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Republic of Serbia
MINISTRY OF HEALTH

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European Union

#ЕУ ЗА ТЕБЕ

EU FOR ENABLING A MORE RESPONSIVE HEALTHCARE SYSTEM IN THE REPUBLIC OF SERBIA

Interim Report No. 2

6 February 2024 – 5 February 2025

Contract No. 2022/441-215

Implemented by United Nations Development Programme (UNDP)
and World Health Organization (WHO).

UNDP

World Health Organization
European Region

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1 LIST OF ACRONYMS USED IN THE REPORT

CA	Contracting Authority
CSO	Civil Society Organization
DoA	Description of Action
DRR	Disaster Risk Reduction
EC	European Commission
EU	European Union
EUD	Delegation of the European Union to the Republic of Serbia
EPS	Joint Stock Company Elektroprivreda Srbije
GDPR	General Data Protection Regulation
GoS	Government of Serbia
GSS	Geological Survey of Serbia
HIS	Health Information System
INCS	Institute for Nature Conservation of Serbia
IPA	Instrument for Pre-Accession Assistance
IPH	Institute of Public Health
IPHS Batut	Institute of Public Health of Serbia "Dr Milan Jovanović Batut"
ITE	Office for IT and eGovernment
LBM4	WHO Laboratory Biosafety Manual 4th edition
LQMS	Laboratory Quality Management System
LQSI	Laboratory Quality Stepwise Implementation
LSG	Local Self-government
MEI	Ministry of European Integration
MEP	Mechanical, electrical, and plumbing
MoAFWM	Ministry of Agriculture, Forestry and Water Management
MoEP	Ministry of Environmental Protection
MoH	Ministry of Health
MoI	Ministry of Interior
MoME	Ministry of Mining and Energy
MPI	Ministry for Public Investment
NALED	National Alliance for Local Economic Development
NRL	National Reference Laboratory
PE	Public Enterprise
PH EP&R	Public health emergency preparedness and response

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PHC	Public Health Centre
PMO	Prime Minister Office
PSC	Project Steering Committee
PWMC	Public Water Management Company
QA	Quality Assurance
QSE	Quality System Essentials
QSE	Quality System Essentials
RCCE	Risk Communication and Community Engagement
RGA	Republic Geodetic Authority
RIZIS	Republic Integrated Health Information System
RWD	Republic Water Directorate
SEM	Sector for Emergency Management, Ministry of Interior
SEPA	Serbian Environmental Protection Agency
SimEx	Simulation exercise
SOP	Standard Operating Procedure
SORS	Statistical Office of the Republic of Serbia
ToR	Terms of Reference
UNDP	United Nations Development Programme
WG	Working Group
WHO	World Health Organization
WR	WHO Representative

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2 DESCRIPTION

FACTSHEET

First Counterparty of the grant contract:	**United Nations Development Programme (UNDP)**
Name and title of the contact person:	Yakup Beris, UNDP Resident Representative in the Republic of Serbia
Second Counterparty of the grant contract:	World Health Organization (WHO)
Name and title of the contact person:	Fabio Scano, WHO Representative in the Republic of Serbia
Title of the Action:	EU for Enabling a More Responsive Healthcare System in the Republic of Serbia
Total grant contribution:	EUR 12,000,000.00
Implementation period of the Action	6 February 2023 – 5 February 2027
Contract number:	CRIS 2022/441-215
Target country(ies) or region(s) in which the activities take place:	Republic of Serbia
Final beneficiaries and target groups:	Ministry of Health, Institute of Public Health of Serbia 'Dr Milan Jovanovic Batut' and network of institutes of public health, primary health care centers, Ministry of Interior – Sector for Emergency Management, Prime Minister Office, Republic Geodetic Authority, local communities, administrations, and CSOs, as well as men and woman in Serbia affected by health crisis and users of the public healthcare system services.
Report document description:	**Progress Report No. 2 following the second twelve months of implementation**
Start date and end date of the reporting period:	**6 February 2024 – 5 February 2025**

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SUMMARY OF THE ACTION

Serbia has achieved a moderate level of preparedness for health-related emergencies but need to enhance its overall managerial capacity, human resources, and financial sustainability for the health system in the coming years. As for public health, its legislation on healthcare only partially aligns with the EU acquis and have yet to implement the national plan for human resources in the health sector while the outflow of physicians from the country remains high. It is not yet leveraging the EU-funded centralized electronic health record system, and it has yet to ensure compliance with EU health indicators.

Concerning serious cross-border health threats, including communicable diseases, national surveillance and response capacities need modernization, as they remain limited. Serbia still needs to implement a centralized health information and communication system, to complete the harmonization of its legislation with the Directive on applying patients' rights in cross-border healthcare, and to establish an e-health unit at the Ministry of Health to coordinate complex activities involved in setting up a comprehensive health information system at all care levels. Also, public health system needs additional work on using laboratory data for surveillance and assurance of quality and management systems of biosafety and biosecurity, and strengthening diagnostic capacities which includes renovation and upgrading of laboratories that form the Ministry of Health network to increase the health system's resilience to emergencies.

Even though Serbia has a good primary health care structure, with 158 primary health care centres (PHCs) in every municipality linked to local self-governments, creating a solid basis for response to potential emergencies it needs improvement of their capacities and connectivity with all local partners, including the civil sector, to significantly boost contribution to better response in crisis.

In response to these healthcare challenges, UNDP and WHO, have received support from the EU Delegation to the Republic of Serbia through the 'EU for Enabling a More Responsive Healthcare System in the Republic of Serbia' initiative. This initiative involves reconstructing and equipping three laboratories for biologically safe agent processing, implementing international quality standards, developing emergency response procedures, manuals and instructions, digitalizing the public health system, and incorporating public health risks into the Disaster Risk Register.

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Overall objective

Enhance the resilience, responsiveness, and capacity for emergency management of serious national public health threats

Specific objective

Improve Serbia's health care system capacities for response to emergencies in line with EU and international standards

Outcome

Improved planning and response capacities of health system in times of crisis

UNDP and WHO are working closely with the Ministry of Health, as the key beneficiary, and other beneficiaries of the Action, the Institute of Public Health of Serbia 'Dr Milan Jovanovic Batut' (IPHS Batut), Ministry of Interior – Sector for Emergency Management (SEM), Office for IT and eGovernment (ITE), Prime Minister's Office (PMO), Republic Geodetic Authority (RGA), and the network of the institutes of public health, primary health care centres, local communities, administrations, and civil society organizations, to achieve specified objectives. The overall coordination at the level of the entire project is ensured by UNDP in collaboration with WHO. At the level of partnership, the responsibilities, resources and other inputs for each of the activities and results are defined per partner, and UNDP is committed to do the follow up of activities regularly and thoroughly, and to report about achievements at the level of partnership.

UNDP is primarily tasked with infrastructure upgrades and procurement of equipment, while WHO ensures policy coherence for health emergency management with capacity building for the national health system. UNDP has the predominant responsibility for the upgrade of the Disaster Risk Register Public Health Upgrade and e-Health System development, while WHO is leading the governance segment of e-Health work.

The Intervention logic remains valid and there are no modifications to the log-frame matrix either at the level of outcome, outputs or activities.

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3 ASSESSMENT OF THE IMPLEMENTATION OF ACTIVITIES

Referring to the updated Log frame matrix, during the reporting period the Action has had a considerable level of achievement and positive impact of the results on the basis of corresponding current value of indicators from the updated log-frame matrix (please see heading 5 below).

UNDP completed technical documentation and obtained construction permits for all three institutes of public health (Belgrade, Nis and Kragujevac). WHO provided technical guidance on compliance of designs with international biosafety standards. UNDP contracted works and supervision for all three institutes and works are at a steady pace of implementation. All three institutes will be reconstructed, equipped and furbished, and officially handed over to the beneficiaries by the autumn 2025. UNDP is continuously providing technical assistance to the Ministry of Health for programming, monitoring and reporting on EU funds. In the process of Disaster Risk Register upgrade to include public health risks, UNDP provided additional technical support to national authorities for acquiring, harmonizing and exchanging data on electrical facilities and lines, and the inclusion of 2022 census aggregate data, uploaded and published 75 datasets. UNDP contracted the software upgrade of the Register, finalized inception phase, detailed technical specification, testing and acceptance plan, and developed ERIK module and 1st testing version of the Upgraded Register and started with incremental testing. During the reporting period, UNDP collaborated with the government to assist in the creation of a new architecture for the eHealth system. This involved enhancing data protection by relocating the existing Information Systems of health institutions to the Government Data Centre. A team of consultants successfully completed the development of the eReferral system, which included functional and technical specifications, source code, test cases, and training materials. However, due to changes within the government and pending a decision on the new architecture. the source code and accompanying documentation have not yet been handed over to the Ministry of Health. It is anticipated that the handover will occur by the end of June 2025. Additionally, UNDP has begun working on designing training for citizens to utilize eHealth services, which are accessible via a mobile application and web portal. Further, UNDP started preparatory activities for awareness raising campaigns in 5 cities but had to make a slight adjustment due to current societal instabilities and ongoing citizens, academia and school system protests. The protest commenced following the collapse of the canopy at the railway station in Novi Sad in November 2024 causing public unrest, and the student protests gaining their momentum towards the end of 2024, forcing the Prime Minister resignation in the end of January 2025. UNDP has undertaken all necessary measures to mitigate the risks arising from the current political situation and has adjusted its activities accordingly. As stated above all commenced activities continue in accordance with project plan without delays and were not affected so far, while emergency awareness raising activities will be implemented jointly with local actors who have strong reputations and the trust of the local communities, ensuring that the intended impact is effectively delivered and communicated. The grass root organizations have been carefully selected based on their mandates (Red Cross, Voluntary Firefighting Brigade), which ensure impartiality and align with the specific needs of the communities, thus ensuring that EU funded activities are perceived as unbiassed to any involved party. The first two events are scheduled for May

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2025. UNDP shall closely monitor the situation and will further adapt the timing, approach, and content of activities as needed to ensure their relevance and effectiveness.

All WHO activities within the project aim to build capacity and transfer know-how to the national laboratory and e-health systems and ensure sustainable preparedness and response capacity for health emergencies at the national and local levels. WHO, in collaboration with the Ministry of Health and the Institute of Public Health of Serbia (IPHS Batut), worked to enhance the Laboratory Quality Management System (LQMS) across 22 microbiology laboratories, aligning them with the ISO 15189 standard. A mentorship program conducted in 2024 led to a notable 18% increase in compliance with the LQMS activities over a nine-month period, with significant improvements in areas such as Process Management, Customer Focus, Facilities and Safety, Documents and Records Management. Mentorship work also supported additional training on biosafety, biosecurity and waste management held in 8 IPHs in 2024 using WHO guidance and with participation of all laboratory staff within each respective institute. WHO also completed the implementation of strategic health emergency risk assessments across 144 local self-government units and 17 city municipalities of Belgrade, providing a foundation for emergency preparedness planning. These assessments will also become an integral part of the Disaster Risk Register. Simultaneously, WHO initiated the development of localized public health emergency preparedness plans for 100 municipalities. The methodology and templates for plan development were based on the adapted WHO methodology and completed, along with plans for three municipalities during the pilot phase in 2024. WHO is also developing six national-level SOPs for managing public health emergencies, which are set to be finalized by the end of 2025. Once developed and adopted, they will also serve as a model for such SOPs/contingency plans at different subnational levels. This all enables personnel in local self-governments and the local public health system to build the capacity to independently mitigate and respond to major emergency risks in their communities without relying on international support. On the digital health front, acknowledging a change in government, WHO resumed support for the Ministry of Health's digitalization efforts, with a focus on the eZdravlje (*eHealth*) portal, which will enhance healthcare workers' capacity and introduce telemedicine features. These combined efforts have laid a strong foundation for improving the country's public health response capabilities, ensuring long-term sustainability and enhanced preparedness for future health emergencies.

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Key project results in the reporting period are:

Infrastructure:

- UNDP completed technical documentation and obtained construction permits for all three institutes of public health (Belgrade, Niš and Kragujevac).
- WHO provided technical guidance to ensure that the designs for laboratories undergoing reconstruction comply with international biosafety standards.
- UNDP contracted works and supervision for all three institutes and works are at a steady pace of implementation. All three institutes will be reconstructed, equipped and furbished, and officially handed over to the beneficiaries by the autumn 2025.

Quality systems and Institutional capacity:

- WHO enhanced the Laboratory Quality Management System in 22 microbiology laboratories, achieving and verifying an 18% increase in compliance with LQMS over a nine-month period.
- WHO supported the establishment of a network of national experts in laboratory quality to ensure sustainability and the continuous transfer of knowledge.
- WHO successfully completed health emergency risk assessments across 144 local self-government units and 17 city municipalities in Belgrade, establishing a solid foundation for emergency preparedness planning and building capacity.
- WHO initiated the development of public health emergency preparedness plans for 100 municipalities, completing the methodology and templates, and finalizing plans for three municipalities during the pilot phase in 2024.
- UNDP provided short-term technical support for programming and implementation of IPA projects to the Ministry of Health.
- WHO provided technical support to the Sector for Public Health to coordinate responsibilities related to laboratory system strengthening and emergency preparedness.

Digitalization and Innovation:

- UNDP rendered data acquisition support to EPS and SORS. Contracted Disaster Risk Register software development. 75 datasets and 1 sub-system (ERIK) uploaded. Developed 1st testing version of the Upgraded Register for software upgrade.
- UNDP supported the design and establishment of the SMS system for transmission of urgent information to citizens in case of hazard.
- UNDP supported the transfer of local electronic health systems (EHRs) to the Data Centre in Kragujevac The current number of active systems is 36 and 13 systems are in the process of migration.
- UNDP supported further work on establishing a new architecture of the healthcare system and eHealth Record
- WHO supports the Ministry of Health's digitalization efforts by advancing the eZdravlje portal, which will enhance healthcare workers' capacity and introduce telemedicine features, with the system set to be fully operational by the end of 2025.

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ACTIVITY A.0: ESTABLISHMENT AND COORDINATION OF THE DECISION-MAKING PROCESS

Planned results	**Target**	**Responsible IP**	**Deliverables reached in the reporting period**
UNDP and WHO Project Teams operational	2 project teams operational	UNDP WHO	UNDP and WHO Project Teams operational
Project Steering Committee established and operational	PSC operational PSC Minutes prepared	UNDP WHO	PSC established, operational and convened on three occasions - in June and November 2023, and in November 2024. Minutes from the SC meetings disseminated accordingly.
MoH appointed focal points for the implementation of the Action	5 MoH staff appointed	UNDP WHO	MoH appointed an overall contract management focal point and 4 contact points for each of the Action's components. Following the appointment of the new Government, MoH revised its decision and assigned new contact points in July 2024.
Status of the Activity: Steady Pace of Implementation			

The implementation structures remain unchanged with effective decision-making process and the UNDP and WHO respective Project Teams have regular interaction ensuring efficiency, synergy and bringing an added value of EU funds support. This is visible by the sound degree of implementation of specific project activities.

Continuous enforcement of the Quality Assurance (QA) mechanism and monitoring visits establishes there is a clear link of the project to the programme's theory of change, responds to the development in strategic and policy framework, clearly specified target groups, prioritizing groups left furthest behind the application of acquired knowledge, identified good practices, and UNDP's lessons learned in the design of the Action and implementation of similar activities.

Following the parliamentary elections and shifts in Governmental positions, on 17 July 2024 the **MoH officially informed CA/EUD on the new appointment of designated focal point in the MoH for the entire Action, as well as contact persons for each of the four project components.**

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In the reporting period, in agreement with the CA, UNDP and WHO organized the **Third Project Steering Committee Meeting on 18 November 2024.** Following up on the plan established in the 2nd PSC, UNDP and WHO provided an overview and discussed the status and progress of each of the activities and issues of importance to smooth implementation of the Action and agreed on the way forward in the coming period. The UNDP and WHO designated Project Team prepared the PSC sessions, considering the relevant data and material. For the 3rd PSC, UNDP team acted as the Secretariat of the Steering Committee. Detailed Minutes of the 3rd PSC are enclosed as ***Annex X – 3rd Project Steering Committee Meeting Minutes, 18.11.2024.***

At the request of Ministry of Health, **UNDP continued providing short-term technical support (4 consultants) for programming and implementation of Instrument for Pre-Accession Assistance (IPA) projects** in the period March – August 2024. In September 2024, UNDP and MoH reassessed the need for further support to MoH's IPA unit, agreed on its design and UNDP has contracted additional technical support for the period October 2024 – June 2025 for programming, monitoring and reporting on EU assistance to the public health sector in the Republic of Serbia, with special focus on IPA Actions. UNDP provided technical support to the Office of IT and eGovernment by engaging the technical expert for the infrastructure and system architecture. The expert is providing day to day support to government efforts to increase security of the health network and existing information systems and their integration in the Data Centre in Kragujevac.

In September 2024, the Ministry of Health requested WHO's support in strengthening the capacity of the Sector for Public Health and Program Health Care by temporarily employing a technical coordinator. This coordinator would support the Sector in activities related to the 'EU for Healthcare in Serbia' project, which requires direct involvement from the Ministry. As the lead unit for emergency preparedness within the Ministry of Health, the Sector needed additional capacity to coordinate responsibilities related to laboratory system strengthening and emergency preparedness under the project. Following a selection process, WHO contracted the most suitable candidate in October 2024, who is now embedded within the Sector.

Support provided raised government awareness of ownership of results of the Action and increased efficiency of implementation and synergetic effects with other similar EU funded actions in the public health sector in the Republic of Serbia.

Quality, scope and time perspective of the results and activities are continually observed and conveyed to relevant national partners and the EUD through written and verbal reporting mechanism and on-the-spot monitoring and evaluation requirements.

The assessment for each implementation activity is presented below.

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ACTIVITY 1.1 IMPLEMENTATION OF THE LABORATORY QUALITY MANAGEMENT SYSTEM (LQMS) IN THE MICROBIOLOGICAL LABORATORIES

Planned results	**Target**	**Responsible IP**	**Deliverables reached in the reporting period**
Training of mentors for LQMS through two 3 days trainings, using the WHO LQMS training toolkit and the Laboratory Quality Stepwise Implementation (LQSI) tool	**10 mentors**	**WHO**	**Trained 16 experts, 11 successfully passed mentorship exam**
Training of laboratory staff for LQMS and implementation of the LQSI tool secured	**50 staff**	**WHO**	**Trained 59 persons from 25 laboratories**
Development of Quality manuals for the Institutes of Public Health and critical SOPs	**3 QMs and SOPs for 3 IPHs**	**WHO**	**Planned for 2025**
Support to Public health laboratories through national mentors to develop or improve LQMS under WHO guidance	**25 IPHs labs**	**WHO**	**25 laboratories supported in implementation of LQMS. The level of LQMS compliance increased from 40% to 58%.**
Status of the Activity: Steady Pace of Implementation			

Ensuring and maintaining the quality of laboratory services is crucial for accurate diagnosis and an effective response to health threats. A Laboratory Quality Management System (LQMS) system can be described as a set of building blocks needed to control, assure and manage the quality of the laboratory's processes. The implementation of LQMS aligns diagnostic testing with the relevant international standards along with EU recommendations, improving laboratory efficiency and reliability. According to the last JEE findings in Serbia, inconsistencies in LQMS implementation across diagnostic laboratories in the country have been identified and a need for strengthening and expanding LQMS implementation in the national laboratory system was highlighted.

During the first two years of the implementation of the project WHO, in collaboration with the Ministry of Health and the Institute of Public Health of Serbia, has worked on strengthening and expanding LQMS implementation in the network of Institute of Public Health (IPH) microbiology laboratories, based on the ISO 15189 standard. The approach to strengthening laboratory operations through training, mentorship, and transferring know-how and experiences was based on the framework of 12 basic pillars - quality system essentials (QSEs), as implemented in the Laboratory Quality Stepwise Implementation tool (LQSI), developed by WHO and aligned with ISO 15189 standard.

Implementation and Achievements

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WHO initiated the LQMS improvement efforts in a network of IPH laboratories by training and selecting **eleven national mentors** in November and December 2023. The mentors were selected among laboratory specialists from the IPH network and the Universities of Belgrade, Niš and Kragujevac, based on the results achieved within the training and previous experience relevant to LQMS implementation. This was followed by a three-day training on the LQMS for **59 representatives from 25 laboratories**, including the Institute for Virology, Vaccines and Sera "Torlak", in January and February 2024. In this way, WHO has initiated creating **a network of quality experts** in all regions of the country.

Picture 1 - Mentor visit to IPH Niš laboratory before the start of reconstruction, April 2024

Throughout 2024, mentors support was provided to **22 IPH laboratories**. Being already accredited against the ISO 15189 standard, microbiology laboratories of IPH Sombor and IPH Subotica were not included in the mentoring program, however, lab specialists from these two IPHs participated in the initiative as mentors, while Torlak Institute will be supported under a separate initiative. The three institutes not included in mentorship support, benefited from organized LQMS training and knowledge sharing within the network.

The mentoring program was implemented in line with the approach developed within the Better Labs for Better Health initiative of WHO EURO, featuring structured mentoring visit plan, assessing the laboratory according to the LQSI checklist and development of the Action plan for LQMS implementation. Between March and November 2024, WHO performed two mentoring on-site visits per laboratory, alongside regular weekly online support. During the initial mentoring visit, the mentors and lab specialist jointly conducted a **baseline assessment using the LQSI checklist**, leading to the development of customized action plan for each laboratory. Action points included:

- establishing **quality teams** within each laboratory,
- establishing **regular quality related meetings,**
- considering appointing a **quality officer** and a **biosafety officer**, and
- considering and evaluating **different aspects of QSEs**.

Picture 2 – 2nd mentor visit to IPH Uzice, November 2024

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Results and Impact

The use of the LQSI tool allowed for measurable assessment of the level of LQMS implementation, expressed in percentage of requirements fully and partially fulfilled, regarding the implementation phase (phase 1-phase 4) and particular QSEs of LQMS. The baseline assessment revealed that, on average, in participating laboratories **40% of LQMS activities** were **fully implemented**, while for additional **26%** implementation was still **in progress**. Upon completion of the mentoring program, percentage of **fully implemented activities increased to 58%**, a significant rise of **18%** achieved within the scope of nine months only.

Picture 3 - Mentor visit to IPH Leskovac, November 2024

Upon the initial assessment, only one QSEs area – **Documents and Records** – scored above 60%. However, by the end of the project, **four additional QSEs areas** exceeded 60%: **Information Management, Customer Focus, Purchasing and Inventory, and Equipment**.

Significant improvements were observed in the following areas:

- **Process Management:** Increased from 21% to 44%.
- **Customer Focus:** Improved from 46% to 68%.
- **Facilities and Safety:** Increased from 41% to 60%.
- **Documents and Records Management:** Rose from 60% to 76%.

However, significant challenges still remain, e.g. with QSE, **Process Management,** which remained one of the least developed QSE, emphasizing the need for continued support in this area.

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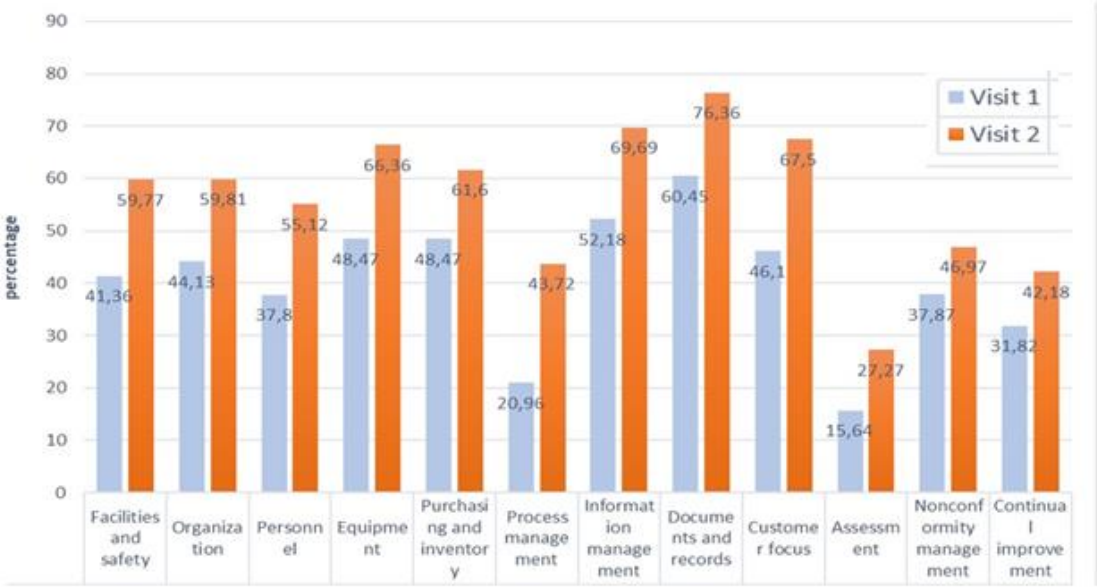

Figure 1 - Average percentage totals scores of fully implemented activities per QSEs, at baseline and final visit (visit 1 and 2)

Sustainability

A **national LQMS implementation lessons-learned meeting** was held on **25 February 2025** in Belgrade, gathering representatives from **25 participating laboratories**. General results of the project were presented and discussed. Eight public health institutes shared their own experience in more details, presented their achievements and discussed strategies for further LQMS improvements. As a result, establishment of a **national platform for communication and cooperation** on LQMS was proposed, involving the **National Expert Committee for Microbiology**.

To further enhance LQMS implementation, WHO shall develop **Standard Operating Procedures (SOPs) and Quality Manual,** as a document setting forth quality policies and describing the quality management system of an organization. Both outputswill be shared across all public health institutes to use them as a template for adaptation for their respective laboratories. The **University of Belgrade Faculty of Medicine, Institute for Microbiology and Immunology in Belgrade,** has volunteered to host the **next LQMS meeting in late 2025**.

The project significantly strengthened laboratory quality management in Serbia by implementing structured training, mentorship, and systematic improvements. During the 9 months significant improvements were achieved in the areas of **Process Management, Customer Focus, Facilities and Safety and Documents and Records Management.** The establishment of a national collaboration platform ensures sustainability and continuous improvement. Through this initiative, Serbia's laboratories are now better equipped to provide **rapid, reliable, and accurate diagnostic services**, reinforcing the country's overall public health response capabilities.

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The establishment of a well-functioning network of 11 laboratory mentors, coordinated by a lead mentor from the IPHS Batut, who will continue operating independently also after the project ends, shall be key sustainability achievement. Additionally, all documents developed within the project for the three reconstructed laboratories will be shared with all laboratories in the network to ensure know-how transfer.

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ACTIVITY 1.2 LABORATORIES' RECONSTRUCTION AND UPGRADE IN LINE WITH LBM4

Planned results	**Target**	**Responsible IP**	**Deliverables reached in the reporting period**
Reconstruction and equipping of laboratories to be fully operational and compliant with the international and WHO Biosafety standards Training of laboratory staff of Institutes of Public Health on biosafety, biosecurity, and risk assessment Training of laboratory staff of Institutes of Public Health on waste management Conducting risk assessment and developing mitigation plan for improvement developed for IPHs with reconstructed laboratories Development of Biosafety manual for the IPHs with reconstructed laboratories	**3 laboratories (Belgrade, Nis and Kragujevac)**	**UNDP**	**Completed technical documentation, and contracted works and supervision for all three IPHs.**
	50 staff in 25 IPHs	**WHO**	**Trained 42 staff from 18 laboratories in 2023. Additional training was in 2024 in 8 IPH laboratories by their staff as a part of LQMS activity.**
	50 staff in 25 IPHs	**WHO**	**64 staff from 27 labs trained (24 IPH + 3 NRLs)**
	3 risk assessments and mitigation plans	**WHO**	**Planned for 2026, after the completion of the reconstruction of the laboratories.**
	3 biosafety manuals	**WHO**	**Planned for 2025**
Status of the Activity: Steady Pace of Implementation			

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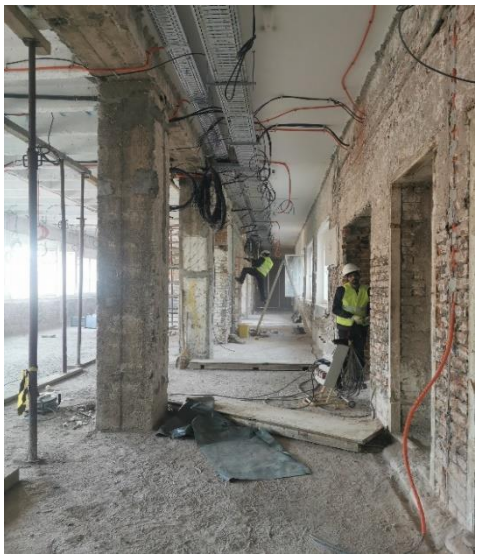
UNDP completed technical documentation for all three institutes, and jointly with WHO expert ensured its compliance with latest biosafety guidelines. UNDP engineering unit, designing company, and independent verifier assured full alignment of technical documentation and designs with prescribed conditions and approvals of the authorities, in accordance with Serbian legislation and examples of good practice.



Picture 4 - Ongoing works in IPH Nis

As an additional quality control layer, UNDP had commissioned a design verification and control company for conducting independent review and verification of designs in parallel with their preparation ensuring the best possible quality of designs and value for money. The company also supported the UNDP technical team in preparation of Tender for Works – during the summer 2024. UNDP contracted works and supervision for institutes in Belgrade and Nis in September and October, and for the institute in Kragujevac in December 2024.

Picture 5 - Hydro isolation and flooring in IPHS Batut

Picture 6 - Placing the sewage network in IPH Kragujevac

Works in IPHS Batut started 30 September 2024 and will last twelve months and in IPH Nis on 29 October 2024 with the duration of 10 months and works in IPH Kragujevac stared 14 January 2025 with defined implementation period of 9 months.

To ensure the accountability and efficient implementation of works, UNDP has engaged in-house engineering capacities for monitoring the implementation of the contract, established mechanism of regular weekly meetings and on-site visits to monitor the progress within the agreed timelines, in close cooperation with the responsible Contractor, the Supervision company and the responsible staff of the beneficiary IPHs. UNDP ensures reconciliation of the established advanced bio-safety level requirements and the technical design phase, in line with the WHO guidelines throughout the reconstruction works project lifecycle. As of November 2024, the Institute for the Protection of Cultural Monuments of City of Belgrade nominated their representative to monitor the implementation of the reconstruction works at IPHS Batut and ensure the works are in line with its preservation status and historical appearance. The Institute for the Protection of Cultural Monuments of the City of Kragujevac

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will nominate their representative as well and will join the regular weekly meetings at the Institute for Public Health Kragujevac, as of March 2025.

In all three IPHs, UNDP has, in agreement with the beneficiaries and in line with all security aspects prescribed by the legislation, divided the **reconstruction works in two phases to preserve the uninterrupted operations** of the institutes. IPHS Batut, as well as IPHs in Nis and Kragujevac, assure uninterrupted works of the Contractor, the continuous access and presence of the Supervision of Works, adaptation of work processes to accommodate the phase reconstruction and preservation of their operations at full capacity, addressing the challenges of dividing the reconstruction zones adaptation of work processes.

Upgraded laboratories shall implement advanced bio-safety standards and bio-hazard protection but also achieve a sustainable and cost-effective maintenance of the reconstructed premises and a positive impact on the entire facility.

Based on the current progress of works the envisaged cost estimate of the laboratories upgrade defined in the Project for Execution remains valid, however the appearance of additional and unforeseen works, necessary for optimal and safe use of the buildings, might raise the need for the utilization of envisaged contingency. In case of a need for contingency funding, UNDP will initiate accordingly an administrative procedure in front of the CA.

The progress of works per each facility is provided in the table below:

Facility	Work progress
IPHS Batut	**Completed Works:** In the initial phase, the project focuses on demolition, infrastructure installation, and waterproofing to ensure the building's functionality and integrity. As the first phase of the reconstruction, works are ongoing in part of the building on basement and ground floor level and partially cover external walls waterproofing. So far, the Contractor has completed several tasks, including the demolition and debris removal of the basement floor slab and plaster, radiator dismantling while maintaining essential heating, and the plastering of walls. Sewer pipes have been installed and connected to the sewage system, and preparations for new electrical and thermomechanical installations are underway. The Contractor commenced with the excavation works around the building and waterproofing while already, prepared a new floor slab in the basement, and created an opening for a small freight elevator. The Contractor has facilitated the application of external waterproofing on the basement walls due to excavation. The Contractor started with the production of new windows.

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Facility	Work progress
	The Contractor is implementing the works in line with the agreed dynamics and does not jeopardize the overall completion deadline.
IPH in Nis	**Completed Works:** The ongoing works focus on demolition, infrastructure installation, and waterproofing to ensure the building's functionality and integrity. As the first phase of the reconstruction, works are ongoing in part of the building on basement, ground and first floors level, and partially cover external walls waterproofing. The renovation work included the demolition and removal of the basement floor slab, as well as the dismantling of radiators while ensuring continued heating in operational areas. The Constructor completed stripping of the plaster from the walls and cleared all the debris. **In this process, UNDP discovered damages to the mezzanine construction previously unrevealed which must be rehabilitated for the safety of the entire facility, imposing additional costs. The Contractor started with reparation works to address this issue.** The Contractor installed sewer pipes and connected them to the external system, and completed preparations for new electrical and thermomechanical installations, involving routing, drilling, and shelf construction. The Contractor filled and compacted the basement in preparation for the new floor slab and dismantled the small freight elevator. The Contractor is implementing the works in line with the agreed dynamics without delays.
IPH in Kragujevac	**Completed Works:** Renovation works started in the basement and included demolishing the floor slab, removing debris, and excavating the sewage system. The Contractor dismantled the suspended ceiling and some radiators while maintaining heating in operational areas. The Contractor partially demolished certain walls and carried out plaster removal and clearing of all the debris. The Contractor installed sewer pipes and connected them to the external system, and completed preparations for new electrical and thermomechanical installations, including routing, drilling, and shelf construction. The Contractor is implementing the works in line with the agreed dynamics and the overall completion deadline.

In parallel with reconstruction, UNDP assessed and established needs for equipment and furniture for all three institutes. UNDP developed initial technical specifications. In close cooperation with the Institute of Public Health of Serbia (IPHS) "Dr Milan Jovanović - Batut" in Belgrade, Institute of Public Health Institute (IPH) in Nis, and IPH in Kragujevac. UNDP assessed and harmonized the specific needs for the procurement of laboratory equipment (e.g. biosafety cabinets, thermostats, microscopy equipment) and furniture in line with international biosafety standards to implement basic and higher safety measures in the reconstructed microbiology laboratories.

To assure the procurement of a quality contractor and ensure competition, transparency, and efficiency of the procurement process, UNDP, performed local and international market research and identified a wide list of potential suppliers at local and international market, defined the scope of the

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equipment operation training, including maintenance and storage instructions and related safety protocols.

UNDP finalized technical specifications for equipment and laboratory furniture, placement layout in each of the three institutes, scope of the mandatory equipment operation training, and maintenance and storage requirements, instructions and related safety protocols.

By the end of the reporting period, UNDP has agreed the technical specification of **the equipment and furniture** with the IPHS Batut and is in last stage of fine tuning with the IPH Nis and Kragujevac. This will enable UNDP to **launch the tender for its procurement beginning of May 2025** and coincide its delivery with the completion of works.

UNDP plans to finish the reconstruction, complete the equipping of all facilities, hand over the works and equipment, and officially open all the modern laboratories by autumn 2025.

In parallel with infrastructure improvements, the WHO is supporting experts in these three laboratories in developing **Biosafety Manuals, Quality Manuals,** and relevant **Standard Operating Procedures (SOPs)**. These documents play a crucial role in establishing a well-structured and efficient laboratory environment:

- **Biosafety Manuals** outline the principles and procedures necessary to protect laboratory personnel, the community, and the environment from biological hazards. They provide guidelines on risk assessment, containment measures, and emergency response protocols, ensuring safe microbiological practices.
- **Quality Manuals** set forth the quality policies and describe the quality management system (QMS) of an organization. They define the laboratory's commitment to quality, compliance with international standards, and continuous improvement, ensuring the reliability and accuracy of test results.
- **Standard Operating Procedures (SOPs)** are detailed, written instructions that describe specific laboratory processes and workflows. These documents ensure consistency, reduce errors, and provide clear guidance to laboratory personnel, contributing to operational efficiency and regulatory compliance.

The development of these documents is essential for ensuring laboratory safety, maintaining high-quality testing and research standards, and complying with international regulations. This initiative builds on previous project activities conducted within the EU for Enabling More Responsive Healthcare System Project, that include laboratory staff trainings in biosafety, biosecurity, risk assessment, and waste management during 2023, as well as mentorship work focused on improving laboratory quality management systems (LQMS) in 2024.

In cooperation with laboratory management, **experts from these laboratories have been selected in January 2025 to coordinate this work within their institutions**. Throughout 2025, they will collaborate with WHO LQMS mentors to develop and implement these critical documents, strengthening laboratory systems and enhancing public health capabilities in Serbia. Developed documents will be

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also shared with the whole network of institutes of public health to use them as a template for adaptation for their respective laboratories.

As the training on biosafety, biosecurity, and risk assessment was organized at the initiative of the Ministry of Health in July 2023, during the peak of the annual leave season, only 18 out of the 25 planned laboratories were able to participate. To ensure broader coverage, **in 2024, eight Institutes of Public Health** (Niš, Kraljevo, Valjevo, Zrenjanin, Kikinda, Pančevo, Užice, and Šabac) **organized additional trainings on this topic**, using WHO materials and with the support of WHO LQMS mentors. These training courses were designed for all laboratory staff within each respective institute.

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ACTIVITY 2.1 DEVELOPMENT OF PROCEDURES FOR HEALTHCARE SYSTEM RESPONSE TO EMERGENCIES AT NATIONAL AND LOCAL LEVEL AND PUBLIC HEALTH EMERGENCY MANAGEMENT TRAINING FOR THE HEALTH SYSTEM EMPLOYEES INCLUDING SANITARY INSPECTORS

Planned results	**Target**	**Responsible IP**	**Deliverables reached in the reporting period**
Development of Methodology (template) for public health emergency preparedness and response plans for local level, including the curriculum for training for municipal health councils, PHCs, IPHS, and other relevant entities	**Methodology and training curriculum developed**	**WHO**	**Completed in February 2025**
Development of SOPs at the national level with defined responsibilities at the local level for: • *Coordination and information exchange in case of public health threats,* • *Mass trauma management;* • *Dealing with radiological accidents,* • *The response in case of public health threats at points of entry (PoE),* • *PHC preparedness response in emergencies,* *Hospital preparedness and response in emergencies*	**6 SOPs**	**WHO**	**Planned for 2025**
Training of Trainers on methodology for the development of public health emergency preparedness and response plans for IPHs representatives	**30 trainers** **24 district IPHs representatives**	**WHO**	**Planned for April 2025**
Training of municipal representatives (municipal health councils, PHCs, and other relevant entities) on methodology for the development of public health emergency preparedness plan and development of response plans	**500 representatives** **100 municipalities** **24 districts**	**WHO**	**Planned April and May for 2025**
Development of training curricula for sanitary inspectors on detection of public health threats, risk assessment, and response in public health emergencies, and training of sanitary inspectors	**Training curricula** **150 sanitary inspectors**	**WHO**	**Planned for 2026**

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Status of the Activity: Steady Pace of Implementation

The **development of public health emergency preparedness and response (contingency) plans** at the local level is a cornerstone for establishing a strong national emergency preparedness system. In 2024, WHO supported the network of Institutes of Public Health and local authorities in Serbia in **completing a public health emergency risk assessments** across all 144 local self-government units, including additional assessments for each of Belgrade's 17 city municipalities. In October 2024, WHO launched the second phase of this project, which focuses on assisting 100 local self-governments in **developing localized preparedness and response plans** for specific public health threats identified in the 2024 risk assessment.

Given the shared responsibilities between local self-governments and the network of Institutes of Public Health, this phase will be executed with the active involvement of all relevant partners. To facilitate the development of these plans, WHO, in coordination with the Ministry of Health, partnered with two specialized organizations: the **Institute of Public Health of Serbia "Dr Milan Jovanović Batut,"** which provides indirect support to local self-governments through coordination with district public health institutes, as well as direct interventions when necessary; and the **Standing Conference of Towns and Municipalities (SCTM),** which directly supports the 100 participating local self-governments. According to Serbian legislation, institutes of public health play a central role in all public health activities, including health emergency preparedness and response, while local self-governments have their own legal obligations in this area. Given its long-standing role as the national association of Serbian cities and municipalities, SCTM is uniquely positioned to serve as an implementing partner, leveraging its expertise in supporting local administrations through training, consultations, and technical assistance. While actively participating and directly contributing to the development of the plans, NIPH and district IPHs will also be given the main technical supervisory role, ensuring the required quality of the produced documents (plans). SCTM will be responsible for the overall coordination and dynamics of implementation, leveraging its position and constant direct communication with the municipalities, as well as its proven capacity to facilitate and coordinate simultaneous implementation of activities in a large number of self-governments.

WHO, SCTM, and IPHS Batut decided to first **pilot the plan development process** in three municipalities to test WHO's existing templates and training methodology in the Serbian national context. This pilot phase also served as a training opportunity for future trainers who will lead the full-scale development process in 2025. On **November 19, 2024, experts from WHO, SCTM, and IPHS Batut conducted a full-day workshop** for representatives of Sombor, Dimitrovgrad, and Varvarin, along with experts from their respective Institutes of Public Health. By the end of December 2024, these three municipalities had successfully developed public health emergency plans. WHO, SCTM, and IPHS Batut closely monitored and supported the development process, analyzing challenges encountered by municipal teams.

Building on the experience gained in the pilot phase, the expert team worked throughout January and February 2025 to refine and adapt the template to the Serbian context and design a **training curriculum** for municipal health councils, primary healthcare centers (PHCs), Institutes of Public Health, and other relevant stakeholders. In February and March 2025, a **list of trainers and mentors was finalized,** comprising 24 experts from public health institutes and 10 specialists with experience

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in local plan development. These mentors will undergo training in April 2025 to support local self-governments using standardized templates and methodologies.

The **selection of 100 local self-governments** will be conducted in March 2025 through a public call for applications, with evaluation criteria jointly defined by SCTM, WHO, and IPHS Batut . In April and May 2025, **training for local self-government representatives** will begin with two introductory webinars, followed by 10 full-day, in-person workshops across 10 different locations nationwide. These sessions will train 500 representatives from local self-governments, PHCs, local health councils, and other stakeholders involved in the plan development process. **Local teams will have six months to finalize their plans** with continuous support from SCTM and IPH mentors, with completion expected by November 2025.

Parallel to these activities, WHO is collaborating with the Ministry of Health on developing **six national-level Standard Operating Procedures (SOPs)** for:

- **Coordination and information exchange** during public health threats
- **Mass trauma management**
- **Response to** radiological and nuclear **accidents**
- **Public health threat response at points of entry (PoE)**
- **Primary healthcare centers' preparedness and response in emergencies**
- **Hospital preparedness and response in emergencies**

To develop these SOPs, a **working group will be established, comprising leading national experts.** The selection process for working group members took place between September 2024 and January 2025 to ensure the best expertise was engaged. The official formation of the working group is expected in March 2025, with the **completion of all six SOPs by the end of 2025.**

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ACTIVITY 2.2 DISASTER RISK REGISTER UPGRADE WITH PUBLIC HEALTH RISKS

Planned results	**Target**	**Responsible IP**	**Deliverables reached in the reporting period**
Extension, operationality and functionality of the Disaster Risk Register system for the incorporation of health-related risks *Conducting Public health risk analysis in the context of emergencies (incl. identification, quantification and prioritization), based on WHO methodology, at local level, involving municipal health councils, PHCs, IPHS and other relevant entities from various sectors* *Training of platform managers, data providers, and end-users for platform management, data preparation, exchange protocols, and everyday use*	100% upgraded and includes health issues	UNDP	UNDP rendered data acquisition support to EPS and SORS. Contracted software development. 75 datasets and 1 sub-system (ERIK) uploaded. Developed 1st testing version of the Upgraded Risk Register. UNDP supported the design and establishment of the SMS system for transmission of urgent information to citizens in case of hazard.
	Public health risk assessment in the context of emergencies conducted at local level for 150 municipalities	WHO	Public health risk assessment carried out across all 144 local self-government units and 17 city municipalities of Belgrade
	At least 200	UNDP	Planned for first quarter of 2025
Status of the Activity: Steady Pace of Implementation			

In the process of upgrading the Disaster Risk Register to include public health risks, UNDP coordinates the following interlinked sub-activities:

1. Business analytics – needs assessment, stakeholders' engagement, defining technical requirements,
2. Software upgrade – development of software application, data exchange services, design and presentation of data, analysis and reports,
3. Data acquisition – data collection and upload and creating meta-databases.

After reaching the agreement with the national partners, the SEM and the RGA, on the final technical specifications and the detailed scope of work, **UNDP launched the tender on 13 February 2024**. and **signed a contract with the most successful bidder on 28 May 2024**.

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UNDP, from the start of the contract, imposed monitoring, quality control and business analytics mechanisms for monitoring the progress of software development assuring the contractual pace of implementation, which included regular meetings and communication between UNDP, the Contractor and the key national partners – the SEM and the RGA, regular reviewing of produced documentation and outputs, and enforcing measures for mitigating identified and arising risks and preventing potential delays. This enabled early identification of arising or potential implementation risks and ensured a smooth and timely rollout of all contract's defined deliverables in the requested quality and reflecting the needs of the beneficiaries in a user-friendly manner.

As an additional oversight of the software development, the UNDP Technical Consultant continues to support UNDP staff related to the for high-level software design advising on the appropriate mitigation measures in case of risk of delays or unforeseen obstacles, reviewing documentation and conveying in understandable format the technical requirements to business users (key national partners and data proprietors) and vice versa.

UNDP continued providing **technical support to RGA** in assisting the national authorities in collecting, analyzing and feeding the risk related data, rollout of new services for data exchange between the institutions data providers information systems and the RGA National spatial data infrastructure (NSDI) system, maintaining the functionalities of the RGA internal network, monitoring and analysis of services and applications, improving the system infrastructure, and data exchange and data import in the Register. UNDP also provides support to the **key national partners and institutions data holders** in applying their functional and analytical requirements.

As a key step in the implementation of the initial phase of the conceptualization of the future software, UNDP organized a **kick-off introductory meeting on 6 June 2024** bringing together the Contractor and the representatives of key beneficiaries, the SEM and the RGA. The meeting closely defined and harmonized expectations for each of the delivery elements and their deadlines, management of confidential data sets, and the creation of new functionalities. It also paved the way on how to improve information infrastructure and data digitalization relevant to the public health system and agreed on the best solutions for data entry and management by state institutions that are both the owners and the end users of this data.

Picture 7 - Kick-off meeting at UN House, 6 June 2024

To facilitate the implementation and apply lessons learned from the previous phase of establishing the Disaster Risk Register via IPA 2019 Action 'EU for Serbia Resilient to Disasters', UNDP has advanced data acquisition and establishment of data exchange modalities with the national authorities data providers prior to the start of the software upgrade. In the process of software advancement UNDP introduced incremental testing of the software functionalities and data analytics throughout the

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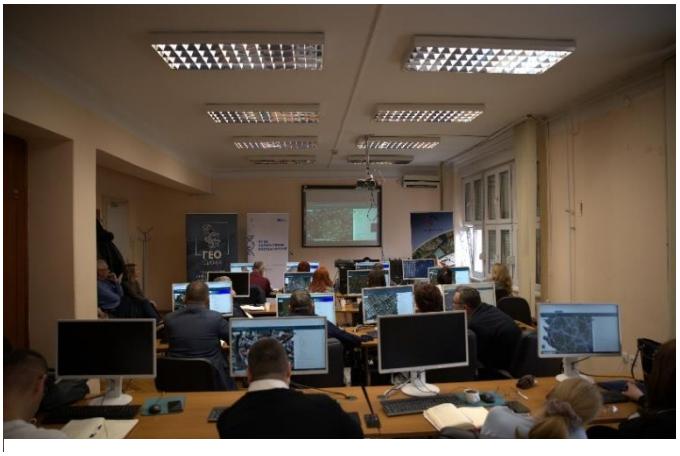
development of the software and its sub-systems/modules to adequately reflect the needs of the beneficiaries in a user-friendly manner.

The Contractor has developed the module Risk Records and Disaster Information (ERIK) as a sub-system of the Disaster Risk Register. This module has functionalities and analytics related to local Disaster Risk Assessments (DRA) and Rescue and Protection Plans (RPP) and is one of the key features of SEM monitoring the local level actions.

The first testing workshop of the new functionalities of the Register was organized in-person on 23 January 2025 in the premises of the RGA. Besides UNDP project team and technical consultant, the representatives of the Contractor, and the RGA colleagues, a number of 20 SEM senior staff attended. As a continuation, testing workshops will extend throughout February, while the first training sessions for national authorities data provider will commence in April 2025.



Picture 8 - 1st testing workshop, 23 January 2025

The planned date for the completion of software development, training and user-acceptance testing is 30 April 2025.

An overview of phases of software development are presented in the table below:

Milestone	Timeline
Project start (contract sign)	28 May 2024
PHASE 1: Inception phase	28 May 2024 – 27 June 2024
Inception report with project implementation plan developed and approved	27 June 2024
PHASE 2: Preparation of detailed system specification	10 May 2024 – 3 September 2024
Detailed system specification delivered and approved	3 September 2024
PHASE 3: Development, testing, deployment of the System, training, and warranty	1 August 2024 – 30 April 2025
Testing and production environments configured	3 March 2025
Upgrade of Disaster Risk Register information system developed and tested	3 March 2025
Final acceptance of the System	15 March – 13 April 2025

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Training plan developed and approved	31 March 2025
Training materials produced and approved	31 March 2025
Training sessions conducted	25 April 2025
Project closed	30 April 2025
Warranty period	13 April 2025 – 13 April 2026

Following the process of intensive data acquisition in the previous reporting period, this reporting period is characterized with additional efforts on data acquisition, and extensive consultations and several iterations between UNDP, SEM and RGA with data holders on providing datasets in adequate format for exchange with RGA information system. This resulted in **17 institutions proving 76 datasets, including the ERIK sub-system, with accompanying metadata, uploaded and ready for publishing**.

In the period April-August 2024**, UNDP engaged additional 3 sector specific consultants and provided technical support to Joint Stock Company Elektroprivreda Srbije (EPS) and Statistical Office of the Republic of Serbia (SORS) in collecting, analyzing and feeding the risk related data and meta-data** of relevance for the Register Health upgrade and in connectivity and networking of institution's information system. Depending on the dynamics of data update by responsible data provider and the format of the data, the RGA has established data exchange either through services (direct link and exchange of data reflected in the Register immediately upon their update).

By updating the risk assessments and risk data, the **Register will serve the health risk analysis in the context of emergencies and represent a database for the Ministry of Health**, and IPHS Batut in developing their public health risk assessments at municipal level.

The Government of the Republic of Serbia, through its Action Plan for the period 2024–2027, has outlined measures to ensure the entry of all relevant data into the Register, as well as to increase the number of its users. These efforts aim to enhance the comprehensiveness and usability of the Register, making it a central tool for risk assessment and disaster preparedness across sectors. By populating the Register with complete and up-to-date information, and expanding its user base, the system will be further more integrated into decision-making processes at both national and local levels. This will significantly contribute to the Register's long-term sustainability and visibility, reinforcing its role as a key instrument in building a more resilient society.

As expressed, and agreed on the 3rd PSC, the main challenge in the future will be communication with end-users. The RGA is combatting this issue by **introducing e-learning platform for the citizens and end-users** for their 10 most important services and applications. It is not only about adding artificial intelligence (AI) features but adapting the content and technical details to the citizens. The need for support from the EU and UNDP, and in collaboration with the SEM, in extending this endeavour to the Register and other parts of the system and establishing a close cooperation with the citizens and end-

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users, is pressing. UNDP shall contract also this additional functionality within the existing software development upgrade of the Register.

Establishing a two-way communication with the citizens end-users is the new horizon ahead of the EU support using AI and an optimized and general public friendly content and interface.

Strategic risk assessment and profiling is an evidence-based approach that informs preparedness and response to health emergencies. Risk profiling is typically conducted as a baseline activity before an event occurs to identify and prioritize hazards, as well as coping capacities and weaknesses. Public health authorities must first recognize hazards and assess the level of risk within their territories before adopting a risk-based approach to managing health emergencies and mitigating risks.

WHO's Strategic Tool for Assessing Risks (STAR) provides a comprehensive toolkit and methodology to assist public health authorities in conducting rapid, strategic, and evidence-based assessments of public health risks. These assessments help prioritize health emergency preparedness and disaster risk management activities. In November 2023, through the EU DG NEAR Project "Strengthening Health Systems Resilience in the Western Balkans," 50 experts from all 23 district institutes of public health were trained by WHO national experts and trainers from IPHS Batut to implement the STAR tool and methodology.

The **implementation of strategic risk assessment** and profiling for all local self-governments (cities and municipalities) in Serbia is a **key activity** aimed at complementing the ongoing **upgrade of the Disaster Risk Register** with public health data. This initiative ensures the production of reliable public health risk assessments using national data sources and collaboration with local self-government representatives.

By developing municipal risk profiles public health emergency preparedness and response plans Serbia will significantly enhance its capacity to prevent, mitigate, and respond to all types of health emergencies.

To achieve this, **WHO and the Ministry of Health** partnered with the **Institute of Public Health of Serbia "Dr Milan Jovanović Batut"** as the key institution responsible for planning, organizing, coordinating, implementing, and monitoring all activities within the health sector related to health emergency risk assessment, prevention, and mitigation. Additionally, IPHS Batut oversees the network of district institutes of public health (district IPHs), which cover the entire country and have jurisdiction over their respective districts. These roles and responsibilities are defined by the Law on Public Health and the Law on Healthcare. The responsibility for conducting strategic risk analysis and developing risk profiles was assigned to district IPHs and their trained experts, with IPHS Batut providing oversight,

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facilitation, and coordination. The Ministry of Interior – Emergency Management Sector provided the very important data sets required to be combined with health-sector-related data, to get the valid risks identification, quantification and prioritization.

Picture 9 - Induction workshop held in IPHS Batut, 17 May 2024

The work **commenced in April 2024** with the formation of a **Coordination Team** comprising members of **IPHS Batut's Emergency Management Team, experienced experts in STAR methodology, and a representative from the Ministry of Health, supported by the consultant from the Ministry of Interior – Emergency Management Sector**. That same month, the team developed Expert-Methodological Guidelines for applying the WHO STAR tool in public health risk assessment. An **induction workshop** with all involved experts was held on **May 17, 2024**, after which local experts were provided with datasets from national data sources and began collaborating with emergency preparedness focal points within their respective local self-governments and other stakeholders (PHCs, hospitals, emergency service providers, etc.).

The **risk assessments were conducted between May and September 2024**. During this period, **IPHS Batut conducted 23 field visits** to local teams across all districts in Serbia to **provide technical assistance, address challenges** encountered by the teams, and **engage with local governments on data collection deficiencies**. Local teams were guided to ensure uniform assessment methodologies were applied.

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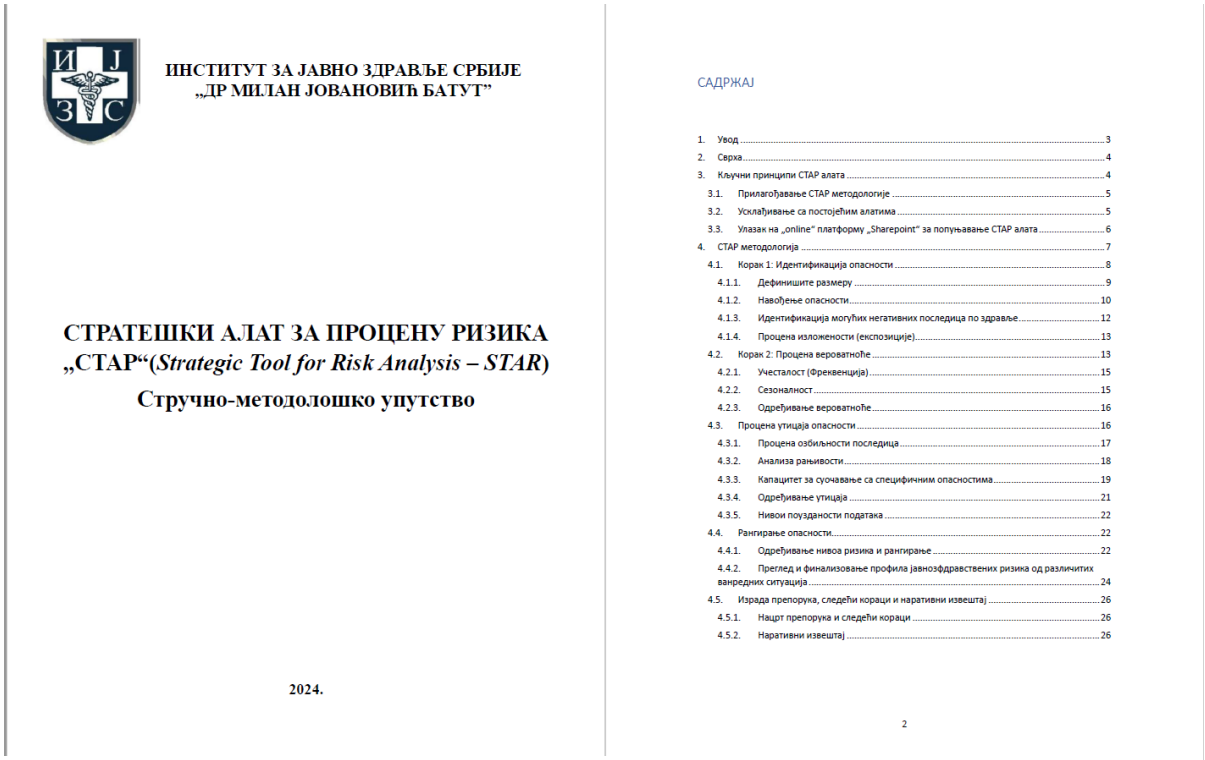

ИНСТИТУТ ЗА ЈАВНО ЗДРАВЉЕ СРБИЈЕ
„ДР МИЛАН ЈОВАНОВИЋ БАТУТ"

СТРАТЕШКИ АЛАТ ЗА ПРОЦЕНУ РИЗИКА
„СТАР"(*Strategic Tool for Risk Analysis – STAR*)
Стручно-методолошко упутство

2024.

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Picture 10 - Expert-Methodological Guidelines on assessing public health risks in emergencies using STAR Tool

While the target set in the Description of Action document was 150 municipalities, emergency preparedness mandates are at the level of local self-governments. In agreement with IPHS Batut, it was decided to conduct the analysis at the self-government unit level, which, in the case of some cities, includes multiple city municipalities. For cities consisting of multiple municipalities (Niš, Novi Sad, Užice, Požarevac), risk assessments were conducted at the city level as a single unit. The only exception was the City of Belgrade, where the large geographical area, diverse topography, and varying emergency risks necessitated separate risk analyses and profiles for each of its 17 city municipalities. Ultimately, **risk assessments were carried out across all 144 local self-government units and 17 city municipalities of Belgrade**.

Beyond **risk identification**, evaluations were conducted to assess **the severity of potential health impacts**, the **capacities of the health and non-health sectors**, and **community resilience** in responding to these risks. This process enabled the **ranking of risks and the identification of priority areas for action**, which is essential for **effective public health threat management**. As a result of the project, priority actions were determined for managing public health risks in all municipalities, ensuring that the impact of risks can be reduced to an acceptable level. The proposed measures include both **short-term actions for immediate risk reduction** and **long-term strategies for sustained risk management**. The **developed municipal risk profiles were presented on October 18, 2024**, in IPHS Batut with participation of all involved stakeholders (MoH, MOI, IPHs) and they will serve as the foundation for

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public health emergency preparedness and response plans at the local level, which are scheduled for completion in 2025. By successfully implementing these activities, **Serbia will significantly enhance its capacity to prevent, mitigate, and respond to all types of health emergencies**.

As a joint action of two ongoing projects UNDP is implementing, UNDP presented the new functionalities of the Disaster Risk Register on two occasions:

- Regional conference "10 Years After the 2014 Floods" in Belgrade 22-23 October 2024, organized by UNDP, as the one of the most important non-structural measures that the Republic of Serbia has undertook in the last decade in the DRR and emergency response area. Joint presentation of the SEM and the RGA showcased the potential and functionalities of the Registry through simulations of specific scenarios in cases of forest fires, landslides, and floods. This presentation particularly highlighted the synergy between the UNDP, the MoI and the RGA, as well as the importance of using modern digital platforms in the prevention and response to emergency situations.
- 2024 Europe & Central Asia Regional Platform for DRR in Budva 5-8 November 2024 organized jointly by the Government of Montenegro, the European Commission, the UNDRR and UNDP, showcasing the link to the national spatial data infrastructure (NDSI) and innovative risk management and emergency response tools achieving risk informed investment planning and sustainable development.

At the request of the Sector for Emergency Management, UNDP has supported, within the Action, the introduction of a unique early warning system by engaging an expert for the successful establishing of the system for **urgent dissemination of information to citizens in case of warning or hazards occurring of natural and technical-technological accidents**. The MoI established as of November 2023 an intergovernmental Working Group (WG) for developing the system for transmission of emergency information to citizens in case of warning or occurring hazard of natural and technical-technological accident which can cause havoc to people's lives, health, and assets. The expert participated in the activities of the WG and supported the establishment of the **SMS (Short Message Service) reporting and informing** in emergencies and was responsible for developing methodology and notification procedures for key entities monitoring specific phenomena in Serbia. This included creating technological solutions, technical specifications, and communication technology recommendations for emergency SMS notifications in collaboration with SEM and mobile operators. Additionally, expert also defined backup power requirements for mobile networks and establishing procedures for the MoI Operations Centre to inform and alert citizens.

As a final stage of these efforts, the MoI and the MoIT signed a Memorandum of Cooperation on the transmission of urgent information to citizens in case of disaster warning. Based on this the new system which automatically sends warnings via SMS to the numbers of all mobile phone users in the affected area started its implementation on 15 September 2024.

Swift transmission of emergency information to all mobile phones at the base station in the part of the territory threatened by a health crisis or approaching natural hazard enables informing and awareness amongst the citizens and reduces risks to their lives and property.

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UNDP recognized the trend in future innovative development of a comprehensive early warning and improvement of the public alert system using advanced communication technologies and social networks, the expert has in close collaboration with the SEM and the mobile network operators:

- developed technological solution and recommendations for selection of communication technologies, and the procedures for **CBS (Cell Broadcast Service), reporting and informing** in emergencies, and the **use of national roaming services,** which includes using base stations amongst the operators in case of absence or bad reception of user/recipient home network
- identified **mobile apps and social networks** (e.g. Viber, Whatsapp, Facebook, Youtube, Instagram, X, WeChat, TikTok, Telegram, Snapchat, etc.) most efficient for **reporting and informing** in emergencies, and established and facilitated a consultative process between MoI Operations centre and the representatives of selected social networks in the Republic of Serbia for their integration in the system for informing and alerting in emergencies.

ACTIVITY 2.3 TRAINING OF THE PROFESSIONALS FOR PSYCHO-SOCIAL SUPPORT FOR GROUPS AFFECTED BY PUBLIC HEALTH CRISIS AND EMERGENCY BASED ON THE DEFINED PSYCHO-SOCIAL SUPPORT MANUAL

Planned results	**Target**	**Responsible IP**	**Deliverables reached in the reporting period**
Updating and accrediting the training curricula for PHC health care professionals with the National Health Council of Serbia	Curricula updated and accredited	WHO	Planned for 2026
Training of primary health care level professionals for psycho-social support for groups affected by public health crises and emergencies	150 professionals	WHO	Planned for 2026
Status of the Activity: Not started yet. Ongoing considerations.			

Training of primary care professionals for psycho-social support for groups affected by public health crises and emergencies is planned for the fourth year of implementation (2026). Following tragic mass shootings at the Primary School 'Vladislav Ribnikar' in Belgrade and in villages Dubona and Malo Orašje in Mladenovac in May 2023, the Ministry of Health approached WHO on 9 May 2023 with the request to implement the activity in 2023. However, the Ministry's strategy shifted during the summer 2023. WHO, in agreement with the MoH and the EUD, postponed the capacity building for mental health support in crisis response for the general population to avoid overlapping with other ongoing activities (project for strengthening capacities of pediatricians and school psychologists). WHO stands prepared to initiate this activity at the appropriate time as per the agreement with the Ministry of Health, otherwise it will be implemented as planned in 2026.

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ACTIVITY 3.1 DIGITALIZATION AND E-HEALTH

Planned results	**Target**	**Responsible IP**	**Deliverables reached in the reporting period**
Conducting assessments of main functions of the Health Information System complementing and building on the results of the digital analysis	2 assessments	WHO	First assessment completed in May 2023
Upgrade of the Electronic Health Record system	E-Health System operational and functional	UNDP and WHO	Architecture of the new RIZIS Recommendations related to the shortcomings of the Law on Health Documentation and Records in the Healthcare Domain (2023) of the greatest importance from the point of view of personal data protection Finalized development of the eReferrals subsystem including functional and technical specification, source code, test cases and training material Design of the new architecture finalized Inputs for the bylaw on eKarton provided Assessment of the as is and to be state in the histopathology lab in Sremska Kamenica completed

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Establishment and functionality of the Health records data governance platform	Curricula updated and accredited	UNDP and WHO	Provided support for the new legislation
Capacitation of end users, managers, and administrators for the usage of digital health solution	300 end users 10 trainers	UNDP and WHO	Planned for 2026
Training of citizens on site	At least 150,000	UNDP and WHO	Planned for 2026
Provision of E-Health training and outreach material to PHCs	156 PHCs	WHO and UNDP	Activity shall start in Q2 2025
Status of the Activity: Steady pace of implementation.			

Following the parliamentary elections in December 2023 and the formation of a new government in May 2024, there was a complete reshuffle of the teams responsible for digitalization processes in both the Prime Minister's Office (PMO) and the Ministry of Health (MoH). While the government was appointed in May 2024, the digitalization teams were not fully established until late autumn 2024. Since then, both UNDP and WHO teams has been a regular member of the still informal coordination mechanism for health digitalization created by the PMO and MoH.

During the reporting period, UNDP actively advanced several critical initiatives to enhance Serbia's healthcare information systems. **Efforts to transition local electronic health systems (EHRs) to the government Data Centre (DDC) in Kragujevac are ongoing**. Currently, 36 systems are active, with an additional 13 systems undergoing migration. This relocation directly enhances security and reliability, enables direct communication with central systems hosted at DDC and allows to gradually phase out Internet-based data transmission. Complete migration of central systems, like eRadiology, shall be completed by the end of June 2025.

The design of a new healthcare system architecture intensified. **UNDP supported establishment of preconditions for the national EHR system, eKarton, and design of new architecture** after conducting workshops and assessing existing technical documentation. This design includes processes for health data exchange between local EHRs and eKarton via the government service bus (ESB). Future plans include connecting existing central systems to the ESB, ensuring efficient and secure data exchange. The functional readiness of eKarton is expected by the end of 2025, with initial tests integrating one primary, one secondary, and one tertiary health institution via ESB. Current focus includes defining and integrating the process for assigning and exchanging a new identifier—"Lični Zdravstveni Broj" (Personal Health Number)—through the state service bus to facilitate patient data access and exchange.

UNDP engaged several experts and **completed development of the eReferrals system by completing its functional and technical specifications, source code, test cases, and training materials.** However, due to the government decision to take the new shift in eHealth architecture the handover of the eReferrals system is still pending. UNDP organized several consultation meetings with the Ministry of Health, Office for IT and eGovernment, and PMO to define the new architecture and necessary changes and actively participated in the newly established coordination mechanism. Handover of the eReferrals

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subsystem shall be completed by the end of June 2025 for initial testing with the new eKarton architecture.

In terms of legislation, UNDP provided inputs for the eKarton bylaw, outlining data sets for exchange and methods of data exchange. We anticipate adopting these bylaws by the end of Q2 or the beginning of Q3.

As per MoH request, UNDP visited the histopathological laboratory in Sremska Kamenica, where healthcare institution renovations were completed. We assessed the current state and developed a new state design.

Within newly established coordination mechanism, as well as through bilateral cooperation with the MoH, WHO has agreed on the main areas of support to be provided in the digitalization process. The primary focus will be on **enhancing the capacity of healthcare workers to effectively utilize all digital platforms and their full functionality**. Although several components of the health information system are still under development or refinement, the first phase of WHO support will concentrate on **advancing parts of the eHealth (eZdravlje) portal aimed at healthcare workers**.

In addition to providing citizens with access to their health records and the ability to schedule appointments, the eHealth portal will, by early 2025, introduce features enabling communication between patients and doctors, telemedicine consultations, and an educational portal for healthcare workers. WHO has agreed with the MoH to provide ongoing support throughout 2025 in building the capacity of healthcare workers to use these platforms, through **online** and some **in-person training**, as well as developing **training modules within the portal** itself. Moreover, UNDP team tested the eHealth application to prepare training materials, with the new mobile application and portal expected to be finalized in May. This completion will enable citizens to access healthcare services digitally, and UNDP will support MoH and Government of Serbia in promoting these services to citizens.

Once all features of the new eHealth system are fully operational by the end of 2025, WHO will conduct **two planned digital health surveys**. These surveys will **assess the functionality**, **user acceptance**, and the **challenges** faced by healthcare workers and the general population in using the system.

ACTIVITY 4.1 IMPLEMENTATION OF THE RCCE PLAN, INCLUDING TRAININGS, SIMEX, DEVELOPMENT SOPS, ETC

Planned results	**Target**	**Responsible IP**	**Deliverables reached in the reporting period**
Establishment of the Multi-sectoral coordination mechanism at national level	Mechanism established	WHO	Planned for 2025
Development of SOPs and tools to support RCCE, together with informational-educational materials on different topics	5 SOPs and tools Inf.-edu. material	WHO	Planned for 2025

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Development of a training curriculum for the RCCE	Curriculum for RCCE	WHO	Planned for 2025
Training of public health professionals on RCCE	55 professionals	WHO	Planned for 2026
Conducting a simulation exercise for RCCE at all levels of the healthcare system	6 SimEx	WHO	Planned for 2026
Status of the Activity: Not started yet.			

Work on this activity will begin in September 2025 with support for the establishment of a Multi-Sectoral Working Group on Risk Communication and Community Engagement in health emergencies, led by the Ministry of Health. One of the group's key roles will be to develop five standard operating procedures and tools for RCCE in health emergencies, as well as to oversee the development of an RCCE training curriculum, which is expected to be initiated by the end of 2025. In 2026, training sessions will be conducted for 55 public health professionals from district Institutes of Public Health (IPHs) and the Institute of Public Health of Serbia "Dr Milan Jovanović Batut." Additionally, five simulation exercises for RCCE will be organized across all levels of the healthcare system.

ACTIVITY 4.2 EMERGENCY AWARENESS RAISING EVENTS

Planned results	**Target**	**Responsible IP**	**Deliverables reached in the reporting period**
Awareness raising events in local communities	At least 10	UNDP and WHO	Planned for 2025 and 2026
Reaching people through communication activities	At least 500,000	UNDP and WHO	Planned for 2025 and 2026
Status of the Activity: In preparatory phase.			

UNDP and WHO will implement a designated campaign within the broader communication-based framework creating a better understanding of prevention and harm reduction measures, familiarity with emergency protocols, and contribute to the engagement of communities and citizens in disaster risk reduction (DRR) actions.

The initial consultations started with LSG representatives in Kruševac and Čačak, focusing on youth and private companies, as of December 2024. In parallel, UNDP discussed with SEM joint activities in awareness raising on preparedness and response in emergencies among Roma population and people with disabilities. UNDP started with preparation of the events with representatives of local self-governments however, the turbulent political atmosphere following the collapse of the canopy at the railway station in Novi Sad in November 2024 causing public unrest, and the student protests gaining their momentum towards the end of 2024, led to an early end of the school year. The primary and secondary public education system joined the protest as the start of the second term, and protest continue throughout Serbia. Having this in mind, UNDP expected lower readiness of the different

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target groups, especially the youth, to participate in awareness raising events during this turmoil, particularly in Čačak. UNDP has undertaken all necessary measures to mitigate the risks arising from the current political situation and student protests and has adjusted its activities accordingly. In particular, activities will be implemented jointly with local actors who have strong reputations and the trust of the local communities, ensuring that the intended impact is effectively delivered and communicated. The grass root organizations have been carefully selected based on their mandates (Red Cross, Voluntary Firefighting Brigade), which ensure impartiality and align with the specific needs of the communities, thus ensuring that EU funded activities are perceived as unbiassed to any involved party. Following this approach, UNDP has adapted its activities and scheduled **the first two awareness-raising events on emergency situations for May 2025, to be held in Sombor and Loznica**. The first event will take place on May 12 in Sombor and will focus on providing psychological support and the best coping mechanisms for elderly during emergencies. It will be followed by a joint exercise with young Red Cross volunteers and a Health fair. The second event, scheduled for May 16 in Loznica, is aimed at the youngest audience—preschoolers and first-grade students. Firefighters and medical professionals will work together to teach children how to prepare for and protect themselves in the event of the most common emergencies.

UNDP shall continue with emergency awareness raising events throughout 2025 and 2026, closely monitor the situation and will further adapt the timing, approach, and content of activities as needed to ensure their relevance and effectiveness.

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4 RISKS ASSESSMENT

All risks defined in the Description of Action (DoA) remain valid, additional risks are identified in the Inception phase for which UNDP and WHO responded with immediate management action and addressed it in a timely manner. All are provided in the table below:

No.	Description of Risk	Probability	Impact	Consequence	Mitigation Measures
Institutional in Description of Action					
1.	Political changes at the local and national level	Medium	Medium	Delay in implementation	The topics tackled in this project are considered high priority for both the national and local level. As such, they would be supported by any national/local government regardless of political orientation. The UNDP/WHO will maintain regular contacts and coordination with authorities at all levels. In case of changes, they will approach the new structures with transparent and independent presentation of project activities, broader significance and impact.
2.	Lack of motivation and commitment from national and local institutions and organizations to fully participate	Low	Medium	Delay in implementation	This proposal is prepared in close partnership with relevant national institutions. All proposed activities were checked for commitment by the final beneficiaries. The target institutions and organizations have expressed commitment for maintenance of facilities developed in the project. The UNDP/WHO will maintain a close collaboration with relevant stakeholders to encourage commitment.
Technical in Description of Action					
3.	Delays in deliveries of equipment, materials and/or infrastructure	Low	Medium	Delay in implementation	Possibility to apply UNDP procurement procedures (as pillar-assessed organizations) represents an important advantage of this partnership. It will increase efficiency, decrease reaction time and improve control over sub-contractors.

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No.	Description of Risk	Probability	Impact	Consequence	Mitigation Measures
	upgrade due to poor performance by contractors				Each infrastructure and supply activity will be thoroughly reviewed in the preparatory phase. Technical and logistical arrangements will be made in such a way so as to decrease risk. All facts will be presented to the PSC before a decision is made. UNDP/WHO will maintain close control and communication with sub-contractors. Their performance will be incorporated into the internal monitoring system. UNDP/WHO will put efforts in risk management during implementation of different contracts.
4.	Delays in finalization of procedures relating to obtaining relevant permits for (re) construction of laboratories and primary health care centers/facilities for detection of reaction and response in case of emergency.	Low	Medium	Delay in implementation	Relevant IPH and health center appointed staff to deal with permitting procedure. UNDP/WHO shall establish close cooperation with all authorities having jurisdiction, to ensure receipt of all required approvals, permits and location conditions in due time. MoH resumes the responsibility to liaise with the responsible national and local institutions ensuring no delays in the issuance of the necessary documentation. UNDP shall engage in-house engineering capacities for monitoring of the implementation of the contract.
5.	Lack of availability of relevant staff for project implementation at	Medium	Medium	Delay in implementation	Institutions and organizations to nominate relevant staff (member and deputy member) for the implementation of the project. National health professionals' retention plan.

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No.	Description of Risk	Probability	Impact	Consequence	Mitigation Measures
	national and local level.				
Technical in Feasibility Study					
6.	Lack of the preconditions ensured by IPHS/IPHs for the reconstruction of facilities	Low	High	Delay in implementation	Full commitment of the IPHS/IPHs to the Project and ensuring the preconditions for construction (plot, permits, contribution through building the foundations of INHs, utility connections, infrastructure, etc.) are crucial for the success of the implementation. The Project team will regularly monitor the state, preparedness and maturity of the INHs for the construction, and provide support to the IPHS/IPHs representatives and institutions for preparation of the documents, resolving issues and enabling the construction to start.
7.	Technical challenges in partial reconstructions of the buildings	Moderate	Moderate	Increase of cost, delays in implementation	As the buildings will not be reconstructed in full scope, but only parts with the laboratories, there is a risk of technical challenges in dividing the reconstruction zone and some of the works needed to be done outside of the laboratories area. Careful planning and design must identify all technical issues and reflect them to the budgeting and tendering of works.
8.	Insufficient funds for the construction phase	Moderate	High	Delay in implementation , reduction of scope of works	The reconstructions of old buildings such as the ones identified always pose a risk for unforeseen works. Design phase must provide accurate cost estimates for the required works. In case of insufficient funds, prioritization of the selected facilities and scope of works shall be done with the stakeholders.
9.	Financial claims by the Contractor	Moderate	Moderate	Increase of project costs	Possibilities for unforeseen works and costs are reduced by developing accurate designs. Therefore, all efforts to mitigate this risk shall be focused during design, reviewing both drawings and materials specifications. Technical control and

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No.	Description of Risk	Probability	Impact	Consequence	Mitigation Measures
					supervision consultant will be contracted for verification of BoQs and estimated prices, in addition to their legal requirements.
10.	Changes of the design during construction phase	Moderate	Moderate	Delay in implementation and increase of construction costs	Changes in the design due to late requests by the beneficiary may result in increase of budget and time for construction. All due diligence, discussions with stakeholders and careful needs assessment during the design stage shall minimize the risk and impact of potential changes.
11.	HSE incidents during construction	Low	High	Delay in implementation . Public and reputation issues.	Although all HSE (health and safety executive) issues on the site are the responsibility of the Contractor, management of the project shall ensure that the contractor is fulfilling all HSE prescribed measures.
Social and environmental in SESP					
12.	Utilization of harmful materials as a failure to comply with the requirements considering environmental protection during the preparation of the technical documentation and design for construction.	Moderate	Low	Breaking of the environmental protection rules in the phase of the preparation of documentation or during the construction process	Within the design phase of the Project, UNDP developed the Feasibility Study containing the overview of the regulation in the area of environment protection over reconstruction requirements of the targeted facilities. The Study identified no adverse environmental impact, under the assumption that the legal requirements are obeyed. UNDP engineering unit, designing company, technical control company and independent verifier will assure full alignment of technical documentation and designs with prescribed conditions and approvals of the authorities, in accordance with Serbian legislation and examples of good practice.

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No.	Description of Risk	Probability	Impact	Consequence	Mitigation Measures
13.	Application of unsafe material (hazardous paint, tiles and low-quality furniture lacking safety attests) and technologies by the construction company/equipment suppliers during local infrastructure upgrading	Low	Low	Negative influence on safety at work. Public and reputation issues.	Selection of compliance with the design will be supervised by UNDP construction engineer / works supervision company in accordance with safety categorization of the potentially used materials.
14.	Soil and underground water contamination due to inappropriate waste disposal from construction sites;	Low	Moderate	Negative environmental impact. Public and reputation issues.	Engagement of Environmental consultant responsible for performing environmental screening, defining and supervising implementation of corrective measures including waste disposal from construction sites, and ensuring waste disposal from construction sites including potentially toxic (e.g. asbestos) will be performed in accordance with the laws and applicable regulations of the Republic of Serbia.
Additional Technical Risk in the Implementation Phase					
15.	Delays in implementation of Risk Register	Moderate	Moderate	Use of the Register below expectations	UNDP prepared quality Terms of Reference following extensive consultations and agreement with the beneficiaries and initiated the data acquisition and harmonization. UNDP put in place the monitoring, quality control and business analytics mechanisms including the UNDP engaged technical experts for software

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No.	Description of Risk	Probability	Impact	Consequence	Mitigation Measures
	Software and needs of the beneficiary not reflected and in a user-friendly manner by the Contractor			and decreased engagement of beneficiaries and data holders	design and implementation assuring timely and quality implementation of the contract and reflecting the needs of the beneficiaries in a user-friendly manner. UNDP and the WG continuously coordinate the process and support RGA and national authorities' data holders in improving data quality and data acquisition, connectivity and networking of institutions' information systems with the RGA information system and the National geospatial data infrastructure system.
16.	Delays in deliveries of equipment, materials and/or infrastructure upgrade due to poor performance by contractors	Low	Medium	Delay in implementation	UNDP enforces the mechanism of regular meetings and monitoring of agreed timelines (weekly and thematic meetings, and on-the-spot visits), and engages its in-house engineering capacities for monitoring the implementation of the contract. Delay damages and/or performance securities shall be imposed if delays on behalf of the Contractor in the realization of the project occur.

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5 LOGFRAME MATRIX UPDATED

IF	THEN	BECAUSE
Laboratory technical capacities upgraded in line with WHO Laboratory biosafety manual, 4th edition (LBM4) and international quality standards; procedures for reaction and response in emergency (SOPs, etc.); human capacities (Health Care Practitioners, Sanitary Inspectors', psycho-social support) for detection, risk assessment and reaction improved.	Serbia' capacity for emergency management will be improved sufficiently to establish a resilient and responsive public health care system at national and local level.	Operational, technical and human capacities in managing biological and chemical hazards are enhanced, procedural framework established effective, efficacy, case-sensitive and risk-informed emergency responses.
Digital capacities (Disaster Risk Register health upgrade, E-health) increased, awareness the general public on how to behave in a crisis and the role of public institutions raised, and National Action Planning for Health Security (NAPHS) implemented.		More coherent and comprehensive planning and regulatory framework, informed decision making, biological and chemical hazards risk governance strengthened, digitalized public healthcare system, overall health status of the population improved.

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Results	Results chain: Main expected results (maximum 10)	Indicators (at least one indicator per expected result)	Baselines (Year 2022)	Current value	Targets (Year 2026)	Sources of data (1 per indicator)	Assumptions
Impact	To enhance the resilience, responsiveness and capacity for emergency management to serious national public health threats	Readiness of candidate countries and potential candidates on economic criteria Public social security expenditure (as percentage of GDP)				– European Commission - KPI 4 of IPA III Proposal – EC Progress Report	*Not applicable*
Outcome 1	Improved health care system for reaction in emergencies in line with EU and international standards	Number of health emergency protocols in line with EU and standards	1	1	1	MoH reports Project reports	Institutions crucial to the HRSD sector remain aware of the need to plan and implement response measures to crises Decision makers in individual intuitions remain committed to communal

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Results	Results chain: Main expected results (maximum 10)	Indicators (at least one indicator per expected result)	Baselines (Year 2022)	Current value	Targets (Year 2026)	Sources of data (1 per indicator)	Assumptions
							approaches to crisis response
Output 1 related to outcome 1	Improved planning and response capacities of health system in times of crisis	1.1: Number of laboratories with trained staff for LQMS and LQSI tool 1.2. Number of fully operational laboratories in line with the WHO LQMS (Belgrade, Nis, Kragujevac)	1.1: 0 (2022) 1.2: 0 (2022)	1.1: 25 1.2: 1.3 – Works ongoing	1.1: 25 (2023) 1.2: 3 (2025) - at least regional Biosafety Level 2 Surveillance laboratories in IPHS	Programme/Project Reports Report on Implementation of Public Health Strategy Annual IHR/ECDC report Official Gazette of the Republic of Serbia Reports of the Authority responsible for risk management	Political and financial commitments to develop and maintain IHR (2005) implementation at both the regional, national, and sub national levels. Improve governance for multisectoral IHR implementation
		2.1: % local administration trained to apply methodology for risk assessment by the end of 2021[1]	2.1: 0% (2022) 2.2: 0 (2022)	2.1: 100% 2.2: 85%	2.1: 90% (2026) 2.2: 100% (2026)		

[1] "Action plan for the implementation of the National Program for Disaster Risk Management (2017-2020)" / Result 2.1.2. Methodologies for different hazard assessment are improved and are applied as a tool for identification and assessment of disaster risk monitoring

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Results	Results chain: Main expected results (maximum 10)	Indicators (at least one indicator per expected result)	Baselines (Year 2022)	Current value	Targets (Year 2026)	Sources of data (1 per indicator)	Assumptions
		2.2: Disaster Risk Register includes health related issues in Serbia					through whole-of-government and whole-of-society approaches.
		3.1. e-Health System operational and functional	3.1: 0 (2022)	3.1: 0.1	3.1: 1 (2026)		
		3.2 Number of PHCs covered with E-Health training and outreach material	3.2: 0 (2022)	3.2: 0	3.2 156 (2026)		
		4.1: Number of health care professionals trained for psycho-social support in emergencies	4.1: 100 (2022)	4.1: 100	4.1: 250 (2026)		
		4.2 Number of SOPs and tools for RCCE in emergencies	4.2: 1(2022)	4.2: 1	4.2: 6 (2026)		
		4.3 Number of public health professionals trained on RCCE in emergencies	4.3: 0 (2022)	4.3: 0	4.3: 55 (2026)		
		4.4 Number of simulation exercises for RCCE	4.4: 1 (2022)	4.4: 1	4.4: 6 (2026)		
		4.5 Simulation exercise for local communities organized	4.5: 0 (2022)	4.5: 0	4.5: 10 (2026)		

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Results	Results chain: Main expected results (maximum 10)	Indicators (at least one indicator per expected result)	Baselines (Year 2022)	Current value	Targets (Year 2026)	Sources of data (1 per indicator)	Assumptions
		including at least 10 awareness-raising events 4.6 Number of people reached through communication activities	4.6: 0 (2022)	4.6: 0	4.6: 500,000		

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LIST OF THE CONTRACTS (WORKS, SUPPLIES, SERVICES) ABOVE € 60 000 AWARDED FOR THE IMPLEMENTATION OF THE ACTION DURING THE REPORTING PERIOD

No.	Contract Value[2]	Contract Award	Contract Type	Contractor's Name	Description of Activity
1	EUR 1,659,354.14	Open international Competition – Request for Proposal (RFP) (UNDP-SRB-00438)	Contract for Works	Gramis doo	Reconstruction, rehabilitation, and adaptation of the Microbiological laboratory of the Institute for public health of Serbia "Dr. Milan Jovanovic Batut"
2	EUR 1,288,502.70	Open international Competition – Request for Proposal (RFP) (UNDP-SRB- 00498,1)	Contract for Works	Credo doo	Reconstruction, rehabilitation, and adaptation of the Microbiological laboratories of the Institute for public health Nis
3	EUR 1,088,713.21	Open international Competition – Request for Proposal (RFP) (UNDP-SRB-00590)	Contract for Works	Jadran doo	Reconstruction, rehabilitation, and adaptation of the Microbiological laboratories of the Institute for public health Kragujevac
4	EUR 89,852.14	Open international Competition – Request for Proposal (RFP) (UNDP-SRB-00549)	Contract for Services	Beopotez doo	Supervision of the construction works at Microbiological Laboratory of the Institute "Dr. Milan Jovanovic Batut"

[2] All contracts are concluded in USD currency. For the purpose of the report the EUR/USD weighted currency exchange rate applicable on dates of recording the last two prefinancing installments in UNDP accounting system has been applied. The exact contract value in EUR will be calculated upon completion of the contract, since the costs will be partially covered by the both received traches, converted by applicable exchange rates.

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5	EUR 87,568.80	Open international Competition – Request for Proposal (RFP) (UNDP-SRB- 00639)	Contract for Services	Beopotez doo	Supervision of Reconstruction and Rehabilitation of the Microbiological Laboratory, Institute for Public Health Nis
6	EUR 678,429.80	Open international Competition – Request for Proposal (RFP) (UNDP-SRB-00180)	Contract for Services	IGEA doo	Disaster Risk Register software upgrade
7	EUR 232,979.64	Direct Financial Contribution – a grant mechanism that is used for contracting governments or its affiliated institutions	Direct Financial Contribution	Institute of Public Health of Serbia "Dr Milan Jovanovic Batut"	Implementation of WHO's Strategic Tool for the Analysis of Risks (STAR) in Municipalities in Serbia

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ACTIVITY MATRIX

COMPONENT 1: *Strengthening the public health laboratory system* ***ACTIVITY 1.1*** *Implementation of the Laboratory Quality Management System (LQMS) in the microbiological laboratories* ***ACTIVITY 1.2*** *Laboratories reconstruction and upgrade in line with LBM4* ***COMPONENT 2:*** *Capacity building and strengthening of the health system for emergency preparedness and response with focus on primary health care* ***ACTIVITY 2.1*** *Development of procedures for healthcare system response to emergencies at national and local level and public health emergency management training for the health system employees including sanitary inspectors* ***ACTIVITY 2.2*** *Disaster Risk Register upgrade with public health risks* ***ACTIVITY 2.3*** *Training of the professionals for psycho-social support for groups affected by public health crisis and emergency based on the defined psycho-social support manual* ***COMPONENT 3:*** *Strengthening of the Health Information system and implementation of E-Health platform* ***ACTIVITY 3.1*** *Digitalization and E-Health* ***COMPONENT 4:*** *Capacity building for communication in emergencies including raising awareness* ***ACTIVITY 4.1*** *Implementation of the RCCE Plan, including trainings, SimEx, development SOPs, etc* ***ACTIVITY 4.2*** *Emergency Awareness Raising Events*	***Means:*** Project team, per diems, travel costs, equipment purchase, rent of office, vehicle costs, office consumables, external services, constructions/works ***Costs*** 1. Human resources: 1,769,535.78 EUR 2. Travel costs: 33,250.00 EUR 3. Equipment: 459,400.00 EUR 4. Local office: 59,050.00 EUR 5. Other, services: 763,420.77 EUR 6. Other: 7,807,492.98 EUR 7. Indirect costs: 762,450.47 EUR 8. Contingency reserve: 345,400 EUR **TOTAL ELIGIBLE COSTS: EUR 12,000,000.00**	***Assumptions*** *Political and economic stability and government commitment to improvement of disaster risk resilience*

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UPDATED ACTION PLAN FOR THE FUTURE ACTIVITIES OF THE PROJECT[3]

Year 3													
	Half-year 1						Half-year 2						Implementing body
Activity	**M 1**	**M 2**	**M 3**	**M 4**	**M 5**	**M 6**	**M 7**	**M 8**	**M 9**	**M 10**	**M 11**	**M 12**	
Execution Activity A0: Establishment and coordination of Decision-Making Process													UNDP / WHO
Preparation Activity 1.1 Implementation of the Laboratory Quality Management System (LQMS) in the microbiological laboratories													WHO
Execution Activity 1.1 Implementation of the Laboratory Quality Management System (LQMS) in the microbiological laboratories													WHO
Execution Activity 1.2 Laboratory reconstruction and upgrade in line with LBM4													UNDP / WHO

[3] This update action plan is developed in line with the guidelines in the reporting template and covers the financial period between the interim report and the next report, reflecting only the activities planned for this financial period.

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Year 3													
	Half-year 1						Half-year 2						Implementing body
Activity	**M 1**	**M 2**	**M 3**	**M 4**	**M 5**	**M 6**	**M 7**	**M 8**	**M 9**	**M 10**	**M 11**	**M 12**	
Preparation Activity 2.1 Development of procedures for healthcare system response to emergencies at national and local level and public health emergency management training for the health system employees including sanitary inspectors													WHO
Execution Activity 2.1 Development of procedures for healthcare system response to emergencies at national and local level and public health emergency management training for the health system employees including sanitary inspectors													WHO
Execution Activity 2.2 Disaster Risk Register upgrade with Public Health related risk													UNDP/WHO
Preparation Activity 2.3 Training of the professionals for psycho-social support for groups affected by public health crisis and emergency based on the defined psycho-social support manual													WHO
Execution Activity 3.1 Digitalization and eHealth													WHO/UNDP

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Year 3

	Half-year 1						Half-year 2						Implementing body
Activity	**M 1**	**M 2**	**M 3**	**M 4**	**M 5**	**M 6**	**M 7**	**M 8**	**M 9**	**M 10**	**M 11**	**M 12**	
Preparation Activity 4.1: Implementation of the RCCE Plan, including trainings, SimEx, development SOPs, etc.													WHO
Execution Activity 4.1: Implementation of the RCCE Plan, including trainings, SimEx, development SOPs, etc.													WHO
Preparation Activity 4.2 Emergency Awareness Raising Events													UNDP
Execution Activity 4.2 Emergency Awareness Raising Events													UNDP

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6 BENEFICIARIES/AFFILIATED ENTITIES AND OTHER COOPERATION

Cooperation and Partnership

There is an excellent relationship and strong cooperation established with the state authorities, at national and local level, and this is crucial in mitigating implementation risks, and facilitating addressing the needs of the beneficiaries in the changing circumstances throughout the implementation of the Action.

Especially is important the partnership with the key national partner **Ministry of Health (MoH)**, and the **Institute of Public Health of Serbia "Dr Milan Jovanović Batut" (IPHS Batut)**, as well as the identified locations for reconstruction of laboratories **Institutes of Public Health (IPHs) in Nis and Kragujevac**. Besides longstanding and close collaboration, UNDP and WHO included them already from the preparatory phase of the intervention in identifying and prioritizing the laboratories for the upgrade in line with Biosafety 2/2+ standards, as well as in the established mechanisms of managing and updating the Register and cooperation with SEM. This partnership is visible in the engagement in the process of developing and harmonizing the technical documentation, planning of uninterrupted operations of laboratories during reconstruction, exploring arrangements to optimally meet the needs of the beneficiaries and achieve best value for money, ensuring strong ownership and sustainability of results. Also, the IPHS immediately responded to the requests of the UNDP and quickly acquired and harmonized data on healthcare capacities and contagious diseases and established data exchange services with the RGA. UNDP also established cooperation with the MoH by supporting the IPA unit in planning, programming, monitoring, and reporting on EU funds, and the process of EU accession and harmonization with the EU acquis. This is especially important since the Ministry of Health is involved to more or less extent in 23 out of 35 negotiation chapters covering specific areas of EU policies. An integral parts of the Chapter 28 – Consumer and health protection within the Cluster 2: Internal market are e-health, infectious diseases, blood, tissues and cells, mental health, rare diseases, inequalities in the realization of the right to health care, prevention of injuries and promotion of safety, patient rights in cross-border healthcare, health personnel, medical devices, and in vitro diagnostic medical device are the core subject of intervention of the Action. UNDP engaged technical support to the MoH is also responsible for harmonization of the strategic, operational and legal framework of the health sector with the legal acquis of the EU (EU acquis). With this UNDP supported the MoH in presenting the activities within the areas under the jurisdiction of the Ministry of Health under Chapters 1, 2, 3, 10, 19, 28, through the description of the steps in fulfilling the criteria, the key challenges in fulfilling the criteria, as well as the deadlines for the mentioned activities. WHO also engaged a technical expert to support the Sector for Public Health and Program Health Care, not only in coordinating all activities related to the implementation of the 'EU for Healthcare in Serbia' project within the Ministry of Health but also in strengthening its collaboration with international organizations and partners on joint public health initiatives.

In 2024, WHO facilitated a partnership to develop public health emergency preparedness and response plans at the local level, bringing together two key institutions responsible for strengthening the capacity of local self-governments and the national public health system—the Standing Conference of Towns and Municipalities and the Institute of Public Health of Serbia "Dr Milan Jovanović Batut." This collaboration builds on an already well-established partnership in strategic public health planning at the local level and the introduction of local health councils. By enhancing the capacity of local authorities in Serbia, this initiative also complements other EU-funded projects implemented by SCTM, aimed at improving local government administration.

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UNDP and WHO maintain an excellent relationship and strong cooperation with the state authorities involved in the process of digitalization of public health, namely the **Ministry of Health – Sector for Digitalization**, and the **Prime Minister's Office and Office and Office for IT and eGovernment**. The Prime Minister's Office was involved as a partner in the organization of the WHO assessment mission in 2023, organizing meetings with key stakeholders. The Ministry of Health involved both UNDP and WHO in the working group formed to develop a new Action Plan for Digitalization of health. Under UNDP guidance, MoH signed the agreement with ITE regarding technical support and migration of the existing IS into Data center in Kragujevac as well for hosting the new IS – RIZIS.

Digitalization of health, supported through the Action, is the core enabler of the cross-sector engagement regarding biotech/bioeconomy, as well as the development and implementation of **artificial intelligence in the medical sector**. UNDP continuously supports Government of Serbia and Center for 4 Industrial Revolution, that initiated establishment of Bio4 Campus, a new biotech European hub. Further, with the support of UNDP the Institute for Artificial Intelligence is currently working on development of AI solution for mammography, development of personalized therapy and diagnostic of rare diseases. Permanent partnership between UNDP and national institutions in digitalization ensured comprehensive approach in infrastructure, open data, digital skills and emerging tech, facilitated cross-sector engagement and ensured that new technologies are used ethically and do not exacerbate inequalities.

Both, UNDP and WHO teams established reliable relationship with colleagues implementing two twinning project is Serbia, one between the National Blood Center of Lithuania and the Serbian Directorate for Biomedicine that was finished in January 2024, and the second **twinning project "Strengthening the capacity of Serbia's health sector for communicable disease surveillance"**, implemented by MoH, IPHS "Dr Milan Jovanović Batut" and Finnish Institute for Health and Welfare (THL). Although the "Support in strengthening of the capacities of relevant institutions within the substances of human origins (SoHO) system" project concluded, results achieved will be crucial in establishing a national blood donor registry that aligns with the European Union's standards, integrating it with the electronic health records for a seamless operational flow. Synergies between EU for Healthcare in Serbia and "Strengthening the capacity of Serbia's health sector for communicable disease surveillance" projects are achieved during several meetings and with continuous communication during reporting period, especially in terms of digitalization of the healthcare when it comes to epidemiological surveillance and the capacities improvements of the network of public health institutes and national reference laboratories.

The Action is building upon the results of the intervention **'EU for Serbia Resilient to Disasters'** financed by IPA funds for the year 2019 the UNDP is implementing in the period 2020-2025. It specifically builds upon the established Disaster Risk Register, an interactive and interoperable system aligned with the EU INSPIRE Directive and the EU Initiative to Enhance Data Interoperability. UNDP shall upgrade the system to encompass direct public health risks and the implications for citizens' health arising from both natural and other disasters. UNDP keeps promoting the Register usage, and expanding partnerships in the private sector, bringing together two projects and key national partners, SEM and RGA, in presentation of Register functionalities. During reporting period, UNDP promoted the Register at regional conference "10 Years After the 2014 Floods" in Belgrade 22-23 October 2024 as well at 2024 Europe & Central Asia Regional Platform for DRR in Budva 5-8 November 2024 organized jointly by the Government of Montenegro, the European Commission, the UNDRR and UNDP.

Subregional **EU DG NEAR Project "Strengthening Health Systems' Resilience in Western Balkans"** implemented in partnership with WHO and MoH between 2021 and 2025 is complementary and in many aspects prepared the ground for the implementation of the Action. Through the EU DG NEAR

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project, support to the implementation of the National Action Plan for Health Security (NAPHS) started so that the actions to be implemented through the IPA Action have a good base for continuation of support (strengthening the laboratory, risk management and RCCE). Activities implemented through the EU DG NEAR Project of relevance to the Action are:

- Strengthening national laboratory capacity for diagnostics of high-threat pathogens through advanced hands-on training on genomic sequencing, activity implemented in partnership with National Reference Laboratory for respiratory viruses at the Torlak Institute which encompassed a strong component of LQMS.
- Training of public health professionals on using the WHO tool for assessment of public health risks in emergencies, activity implemented in partnership with the IPHS Batut and the network of district IPHs. This set the ground for the implementation of the public health risk assessment in emergencies and the development of public health risk profiles for 173 municipalities that will be implemented through the Action.
- Assessment of safety risks in six hospitals in Serbia, activity implemented in partnership with the MoH and IPHS Batut. A pool of professionals trained on using the WHO tool Hospital Safety Index and subsequently the actual assessment done in six hospitals selected by the MoH. Assessment reports from these hospitals will feed into the Disaster Risk Register health upgrade within the Action.

Substantial driving force for allowing the upgrade of the Disaster Risk Register with the instrumental data sets related to the health sector to enhance and strengthen health system resilience and responsiveness and to largely contribute to upgrading health security and health system preparedness and readiness for natural and man-made disasters and other emergencies – was the very functional relationship and cooperation between the WHO and the Ministry of Interior, Emergency Management Sector, that has been established several years earlier and well maintained and nurtured over the time. Namely, the Ministry of Interior, Emergency Management Sector provided crucial data sets required at the local/municipal level to conduct relevant and fully valid health emergency risk assessments in municipalities across Serbia.

Crucial partnerships in the endeavor of a further very comprehensive upgrade of the Disaster Risk Register, UNDP achieved with the **Ministry of Interior, Sector for Emergency Management (MoI/SEM)** and the **Republic Geodetic Authority (RGA).** The SEM chairs the Disaster Risk Register Working Group tasked to establish the Disaster Risk Register by defining priority risks and corresponding data sets, ensuring data acquisition and integration in the Register, and assure its continuous enhancement, upgrade and risk data update. The RGA is the national authority for geospatial data, with capacities to host, maintain, develop and technically assist the institutions data holders in data harmonization and exchange. UNDP cherishes and will bolster already established cooperation and mechanism of regular meetings between UNDP, SEM, RGA and other national stakeholders in the development and upgrade of the Register and will supplement it with the once selected Contractor for the upgrade.

In October 2024, in the regional conference "10 Years After the 2014 Floods", UNDP Serbia in cooperation with the SEM and the RGA, with the support from EU, has introduced new functionalities of the Disaster Risk Register. This emphasized long-lasting, fruitful and future collaboration between EU, UNDP and the key national authorities in the digitalization of disaster risk management – from the idea of the Disaster Risk Register to its operationalization in 2022 and its ongoing upgrade to include public health risks and enhance analytics and add new functionalities for planning and managing risks in the territory of the Republic of Serbia. This good cooperation has again sprouted its results in the November 2024 in Budva, Motenegro, in the Europe and Central Asia Regional Platform for Disaster Risk Reduction. In addition, UNDP through cooperation with its Istanbul Regional Hub (UNDP IRH) has

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established a bridge with SEM and RGA counterparts from the Western Balkans. Furthermore, UNDP shall support the work of the GoS WG for the development of the Register by providing technical expertise in high-level software development, applying their functional and analytical requirements, and harmonizing additional data and implementing data exchange services. This modus operandi has proven to be a successful mechanism for developing and upgrading the existing DRR systems and represents a model of good practice to be replicated in the region and across other continents, having the commonalities and differences of national and regional context. UNDP established cooperation both at operational and high-level with the member institutions and organizations, risk related data holders, by participating in the Disaster Risk Register Working Group, and further strengthened partnerships with **SEM, Ministry of Health (MoH) and Institute of Public Health of Serbia "Dr Milan Jovanović Batut" (IPHS Batut), Ministry of Environmental Protection (MoEP) with Serbian Environmental Protection Agency (SEPA) and Institute for Nature Conservation of Serbia (INCS), RGA, Geological Survey of Serbia (GSS), Ministry of Agriculture, Forestry and Water Management with its Republic Water Directorate (RWD), Public Water Management Companies (PWMCs) 'Srbijavode' and 'Vode Vojvodine', and Plant Protection and Veterinary Directorates**, by assisting them in data acquisition, harmonization and establishing data exchange procedures and services.

UNDP and WHO have excellent cooperation with the **NALED (National Alliance for Local Economic Development)** through its active involvement in the health digitalization reform process. NALED is a private-public association with a significant role in the healthcare reform in Serbia. To improve the efficiency of the healthcare system at both national and local level, members of NALED have established the Healthcare Alliance. This initiative also launched the formation of the Coordination Body for the Digitalization of the Healthcare System of the Government of the Republic of Serbia, highlighting healthcare as a priority. UNDP and WHO are included in the Working Group on the new Action Plan for Digitization in Healthcare for the period 2024-2025. In the NALED Healthcare Alliance session held 29 February 2024, in Belgrade, UNDP presented the activities of the "EU for the Healthcare System of Serbia" project. The Action envisaged enhancement of infrastructure, equipping, and strengthening human capacities, implementing the eHealth platform and sustainable digitalization in accordance with EU standards, are fully aligned with the NALED initiatives contributing to the improvement of the healthcare system in Serbia. Among the goals of the Healthcare Alliance for 2024 are the adoption of a new Action Plan for Digitalization in Healthcare, further development of eHealth, and the application of artificial intelligence in healthcare.

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7 VISIBILITY

UNDP and WHO have no objection to this Report being published on the EuropeAid web page.

UNDP and WHO ensured the visibility of the EU support to Serbia by presenting the activities and achieved results on project website on #EUzatebe platform – 9 news posted, UNDP Serbia official website, Europa.rs, issues in newspaper and local media outlets, and via social media. Visibility of EU support at the construction sites is ensured through construction and dedicated boards, branding of safety and work equipment.

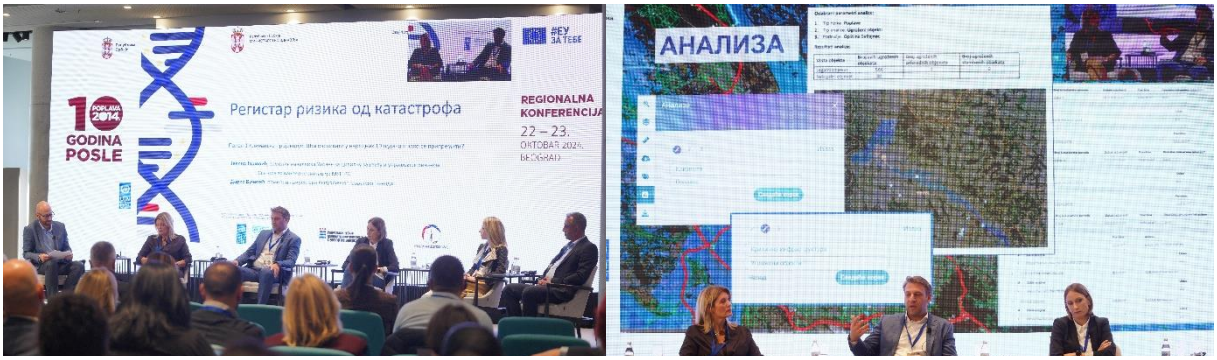
UNDP and WHO achieved the visibility of the donor by branding purchased equipment, visual representation at workshops, training and meetings and the use and distribution of visibility material in all events. UNDP and WHO develop video, audio and visibility material in the most suitable format for the wider public and actively promote EU support and convey the most important messages in the project implementation.

UNDP presented the 'EU for Healthcare in Serbia' project in the regular meeting of the NALED Healthcare Alliance on 29 February 2024, gathering national and local health institutions, local communities, and the private sector. UNDP presented how the Action shall support achieving the set of goals of the NALED Health Alliance related to digitalization of healthcare and development of eHealth.

Picture 11 - UNDP presenting the project in NALED Healthcare Alliance, 29 February 2024

UNDP **presented the new functionalities of the Disaster Risk Register on two occasions**.

First, in the **regional conference "10 Years After the 2014 Floods" in Belgrade 22-23 October 2024**. The Register has been conveyed as the one of the most important non-structural measures that the Republic of Serbia has undertook in the last decade in the DRR and emergency response area. One of the key highlights was the capacity strengthening through the Disaster risk register partnerships upgrade.



Picture 12 - Presentation of the new functionalities of the Disaster Risk Register in the regional conference "10 Years After the 2014 Floods", Belgrade 22-23 October 2024

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AUDIENCE STATS

Total Attendance: 140 at Grand Opening
Active Participants per Day: 95 (with a 10% daily decline)
Sector Breakdown:
Public Sector: 70%
Private Sector: 10%
High Officials: 20%
Regional & International Representatives:
5 Countries (Serbia, Bosna and Herzegovina, Montenegro, North Macedonia, and Albania), 3 Embassies, 25+ experts
Public Figures:
5 Ministries, 12 Governmental Services, and 6 Municipalities

MEDIA COVERAGE

Media Channels:
24 News Reports (Regional, Local, Specialized)
Airtime: 4 minutes on national frequencies

Platform Reach:
3 Regional Press Agencies
3 Prominent Newsrooms
2 National TV Stations,
1 Radio
21 Online News Outlets

The video of both days of the conference is available in the following link: Where are we 10 years after the 2014 floods? | United Nations Development Programme (undp.org). The presentation of the Disaster Risk Register at the conference is available in the following link: Day2 , Regional Conference"10 Years After the Floods" – Panel 1, Risk Register section (*0:21:15-1:06:45*).

Second, in the **2024 Europe & Central Asia Regional Platform for DRR in Budva 5-8 November 2024** organized jointly by the Government of Montenegro, the European Commission, the UNDRR and UNDP. This event brought together governments of 55 UN member states, as well as civil society and private sector actors, to facilitate knowledge sharing and make concrete commitments on disaster risk reduction. UNDP conveyed the register as an innovative risk management and emergency response tools linked with spatial data infrastructure, with usage potential for investment planning, sustainable development, and appraisals.

Picture 13 - EC and SEM colleagues, and the UNDP Serbia and IRH in the 2024 Europe & Central Asia Regional Platform for DRR, Budva, Montenegro, 5-8 November 2024

Following the first testing workshop of the new functionalities of the Register organized 23 January 2025 in the RGA, UNDP has prepared and published a short video – reel. The reel had excellent response with over 22,000 views, over 400 likes, and downloaded 176 times and shared 68 times. The

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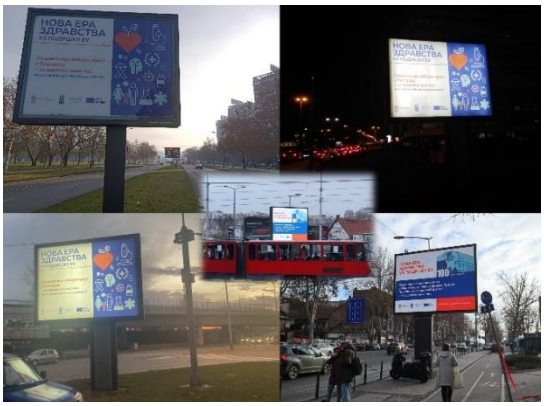
high number of downloads is excellent, as it signifies the people will look back on this material and hold it as info of their significance. Linkedin shows a good number of 165 engagements and a reasonable of 12 shares.

The reel is available in the following links – LINKEDIN, platform X, **Instagram** and **Facebook**

In 2024, the RGA has also been promoting the Register platform in the international level at the request of the World Bank, the UN Geo-Spatial Information Management Council, the regional committees, and other regional specific conferences.

During December 2024 and January 2025, UNDP prepared promotional billboards and placed them across key high-traffic locations in Belgrade to mark the beginning of reconstruction work at IPHS Batut in the year marking its 100th anniversary. Positioned throughout the holiday season, a period marked with increased public activity, the billboards had maximized the visibility of the Action and ensured broader outreach and engagement amongst the general population.



Picture 14 - Promotional billboards across key high-traffic locations in Belgrade

The current statistics of the social media outreach of the Action provided in the following table:

Social media reach and views	**Stats**
Facebook "UNDP Serbia" post	15,382 impressions, reach 4,541
Linkedin "UNDP Serbia" post	2,572 impressions
Instagram "UNDP Serbia" post	23,241 views, reach 16,624
Instagram "WHO Serbia" post	15,000 plays

WHO has used every opportunity to enhance the visibility of its activities within the Project, ensuring that the support from the European Union is prominently showcased. Through the #EUzatebe platform, news stories are shared that highlight activities on improving laboratory capacities and bolster public health emergency preparedness.

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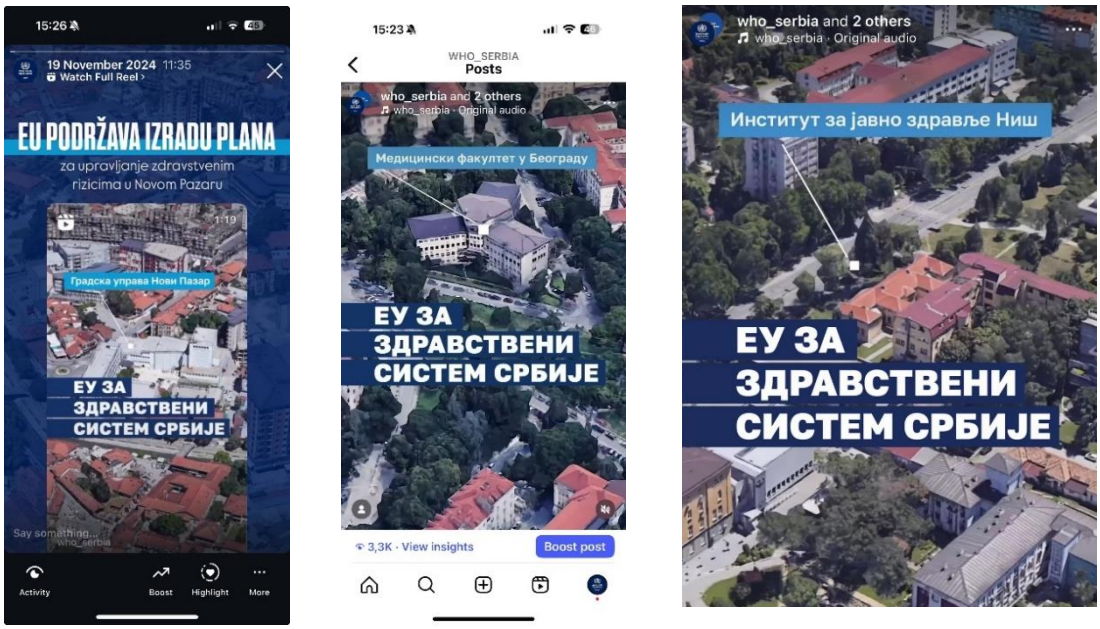

Picture 15 - Project-related content promoted through WHO and EUD social media

To further promote our initiatives, WHO produced seven engaging video materials and reels. These videos are on improving laboratory quality management systems in microbiological laboratories at IPH Batut, IPH Niš, the Medical Faculty in Belgrade, about the mentorship program, implementation of strategic risk assessment and profiling for all local self-governments. Collaborating with @eusrbija, these videos reached an impressive audience of around 12,000 views on Instagram alone, demonstrating the interest and support. All materials were posted on X and Facebook.

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During a field visit to Novi Pazar, a special featuring the Mayor was created, emphasizing the Project's significance for local communities, particularly in terms of risk assessment in health emergencies. This video, also posted with @eusrbija, attracted over 3,000 views, showcasing the local impact and engagement.

Beyond these targeted materials, various opportunities are used to further promote the Project:

The WHO Representative (WR) leveraged the presence of numerous traditional media outlets in Niš and Novi Pazar during field visits to highlight Project activities, ensuring broad coverage and visibility. In Niš on 25 September 2024, WR Fabio Scano in an interview to national and local media highlighted EU support for public health and health emergencies in Serbia (Glas juga, TV Zona plus, TV Kopernikus, TV B92/TV Prva, Gradski portal 018, … .

Picture 16 - WR Fabio Scano in a media interview in Niš, 25 September 2024

Through interviews on traditional media RTS (average number of RTS views on a daily basis is **around 2.5 million** viewers), Tanjug, Telegraf (the average number of visitors on a daily basis is approximately **500 000**), and others, the WR underscored the Project's focus on laboratories, risk assessment, and digitalization, reaching a wide audience and fostering greater awareness and support.

UNDP and WHO developed the Visibility and Communications Action Plan for 2025-2026 and presented its draft at the 3rd PSC in November 2024. The Action Plan outlines the communication goals and visibility activities approach, depicting tentative timeframe, which will be populated with the exact dates based on the availability of the Minister and harmonization with the EU Ambassador.

UNDP planned key visibility activities in 2025-2026 encompass:

- Production of several promotional videos for social media to showcase the progress of reconstructions at all three institutes in Belgrade, Nis and Kragujevac.
- Official opening site visits by high-level officials in September and October 2025.
- Continuing work on presentation of the Register upgrade to the Government Officials and national partners in training, and also through brunches with the media to gather better understanding of this innovative tool.
- A media event on the updates on the digitalization process and presentation of the E-Health upgrade.
- Outreach campaign in 15 cities regarding digitalization of health, and
- Emergency Awareness Raising Events in 10 cities throughout 2025 and 2026.

WHO planned key visibility activities in 2025-2026 encompass:

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- Stories and posts in local media across 100 municipalities, for which health emergency plans will be developed. WHO will produce stories and posts explaining health emergency plans and their importance presented to the local community
- WHO will organize two final events to promote the results achieved and in February 2025 regarding laboratory work, and second in October or November 2025 on developing health emergency plans
- Regarding presence in social media, WHO plans to produce two videos, showcasing real-world scenarios related to mass trauma management and radiological accidents. This being attractive to the general population.
- Communication campaign for HCWs on health digitalization.

In the following period, UNDP and WHO shall focus also on traditional and local media and convey more messages from expanded fieldwork activities.

Name of the contact person for the Action:

Yakup Beris, UNDP Resident Representative in the Republic of Serbia

Signature: DocuSigned by: Yakup Beris 8E8AB6D378F0463...

Location: Belgrade

Date report sent: April 29, 2025

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8 LIST OF ANNEXES

Annex 1 – 3rd Project Steering Committee Meeting Minutes, 18.11.2024

Annex 2 – Minutes and Participants Lists of the Meeting for the development of the Disaster Risk Register

Annex 3 – LQMS Mentorship Report

Annex 4 - Health Emergency Risk Assessments Report

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Republic of Serbia
MINISTRY OF HEALTH

This project is funded by
European Union

#ЕУ ЗА ТЕБЕ

EU FOR HEALTHCARE IN SERBIA

3rd PROJECT STEERING COMMITTEE MEETING

18 November 2024, 13.00 – 14.30

UN House, Ground Floor Conference Room

18 November 2024, 13:00-14:30, UN House/Zoom

MINUTES of the Meeting

Implemented by United Nations Development Programme (UNDP) and World Health Organization (WHO).

UNDP

World Health Organization
European Region

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Agenda Item 1: Opening Remarks

Mr. Yakup Beris welcomed the new colleagues from the Ministry of Health (MoH), the Ministry of Interior, Sector for Emergency Management (SEM), and the Republic Geodetic Authority (RAG) and thank all for gathering to discuss progress and important milestones of this very important project.

He looked back on the Covid-19 pandemic highlighting the critical need for well-equipped laboratories to swiftly detect, process, store, and treat viruses and stressed that the support from the EU in this area is incredibly important. He reported that the reconstruction works at Institutes of Public Health in Belgrade and Nis are progressing according to the plan. By the end of November 2024, we expect to start with works on microbiological laboratories of Institute of Public Health Kragujevac as well. He looks forward to jointly open new laboratories with enhanced microbiological safety features in line with WHO international standards.

He reiterated the appreciation with the Government of Serbia and the European Union in developing the Disaster Risk Register and noted the progress achieved is already considerable and UNDP, Geodetic Authority and Sector for Emergency Management have been proudly presenting this powerful tool on several occasion at national level and world-wide.

Related to the digitalisation and development of the eHealth system, he added UNDP is actively participating in the coordination process of digitalization of health, led by the Cabinet of the Prime Minister and stands ready to further support the MoH.

Mr. Nicola Bertolini stressed this is the last big intervention in the health sector under the IPA programme, and it should trigger all possible institutional forces and commitment to expand the health development in the country. This Action brings a comprehensive improvement through upgraded laboratories, digitalized services and enhanced emergency response capabilities. He highlighted the urgency to ensure staff stability and institutional memory, especially the hands-on engagement of the new health information system (HIS) coordinator. He also urged to immediately implement the e-Referral already concluded in May 2024 and fully developed by the project, but not yet approved by

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the MoH. He emphasized as the high priority to project success is the active engagement from the Minister, the Minister's Cabinet, and all high-level personality, in particular to the good visibility of the project results. He expressed the need to have a clear visibility Action Plan also involving Belgrade, Niš and Kragujevac as important beneficiaries of this project, as well as the rollout of the Disaster Risk Register. He then read out selected recommendations of the ROM mission of the Action concluded in June 2024:

- Need to address challenges posed by staff turnover and organizational changes in MoH that can adversely affect long-term sustainability.
- Establish a robust succession planning sustainability strategy and capacity building framework to ensure continuity and sustain project outcomes.
- Increase private sector engagement by identifying and promoting opportunities for collaboration beyond digital health strategy development, such as laboratory capacity building and emergency preparedness.

Ms. Vera Stoiljković greeted participants on behalf of the Minister of Health and extended her appreciation to the EU, UNDP and WHO, the MEI, IPHS Batut, MoI and colleagues and experts from project teams. She reiterated the importance of the Action and the lesson drawn from the Covid-19 pandemics on exchange of information, work efficiency, and eradication of borders in treatment and prevention of infectious diseases.

She noted good cross-border cooperation, coordinated activities of international community, and national public health systems response as the necessary factors for epidemiological control. She thanked the EU for recognizing the importance and financially supported the Action aiming to determine the current weaknesses of our system and providing clear guidelines for its improvement. She stated that the results of the project will lay the foundations for responding to the weaknesses and initiating a comprehensive action for improving the quality of microbiological diagnostics and the system of surveillance of

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infectious diseases, and essentially contributing to the prevention and control of diseases in our country.

Mr. Fabio Scano thanked all the colleagues for their presence at the meeting and stressed out several points.

The first point is regarding e-Health as the most dynamic area in Serbia we all need to adapt.

The second point is regarding the WHO emergency work and completion of the assessment of the risk factors in LSGs. He visited Novi Pazar and was very impressed of the mayor's awareness of the Action and mentioned the visibility videos regarding the visit. He felt strong ownership in Novi Pazar and in the PHI Nis as well. The next phase is developing plans for each of LSGs, a total of 100 due to funding constraints.

The third point is regarding the construction of laboratories which is on track, and the capacity building of people working in 25 laboratories of the public health laboratory network.

He added regarding visibility the need to translate all activities into health outcomes and show the impact of the project and what it means to the people of Serbia. He reiterated the need for a visit by Minister Lončar and the EU Ambassador to one of the sites, possibly outside of Belgrade.

Agenda Item 2: Overview of the project activities and the way forward

PROGRESS TO DATE

ACTIVITY 1.1: Implementation of the Laboratory Quality Management System (LQMS) in the microbiological laboratories

WHO: Support to 24 laboratories across all districts of Serbia, extended also to Torlak Institute and Institute for Microbiology and Immunology in Belgrade, and Pasteur Institute in Novi Sad. WHO trained 59 key personnel (head of laboratories and focal point for QA in respective institutions) from 25 laboratories to implement LQMS and align laboratory standards in Serbia with international quality norms.

Eleven (11) mentors have been working across 22 laboratories throughout 2024 to support the implementation of the quality

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management system. This encompassed one week visit of mentors focused on assessment of status and level of LQMS implementation and developing action plan till the end of 2024. Mentors then on a weekly basis worked with laboratory staff and in their final visits evaluated the achievement of results and prepared recommendations for future activities and addressing gaps for achieving LQMS and accreditation according to ISO standards. WHO plans a conference in February 2025 to present results and the status of achievements. Several laboratories (Zrenjanin, Pančevo, Čačak and Užice) achieved level of compliance to immediately start accreditation for ISO standards, and this number will increase in the next several months.

ACTIVITY 1.2 Laboratories reconstruction and upgrade in line with LBM4

UNDP completed technical documentation for all three institutes, and jointly with WHO expert supported the development in line with latest WHO guidelines. During the summer UNDP contracted works and supervision for institutes in Belgrade and Nis, whilst Kragujevac is in the final stage of evaluation and works expected to start in December 2024. Works in Batut started 30 September 2024, and we are into demolition works and starting installation works. Works in Nis started 29 October 2024 preparing construction site and starting demolition works. In parallel with reconstruction, UNDP is preparing technical specifications and needs of the institutes regarding furniture and equipment, expect to publish the tender by the end of 2024 so we can have institutes ready and open during autumn 2025.

Mr. Periša Simonović: He conveyed assurance of the IPHS Batut the works shall be completed by envisaged 15 August 2025. IPHS Batut assures uninterrupted works of the Contractor, the continuous access and presence of the Supervision of Works, and in line with all security aspects prescribed by the legislation ensure uninterrupted operations of the IPHS Batut, as well as IPHs in Nis and Kragujevac. All institutes have adapted their work to preserve their operations at full capacity. IPHS Batut with the support of MoH have full understanding of synergy of other project components – the reconstruction and assuring the implementation of unified WHO methodology for LQMS implementation. The entire network of all 25 institutes should be able to start with the preparation for implementation of ISO 15189 standard,

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apart from the two already in place in Subotica and Sombor. The third indivisible part is to upgrade the capacities active in the previous pandemic. The education at local level is of utmost importance where people live and work. As starting point are the risk assessments in 2025 in each of 158 LSGs. He concluded that all these component of the Action shall bring to a higher level of preparedness the whole system managed by the MoH.

ACTIVITY 2.2 Disaster Risk Register upgrade with public health risks

UNDP contracted Software developer which started their work as of 28 May 2024. In the last 5 months the Contractor completed inception phase, developed and adopted detailed system specifications together with the SEM and the RGA, and adopted testing and acceptance plan. Now, we are fine tuning the specification and the design of the module Risk Records and Disaster Information (ERIK).

The Action supported the introduction of SMS early warning system for disaster hazards active as of 15 September 2024. This enabled informing the citizens in case of disasters and send instructions to react and be safe via SMS.

Software developer prepared the simulation and the presentation of the new Register functionalities, presented in numerous occasions.

UNDP together with the WG for the Register established SOPs and services for data exchange with the RGA, and finalized harmonization of datasets for import in the upgraded Register. Now the Register shall include 9 updated datasets and 86 new datasets through its upgrade. Some of the key datasets encompass 2022 census data, Lack of drinking water, Animal feed facilities, Animal and plant diseases, Real estate price register and estimates, Landslide polygons, Electric power facilities and lines, SEVESO facilities, Tailings and mines, Healthcare facilities capacities, Hospital Safety Index, Infectious diseases history.

Ms. Sretenovic then guided the participants through the video presenting the new functionalities of the Disaster Risk Register based on the existing data on floods, showcasing the synergy of EU support actions to the Republic of Serbia IPA 2019 'EU for Serbia Resilient to Disasters' and IPA 2021 'EU for Healthcare in Serbia'. The video presents

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the case of torrential flooding in western parts of Serbia and what data can be used for development of models.

WHO: The Register shall be fed by data and analysis WHO completed in 2024. In cooperation of WHO, IPHS Batut and local authorities, 48 experts completed risk assessments for public health emergencies in each of Serbia's 144 local self-governments between March and September 2024. This work is completed and presented in October 2024. These assessments provide a clear overview of available resources to respond to priority health risk and highlight areas where additional resources are needed.

The piloting of development of public health emergency preparedness and response plans started in November 2024 in cooperation with Standing Conference of Towns and Municipalities (SCTM), the IPHS Batut and their network in three municipalities – Sombor, Varvarin and Dimitrovgrad. These three plans shall be completed by the end of 2024.

WHO initiated the development of 6 SOPs for public health emergencies:

- Coordination and information exchange in case of public health threats,
- Mass trauma management;
- Dealing with radiological accidents,
- The response in case of public health threats at points of entry,
- PHC preparedness response in emergencies,
- Hospital preparedness and response in emergencies

WHO identified experts for preparation of SOPs in cooperation with MoH, and the MoH will shortly establish a Working Group for development and adoption of SOPs.

ACTIVITY 3.1 Digitization and E-Health

Specific sub-activities implemented by UNDP

UNDP: Previous 2 WGs, one for architecture of RIZIS (Republic Integrated Health Information System) and the other on medical documentation and the law, were determined. In August 2024

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Government of Serbia established a new coordination mechanism, with regular weekly meetings held on Friday, on the level of the PM's Cabinet which has a dedicated special advisor for digitalization of health, Ms. Katarina Pavićević. She was unfortunately unable to join us today but is willing to meet anytime soon. The digitalization of health is the priority of the PM, and in December 2024 we expect that Government will establish a WG for digitalization of health to coordinate the ongoing activities of the MoH and Office for IT.

In the previous period, UNDP conducted the 1st assessment on data security and security of information system of primary and secondary health institutions. UNDP established capacity within the Office for IT which has the mandate for the Government Data Centre and Government Network and Security. Up to now 23 HIS on primary and secondary level have been moved to Government Data Centre in Kragujevac (GDC) to prevent failure and secure the data and 5 is in process of connecting to health data network. UNDP agreed to move 50 more in the upcoming period. By end 2025 over 350 institutions and their information systems shall be moved to GDC. The oldest ones and security and failure prone are scheduled to move first. A special unit is established in the Office for IT, we have two persons dedicated, one supported by the Action and other from the Office for IT, working together with UNDP and the MoH.

UNDP is currently working on establishing the new architecture of the integrated solutions with the new team from the MoH. The new idea is to integrate the all the HIS with eGovernment backbone = government service bus, meaning one road for the data exchange sitting in the GDC. This means that the data from every single vendor solution will be only exchanged through the Government service bus This will contribute to greater operability and standardisation. This draws the need to align all the existing solutions and the ones that will be developed in the future with the new architecture, including the new priority activities of MoH – eReferal, ePrescrpition, eSickLeave, and eHealthRecord.

The MoH is well aware of the recommendation of the EUD given concerning the Law on Medical Documentation and is willing to work on the amendments to address them. By last Friday, 15 November 2024, five bylaws are already drafted, and six more are to be drafted. Once this

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is finalized, UNDP will provide expert support to review all the bylaws and verify they address all EU concerns and recommendations.

Specific sub-activities implemented by WHO

WHO: WHO supported MoH capacitating the department for digitization within the MoH with necessary human resources – and ready to continue support. Supported MoH and IPHS Batut in participation in WHO Health Information Network, a European wide initiative. Initiated work on mapping of HR capacities and competencies in the Healthcare System in Serbia – on hold now but ready to continue. WHO is awaiting priorities of MoH for further support, and supporting all activities implemented by UNDP.

VISIBILITY

UNDP: UNDP and WHO regularly update project visibility page at #Euzatebe platform – 9 news posted. High-level visibility event for the official project presentation took place 5 February 2024 in IPHS Batut. The Minister of Health, Minister of EU Integration, the EU Ambassador, and Resident Representative of UNDP and WHO, and the Director of IPHS Batut participated. The event raised considerable media attention, gathering 47 positive or neutral media reports, as well as significant social media posts with outreach to broader population. Visibility of EU support at the construction sites is ensured through construction and dedicated boards, branding of safety and work equipment.

UNDP presented the 'EU for Healthcare in Serbia' project in the regular meeting of the NALED Healthcare Alliance on 29 February 2024, gathering national and local health institutions, local communities, and the private sector. UNDP presented the new functionalities of the Disaster Risk Register on two occasions:

- Regional conference "10 Years After the 2014 Floods" in Belgrade 22-23 October 2024, as this is one of the most important non-structural measure the GoS undertook in the last decade, and
- 2024 Europe & Central Asia Regional Platform for DRR in Budva 5-8 November 2024 organized jointly by the Government of Montenegro, the European Commission, the UNDRR and UNDP.

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WHO: WHO communicated Laboratory and Public health risks work through creating posts and video stories on social media – Instagram, Facebook, X, and through visits to beneficiary institutions (Niš and Novi Pazar) attracting the attention of local traditional media.

Project Management

UNDP: UNDP and WHO submitted 1st Interim Report for the period 6 February 2023 – 5 February 2024. After reassessing the needs for further support to MoH IPA unit and agreeing on its design, UNDP continued providing technical support for programming, monitoring and reporting on IPA projects in the period February 2024 – June 2025. UNDP extended support to Office for IT and eGovernment for HIS architecture and migration of data to Government Data Centre in Kragujevac.

WHO, at the request of MoH, is providing technical support to strengthen the capacity of the Sector for Public Health for implementation of IPA projects and joint public health initiatives in the period October 2024 – October 2026. WHO also, at the request of MoH, provided short-term technical assistance to the Sector for Digitalization in the development of bylaws from December 2023 to January 2024.

WAY FORWARD - Next steps within the project:

ACTIVITY 1.1: Implementation of the Laboratory Quality Management System (LQMS) in the microbiological laboratories

WHO plans a conference in February 2025 to present results and the status of achievements, probably in the IPHS Batut. Development of national templates for Biosafety Manuals, Quality Manuals, and Standard Operating Procedures (SOPs), as well as customized documentation for 3 reconstructed Institutes. Conducting risk assessments in 3 laboratories following the completion of construction works. To extend the benefits of manuals to all 25 laboratories in the country, WHO will develop templates for the other institutes enabling them to complete all the necessary manuals.

ACTIVITY 1.2 Laboratories reconstruction and upgrade in line with LBM4

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UNDP: IPHS Batut works will last for a year and be completed by 15 August 2025. IPH Nis works finalized by 4 August 2025. All works implemented in phases to enable working conditions for laboratories and staff, hence the timeframe is a bit prolonged. UNDP is contracting works and supervision for IPH Kragujevac to be finalized in December 2024. Construction works will last nine months from start date. By end 2024, UNDP shall issue tender for equipment and furniture and to complete equipping of all facilities and officially opening of all modern laboratories by autumn 2025.

ACTIVITY 2.1 Development of procedures for healthcare system response to emergencies at the national and local level

WHO plans to finalize piloting development of public health emergency preparedness and response plans in 3 municipalities by the end of 2024. Implement trainings for development of plans for LSGs in March – May 2025 for the rest of the 97 municipalities. Develop all 100 plans by October 2025. Develop all 6 SOPs for public health emergencies by April 2025.

ACTIVITY 2.2 Disaster Risk Register upgrade with public health risks

UNDP plans to developed software with all relevant data uploaded and tested by February 2025. Complete training of end users in March and April 2025. Upgraded Disaster Risk Register will include 86 new datasets from national institutions data proprietors. UNDP is working with SEM and RGA to introduce E-platform with Artificial Intelligence (AI) based chatbot support provided to the general-public users – citizens in using the Register.

Mr. Darko Vučetić emphasized the smooth implementation of the project and note that through this Action the RGA covered more than 90 datasets and in last 7 years within the national spatial data infrastructure 350 datasets. This is thanks to the setup done in this project and the WG. He communicated that in the last one year, the RGA has been promoting the Register platform in the international level by request of the World Bank, the UN Geo-Spatial Information Management Council, the regional committees and other regional specific conferences. He noted as the main challenge in the future will be communication with end-users. The RGA is facing this issue with their

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services and applications. Hence RGA started with e-learning platform for the citizens and end-users, not only about AI, but to adapt all the content and specific and technical details to the citizens. The RGA started this process with their 10 most important services and would like to extend this to the Register and other parts of the system. He extended the need for support in this endeavour to EU and UNDP, and in collaboration with the SEM, all for establishing a close cooperation with the citizens and end-users.

Ms. Jelena Jašović greeted the assembly on behalf of Mr. Luka Causic, Head of the Sector for Emergency Management. She reiterated thanks to RGA and to UNDP for the support for which the SEM finally ignited the interinstitutional collaboration system and WG mechanism. The video shows a glimpse of the future quality upgrade of the Register, and the scope of the Register going beyond the legislative obligations. The Register is not a mere geodatabase, but a geo-information system ensuring official and standardized risk and critical infrastructure data. She explained the coordination role of the SEM and engagement in design of the system, particularly the ERIK module (Registry of risks and disaster information) related to the LSGs and local specific risks and their capacities to respond to those risks. These LSGs risk assessment served as basis for public health risk assessment and assessing the impact of disasters to public health in complementarity with risk of communicable diseases. The SEM supported the LSGs capacity for sharing their knowledge in preparation of risk assessments, and the public health critical infrastructure and their human, accommodation and technical capacities, as well as hospital safety index, in collaboration with the MoH. By completion of all these data, we have in mind always the first vested value – human lives and health.

ACTIVITY 3.1 Digitization and E-Health

Specific sub-activities implemented by UNDP

UNDP will support transfer of additional 50 HIS at Government Data Centre in Kragujevac, the list is ready. There will be a planning workshop on 20 November 2024 (Wednesday) to define the new architecture of RIZIS with all counterparts from both MoH, Office for IT and all the vendors that have the system within the primary and health care institutions. This will define the technical specifications for the

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components to be revised and then integrated. UNDP expects to have the first component by February 2025, and the MoH will until then finish redefining the application for eHealth which is towards the citizens. UNDP shall design the whole campaign and go through 10 cities in Serbia to educate both hospitals and citizens to use eHealth services at their disposal as of February 2025. UNDP shall finish also procure the necessary piece of equipment for the first digitalized and automated histopathology laboratory in Sremska Kamenica. UNDP completed the assessment regarding the digitalization within another project 'Support to Development of AI Ecosystem in Serbia' which choose the Sremska Kamenica as its first pilot laboratory. This automated work should decrease the waiting list for the examinations of little plates for histopathology findings. It will be scaled up to enable digitalization and automatization of all histopathology laboratory in Serbia. As

Work with the MoH to review and assess the bylaws to align with the GDPR.

Ms. Maja Vučković Krčmar urged the materialization of policy decisions since the funds are limited by Action implementation period and reminded the EU support in introducing the HIS since 2003.

UNDP reiterated the political circumstances with the establishment of the new Government, the new Cabinet, the new advisor of the PM for health digitalization, which is beyond influence of the Action. Following the naming of the PM advisor, the digitalization of health remains one of the top three priorities of the PM of Serbia. The priorities are defined – the eReferal, ePrescrpition, eSickLeave, and eHealthRecord – and we will know more on the upcoming workshop how they will be integrated in the HIS. She reminded every weekly meeting in the Cabinet of the PM discusses how the Action can support the Government priorities.

Mr. Nikola Radoman confirmed the soon align of the new architecture to the law, and soon have integration at local level, and data at secure place – GDC in Kragujevac through the ongoing migration of data. He confirmed the agreement on the eRefferal upgrade, ePrescription upgrade for specialist doctors, and eSickLeave, and eHealthRecord which are the top 4 priorities of the Minister.

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UNDP noted the new budget for 2025 shows the GoS is dedicating funds to the overall digitalization of health, of which the Action a part of.

UNDP confirmed the Action stands ready to support MoH Sector for Digitalization, both by UNDP and WHO, upon the MoH request and needs.

Specific sub-activities implemented by WHO

WHO said that shortly we will have a fully updated Health information infrastructure, and WHO will focus on improved utilization of digital health platforms. First the WHO will conduct in the first half of 2025 an assessment of the utilization of digital platforms among healthcare workers – HCWs (National Digital Literacy Survey in HCWs) and identify challenges they experience in using the platform. Based on the survey results, WHO will in the second half of 2025 provide tailored training (online and in-person) and communication materials for HCWs, with focus on PHCs. After the ongoing upgrade of digital platform for patients, WHO will conduct National Digital Health Literacy Survey among the general population as end users to observe the use and the barriers they face. This survey shall inform UNDP in their work with the citizens on better uptake of digital health service. WHO stands ready to provide expert support for the revision of bylaws related to the Law on Health Documentation and Records, including assistance in governance, data protection and data quality, telemedicine, and AI in health.

ACTIVITY 4.1 Implementation of the RCCE Plan, including trainings, SimEx, development SOPs, etc

WHO plans to start activities within this component in the second quarter of 2025, and in the first part will be the establishment of the National Working Group for RCCE with which WHO will initiate development of SOP. Once we have these guidelines, WHO plans to conduct simulation exercise in the 2026.

ACTIVITY 4.2 Emergency Awareness Raising Events

UNDP plans to start with fist event in December 2024 and continue throughout 2025 and 2026. The first 5 cities UNDP plans to conduct campaign will be Cacak by the end of 2024, followed by Krusevac, Zrenjanin, Sombor and Sremska Mitrovica.

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VISIBILITY

On the note of Mr. Bertolini, UNDP and WHO already developed a draft Visibility and Communications Action Plan for 2024-2025, outline the communication goals and visibility activities approach.

UNDP key visibility activities

UNDP listed the following**:**

- Breaking ground site visits by high-level officials, and billboards throughout three cities subject to reconstruction works (Belgrade, Nis and Kragujevac) and event branding.
- Official opening site visits by high-level officials in September and October 2025.
- Continuing work on presentation of the Register upgrade to the Government Officials and national partners in training, and also through brunches with the media and gather their support.
- A media event hopefully during February and March 2025 on the updates on the digitalization process and presentation of the E-Health upgrade.
- Continue with the outreach campaign in 15 cities regarding digitalization of health, and
- Emergency Awareness Raising Events in 5 cities.

She added the Action Plan depicts tentative timeframe, and it will be populated with the exact dates based on the availability of the Minister and harmonization with the EU Ambassador.

WHO key visibility activities

WHO noted that the work on health emergency plans that will cover 100 municipalities has a huge potential for promotion in traditional local media. WHO already discussed with the Standing Conference of Towns and Municipalities (SCTM) on engaging resources for communication and promoting work in local media. WHO will produce stories and posts explaining health emergency plans and their importance presented to the local community.

WHO will organize two final events to promote the results achieved and in February 2025 regarding laboratory work, and second in October or November 2025 on developing health emergency plans.

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Regarding presence in social media, WHO plans to produce two videos, showcasing real-world scenarios related to mass trauma management and radiological accidents. This being attractive to the general population.

Finally, communication materials for HCWs on health digitalization would also have high visibility potential.

Project Management

UNDP announced the submission of the 2nd Interim Report for the period 6 February 2024 – 5 February 2025, and the next, 4th Steering Committee by end June 2025 if not schedule ad-hoc on any urgent matter.

The meeting was closed at 14.35 hrs.

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Key points of the meeting:

- 4 laboratories achieved level of compliance to immediately start accreditation for ISO standards. WHO will extend the benefits of manuals from 3 reconstructed labs to all 25 laboratories in the country.
- Technical documentation completed for all three institutes, works underway in IPHS Batut as of September and IPH Nis as of end October, and IPH Kragujevac to start in December 2024. Uninterrupted operation of institutes is continuously assured. Tender regarding furniture and equipment by end 2024. Complete equipping of all facilities and officially opening of modern laboratories by autumn 2025.
- Piloting development of public health emergency preparedness and response plans in 3 municipalities by the end of 2024. Develop all 100 plans by October 2024. Develop all 6 SOPs for public health emergencies by April 2025.
- Register upgrade - Software developer completed inception phase, developed and adopted detailed system specification, and adopted testing and acceptance plan. 9 updated datasets and 86 new datasets through its upgrade. Completed risk assessments for public health emergencies in all 144 LSGs. Final tuning of the module Risk Records and Disaster Information (ERIK). Developed software with all relevant data uploaded and tested by February 2025. Complete training of end users in March and April 2025.
- Presenting the good work on the Register in the region and worldwide. World Bank, the UN Geo-Spatial Information Management Council, the regional committees and other regional specific conferences.
- UNDP is working with SEM and RGA to introduce E-platform with Artificial Intelligence (AI) based chatbot support provided to the general-public users – citizens in using the Register..
- Certain delays in eHealth component related to political changes and appointments of MoH contact persons. The MoH and the GoS remain committed to the digitalization of health as one of the top priorities.

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- Priorities defined – the eReferal, ePrescrpition, eSickLeave, and eHealthRecord – and regular coordinating mechanism established. Action is a part of the overall GoS digitalization of health. UNDP developed eRefferals and MoH redefined citizen wise eHealth application in function by February 2025.
- UNDP extended support to Office for IT and eGovernment for HIS architecture and migration of data to Government Data Centre in Kragujevac. 23 HIS moved to GDC, 5 in process of connecting, and 50 more in the upcoming period.
- Five bylaws drafted, six more to be drafted, which shall address EU concerns and recommendations on the Law on Medical Records.
- WHO to conduct National Digital Literacy Survey in HCWs and design training for utilization of digital platforms among healthcare workers and general population in the second half of 2025.
- Awareness raising campaign first event in December 2024 in Cacak, followed by Krusevac, Zrenjanin, Sombor and Sremska Mitrovica and others throughout 2025 and 2026.
- Continuous expert support to MoH – the IPA unit, the Sector for Public Health, and the Sector for Digitalization of Health
- Visibility improved – regular posting on #Euzatebe platform, High-level visibility event in February 2024, presentation at construction sites, boards and branding of safety and work equipment. Presenting and promoting the Action objectives and achievements (NALED, international conferences and platforms), posts and video stories on social media, and the traditional local media.
- UNDP and WHO already developed a draft Visibility and Communications Action Plan for 2024-2025. AP depicts tentative timeframe and will be populated with the exact dates based on availability of Minister of Health and the EU Ambassador.
- Submission of the 2nd Interim Report for the period 6 February 2024 – 5 February 2025.
- 4th Steering Committee by end June 2025 if not schedule ad-hoc on any urgent matter.

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Republic of Serbia
MINISTRY OF HEALTH

This project is funded by
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Implemented by United Nations Development Programme (UNDP) and World Health Organization (WHO).

World Health Organization
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Annex 1: Agenda

3rd Steering Committee Meeting 18 November 2024, 13.00 – 14.30 UN House, Ground Floor Conference Room	
13.00-13.20	Opening Remarks • Mr. Yakup Beris, UNDP Resident Representative • Mr. Nicola Bertolini, Head of Cooperation of the Delegation of the European Union in Serbia • Ms. Vera Stoiljkovic, Assistant Minister, Ministry of Health • Mr. Fabio Scano, WHO Representative in Serbia Moderator: Ms. Violeta Sretenovic, UNDP Project Analyst
13.20-14.00	Overview of the project activities and the way forward Joint presentation of UNDP and WHO project teams and beneficiary institutions
14.00-14.515	AOB
14.15-14.30	Concluding points

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Annex 2: List of Participants

No.	Name	Organization	Function
1.	Nicola Bertolini	Delegation of the European Union to the Republic of Serbia	Head of Cooperation
2.	Maja Vučković Krčmar	Delegation of the European Union to the Republic of Serbia	Project Manager
3.	Fabio Scano	WHO	Representative in Serbia
4.	Ivan Živanov	WHO	Technical Officer
5.	Aleksandar Bojović	WHO	Public Health Officer
6.	Irena Stanojević	WHO	Communications Officer
7.	Miljan Rančić	WHO	Professional Officer
8.	Yakup Beris	UNDP	Resident Representative
9.	Žarko Petrović	UNDP	Programme Specialist-Resilient Development
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Republic of Serbia
MINISTRY OF HEALTH

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EU FOR HEALTHCARE IN SERBIA

WHO mentoring program for implementation of the Laboratory Quality Management System in the microbiology public health laboratories in the Republic of Serbia

Technical Report

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Implemented by United Nations Development Programme (UNDP) and World Health Organization (WHO).

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List of abbreviations

AMR	Antimicrobial resistance
COVID-19	Coronavirus disease 2019
ELISA	Enzyme-linked immunosorbent assay
EQA	External quality assessment
EUCAST	The European Committee on Antimicrobial Susceptibility Testing
IPH	Institute of Public Health
ISO	International Organisation for Standardisation
JEE	Joint External Evaluation
LIS	Laboratory information system
LQMS	Laboratory Quality management system
LQSI	Laboratory quality stepwise implementation tool
NRL	National reference laboratory
PT	Proficiency testing
QSE	Quality system essential
SOP	Standard operating procedure
TAT	Turnaround time
UNDP	United Nations Development Program
WHO	World Health Organization

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1. Executive Summary

The COVID-19 pandemic has underscored the critical role of public health laboratory system in a country's health system, Efficient laboratory systems with well-functioning, sustainable laboratory services, operating according to international principles of quality and safety – laboratory quality management systems (LQMS), are an essential part of strong health systems and are crucial for facing such acute public health eve. According to the JEE findings in Serbia, a need for strengthening and expanding laboratory QMS implementation in the national laboratory system was identified. Based on these findings, an EU project for a resilient and responsive public health system was initiated in collaboration with WHO, UNDP, and national health authorities. Among the proposed activities in the EU project for a Resilient and Responsive Public Health System is promoting and implementing laboratory QMS for public health laboratories in Serbia.

The mentoring program, based on the approach developed within the Better Labs for Better Health initiative launched by WHO Regional Office for Europe, to support the quality management system in public health laboratories was conducted in 2024, with the objectives to:

-Provide support for the implementation of LQMS in the laboratories of the PHL network;

-Perform two mentoring visits to assess the level of LQMS implementation in the laboratories of the PHL network and devise an action plan to implement and improve it, along with the laboratory manager or staff member assigned by the manager;

-Develop a mid/long term laboratory quality implementation plan, according to the gaps identified, together with the laboratory.

Upon successful training and selection in November and December 2023, eleven mentors have been selected to implement the national mentoring project on LQMS in 22 laboratories of the network of PH labs in Serbia.

The mentoring program has been implemented in the period March-November 2024, through a set of two on-site visits and online support provided by mentors in the period in-between. All mentoring visits were scheduled and completed as planned, following structured Agenda, providing assessment of the LQMS according to the LQSI checklist and resulting in an Action plan for further LQMS implementation for

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each participating laboratory. The obtained average scores at baseline assessment were 40 % for fully implemented activities across all the phases (ranging from 11-73%), 26% for activities in progress (ranging from 10-47%), hence, in total 66% of LQSI activities that were resolved or under development (ranging from 34-91%) (Figure 66). The scores obtained at the final mentoring visit were on average 58% fully implemented (ranging from 16-89%), 18% in progress (ranging from 6-36%), resulting in 76% in total (44-96%). Undertaken activities within the program in all participating laboratories have mostly covered LQSI phases 1 and 2, that have shown major advances: an average score for fully implemented Phase 1 activities was 40,4% at baseline assessment (range 15 – 70%), reaching 71,3% at final assessment (range 30- 93%), an increase of nearly 30% (Figure 67). Similarly, for the fully implemented activities of LQSI phase 2, an average score at baseline assessment was 46,2% (range from 17 – 82%), whereas at the reassessment it was 67% (range form 25 – 95%), an increase of nearly 20% (Figure 67). For phases 3 and 4, both the baseline and final assessment scores were lower, namely 42,6 % (range 10-80%) and 57,6% (range 25 – 93%), respectively for the phase 3 and 30% (range 0 -75%) and 37,9% (range 0-85%), respectively, for the phase 4. Positive impact of the program and increase of the obtained scores was visible across all the LQSI phases.

Upon baseline assessment, the only QSE with the obtained average score above 60% was found to be Documents and records, whereas most of the remaining 11 QSEs scored below 50% on average. However, upon the completion of the mentoring program, final average score above 60% was also reached for QSEs Information management, Customer focus, Purchasing and inventory and Equipment, ensuring the bases for further LQMS implementation. QSEs Facilities and safety, Personnel and Organization have shown substantial improvement, reaching above 50%, yet, to expand LQMS implementation of QSEs Process management, Assessment, Nonconformity management and Continual improvement further efforts and support are needed.

Practical, hand-on approach and team work together with mentors have facilitated to promote and enhance “quality culture” in all participating labs. Based on the project input and obtained results, considering the achieved level of LQMS implementation, 5/22 IPHs expressed clear intention to proceed towards official accreditation against ISO15189 in the near future.

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In order to allow sustainable implementation of LQMS, some key points need to be approached:

-Provide sufficient number and adequate laboratory personnel, to avoid excessive workload, allow for fruitful professional development and succession of generations of specialists;
-Provide a dedicated budget-line for LQMS activities, including EQA participation;
-Consider improving conditions of facilities and safety
-Establish a platform to facilitate communication and collaboration within the network of PHI microbiology laboratories, to promote sharing of experiences and practices and with prospect to expand to all microbiology labs;
-Facilitate organization of training courses related to LQMS implementation

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2. Introduction

The COVID-19 pandemic has underscored the critical role of public health laboratory system in a country's health system, particularly during acute public health events. Beyond their function in clinical microbiology diagnostics, public health laboratories play a pivotal role in the assessment, response, notification, and monitoring of public health events, making the implementation of the Laboratory Quality Management System (LQMS) a matter of utmost importance.

In 2012, the World Health Organization (WHO) Regional Office for Europe launched the Better Labs for Better Health initiative, a far-reaching and meticulous program aimed at assisting Member States of Eastern Europe and Central Asia in enhancing the quality and safety of their laboratory services. This initiative has now extended its scope to the Republic of Serbia, introducing a comprehensive and ambitious mentoring program for implementing the LQMS in microbiology public health laboratories, covering the entire network of national public health laboratories.

The Republic of Serbia has the network of public health institutes (IPH) across Serbia, coordinated by the Institute of Public Health of Serbia as the roof institution of this network. Each public health institute has a microbiology laboratory involved in microbiology diagnostics at the regional level. Three of the institutes from the network are also University centers, namely the Institute of Public Health of Vojvodina, the Institute of Public Health Nis, and the Institute of Public Health Kragujevac, with a broader role in the future education of young specialists.

According to the JEE findings in Serbia, a need for strengthening and expanding laboratory QMS implementation in the national laboratory system was identified. Based on these findings, an EU project for a resilient and responsive public health system was initiated in collaboration with WHO, UNDP, and national health authorities. Among the proposed activities in the EU project for a Resilient and Responsive Public Health System is promoting and implementing laboratory QMS for public health laboratories in Serbia.

The mentoring program is designed to support the quality management system in public health laboratories as part of the EU project "EU in Support to the Health System of Serbia." The WHO country office in Serbia, in cooperation with the Ministry of Health and the Institute of Public Health of Serbia "Dr Milan Jovanovic Batut," is collaborating on this project of great importance for the Serbian public

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health system. The program encourages the mentored laboratories to participate in implementing planned activities under the mentor's guidance.

3. Objectives

- Provide support for the implementation of LQMS in the laboratories of the PHL network;
- Perform two mentoring visits to assess the level of LQMS implementation in the laboratories of the PHL network and devise an action plan to implement and improve it, along with the laboratory manager or staff member assigned by the manager;
- Develop a mid/long term laboratory quality implementation plan, according to the gaps identified, together with the laboratory.

4. Outcomes

4.1 Implementation process

Upon successful training and selection in November and December 2023, eleven mentors have been selected to implement the national mentoring project on LQMS in 22 laboratories of the network of PH labs in Serbia. Mentors were trained on the main LQMS principles and use of the LQSI tool, developed by WHO, which covers 12 quality system essentials (QSE) to assess the level of LQMS implementation.

The mentoring program has been implemented in 2024, through a set of two on-site visits and online support provided by mentors in the period in-between. The list of mentors and designated laboratories for each of them is given in Annex 1.

Initial visits have been performed in March - April 2024. During the initial on-site visit to the lab, baseline laboratory assessment using the LQSI checklist was performed, and an action plan regarding the implementation and improvement of LQMS was agreed upon. Mentoring visits were performed according to the predefined Agenda, including the introductory meeting with the director of IPH and the management of the Center for Microbiology, followed by a round visit of the premises of the Center for Microbiology, discussing the sample flow, sample collection, samples storage conditions during and after the testing process, condition of equipment and its` position and maintenance, elements of the testing process,

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personnel, biosafety, biosecurity, preparation of media, waste management and other vital issues to achieve good laboratory practice in microbiology laboratory. The provisional visit Agenda is found in Annex 2.

During the visit, mentors spent ample time filling-in and working on the LQSI questionnaire together with lab specialists, discussing issues of LQMS implementation and jointly preparing the action plan. Action plan template is found in Annex 3.

Mentors supported the implementation of Action plan via online communication and exchange in the period March-October 2024. Second on-site visits have been performed in October- November 2024, to evaluate the progress achieved in LQMS implementation and propose further steps.

4.2 Implementation outcome per IPH

IPH Batut

IPH Batut was mentored by Prof. dr Aleksandra Knežević who performed the initial visit from March 28 – April 3 2024. Reference Laboratory (RL) for *Salmonella, Shigella, Yersinia enterocolitica* and *Vibrio cholere.* was selected by the IPH team to be the site of the mentoring program. Baseline assessment according to the LQSI checklist revealed 60,4% of actions fully and 24% partially fulfilled (in total 84,4%). Based on the scores obtained by the LQSI tool, the Action plan was developed, containing 29 action points, with emphasis on the following QSEs, needing need immediate intervention: purchasing and inventory, process management and personnel. Places of improvement for the remaining QSEs have also been identified

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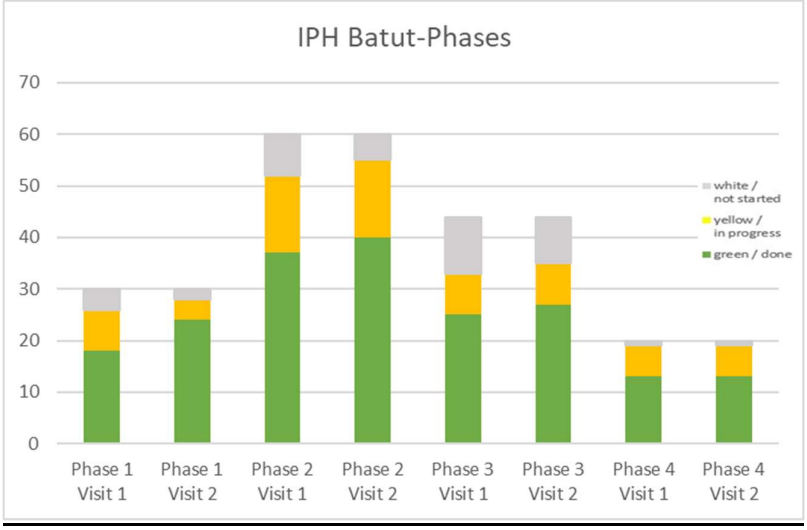

Figure 1. IPH Batut: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

The action plan activities included the appointment of the Quality team, training and education of laboratory staff about the LQMS and accreditation process, establishment of regular QMS meetings, development of SOP for cleaning and hygiene, plans for external quality assessment (EQA), preparation of the list of clients, development of SOP for critical intervals, design of the new laboratory information system (LIS), validation and verification of methods and introduction of a procedure for quality indicators.

Figure 2. Mentoring in IPH Batut

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In the period between the two visits, there was continuous communication (zoom meetings, phone/viber calls, emails) with the lab team. The team and Prof Knežević developed documents and records, worked on implementation of validation and verification of methods, equipment and reagents, discussed the inventory issues, trained laboratory staff, conducted the competence assessment, and made plans for EQAS participation and addressed the use of quality indicators. The team shared with Prof. Knežević all the prepared documents and reports (SOPs for methods, reports of method verification, equipment verification, inventory of reagents, etc.), revised SOPs and other documents (e.g. training and competence assessment reports).

During the second mentoring visit, performed in November laboratory staff and IPH management evaluated all activities related to the action plan and LQSI checklist. Out of 29 activities in Action plan, 14 (48.3%) were completely realized, 10 (34.5%) were partially realized and 5 (17.2%) were not realized.
The main challenges in fulfilling the action plan were limitations of the existing LIS and ongoing reconstruction of the building and laboratories.
Reassessment using LQSI tool checklist within the scope of the second visit revealed that nearly 67,5% of LQSI actions were fully and 21,4% partially fulfilled, totaling over 88%. The highest number of activities were realized in phase I (60 vs. 80%) and in phase II (62 vs. 67%). The evaluation of the progress in the quality elements showed that the highest number of activities were realized in the elements: Personnel (50 vs. 72.7%), Documents and records (80 vs. 90%) and Customer focus (57.1 vs. 71.4%).

The complex structure of the Center for Microbiology in IPHRS Belgrade with 9 laboratories challenges the implementation of ISO 15189 standard. There are different capacities for accreditation between the laboratories (premises, equipment, methods, personnel, etc.). However, the lack of laboratory personnel is the main issue (specialists of microbiology and laboratory technicians).

IPH Vojvodina

IPH Vojvodina was mentored by Prof. dr Aleksandra Knežević who performed the initial visit from April 22-26 2024. Baseline assessment according to the LQSI checklist revealed 68,2% of actions fully and 21,4% partially fulfilled (in total 89,6%).

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The obtained scores revealed advanced level of LQMS implementation. For QSEs Documents and records, Purchasing and inventory , Continual improvement all the requirements were assessed as fully implemented. Activities within majority of other QSEs scored over 60% : Facilities and safety 65%, Organization 75%; Equipment 73,3%; Customer focus 85.7%, Assessment,77.8%; Nonconformity management, 66.7% (Figure 3). The QSEs with lowest level of implementation were found to be Personnel 40.9%; Process management 52.4% and Information management, 58.3%.

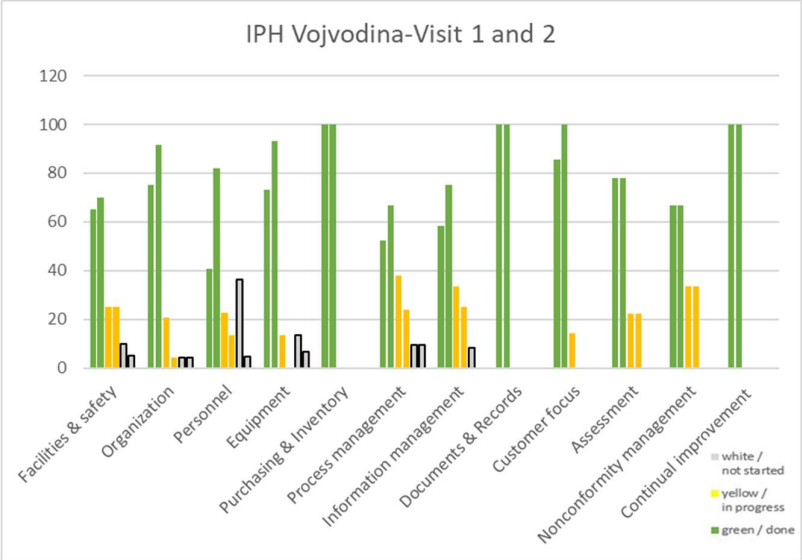

Figure 3. IPH Vojvodina: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

Based on the assessment findings lab team and Prof Knežević developed a comprehensive action plan containing 30 Action points. , This plan focused on improving existing procedures and strengthening biosafety and biosecurity measures. It included biosafety training, biosafety guidelines, and a list of dangerous pathogens. The plan also addressed improving existing procedures by adding the description of sample storage, criteria for sample rejection, emergency reports, and records. The action plan encompassed the preparation of the following SOPs: 1. SOP

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for validation and verification of the microbiology methods; 2. SOP for measurement uncertainty assessment, 3. SOP for competency assessment, 4. SOP for continual education. The QSEs also covered in the action plan were personnel issues, equipment handling and maintenance, LIS, internal and external quality control, and emergencies. Colleagues were actively working on SOPs for managing hazardous materials, personnel replacement charts, personnel signature charts, EQA plans for serology and an extension of the content of the existing SOPs.

Figure 4. Mentoring in IPH Vojvodina

Prof Knežević and the IPH team maintained active communicated focusing on realization of the action plan and education and training on ISO 15189:2023. The team developed the documents and records, began validation and verification of methods, verified equipment and reagents, made an inventory list, trained staff and conducted a competence assessment. The most crucial issues tackled during this project are planning and participation in EQA schemes and using quality indicators.

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Prof Knežević conducted the final visit in November 2024. Follow-up on the Action plan revelaed 20 (66.6%) of the 30 activities in the action plan fully completed. Five of the remaining activities, partially completed and five not yet started, will be completed in 2025. The major challenge was identified as limitations of the LIS. Reassessment using LQSI tool checklist within the scope of the second visit revealed that nearly 83% of LQSI actions were fully and 13% partially fulfilled, totaling over 86%. The outcome of the follow-up assessment according of the LQSI checklist showed significant progress, with 80 and 92% of the activities completed in Phase I and II, respectively (Figure 5). The progress in QSEs is particularly encouraging, with personnel, equipment and process management at 81,8%, 93,3%, and 66,7%, respectively.

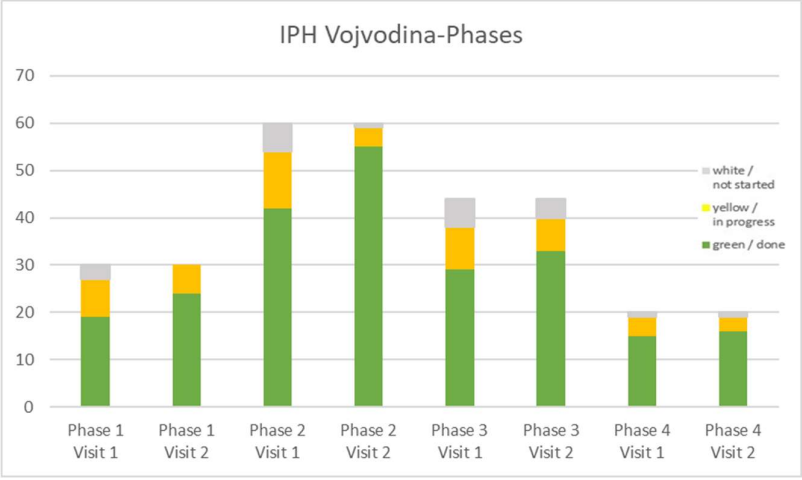

Figure 5. IPH Vojvodina: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

IPH Vojvodina management and personnel showed high interest and motivation for implementing LQSMS and aligning with the ISO 15189:2023 standard.

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IPH Niš

IPH Niš was mentored by prof. dr Dragana Vuković who performed the initial visit from 8-11 April 2024. Baseline assessment according to the LQSI checklist revealed 21% of actions fully and 33% partially fulfilled (in total 54%) (Figure 6).

The laboratory assessment based on the LQSI tool revealed a lot of space for improvement, with most of the activities within the QSEs assessed still in progress. However, it's important to note that significant progress has been made in some QSE activities, particularly in the areas of facilities and safety, organisation, equipment, documents and records, purchasing and inventory. Entirely in progress were nonconformity management and continual improvement.

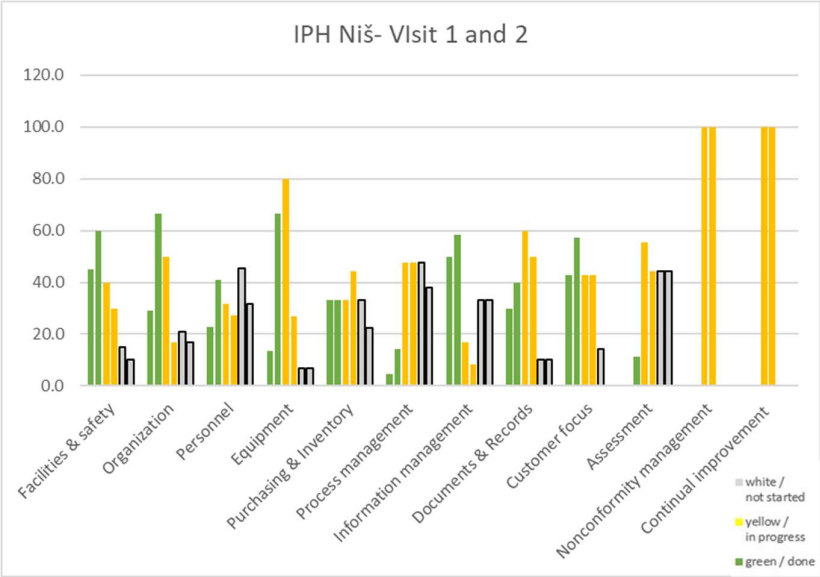

Figure 6. IPH Niš: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

The action plan, with 37 assignments, aimed to solve the following issues: 1/ biosafety- training, internal rulebook, reagents spills, risk assessment; 2/waste

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management plan; 3/training of the quality team for ISO 15189:2023 and quality management plan; 4/ equipment: records, inventory register, instruction for use, maintenance, calibration; 5/list of analyses; 6/ master SOP applied on all SOPs; 7/ internal and external quality control and the annual plan for EQAS; 8/ sample collection.

The IPH team appointed the Quality Team, Biosafety Officer, and Equipment Officer. As the IPH is already certified, the quality team made the suggested adjustments and additions to the existing documents. . Regular staff meetings are held, and the meeting minutes are jointly reviewed. The organisational chart of the Center for Microbiology was prepared and is available on the website. The list of clinical microbiology tests and the equipment inventory register have been revised and updated. Revision of the inventory list of hazardous materials is underway, and we encourage your input in this process. Internal training on laboratory biosafety has been scheduled, and the biosafety manual was completed. Instructions for equipment maintenance and the annual plan for these activities have been prepared.

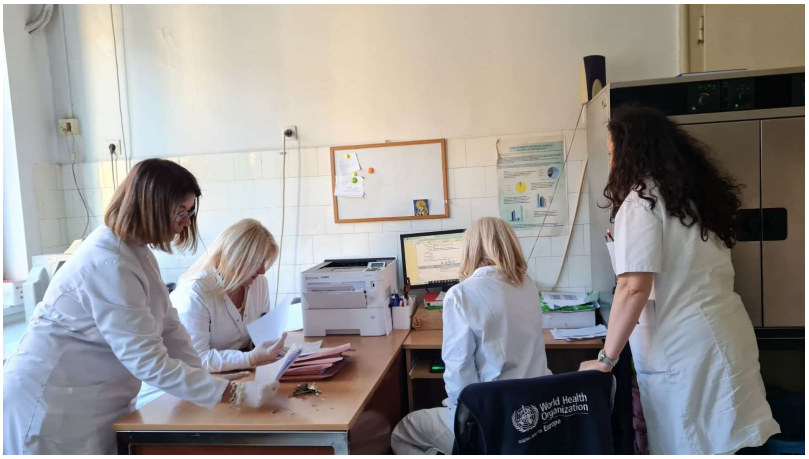

Figure 7. Mentoring in IPH Niš

The intensity of the activities during the period between the two visits (March-November) was critically affected by the temporary relocation of the microbiology laboratories because of extensive renovation work. This relocation significantly

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slowed down and even interrupted some activities, as the personnel was fully dedicated to the relocation while keeping the work process uninterrupted.

General focus in consultations was on finding the best approach to develop and implement QMS based on ISO 15189 in the IPH Niš, which is already cerified against SRPS ISO 9001:2015 and has efficiently implemented QMSs in compliance with SRPS ISO 17025:2017, for but only in the Center for Hygiene and Human Ecology for sanitary microbiology and chemistry services, and is maintained separately from the ISO 9001 QMS.

Prof Vukovic conducted the follow-up visit in November. Together with the IPH team they analized the undertaken activities and completed tasks by reviewing the Action Plan and the LQSI list. Special attention was dedicated to the tasks that were not completed, and the possiblities to overcome the obstackles and complete the action plan in future.

Figure 8. mentoring in IPH Niš

The assignments from the action plan were partially implemented, 16 (43.2%) fully implemented, 12 (32.4%) partially, and 9 (24.4%) were not achieved. The delay in the completion of tasks happened with the tasks that are time and resource-consuming, such as biological risk assessment for multiple clinical microbiology tests performed, writing procedure for equipment management, writing master SOP, preparation of plans for personnel competency assessment, verification of

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microbiological tests performed, preparation of the procedure and plans for participation in PT programs.

Follow-up assessment using LQSI tool checklist within the scope of the second visit revealed that nearly 45% of LQSI actions were fully and 34% partially fulfilled, totaling 79%. (Figure 9). The most prominent improvements were made in phases 1 and 2.

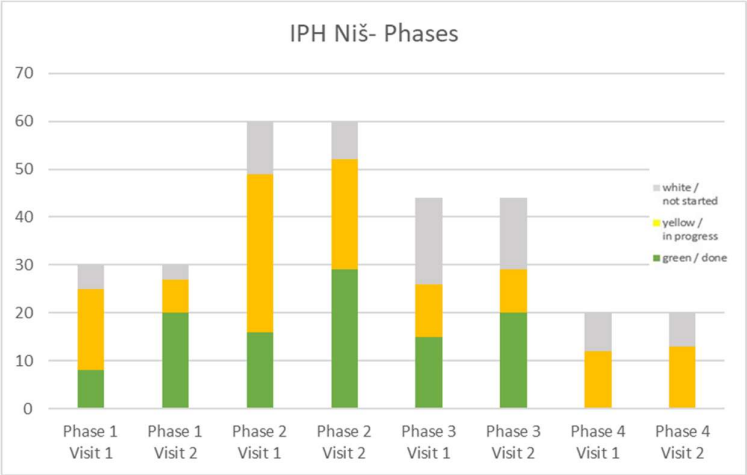

Figure 9. IPH Niš: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

Some of the most significant achievements are related to the equipment as one of the quality system essentials. The team prepared the equipment register, SOPs for operating equipment, SOP for maintenance and calibration of equipment, appropriate records, preventive maintenance schedule for 2025, and log sheets for selected pieces of equipment. The management purchased SRPS ISO 15189:2023 standard and developed the quality plan per the tasks listed in the Action Plan. The new organisational staff chart is available at https://www.izjz-nis.org.rs. The microbiologists revised and updated the list of clinical microbiology tests(also made available online) and improved the monitoring of internal quality controls. Some documents and records were newly prepared, and changes were made to existing documents (e.g. SOPs for microbiology tests performed by the CM, specimen collection and transport, and quality control).

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Plans for the future are very ambitious, and they include biological risk assessment for the tests and development of control lists, external training on ISO 15189 requirements for key personnel followed by internal training for staff, writing master SOP and SOPs for all tests, different aspects of personnel management in compliance with ISO 15189, upgrading the inventory system and development of document control system. Additional improvement is expected from microbiologists in both internal and external quality control, verification of tests, and the analysis of TAT for selected tests. The final goal is to continue with activities leading to the gradual implementation of the QMS based on ISO 15189: 2023—the deadlines defined in the plan range from 3 months to midterm (3-5 years).

IPH Kragujevac

IPH Kragujevac was mentored by Dr. Snezana Delic who performed the first visit from March 25 - 29 2024. IPH Kragujevac has already been accredited against the SRPS ISO 9001:2015 and SRPS ISO 17025:2017 standards for the field of sanitary microbiology, providing some experience to the quality manager as well as microbiology specialists.

Baseline assessment according to LQSI checklist revealed 24% of actions fully and nearly 34% partially fulfilled (in total 58% of actions tackled). Considering QSEs, requirements regarding Documents and records were found very well developed, providing good foundation for QMS, whereas QSEs assessment, organization, facilities and customer focus need substantial improvement (Figure 10).

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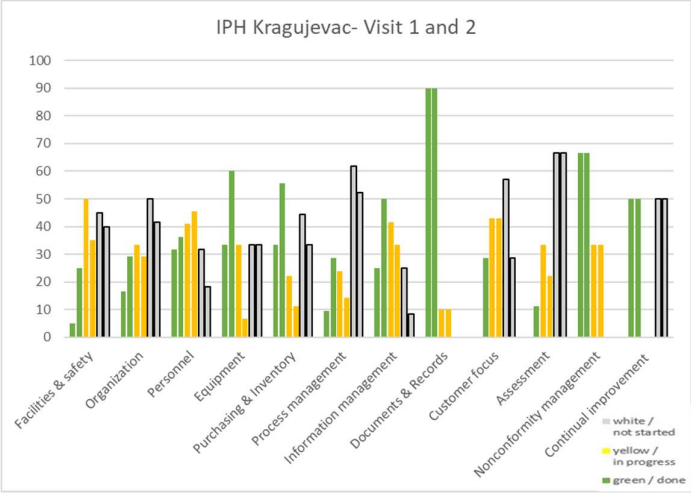

Figure 10. IPH Kragujevac: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

Based on the assessment results within the initial visit an Action plan containing 55 tasks was developed comprising: a/ equipment- writing SOPs and short instructions for use for all devices, hiring an equipment officer, keeping maintenance records, registering the equipment out of use, planning for equipment maintenance; b/ SOP for waste management, chemical spills and SOP in case of spill of chemicals; c/ premises- the installation of the security system in the lab, separate laboratory premises to prevent cross-contamination, alternate power supply- generator; d/ hiring the biosafety officer; e/ organizing regular staff meetings; f/ defining sample admission and rejection criteria, g/ SOP for EQAS and IQAS, SOP for verification of the commercial tests; h/ management and security of information.

In the period April-October 2024, monthly Skype meetings and continuous communication (online, telephone) took place with the team of the Center for Microbiology. Communication and support focused primarily on the implementation of internal controls in immunoserology, scheduling and participation in PT/ programs, application and use of the Med Lab QC program, procedures for validation and determination of uncertainty of measurement for immunoserological tests. The team also made a list of analyses and determined the turn-around-time (TAT) and worked along with Dr Delic on the verification process, preparation of a

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verification plan, and explained the use of MedCalc software, used in laboratories to calculate the sensitivity and specificity of tests. IPH Kragujevac has its own LIS, designed according to the staff's instructions to keep the records and documentation in electronic form.

Figure 11. Mentoring in IPH Kragujevac

The second visit, performed from November 25 - 27 2024, revealed partial completion of the Action plan, with 27/55 (49%) of action points fully completed. Reassessment using LQSI toll checklist within the scope of the second visit revealed that nearly 40% of LQSI actions were fully and 26% partially fulfilled, totaling 66% compared to 58% at baseline. In particular, an increase from 50 to 77% was noted regarding Phase 1 activities, whereas the score for Phase 2 has improved by 7% in fully completed actions (Figure 12). In particular, over 20% improvement was achieved for QSEs: facilities and safety, equipment, purchasing and inventory, process management, information management, and customer focus. Some of the QSEs improved by 10%, like organization, personal, and assessment.

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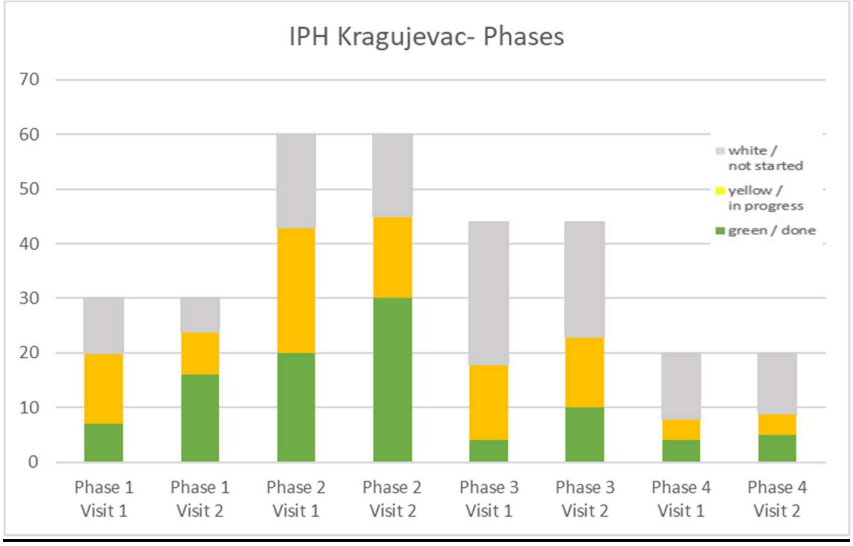

Figure 12. IPH Kragujevac: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

Of note, the number of staff currently working in the Center for Microbiology, including medical doctors specialists in medical microbiology and laboratory technicians is considered suboptimal and insufficient to carry out regular laboratory activities and tasks related to LQMS implementation of the requirements of the ISO 15189 standard.

Together with the mentor, lab team and management devised provisional mid-term Action plan, based on the LQSI tool, for the laboratory to further pursue LQMS implementation.

IPH Belgrade

IPH Belgrade was mentored by Dr. Snezana Delic who performed the first visit on March 4 to 8 2024. The IPH Belgrade is already accredited against SRPS ISO 9001:2015 and SRPS ISO 17025:2017 standards for the field of sanitary

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microbiology, which facilitated communication and cooperation with the mentor, considering that the Institutes' quality manager and coordinator for the quality of health care, as well as microbiology specialists, are familiar with and routinely apply the basic principles of quality in laboratories.

Baseline assessment according to LQSI checklist revealed nearly 40% of actions throughout all four phases fully and 26% partially fulfilled (in total, 66%), especially concerning QSEs Documents and Records, Information management and Equipment management. Facilities and safety as well as QSEs Continuous improvement, Assessment, Process management, Organization and personnel, required acting upon, which was included in the Action plan (Figure 13).

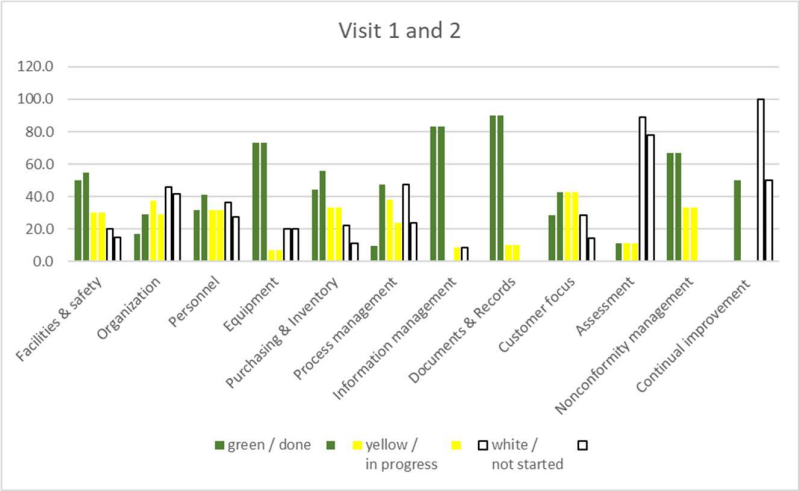

Figure 13. IPH Belgrade: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

The agreed action plan, which contained 43 tasks, included training the staff in the field of QMS, planning for quality management and improvement, and organizing regular meetings. The management also agreed to address the biosafety issue by creating a new position for an adequately trained biosafety officer. The team planned to develop SOPs for sample collection, sample admission and rejection criteria, the list of tests with SOPs for each test, and the SOP for verification of tests to enhance

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the quality of the laboratory results. Internal and external quality assessment, supported by a SOP, was deemed essential for the quality of results, followed by the procedure for the continual selection and regular monitoring of the functioning of National Reference Laboratories since the IPH Belgrade hosts NRL for EQA.

Figure 14. mentoring in IPH Belgrade

Following the first visit, the team demonstrated their proactive approach by initiating the development of new SOPs, including the list of tests and the instructions for sample collection. They also commenced the validation of two methods in immune serology and procured samples for EQAS, showcasing their commitment to continuous improvement.

Between the two visits, Dr Delic was in continual communication with the IPH Belgrade team. The communication and consultancy focused primarily on training and implementation of internal control in immunoserology, participation in EQA programs, and the methods for preparing the validation and verification. To the advantage of the IPH is the ownership of a custom-made LIS, in place for many

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years, which makes preparing the documents much more straightforward, considering that paper forms are replaced with electronic records, which are more accessible for change and improvement. In general, the entire documentation of the quality system according to ISO 9001: 2015 is found to be very robust and comprehensive.

The second on-site visit was realized on October 10, and November 1, and 4 2024. Considering the action plan, 24 of 43 activities were fully completed, representing a 55.8% fulfilment rate. While certain obstacles in the legal and economic departments of IPH hindered the completion of all activities, substantial improvements were made in key QSEs, such as process management, customer focus, and customer focus. Reassessment using LQSI toll checklist within the second visit revealed that over 51% of actions were fully and 23% partially fulfilled – overall 75%, compared to 66% of actions tackled at baseline. In particular, regarding Phase 1, an increase from 50 to 77%, and Phase 2, which improved by 7% in fully completed actions (Figure 15).

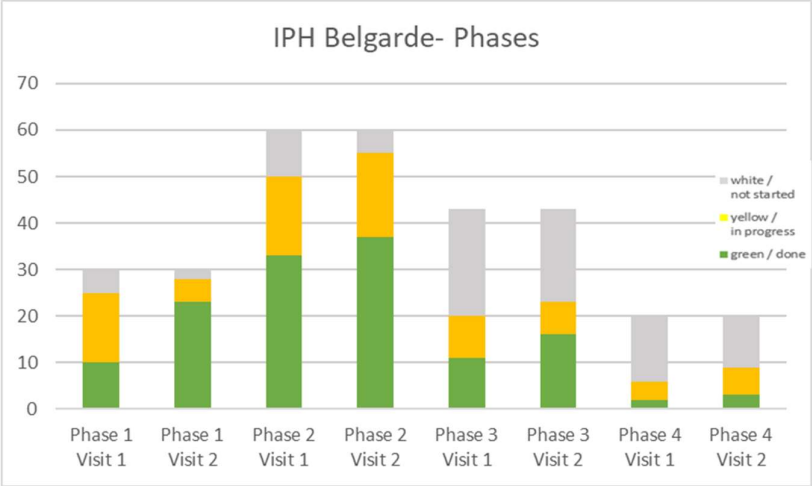

Figure 15. IPH Belgrade: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

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Dr Delic and the team defined both short-term and long-term plans for further improvement of LQMS. The short-term plans started with the activities from the action plan that still need to be completed. The long-term plan is to progress in phases 2 and 3 on their way to accreditation.

The IPH has fully embraced the postulate of continuous improvement in good laboratory practice as the only way to enhance laboratory work, instilling confidence in the future of the laboratory.

Since the very beginning of the project, IPH Belgrade expressed its intention to seek formal accreditation against ISO 15189:2023, which motivated lab specialists to participate in two very fruitful visits and diligently work on aligning the documents according to the standard ISO 15189: 2023 in 2024.

IPH Vranje

IPH Vranje was mentored by prof. dr Snezana Mladenovic who performed the initial visit from 4-8 March 2024. Baseline assessment according to the LQSI checklist revealed 27% of actions fully and 21% partially fulfilled (in total 48%) (Figure 16).

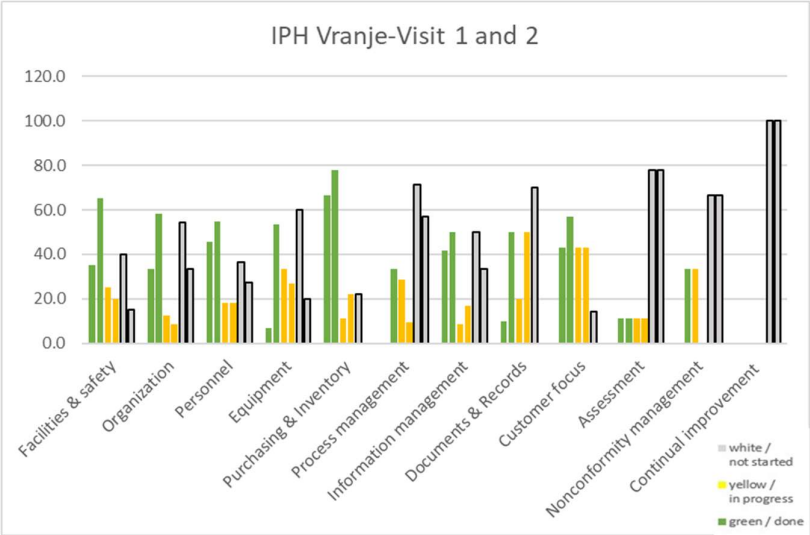

Figure 16. IPH Vranje: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

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The obtained scores on QSEs personnel, purchasing and inventory, and customer focus were highly compliant with LQMS requirements. The space for improvement was identified regrading QSEs documents and records, nonconformity management, continual improvement, equipment and process management.

The Action plan containing 23 action points was endorsed to tackle the issues: 1/ establishing a QMS team, designating biosafety officer, equipment officer, and purchasing officer, 2/organize staff training for ISO 15189:2023/ regular staff meetings, 3/ establishing matrix of authorisation, 4/ procuring power generator for continual power supply, 5/ establishing monitoring of the equipment and environment parameters, 6/write SOPs for all analyses and the media; 7/ prepare SOP for urine and sputum testing; 8/ compile and update list of all studies performed in the lab; 9/ establish equipment register: new list, calibration, installation record; 10/organise regular staff competency assessement; 11/ prepare short desk instructions for AMR testing according to EUCAST rules; 12/ procure the first aid kit and kit for reagents spills; 13/ make SOPs for sampling with sample rejection criteria; 14/ establish and perform internal quality control for AMR; 15/ prepare short desk instructions for ELISA system and BACTEC.

With the action plan in place, the IPH team wholeheartedly embraced the challenge. Regular communication with the mentor and the organisation of staff meetings became a norm, allowing the team to discuss progress, address issues, and plan future actions. The meeting minutes served as a record of these discussions and decisions, ensuring transparency and accountability. By July, the IPH had made significant strides, procuring the first aid kit, organising the first aid training, preparing the list of all analyses, and monitoring the environmental and equipment parameters. The microbiologists prepared the short desk instructions for AMR according to EUCAST requirements, and the authorisation matrix was ready. Of note, during the project period significant renovation works in the laboratory area were undertaken, including separating hygiene supply storage, staff changing rooms, and consumables storage for the reception department. Reception areas were physically separated from laboratory spaces, while the possibility to enlarge the lab space by repurposing the administrative staff office is being considered. Notably, based on the mentors' recommendation, and considering the low number samples tested, sustainability of TB diagnostics in the IPH Vranje has been critically evaluated. As a result, the management considered rationalisation by retaining sample collection and transport, yet referring these samples to the Special Hospital for Tuberculosis and Non-specific

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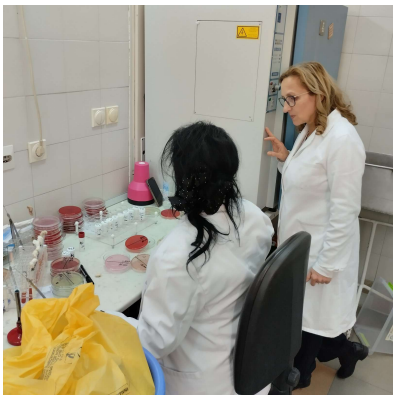
Pulmonary Diseases in Surdulica, which would free additional space for the Center for Microbiology.



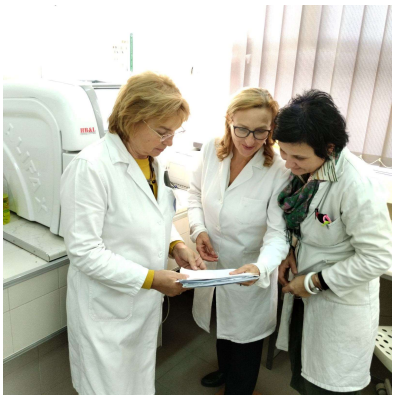


Figure 17. mentoring in IPH Vranje

The second mentoring visit was performed in November, to assess the fulfilled activities and to make plans for the future. Out of the 23 tasks outlined in the action plan 19 tasks have been fully completed (83%). The major challenges for fully implementing the Action plan remained the space and staff shortages Three activities are in progress: procurement of a new generator, revision of the laboratory testing request form, and biological reference intervals for all the tests.

Reassessment according to the LQSI checklist revealed 51% of actions fully and 19% partially fulfilled (in total 70%) (Figure 18). LQMS implementation has significantly improved considering LQSI phases 1 and 2, particularly regarding QSEs facilities, safety, organisation, process management, and documents and records, although phases 3 and 4 have also progressed.

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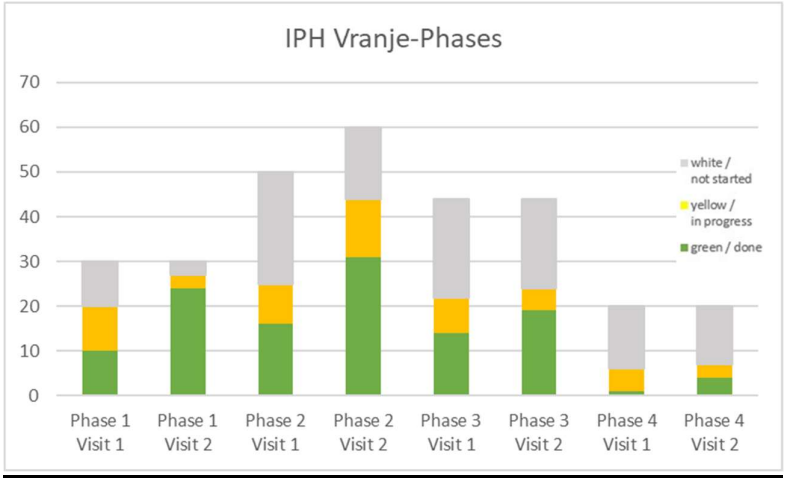

Figure 18. IPH Vranje: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

In the coming years, IPH Vranje will have to urgently increase the number of staff to ensure the premises for adequate microbiology diagnostics, improve electronic data management, introduce new LIS, train the staff in LQMS, and focus on improving the existing methods and analyses. This is a critical need that cannot be overlooked.

Despite the significant challenges, IPH Vranje has demonstrated exceptional dedication and achieved notable progress in LQMS implementation. Strategic planning, effective resource management, and sustained commitment will be critical to achieving full accreditation.

IPH Valjevo

IPH Valjevo was mentored by prof. dr Vera Mijač who performed the initial visit from 4-8 March 2024. The visit was conducted according to the predefined plan, revealing many problems and obstacles, including staff shortages. The IPH is not certified against ISO 9001: 2015, although the sanitary microbiology laboratory is accredited against ISO 17025:2017, and this might be an advantage for the future alignment to ISO 15189.

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Baseline assessment according to the LQSI checklist revealed 11% of actions fully and 23% partially fulfilled (in total 34%) (Figure 19). Generally, the implementation of LQMS at IPH Valjevo is found to be in the initial phase, leaving much space for improvement.

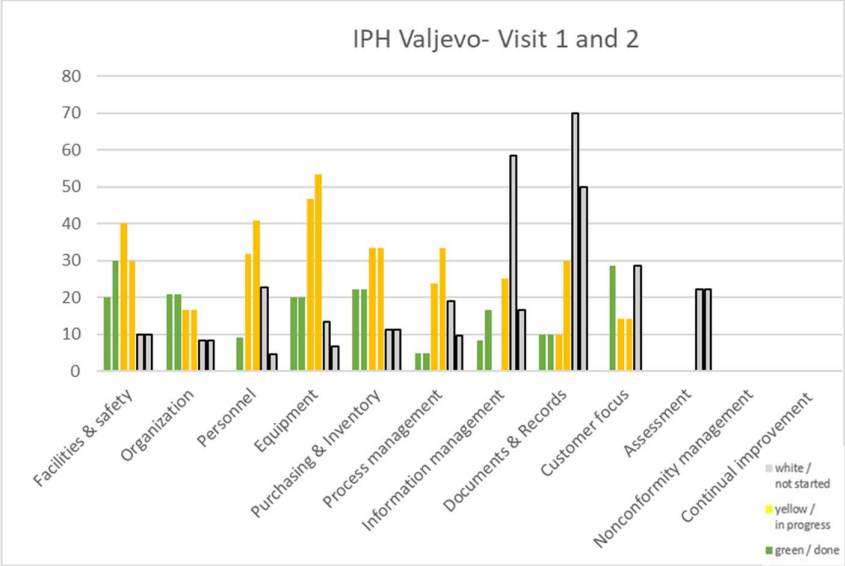

Figure 19. IPH Valjevo: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

At the initial visit an Action plan was devised, containing 56 action points. The plan included specific tasks related to training, risk assessment, waste management, quality management, equipment management, and information management, all aimed at improving the critical areas of lab work. Proposed actions were planned to tackle the most critical areas of lab work: 1/ training staff on first aid, procuring the first aid kit and making it available at designated places in the lab, basic risk assessment, designating biosafety officer , preparing biosafety manual and organising training on biosafety, compiling the list of hazardous materials in the lab; 2/ making procedure for and organising waste management;3/ designating the quality team and the quality officer, preparing QMS plan, organising regular staff meetings, providing register of customer complaints and impressions, setting up

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documentation register; 3/establishing organisation scheme, providing job description for every job position;4/ providing instructions for sampling; 5/ establishing equipment management: short instructions for use, equipment register, writing SOPs for equipment use and maintenance, designating responsible staff, establishing inventory register; 6/ writing master SOP and SOPs for all the tests; making SOP for assessment of staff competency, introductory training for new staff; 9/ writing SOP for sample reception; 10/introducing internal quality control into regular work, setting annual plan for EQA; 11/ establishing information management.

Figure 20. Mentoring in IPH Valjevo

Following the initial visit, the team at IPH Valjevo demonstrated their commitment to the action plan by immediately initiating several key tasks. They took proactive measures, such as installing mosquito nets on all laboratory windows and restricting access to visitors and non-laboratory personnel. The team promptly wrote job descriptions for all laboratory staff and finalised a comprehensive list of laboratory analyses for distribution to clients. They also revised the laboratory report forms, adding reference intervals and necessary comments for some types of analysis. These actions reassure us of the team's commitment and initiative in implementing the QMS in the Center for

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Microbiology of IPH Valjevo. However, the lack of personnel, with only one medical doctor specialised in microbiology, was an obstacle to the full accomplishment of the initial plan until the end of the project.

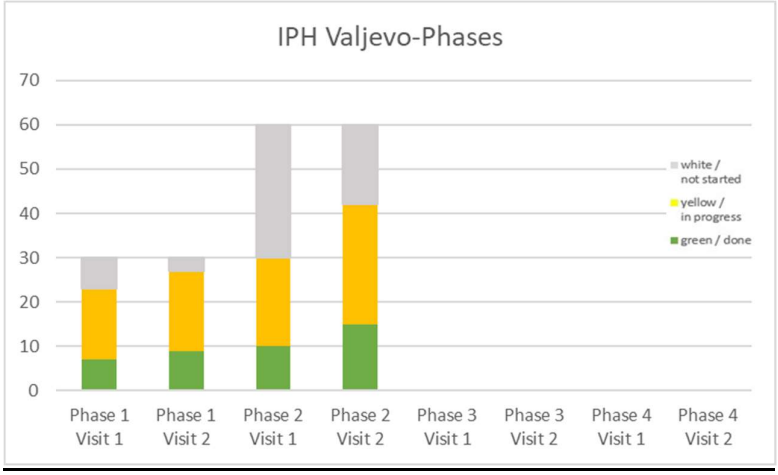

Figure 21. IPH Valjevo: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

The second mentoring visit, organised in October, showed some promising progress. Of the 56 planned activities (defined in the Action plan), 11 (20%) were fully accomplished, while 14 (25%) were initialized but not finalized yet. Reassessment according to the LQSI checklist revealed 16% of actions fully and 29% partially fulfilled (in total 45%) (Figure 21). Progress was achieved in facilities and safety, personnel, information management, and customer focus. The main problem remains the lack of personnel, especially in the summer period, which led to a loss of time for the planned activities. Despite this, the team's commitment to the QMS elements and the certification process according to ISO 15189:2023 is a reason for optimism about the future of the IPH Valjevo laboratory.

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IPH Zaječar

IPH Zaječar was mentored by Prof. dr Aleksandra Knežević who performed the initial visit from April 15-19 2024. Baseline assessment according to the LQSI checklist revealed 51% of actions fully and 37% partially fulfilled (in total 88%) (Figure 22).

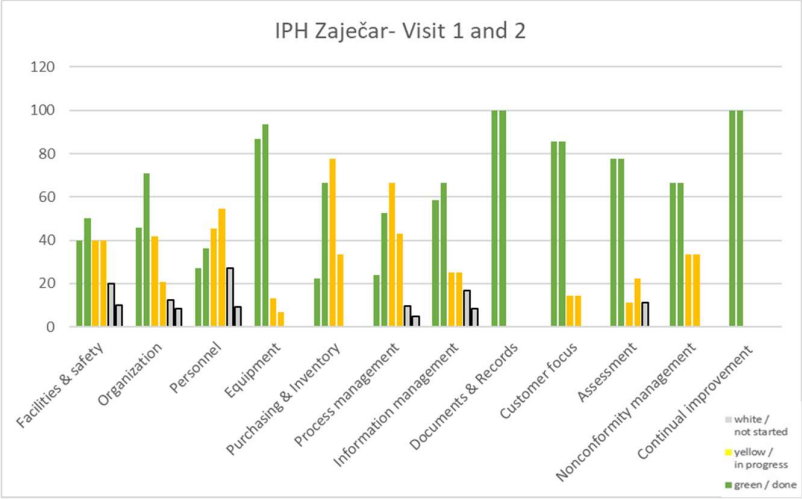

Figure 22. IPH Zaječar: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

Among the well implemented QSEs scoring over 85% implementation were Documents and records, Continual improvement, Equipment and Customer focus, whereas the following QSEs were found to be still in progress: Facilities and safety, Organization, Personnel, Purchasing and inventory and Process management.

Based on the scores obtained by the LQSI tool, the Action plan was developed, containing 38 action point, including official designation of the quality team, developing SOPs for the equipment, LIS, biosafety, and reagents. Prof. Knežević recommended revising the quality policy but also stressed that the team should prepare the guidelines for biosafety and SOP for bio-incidents and accidents. The action plan also covered samples management, including storage,

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acceptance/rejection criteria, and sample transportation. The team had the plan to verify equipment following the procedure's instructions, tackle the personnel issue and improve a few SOPs for continual education, competency assessment, internal organization, and the systematization of jobs. The action plan had to tackle the validation and verification of microbiology methods, verifications of tests, define quality indicators, solve an EQA issue, and prepare the EQA plan and SOP for external and internal quality control.

Figure 23. Mentoring in IPH Zaječar

Between the two visits, Prof Knežević and the team maintained continuous communication. They were mainly focused on realizing the Action plan activities and the training to implement ISO 15189 requirements. The team developed the documents and records, started validation and verification of methods (conventional and molecular techniques in microbiology), verified the equipment, made the inventory list, and organized the staff training and competence assessment. The staff also started to plan participation in EQA schemes and started the use of quality indicators. The team shared all documents and reports developed in the meantime (SOPs for methods, reports of method verification, equipment verification, inventory of reagents, etc.), revised SOPs and other documents (e.g., training and competence assessment reports), and Prof Knežević evaluated the documents.

The Institute has made significant progress by compiling a comprehensive list of all hazardous materials and an inventory of reagents. The team has also initiated activities to prepare missing documents, improve the existing SOPs, verify equipment, and define the responsibility matrix within the Institute's QMS.

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The second mentoring visit was organised in November 2024. Of the 38 planned activities (defined in the Action plan), 16 were completed (42%), 14 were partially completed (37%), and 8 were not completed (21%). Challenges in implementing the action plan were the limitations of the currently used LIS and staff shortages due to the regular retirement process, including senior staff of the Center for Microbiology and Center for Sanitary Microbiology.

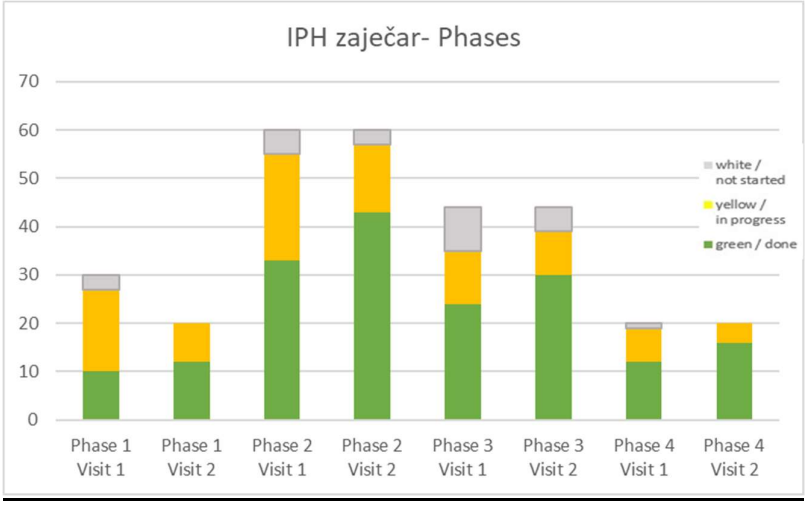

Figure 24. IPH Zaječar: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

Reassessment according to the LQSI checklist revealed 78% of actions fully and 22% partially fulfilled (Figure 24). The analysis of the LQSI checklist showed that the highest number of activities were completed in phase II, moving from 55.5% to 71.67% of "in place" activities and in phase III, from 54.54% to 68.18%.

During the mentoring period, the team and the management showed a high level of interest and motivation for implementing the ISO 15189:2023 standard. IPH will complete the action and quality plans in 2025. The Center for Microbiology has capacities to start activities on the implementation of the ISO 15189 standard. However, the main issue is the lack of laboratory personnel, both microbiologists and technicians. The final meeting allowed the IPH management, quality team, and

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laboratory staff to express their intention to begin the preparation for accreditation according to the ISO 15189 standard.

Prof Knežević made recommendations for future activities on the IPH's way of aligning to ISO 15189:2023. The IPH should select several accredited methods and analyses, educate the staff about the standard ISO 15189:2023, conduct the competency assessment, strengthen the existing quality control in line with the requirements of the standard ISO 15189:2023, and improve information management (LIS).

IPH Zrenjanin

IPH Zrenjanin was mentored by Dr. Snezana Delic who performed the first visit from February 26 to March 1 2024. Baseline assessment according to the LQSI checklist revealed 36% of actions fully and 32% partially fulfilled (in total nearly 69% of actions tackled) (Figure 25).

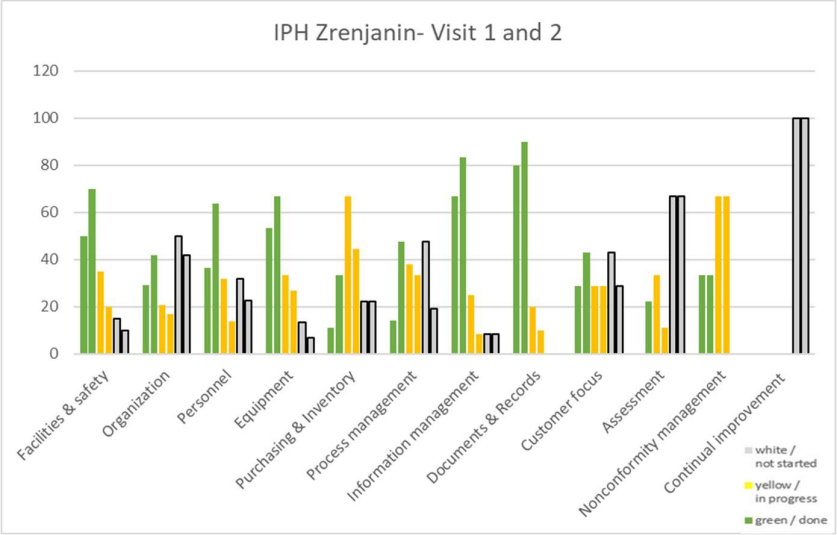

Figure 25. IPH Zrenjanin: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

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The obtained scores revealed QSE Documents and records as a strongpoint of the LQMS of IPH Zrenjanin, with 80% of the related LQSI actions entirely fulfilled, providing the basis for the successful prospective implementation of standard ISO 15189. Furthermore, QSEs information management, equipment and facilities and safety, have also been found to be well implemented in IPH Zrenjanin, with over 50% of LQSI actions fully resolved.

During the first visit, the team agreed upon the action plan containing 45 tasks which has tackled the following issues: 1/ training on biosafety and bio-incidents, including training records and evaluation; 2/waste management plan; 3/ equipment- assigning an equipment officer, preparing SOPs and instructions for use, establishing records of maintenance; 4/ tests- compiling list of analysis performed by the lab, with defined TAT and information about it available for customers (e.g. on the IPH web page), develop analytical SOPs (six test methods have been chosen to start with), develop SOP for verification of commercial tests; 5/ develop SOP for sample reception, including criteria and procedure for rejection of samples; 6/ develop SOP for participation in EQA ; 7/ Assess if forms for sample referral and analysis reports are in line with LQSI recommendations and ISO15189 requirements and modify if needed; 8/ develop orientation procedure for new employees, including permanent positions, admission of guest colleagues and temporary positions.

In the period from March to November 2024, a continuous communication via online Skype meetings and telephone communication has been maintained between the mentor and the lab team (head of the laboratory and the IPH Zrenjanin quality manager). The team has diligently worked together and tackled issues of implementing internal quality control assessment, especially on introducing internal quality control in immunoserology testing, as well as planning for and participating in EQA schemes. Dr Delic provided support and training to implement use of the MedlabQC program as the tool for internal control monitoring in immunoserology. The team together with the mentor initiated planning and preparing procedures for validation and determination of measurement uncertainty for a number of tests selected by the lab and made a list of analyses and determined their TATs.

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Figure 26. Mentoring in IPH Zrenjanin

The second visit, performed from November 6-8 2024, revealed completion of the Action plan, with 27/55 (49%) of action points fully accomplished (Figure 27).

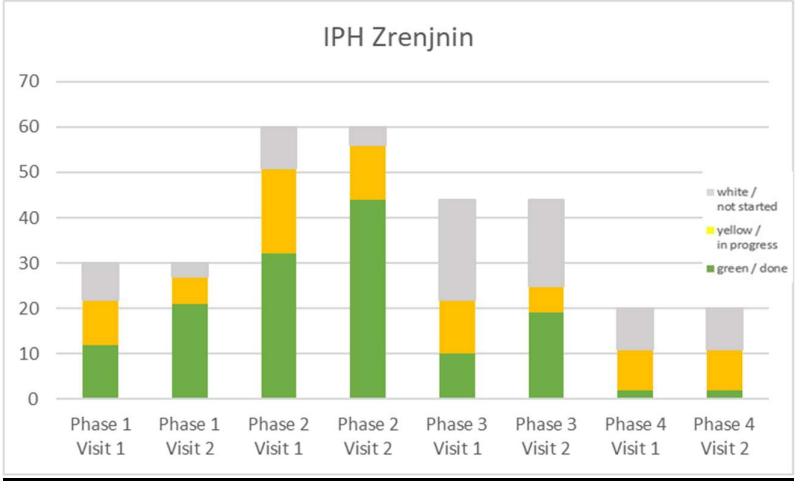

Figure 27. IPH Zrenjanin: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

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In view of the second LQSI based assessment, in total, percentage of actions fully and partially accomplished reached 56% and 21%, respectfully, reaching 77% in total, reflecting the team's dedication, with support of dr. Delic. The most prominent progress was accomplished in LQSI `s phases 1 and 2, especially regarding activities: facilities and safety, personnel, purchasing and inventory, process management, information management, and assessment.

The remaining tasks, particularly those connected to legal and economic services, were left for future attention. The IT sector also has plans to design and implement new LIMS, in accordance with ISO 15189: 2023 standard requirements, as the current "Heliant" software has limitations. IPH planned to work hard on quality indicators like assessment, continual improvement and organization, although those are issues that go beyond the action plan. Unfortunately, at the end of the project, continual improvement remains undeveloped and will need attention in the future.

The IPH management's commitment to the accreditation process against the standard 15189:2023 is unwavering. They have expressed their support for the continuous improvement postulate in laboratory work and plan to work on phases 3 and 4in the coming years. The team is fully aware of the long road ahead to achieve accreditation, but their strong motivation, coupled with the adequate space and necessary equipment, instills confidence in the project's future.

IPH Kikinda

IPH Kikinda was mentored by Dr. Snežana Mavrak who performed the first visit from 11-15 March 2024. Baseline assessment according to the LQSI checklist revealed 53% of actions fully and 19% partially fulfilled (in total nearly 72%) (Figure 28). The highest score has been obtained for QSEs documents and records, nonconformity management, and equipment. Regarding QSEs facilities and safety, organization, continual improvement, purchasing and inventory, space for improvement has been identified.

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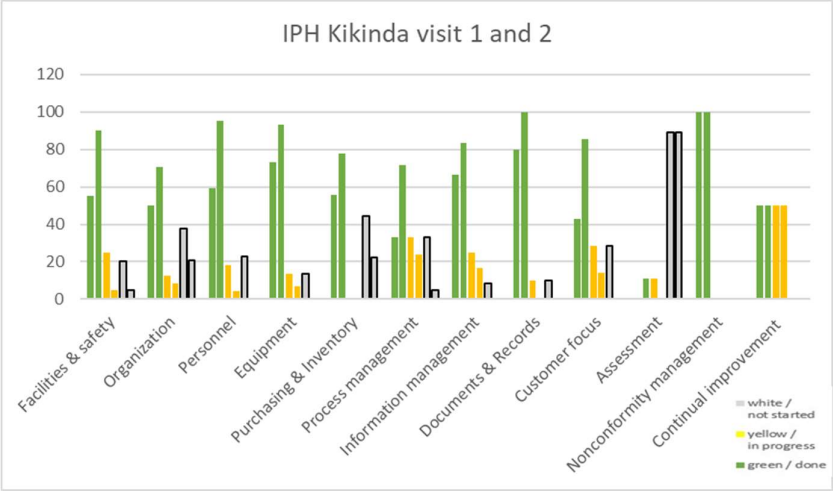

Figure 28. IPH Kikinda: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

The IPH team endorsed the action plan comprising 34 action points, to tackle issues: 1/ IPH will establish the project team, head of the team, 2/ biosafety issues: biosafety officer, organize biosafety training, make the List of hazardous materials, restrict the access to laboratory, biosafety assessment, a procedure in case of bio-incident, the List of vaccinated employees and other vital issues in biosafety; 2/ support the existing Quality management system with a few activities like the regular staff meetings, annual plan for QMS, the meeting about the importance of accreditation process; 3/ matrix of authorization; 4/ equipment: register, procedures; 5/ SOPs for all tests, SOP for validation and verification; internal quality control; 6/SOP for competency assessment; SOP for reports, their evidence and archive; 7/ define TAT for all analyses. The IPH team maintained continuous online communication with their mentor.

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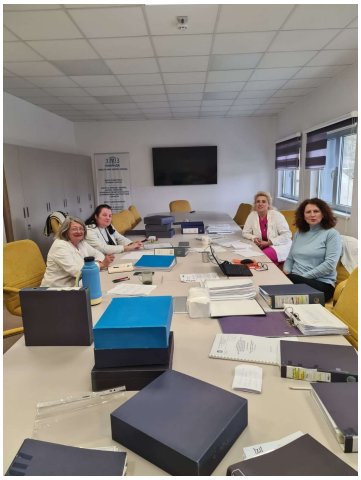

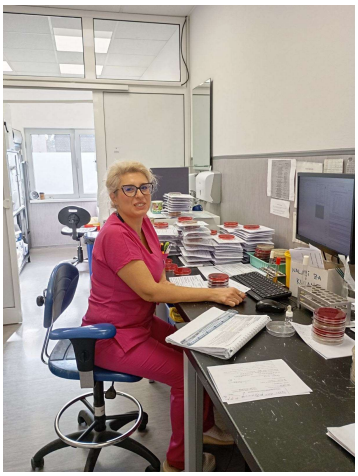

Figure 29. Mentoring in IPH Kikinda

The second on site visit was performed in November 2024, to find solid realization of the Action plan, with 23 out 34 action points fully undertaken (68%). Project team has been appointed, the team started organizing regular staff meetings and created the form meeting minutes, informed the staff of the QMS implementation plan, made the List of equipment authorization, created the results form, created a list of all employees' signatures, determined the TAT for all the analyses. The IPH made an inventory list of all hazardous materials with their locations and established the urgent results notification record. The team was working on a biosafety manual, a crucial document that outlines safety procedures and guidelines. They assessed the biorisk in the laboratory and made the adjustments to the sampling SOP. However, a number of challenges have also been faced: a security system to prevent unauthorized access to the laboratory could not be installed due to additional investments and construction interventions needed, revision of report form could not be implemented, preparation of the laboratory service manual could not be completed. Four activities remained still progress, to be implemented in the first half of 2025. These activities are mainly connected to the quality control assessment, including the internal quality controls, verification of the commercial tests, validation of the in-house procedures and the written SOPs for all the tests performed in the laboratory. There is still some work to do to introduce the equipment verification process.

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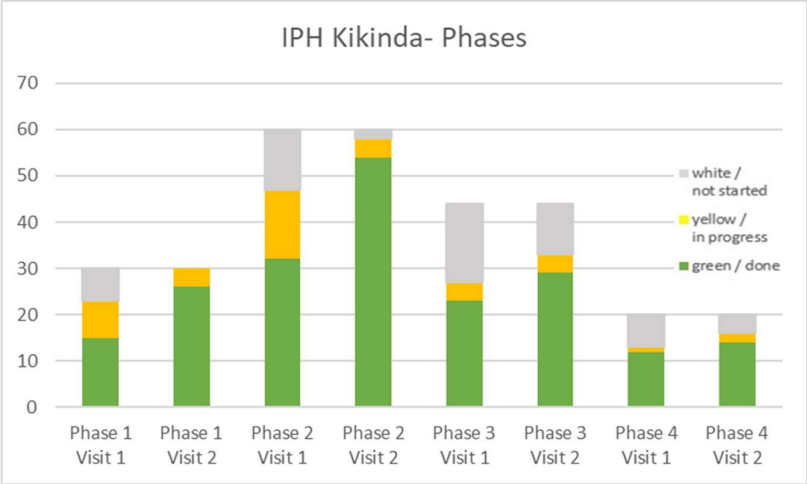

Figure 30. IPH Kikinda: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

Considering the second assessment using LQSI checklist, the obtained score showed 80% of actions fully implemented and further 9% in progress, in total 89% (Figure 30). The team achieved the highest progress, almost 40%, in QSEs in facilities, personnel, and process management. Considering LQMS implementation process, phases I and II reached the score of nearly 90%, whereas for phases 3 and 4 additional activities are required.

IPH Kraljevo

IPH Kraljevo was mentored by dr Ivana Kelić who performed the initial visit from April 1-5 2024. Baseline assessment according to the LQSI checklist revealed 36% of actions fully and 25% partially fulfilled (in total 61%) (Figure 31).

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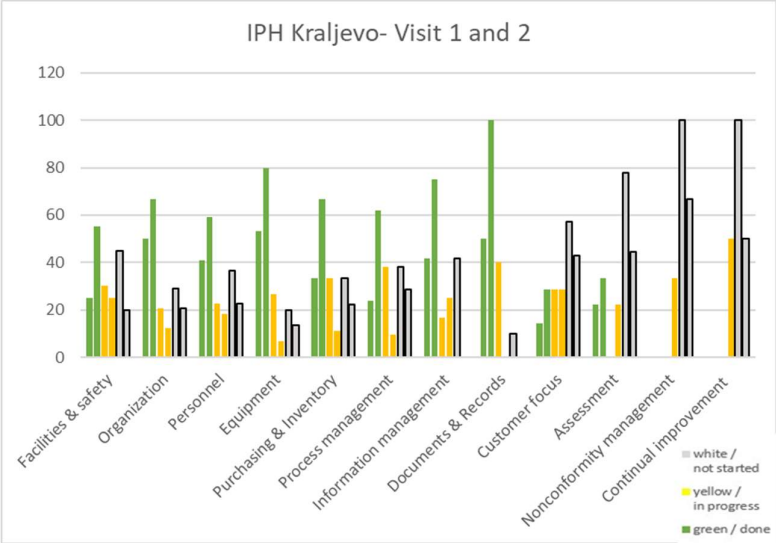

Figure 31. IPH Kraljevo: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

Considering that IPH Kraljevo does have accreditation against ISO 17025:2017 in the field of sanitary microbiology, hence, the process of alignment with ISO 15189:2023 requirements would thus be facilitated.

IPH Kraljevo has moved to a new building a few years ago, and the Center for Microbiology is designed modernly, considering all the rules of good laboratory practice and biosafety. The LQSI assessment revealed that QSEs are generally well developed, but some, like documents and records, equipment, organization, personnel, and information management, need adjustments and improvement.

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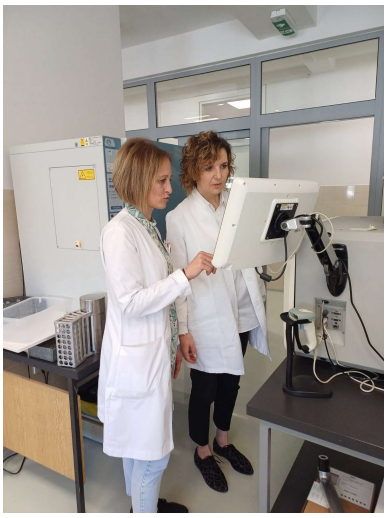

Figure 32. Mentoring in IPH Kraljevo

Based on the LQSI questionnaire analysis, the insight into the documentation, and the on-site visit, Dr Kelić and the IPH team jointly prepared the action plan with 28 assignments, the basis for future work. The action plan focused on improving documentation, especially for the equipment and organization, and samples management, including reception and transport of samples. It tackled the following activities: 1/ organize regular staff meetings; 2/ make SOP for waste management; 3/ name the quality officer, who will be responsible for managing the biosafety training; 4/ prepare job descriptions for all staff positions; 5/ make the list of all analyses performed in the lab and SOPs for a defined list of analyses; 6/ designate the quality officer; 7/ make the floor plan of the laboratory; 8/ equipment management: create the list of staff responsible for taking care of specific devices, short instructions for use, SOPs for equipment, prepare the annual maintenance plan.

The second mentoring visit took place on October 26-28 2024. Out of 28 action points of the Action plan, 25 have been completed – 89%. Of note, the Center has implemented new LIS, developed within the EU project IPA 2020, Strengthening the Capacity of Serbia's Health Sector for Communicable Disease Surveillance, IPH

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Kraljevo being the first IPH to implement this software and participate in its design and application process.

Reassessment according to the LQSI checklist revealed 62% of actions fully and 16% partially fulfilled, totaling to 78% (Figure 33). The most significant progress was achieved regarding the QSEs: documents and records, with 50% progress (in place); process management, with 40% progress; purchasing and inventory, equipment and facilities, and safety, with almost 30% progress.

LQMS implementation has improved across all four phases, phase 1 progressed to "in place" by 31%, phase 2 is even better, with 80% in place, and phase 3 improved by 24%.

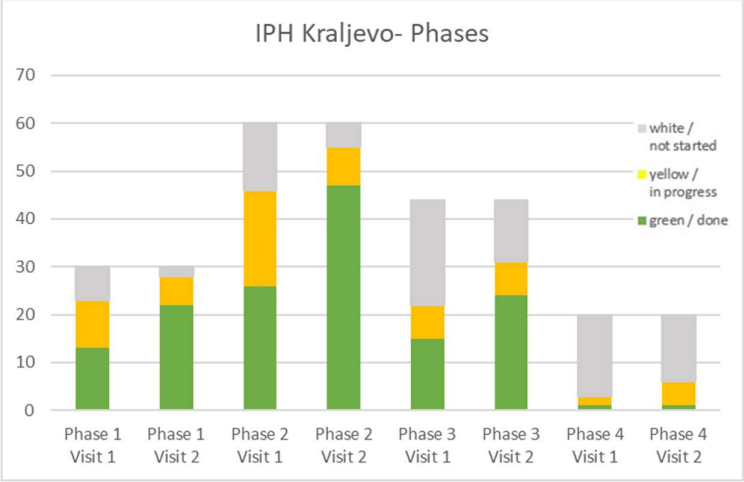

Figure 33. IPH Kraljevo: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

While significant progress was achieved, there are still some activities that remain to be completed. The organization of first aid training was complex, as the educator and the facilitators had to have a license to train staff, and it took work to book a date. Important SOPs still need to be revised, including the SOP for waste management, for induction to work. SOPs for recording, reporting, and archiving results and SOP for validation and verification. Among the main challenges

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identified remain insufficient staff and work overload of the existing laboratory personnel.

IPH Kruševac

IPH Kruševac was mentored by dr. Zorica Zrnić who performed the initial visit from 1-5 April 2024. Baseline assessment according to the LQSI checklist revealed 42% of actions fully and 10% partially fulfilled (in total nearly 52%) (Figure 34).

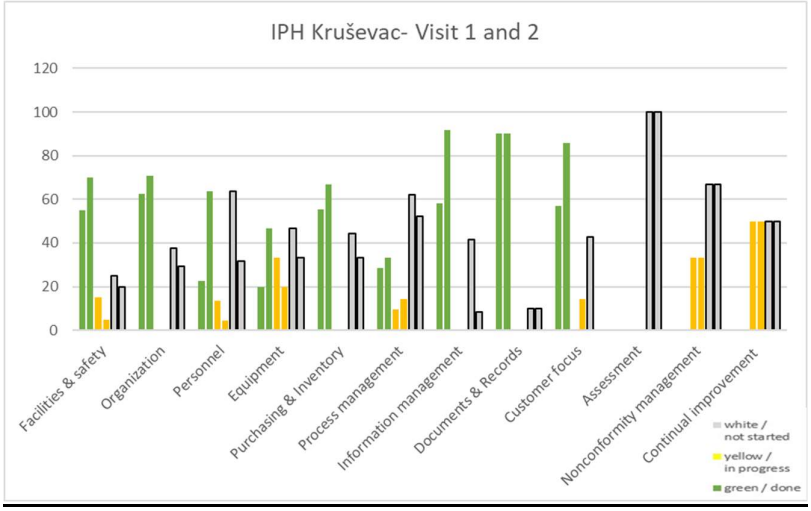

Figure 34. IPH Kruševac: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

The visit was conducted according to the predefined plan. After the initial meeting, the management showed the premises of the Center for Microbiology and worked with Dr Zrnic on the LQSI questionnaire. The LQSI assessment showed that IPH Kruševac has foundations in documents and records which strongly support the QMS. The questions related to the QSEs, such as facilities and safety, organisation, purchasing and inventory, information management, and customer focus, clearly required some improvement. In contrast, assessment, nonconformity management,

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and continual improvement are QSEs that needed substantial progress to align with LQMS and ISO 15189 requirements.

Figure 35. Mentoring in IPH Kruševac

The team and Dr Zrnic endorsed the Action plan with 21 action points to tackle some of the issues: 1/train staff to recognise symptoms of laboratory-associated infections and facilitate access to diagnostic and medical services for when such cases occur; 2/purchase the first aid kit and organise first aid training for staff; 3/prepare the authorisation matrix; 4/ install the security system to restrict access the laboratory; organise regular staff meetings for QMS; 5/ establish monitoring of the environment parameters; 6/ compile the list of staff signatures; 7/ make equipment- related documents and procedures, register, short instructions for use; 8/ make list of all tests performed in the lab; 9/ make SOPs for all tests; 10/ create SOP for staff competency assessment and perform staff competency assessment; 11/ make SOP for sampling; 12/ perform survey of clients satisfaction; 13/ perform acceptance checklist of tests upon delivery of new supplies; 14/ designate replacements for all personnel; 15/ make list of clients;16/ develop authorisation matrix.

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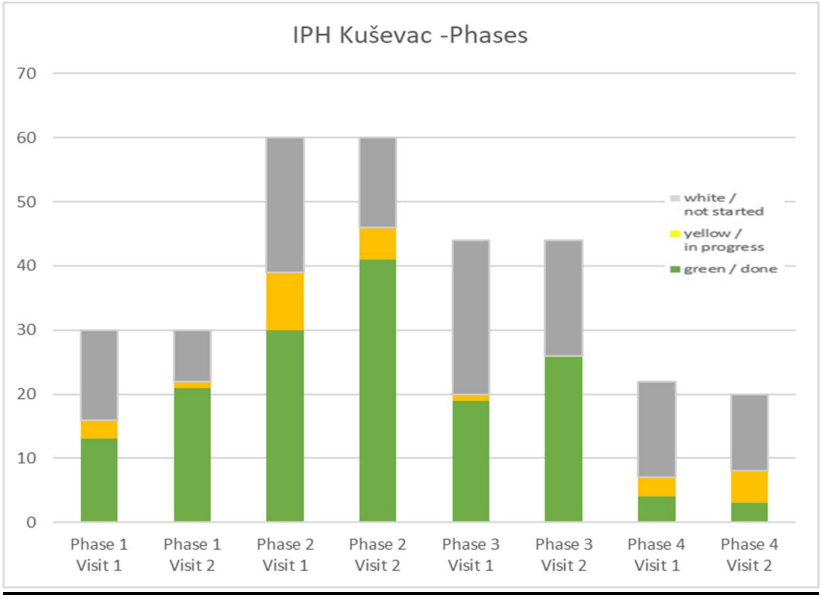

Figure 36. IPH Kruševac: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

During the initial visit and in communication with the mentor, IPH Kruševac took several proactive steps to address the identified issues during the first part of the project. These steps, including the purchase of spill kits and the installation of a security system, demonstrate the team's initiative and commitment to addressing the identified issues. The management organised staff meetings to discuss the goals of QMS implementation and the need for accreditation. They prepared the equipment register. The team worked hard to fulfil the rest of the activities from the action plan during September and October, except the SOPs for the equipment, which is left for 2025.

The second mentoring visit was done in November 2024. Dr Zrnic and the team discussed the realization of the Action plan. Reassessment by the LQSI checklist revealed 59% of actions fully and 7% partially fulfilled (in total nearly 66%) (Figure 36). Substantial improvement has been achieved regarding QSEs personnel (more than 40%), equipment, information management, and customer focus..

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IPH Leskovac

IPH Leskovac was mentored by prof. dr Snezana Mladenovic who performed the initial visit from 11-15 March 2024. Baseline assessment according to the LQSI checklist revealed 21% of actions fully and 33% partially fulfilled (in total 54%) (Figure 37). The assessment based on the LQSI checklist revealed significant space for improvement in process management, documents and records, continual improvement, and nonconformity management. Although the IPH has many documents in preparation, they will have to adjust them to comply with LQMS requirements.

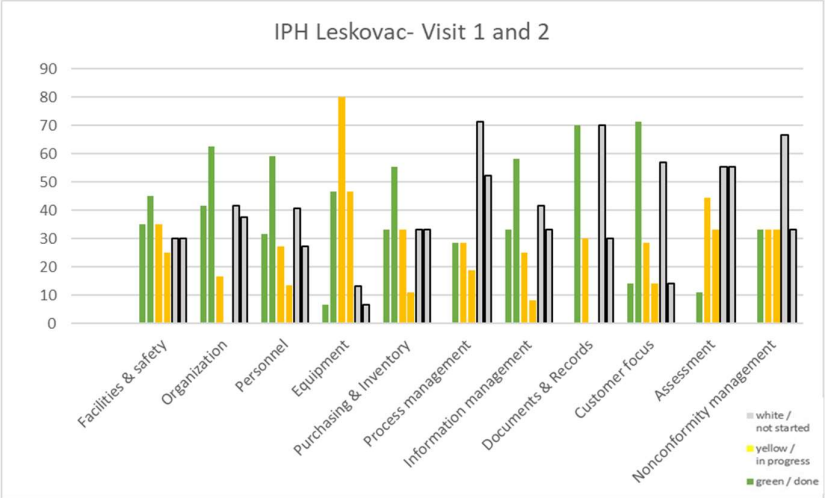

Figure 37. IPH Leskovac: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

The IPH Leskovac team, demonstrating their commitment, agreed upon an action plan with 34 action points to address the following issues: 1/establish the QMS team, appoint the head of the team, organise regular staff meetings, prepare the organisational scheme, organise the meeting to explain the importance of the accreditation process, 2/ write the authorisation matrix; 3/ prepare master SOP, compile the list of all analyses performed in the lab, prepare SOs for Gram staining, SOP for antimicrobial resistance testing (AMR), SOP for urine sampling and testing, SOP for sputum sampling and testing, define reference intervals for all analyses; 4/ make SOP for personnel competency assessment; 5/ prepare SOP for new staff

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training; 6/ establish equipment- maintenance plan, prepare short instructions for use, equipment register, SOPs for equipment related procedures; 7/ distribute SOPs in folders on suitable locations at places of work.

Figure 38. Mentoring in IPH Leskovac

Upon the initial visit and in communication with the mentor, the IPH team made significant strides in the action plan. The QMS team was established, the authorisation matrix was formed, and the list of personnel was signed. The staff was informed about the importance of accreditation, and they wrote the meeting minutes. The list of laboratory service clients is being prepared. The team made folders for storing SOPs in suitable locations, designed the document review form, and stored the documents and records appropriately. Additionally, the IPH team created a work schedule for employees, considering authorisations and staff rotation for regular work, which still need to be in situations with reduced staff (holidays, emergencies).

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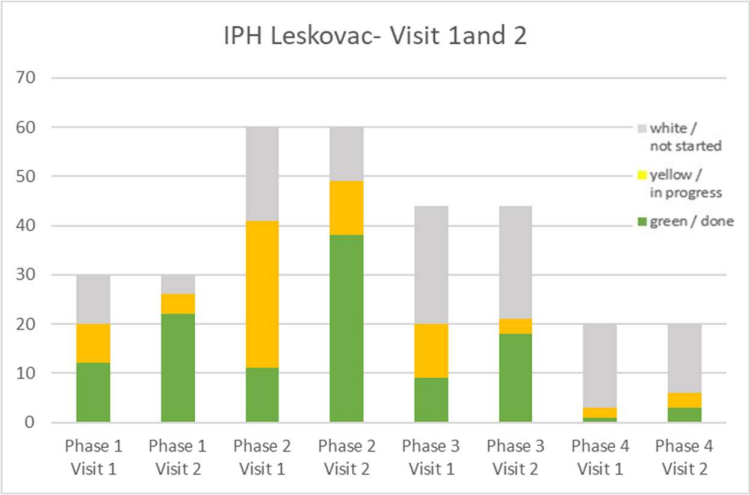

Figure 39. IPH Leskovac: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

The second mentoring visit was organised in late November. Out of the 34 tasks in the action plan, 32 were fully completed (94%), one task was partially completed and one task remained uncompleted. The uncompleted task is related to training staff to recognise symptoms of laboratory infections, which is crucial for ensuring a safe and healthy work environment. Reassessment according to the LQSI checklist revealed 49% of actions fully and 17% partially fulfilled (in total 66%) (Figure 39).

QSEs equipment, facilities and safety, process management, documents and records, non-conformity management, personnel, information management, and customer focus, showed progress by approximately 30%. The only indicator where no progress was recorded was continual improvement, linked to phase 4.

A significant challenge in fulfilling the planned activities was the lack of microbiology specialists in sanitary microbiology. This shortage led to doctors taking over the sanitary microbiology laboratory's activities from clinical microbiology, resulting in an increased workload and limiting engagement in the current project. Besides the staff shortages, inadequate premises need urgent

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renovation to be suitable for the accreditation process and new and improved diagnostics.

The management will have to solve the problem of staff shortages and invest in education related to basic and advanced techniques in microbiology and quality management. The plans for the future include mid- and long-term plans that will tackle the activities in phases 1, 2, and 3, 4, respectively. The progress shows that the team's enthusiasm can overcome limitations, but the sustainability of this progress requires additional support and resources.

IPH Novi Pazar

IPH Novi Pazar was mentored by dr Ivana Kelić who performed the initial visit from April 18-22 2024. Baseline assessment according to the LQSI checklist revealed 27% of actions fully and 18% partially fulfilled (in total 45%) (Figure 40).

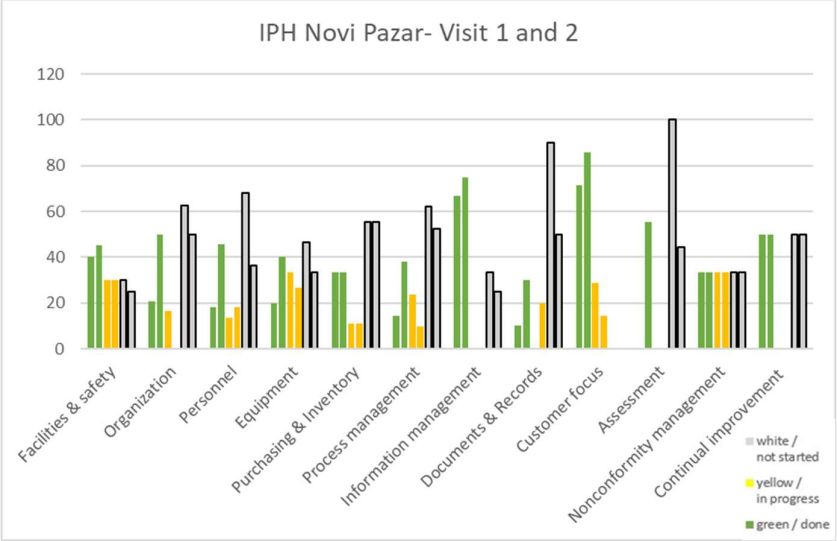

Figure 40. IPH Novi Pazar: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

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Based on the LQSI questionnaire analysis, the insight in the documentation, and the on-site visit, Dr Kelić and the IPH team prepared the Action plan with 24 tasks to cover the most critical assignments in laboratory workflow, identify documents, and prepare SOPs and procedures. According to the action plan the team agreed to 1/ name the quality team; 2/ organize regular staff meetings; 3/ make an inventory of all existing documents; 4/ prepare the master SOP; 5/make the list of all tests and analyses performed in the lab; 6/ prepare SOPs for a defined number of the analyses; 7/equipment management: establish equipment register and list all equipment, form equipment logbooks for every device, develop plan of maintenance, calibration, list of pipettes, annual calibration plan for pipettes; 8/ prepare SOP for sampling; 9/ develop form and register of rejected samples; 10/ compile a list of staff signatures; 11/ define TAT for all analyses; 12/ prepare the list of replacements for every workplace.

In between the two mentoring visits continuous communication and exchange with the mentor was maintained. The IPH quality team started with regular staff meetings documented meeting minutes, compiled the master SOP, prepared the list of analyses, identified the existing valid documentation, wrote some of the methods SOPs: for Gram staining, control of bacterial resistance, detection of IgM and IgG antibodies using the ELISA test for Hepatitis B virus, quality control in media preparation, and sampling. Registers for equipment, calibration, and evidence of installation of all devices was prepared, as well as the list of all the staff signatures and the list of replacements for all workplaces, and prepared the list of all the staff signatures and the list of replacements for all workplaces.

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Figure 41. Mentoring in IPH Novi Pazar

The second mentoring visit to the IPH Novi Pazar took place on October 21 - 23, 2024. The Action plan has been found to be fully addressed. Reassessment according to the LQSI checklist revealed 47% of actions fully and 14% partially fulfilled (in total 61%) (Figure 42). Significant progress has been achieved in implementing LQSI phases 1 and 2. Level of implmentation for QSE Personnel has increased by 27.3%, the score for QSE Equipment has risen by 20%, while for QSE Assessment, being of the most complex, the score has improved by 55.6%.

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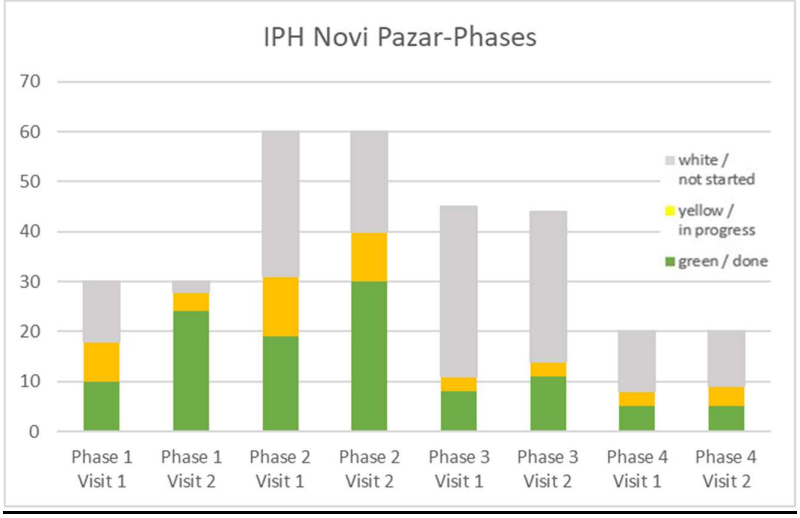

Figure 42. IPH Novi Pazar: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

As in many other IPHs, lack of staff and work overload has been identified among the major challenges for LQMS implementation. A significant improvement is expected with the construction of a new facility that is foreseen in the near future (construction works are expected to start in 2025), as a bases to initiate the process of accreditation.

IPH Pančevo

IPH Pančevo was mentored by prof. dr Dragana Vuković who performed the initial visit from 11-15 March 2024. Baseline assessment according to the LQSI checklist revealed 73% of actions fully and 18% partially fulfilled (in total 91%) (Figure 43). The high score reflects the fact that LQMS of IPH Pančevo is already implemented in compliance with ISO 9001 and ISO 17025 standards.

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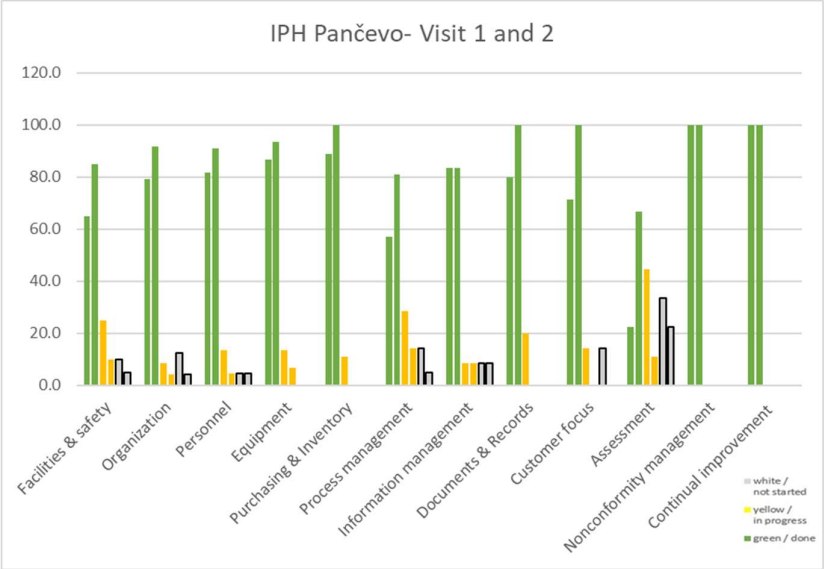

Figure 43. IPH Pančevo: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

Notably, IPH has successfully fulfilled requirements regarding the QSEs Nonconformity management, Continual improvement. Concluding the first visit, the action plan of 29 Action points was agreed upon, tackling issues such as biosafety by organizing training/education of staff, creating biosafety and bio incident procedures, and documents regarding risk assessment. A plan for regular, monthly staff meetings with the quality officer was set, as well as organizing internal training for implementing ISO 15189:2023 by the quality officer. Further action points included: 1/ to write master SOP, SOPs for three microbiological methods and to form the SOPs register, to amend reference values in all methods SOPs, 2/ to make procedures for sampling and samples transportation, including the form for transport conditions, 3/ to determine TAT for all analyses, monitor it, 4/ to compile new report form for verification and validation, 5/ to prepare SOP and perform verification of three microbiological methods,6/ to make SOP for verification of LIS, with the report form, 7/ to define and start monitoring quality indicators.

Following the initial mentoring visit, collaboration with the mentor and regular consultations were concentrated on alterations/adjustments needed in the existing

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documents and on preparation of new documents, namely, how to write and implement them in accordance with ISO 15189 requirements. The focus was also on biosafety issues and preparation of biosafety manual, training of the laboratory staff on the ISO15189 purpose and requirements, preparing individual job descriptions, writing the master SOP as well as individual SOPs for clinical microbiology tests, storage of reagents, list of SOPs, specimen collection and transport, planning PT activities, determination of TAT, selection of other quality indices appropriate for clinical microbiology and their monitoring, verification of tests performed by the DCM. All revised as well as newly written documents and records, list of laboratory services offered by the DCM, instructions for the patients, minutes from the regularly held laboratory meetings and plans that had been made were reviewed and discussed in detail.

Figure 44. Mentoring in IPH Pančevo

The Center for Microbiology prepared the EQA annual plan and the guidelines for verifying the selected tests. The activities included work on biosafety issues and preparation of the biosafety manual, individual job descriptions, SOPs for tests, list of SOPs, storage of reagents, determination of TAT, and internal quality control monitoring.

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The second mentoring visit occurred in November 2024. The team has implemented 2529 activities of the Action plan (86,2%), and four were partially completed. The tasks that were not completely realized were mainly time-demanding, such as verification of tests performed by the DCM, biological risk assessment for multiple tests, and creation of the list of SOPs for the tests performed. The major problem was availability of the staff and heavy workload they had to manage in their routine work. Creating the format for result reporting was also the task that remained only partially completed. The format in compliance with ISO 15189 was actually defined, but execution was not completed due to the LIS software vendor

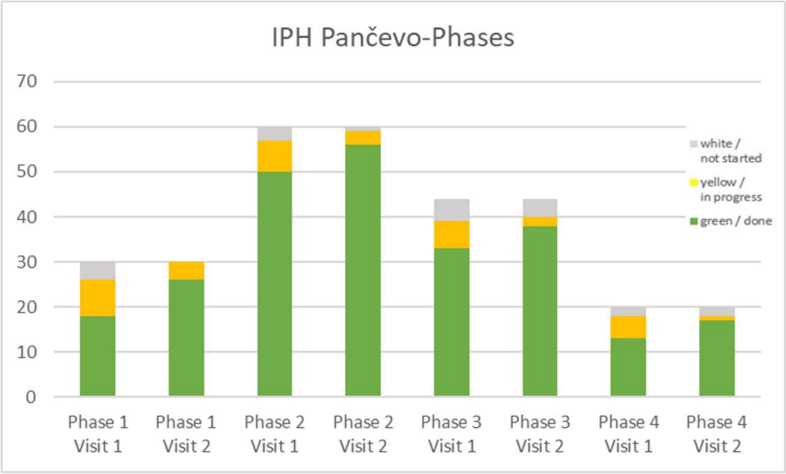

Figure 45. IPH Pančevo: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

Reassessment according to the LQSI checklist revealed 89% of actions fully and 7% partially fulfilled (in total 96%) (Figure 45). Significant improvements were achieved in all four implementation phases, with the most successful results realized in Phases 1 and 4. The assessment during the follow-up visit showed the percentage of activities "in place" per phase as follows: 87% for Phase 1, 93% for Phase 2, 93% for Phase 3, and 85% for Phase 4. Together with the mentor, the quality officer prepared and discussed the medium-term plan in the final meeting. The proposed plan contains tasks structured in several phases (over the period 2025-2026)

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including: improvements in information management and LIS verification; improvement in results reporting, with a specific focus on critical results, biological risk assessment and integration into risk management; training of selected personnel for ISO 15189 internal auditors; extensive review of the existing documents and records and adjustments/writing new documents in compliance with SRPS ISO 15189:2023; performance of an internal audit to identify the last improvements necessary for ISO 15189 accreditation. The final step would be applying for SRPS ISO 15189:2023 accreditation certificate. The assessment outcome indicated that IPH is indeed highly prepared for the process

Despite the major achievements reached through the mentoring program, some major challenges have been identified, including the relocation of the Center for Microbiology into the new building, which is expected to happen in the coming months and lack of staff and work overload.

IPH Požarevac

IPH Požarevac was mentored by Dr. Zorica Zrnić who performed the first visit from 11-15 March 2024. Baseline assessment according to the LQSI checklist revealed 44% of actions fully and 11% partially fulfilled (in total nearly 55%) (Figure 46). The assessment results revealed that QSEs' documents and records, information management, purchasing and inventory, organization, and customer focus have been implemented significantly. QSE's continual improvement, nonconformity management, assessment, and equipment were found to need substantial improvement.

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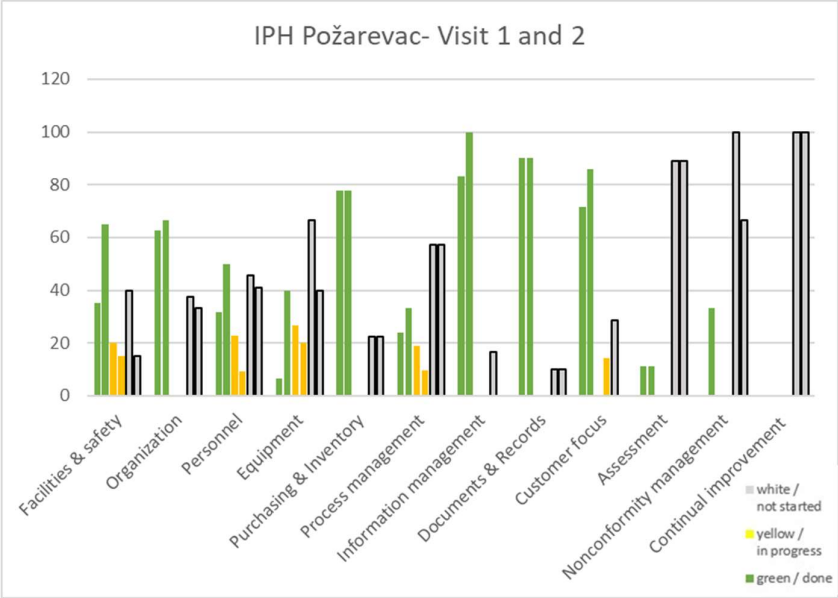

Figure 46. IPH Požarevac: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

The action plan with 17 action points was jointly compiled by the IPH team and the mentor to tackle some of the issues: 1/Train staff to recognize symptoms of laboratory-associated infections and facilitate access to diagnostic and medical services for when such cases occur; 2/purchase the first aid kit and organize first aid training for staff; 3/Prepare the authorization matrix; 4/ install the security system to restrict access the laboratory; / regular staff meetings for QMS; 5/ follow up of the environment parameters; 6/ the list of staff signatures; 7/ equipment- procedures, register, short instructions for use; 8/ the list of tests; 9/ SOPs for all tests; 10/SOP for the staff competency assessment and test for staff competency; 11/SOP for sampling; 12/ survey of clients satisfaction.

The IPH has accepted the action plan and immediately set to work on the assigned tasks.

During the first part of the project, the team trained the staff to recognize symptoms of laboratory-associated infections and to facilitate access to diagnostic and medical services when such cases occur. The IPH procured the first aid kits and conducted

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comprehensive training for the personnel. The staff compiled an exhaustive list of all tests and established a system for immediate notification in urgent cases and for results that fall in the critical interval. The lab staff opened a register of essential results / urgent, critical values of clinical significance, regularly evaluated the laboratory customer satisfaction, monitored and recorded environmental and equipment parameters, and developed a signature list of all staff members. A significant milestone was the successful installation of the security system to restrict access to the laboratory. This was a crucial step towards ensuring the safety and security of the laboratory.

Figure 47. Mentoring in IPH Požarevac

Dr Zrnić performed the second mentoring visit to the IPH Požarevac from 6-8 November, 2024. During the visit, the team worked on the LQSI questionnaire and checked the implemented activities. Sixteen out of 17 activities from the action plan have been fulfilled, equaling 94% completion. The remaining activities were related to the procedures for the equipment, which will be written in 2025. In the meantime, the IPH established the laboratory for molecular diagnostics and will start to perform PCR tests for Chlamydia and HPV. The staff shortages, evident at the beginning of the project, are surmounted, meaning that the IPH has four microbiologists and a sufficient number of technicians. Considering the reassessment by LQSI checklist, the score revealed 58% of actions fully and 7% partially fulfilled (in total 65%)

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(Figure 48). The QSEs showing the most impressive progress include facilities and safety, personnel, equipment, process management, information management, and nonconformity management.

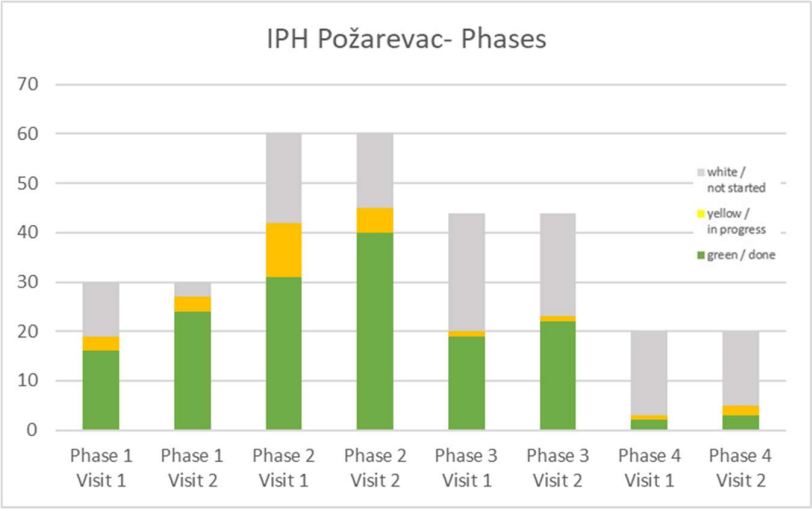

Figure 48. IPH Požarevac: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

The plans for the future are pretty ambitious and include a quality plan, training of staff about quality management, SOPs, records and logbooks for all devices in the laboratory, uninterrupted electricity supply, SOP for equipment maintenance, and many other tasks on the way to alignment to the ISO 15189:2023 standard.

IPH Pirot

IPH Pirot was mentored by Dr. Dejan Baskić who performed the first visit from 11-15 March 2024. Baseline assessment according to the LQSI checklist revealed 19% of actions fully and 26% partially fulfilled (in total nearly 45%) (Figure 49).

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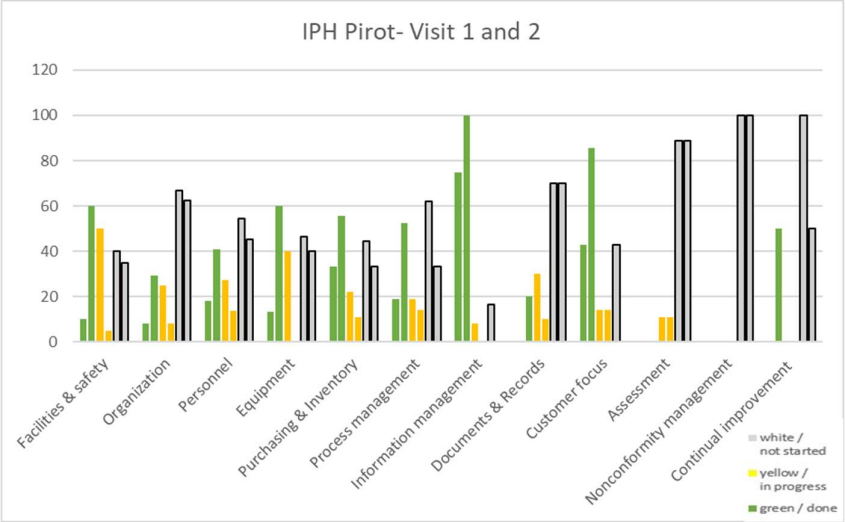

Figure 49. IPH Pirot: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

The Action plan with 46 assignments was compiled and agreed upon. Additional 10 tasks have been discussed to be tackled in 2025, beyond the project period. . The team decided upon the following assignments: 1/The IPH will buy the first aid kit and organize the first aid training; 2/ prepare SOP for managing spills; 3/ make SOP for waste management; 4/ perform assessment of biosafety; 5/ make SOP for procurement; 6/ compile the equipment register, designate equipment officer, establish equipment maintenance and calibration; 7/ make SOP for sampling; 8/ Compile list of all analyses; 9/ Determine TAT for all analyses,; 10/ make SOP for and implement EQA; 11/ implement the use of internal quality control for three serological analyses; 12/ write quality policy; 13/ start to follow up of critical parameters/quality indicators; 14/ optimize laboratory space and prevent cross-contamination.

After the initial visit, supported by the mentor, the IPH team diligently implemented the activities from the action plan. The management introduced many activities in the first part of the year, they held regular staff meetings with the minutes, bought the first aid kit and organized the certified first aid training. The staff was kindly asked to fill out the feedback and satisfaction form, and the results were incorporated into improvement initiatives and documented in meeting minutes. Colleagues from

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the lab did the facility and safety assessment. The IPH integrated the guidelines for dealing with spilt substances into the QMS documentation with the initial list of hazardous materials and their locations. The head of the lab prepared the monthly work schedule considering authorizations and staff rotation, the register of client consultations, the register for laboratory samples sent for testing in RL was implemented, and a list of laboratory clients was compiled. The waste management plan was integrated into the QMS documentation. Members of staff signed the conflict of interest forms. The equipment officer developed a procurement and equipment receipt procedure.

The second mentoring visit was organized from 12-15 December, 2024. Analysis of the Action plan revealed that 42 out of 46 planned action points have been fulfilled, equaling to 91% completion of the action plan. Considering reassessment according to the LQSI cheklist, a substantially increased score was reached, with 48% of actions found fully and 8% partially implemented (in total 56%) (Figure 50). Of note, the most prominent increase was found related to the LQSI phase 1 activities.

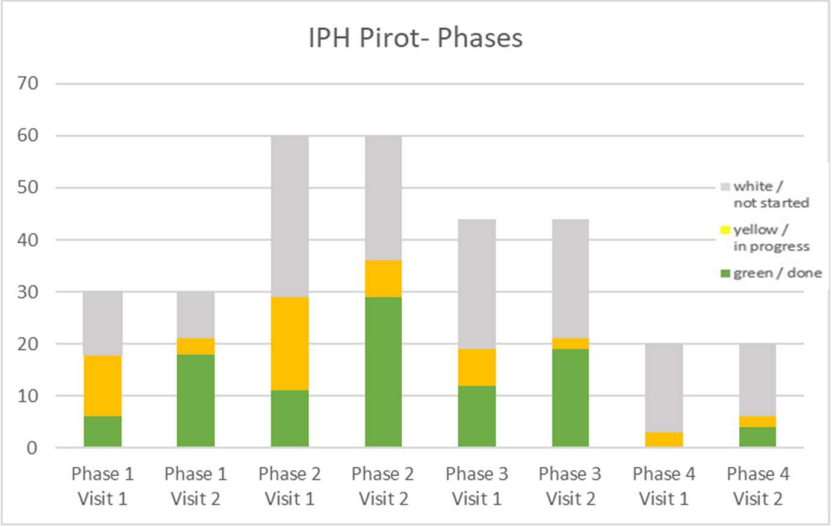

Figure 50. IPH Pirot: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

Based on the assessment results, the mentor provided recommendations for further steps to improve and implement the laboratory quality management system. The first

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and most critical task is to certify the IPH by the standard ISO 9001 to make a solid foundation on its way to accreditation. The certification will help establish the basic principles of quality management and introduce standardized processes that will enable the further development of LQMS. The second one is to continue the LQMS implementation in gradual phases since the team has reached a high percentage (91.3%) in fulfilling activities. The next step would be to consolidate the existing achievements further, focusing on key areas that have not yet been fully implemented, such as standardizing procedures and improving existing quality management systems. The third step is to provide basic training and further education to staff in standard ISO 9001. The training should cover the basic principles of quality management and the implementation of ISO 9001 standards. The fourth recommendation is to improve the monitoring and evaluation processes of the activities achieved in the action plan. The fifth is to focus on stakeholder engagement, laboratory staff and IPH management to implement and improve the quality system. The last recommendation is to develop documents and records management.

The team's focus and determination are evident in the plan for 2025-2026, which includes the following tasks: defining objectives and preparing the annual quality plan, training on quality management principles, assessing staff expertise and competence, monitoring internal quality controls, and verifying commercial tests. This plan underscores our commitment to continuous improvement and the future of quality management at IPH Pirot.

IPH Sremska Mitrovica

IPH Sremska Mitrovica was mentored by Dr. Tijana Relić who performed the first visit from 11-15 March 2024. Baseline assessment according to the LQSI checklist revealed 41% of actions fully and 23% partially fulfilled (in total nearly 64%) (Figure 51).

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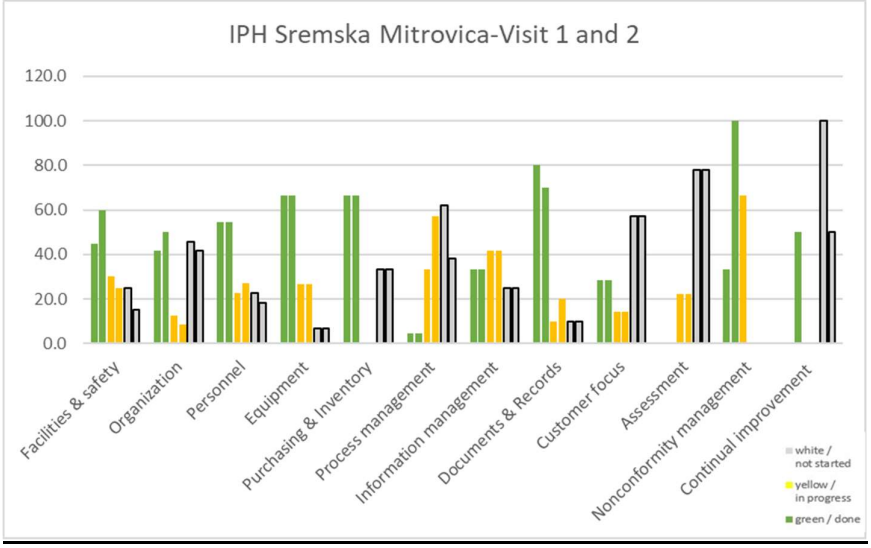

Figure 51. IPH Sremska Mitrovica: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

Upon the baseline assessment, the results of the LQSI questionnaire assessment showed that the IPH QMS has foundations in QSE documents and records, purchasing and inventory, equipment, personnel, and information management. Still, the team has to work on assessment, nonconformity management, continual improvement, and process management. Dr Relic and the IPH team prepared the Action plan comprising 47 tasks, with the idea of helping adjust and improve the existing documentation. The following was planned to be done: 1/train staff to recognize symptoms of laboratory-associated infections and facilitate access to diagnostic and medical services for when such cases occur; 2/purchase the first aid kit and organize first aid training for staff; 3/ organize regular staff meetings for QMS; 4/ prepare the authorization matrix; 5/ compile the list of tests; install the security system to restrict access the laboratory; 6/ separate facilities to optimize the space and prevent cross-contamination.; 7/ follow up of the environmental parameters; 8 /determine TAT for all analyses, and list of all analyses; 9/ organize EQAS; 10/ follow-up the internal quality control; 12/ quality policy; 13/ follow-up of critical parameters/quality indicators; 14/ equipment management- write procedures, register, short instructions for use; 15/ make SOP for sampling; 16/ start using acceptance checklist of tests upon delivery of new supplies; 17/ designate replacements for all personnel; 18/ name the IPH quality management team, and the quality officer,19/ write the rulebook for all analyses.

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However, meanwhile, the IPH Sremska Mitrovica underwent significant changes in its management structure in April 2024. The first formed quality team was non-operational until June, when management established the new QMS team, which accomplished several tasks quickly. They regularly organized staff meetings, compiled a list of tests and hazardous reagents, developed SOPs, and prepared a list of staff replacements. Dr Relic informed the WHO Office Belgrade about the changes and continued her constant communication with the team. In order to provide better support to implementing the Action plan, additional on-site visit was necessary, and it was performed in September.

Figure 52. Mentoring in IPH Sremska Mitrovica

Final mentoring visit was done in November 2024, Despite the lack of adequate circumstances to fully endorse the ambitious plan of 47 activities, the team was determined to overcome the challenges, resulting in 21/47 action points realized (45%). Some of the action points that could not be realized, such as the separation of the laboratory space to avoid cross-contamination, are linked to the reconstruction of the building, or to collaboration with other units of the IPH that could not be facilitated during the project period, e.g. the contribution from the IT sector, needed for revision of the results form and to change hardware storage and data archiving.

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Together with the mentor, the team has revised and prepared the Action plan to be considered for the immediate and later stages upon completion of the project. Activities related to quality control, method validation, verification, and internal and external quality control, are planned for the later period. There is still a lot of work left on writing various SOPs like those for the performance of the tests, sampling, laboratory services, and determination of the TAT. The team will leave writing the quality policy and long-term objectives for the following year.

Considering the second assessment using LQSI checklist, the obtained score showed 46% of actions fully implemented and further 25% in progress, in total 71% (Figure 53).

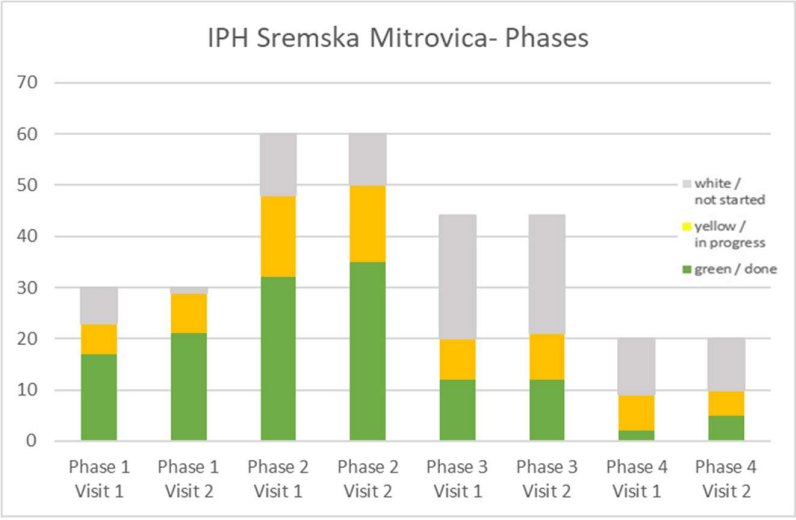

Figure 53. IPH Sremska Mitrovica: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

The management plans to stay on track with progress and alignment with the standard ISO 15189: 2023. They are optimistic about fulfilling the planned activities by the end of the year and during 2025.

IPH Ćuprija

IPH Ćuprija was mentored by Dr. Aleksandar Damjanović who performed the first visit from 25-29 March 2024. Baseline assessment according to the LQSI checklist

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revealed 36% of actions fully and 30% partially fulfilled (in total nearly 66%) (Figure 54).

The assessment revealed existing elements of LQMS in IPH Ćuprija as a good foundation for further improvement since they have well-developed QSEs documents and records, customer focus, equipment, and personnel. In contrast, QSEs assessment, continual improvement, and process management need substantial improvement.

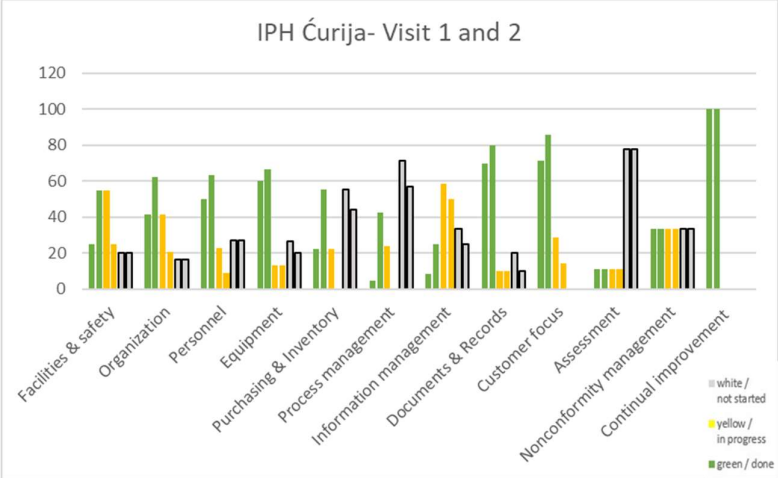

Figure 54. IPH Ćuprija: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

The action plan was developed to tackle the following: 1/ make SOP for waste management; 2/ make SOP for managing spills; 3/ purchase the first aid kit and organize the first aid training; 4/ designate biosafety officer and inventory officer; 5/ make job description for all positions; 6/ equipment management: make equipment register, make SOPs for handling, short instructions for use and maintenance; 7/ write SOP for sampling; 8/ compile list of all analyses; 9/ Determine TAT for all analyses; 10/ follow up of critical parameters/quality indicators; 11/ organize regular staff meetings for QMS; 12/ install the security system to restrict access the

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laboratory, 13/ establish and perform internal control for three serological analyses;14/ install digital and information security system.

Figure 55. Mentoring in IPH Ćuprija

The second visit was organized from the 18- 20 November, 2024. The team and Dr Damjanovic went through the second round of LQSI questions and defined which activities in the action plan were finalized. Although made with low expectations due to the staff shortages, the action plan is fulfilled in 67.64% of the planned activities. The team agreed not to include activities such as validation and verification of the tests and equipment in the plan. However, these activities are essential for the quality of the results, and the team decided to leave this for the next year, along with the younger colleagues who are residents specializing in microbiology.

Second assessment according to the LQSI checklist revealed significant progress in several QSEs, with 55% of actions fully and 16% partially fulfilled (in total nearly 71%) (Figure 56). The progress was the most prominent in areas such as facilities and safety, purchasing and inventory, process management, information management, continual improvement, and nonconformity management, reaching on

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average 300% score increase. The score for the remaining QSEs rose by at least 10%, indicating a positive trajectory for the future.

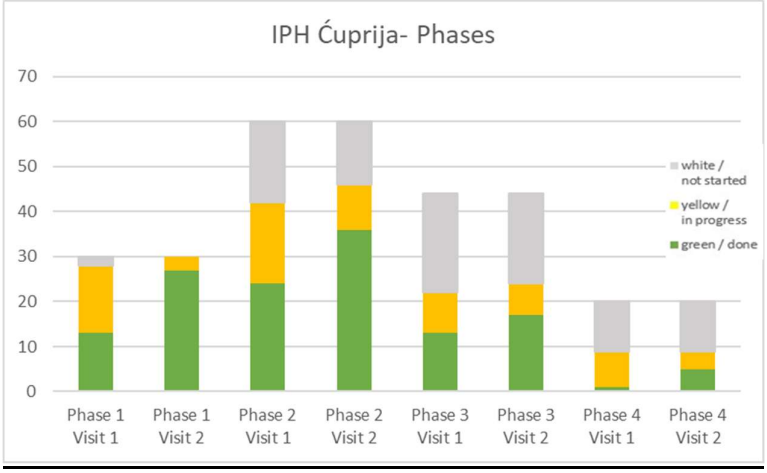

Figure 56. IPH Ćuprija: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

The action plan has not been fulfilled completely, leaving the following SOPs to be developed in the future: SOP for spilt liquids, master SOP, the instructions for maintenance of the equipment, SOP for the internal quality control, SOP for process flow in the laboratory, determine TAT, SOP for the result's reporting, registration and making the result's archive.

Some activities require financial investment, such as purchasing a set for spilt liquids and installing an electronic lock to prevent unauthorized access to the laboratory. Other activities rely on the IT sector, such as TAT included in LIS and restricted access to laboratory data and the archive of results. Being aware of these tasks will help us all prepare for the next steps.

The IPH team achieved sustainable success in aligning with ISO 15189:2023 for the time being. If they overcome staff shortages, we can expect IPH to continue with further preparations for the accreditation.

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IPH Užice

IPH Užice was mentored by prof. dr Dragana Vuković who performed the initial mentoring visit from 25-29 March 2024. Baseline assessment according to the LQSI checklist revealed 66% of actions fully and 25% partially fulfilled (in total 91%) (Figure 57).

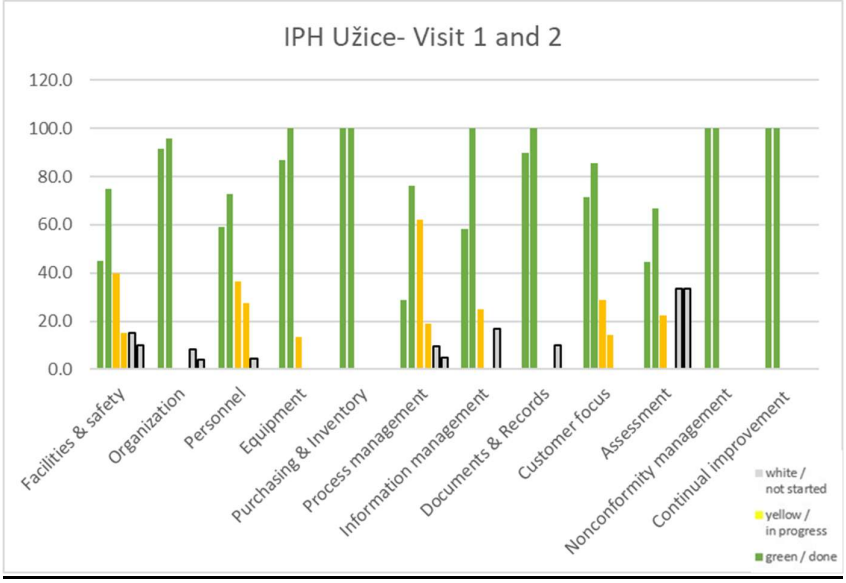

Figure 57. IPH Užice: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

IPH Užice has already efficiently implemented QMS in compliance with ISO 9001 and ISO 17025 standards. Baseline assessment based on the LQSI tool revealed that many QSEs are already in line with ISO15189 requirements, in particular continual improvement, nonconformity management, purchasing, and inventory, which achieved a score of 100%. For QSEs Organization, Documents and records, and Equipment, over 85% of required activities were found fully completed. Based on the assessment results the Action plan of 32 action points has been jointly devised

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by the lab team and the mentor, including: 1/ to write master SOP, SOPs for three microbiological methods and form the SOPs register, as well as amend reference values in all methods SOPs; 2/to prepare a statement for conflict of interest; 3/ to make staff competency assessment and training plan; 4/ to create a plan for EQA; 5/ to make procedure for verification of tests; 6/to define and start monitoring quality indicators.

Figure 58. Mentoring in IPH Užice

The laboratory team was committed to the mentoring program and application of the LQSI tool to identify the improvements that need to be made. They were open to recommendations and suggestions, and proficient in fulfilment of the tasks. General focus in our consultations and discussions was on finding best approaches to implement and integrate a QMS based on ISO15189 in the IPH Užice. The consultations were concentrated on alterations/adjustments needed in the existing documents and on preparation of new documents, namely, how to write and implement them in accordance with ISO 15189 requirements. The focus was also on biosafety and writing of biosafety manual, providing training on ISO 15189 requirements for the staff, writing the master SOP as well as individual SOPs for clinical microbiology tests, list of SOPs, equipment management, risk management,

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planning and performing personnel competency assessment, monitoring and control of specimen collection and transport, verification of the tests performed, planning PT activities, determination of TAT, and selection of other quality indices appropriate for clinical microbiology and their monitoring. All revised as well as newly written documents, list of laboratory services offered by the lab, instructions for the patients, minutes from the laboratory meetings, and plans that had been made were reviewed and discussed in detail.

The second mentoring visit was organized in November, 2024. Twenty-one of 32 tasks of the Action plan have been fully realized (65.6%), 4/32 (12.5%) were partially completed, and 7/32 (21.9%) have not been achieved. The tasks that were not fulfilled were mainly time-consuming and resource-consuming, such as writing new SOPs for tests, verifying tests, participating in EQA programs, and conducting personnel competency assessments. The major problem was the staff's availability and the heavy workload they had to manage in their routine work.

Final assessment according to the LQSI checklist revealed significant progress in several QSEs, with 86% of actions fully and 9% partially fulfilled (in total 95%) (Figure 59).

The team has made significant progress in all four implementation phases, with the most successful results achieved for activities in Phases 1 and 2. Assessment during the follow-up visit showed proportions of activities “in place” per phase as follows: 87% for Phase 1, 87% for Phase 2, 93% for Phase 3, and 85% for Phase 4. LQSI assessment was significantly improved, especially QSEs like facilities and safety, personnel, equipment, process management, information management, documents and records, and customer focus and assessment. This progress instills optimism for the future of the project.

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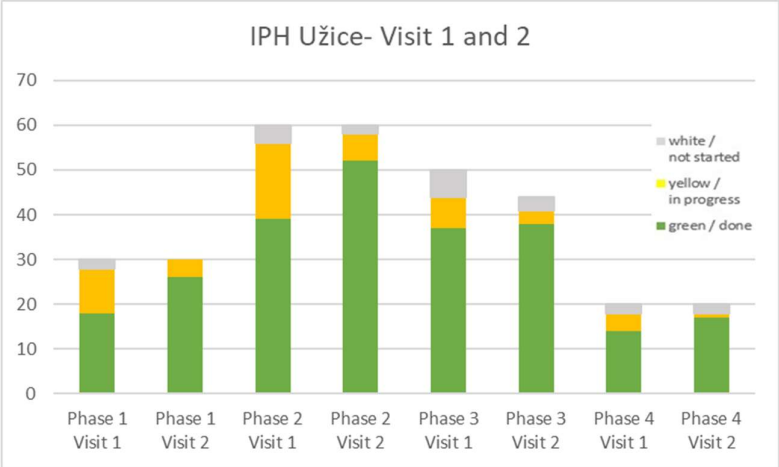

Figure 59. IPH Užice: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

IPH management identified goals for the coming years through mid- and long-term action plans. Some of the significant activities identified are further improvements in biosafety, writing SOPs for all tests, different aspects of personnel management in compliance with ISO 15189, tests verification of tests, EQA plan and regular participation in EQA programs; estimation of uncertainty of measurement for quantitative tests. The end goal is to implement the QMS based on SRPS ISO 15189:2023 and successfully integrate it into the quality management system in compliance with SRPS ISO 9001:2015 and SRPS ISO 17025:2017.

IPH Čačak

IPH Čačak was mentored by prof. dr Vera Mijač who performed the initial visit from 25-28 March 2024. Of note, IPH Čačak is currently accredited against ISO 17025:2017, for the field of sanitary microbiology, which facilitated communication and cooperation with the mentor, and allowed to sets the standards for quality management systems clinical microbiology laboratory.

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Baseline assessment according to the LQSI checklist revealed 23% of actions fully and 39% partially fulfilled (in total 62%) (Figure 60).

The results of the initial LQSI-based assessment revealed a good state related to QSEs equipment, continual improvement, purchasing and inventory, nonconformity management, and information management, whereas QSEs organisation, process management and assessment needed improvement.

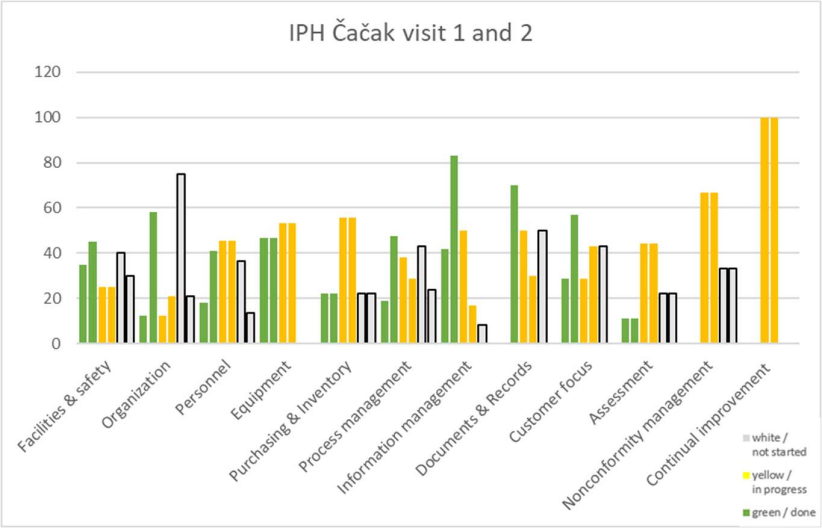

Figure 60. IPH Čačak: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

A comprehensive action plan was agreed upon on the initial visit, comprising 82 action points to be realized within the current project and additional 27 action point, for the coming mid- to long-term period (109 in total). The Action plan covered all QSEs: 1/ Master SOP and SOPs for all tests, list of analysis, 2/Authorisation matrix ;3/ job descriptions; 4/equipment issue: Procedures, register; 5/ risk assessment, training for biosafety officer, biosafety assessment; 6/ the quality team, the quality officer, regular staff meetings; 7/ internal quality control included in every testing process; 8/ EQAS plan and annual EQAS; / inventory; 10/ TAT defined; 11/SOP for

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validation and verification, conducted verification for tests; 12/ information management; 13/ SOP for complaints.

In communication with the mentor during the first two months after the initial visit, the IPH team carried out several steps. They developed a list of laboratory analyses, wrote master SOP and procedures for sample collection and distributed them to the laboratory clientele, organised regular weekly staff meetings, revised and prepared SOPs for all procedures, created equipment logbooks, and wrote instructions for equipment use, formed an inventory of clients, revised the laboratory request and result forms, with reference intervals included where needed, introduced the laboratory customer satisfaction questionnaire.

Figure 61. Mentoring in IPH Čačak

The second mentoring visit was performed in October 2024, to find 56/82 action points of the Action plan positively resolved (68%). Reassesment according to the LQSI checklist questionnaire revealed 48% of actions fully and 36% partially fulfilled (in total 82%) (Figure 62). Regarding Phase I, the majority of activities were implemented or implementation has started during the project period, and 13% did not start so far. The greatest achievements were done in the Phase II, with only 10% of activities that did not start yet. It must be emphasized that many actions belonging to the Phase III and Phase IV have also been initiated or already in place.

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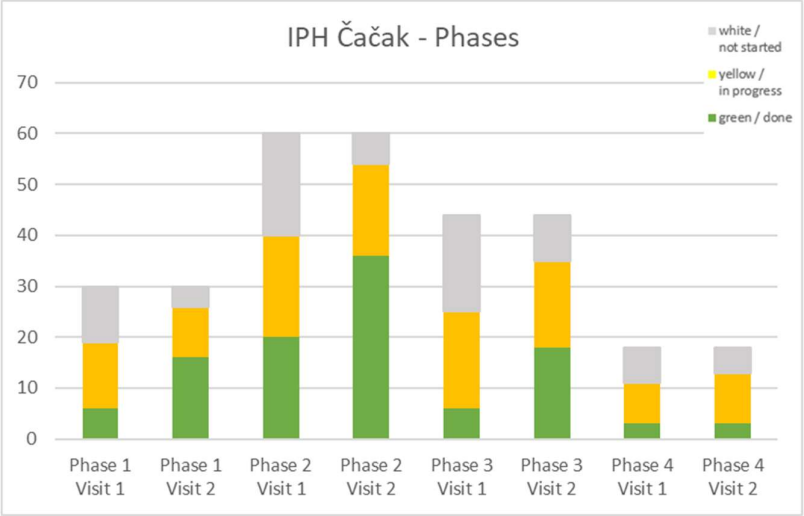

Figure 62. IPH Čačak: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

In summary, the laboratory has achieved the key requirements for long-term planning and initiation of the accreditation process according to the ISO 15189 standard. The employees are very motivated for everyday work, but also for introduction of new methods (such as PCR, that was recently provided, during Covid-19 pandemic), staff is highly qualified, documentation of the quality system is well organized which all are perquisites for good laboratory practice in place and inspiration for improvement. However, a major drawback is linked to staff shortages, which remains a problem to be addressed.

IPH Šabac

IPH Šabac was mentored by Dr. Snežana Mavrak who performed the first visit from 8-12 April 2024. Baseline assessment according to the LQSI checklist revealed 64% of actions fully and 19% partially fulfilled (in total nearly 83%) (Figure 63). The obtained scores reflected that IPH Šabac has a strong foundation in excellently defined documents and records.

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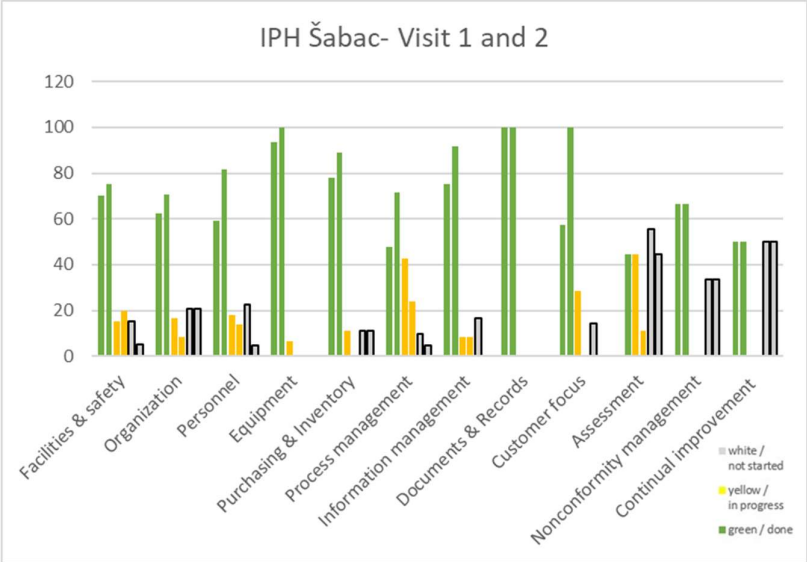

Figure 632. IPH Šabac: percentage of activities per QSE in place, in progress or not started, visits 1 and 2

All issues about the equipment are almost entirely in line with the standard. The requirements for QSEs, like facilities and safety, organization, personnel, nonconformity management, purchasing, and inventory, are nearly fully met, with just a few adjustments needed to be aligned with the standard requirements.

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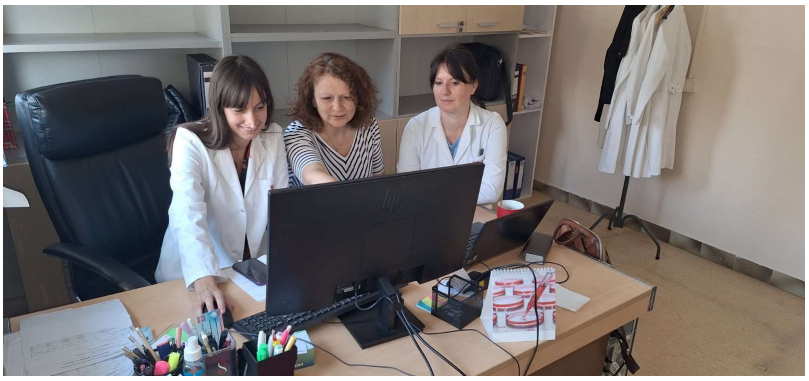

Figure 64. Mentoring in IPH Šabac

The team has unanimously accepted the action plan, containing 29 action points, which addresses the following activities: 1/ create a QMS team, hire the quality officer and biosafety officer, conduct a risk assessment; 2/ organize regular staff meetings and familiarize the staff with the accreditation process and with the standard 15189:2023; 3/ write the biosafety manual and manage the training about the biosafety; 4/ write a procedure about the spills in the laboratory and purchase the kit for decontamination; 5/authorization matrix; 6/ SOP for all tests and verification of all commercial tests; 7/SOP for sampling; 8/ internal control and the analysis of the results; 9/ quality policy, quality system aims, annual plan for QMS; 10/ SOP for

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referral laboratory;11/organize the external revision company and write the action plan according to the findings of the revision company;12/ SOP for transportation tracking.

Between the two visits continuous support has been provided by the mentor, while IPH Šabac appointed a project team, held staff meetings, created a list of customers, created a list of all employees' signatures, and established a record of urgent notification of test results. The team started writing the biosafety manual and initiated conducting a risk assessment in the laboratory. Additionally, they have begun modifying the SOPs for sampling and receiving samples, showing a proactive approach to improvement.

The second visit, performed in November 2024, revealed that the team fulfilled 18 out of 29 activities of the action plan (62%). Seven activities assigned to the management remain to be developed in the coming year. The activity related to participation in EQA is in progress and expected to be completed very soon.

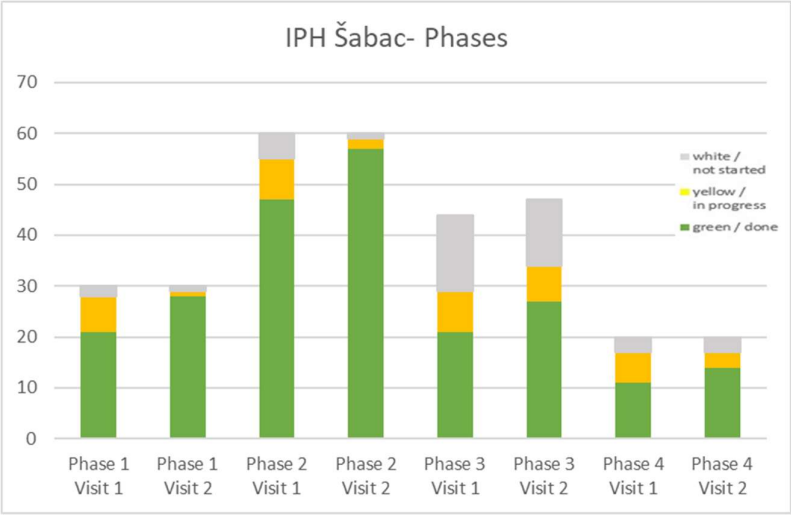

Figure 65. IPH Šabac: percentage of implementation per LQSI phases: in place, in progress or not started, visits 1 and 2

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Considerig LQSI based assessment progress was also evident, with fully completed activities related to QSEs equipment, documents and records and customer focus, reaching the 100% score (Figure 65). The highest level of achievement was accomplished in customer focus (42,9%) and assessment (44,4%). The team also worked diligently on personnel and process management.

Of note, activities regarding validation and verification of microbiology methods and equipment are perceived by the lab tram as challenging and the need for additional staff training has been identified. The obtained high score and positive feedback have instilled confidence in the team, including the director, and IPH Šabac expressed the intention to go for formal accreditation against ISO 15189:2023 shortly. This determination should inspire confidence in the team's ability to achieve their goals.

4.3 Overall outcome

The mentoring program was implemented through a set of two on-site mentoring visits, with an online support provided by the mentors in-between. In the period March – November 2024, eleven mentors provided support for 22 PHI microbiology laboratories. All mentoring visits were scheduled and completed as planned, following structured Agenda, providing assessment of the LQMS according to the LQSI checklist and resulting in an Action plan for further LQMS implementation for each participating laboratory.

All the mentors have been cordially received in their mentored laboratories, lab teams for LQMS were formed and engaged enthusiastically within the project.

However, a number of challenges have been identified. The major challenges faced in many participating labs are related to insufficient number of laboratory personnel, both doctors, microbiology specialists and technicians; inadequately organized and/or maintained lab facilities; lack of a dedicated budget line for LQMS activities, e.g. EQA participation; need for continuing training.

The stepwise approach of the LQSI tool used for lab assessment, is based on twelve QSEs as pillars of LQMS. It guides through LQMS implementation in four consecutive and partially overlapping phases, with growing level of LQMS implementation at each phase and allows for measurable monitoring of the process. The obtained average scores at baseline assessment were 40 % for fully implemented

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activities across all the phases (ranging from 11-73%), 26% for activities in progress (ranging from 10-47%), hence, in total 66% of LQSI activities that were resolved or under development (ranging from 34-91%) (Figure 66). The scores obtained at the final mentoring visit were on average 58% fully implemented (ranging from 16-89%), 18% in progress (ranging from 6-36%), resulting in 76% in total (44-96%) (Figure 44). Overall, an important progress in the level of LQMS implementation has been achieved, with the rise of an average percentage of fully implemented activities of 18%, albeit within the very limited duration of the mentoring activity.

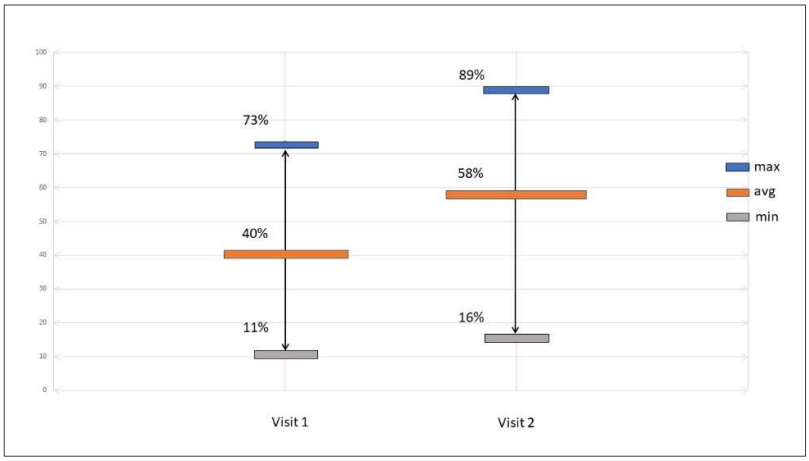

Figure 66. Average scores, with ranges, for fully implemented activities across all four phases, at baseline and final assessment (visit 1 and visit 2)

However, wide ranges of the obtained scores reflect substantial heterogeneity among the level of implementation in different PHI laboratories, from basic to advanced. Undertaken activities within the program in all participating laboratories have mostly covered LQSI phases 1 and 2, that have shown major advances: an average score for fully implemented Phase 1 activities was 40,4% at baseline assessment (range 15 – 70%), reaching 71,3% at final assessment (range 30- 93%), an increase of nearly 30% (Figure 67). Similarly, for the fully implemented activities of LQSI phase 2, an average score at baseline assessment was 46,2% (range from 17 – 82%), whereas at the reassessment it was 67% (range form 25 – 95%), an increase of nearly 20% (Figure 67). For phases 3 and 4, both the baseline and final assessment scores were lower, namely 42,6 % (range 10-80%) and 57,6% (range 25 – 93%), respectively for

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the phase 3 and 30% (range 0 -75%) and 37,9% (range 0-85%), respectively, for the phase 4. Nevertheless, positive impact of the program and increase of the obtained scores was visible across all the LQSI phases (Figure 67).

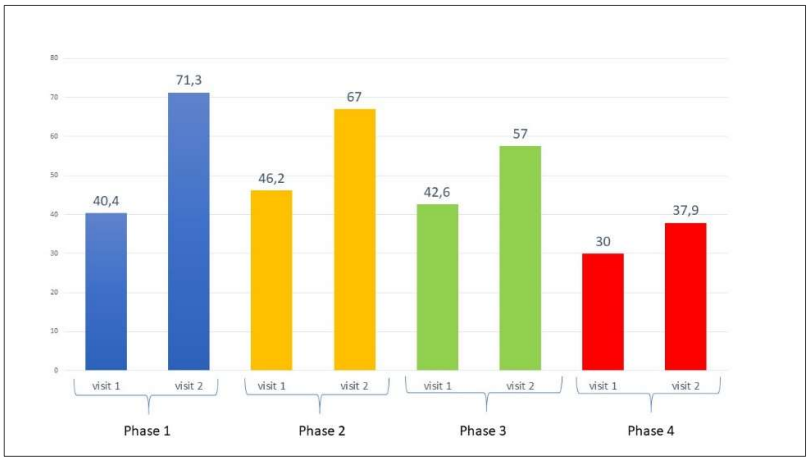

Figure 67. Average percentage total scores of fully implemented activities per LQSI phases, at baseline and final visit (visit 1 and 2)

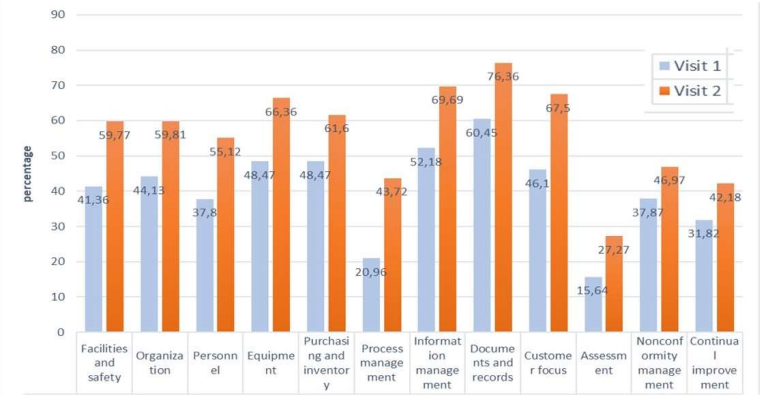

Figure 68. Average percentage totals scores of fully implemented activities per QSEs, at baseline and final visit (visit 1 and 2)

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Considering the improvement of the major QSEs, there is an increase in the obtained average scores for all QSEs (Figure 68).

Upon baseline assessment, the only QSE with the obtained average score above 60% was found to be Documents and records, whereas most of the remaining 11 QSEs scored below 50% on average. However, upon the completion of the mentoring program, final average score above 60% was also reached for QSEs Information management, Customer focus, Purchasing and inventory and Equipment, ensuring the bases for further LQMS implementation. QSEs Facilities and safety, Personnel and Organization have shown substantial improvement, reaching above 50%, yet still needing further improvement. To expand LQMS implementation of QSEs Process management, Assessment, Nonconformity management and Continual improvement further efforts and support are needed.

5. Conclusion and Recommendations

WHO mentoring program for implementation of the Laboratory Quality Management System in the microbiology public health laboratories in the Republic of Serbia has provided a valuable insight into the level and scope of LQMS implementation in microbiology laboratories of the PHI network in Serbia. The findings reflect substantial heterogeneity, from the very basic to advanced level LQMS implementation, approaching formal accreditation against the ISO 15189 standard. Nevertheless, undertaken activities within the program have significantly improved the level of LQMS implementation in all participating laboratories, with an average overall increase in fully completed activities close to 20%. Positive impact of the program and increase of the obtained scores was visible across all the four LQSI phases, in particular phases 1 and 2. Practical, hand-on approach and team work together with mentors have facilitated to promote and enhance “quality culture” in all participating labs. The project has unanimously engaged with highly motivated laboratory specialists with clear understanding of the LQMS importance and its value for laboratory work.

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In order to allow sustainable implementation of LQMS, some key points need to be approached:

-Provide sufficient number and adequate laboratory personnel, to avoid excessive workload, allow for fruitful professional development and succession of generations of specialists;
-Provide a dedicated budget-line for LQMS activities, including EQA participation;
-Consider improving conditions of facilities and safety
-Establish and maintain a platform to facilitate communication and collaboration within the network of PHI microbiology laboratories, to promote sharing of experiences and practices and with prospect to expand to all microbiology labs in the country;
-Facilitate organization of training courses related to LQMS implementation

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Annex 1. IPH network in the mentoring program and list of mentors

S. Num.	IPH	Mentor
1.	IPH Batut	Prof. dr Aleksandra Knežević
2.	IPH Vojvodina	Prof. dr Aleksandra Knežević
3.	IPH Zaječar	Prof. dr Aleksandra Knežević
4.	IPH Belgrade	dr Snežana Delić
5.	IPH Kragujevac	dr Snežana Delić
6.	IPH Zrenajnin	dr Snežana Delić
7.	IPH Niš	Prof. dr Dragana Vuković
8.	IPH Pančevo	Prof. dr Dragana Vuković
9.	IPH Užice	Prof. dr Dragana Vuković
10.	IPH Valjevo	Prof. dr Vera Mijač
11.	IPH Čačak	Prof. dr Vera Mijač
12.	IPH Šabac	Dr Snežana Mavrak
13.	IPH Kikinda	Dr Snežana Mavrak
14.	IPH Leskovac	Prof. dr Snežana Mladenović
15.	IPH Vranje	Prof. dr Snežana Mladenović
16.	IPH Požarevac	Dr Zorica Zrnić
17.	IPH Kruševac	Dr Zorica Zrnić
18.	IPH Pirot	Prof. dr Dejan Baskić
19.	IPH Ćuprija	Dr Aleksandar Damjanović
20.	IPH Sremska Mitrovica	Dr Tijana Relić
21.	IPH Novi Pazar	Dr Ivana Kelić
22.	IPH Kraljevo	Dr Ivana Kelić

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Annex 2. Action plan template

Description of action plan objectives:	**Developed by:**
•	**Date and initials laboratory supervisor:**

Action point no.	**Description of the action points**	**Desired result**	**Task assigned to**	**Deadline realization**	**Date realization and initials**	**Indicator of realization of the action point**
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

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Annex 3. Agenda for the first mentoring visit

Note: timings can be changed to fit with the laboratory's schedule, but all components should be covered during the first visit, as far as possible.

Day	Time	Activities
Day 1	09:00 – 13:00	• Briefing of Hospital/laboratory services director and laboratory manager: Better Labs for Better Health and the Mentoring programme • In-depth briefing of laboratory manager/department head, with responsible staff on: mentoring approach, the role of the mentor, expected outcomes, the scope of mentoring, discussion of agenda for first visit and likely structure and schedule of future visits; • Tour of laboratory and greeting of staff
	14:00–17:00	• Training on introduction to the quality management system for all laboratory staff • Discussion
Day 2	09:00–13:00	• Audit using LQSI monitoring checklist
	14:00–17:00	• Training on introduction to the quality management system for all laboratory staff
Day 3	09:00–13:00	• Audit using LQSI monitoring checklist
	14:00-17:00	• Training on introduction to the quality management system for all laboratory staff
Day 4	09:00–13:00	• Audit using LQSI monitoring checklist
	14:00–17:00	• Discussion and coordination of the Quality Plan #1 with laboratory manager/department head and staff
Day 5	09:00–13:00	• Developing Quality Plan#1 with lab staff
	14:00–17:00	• Discussion and coordination of the Quality Plan #1 with laboratory manager/department head and staff • Closing meeting

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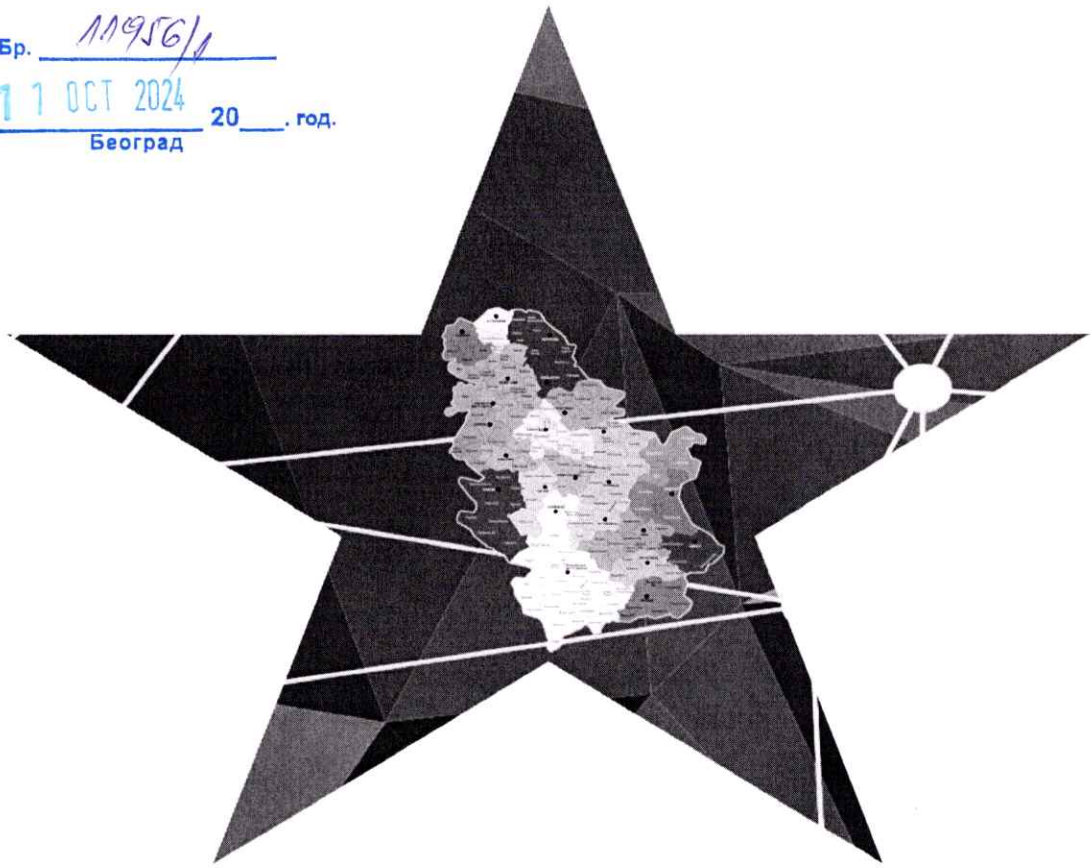
Република Србија
МИНИСТАРСТВО ЗДРАВЉА

Овај пројекат финансира
Европска унија

#ЕУ ЗА ТЕБЕ

Assessment of Public Health Risks in Emergency Situations in Local Government Units in the Republic of Serbia "Strategic Toolkit for Assessing Risks – STAR"

Република Србија
Институт за јавно здравље Србије
„Др Милан Јовановић Батут"
Бр. 11956/1
11 OCT 2024 20___. год.
Београд



Belgrade, 2024.

World Health Organization
European Region

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1. INTRODUCTION

The Ministry of Health, in collaboration with the World Health Organization (WHO) and the United Nations Development Programme (UNDP), is implementing the IRA project "EU for the Health System of Serbia," funded by the European Union. The Ministry of the Interior, Sector for Emergency Management, is also the beneficiary of the second component of this project.

In accordance with the implementation plan and following the training for using the WHO tools for assessing public health risks in emergencies (Strategic Toolkit for Assessing Risks – STAR), the project activities have been implemented – the development of public health risk assessments in emergencies in 144 self-government units (SGUs) in the Republic of Serbia. The purpose of this assessment is to provide a basis for developing preparedness plans for LGUs to respond to the public health aspects of all types of emergencies, which is also an obligation of local governments under the Public Health Law. Additionally, these assessments will become an integral part of the National Disaster Risk Register in the Republic of Serbia, maintained by the Sector for Emergency Situations of the Ministry of the Interior.

Given the role and legal responsibilities in the field of preparedness and response of the health system in emergencies, it has been decided that public health institutes and agencies will lead these activities, while the entire process will be coordinated by the Institute of Public Health of Serbia "Dr. Milan Jovanović Batut." The development of these risk assessments and preparedness and response plans (within the relevant protection and rescue plans) will help local government units to improve and enhance their preparedness to respond to all types of public health threats in the context of emergencies. The risk assessments was conducted from April 1 to September 30, 2024.

STAR Methodology

STAR is designed to support national and subnational authorities, cities, and communities in conducting strategic risk assessments using a qualitative, participatory, and discussion-based approach. Through inclusive and transparent participation of key stakeholders, the risk profile for emergencies is developed based on a review of existing evidence and the collective experience of participants.

The strategic risk assessment uses a step-by-step process to describe risks within a specific geographic area and develop a risk profile for emergencies. Through a consensus-building process that draws on existing data and experience in emergency response, multisectoral experts gather to identify hazards that may trigger response, the likelihood of each hazard occurring, and the potential impact of the hazard. These key steps in risk assessment include:

- **Step 1**: Identifying hazards and describing scenarios that are most likely to require activation of a coordinated response
- **Step 2**: Assessing likelihood
- **Step 3**: Assessing impact
- **Step 4**: Determining risk levels
- **Step 5**: Finalizing recommendations and reports
- **Step 6**: Integrating prioritized recommendations and steps into national or subnational action plans for sustainable capacity strengthening.

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Key principles of the STAR tool

STAR is developed based on the following principles:

- Comprehensive hazard approach
- Whole society approach
- Health system approach
- Evidence-based risk set
- Transparency

Purpose

The purpose of the STAR tool is to support countries (at national and subnational levels), cities and municipalities in assessing public health risks associated with identified hazards, prioritizing actions to be prepared for likely risks associated with potential emergencies, and supporting increased preparedness and response readiness.

Supported by a risk profile that includes a description of the risks (affected geographic areas, potential impact, population vulnerability, and coping capacities), national and subnational authorities can strengthen the readiness of their health sector, emergency systems, and response planning, anticipating threats and potential public health emergencies before they occur. The first days of response in emergencies largely represent a test of the country's preparedness activities and plans at both local and national levels. Therefore, increasing risk-based preparedness activities would result in enhanced readiness to address imminent threats and minimize the time and costs of initiating response mechanisms in emergencies for a more effective response. Such an approach to emergency and disaster preparedness and risk-based response planning would lead to reduced effects of potential emergencies, including preventing increased mortality and morbidity.

Objectives

- Identify, document, quantify, and prioritize public health risks related to all types of possible emergencies in the appropriate territories of 144 municipalities in Serbia, through the application of a standardized and internationally recognized methodology – WHO STAR tool.
- Inform the Ministry of Health about the needs of different parts of the country to ensure and strengthen preparedness and response capacities in emergencies.
- Develop risk assessments that will become an integral part of the National Disaster Risk Register, maintained by the Ministry of the Interior, Sector for Emergency Management.
- Enable evidence-based planning, i.e., the creation of protection and rescue plans (health emergencies preparedness and response plans) in all municipalities in the territory of the Republic of Serbia.

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2. ACTIVITIES IN IMPLEMENTING THE PROJECT

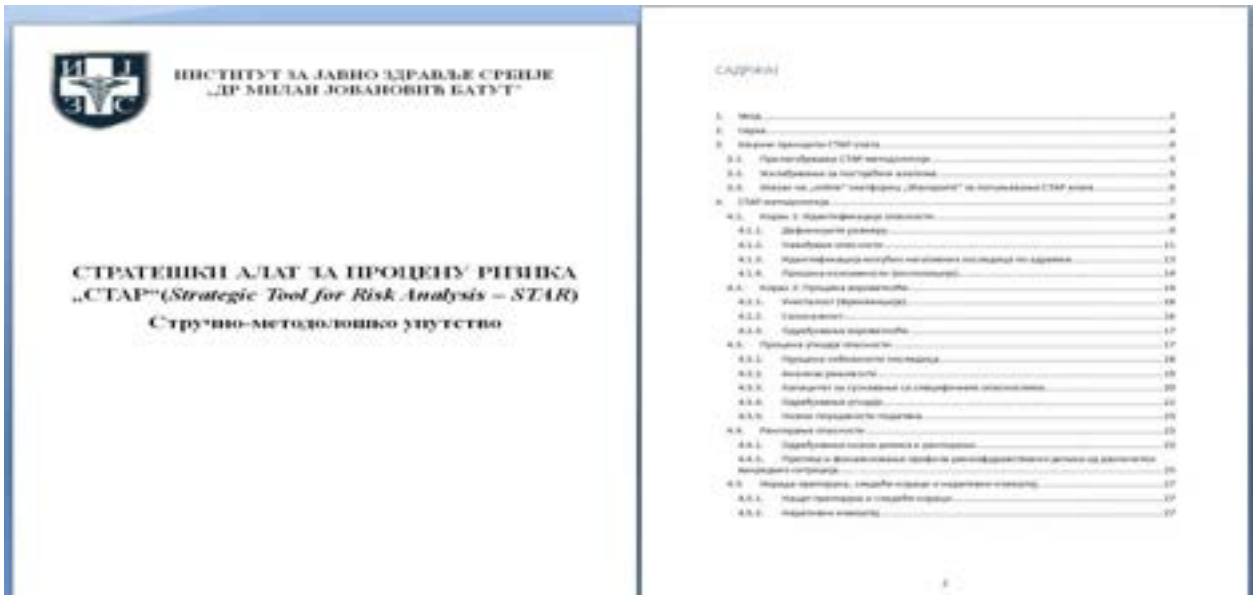
Formation of a coordination team and appointment of the main coordinator in the Institute of Public Health of Serbia

At the meeting held at the Institute of Public Health of Serbia, the following composition of the coordination team for project implementation was agreed upon:

1. Prof. Dr. Verica Jovanović, Institute of Public Health of Serbia
2. Dr. Ivan Ivanović, Institute of Public Health of Serbia
3. Miljan Perić, Ministry of Health
4. Dejan Ivanović, Institute of Public Health of Serbia – project coordinator

Development of Expert-Methodological Guidelines

The Coordination Team developed the Expert-Methodological Guidelines (Image No. 1) for the application of the WHO STAR tool for assessing public health risks in emergency situations. The guidelines were submitted to the WHO Office in Belgrade, and after receiving approval for compliance, they were forwarded to all project participants from the territorially responsible public health institutes/agencies.


ИНСТИТУТ ЗА ЈАВНО ЗДРАВЉЕ СРБИЈЕ
„ДР МИЛАН ЈОВАНОВИЋ БАТУТ"

СТРАТЕШКИ АЛАТ ЗА ПРОЦЕНУ РИЗИКА
„СТАР"(*Strategic Tool for Risk Analysis – STAR*)
Стручно-методолошко упутство

САДРЖАЈ

Image No. 1 – Expert-Methodological Guidelines for Assessing Public Health Risks

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Introductory Meeting with All Project Participants

From November 13-14, 2023, training was conducted for teams from the territorially responsible public health institutes/agencies on the application of the WHO tool for assessing public health risks in emergency situations, the "Strategic Toolkit for Assessing Risks – STAR," organized by the Ministry of Health in collaboration with the WHO Office in Serbia. Following the training, the Institute of Public Health of Serbia "Dr. Milan Jovanović Batut" organized an introductory meeting to commence the second phase of activities, during which the Expert-Methodological Guidelines for using the STAR tool, project objectives, and the timeline for executing project tasks were presented. The meeting was held on Friday, May 17, 2024, at 10 AM (Image No. 2).

Image No. 2 – Participants of the Introductory Meeting Organized by the Institute of Public Health of SerbiaThe meeting was attended by:

- Dr. Jelena Janković, Assistant Minister of Health
- Prof. Dr. Verica Jovanović, Director of the Institute of Public Health of Serbia
- Dr. Fabio Scano, Director of the WHO Office in Serbia
- Dr. Maja Krčmar, EU Delegation in Serbia

Project Coordination Team:

- Dr. Ivan Ivanović, Institute of Public Health of Serbia
- Miljan Rančić, WHO Office in Belgrade
- Miljan Perić, Ministry of Health
- Jelena Jašović, Emergency Situations Sector
- Dejan Ivanović, Project Coordinator, Institute of Public Health of Serbia
- Tamara Tomašević, Institute of Public Health of Serbia
- Jakov Boban, Institute of Public Health of Serbia
- Miloš Todorović, Institute of Public Health of Serbia

Public Health Risk Assessment Team from the Public Health Institute of Subotica:

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- Dr. Dragica Kovačević-Berić
- Draga Kolar, BSc Eng.

Public Health Risk Assessment Team from the Public Health Institute of Zrenjanin:

- Dr. Radivoj Filipov
- Dr. Milena Subić-Dragić

Public Health Risk Assessment Team from the Public Health Institute of Kikinda:

- Dr. Sanja Brusin Beloš
- Dušan Kovrlija, BSc Manager

Public Health Risk Assessment Team from the Public Health Institute of Sombor:

- Dr. Dragoslava Čubrilo
- Dr. Jelena Zekić

Public Health Risk Assessment Team from the Public Health Institute of Pančevo:

- Dr. Olivera Stanišić
- Dr. Dubravka Nikolovski

Public Health Risk Assessment Team from the Public Health Institute of Vojvodina:

- Dr. Natasha Dragić
- Dr. Tatjana Pustahija

Public Health Risk Assessment Team from the Public Health Institute of Sremska Mitrovica:

- Dr. Tatjana Rogulja Orelj
- Dr. Marija Lazarević

Public Health Risk Assessment Team from the Public Health Institute of Požarevac:

- Dr. Ana Jovanović
- Slobodan Cakić

Public Health Risk Assessment Team from the Public Health Institute of Ćuprija:

- Dr. Ivana Simić
- Brankica Mirković

Public Health Risk Assessment Team from the Public Health Institute of Zaječar:

- Ankica Živković Radenković
- Nikola Jovanović

Public Health Risk Assessment Team from the Public Health Institute of Pirot:

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- Dr. Elizabeta Aleksić
- Dr. Tatjana Vidanović

Public Health Risk Assessment Team from the Public Health Institute of Leskovac:

- Dr. Zorana Kulić
- Dr. Vesna Živković

Public Health Risk Assessment Team from the Public Health Institute of Vranje:

- Dr. Svetlana Stojanović
- Dr. Nebojša Stojanović

Public Health Risk Assessment Team from the Public Health Institute of Kraljevo:

- Dr. Miloš Urdov
- Dr. Vladimir Nikolić

Public Health Risk Assessment Team from the Public Health Institute of Kruševac:

- Dr. Mirjana Avramović
- Dr. Predrag Pavlović

Public Health Risk Assessment Team from the Public Health Institute of Čačak:

- Dr. Aksentije Tošić
- Dr. Davor Obrenović

Public Health Risk Assessment Team from the Public Health Institute of Novi Pazar:

- Dr. Fuad Ugljanin

Public Health Risk Assessment Team from the Public Health Institute of Užice:

- Dr. Marija Palikuća
- Slavica Dešević, BSc Eng.

Public Health Risk Assessment Team from the Public Health Institute of Valjevo:

- Dr. Biljana Rajković
- Dr. Aleksandra Filipović

Public Health Risk Assessment Team from the Public Health Institute of Šabac:

- Dr. Igor Dragičević
- Milka Birmancević

Public Health Risk Assessment Team from the City Institute of Public Health of Belgrade:

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- Dr. Dragan Pajić
- Dr. Andrej Šoštarić
- Dr. Maja Vračarić

Public Health Risk Assessment Team from the Public Health Institute of Kragujevac:

- Dr. Ana Miljanović
- Dr. Nikola Uskoković

Public Health Risk Assessment Team from the Public Health Institute of Niš:

- Dr. Mirko Ilić
- Dr. Snežana Gligorić

Meeting Topics:

- Purpose and objectives of the project
- Introduction to the risk assessment methodology – STAR Tool
- Familiarization of participants with the details of the Expert Methodological Guidelines
- Reminder for participants on the functioning of the WHO STAR tool for public health risk assessment
- Suggestions for data collection methods
- Documentation of evaluations
- Reporting procedures
- Plan for professional supervision of team activities
- Next steps

Professional Supervision of Evaluation Teams

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In order to implement the planned activities for the "STAR" project, the Coordinating Team of the Institute of Public Health of Serbia "Dr. Milan Jovanović Batut" and the Ministry of Health conducted a review of the professional work of the territorially responsible public health institutes in the following schedule:

- July 8, 2024, at the Public Health Institute in Pančevo (Coordinating team members: Jakov Boban and Dejan Ivanović)
- July 9, 2024, at the Public Health Institute in Zrenjanin (Coordinating team members: Jakov Boban and Miloš Todorović)
- July 15-16, 2024 (with overnight stay) - expert visit to the Public Health Institutes in Kraljevo and Novi Pazar (Coordinating team members: Miljan Perić, Tamara Tomasević, and Dejan Ivanović)
- July 17, 2024 - expert visit to the Institute of Public Health in Kragujevac (Coordinating team members: Miloš Todorović and Dejan Ivanović)
- July 18, 2024 - expert visit to the Public Health Institute in Ćuprija (Coordinating team members: Tamara Tomasević and Jakov Boban, Miljan Perić, Miloš Todorović)
- July 19, 2024 - expert visit to the Public Health Institute in Kruševac (Coordinating team member: Dejan Ivanović)
- July 22, 2024 - expert visit to the Public Health Institute in Pirot (Coordinating team members: Miloš Todorović, Jakov Boban, and Dejan Ivanović)
- July 23-24, 2024 (with overnight stay) - expert visit to the Public Health Institutes in Subotica and Sombor (Coordinating team members: Miljan Perić, Tamara Tomasević, and Dejan Ivanović)
- July 25-26, 2024 - expert visit to the Public Health Institutes in Leskovac and Vranje (Coordinating team members: Tamara Tomasević, Jakov Boban, and Dejan Ivanović)
- July 29, 2024 - expert visit to the Public Health Institute in Sremska Mitrovica (Coordinating team members: Miloš Todorović and Jakov Boban)
- July 30, 2024 - expert visit to the Public Health Institute in Valjevo (Coordinating team members: Miloš Todorović, Tamara Tomasević, and Dejan Ivanović)
- July 31, 2024 - expert visit to the Public Health Institute in Kikinda (Coordinating team members: Miloš Todorović, Tamara Tomasević, and Dejan Ivanović)
- August 1, 2024 - expert visit to the Public Health Institute in Belgrade (Coordinating team members: Miloš Todorović, Tamara Tomasević, and Dejan Ivanović)
- August 5, 2024 - expert visit to the Public Health Institute in Požarevac (Coordinating team members: Miloš Todorović, Tamara Tomasević, and Jakov Boban)
- August 6, 2024 - expert visit to the Public Health Institute in Čačak (Coordinating team members: Miloš Todorović, Jakov Boban, Miljan Perić, and Tamara Tomasević)
- August 7, 2024 - expert visit to the Public Health Institute in Užice (Coordinating team members: Miljan Perić and Jakov Boban)
- August 7, 2024 - expert visit to the Institute of Public Health in Novi Sad (Coordinating team members: Miloš Todorović and Dejan Ivanović)
- August 8, 2024 - expert visit to the Institute of Public Health in Niš (Coordinating team member: Dejan Ivanović)
- August 9, 2024 - expert visit to the Public Health Institute in Zaječar (Coordinating team member: Dejan Ivanović)
- August 28, 2024 - expert visit to the Public Health Institute in Šabac (Coordinating team members: Dejan Ivanović, Tamara Tomasević, and Miljan Perić)

The topics of the expert visits were:

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- Identification and presentation of a preliminary list of hazards
- Assessment of the scale of hazards and exposure
- Determining probability through frequency and seasonality
- Defining and evaluating severity, vulnerability, and response capacity
- Review of risk levels and determination of reliability levels for each hazard
- Review of the risk matrix – necessary activities in the area of response readiness, as well as opportunities for risk reduction
- Final report and photography

Field Observations:

- During the conducted field visits (see Image No. 3), local team members received clear instructions and guidelines for further work in the "STAR" tool, in accordance with the provided Expert-Methodological Guidelines, to meet all requirements necessary for the successful implementation of the project.
- During the presentation of processed local governments, noticeable deficiencies were observed in the way relevant data was collected from the field, as well as in the interpretation of the data, which local team members were informed about during the meetings.
- Following modifications based on the suggestions of the Coordinating Team, local teams were tasked with reporting on the same to verify compliance with the established methodology.
- Based on the assessment of all relevant facts from the field, the impression was gained that the pace of work is at a satisfactory level and that all activities planned in the project will be completed within the already defined deadlines.

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Image No. 3 – Field Visits to Local Team Members

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3. METHODS OF MAINTAINING THE DYNAMICS OF IMPLEMENTATION OF PROJECT ACTIVITIES

In addition to pre-defined field visits, meetings via the Zoom platform, and telephone conversations as a way to maintain the dynamics of the implementation of project tasks, the challenges arising from short deadlines and the vacation season, both members of local teams and employees of relevant institutions, led to developing and introducing the coordination team the following mechanisms:

1. Giving general suggestions for the continuation of work on the STAR tool, in line with the developed expert-methodological instructions and WHO guidelines.
2. Providing specific suggestions in the form of comments on the data input sheet for each individual LGU.
3. Delegating a mentor (one of the members of the coordination team) to local teams, with the task of daily communication and providing timely guidelines for the fulfillment of project goals.
4. Strengthening team spirit and competition through folder coloring in the STAR tool:
    a. Red folder: assessment of public health risks has not been completed or coordination with SMU is in progress.
    b. Light green folder: the assessment of public health risks has been completed, but no priority actions have been defined or response capacities have been specified.
    c. Dark green folder: public health risk assessment is done in full.

It is estimated that more than 700 hours of telephone conversations were spent and about 5,000 kilometers were traveled for the purposes of coordination activities.

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4. DATA COLLECTED ON PUBLIC HEALTH RISK ASSESSMENT IN LOCAL SELF-GOVERNMENTS IN THE TERRITORY OF THE REPUBLIC OF SERBIA

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ŠUMADIJA ADMINISTRATIVE DISTRICT

1. City of Kragujevac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Висок
Загађен ваздух	Висок	Врло могуће	Озбиљан	Висок	Низак
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Делимична	Висок
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Колапс конструкције)	Низак	Мало вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Висок
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against COVID-19.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially at-risk groups.

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against influenza.
5. Educate healthcare workers on the importance of monitoring influenza and the quality of obtained data.
6. Intensify vaccination campaigns against seasonal influenza for all population categories, especially at-risk groups.

Air Pollution

1. Modify urban transport by introducing newer EURO 4 buses, building traffic bypasses, and creating mini-parks in the city center.
2. Increase inspection controls of major polluters.
3. Develop a plan for systemic subsidies from local government and the Republic of Serbia for transitioning to more environmentally friendly fuels.

MODERATE RISK

Pertussis (Whooping Cough)

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teaching staff about the importance of vaccination.

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3. Adhere to the Law on Protection from Infectious Diseases, implement penal provisions, and ensure constant control by sanitary inspection.
4. Revise vaccination records across the entire district and intensify efforts to detect and provide supplementary vaccination for children from hard-to-reach population groups.
5. Monitor and conduct continuous oversight of vaccination implementation.

Measles

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teaching staff about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases, implement penal provisions, and ensure constant control by sanitary inspection.
4. Revise vaccination records across the entire district and intensify efforts to detect and provide supplementary vaccination for children from hard-to-reach population groups.
5. Monitor and conduct continuous oversight of vaccination implementation.

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection from Infectious Diseases.
2. Continuous inspection by Veterinary, Sanitary, and Agricultural Inspectors.
3. Sanitary-hygienic supervision with the implementation of DDD (disinfection, disinsection and deratization) activities.
4. The Public Health Institute conducts health checks for certain categories of employees in facilities under sanitary supervision.

Heatwave

1. Developed a Vulnerability Assessment for Natural Disasters and an Emergency Protection and Rescue Plan.
2. Defined tasks and obligations for all entities in the protection and rescue system.
3. Established a system for urgently informing the population, timely informing the public about the occurrence of droughts and heatwaves, and ensuring alternative water supply.

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2. Municipality of Aranđelovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Висок
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Делимична	Висок
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Висок
Загађен ваздух	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against COVID-19.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially at-risk groups.

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against influenza.
5. Educate healthcare workers on the importance of monitoring influenza and the quality of obtained data.
6. Intensify vaccination campaigns against seasonal influenza for all population categories, especially at-risk groups.

MODERATE RISK

Pertussis (Whooping Cough)

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Measles

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases
2. Ongoing inspections by Veterinary, Sanitary, and Agricultural Inspectors
3. Sanitary-hygienic oversight with the application of pest control activities
4. Health inspections conducted by the Institute of Public Health of Kragujevac for specific categories of employees in facilities under sanitary supervision

Heatwave

1. Development of a Vulnerability Assessment for Natural Disasters and an Emergency Protection and Rescue Plan
2. Defined tasks and responsibilities for all entities in the protection and rescue system
3. Developed an emergency notification system for the population, timely informing the public about droughts and heatwaves
4. Provision of alternative water supplies

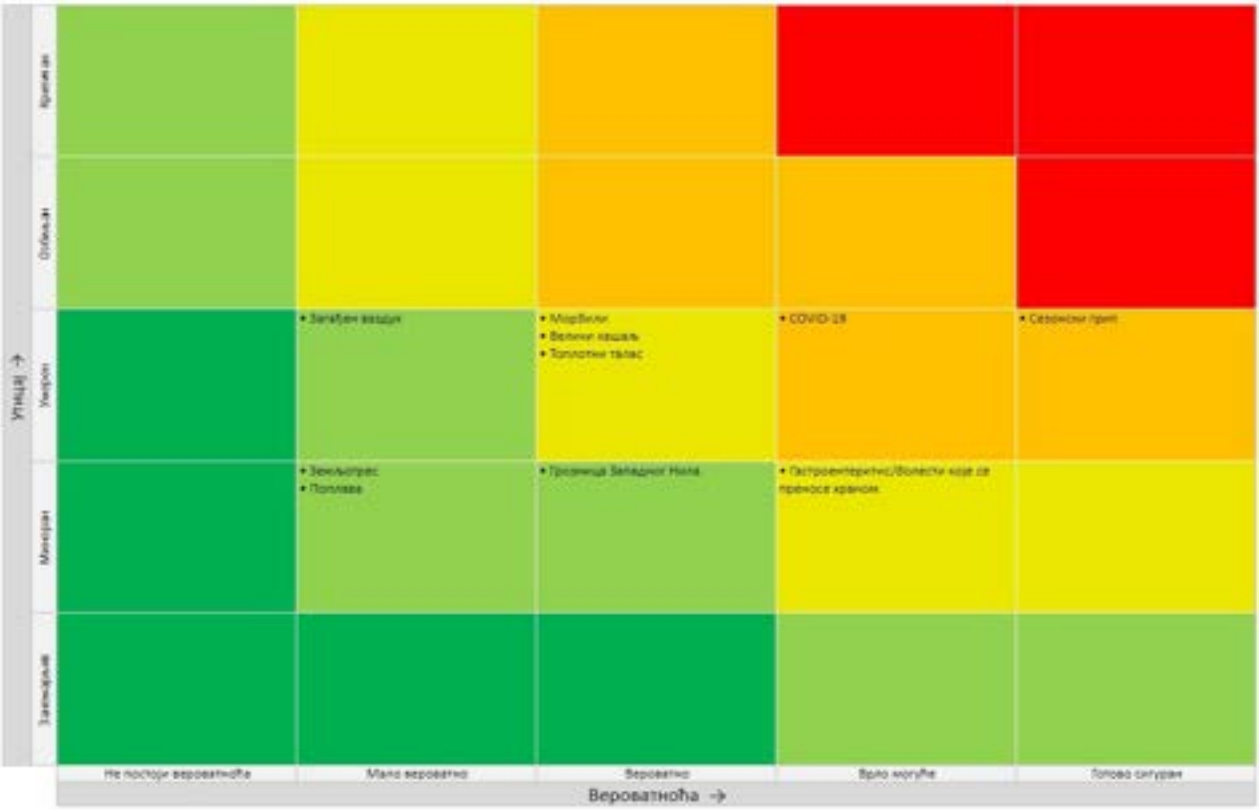
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Municipality of Batočina

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Висок
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Делимична	Висок
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Минoран	Низак	Делимична
Поплава	Низак	Мало вероватно	Минoран	Низак	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Висок
Загађен ваздух	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against COVID-19.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially at-risk groups.

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against influenza.
5. Educate healthcare workers on the importance of monitoring influenza and the quality of obtained data.
6. Intensify vaccination campaigns against seasonal influenza for all population categories, especially at-risk groups.

MODERATE RISK

Pertussis (Whooping Cough)

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Measles

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases
2. Ongoing inspections by Veterinary, Sanitary, and Agricultural Inspectors
3. Sanitary-hygienic oversight with the application of pest control activities
4. Health inspections conducted by the Institute of Public Health of Kragujevac for specific categories of employees in facilities under sanitary supervision

Heatwave

1. Development of a Vulnerability Assessment for Natural Disasters and an Emergency Protection and Rescue Plan
2. Defined tasks and responsibilities for all entities in the protection and rescue system
3. Developed an emergency notification system for the population, timely informing the public about droughts and heatwaves
4. Provision of alternative water supplies

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Knić

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Висок
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Делимична	Висок
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Минoран	Низак	Делимична
Поплава	Низак	Мало вероватно	Минoран	Низак	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Висок
Загађен ваздух	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against COVID-19.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially at-risk groups.

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against influenza.
5. Educate healthcare workers on the importance of monitoring influenza and the quality of obtained data.
6. Intensify vaccination campaigns against seasonal influenza for all population categories, especially at-risk groups.

MODERATE RISK

Pertussis (Whooping Cough)

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Measles

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases
2. Ongoing inspections by Veterinary, Sanitary, and Agricultural Inspectors
3. Sanitary-hygienic oversight with the application of pest control activities
4. Health inspections conducted by the Institute of Public Health of Kragujevac for specific categories of employees in facilities under sanitary supervision

Heatwave

1. Development of a Vulnerability Assessment for Natural Disasters and an Emergency Protection and Rescue Plan
2. Defined tasks and responsibilities for all entities in the protection and rescue system
3. Developed an emergency notification system for the population, timely informing the public about droughts and heatwaves
4. Provision of alternative water supplies

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Lapovo

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Висок
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Делимична	Висок
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Минoран	Низак	Делимична
Поплава	Низак	Мало вероватно	Минoран	Низак	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Висок
Загађен ваздух	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against COVID-19.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially at-risk groups.

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against influenza.
5. Educate healthcare workers on the importance of monitoring influenza and the quality of obtained data.
6. Intensify vaccination campaigns against seasonal influenza for all population categories, especially at-risk groups.

MODERATE RISK

Pertussis (Whooping Cough)

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Measles

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases
2. Ongoing inspections by Veterinary, Sanitary, and Agricultural Inspectors
3. Sanitary-hygienic oversight with the application of pest control activities
4. Health inspections conducted by the Institute of Public Health of Kragujevac for specific categories of employees in facilities under sanitary supervision

Heatwave

1. Development of a Vulnerability Assessment for Natural Disasters and an Emergency Protection and Rescue Plan
2. Defined tasks and responsibilities for all entities in the protection and rescue system
3. Developed an emergency notification system for the population, timely informing the public about droughts and heatwaves
4. Provision of alternative water supplies

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Rača

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Висок
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Делимична	Висок
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Минoран	Низак	Делимична
Поплава	Низак	Мало вероватно	Минoран	Низак	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Висок
Загађен ваздух	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against COVID-19.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially at-risk groups.

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against influenza.
5. Educate healthcare workers on the importance of monitoring influenza and the quality of obtained data.
6. Intensify vaccination campaigns against seasonal influenza for all population categories, especially at-risk groups.

MODERATE RISK

Pertussis (Whooping Cough)

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Measles

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases
2. Ongoing inspections by Veterinary, Sanitary, and Agricultural Inspectors
3. Sanitary-hygienic oversight with the application of pest control activities
4. Health inspections conducted by the Institute of Public Health of Kragujevac for specific categories of employees in facilities under sanitary supervision

Heatwave

1. Development of a Vulnerability Assessment for Natural Disasters and an Emergency Protection and Rescue Plan
2. Defined tasks and responsibilities for all entities in the protection and rescue system
3. Developed an emergency notification system for the population, timely informing the public about droughts and heatwaves
4. Provision of alternative water supplies

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. Municipality of Topola

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Висок
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Делимична	Висок
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Минoран	Низак	Делимична
Поплава	Низак	Мало вероватно	Минoран	Низак	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Висок
Загађен ваздух	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against COVID-19.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially at-risk groups.

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection from Infectious Diseases.
4. Increase vaccination coverage among healthcare workers against influenza.
5. Educate healthcare workers on the importance of monitoring influenza and the quality of obtained data.
6. Intensify vaccination campaigns against seasonal influenza for all population categories, especially at-risk groups.

MODERATE RISK

Pertussis (Whooping Cough)

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Measles

1. Increase vaccination coverage
2. Educate healthcare workers at all levels of health protection (especially pediatricians), parents, educators, and teachers about the importance of vaccination
3. Adhere to the Law on Protection Against Infectious Diseases, implement penalties, and ensure constant oversight by health inspectors
4. Review vaccination records across the entire district and intensify efforts to identify and supplement vaccination for children from hard-to-reach population groups
5. Supervise and continuously monitor the implementation of vaccination

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases
2. Ongoing inspections by Veterinary, Sanitary, and Agricultural Inspectors
3. Sanitary-hygienic oversight with the application of pest control activities
4. Health inspections conducted by the Institute of Public Health of Kragujevac for specific categories of employees in facilities under sanitary supervision

Heatwave

1. Development of a Vulnerability Assessment for Natural Disasters and an Emergency Protection and Rescue Plan
2. Defined tasks and responsibilities for all entities in the protection and rescue system
3. Developed an emergency notification system for the population, timely informing the public about droughts and heatwaves
4. Provision of alternative water supplies

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

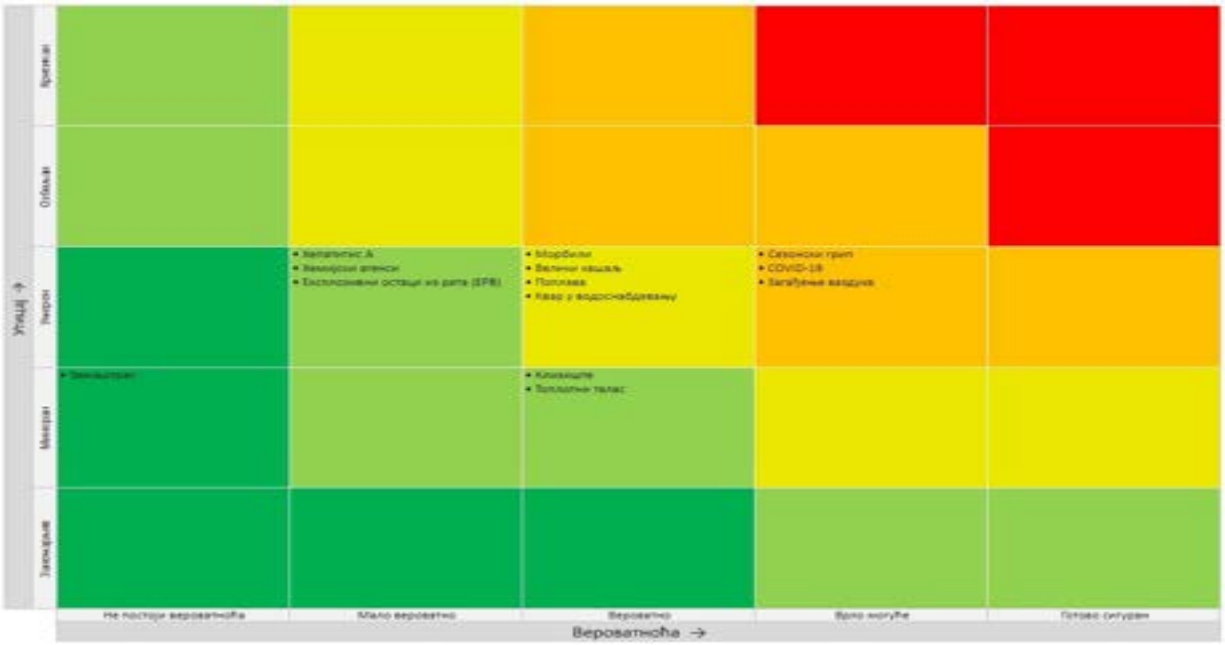
NIŠAVA ADMINISTRATIVE DISTRICT

1. City of Niš

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Вероватно	Минoран	Низак	Делимична
Топлотни талас	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Експлозивни остаци из рата (ЕРВ)	Низак	Мало вероватно	Умерен	Делимична	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Минoран	Делимична	Висок

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Air Pollution

1. Implementation of measures outlined in the Air Quality Plan by the City Administration; ensuring the continuous operation of the local air quality measurement network.

2. Compliance with the Public Health Law and regulations assessing the health risk of urban populations from polluted air.

3. Procurement of equipment necessary for continuous air quality monitoring in the municipalities of Pantelej, Palilula, Niška Banja, and Crveni Krst (4 automatic measuring stations for ambient air measuring PM 10 and PM 2.5).

4. Supervision of the application of legal regulations for emissions of pollutants into the air by legal entities through inspectors.

5. Education of the population on the benefits of using environmentally friendly heating methods and transport, as well as interpreting the SAQI displayed on the Environmental Protection Agency's website.

Seasonal Influenza

1. Involvement of representatives from the Public Health Institute Niš in the Health Council of the Local Government as well as in the Emergency Situation Headquarters of the Local Government (except for Niš).

2. Strengthening the human resource capacities of health institutions (primarily primary health care).

3. Increasing vaccination coverage.

4. Education of health workers at all levels of health care about the importance of vaccination.

5. Compliance with the Law on the Protection of the Population from Infectious Diseases and Guidelines on Immunization.

6. Increasing the coverage of health workers vaccinated against the flu.

7. Intensifying flu vaccination campaigns among all population categories, especially at-risk groups.

COVID-19

1. Involvement of representatives from the Public Health Institute Niš in the Health Council of the Local Government as well as in the Emergency Situation Headquarters of the Local Government (except for Niš).

2. Continuous monitoring of the virus's activity intensity and dominant type.

3. Regular reporting to the public and health systems at all levels.

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4. Strengthening the human resource capacities of health institutions (primarily primary health care).

5. Updating medical equipment for the diagnosis and treatment of patients.

6. Continuous education of health workers, especially in primary health care.

7. Compliance with the Law on the Protection of the Population from Infectious Diseases. Increasing vaccination coverage. Educating health workers at all levels of health care about the importance of vaccination. Intensifying campaigns on the importance of vaccination among all population categories, especially at-risk groups.

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2. Municipality of Aleksinac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Олуја	Умерен	Вероватно	Умерен	Низак	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Низак
Земљотрес	Низак	Мало вероватно	Минoран	Делимична	Висок
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хепатитис А	Низак	Мало вероватно	Умерен	Делимична	Низак
Грозница Западног Нила	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Веома низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Involvement of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Continuous monitoring of the intensity of virus activity and dominant strain.

3. Regular reporting to the public and health system at all levels.

4. Strengthening the human resource capacities of health institutions (primarily primary health care).

5. Updating medical equipment for the diagnosis and treatment of patients.

6. Continuous education of health workers, especially in primary health care.

7. Compliance with the Law on the Protection of the Population from Infectious Diseases. Increasing vaccination coverage. Educating health workers at all levels of health care about the importance of vaccination. Intensifying campaigns on the importance of vaccination among all population categories, especially at-risk groups.

Seasonal Influenza

1. Involvement of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Strengthening the human resource capacities of health institutions (primarily primary health care).

3. Increasing vaccination coverage.

4. Education of health workers at all levels of health care about the importance of vaccination.

5. Compliance with the Law on the Protection of the Population from Infectious Diseases and Guidelines on Immunization.

6. Increasing the coverage of health workers vaccinated against the flu.

7. Intensifying flu vaccination campaigns among all population categories, especially at-risk groups.

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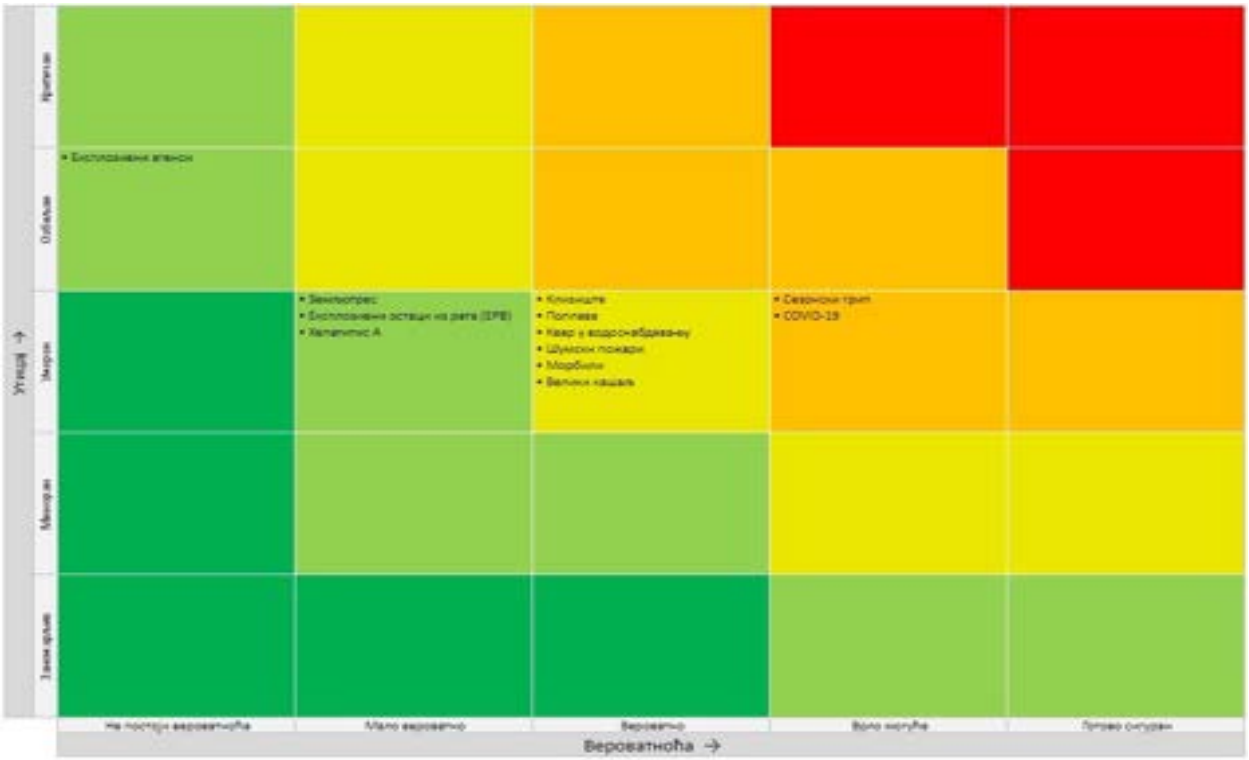
3. Municipality of Doljevac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Низак	Низак
Поплава	Умерен	Вероватно	Умерен	Низак	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Низак
Експлозивни остаци из рата (ЕРВ)	Низак	Мало вероватно	Умерен	Низак	Делимична
Експлозивни агенси	Низак	Не постоји вероватноћа	Озбиљан	Висок	Делимична
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Continuous monitoring of the intensity of virus activity and the dominant strain.

3. Regular reporting to the public and health system at all levels.

4. Strengthening the human resource capacities of health institutions (primarily primary health care).

5. Upgrading medical equipment for the diagnosis and treatment of patients.

6. Continuous education of health workers, especially in primary health care.

7. Compliance with the Law on the Protection of the Population from Infectious Diseases.

8. Increasing vaccination coverage.

9. Educating health workers at all levels of health care about the importance of vaccination.

10. Intensifying campaigns on the importance of vaccination among all population categories, especially at-risk groups.

Seasonal Influenza

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Strengthening the human resource capacities of health institutions (primarily primary health care).

3. Increasing vaccination coverage.

4. Educating health workers at all levels of health care about the importance of vaccination.

5. Compliance with the Law on the Protection of the Population from Infectious Diseases and Guidelines on Immunization.

6. Increasing the coverage of health workers vaccinated against the flu.

7. Intensifying flu vaccination campaigns among all population categories, especially at-risk groups.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Gadžin Han

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Мало вероватно	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Низак	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Делимична
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Continuous monitoring of the intensity of virus activity and the dominant strain.

3. Regular reporting to the public and health system at all levels.

4. Strengthening the human resource capacities of health institutions (primarily primary health care).

5. Upgrading medical equipment for the diagnosis and treatment of patients.

6. Continuous education of health workers, especially in primary health care.

7. Compliance with the Law on the Protection of the Population from Infectious Diseases.

8. Increasing vaccination coverage.

9. Educating health workers at all levels of health care about the importance of vaccination.

10. Intensifying campaigns on the importance of vaccination among all population categories, especially at-risk groups.

Seasonal Influenza

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Strengthening the human resource capacities of health institutions (primarily primary health care).

3. Increasing vaccination coverage.

4. Educating health workers at all levels of health care about the importance of vaccination.

5. Compliance with the Law on the Protection of the Population from Infectious Diseases and Guidelines on Immunization.

6. Increasing the coverage of health workers vaccinated against the flu.

7. Intensifying flu vaccination campaigns among all population categories, especially at-risk groups.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Merošina

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Врло могуће	Минoран	Низак	Делимична
Клизиште	Умерен	Вероватно	Умерен	Низак	Низак
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Continuous monitoring of the intensity of virus activity and the dominant strain.

3. Regular reporting to the public and health system at all levels.

4. Strengthening the human resource capacities of health institutions (primarily primary health care).

5. Upgrading medical equipment for the diagnosis and treatment of patients.

6. Continuous education of health workers, especially in primary health care.

7. Compliance with the Law on the Protection of the Population from Infectious Diseases.

8. Increasing vaccination coverage.

9. Educating health workers at all levels of health care about the importance of vaccination.

10. Intensifying campaigns on the importance of vaccination among all population categories, especially at-risk groups.

Seasonal Influenza

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Strengthening the human resource capacities of health institutions (primarily primary health care).

3. Increasing vaccination coverage.

4. Educating health workers at all levels of health care about the importance of vaccination.

5. Compliance with the Law on the Protection of the Population from Infectious Diseases and Guidelines on Immunization.

6. Increasing the coverage of health workers vaccinated against the flu.

7. Intensifying flu vaccination campaigns among all population categories, especially at-risk groups

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Ražanj

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Земљотрес	Низак	Мало вероватно	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Низак	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Низак	Делимична
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Continuous monitoring of the intensity of virus activity and the dominant strain.

3. Regular reporting to the public and health system at all levels.

4. Strengthening the human resource capacities of health institutions (primarily primary health care).

5. Upgrading medical equipment for the diagnosis and treatment of patients.

6. Continuous education of health workers, especially in primary health care.

7. Compliance with the Law on the Protection of the Population from Infectious Diseases.

8. Increasing vaccination coverage.

9. Educating health workers at all levels of health care about the importance of vaccination.

10. Intensifying campaigns on the importance of vaccination among all population categories, especially at-risk groups.

Seasonal Influenza

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Strengthening the human resource capacities of health institutions (primarily primary health care).

3. Increasing vaccination coverage.

4. Educating health workers at all levels of health care about the importance of vaccination.

5. Compliance with the Law on the Protection of the Population from Infectious Diseases and Guidelines on Immunization.

6. Increasing the coverage of health workers vaccinated against the flu.

7. Intensifying flu vaccination campaigns among all population categories, especially at-risk groups

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Floods

1. Involve representatives from the Public Health Institute Niš in the Health Council of the local government as well as in the Emergency Situations Headquarters.

2. Develop a Safe Water Supply Plan for the public water supply managed by the utility company for regular and emergency situations (the utility company's water sources are located near a river whose bed is not being cleaned).

3. Submit the Plan to the Public Health Institute Niš for review and approval.

4. Identify alternative water supply sources within the local government area.

5. Conduct health safety checks of drinking water from alternative water supply sources by an authorized health institution.

6. Clearly mark water facilities with unsafe drinking water; provide water tankers for drinking water.

7. Ensure priority water supply for health and educational institutions.

8. Fill tankers exclusively from hydrants for which there is proof of drinking water safety and according to a pre-written procedure.

9. Ensure stationary tankers through the Red Cross—plan locations for their placement.

10. Adhere to the Red Cross procedures for filling stationary tankers.

11. Ensure emergency monitoring of drinking water by the Public Health Institute Niš according to instructions developed by the Ministry of Health of the Republic of Serbia.

12. Establish an ALERT system by primary healthcare under the supervision of the Public Health Institute Niš.

13. Assess the affected areas and facilities, and after floodwaters recede, carry out land sanitation and disinfection measures.

14. Educate the population on actions to take before, during, and after a flood.

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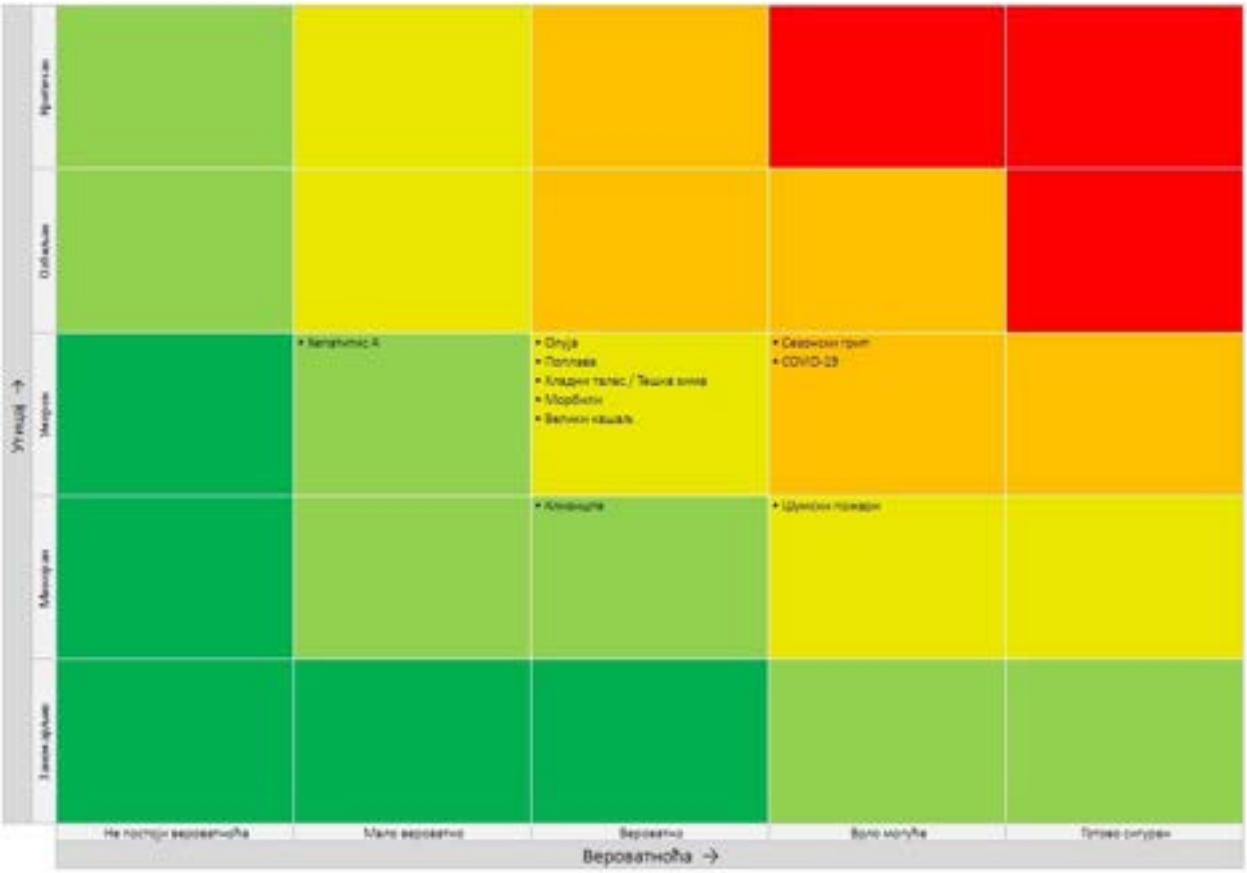
7. Municipality of Svrljig

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Олуја	Умерен	Вероватно	Умерен	Низак	Делимична
Клизиште	Низак	Вероватно	Минoран	Низак	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Врло могуће	Минoран	Низак	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Continuous monitoring of the intensity of virus activity and the dominant strain.

3. Regular reporting to the public and health system at all levels.

4. Strengthening the human resource capacities of health institutions (primarily primary health care).

5. Upgrading medical equipment for the diagnosis and treatment of patients.

6. Continuous education of health workers, especially in primary health care.

7. Compliance with the Law on the Protection of the Population from Infectious Diseases.

8. Increasing vaccination coverage.

9. Educating health workers at all levels of health care about the importance of vaccination.

10. Intensifying campaigns on the importance of vaccination among all population categories, especially at-risk groups.

Seasonal Influenza

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Strengthening the human resource capacities of health institutions (primarily primary health care).

3. Increasing vaccination coverage.

4. Educating health workers at all levels of health care about the importance of vaccination.

5. Compliance with the Law on the Protection of the Population from Infectious Diseases and Guidelines on Immunization.

6. Increasing the coverage of health workers vaccinated against the flu.

7. Intensifying flu vaccination campaigns among all population categories, especially at-risk groups

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TOPLICA ADMINISTRATIVE DISTRICT

1. Municipality of Žitorađa

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Низак	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Низак	Делимична
Експлозивни агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Continuous monitoring of the intensity of virus activity and the dominant strain.

3. Regular reporting to the public and health system at all levels.

4. Strengthening the human resource capacities of health institutions (primarily primary health care).

5. Upgrading medical equipment for the diagnosis and treatment of patients.

6. Continuous education of health workers, especially in primary health care.

7. Compliance with the Law on the Protection of the Population from Infectious Diseases.

8. Increasing vaccination coverage.

9. Educating health workers at all levels of health care about the importance of vaccination.

10. Intensifying campaigns on the importance of vaccination among all population categories, especially at-risk groups.

Seasonal Influenza

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Strengthening the human resource capacities of health institutions (primarily primary health care).

3. Increasing vaccination coverage.

4. Educating health workers at all levels of health care about the importance of vaccination.

5. Compliance with the Law on the Protection of the Population from Infectious Diseases and Guidelines on Immunization.

6. Increasing the coverage of health workers vaccinated against the flu.

7. Intensifying flu vaccination campaigns among all population categories, especially at-risk groups

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

2. Municipality of Kuršumlija

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Врло могуће	Минoран	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Земљотрес	Низак	Мало вероватно	Минoран	Низак	Делимична
Хепатитис А	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Continuous monitoring of the intensity of virus activity and the dominant strain.

3. Regular reporting to the public and health system at all levels.

4. Strengthening the human resource capacities of health institutions (primarily primary health care).

5. Upgrading medical equipment for the diagnosis and treatment of patients.

6. Continuous education of health workers, especially in primary health care.

7. Compliance with the Law on the Protection of the Population from Infectious Diseases.

8. Increasing vaccination coverage.

9. Educating health workers at all levels of health care about the importance of vaccination.

10. Intensifying campaigns on the importance of vaccination among all population categories, especially at-risk groups.

Seasonal Influenza

1. Inclusion of representatives from the Public Health Institute Niš in the Health Council of the Local Government and the Emergency Situation Headquarters (except for Niš).

2. Strengthening the human resource capacities of health institutions (primarily primary health care).

3. Increasing vaccination coverage.

4. Educating health workers at all levels of health care about the importance of vaccination.

5. Compliance with the Law on the Protection of the Population from Infectious Diseases and Guidelines on Immunization.

6. Increasing the coverage of health workers vaccinated against the flu.

7. Intensifying flu vaccination campaigns among all population categories, especially at-risk groups

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3. Municipality of Blace

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Низак	Вероватно	Миноран	Низак	Делимична
Олуја	Низак	Вероватно	Миноран	Низак	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Миноран	Низак	Делимична
Квар у водоснабдевању	Висок	Врло могуће	Озбиљан	Висок	Делимична
Ватра	Умерен	Вероватно	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Involve representatives from the Public Health Institute Niš in the Health Council of the local government as well as in the Emergency Situations Headquarters (except for Niš);
2. Continuously monitor the intensity of the virus's activity and its dominant type;
3. Regularly report to the public and the health system at all levels;
4. Strengthen the staffing capacities of health institutions (primarily primary healthcare);
5. Update medical equipment for diagnosing and treating patients;
6. Continuously educate healthcare workers, primarily in primary healthcare;
7. Adhere to the Law on the Protection of the Population from Infectious Diseases. Increase vaccination coverage. Educate healthcare workers at all levels about the importance of vaccination. Intensify campaigns on the significance of immunization for all population categories, especially at-risk groups.

Seasonal Influenza

1. Involve representatives from the Public Health Institute Niš in the Health Council of the local government as well as in the Emergency Situations Headquarters (except for Niš);
2. Strengthen the staffing capacities of health institutions (primarily primary healthcare);
3. Increase vaccination coverage;
4. Educate healthcare workers at all levels about the importance of vaccination;
5. Adhere to the Law on the Protection of the Population from Infectious Diseases and the relevant regulations on immunization;
6. Increase the coverage of healthcare workers with the flu vaccine;
7. Intensify flu vaccination campaigns among all population categories, especially in at-risk groups.

Water Supply Failure

1. Involve representatives from the Public Health Institute Niš in the Health Council of the local government as well as in the Emergency Situations Headquarters;
2. Develop a Safe Water Supply Plan for the public water supply managed by the utility company for regular and emergency situations;
3. Submit the Plan to the Public Health Institute Niš for review and approval;
4. Identify alternative water supply sources within the local government area;

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5. Conduct health safety checks of drinking water from alternative sources by an authorized health institution;
6. Clearly mark water facilities with unsafe drinking water;
7. Provide water tankers for drinking water;
8. Ensure priority water supply for health and educational institutions;
9. Fill tankers exclusively from hydrants for which there is proof of drinking water safety and according to a pre-written procedure;
10. Ensure stationary tankers through the Red Cross—plan locations for their placement;
11. Adhere to the Red Cross procedures for filling stationary tankers;
12. Ensure emergency monitoring of drinking water by the Public Health Institute Niš according to instructions developed by the Ministry of Health of the Republic of Serbia;
13. Establish an ALERT system by primary healthcare under the supervision of the Public Health Institute Niš;
14. Ensure personnel and resources to address the issue within a maximum of 7 days until the water supply failure is resolved;
15. Educate the population on actions to take before, during, and after water supply shortages.

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4. Municipality of Prokuplje

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Готово сигуран	Минoран	Низак	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Involve representatives from the Public Health Institute Niš in the Health Council of the local government and in the Emergency Situations Headquarters (except for Niš);
2. Continuously monitor the intensity of the virus's activity and its dominant type;
3. Regularly report to the public and the health system at all levels;
4. Strengthen the staffing capacities of health institutions (primarily primary healthcare);
5. Update medical equipment for diagnosing and treating patients;
6. Continuously educate healthcare workers, primarily in primary healthcare;
7. Adhere to the Law on the Protection of the Population from Infectious Diseases. Increase vaccination coverage. Educate healthcare workers at all levels about the importance of vaccination. Intensify campaigns on the significance of immunization for all population categories, especially at-risk groups.

Seasonal Influenza

1. Involve representatives from the Public Health Institute Niš in the Health Council of the local government and in the Emergency Situations Headquarters (except for Niš);
2. Strengthen the staffing capacities of health institutions (primarily primary healthcare);
3. Increase vaccination coverage;
4. Educate healthcare workers at all levels about the importance of vaccination;
5. Adhere to the Law on the Protection of the Population from Infectious Diseases and the relevant regulations on immunization;
6. Increase the coverage of healthcare workers with the flu vaccine;
7. Intensify flu vaccination campaigns among all population categories, especially in at-risk groups.

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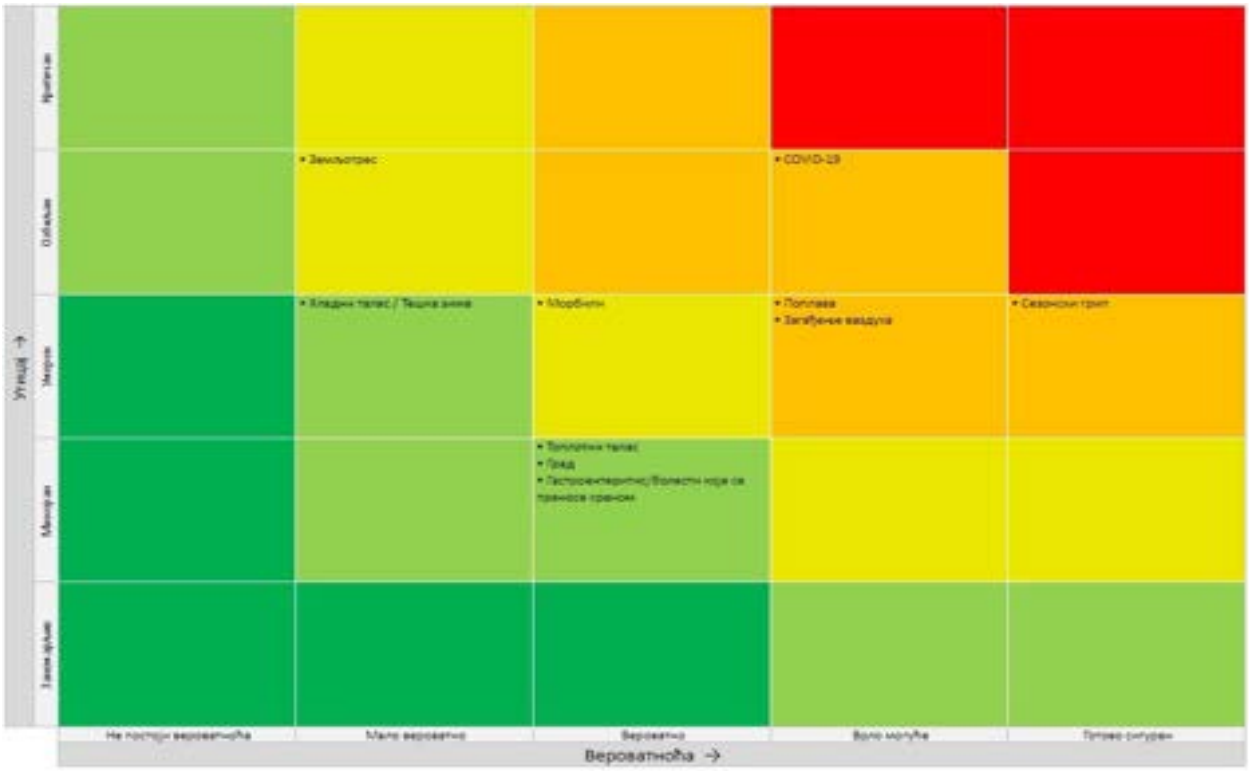
ZAJEČAR ADMINISTRATIVE DISTRICT

1. City of Zaječar

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Делимична
Топлотни талас	Низак	Вероватно	Минoран	Низак	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Делимична	Низак
COVID-19	Висок	Врло могуће	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Низак	Делимична
Загађење ваздуха	Висок	Врло могуће	Умерен	Висок	Делимична
Град	Низак	Вероватно	Минoран	Низак	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Preparation of appropriate planning and technical documentation for flood defense - hydraulic documentation for the basin and watercourses, for flood-prone areas in the basins of the Beli Timok, Crni Timok, and Timok rivers, as well as technical instructions for work during the implementation of flood defense.
2. Ensuring that general and specific conditions for disaster and flood protection are specified in the process of drafting and adopting urban plans and construction regulations.
3. Harmonizing water management and communal infrastructure with urban plans, and through urban spatial planning, anticipating measures for the protection of life and health of people, residential and business properties, and material goods in the event of floods.
4. Planning and implementing anti-erosion works, primarily through reforestation of erosion-prone land, landslide remediation, and similar activities.
5. Planning and construction of missing protective embankments, riverbank protections, etc., as well as regular maintenance and security checks of existing protection systems, in cooperation with the Public Water Management Company “Srbijavode” in Belgrade, Regional Unit “Negotin” in Negotin.
6. Planning and construction of small hydrological accumulations in series, smaller sluices, and dams for receiving flood waves.
7. Planning and construction of drainage canal systems and their regular maintenance.
8. Planning and construction of culverts with greater water capacity.
9. Implementing measures for cleaning riverbeds, canals, and ditches of various materials.
10. Marking on-site the line of maximum possible flood wave that could result from a potential collapse or overflow of dams on hydrological accumulations.
11. Ongoing work on the construction and reconstruction of defense lines and increasing the level of security for flood defense.
12. Regularly updating technical documentation regarding facilities and areas, embankments, and defense lines.
13. Improving the monitoring, communication, and coordination systems for task execution.
14. Organizing observation, early warning, notification, and alert services on larger watercourses and high dams to timely inform about flood dangers.

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15. Training citizens for flood protection and rescue through personal and mutual protection, where each local community is responsible for its area.
16. Training enterprises of interest for flood protection and rescue and recording their tasks in defense plans.
17. Defining tasks for organizations involved in flood defense activities.
18. Establishing cooperation with the commands and units of the Serbian Army in the context of their participation in actions for the protection and rescue of the population and material and cultural goods.
19. Training members of the Emergency Situations Headquarters to manage flood protection and rescue operations.
20. Developing annual operational flood defense plans and other normative acts regulating all matters related to flood defense.

Air Pollution

1. Measures needed to reduce air pollution encompass a wide range of areas and require a multidisciplinary approach, intersectoral and intermunicipal cooperation.
2. Reduction of air pollution originating from combustion facilities, including individual heating sources and boilers.
3. Construction of a new boiler using wood biomass and compressed natural gas (CNG).
4. All four boilers of the Public Utility Company use heating oil as fuel.
5. Emitters from urban boilers contribute to overall air pollution in the city of Zaječar, although individual measurements do not show exceedances of the permitted limit values for prescribed parameters.
6. Implementation of the Assembly Decision to transition the city's boiler to biomass and CNG in Zaječar, involving the construction of a new boiler.
7. The measure involves building a new boiler to replace three existing boilers ("Pivara," "Plaža," and "Kraljevica") that use heating oil as energy.
8. The planned replacement of heating oil with boilers using wood biomass and boilers using compressed natural gas (CNG).
9. Reconstruction of the existing boiler "Ključ" using wood biomass and compressed natural gas (CNG).
10. The boiler of the Public Utility Company "Ključ" uses heating oil as fuel. The emissions from this boiler contribute to overall air pollution in the city of Zaječar, although individual measurements do not show exceedances of the permitted limit values for prescribed parameters.
11. Implementation of the Assembly Decision to transition the city's boiler to biomass and CNG in Zaječar is required.

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12. The measure includes the reconstruction of the existing boiler "Ključ" with one boiler for wood biomass and one boiler for compressed natural gas.
13. Connecting as many boilers and individual heating sources as possible to the district heating system.
14. There are individual heating sources and heating sources for residential buildings that have the technical capability to connect to the district heating system, but in the past, there has been disconnection and a switch to heating from their own boiler (due to inadequate heating, high heating costs, etc.).
15. Replacement of boilers and fuels in public institutions to increase the efficiency of combustion facilities and use ecological fuels.
16. A number of public institutions (schools, preschool institutions, and other facilities) that do not have the technical prerequisites for connection to the district heating system use their own heating sources for warming the facilities. These emitters significantly contribute to emissions of pollutants into the air as they primarily use old, inefficient coal and wood boilers. In this regard, it is necessary to replace the boilers with more efficient ones, transition to fuels with lower emissions of pollutants, considering eco-design requirements and energy labeling of devices.
17. Replacement of boilers and fuels in individual households to increase the efficiency of combustion facilities and use ecological fuels.
18. Increased energy efficiency to reduce air pollution.
19. Improvement of energy efficiency in public buildings - insulation of buildings and replacement of joinery (windows and doors).
20. Improvement of energy efficiency in private buildings - insulation of buildings and replacement of joinery (windows and doors).
21. Improvement of the use of renewable energy sources in public and private buildings - installation of solar panels and collectors.
22. Improvement of the use of renewable energy sources in public and private buildings – utilizing geothermal energy in a way that does not endanger natural resources.
23. Reduction of pollution originating from traffic:
24. Optimization of traffic flow.
25. Increased green areas:
26. Conduct afforestation of the "Kraljevica" park forest and other areas in the territory of the city of Zaječar, maintaining and improving public green spaces in the city.
27. Development of a Cadastre of public green areas in the territory of Zaječar.
28. Enhanced air quality monitoring.
29. Air monitoring in the territory of Zaječar is incomplete as not all parameters prescribed by the Regulation on Monitoring Conditions and Air Quality Requirements ("Official Gazette of the Republic of Serbia", No. 11/10, 75/10, and 63/13) are being monitored.

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30. Within the State and/or Local network of measurement sites, it is necessary to establish monitoring of all parameters for a more complete assessment of air quality, especially monitoring the potential impact of pollution from neighboring areas with increased pollution.
31. Procurement of equipment needed for air quality analysis and monitoring by the Public Health Institute of Zaječar, including PM10, PM2.5, and TSP particle samplers, an automatic measuring station for ambient air measuring PM10, PM2.5, nitrogen oxides, sulfur dioxide, and carbon monoxide.
32. Education aimed at raising awareness about the importance of air quality and its impact on human health.
33. Education and informing the public through promoting activities and alternative modes of transport that contribute to improving air quality, along with recommendations for actions in case of increased air pollution.
34. Education is needed to promote walking and cycling to reduce the use of motor vehicles.
35. In addition to reducing air pollution, this measure would have exceptional health significance for the population, considering that increased physical activity is essential for most modern diseases such as diabetes, obesity, and high cholesterol.
36. Implementation of this measure involves promoting "Health Trails" and marking significant dates in the field of health and environmental protection through flyers, workshops, promotional walks, etc.
37. Exploring possibilities for using electric bicycles (through subsidies) could also be part of this measure.
38. Education is also necessary in terms of informing the population about the harmful effects of heating households with solid fuels (especially coal), promoting the use of more efficient stoves, correct burning methods, and proper maintenance of chimneys.
39. The method of storing firewood and the time of year when firewood is procured to achieve the optimum moisture level for effective burning is crucial for reducing air pollution.
40. The burning of plastics, tires, and used oil to ignite fires in boilers is not an uncommon occurrence.
41. It is particularly important to raise awareness among the population about the extreme carcinogenicity of emitted organic materials in such cases.
42. Special attention needs to be directed toward educating children as the greatest potential for proper and sustainable behavior, including in matters of protecting air from pollution.
43. Within the Health Council of the city of Zaječar, it is necessary to improve intersectoral cooperation between the Local Government and the Public Health Institute "TIMOK" Zaječar when defining planning documents to implement the Public Health Law.

COVID-19

1. Future fiscal support from the Government or other sources should be targeted and strategically invested in priority sectors—including health care, social protection, IT infrastructure for

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education and the economy, and green incentive programs that promote environmentally responsible transformation.

2. Increase the capacity of the public health system.
3. Human and physical resources for testing, contact tracing, treatment monitoring—as well as vaccination—require further strengthening to be prepared for any potential rise in COVID-19 infections and other pathogens.
4. It is equally important to ensure optimal continuity of health services for non-COVID-19 cases during the emergency situation.
5. Since non-communicable diseases are the main cause of mortality and morbidity in Serbia, and since there is a connection between morbidity related to non-communicable diseases and COVID-19, prevention and changes toward a healthier lifestyle are crucial.
6. Provide greater emphasis on PREVENTION and the promotion of healthy lifestyles (including promoting non-smoking, physical exercise, nutrition, and reducing air pollution, as well as other important behavioral health factors).
7. Strengthen multisectoral cooperation and coordination.
8. Within the Health Council of the city of Zaječar, it is necessary to improve intersectoral cooperation between the Local Government and the Public Health Institute "TIMOK" Zaječar when defining planning documents to implement the Public Health Law.
9. Renovation of the infectious disease department at the General Hospital in Zaječar; procurement of vehicles and disinfectant pumps for the Public Health Institute Timok Zaječar.
10. Lack of specialists in preventive branches of medicine, such as specialists in social medicine, epidemiology, and hygiene.
11. This issue directly jeopardizes the capacities of the health system to adequately respond to the challenges of protecting and promoting public health, especially in the context of infectious disease prevention, indicating a significant need for incentives for young doctors to choose these specialties in preventive medicine.

Seasonal Influenza

1. Increase the vaccination coverage, especially among the following at-risk groups:
    - Individuals in workplaces with increased risk (educators, health care workers, banking and postal clerks, hospitality workers, especially those who work in close contact with people);
    - Adults with chronic heart conditions (hypertension, angina pectoris, cardiomyopathy; congenital heart defects, heart failure) and lung diseases (chronic obstructive pulmonary disease, asthma, cystic fibrosis);
    - Adults suffering from diabetes and kidney diseases;
    - Individuals over 65 years old;
    - Individuals living in institutions and collective housing.

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2. Strengthen human and technical capacities.

MODERATE RISK

Earthquake

- Buildings and facilities in the city of Zaječar constructed before the 1963 Skopje earthquake were not built in compliance with mandatory technical regulations for construction in seismic areas established in 1964, nor in accordance with the new regulations from 1981 concerning technical standards for the construction of high-rise buildings in seismic areas, and they do not meet the strict standards of the European Union.

Preventive Actions:

1. Conduct an analysis of the potential consequences of earthquakes on individual settlements and vital infrastructure and public significance facilities, along with procedures to follow in case of danger.
2. Develop evacuation and accommodation plans in the event of an earthquake.
3. The Republic Seismological Institute is responsible for monitoring seismic activity in the territory of the Republic of Serbia and bordering areas.
4. Detailed monitoring of seismic activity in the Republic of Serbia and bordering areas is conducted to inform the public about the main parameters of earthquakes and assess their consequences, so that necessary measures can be taken to assist affected populations in a timely manner.
5. Data on regional and distant earthquakes are needed for international data exchange with other seismological organizations. In the territory of the Republic of Serbia, a regime has been established for the simultaneous operation of two parallel telemetric acquisition systems (in Belgrade and on Divčibare), which enables continuous and uninterrupted operation for automatic location and notification of earthquakes, even if one of them stops functioning.
6. The 24-hour observation regime is enabled by the National Seismological Network of the Republic of Serbia (24 stations), as well as the use of a virtual seismological network comprising stations from the region and Europe (about 30 stations).
7. The Institute sends earthquake information to users and makes it available online.
8. Automatic earthquake information is sent to users via SMS and made available online within 5-10 minutes after an earthquake, with revised information about the location and intensity provided within 10-20 minutes.
9. Immediately after a strong earthquake, expert teams from the Institute visit the affected area to collect data on the manifestations of the earthquake on buildings and the ground.
10. Based on classified data on types of damage and their spatial distribution (using the European macroseismic scale), maps of isoseismals are created to outline specific degrees of intensity in that area.
11. Prohibit the construction of buildings that do not comply with prescribed seismic standards.

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12. Complete the legalization process for unregulated buildings—identify critical points in critical infrastructure and public significance facilities and strengthen and rehabilitate them.

Response Measures:

1. In accordance with the Regulation on Mandatory Means and Equipment for Personal, Mutual, and Collective Protection Against Natural Disasters and Other Accidents, control must be exercised in the City Administration over all entities of special interest for disaster response, economic entities, legal persons, and residential buildings to ensure that prescribed means are acquired and maintained in accordance with the Regulation.
2. Ensure that entities that have not provided the mentioned means do so.
3. Update the act appointing Civil Protection Commissioners and Deputy Commissioners in local communities.
4. Conduct regular training for Civil Protection Commissioners and Deputies.
5. Form an expert operational team for earthquakes (EOT) and regularly update the team composition; conduct regular training for the EOT on earthquakes.
6. Organize earthquake simulations for the public and emergency services to improve preparedness.
7. Educate the Crisis Headquarters, EOT for earthquakes on procedures in case of an earthquake, and check their understanding.
8. Create a database listing buildings and areas particularly sensitive to earthquakes and a database with historical events related to earthquakes.
9. Regularly control, rehabilitate, and improve the connection systems and information systems of the local government unit.
10. Maintain continuous accessibility of roadways and ensure sufficient width around vital facilities.

Measles

1. Increase vaccination coverage.
2. Continuous information dissemination to the population, especially parents, by pediatricians and epidemiologists aimed at enhancing parents' knowledge about the importance of vaccination, providing accurate information, and strengthening parents' trust in this method of child health care.
3. Implement supplementary vaccination for unvaccinated and incompletely vaccinated individuals.
4. Strengthen human and technical capacities.
5. Within the Health Council of the city of Zaječar, it is necessary to improve intersectoral cooperation between the Local Government and the Public Health Institute "TIMOK" Zaječar when defining planning documents to implement the Public Health Law

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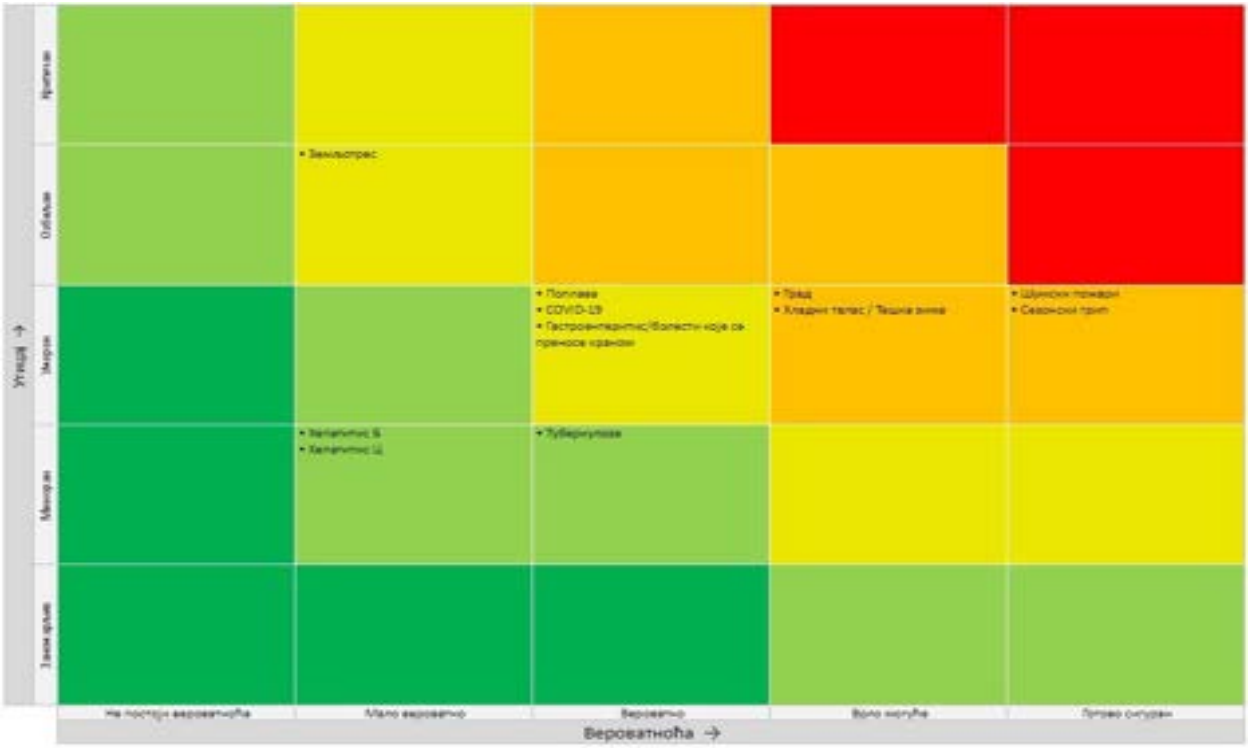
2. Municipality of Knjževac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Умерен	Вероватно	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Низак	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Делимична	Низак
Град	Висок	Врло могуће	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Висок	Врло могуће	Умерен	Делимична	Делимична
Туберкулоза	Низак	Вероватно	Миноран	Низак	Делимична
Хепатитис Б	Низак	Мало вероватно	Миноран	Низак	Делимична
Хепатитис Ц	Низак	Мало вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage, especially among the following at-risk groups:
2. Individuals in high-risk workplaces (educational workers, healthcare workers, bank and postal clerks, hospitality workers, especially those in close contact with people);
3. Adults with chronic heart conditions (hypertension, angina pectoris, cardiomyopathy, congenital heart defects, heart failure) and lung diseases (chronic obstructive pulmonary disease, asthma, cystic fibrosis);
4. Adults with diabetes and kidney diseases;
5. Individuals over 65 years old;
6. Persons living in institutions and collective housing;
7. Strengthen human and technical capacities.

Cold Wave / Severe Winter

1. Conduct an analysis of the impact of extreme weather conditions;
2. Create a maintenance plan for municipal roads and streets, preparing roads for winter conditions;
3. Daily monitoring of forecasts and planning for winter road maintenance;
4. Organize winter services and timely ensure resources, machinery, equipment, and materials for road treatment and snow removal;
5. Identify critical locations and organize monitoring of those areas;
6. Mark road segments indicating hazards (slipperiness, snow drifts, etc.);
7. Install snow barriers in areas prone to snow accumulation;
8. Form an Expert Operational Team (EOT) for extreme weather phenomena/snowstorms, snow drifts, and ice;
9. Ensure the material and technical readiness of firefighting and rescue units for winter conditions and training for operations in winter settings (rescue from snow drifts);
10. Create a database listing facilities that could be endangered in the event of snowstorms, drifts, ice, and cold waves;
11. Train the population, public enterprises, and businesses to respond to snowstorms, drifts, ice, and cold waves;
12. Plan alternative routes due to areas cut off by snow drifts.

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Forest Fires

1. Develop a Protection and Rescue Plan;
2. Create plans for fire protection and rescue;
3. Ensure appropriate spatial planning in accordance with terrain, soil characteristics, and land use;
4. Form an Expert Operational Team (EOT) for protection against fires, explosions, and outdoor fires;
5. Ensure the material and technical readiness of firefighting and rescue units for combating outdoor fires;
6. Enhance the capacity of the civil protection unit to a higher level;
7. Identify areas with the highest potential for outdoor fires and maintain statistical records of arising hazards;
8. Train the population, public enterprises, and businesses to respond to outdoor fires;
9. Maintain telecommunications infrastructure.

MODERATE RISK

COVID-19

1. Future fiscal support from the Government or other sources should be targeted and strategically invested in priority sectors, including healthcare, social protection, IT infrastructure for education and the economy, and green incentive programs that promote environmentally responsible transformation;
2. It is equally important to ensure optimal continuity of health services for non-COVID-19 conditions during the emergency;
3. Since non-communicable diseases are the primary cause of mortality and morbidity in Serbia, and given the connection between morbidity related to these diseases and COVID-19, prevention and lifestyle changes towards healthier habits are crucial;
4. Provide greater emphasis on prevention and promotion of healthy lifestyles (including promoting non-smoking, physical exercise, nutrition, and reducing air pollution, along with other significant behavioral health factors);
5. Strengthen the human resource structure;
6. Ensure the necessary diagnostic equipment;
7. Strengthen multisectoral cooperation and coordination.

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Earthquake

1. Establish a monitoring and recording system (registration of important objects sensitive to strong tremors, development of plans for protective measures for the population and property, and engagement of trained personnel for monitoring);
2. Create and update planning monitoring documents (hazard maps, seismic zoning maps, conduct geodynamic monitoring, microseismic regionalization of the terrain);
3. Develop a Protection and Rescue Plan;
4. Implement prescribed technical standards for the construction of high-rise buildings in seismic zones of VII, VIII, and IX degrees of seismicity according to the MCS scale.

Gastroenteritis / Foodborne Diseases

1. Strict control of hygiene standards in hospitality establishments, markets, stores, and food production facilities to ensure compliance with prescribed measures;
2. Training for all staff in restaurants, catering establishments, and food production on basic hygiene rules and safe food handling;
3. Public awareness regarding the risks of consuming raw or undercooked food, especially during warm months when infections are more common;
4. Within the Health Council of the municipality of Knjaževac, greater engagement from the Local Government is necessary.

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3. Municipality of Boljevac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Делимична	Делимична
Нестанак струје/или помрачење	Низак	Вероватно	Минoран	Низак	Делимична
Град	Низак	Вероватно	Минoран	Веома низак	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Низак	Низак
Морбили	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Government financial support or funding from other sources should be targeted and strategically invested in priority sectors, including healthcare, social protection, IT infrastructure for education and the economy, and green incentive programs that promote environmentally responsible transformation.
2. It is equally important to ensure optimal continuity of health services for non-COVID-19 conditions during the state of emergency.
3. Since non-communicable diseases (NCDs) are the main cause of mortality and morbidity in Serbia, and there is a link between NCD-related mortality and COVID-19, prevention and lifestyle changes towards healthier habits are crucial.
4. Greater emphasis should be placed on prevention and the promotion of healthy lifestyles (including promoting non-smoking, physical exercise, nutrition, and reducing air pollution, as well as other important behavioral health factors).
5. Strengthen multisectoral cooperation and coordination.
6. Within the Health Council of the municipality of Boljevac, greater engagement from the Local Government is necessary for developing plans and implementing the Public Health Law.
7. Diagnostic equipment for the Health Center in Boljevac.

MODERATE RISK

Water Supply Failure

1. Timely detection and immediate response upon learning of the issue; assess the failure and the population affected by the lack of this essential resource; timely and accurate information to the public regarding the failure and access to drinking water (water trucks, etc.).
2. The last project documentation related to water supply is outdated; there is no development project for the water supply system or a project to reduce losses, indicating a priority action for the preparation of water supply project documentation.
3. Improve the water management system.
4. Upgrade, reconstruct, and modernize the existing water supply network to reduce losses to less than 25% while introducing monitoring for system management and loss control.
5. Enhance and develop monitoring systems for groundwater and surface water.
6. Preserve the quality and yield of mountain springs and sources.

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7. The developmental significance of water resources will depend primarily on protecting and preserving the natural characteristics of watercourses, constructing the regional Bogovina system, and building ponds and irrigation systems on agricultural land.
8. Intensify hydraulic activities to regulate torrential river flows, protect against floods, improve water supply to populated areas, and construct irrigation systems.
9. Achieve good status for surface and groundwater.
10. Connect rural and suburban settlements to the city water supply while renewing rural water supply networks with high losses.
11. Gradually clean river watercourses of waste and wastewater, region by region.
12. Install wastewater treatment filters. Ensure healthy drinking water for 90% of the population of Boljevac.
13. Increase ecological awareness among citizens through educational actions and better information to promote a more responsible approach and raise public awareness about the importance and benefits of environmental protection.
14. Water supply for villages - continue the construction of the water supply network in phases.
15. Within the Health Council of the municipality of Boljevac, greater engagement from the Local Government is necessary to implement the Public Health Law.

Earthquake

1. Analyze the potential consequences of earthquakes on individual settlements and vital infrastructure, as well as public facilities and procedures to follow in case of danger.
2. Develop evacuation and care plans in case of an earthquake.
3. Create a Disaster Risk Reduction Plan.
4. Establish continuous education for the population on how to respond during an earthquake.
5. Implement strict building codes requiring the design and construction of earthquake-resistant structures.
6. Map at-risk areas and monitor seismic activity for better future risk assessment.
7. Train programs on how to behave during an earthquake so that citizens know how to protect themselves (e.g., the "Drop, Cover, Hold On" technique).
8. Organize earthquake simulations for the public and emergency services to improve preparedness.

Forest Fires

1. Train residents in forested and rural areas on precautions when using fire and the proper disposal of flammable materials.
2. Organize public campaigns to educate the population about fire hazards and ways to prevent them, especially during the summer months when the risk is highest.

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3. Install warnings in public places near forests, particularly during dry seasons, informing about fire bans.
4. Create natural or artificial barriers (clearings) between forested areas and settlements to reduce the possibility of fire spreading.

Gastroenteritis / Foodborne Diseases

1. Strictly control hygiene standards in hospitality establishments, markets, stores, and food production facilities to ensure compliance with prescribed measures.
2. Train all staff in restaurants, catering establishments, and production on basic hygiene rules and safe food handling.
3. Inform the public about the risks of consuming raw or undercooked food, especially during warm months when infections are more frequent.
4. Within the Health Council of the municipality of Boljevac, greater engagement from the Local Government is necessary to implement the Public Health Law.

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4. Municipality of Sokobanja

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Врло могуће	Умерен	Висок	Делимична
COVID-19	Висок	Врло могуће	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Мало вероватно	Умерен	Делимична	Делимична
Туберкулоза	Низак	Мало вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Strengthen human resource capacities.
3. Health Council - develop expert operational plans.

Flood

1. It is necessary for every regulatory act adopted at the municipal level to include flood risk and a protection and rescue system.
2. It is especially important when developing documents such as the Sokobanja Municipal Strategy and the Environmental Protection Strategy.
3. Regularly update the Operational Flood Defense Plan for torrential watercourses and second-order watercourses under local government jurisdiction.

COVID-19

1. Procurement of vaccines at the national level.
2. Increase the number of beds in the Sokobanja General Hospital.
3. Strengthen human resource capacities.
4. Health Council - develop expert operational plans.

Gastroenteritis / Foodborne Diseases

1. Educate the population on hygiene measures for the distribution, use, and storage of food and water.
2. Timely response upon the first reported case.
3. Increase the number of beds in the Sokobanja General Hospital.
4. Strengthen human resource capacities.
5. Health Council - develop expert operational plans.

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MODERATE RISK

Cold Wave / Severe Winter

1. Sokobanja Municipal Administration - Protection and Rescue Plan for the municipality of Sokobanja.
2. Study the impact of snowfall and wind in winter on traffic functioning within the municipality of Sokobanja.
3. Assess available resources - technical, administrative, material, financial, human, and institutional for implementing snowstorm and snowdrift defenses, including the preparation of annual needs, balances, and budgets.
4. Develop training and education plans for civil protection units and citizens for better preparedness in the event of snowstorms and snowdrifts; daily monitoring of precipitation forecasts, planning measures for snow removal.
5. Emergency Situation Headquarters of the municipality of Sokobanja - preparation and capacity building in case of early announcements for the evacuation of the population, updating general-purpose civil protection units, creating a database with lists of facilities, routes, and settlements at risk from snowstorms and drifts, equipping public enterprises and businesses to respond to snowstorm and snowdrift occurrences, and maintaining communication with surrounding municipalities/cities regarding precipitation conditions and road passability.

Forest Fires

1. Improve the monitoring and warning system using the latest technologies (drones, etc.).
2. Educate the local population, including training for rapid response.

Water Supply Failure

1. Timely detection and immediate response upon learning of the issue.
2. Assess the failure and the population affected by the lack of this essential resource.
3. Timely and accurate information to the public regarding the failure and access to drinking water (water trucks, etc.).

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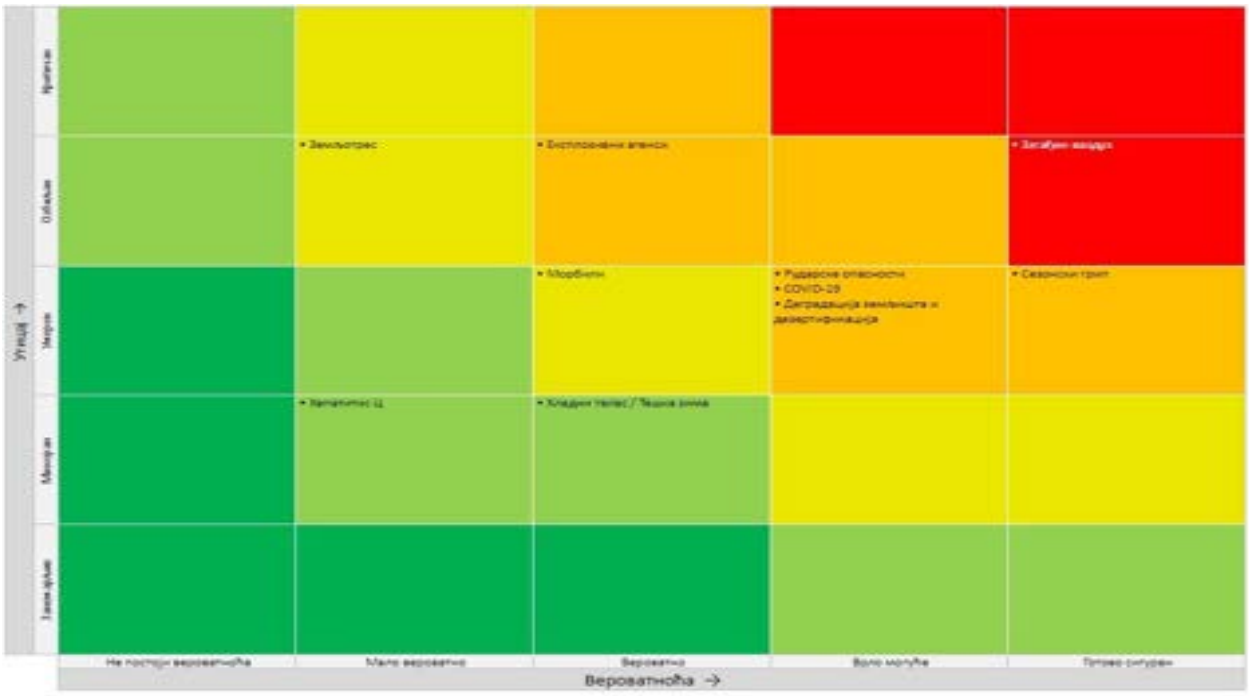
BOR ADMINISTRATIVE DISTRICT

1. City of Bor

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Загађен ваздух	Веома висок	Готово сигуран	Озбиљан	Веома висок	Делимична
Рударске опасности	Висок	Врло могуће	Умерен	Висок	Делимична
Експлозивни агенси	Висок	Вероватно	Озбиљан	Висок	Низак
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Деградација земљишта и дезертификација	Висок	Врло могуће	Умерен	Делимична	Низак
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Низак	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Низак	Делимична
Хепатитис Ц	Низак	Мало вероватно	Минoран	Веома низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

Air Pollution

1. General measures to improve air quality and public health—preserving health;
2. Engaging experts to link air quality monitoring data with health data;
3. Activating the local Health Council to monitor this connection;
4. Updating the Bor Public Health Plan to include and elaborate on the connection between air quality and human health;
5. Establishing occupational medicine within Bor's healthcare system;
6. Strengthening general medicine services to protect employees and residents from the effects of polluted air;
7. Reducing emissions of suspended particles from the old flotation tailings;
8. Reducing emissions of suspended particles from mining activities;
9. Air quality monitoring:
10. Determining the optimal number of measurement locations for air quality monitoring in the Bor agglomeration and creating a local monitoring plan in line with city and industry development and the opening of new mines in the area;
11. Establishing a system for real-time public notification of harmful pollutant concentrations in the air;
12. Creating a guideline for action in case of harmful pollutant concentrations in the air and making it available to citizens;
13. Forming a database on the effects of air pollution on human health according to EU standards;
14. Education, ecological awareness, and information:
15. Supporting programs to raise awareness about eco-friendly heating, educating citizens on the importance of air quality for health, and interpreting air quality conditions, especially regarding public policy documents on air protection;
16. Strengthening the role of citizens and civil society organizations (CSOs) as stakeholders in the public policy-making process for air and environmental protection—participation in all phases of policy document development;
17. Enhancing public information, supporting campaigns and activities to improve public awareness, especially through media, about air quality conditions and the implementation of measures taken;
18. Institutional strengthening:

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19. Continuously strengthening relevant local community bodies: more active work of the Health Council and forming an Ecology Council to jointly address air quality issues and their health impacts, ensuring appropriate assistants to the mayor and city council members focused on environmental protection, strengthening the staffing of the city administration's Environmental Office, and enhancing the role of the Air Quality Monitoring Team;
20. Strengthening cooperation with state authorities—Ministries of Environmental Protection, Health, Energy, and Mining, state administration, local self-government, inspection services, the Environmental Protection Agency, and other bodies;
21. Strengthening the role of citizens and civil society organizations (CSOs) as stakeholders in the public policy-making process for air and environmental protection—participation in all phases of policy document development;
22. Organizing "open door" events twice a year by Serbia ZiJin Copper DOO and Serbia ZiJin Mining, New Environmental Protection Program;
23. Allocating necessary funds in the Bor city budget for the implementation of measures outlined in this program, the CAP, and the Environmental Protection Program;
24. Defining joint financing of specific air quality improvement activities by companies (operators), the city of Bor, public enterprises and institutions, and local communities;
25. Supporting programs to strengthen ecological awareness and educate citizens on environmental protection issues;
26. Public participation, including citizens and CSOs, in decision-making on ecological issues;
27. Monitoring the implementation of measures outlined in the Air Quality Plan and other public policy documents related to air protection and ensuring their currency;
28. Development and implementation of energy infrastructure that does not pollute the environment, including the following:
29. Developing an Energy Efficiency Plan and establishing energy management in the city of Bor;
30. Reconstruction of boiler facilities and hot water networks in JKP Toplana Bor. Building a new boiler house using renewable sources, gasification;
31. Modernizing the gas purification system in JKP Toplana;
32. Increasing the energy efficiency of district heating systems by replacing heat exchangers in heating substations and insulating heat pipes;
33. Conducting internal control of the technical integrity of boiler facilities and regulating the operation of heat transfer substations and the entire district heating system;
34. Increasing the energy efficiency of individual heating systems;
35. Fuel replacement, boiler upgrades, and increasing the energy efficiency of buildings;
36. Incentives for the use of energy-efficient heating technologies and equipment;

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37. Exclusive use of optimal fuels for heating. Prohibition of inadequate fuels and waste materials for heating residential and commercial spaces;
38. Greater use of solar energy in households. Financial incentives for implementing systems utilizing solar energy;
39. Financial incentives for designing and installing systems for utilizing waste heat. Advisories on proper fuel use, public forums on optimizing heating and improving energy efficiency;
40. Supporting projects aimed at using biomass as fuel in thermal power plants and heating plants;
41. Supporting projects aimed at using natural gas as fuel in heating plants;
42. Financial incentives for utilizing geothermal energy for heating;
43. Introducing central (district) heating in settlements within the Bor agglomeration;
44. Reducing emissions of suspended particles from point and surface sources;
45. Reducing surface emissions of suspended particles from surface mines, landfills, and flotation tailings (rehabilitating old mining and flotation waste landfills);
46. Sorting municipal waste, rehabilitating inactive parts of existing landfills;
47. Establishing a Regional Waste Management Center;
48. Reconstruction of boiler facilities in JKP Toplana Bor and modernizing the waste gas purification system and hot water network;
49. Constructing a new heating plant powered by renewable energy sources, gasification;
50. Creating a local registry of pollution sources for the Bor agglomeration;
51. Reducing emissions of suspended particles from surface mines during blasting, transportation, and ore preparation;
52. Renewing the vehicle fleet, initiatives for fuel savings, and installing particle filters (heavy vehicles);
53. Reducing or preventing resuspension of particles;
54. Regular cleaning of roads in the city and suburban areas;
55. Regular cleaning of roads in industrial zones (pertaining to roads in industrial zones in the flotation plants and mines in the Bor agglomeration);
56. Regular cleaning of surfaces in industrial complexes, organizational measures for maintaining the environment of industrial facilities;
57. Taking measures to reduce resuspension of suspended particles at construction sites where work is conducted;
58. Supporting the establishment of a buffer zone and planting shrubs to prevent wind erosion;
59. Reducing particle emissions during soil cultivation and harvesting operations by equipping agricultural machines with devices to reduce dust swirling;

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60. Protecting and expanding the natural ability of forests to absorb pollutants from the air;
61. Relocating dust emission sources outside populated areas;
62. Expanding the network of public urban and suburban transport, relocating heavy vehicle traffic from the city center to the city bypass, addressing parking issues in the city, and constructing bike paths (in accordance with measures outlined in the Bor city's environmental protection development plan and aligning it with the UN 2030 Agenda);
63. Planting grass, afforestation, and planting greenery as a dust filter in high-traffic areas;
64. The Bor Health Council adopted program activities—there is a lack of good will to implement the adopted activities.

HIGH RISK

Soil Degradation and Desertification

1. Implement remediation measures on areas of already degraded land proportional to the area of land currently undergoing degradation.
2. Temporarily and spatially restrict land conversion through the adoption of planning documents.
3. Regularly conduct monitoring of the quality of non-agricultural land (from contaminated and comparative sites).
4. Regularly submit data for the cadastre of contaminated sites to the Environmental Protection Agency.
5. Develop projects for the decontamination and remediation of sites.
6. Implement decontamination and remediation procedures.
7. Re-cultivate areas devastated by mining and industrial activities.
8. Implement decontamination and remediation procedures.
9. Establish protective green belts.
10. Conduct regular soil monitoring.
11. Enhance control over the management of municipal and industrial waste.
12. Create an Annual Program for the protection, regulation, and use of agricultural land (Ni, P, K, Ca, CO3, and pH).
13. Regularly monitor the quality of agricultural land.
14. Develop a Cadastre of damaged agricultural land.
15. Create a Local Remediation Plan in accordance with the Annual Protection Program.
16. Implement actions for the liming/neutralization of acidic agricultural land.

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17. Organize and conduct education for private landowners on the cultivation of selected agricultural crops.
18. Organize and conduct education for private landowners on the proper application of mineral fertilizers, plant protection agents, and other agronomic measures.
19. Control the quality of agricultural products at green markets and retail stores.

Mining Hazards

1. Strengthen safety standards and regulations. Continuous monitoring of conditions in mines.
2. Implement an early warning system.
3. Installing early warning systems in case of collapses, gas explosions, or floods in mines can significantly reduce the number of casualties.
4. Having clearly defined evacuation plans in case of an accident, along with regular simulations and drills, increases the readiness of workers and management to respond quickly and effectively.
5. Regular maintenance of equipment.

Explosive Agents

1. Strategies, regulatory frameworks, plans.
2. Prepare an adequate fire protection plan, i.e., improve the existing one, taking into account objective circumstances and the potential for explosions.
3. Continuous measurement of gas concentrations.
4. Conduct regular checks and inspections.
5. Control of flammable mining dust.
6. Regular training for workers. Control of electrical equipment and installations. Controlled use of explosives.

Seasonal Influenza

1. Increase the coverage of vaccinated individuals, especially from the following risk groups: those in high-risk work environments (educators, healthcare workers, bank and postal clerks, hospitality workers, particularly those in close contact with people).
2. Adults with chronic heart conditions (hypertension, angina pectoris, cardiomyopathy, congenital heart defects, heart failure) and lung diseases (chronic obstructive pulmonary disease, asthma, cystic fibrosis).
3. Adults suffering from diabetes and kidney diseases.
4. Individuals over 65 years of age.
5. People living in dormitories and collective housing.
6. Strengthening human and technical capacities

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MODERATE RISK

Earthquake

1. Designing under current conditions must be carried out in accordance with the "Regulations on Technical Norms for the Construction of High-Rise Buildings in Seismic Areas" ("Official Gazette of SFRY" No. 31/81, 49/82, 29/83, 21/88, and 52/90), which is still in force, although designers increasingly use the European Union regulation – "Eurocode 8," which pertains to the design of structures against seismic effects.
2. This EU regulation contains the latest recommendations for calculating structures in relation to seismic action.
3. Strategies, regulatory frameworks, plans:
4. Prepare documentation to establish a protection and rescue system in case of an earthquake.
5. Familiarize all individuals with the earthquake protection and rescue plan.
    - Plan for checking the protection and rescue system.
6. Early warning system: The possibilities for early warning are weak.
7. Inform the population about the dangers and actions to take in the event of an earthquake.
8. Implement all prescribed protection and rescue measures defined in the protection and rescue plans.
9. Spatial planning and legalization of structures: This is done at the municipal level and can be planned in real time.
10. Maintenance and adaptation of buildings should be carried out in accordance with the law.
11. Build capacities, equip, and train civil protection units; Train personnel in first aid.

Measles

1. Increase vaccination coverage.
2. Continuous information for the population, especially parents, from pediatricians and epidemiologists aimed at improving parents' knowledge about the importance of vaccination, providing accurate information, and strengthening parents' trust in this method of children's healthcare.
3. Conduct supplementary immunization for unvaccinated and partially vaccinated individuals.
4. Strengthen human and technical capacities.
5. The Health Council of Bor has adopted program activities—there is a lack of goodwill to implement the adopted activities.

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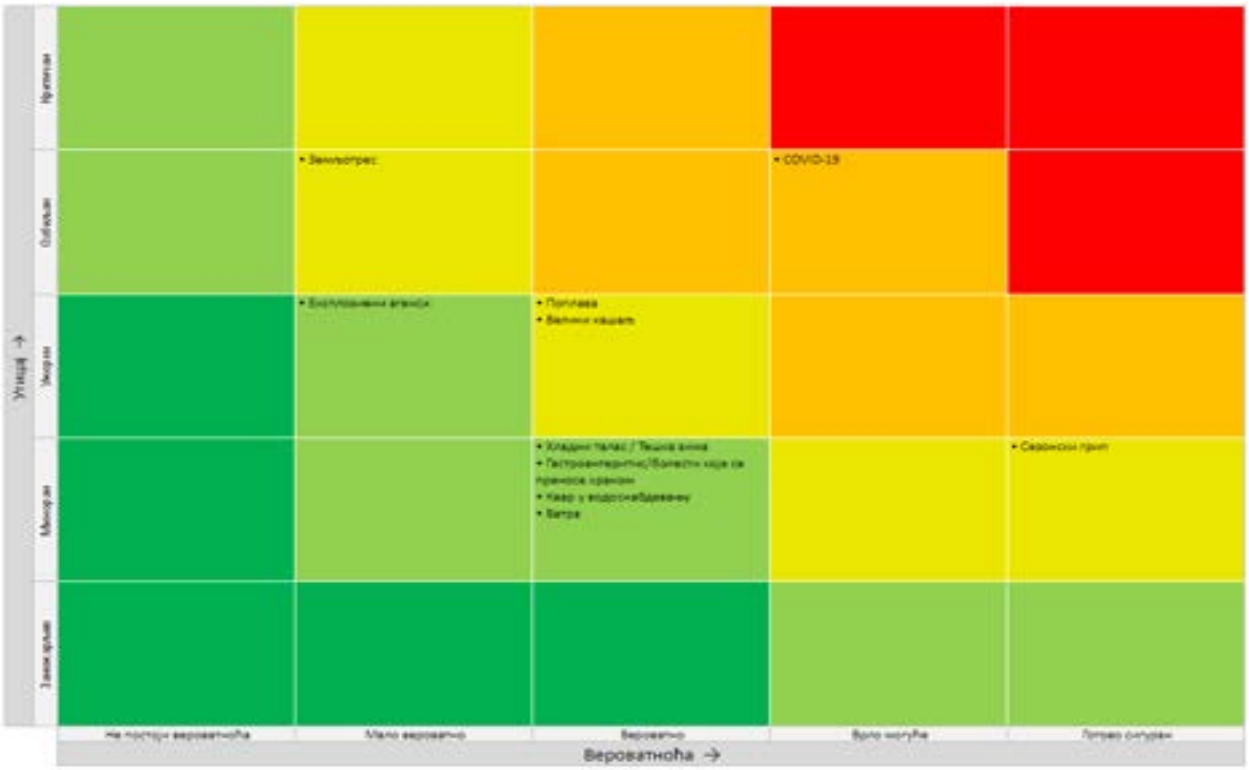
2. Municipality of Kladovo

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Озбиљан	Висок	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Делимична	Низак
Поплава	Умерен	Вероватно	Умерен	Висок	Делимична
Сезонски грип	Умерен	Готово сигуран	Минoран	Низак	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Низак	Делимична
Експлозивни агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Вероватно	Минoран	Низак	Делимична
Квар у водоснабдевању	Низак	Вероватно	Минoран	Низак	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Future fiscal support from the government or other sources should be targeted and strategically invested in priority sectors—including healthcare, social protection, IT infrastructure for education and the economy, and green incentive programs that promote environmentally responsible transformation.
2. It is equally important to ensure optimal continuity of health services for non-COVID-19 issues during the emergency situation.
3. Since non-communicable diseases (NCDs) are the main causes of morbidity and mortality in Serbia, and since there is a link between NCD-related mortality and COVID-19, prevention and changes towards a healthier lifestyle are crucial.
4. Greater emphasis should be placed on PREVENTION and the promotion of healthy lifestyles (including promoting non-smoking, physical exercise, nutrition, and reducing air pollution, as well as other important behavioral health factors).
5. Strengthen the human resources structure.
6. Provide necessary diagnostic equipment.
7. Strengthen multi-sectoral cooperation and coordination.

MODERATE RISK

Earthquake

1. Establish a monitoring and recording system (recording important structures sensitive to strong tremors, creating plans for protective measures for the population and property, and engaging trained personnel for monitoring).
2. Develop and update planning monitoring documents (hazard maps, seismic zoning maps, conduct geodynamic monitoring, microseismic regionalization).
3. Develop/Update the Protection and Rescue Plan.
4. Establish cooperation and monitor notifications from the Republic Seismological Institute of Serbia.
5. Implement prescribed technical standards for the construction of high-rise buildings in seismic zones of IX degree seismicity according to the MCS scale.
6. Regularly maintain the readiness of firefighting and rescue units for rescue operations and extinguishing possible fires in case of an earthquake.

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7. Regularly check readiness and conduct exercises for members of the general-purpose civil protection unit.
8. Equip and train civil protection units.
9. Check capacities and procure material and technical means and other equipment.
10. Educate the population on how to respond in case of an earthquake.
11. Create a database listing buildings particularly sensitive to strong tremors.
12. Train the population, public enterprises, and businesses to respond in case of an earthquake.
13. Regularly monitor roadways, repair damage, and maintain clear access.
14. Ensure continuous passability of roadways and provide sufficient width for traffic according to the MCS scale.

Flood

1. Implement preventive-technical measures for flood protection (ensure necessary research, studies, and projects for taking measures and actions to increase the level of security against flooding).
2. Determine available resources, including technical, administrative, material, financial, human, and institutional resources for flood protection, including preparation of annual needs, balances, and budgets.
3. Develop training and education plans for civil protection units and citizens to improve preparedness in case of floods.
4. Daily monitor forecasts and water levels, planning maintenance measures for watercourses.
5. In cooperation with the RHMZ, find opportunities to install sufficient rain gauges in the municipality for better precipitation forecasting.
6. Maintain protective structures (repair critical points), repair existing and build new embankments.
7. Prohibit the construction of new facilities in flood wave zones.
8. Prohibit the storage of waste and garbage along riverbanks.
9. Purchase or rent mobile barriers for flood defense according to the needs and possibilities of the municipality of Kladovo.
10. Prepare and increase capacity for early warning of the evacuation of the population, livestock, and organize the relocation of material and cultural goods. Form general-purpose civil protection units with the strength of a platoon.
11. Organize flood defense exercises for all stakeholders involved in protection and rescue.
12. Create a database listing facilities, roadways, and bridges that may be threatened in case of floods and determine alternative routes. Equip public enterprises and businesses to respond in case of floods.
13. Maintain communication with surrounding municipalities and cities regarding precipitation and water levels.

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14. Regularly check roadways, repair damage, and maintain clear access.

Perutssis (Whooping Cough)

1. Increase vaccination coverage.
2. Continuous information for the population, especially parents, from pediatricians and epidemiologists aimed at improving parents' knowledge about the importance of vaccination, providing accurate information, and strengthening parents' trust in this method of children's healthcare.
3. Conduct supplementary immunization for unvaccinated and partially vaccinated individuals.
4. Strengthen human and technical capacities.
5. Within the Health Council of the Municipality of Kladovo, it is necessary to improve intersectoral cooperation between the Local Government and Public Health Institute "TIMOK" in the preparation of planning documents, with the aim of implementing the Law on Public Health.

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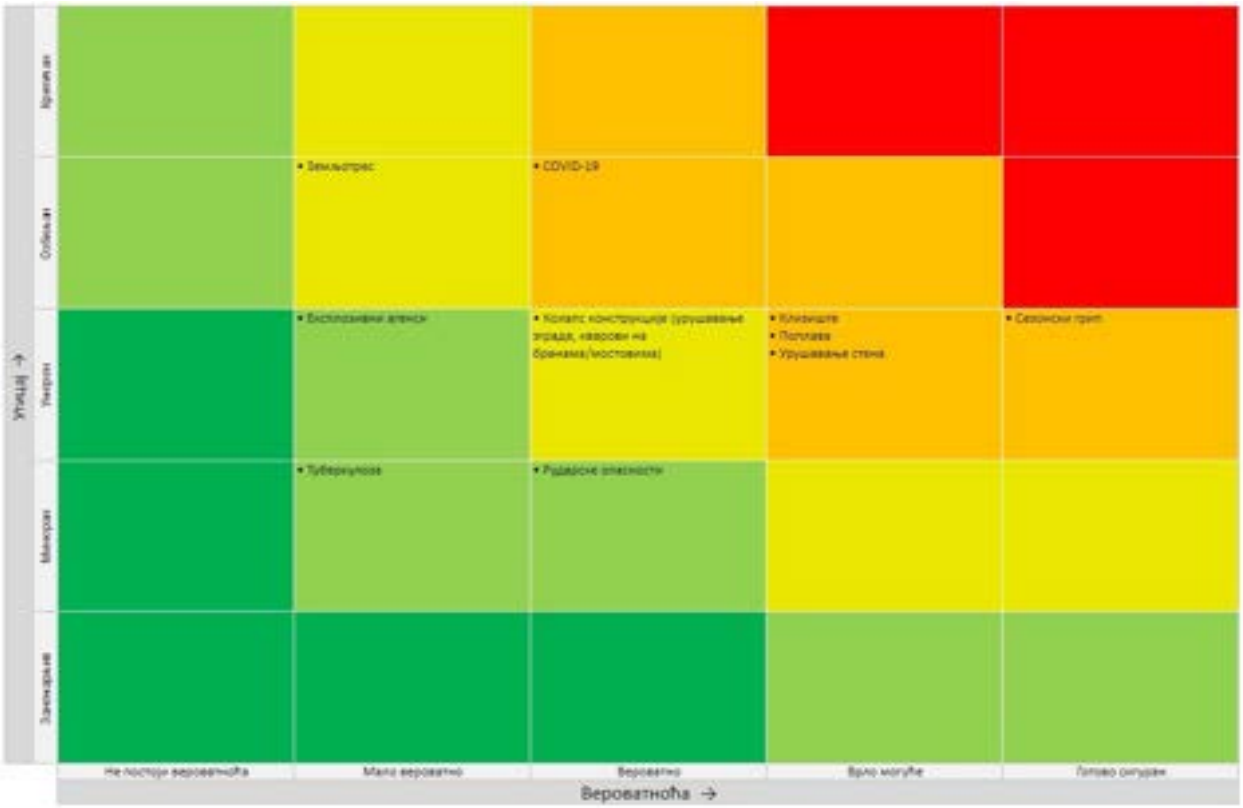
3. Municipality of Majdanpek

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Клизиште	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Урушавање стена	Висок	Врло могуће	Умерен	Делимична	Делимична
Експлозивни агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Колапс конструкције	Умерен	Вероватно	Умерен	Делимична	Делимична
Рударске опасности	Низак	Вероватно	Миноран	Низак	Делимична
COVID-19	Висок	Вероватно	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Низак	Делимична
Туберкулоза	Низак	Мало вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Increase the capacity of the public health system.
2. It is equally important to ensure optimal continuity of health services for non-COVID-19 issues during the emergency situation.
3. Since non-communicable diseases (NCDs) are the main causes of morbidity and mortality in Serbia, and since there is a link between NCD-related mortality and COVID-19, prevention and changes towards a healthier lifestyle are crucial.
4. Greater emphasis should be placed on PREVENTION and the promotion of healthy lifestyles (including promoting non-smoking, physical exercise, nutrition, and reducing air pollution, as well as other important behavioral health factors).
5. Strengthen multi-sectoral cooperation and coordination.
6. Strengthen public health.
7. Within the Health Council of the Municipality of Majdanpek, it is necessary to improve intersectoral cooperation between the Local Government and the Public Health Institute "TIMOK" in defining planning documents, with the aim of implementing the Law on Public Health.
8. Renovate the infectious disease department at the General Hospital in Zaječar.
9. Procure vehicles and disinfection pumps for the Public Health Institute TIMOK in Zaječar.

Seasonal Influenza

1. Increase the vaccination coverage, especially among the following risk groups:
2. Individuals in high-risk workplaces (educational workers, healthcare workers, banking and postal clerks, hospitality workers, especially those in close contact with people).
3. Adults with chronic heart diseases (hypertension, angina pectoris, cardiomyopathy, congenital heart defects, heart failure) and lung diseases (chronic obstructive pulmonary disease, asthma, cystic fibrosis).
4. Adults suffering from diabetes and kidney diseases.
5. Individuals over 65 years of age.
6. People living in dormitories and collective accommodation.
7. Strengthen human and technical capacities.

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Landslides

1. Adequate spatial and urban planning that considers areas prone to landslides.
2. Detailed urban planning for populated areas at risk of landslides.
3. Monitor and study regulations, laws, and sub-legal acts in the field of protection and rescue, and adjust as necessary.
4. Supplement the Decision on the organization of civil protection in the municipality.
5. Develop and update the Protection and Rescue Plan in case of landslides, with a special focus on mitigation. Ensure public awareness about the dangers and procedures in the event of landslides.
6. Install a notification system.
7. Define and create documents for monitoring, management, and protection of the notification system.
8. Build a system for rapid and safe evacuation of buildings in the event of landslides. Conduct communication checks.
9. Provide information about the state of infrastructure from the relevant authority.
10. Train personnel to manage documents, conduct notifications, monitor, and maintain records.
11. Equip the population to respond in case of danger.
12. Define all measures outlined in planning documents. Ensure public awareness about the dangers and procedures in the event of landslides.
13. Install a notification system.
14. Define and create documents for monitoring, management, and protection of the notification system.
15. Build a system for rapid and safe evacuation of buildings in the event of landslides. Conduct communication checks.
16. Provide information about the state of infrastructure from the relevant authority.
17. Train personnel to manage documents, conduct notifications, monitor, and maintain records.
18. Equip the population to respond in case of danger.
19. Define all measures outlined in planning documents.
20. Procure material and technical means for personal, mutual, and collective protection against natural disasters, technical-technological accidents, terrorism, wartime actions, and other major disasters based on the Regulation on mandatory means and equipment for personal, mutual, and collective protection against natural disasters and other accidents (Official Gazette of the Republic of Serbia, No. 3/2011, 37/2015).
21. Train residents for responding in case of landslides.
22. Ensure public awareness about the dangers and procedures.

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Flood

1. Adequate spatial and urban planning that considers areas prone to flooding.
2. Detailed urban planning for populated areas at risk of flooding.
3. Monitor and study regulations, laws, and sub-legal acts in the field of protection and rescue, and adjust normative acts as necessary for local government.
4. Develop and update the Protection and Rescue Plan in case of floods, with a special focus on mitigation.
5. Ensure public awareness about the dangers and procedures in case of floods. Utilize local information resources for early warning of potential dangers.
6. In the most vulnerable areas, develop a plan for rapid and safe evacuation of buildings in case of floods.
7. Maintain continuous communication to receive notifications and alerts about floods. Conduct communication checks.
8. Provide information about the state of infrastructure from the relevant authority.
9. Train personnel to manage documents, conduct notifications, monitor, and maintain records.
10. Equip the population to respond in case of danger.
11. Adequate spatial planning in accordance with the terrain, soil characteristics, and hydrological network.
12. Conduct geotechnical tests of existing and planned urban areas.
13. Conduct engineering-geological, hydrogeological, and other investigations.
14. Prohibit construction of low-rise and high-rise buildings in flood-prone areas and areas susceptible to landslides.
15. Permanently raise the level of readiness of response capacities in case of flooding through training and education of civil protection structures and the population by specialized institutions in the field of protection and rescue.
16. Procure material and technical means for personal, mutual, and collective protection against natural disasters, technical-technological accidents, terrorism, wartime actions, and other major disasters based on the Regulation on mandatory means and equipment for personal, mutual, and collective protection (Official Gazette of the Republic of Serbia, No. 3/2011, 37/2015).
17. Train residents for responding in case of floods.
18. Ensure public awareness about the dangers and procedures.
19. Ensure public awareness about monitoring results and records.
20. Provide education to the population about the potential for generating other hazards and measures for protection and rescue.

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21. Adopt a Decision on amendments to the Decision on designating competent legal entities for protection and rescue in accordance with changes in legal entities.
22. Fill units of general-purpose civil protection, equip them with uniforms, work clothes, and materials for work and training.
23. Implement training for civil protection commissioners and their deputies appointed for local communities.
24. Form a Municipal Emergency Situations Headquarters.
25. Appoint commissioners and deputies for civil protection for populated areas.
26. Designate competent legal entities for protection and rescue.
27. Prepare and enhance capacity for early warning of the evacuation of the population, livestock, and organize the relocation of material and cultural goods.

MODERATE RISK

Earthquake

1. Adequate periodic general and detailed urban planning and construction of buildings concerning the potential risk of earthquakes.
2. Monitor and study regulations, laws, and sub-legal acts in the field of protection and rescue, and adjust as necessary (if needed), supplementing the Decision on the organization of civil protection in the municipality.
3. Develop and update the Protection and Rescue Plan in case of an earthquake, with a special focus on the care of the affected population.
4. Monitor daily reports from the Seismological Institute of Serbia on registered earthquakes in Serbia.
5. Adequate spatial planning in accordance with the terrain, soil characteristics, and hydrological network.
6. Conduct geotechnical studies of existing and planned urban areas.
7. Conduct engineering-geological, hydrogeological, and other studies.
8. Before designing and constructing, determine the so-called seismic hazard, i.e., the degree of seismicity and design buildings for the expected level of seismicity, which includes preparing a report on seismic risk.
9. When determining seismic impacts on low-rise and especially high-rise buildings, consider the influence of local soil conditions.
10. Continuously raise the level of readiness of response capacities in case of earthquakes and multi-risk events, which is not at the required level in the municipality of Majdanpek, through training and education of civil protection structures and the population via specialized institutions in the field of protection and rescue.

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11. Procure material and technical means for personal, mutual, and collective protection against natural disasters, technical-technological accidents, terrorism, wartime actions, and other major disasters, based on the Regulation on mandatory means and equipment for personal, mutual, and collective protection against natural disasters and other accidents (Official Gazette of the Republic of Serbia, No. 3/2011, 37/2015).
12. Train residents on actions to take in case of an earthquake; ensure public awareness about the dangers and procedures in the event of an earthquake.
13. Ensure public awareness about monitoring results and records; inform the population about planned housing arrangements in accordance with seismic characteristics of the terrain.
14. Provide education to the population about the potential for generating other hazards and measures for protection and rescue.

Structural Collapse (Building Collapse, Failures of Dams/Bridges)

1. Adequate periodic general and detailed urban planning and construction of buildings concerning the potential risk of technical-technological accidents.
2. Monitor and study regulations, laws, and sub-legal acts in the field of protection and rescue, and adjust as necessary (if needed), supplementing the Decision on the organization of civil protection in the municipality.
3. Develop and update the Protection and Rescue Plan for emergency situations; ensure adequate spatial planning in accordance with the terrain, soil characteristics, and hydrological network.
4. Conduct geotechnical studies of existing and planned urban areas.
5. Conduct engineering-geological, hydrogeological, and other studies.
6. Before designing and constructing, prepare a risk assessment report.
7. Continuously raise the level of readiness of response capacities in case of technical-technological accidents, which is not at the required level in the municipality of Majdanpek.
8. Through training and education of civil protection structures and the population via specialized institutions in the field of protection and rescue.
9. Procure material and technical means for personal, mutual, and collective protection against natural disasters, technical-technological accidents, terrorism, wartime actions, and other major disasters, based on the Regulation on mandatory means and equipment for personal, mutual, and collective protection against natural disasters and other accidents (Official Gazette of the Republic of Serbia, No. 3/2011, 37/2015).
10. Train residents on actions to take in case of technical-technological accidents.
11. Ensure public awareness about the dangers and procedures.
12. Ensure public awareness about monitoring results and records.
13. Provide education to the population about the potential for generating other hazards and measures for protection and rescue.

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14. Form expert-operational teams for the civil protection headquarters for protection and rescue from technical-technological accidents in emergency situations.
15. Adopt a Decision on amendments to the Decision on designating competent legal entities for protection and rescue in accordance with changes in legal entities.
16. Complete units of general-purpose civil protection up to 100%, equip them with work clothing, uniforms, and materials for training.
17. Implement training for commissioners and deputy commissioners of civil protection appointed for local communities and training for the municipal headquarters for civil protection.
18. Ensure operational readiness for rescuing the affected in case of technical-technological accidents.

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4. Municipality of Negotin

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Клизиште	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Низак	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Низак
Шумски пожари	Умерен	Врло могуће	Минoран	Низак	Делимична
Експлозивни агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хепатитис Ц	Низак	Мало вероватно	Минoран	Низак	Делимична
ХИВ/АИДС	Низак	Мало вероватно	Минoран	Низак	Делимична
Туберкулоза	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Increase staffing capacity.
2. It is equally important to ensure optimal continuity of healthcare services for non-COVID-19 conditions during the state of emergency.
3. Since non-communicable diseases are the main cause of mortality and morbidity in Serbia, and there is a link between mortality related to non-communicable diseases and COVID-19, prevention and shifts towards healthier lifestyles are crucial.
4. Give greater emphasis to prevention and the promotion of healthy lifestyles (including promoting non-smoking, physical exercise, nutrition, and reducing air pollution, as well as other important behavioral health factors).
5. Strengthen multi-sectoral cooperation and coordination.
6. Strengthen public health.
7. Within the Health Council of the municipality of Majdanpek, it is necessary to improve intersectoral cooperation between the Local Government and the Public Health Institute "TIMOK" in Zaječar to define planning documents aimed at implementing the Public Health Law.

Seasonal Influenza

1. Increase vaccination coverage, especially among the following at-risk groups:
2. Individuals in high-risk occupations (teachers, healthcare workers, banking and postal service employees, hospitality workers, especially those in close contact with people).
3. Adults with chronic heart conditions (hypertension, angina pectoris, cardiomyopathy, congenital heart defects, heart failure) and lung diseases (chronic obstructive pulmonary disease, asthma, cystic fibrosis).
4. Adults suffering from diabetes and kidney diseases.
5. Individuals over 65 years of age.
6. Persons living in dormitories and collective housing.
7. Strengthen staffing and technical capacities.

Flood

1. It is essential that every normative act adopted at the municipal level includes flood risk and a system for protection and rescue.

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2. This is particularly important in the preparation of documents such as the Strategy for the Municipality of Negotin and the Strategy related to environmental protection.
3. It is necessary to regularly update the Operational Flood Defense Plan for torrential watercourses and secondary watercourses under the jurisdiction of local self-governments.
4. Ensure adequate spatial and urban planning that considers areas prone to flooding.
5. Detailed urban planning for populated areas at risk of flooding.
6. Monitor and study regulations, laws, and sub-legal acts in the field of protection and rescue, and as needed, make amendments and supplements to normative acts in the field of local government protection and rescue.
7. Develop and update the Protection and Rescue Plan in case of floods, with a special focus on care and adequate spatial planning in accordance with the terrain, soil characteristics, and hydrological network.
8. Conduct geotechnical studies of existing and planned urban areas.
9. Conduct engineering-geological, hydrogeological, and other studies.

Landslide

1. Assess the terrain with appropriate devices to evaluate the risk of potential landslides—identify red zones.
2. In the event of a landslide, evacuate the affected population in the shortest possible time.

MODERATE RISK

Earthquake

1. Adequate periodic general and detailed urban planning and construction of buildings concerning the potential risk of earthquakes.
2. Monitor and study regulations, laws, and sub-legal acts in the field of protection and rescue, and adjust as necessary (if needed), supplementing the Decision on the organization of civil protection in the municipality.
3. Develop and update the Protection and Rescue Plan in case of an earthquake, with a special focus on the care of the affected population.
4. Conduct geotechnical studies of existing and planned urban areas.
5. Conduct engineering-geological, hydrogeological, and other studies.
6. Before designing and constructing, determine the so-called seismic hazard, i.e., the degree of seismicity and design buildings for the expected level of seismicity, which includes preparing a report on seismic risk.
7. When determining seismic impacts on low-rise and especially high-rise buildings, consider the influence of local soil conditions.

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8. Conduct geotechnical studies of existing and planned urban areas.
9. Conduct engineering-geological, hydrogeological, and other studies.
10. Before designing and constructing, determine the so-called seismic hazard, i.e., the degree of seismicity and design buildings for the expected level of seismicity, which includes preparing a report on seismic risk.
11. When determining seismic impacts on low-rise and especially high-rise buildings, consider the influence of local soil conditions.
12. Complete units of general-purpose civil protection up to 100%, equip them with work clothing, uniforms, and materials for training.

Forest Fires

1. Improve monitoring and warning systems using the latest technologies (drones, etc.).
2. Educate the local population, including training for rapid response

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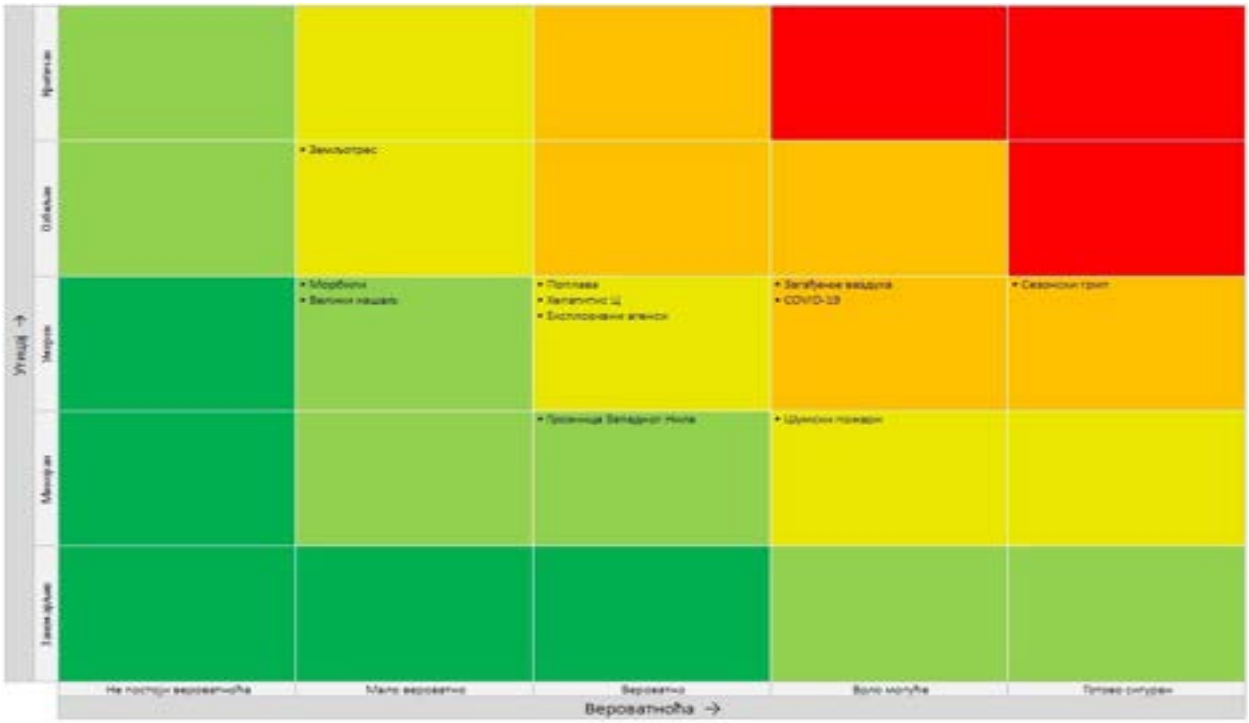
MORAVICA ADMINISTRATIVE DISTRICT

1. City of Čačak

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Умерен	Висок	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Висок	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Веома висок	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Ц	Умерен	Вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Умерен	Вероватно	Умерен	Низак	Делимична
Шумски пожари	Умерен	Врло могуће	Миноран	Низак	Делимична
Морбили	Низак	Мало вероватно	Умерен	Низак	Делимична
Велики кашаљ	Низак	Мало вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Низак	Вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase the coverage of vaccinated individuals each year through educational activities.
2. Reduce the influence of groups opposed to vaccination.

Air Pollution

1. Planned greening of public areas.
2. Use subsidies and motivate citizens for greater participation in the use of renewable energy sources.
3. Continuously improve the energy efficiency of all buildings in the city and surrounding areas.
4. Educate the population about all aspects of air pollution, including recommendations for actions in specific circumstances.

Gastroenteritis/Foodborne Diseases

1. Educate the population regarding hygiene measures for distribution.
2. Proper use and storage of food and water.

COVID-19

1. Maintain the established system of control and prevention for this disease.
2. Reduce the influence of groups opposed to vaccination.

MODERATE RISK

Earthquake

1. Additional education and theoretical verification of the readiness of leading city structures and authorities to respond in the event of an earthquake in the city of Čačak.
2. Attempt further improvements in the quality control of construction projects.

Flood

1. Include flood risk-related acts in the development of every new City Plan.
2. The Public Health Institute of Čačak should take the initiative in the City Health Council to create an additional strategy for reducing the risk of flood disasters from a health perspective.

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Hepatitis C

1. Promote testing and health checks for sexually transmitted diseases through all local electronic media.

Explosive Agents

1. Check how procedures related to the handling and work with explosive agents are implemented in all institutions where they are present.
2. Train as many people as possible in fire protection in all public institutions.

Forest Fires

1. Improve monitoring and warning systems using the latest technological advancements (drones, etc.).
2. Educate the local population, including training for rapid response and reporting.

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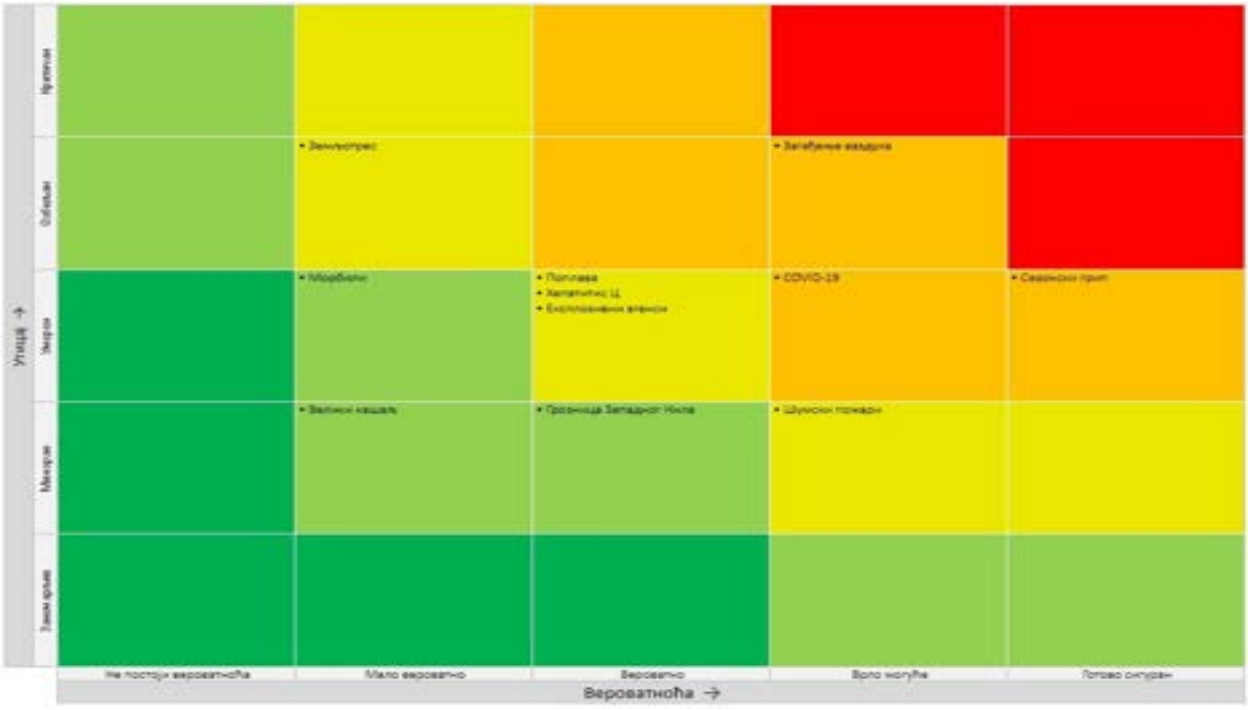
2. Municipality of Gornji Milanovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Озбиљан	Висок	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Висок	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Веома висок	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Ц	Умерен	Вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Умерен	Вероватно	Умерен	Низак	Делимична
Шумски пожари	Умерен	Врло могуће	Минoран	Низак	Делимична
Морбили	Низак	Мало вероватно	Умерен	Низак	Делимична
Велики кашаљ	Низак	Мало вероватно	Минoран	Делимична	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase the coverage of vaccinated individuals each year through educational activities.
2. Reduce the influence of groups opposed to vaccination.

Air Pollution

1. Planned greening of public areas.
2. Use subsidies and motivate citizens for greater participation in the use of renewable energy sources.
3. Continuously improve the energy efficiency of all buildings in the city and surrounding areas.
4. Educate the population about all aspects of air pollution, including recommendations for actions in specific circumstances.

Gastroenteritis/Foodborne Diseases

1. Educate the population regarding hygiene measures for distribution.
2. Proper use and storage of food and water.

COVID-19

1. Maintain the established system of control and prevention for this disease.
2. Reduce the influence of groups opposed to vaccination.

MODERATE RISK

Earthquake

1. Additional education and theoretical verification of the readiness of leading city structures and authorities to respond in the event of an earthquake in the municipality of Gornji Milanovac.
2. Attempt further improvements in the quality control of construction projects.

Flood

1. Include flood risk-related acts in the development of every new City Plan.
2. The Public Health Institute of Čačak should take the initiative in the Health Council of the municipality of Gornji Milanovac to create an additional strategy for reducing the risk of flood disasters from a health perspective.

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Hepatitis C

1. Promote testing and health checks for sexually transmitted diseases through all local electronic media.

Explosive Agents

1. Check how procedures related to the handling and work with explosive agents are implemented in all institutions where they are present.
2. Train as many people as possible in fire protection in all public institutions.

Forest Fires

1. Improve monitoring and warning systems using the latest technological advancements (drones, etc.).
2. Educate the local population, including training for rapid response and reporting

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Municipality of Ivanjica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Умерен	Мало вероватно	Озбиљан	Веома висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Озбиљан	Висок	Низак
Морбили	Низак	Мало вероватно	Умерен	Низак	Делимична
Велики кашаљ	Низак	Мало вероватно	Минoран	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Висок	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Хепатитис Ц	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Делимична
Шумски пожари	Умерен	Врло могуће	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase the coverage of vaccinated individuals each year through educational activities.
2. Reduce the influence of groups opposed to vaccination.

Air Pollution

1. Planned greening of public spaces.
2. Use subsidies and motivate citizens to participate more in the use of renewable energy sources.
3. Continuously improve the energy efficiency of all buildings in the city and surrounding areas.
4. Educate the population about all aspects of air pollution, including recommendations for actions in specific circumstances.

Gastroenteritis/Foodborne Diseases

1. Educate the population regarding hygiene measures for distribution.
2. Proper use and storage of food and water.

COVID-19

1. Maintain the established system of control and prevention for this disease.
2. Reduce the influence of groups opposed to vaccination.

MODERATE RISK

Earthquake

1. Additional education and theoretical verification of the readiness of leading city structures and authorities to respond in the event of an earthquake in the city of Čačak.
2. Attempt further improvements in the quality control of construction projects.

Flood

1. Include flood risk-related acts in the development of every new City Plan.
2. The Public Health Institute of Čačak should take the initiative in the Health Council of the municipality of Ivanjica to create an additional strategy for reducing the risk of flood disasters from a health perspective.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Hepatitis C

1. Promote testing and health checks for sexually transmitted diseases through all local electronic media.

Forest Fires

1. Improve monitoring and warning systems using the latest technological advancements (drones, etc.).
2. Educate the local population, including training for rapid response and reporting.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Lučani

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Озбиљан	Висок	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Висок	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Веома висок	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Ц	Умерен	Вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Умерен	Вероватно	Умерен	Низак	Делимична
Шумски пожари	Умерен	Врло могуће	Миноран	Низак	Делимична
Морбили	Низак	Мало вероватно	Умерен	Низак	Делимична
Велики кашаљ	Низак	Мало вероватно	Миноран	Делимична	Делимична
Грозница Западног Нила	Низак	Вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase the coverage of vaccinated individuals each year through educational activities.
2. Reduce the influence of groups opposed to vaccination.

Air Pollution

1. Planned greening of public spaces.
2. Use subsidies and motivate citizens to participate more in the use of renewable energy sources.
3. Continuously improve the energy efficiency of all buildings in the city and surrounding areas.
4. Educate the population about all aspects of air pollution, including recommendations for actions in specific circumstances.

Gastroenteritis/Foodborne Diseases

1. Educate the population regarding hygiene measures for distribution.
2. Proper use and storage of food and water.

COVID-19

1. Maintain the established system of control and prevention for this disease.
2. Reduce the influence of groups opposed to vaccination.

MODERATE RISK

Earthquake

1. Additional education and theoretical verification of the readiness of leading city structures and authorities to respond in the event of an earthquake in the municipality of Lučani.
2. Attempt further improvements in the quality control of construction projects.

Flood

1. Include flood risk-related acts in the development of every new City Plan.
2. The Public Health Institute of Čačak should take the initiative in the Health Council of the municipality of Lučani to create an additional strategy for reducing the risk of flood disasters from a health perspective.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Hepatitis C

1. Promote testing and health checks for sexually transmitted diseases through all local electronic media.

Explosive Agents

1. Check how procedures related to handling and working with explosive agents are implemented in all institutions where they exist.
2. Train as many people as possible in fire safety in all public institutions.

Forest Fires

1. Improve monitoring and warning systems using the latest technological advancements (drones, etc.).
2. Educate the local population, including training for rapid response and reporting

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RAŠKA ADMINISTRATIVE DISTRICT

1. City of Kraljevo

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Загађење ваздуха	Веома висок	Готово сигуран	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Висок	Висок
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Висок
COVID-19	Висок	Готово сигуран	Умерен	Висока	Делимичан
Суша	Висок	Вероватно	Озбиљан	Висока	Делимичан
Топлотни талас	Висок	Врло могуће	Озбиљан	Висока	Делимичан
Земљотрес	Висок	Врло могуће	Озбиљан	Висока	Делимичан
Поплава	Умерен	Вероватно	Умерен	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Висок	Висок

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

Air Pollution

1. Measures to be taken for better air quality.
2. Zonal planning and implementation of urban plans strictly according to zones.
3. Planning and greening of public spaces and corridors along traffic routes.
4. Planned greening of abandoned, unused areas often used for waste disposal.
5. Limiting the height of residential and commercial buildings and positioning them according to wind roses and ventilation possibilities in the city.
6. Regular cleaning and washing of streets and roads, as well as public spaces, walkways, and parking lots.
7. Reducing pollution through plans to decrease sources of air pollution, particularly from traffic, construction activities, and industry.
8. Creating a registry of air pollutants that measures air quality in the community, providing data on the location, type, quantity, and composition of emitted pollutants, sources of harmful substances, and the energy-technology conditions under which they are emitted into the atmosphere, as well as the temporal and spatial distribution of pollutants in Kraljevo, enabling spatial and temporal forecasting of air pollution levels.
9. Modifying traffic regimes in the city of Kraljevo.
10. Heating and gasifying parts of the city and using renewable energy sources while applying energy efficiency measures. Improving the air quality monitoring system in accordance with the current legal regulations of the Republic of Serbia and EU directives.
11. Measuring pollution at city intersections from motor vehicles and determining the level of pollution from carbon monoxide, ground-level ozone, polycyclic aromatic hydrocarbons, etc. Based on the results, influencing changes in traffic regimes and potentially introducing ecological traffic lights at critical points.
12. Ongoing education of the population to raise awareness about reducing air pollution, including field actions involving citizens.

HIGH RISK

Seasonal Influenza

1. Increase the coverage of vaccinations.

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2. Consider PCR diagnostics in the Public Health Institute of Kraljevo.
3. Increase the number of beds in the Public Health Institution "Studenica" Kraljevo.
4. Strengthen staffing capacities.
5. Health Council - develop operational plans.

West Nile Virus

1. Consider PCR diagnostics in the Public Health Institute of Kraljevo.
2. Increase the number of beds in the Public Health Institution "Studenica" Kraljevo.
3. Strengthen staffing capacities.
4. Health Council - develop operational plans.
5. Reclamation of wetland areas.

COVID-19

1. Procure vaccines at the national level.
2. Increase the number of beds in the Public Health Institution "Studenica" Kraljevo.
3. Strengthen staffing capacities.
4. Health Council - develop operational plans.

Drought

1. In terms of strategic and regulatory documents, it is necessary to include drought risk in every document related to drought-affected areas and protection systems.
2. Incorporate drought risk in planning and preparing regulatory acts.
3. This is particularly emphasized in the development of the following acts:
4. Strategies for the city of Kraljevo.
5. Environmental protection strategies and regulatory acts related to the management of city property.
6. Develop an Operational Response Plan for drought occurrences in the territory of the city of Kraljevo.
7. Develop short-term and long-term action plans to address drought occurrences.
8. Assess existing water supply capacities and plan new water sources.
9. Drought leads to disruptions in the supply of quality drinking water, jeopardizing the technical infrastructure of the water production and distribution system, as well as the operation of public utilities in this area.
10. Increased consumption and demand for water are expected, along with higher maintenance costs for the system, and deterioration in drinking water quality.

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11. Drought will primarily affect the population of municipalities without organized water supply, relying on personal wells, artificial captures, and captured natural sources, as the yield from wells and sources may decrease by 30-50%.
12. There is a need for alternative water supply solutions.
13. Prolonged drought can lead to the drying up of certain sources, resulting in limited availability of drinking water.
14. Roads, railways, and all forms of transportation and public transport are affected, impacting mobility.
15. Public enterprises and businesses need to respond to the consequences of drought, including surveying and repairing damaged transport routes.
16. During drought and hot periods, electricity consumption for cooling increases. Due to the overload of power lines and substations, interruptions in electricity supply occur.

Earthquake

1. Develop a Disaster Risk Reduction Plan.
2. Strengthen civil protection units.
3. Enhance the visibility of the alert system throughout the territory.
4. Establish continuous education for the population on how to act in case of an earthquake.
5. Strengthen staffing capacities of health institutions at all levels of healthcare.

Heat Wave

1. Develop short-term and long-term action plans to address heat wave occurrences.
2. Assess existing water supply capacities and plan new water sources.
3. Heat waves disrupt the supply of quality drinking water, jeopardizing the technical infrastructure of the water production and distribution system, as well as the functioning of public utilities in this area.
4. Increased consumption and demand for water are expected, along with higher maintenance costs for the system, and deterioration in drinking water quality.
5. Heat waves will primarily affect the population of municipalities without organized water supply, relying on personal wells, artificial captures, and captured natural sources, as the yield from wells and sources may decrease by 30-50%.
6. There is a need for alternative water supply solutions.
7. Prolonged drought can lead to the drying up of certain sources, resulting in limited availability of drinking water.
8. Roads, railways, and all forms of transportation and public transport are affected, impacting mobility.

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9. Public enterprises and businesses need to respond to the consequences of drought, including surveying and repairing damaged transport routes.
10. During drought and hot periods, electricity consumption for cooling increases.
11. Due to the overload of power lines and substations, interruptions in electricity supply occur.
12. The population is timely and continuously informed about drought and heat wave occurrences.
13. Public information channels provide advice on mitigating negative impacts on life and health, the economy, ecology, and social stability.
14. Rational consumption of drinking water and electricity is advised.
15. Involve representatives of the Public Health Institute of Kraljevo in the Health Council and develop a Public Health Plan

MODERATE RISK

Flood

1. When it comes to strategic and regulatory acts, it is necessary to include flood risk in every document related to flood-prone areas and the protection and rescue system.
2. Incorporate flood risk in the planning and preparation of regulatory acts.
3. This is particularly emphasized in the development of the following acts:
4. Strategies for the city of Kraljevo.
5. Environmental protection strategies and regulatory acts related to the management of city property.
6. Regularly update the Operational Flood Defense Plan for torrential watercourses and second-order watercourses under the jurisdiction of local government.

Measles

1. Increase vaccination coverage.
2. Consider PCR diagnostics in the Public Health Institute of Kraljevo.
3. Strengthen staffing capacities.
4. Health Council - develop operational plans.
5. Implement supplementary immunization for unvaccinated and partially vaccinated individuals

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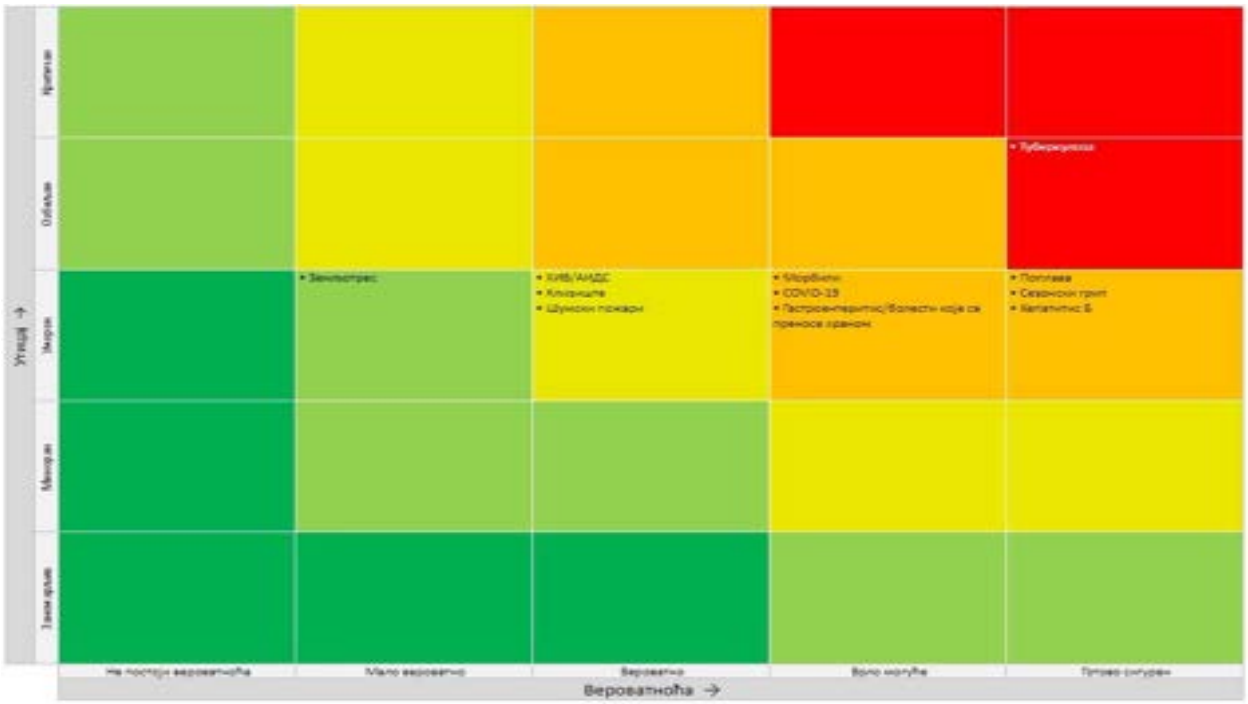
2. City of Novi Pazar

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Туберкулоза	Веома висок	Готово сигуран	Озбиљан	Висок	Низак
Поплава	Висок	Готово сигуран	Умерен	Делимична	Делимична
Морбили	Висок	Врло могуће	Умерен	Висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Висок	Делимична
Хепатитис Б	Висок	Готово сигуран	Умерен	Висок	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Делимична	Делимична
ХИВ/АИДС	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

Tuberculosis

1. Ensure conditions for rapid diagnosis and complete treatment for a duration of 6 months, with mandatory isolation.
2. Test all contacts for TB bacilli.
3. Resolve discrepancies regarding testing of contacts on two levels: children under 18 are tested at the Children's Health Care Service, while those over 18 are tested at the TB dispensary in Novi Pazar.

HIGH RISK

Floods

- In the city of Novi Pazar, it is essential to integrate flood risk into all strategic and regulatory acts related to flood-prone areas and the protection and rescue system.
- This approach should be specifically applied in the development of the following documents:

1. **Development Strategy for the City of Novi Pazar:**
    - This strategic document should include a flood risk assessment, with clear measures for risk reduction and adaptation to potential floods.
    - This includes the development of flood-resistant infrastructure and protection measures for critical facilities and public areas.
2. **Environmental Protection Strategy:**
    - This document should encompass measures for managing waterways and maintaining green areas that can contribute to reducing flood risk.
    - It should also include actions for erosion control and improving wastewater management.
3. **Regulatory Acts Related to the Management of City Property:**
    - When making decisions regarding the use of city property, especially in flood-prone areas, flood risk must be taken into account.
    - This includes conditions for the construction of new buildings or infrastructure in potentially endangered zones.
4. **Operational Flood Defense Plan for Torrential Watercourses and Second-Order Watercourses:**

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- This plan, under the jurisdiction of local government, needs to be regularly updated.
- The plan should include the latest data on torrential flows and risk assessments, as well as measures for timely intervention and evacuation of the population in case of floods.

5. **Priority Actions for Flood Management in the City of Novi Pazar:**
6. **Mapping Flood-Prone Areas:**
    - Update and specify maps of flood-prone areas within the city, including risk assessments for each area.
7. **Strengthening Defensive Infrastructure:**
    - Construct and maintain levees, embankments, and drainage channels in critical areas most susceptible to flooding.
8. **Education and Awareness Raising:**
    - Organize educational programs for citizens, especially those living in high-risk areas, on protective measures and procedures in case of floods.
9. **Intersectoral Cooperation:**
    - Strengthen cooperation between local government bodies, public enterprises, and the civil sector in planning and implementing flood protection measures.
10. **Enhancing Early Warning Systems:**
    - Develop and improve systems for early warning and informing citizens about impending floods, including the use of modern technologies and media.
11. **Revitalization of Watercourses:**
    - Implement measures for the natural revitalization of watercourses, including cleaning and rehabilitating riverbeds to reduce the risk of overflow and erosion.

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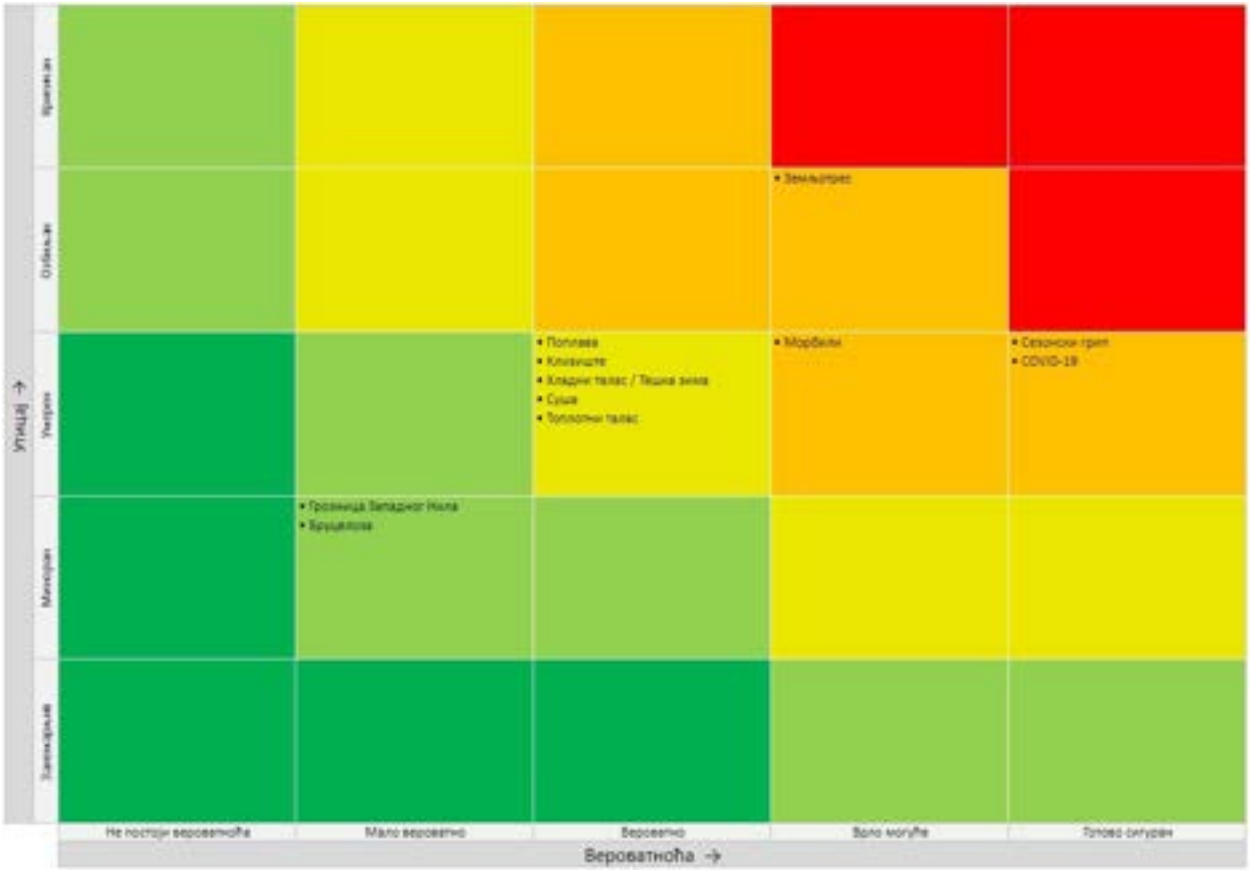
3. Municipality of Raška

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Висок	Висок
Морбили	Висок	Врло могуће	Умерен	Висок	Висок
COVID-19	Висок	Готово сигуран	Умерен	Висок	Висок
Земљотрес	Висок	Врло могуће	Озбиљан	Висок	Делимична
Поплава	Умерен	Вероватно	Умерен	Низак	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Низак	Мало вероватно	Минoран	Низак	Висок
Бруцелоза	Низак	Мало вероватно	Минoран	Низак	Висок

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Kraljevo.
3. Increase the number of beds at the "Studenica" General Hospital in Kraljevo.
4. Strengthen human resource capacities.

Measles

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Kraljevo.

COVID-19

1. Procure adequate vaccines at the national level.
2. Increase the number of beds at the "Studenica" General Hospital in Kraljevo.
3. Strengthen human resource capacities.

Earthquake

1. Develop a Disaster Risk Reduction Plan.
2. Strengthen civil protection units.
3. Enhance the audibility of the warning system throughout the territory.
4. Establish continuous education for the population on actions to take in case of an earthquake.
5. Strengthen human resource capacities in health institutions at all levels of healthcare.

MODERATE RISK

Floods

1. In the upcoming period, it is essential to integrate flood risk into every document related to flood-prone areas and the protection and rescue system.
2. Include flood risk in planning and preparing regulatory acts.
3. This is especially important in the development of the following acts:
    - Strategy for the Municipality of Raška.

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- Environmental protection strategies and regulatory acts related to the management of municipal property.

4. Regularly update the Operational Flood Defense Plan for torrential watercourses and second-order watercourses under the jurisdiction of local self-governments.

Landslide

1. Spatial planning should consider establishing and strictly adhering to standards, criteria, and regulations for planning, designing, and constructing, as well as maintaining all structures to protect against landslides as defined by law.
2. The first preventive measure involves a ban on construction in landslide-prone areas; the second involves regulating the drainage of surface and groundwater; the third involves building retaining walls to necessary depths to prevent soil sliding and protect nearby areas and structures or creating barriers in watercourses at the base of landslides.
3. In cases where existing structures are affected by landslides, construction works must be undertaken to stabilize the soil and divert water from landslide-prone areas.
4. Urban plans and construction will implement preventive measures for landslide protection.

Cold Wave / Severe Winter

1. Municipality of Raška administration.
2. Develop a protection and rescue plan for the municipality of Raška.
3. Study the impact of snowfall and wind during winter on the functioning of traffic in the municipality of Raška.
4. Identify available resources, including technical, administrative, material, financial, human, and institutional, for implementing measures against snowstorms and drifts, including preparing annual needs, balances, and budgets.
5. Develop training and education plans for civil protection units and citizens for better preparedness in the event of snowstorms and drifts; JKP "Raška" and JKP "Roads Raška" should monitor precipitation forecasts daily and plan snow removal measures.
6. The Emergency Situations Headquarters of the municipality of Raška should prepare and increase capacity for early evacuation announcements, update general-purpose civil protection units, create a database of structures, routes, and settlements, and ensure public enterprises are equipped for response to snowstorms and maintain communication with neighboring municipalities/cities about precipitation and road conditions.

Drought

1. Drought disrupts the supply of quality drinking water and threatens the technical infrastructure of the water production and distribution system, affecting the operation of public utilities in this area.
2. Increased consumption and demand for water, higher maintenance costs, and worsening drinking water quality are expected.

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3. Drought will mainly affect the population of the municipality that lacks organized water supply and relies on its own wells, artificial intakes, and captured natural springs, as the yield of wells and springs will decrease by 30-50%.
4. There is a need for alternative water supplies.
5. Prolonged drought may lead to the drying up of certain water sources, resulting in limited access to drinking water.
6. Roads, rail transport, and all means of transport, including public transport, are affected, impacting people's mobility.
7. Public enterprises and companies must respond to mitigate the effects of drought, including surveying and repairing damaged transport routes.
8. During droughts and hot periods, electricity consumption increases for cooling purposes.
9. Overloading of electrical lines and substations may cause power supply interruptions.
10. The population is informed timely and continuously about drought occurrences and heat waves.
11. Public information media issue advice on ways to mitigate negative impacts on life and health, the economy, ecology, and social stability. Rational consumption of drinking water and electricity is advised.

Heat Wave

1. Develop short-term and long-term action plans to address heat waves.
2. Assess existing water supply capacities and plan new water sources.
3. Heat waves disrupt the supply of quality drinking water and threaten the technical infrastructure of the water production and distribution system.
4. Increased consumption and demand for water, higher maintenance costs, and worsening drinking water quality are expected.
5. Heat waves will most affect populations without organized water supply, relying on personal wells, artificial intakes, and natural springs, as the yield of these sources may decrease by 30-50%.
6. There is a need for alternative water supplies.
7. Prolonged drought may lead to the drying up of certain water sources, causing limited access to drinking water.
8. Transport routes, railways, and all transport means, including public transport, are affected, impacting people's mobility.
9. Public enterprises and companies must respond to mitigate the effects of drought, including surveying and repairing damaged transport routes.
10. Increased electricity consumption occurs during hot periods for cooling purposes.
11. Overloading of electrical lines and substations may lead to power supply interruptions.

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12. The population is informed timely and continuously about drought occurrences and heat waves.
13. Public information media provide advice on mitigating negative impacts on life and health, the economy, ecology, and social stability.
14. Rational consumption of drinking water and electricity is advised.

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4. Municipality of Vrnjačka Banja

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Висок	Висок
Морбили	Висок	Врло могуће	Умерен	Висок	Висок
COVID-19	Висок	Готово сигуран	Умерен	Висок	Висок
Поплава	Умерен	Вероватно	Умерен	Низак	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Низак	Мало вероватно	Минoран	Делимична	Висок
Бруцелоза	Низак	Мало вероватно	Минoран	Низак	Висок
Земљотрес	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Kraljevo.
3. Increase the number of beds at the Public Healthcare Institution "Studenica" Kraljevo.
4. Strengthen human resource capacities.

Measles

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Kraljevo.

COVID-19

1. Acquire adequate vaccines at the national level.
2. Increase the number of beds at the Public Healthcare Institution "Studenica" Kraljevo.
3. Strengthen human resource capacities.

MODERATE RISK

Flood

1. When it comes to strategic or regulatory acts, it is necessary to include flood risk in every document related to flood-prone areas and the protection and rescue system.
2. Include flood risk in planning and preparing regulatory acts.
3. This is particularly emphasized in the development of the following acts:
    - Strategy of the municipality of Vrnjačka Banja.
    - Environmental protection strategies and regulatory acts related to the management of municipal property in Vrnjačka Banja.
4. Regularly update the Operational Flood Defense Plan for torrential watercourses and second-order watercourses under local government jurisdiction.

Landslide

1. Spatial planning should consider establishing and strictly adhering to standards, criteria, and norms for planning, designing, and constructing, as well as maintaining all structures to protect against landslides as defined by law.
2. The first preventive measure involves a construction ban in areas prone to sliding; the second relates to regulating the drainage of surface and groundwater from sliding-prone areas; the third involves building retaining walls to necessary depths to prevent soil sliding and subsequent threats to nearby areas and structures, or creating barriers on watercourses at the base of the landslide.
3. Given that certain already constructed structures may later be affected by landslides, construction work must be undertaken to stabilize the ground and divert water from areas that would be affected.
4. Preventive measures for landslide protection are implemented in urban plans and during construction.

Drought

1. Develop short-term and long-term action plans to address drought occurrence.

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2. Review existing water supply capacities and plan new water sources.
3. Drought causes disruptions in the supply of quality drinking water, jeopardizing the technical infrastructure of the drinking water production and distribution system, as well as the functioning of public utility companies in this area.
4. Increased consumption and demand for water, higher maintenance costs for the system, and deterioration of drinking water quality are expected.
5. The drought will primarily affect the population of the municipality that lacks organized water supply and relies on their own wells, artificial catchments, and captured natural springs, as the yield from wells and springs will be reduced by 30-50%.
6. There is a need for alternative water supply.
7. Due to prolonged drought, certain sources may dry up, leading to limited availability of drinking water.
8. Roads, railways, and all forms of public transport will be affected, thus impacting people's mobility.
9. Public enterprises and businesses need to act to mitigate the consequences of drought, including surveying and repairing damaged transport routes.
10. During dry and hot periods, electricity consumption for cooling increases.
11. Overloading of electrical lines and transformer stations can lead to interruptions in the electricity supply to consumers.
12. The population is informed in a timely and continuous manner about drought occurrences and heat waves.
13. Public information channels provide advice on mitigating the negative impacts on human life and health, the economy, ecology, and social stability.
14. Rational consumption of drinking water and electricity is advised.

Heat Wave

1. Develop short-term and long-term action plans to address the occurrence of heat waves.
2. Review existing water supply capacities and plan new water sources.
3. Heat waves cause disruptions in the supply of quality drinking water, jeopardizing the technical infrastructure of the drinking water production and distribution system, as well as the functioning of public utility companies in this area.
4. Increased consumption and demand for water, higher maintenance costs for the system, and deterioration of drinking water quality are expected.
5. Heat waves will primarily affect the population of the municipality that lacks organized water supply and relies on their own wells, artificial catchments, and captured natural springs, as the yield from wells and springs will be reduced by 30-50%.
6. There is a need for alternative water supply.
7. Prolonged drought can cause certain sources to dry up, resulting in limited availability of drinking water.
8. Roads, railways, and all forms of public transport will be affected, thus impacting people's mobility.
9. Public enterprises and businesses need to act to mitigate the consequences of drought, including surveying and repairing damaged transport routes.
10. During dry and hot periods, electricity consumption for cooling increases.
11. Overloading of electrical lines and transformer stations can lead to interruptions in the electricity supply to consumers.
12. The population is informed in a timely and continuous manner about drought occurrences and heat waves.

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13. Public information channels provide advice on mitigating the negative impacts on human life and health, the economy, ecology, and social stability.
14. Rational consumption of drinking water and electricity is advised.
15. Responsible authorities:
    - Municipality of Vrnjačka Banja (Municipal Emergency Headquarters);
    - Ministry of Internal Affairs of the Republic of Serbia;
    - Ministry of Finance;
    - Republic Hydrometeorological Institute.
16. Inclusion of representatives from the Public Health Institute in Kraljevo.
17. A public health plan needs to be developed

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5. Municipality of Tutin

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Туберкулоза	Веома висок	Готово сигуран	Озбиљан	Висок	Низак
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Морбили	Висок	Врло могуће	Умерен	Висок	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Хепатитис Б	Висок	Готово сигуран	Умерен	Висок	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
ХИВ/АИДС	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

Tuberculosis

1. Providing conditions for treatment and diagnosis:
2. Rapid diagnosis.
3. Enable access to modern diagnostic methods for quick and accurate identification of TB cases.
4. Complete treatment.
5. Ensure a 6-month treatment for TB, which includes regular medical check-ups, monitoring, and adequate therapy.
6. Isolation.
7. Mandatory isolation of individuals with TB to prevent the spread of infection to others.
8. Testing of contacts.
9. Testing of children.
10. Test children up to 18 years old at the Child and Youth Health Care Service at the Health Center in Tutin.
11. Testing of adults.
12. Test individuals over 18 years old at the ATD dispensary in the General Hospital in Novi Pazar.
13. Overcoming disagreements.
14. Coordination of healthcare levels.
15. Establish a clear division of responsibilities among different health services to avoid disagreements and ensure effective diagnosis and testing.
16. Cooperation with healthcare institutions.
17. Establish close cooperation with healthcare institutions in the region to ensure continuity in the treatment and testing of patients and their contacts.
18. These measures will ensure effective management of tuberculosis in the municipality of Tutin, providing rapid diagnosis, adequate treatment, and prevention of the spread of infection.

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HIGH RISK

Seasonal Influenza

1. The municipality of Tutin should undertake the following to prevent the spread of Seasonal Influenza:
2. Organize campaigns and ensure the availability of vaccines in healthcare facilities and through mobile teams.
3. Conduct informational campaigns via media and social networks.
4. Distribute educational materials in healthcare institutions and public places.
5. Provide medical and protective equipment in hospitals and health centers.
6. Train healthcare workers on best practices in the prevention and treatment of flu.
7. Facilitate rapid tests for flu diagnosis and early initiation of antiviral therapy.
8. Combat misinformation and provide accurate information from official sources.
9. Establish partnerships with schools, businesses, NGOs, and religious communities.
10. Organize public events and workshops to educate the population.
11. Regularly monitor and analyze data on flu cases.
12. Evaluate the effectiveness of measures and adjust strategies as needed.
13. These measures will ensure better protection for the population of the municipality of Tutin against Seasonal Influenza.

Measles

1. Priority actions in the city of Tutin to enhance capacities for the prevention and treatment of measles include:
2. Raising awareness.
3. Organizing public campaigns and educational workshops on the importance of vaccination.
4. Training healthcare workers.
5. Regular training on current therapeutic protocols and preventive measures.
6. Utilizing media.
7. An active role for local media in informing citizens about risks and prevention.
8. Collaboration with NGOs and the community.
9. Involving local organizations in education and support.

COVID-19

1. Improvement of healthcare facilities.

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2. Expand the capacities of hospitals and clinics and procure necessary medical equipment.
3. Training of medical staff.
4. Organize regular training and specialization for the treatment of COVID-19.
5. Encouraging vaccination.
6. Conduct media campaigns and provide mobile vaccination teams in rural areas.
7. Increase the number of tests conducted.
8. Open new testing sites and introduce rapid tests for early detection of the virus.
9. Monitoring and control.
10. Establish a contact tracing system and regularly inform the public about the epidemiological situation.
11. Support for the population.
12. Provide psychological support and social assistance to the most vulnerable groups.
13. Cooperation and coordination.
14. Collaborate with local and international institutions for coordination of measures and exchange of best practices.

Hepatitis B

1. Targeted campaigns.
2. Raise awareness about hepatitis B vaccination, especially in at-risk groups.
3. Availability of vaccines.
4. Ensure the availability of vaccines in all healthcare institutions in the municipality of Tutin and organize mobile vaccination teams in remote areas.
5. Strengthening preventive measures.
6. Educate and inform about hepatitis B transmission, safe needle use, and protection during sexual intercourse.
7. Collaborate with educational institutions in health promotion.
8. Improve diagnosis and therapy.
9. Provide equipment for rapid diagnosis and treatment of hepatitis B.
10. Train healthcare workers on the latest protocols.
11. Strengthening the capacity of healthcare institutions.
12. Consider temporary health facilities or mobile clinics during the reconstruction of the clinical-hospital center.
13. Optimize resources and staff allocation for maximum efficiency.

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14. Monitoring and surveillance.
15. Establish a monitoring system for tracking hepatitis B cases and contacts.
16. Regular reporting and analysis of data on the incidence and progression of the disease.
17. Cooperation and coordination.
18. Inter-institutional cooperation among healthcare institutions in the municipality of Tutin.
19. Support from the local community and involvement of NGOs in prevention.
20. Financial support and resources.
21. Secure funding from governmental and international organizations.
22. Ensure transparency in the spending of funds to guarantee their effective use.
23. By implementing these measures in the municipality of Tutin, it is possible to significantly improve the situation regarding hepatitis B and reduce the risk of disease spread.

Gastroenteritis/Foodborne Diseases

1. Enhanced sanitary and inspection oversight in public food supply and consumption facilities (hotels, motels, restaurants, pizzerias).
2. Open kitchens for student meals and workers' nutrition in companies, reducing the risk of outbreaks of alimentary origin.

Flood

1. The priority action against flooding in the municipality of Tutin is the construction and maintenance of protective structures and drainage systems.
2. This includes the construction of channels, levees, and other flood protection structures, as well as regular cleaning and maintenance of existing infrastructure.
3. Additionally, it is necessary to update the Operational Flood Defense Plan and organize education for the population on measures they can take in case of floods.

MODERATE RISK

HIV/AIDS

1. Early detection, diagnosis, and treatment of individuals who test positive for HIV and those with AIDS.
2. Health education work, particularly with at-risk groups, in adhering to preventive measures and curbing the spread of this disease.
3. Enhanced control and detection of illegal sites and gatherings of IV drug users with active participation from law enforcement.

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Landslide

1. The priority action in the fight against landslides in the municipality of Tutin is mapping at-risk areas and implementing land stabilization measures.
2. This includes mapping landslide-prone zones, building retaining walls, and improving drainage to prevent erosion and reduce landslide risks.

Forest Fires

1. The priority action in combating forest fires in the municipality of Tutin is establishing firebreaks and regularly clearing vegetation.
2. This includes removing dry grass and shrubs in at-risk areas and forming protective barriers around forested areas to prevent the spread of fires.

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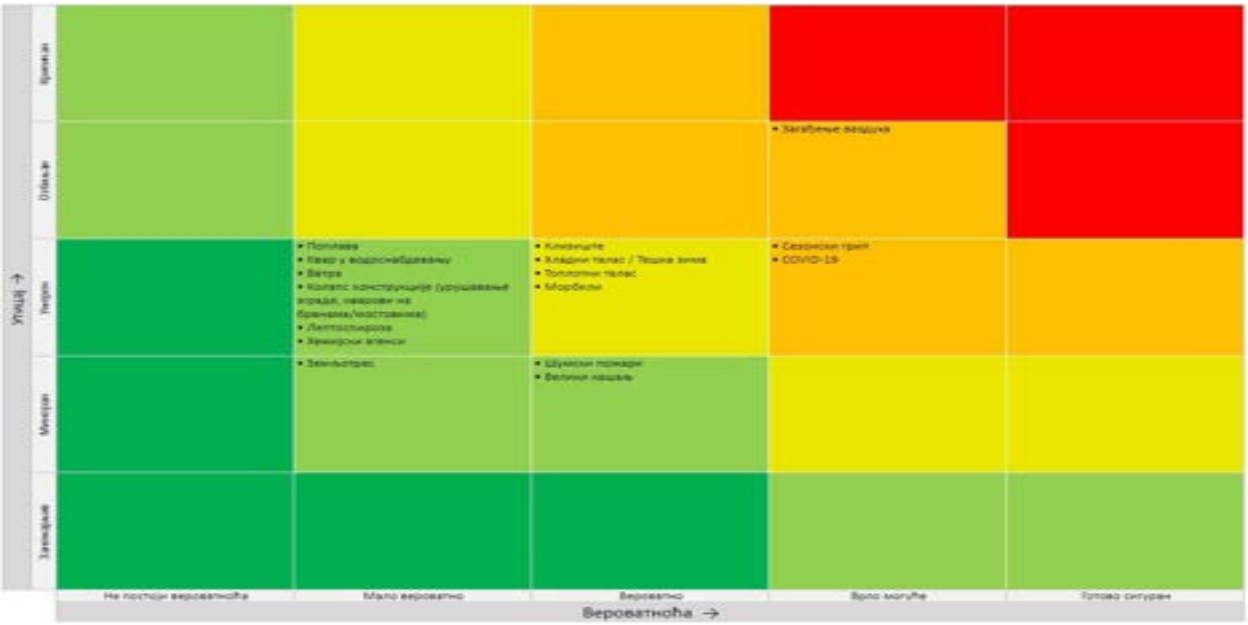
ZLATIBOR ADMINISTRATIVE DISTRICT

1. City of Užice

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Загађење ваздуха	Висок	Врло могуће	Озбиљан	Висок	Низак
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Минoран	Делимична	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Низак	Делимична
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Мало вероватно	Умерен	Делимична	Делимична
Колапс конструкције)	Низак	Мало вероватно	Умерен	Висок	Делимична
Велики кашаљ	Низак	Вероватно	Минoран	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Низак
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies; procurement of an ambulance for the Health Center in Užice.
2. Renovation of the infectious disease department in the General Hospital in Užice.
3. Procurement of ventilators.
4. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
5. Implementation of measures defined by the Health Council of the City of Užice.
6. Education of the population.

Air Pollution

1. Procurement of equipment necessary for air quality analysis and monitoring at the Public Health Institute in Užice (PM10, PM2.5, and TSP particle samplers, automatic measuring station for ambient air—measuring PM10, PM2.5, nitrogen oxides, sulfur dioxide, and carbon monoxide, microwave oven with extraction capability for measuring PAHs, inductively coupled plasma mass spectrometry for determining metals, gas chromatography-mass spectrometry with an additional column for PAH measurement, ion chromatograph).
2. Adaptation of the chemical laboratory space.
3. Increase the number of measuring points.
4. Subsidies for households from local government for transitioning from individual solid fuel heating to gas.

Seasonal Influenza

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies; procurement of an ambulance for the Health Center in Užice.
2. Renovation of the infectious disease department in the General Hospital in Užice.
3. Procurement of ventilators.
4. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
5. Implementation of measures defined by the Health Council of the City of Užice.
6. Education of the population.

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2. Municipality of Arilje

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Клизиште	Умерен	Врло могуће	Минoран	Низак	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Врло могуће	Минoран	Низак	Делимична
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Загађење ваздуха	Умерен	Вероватно	Умерен	Делимична	Низак
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Вероватно	Минoран	Делимична	Делимична
Туберкулоза	Низак	Мало вероватно	Умерен	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Низак
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Arilje.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Arilje.
7. Education of the population.

Seasonal Influenza

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Arilje; renovation of the infectious disease department in the General Hospital in Užice.
3. Procurement of ventilators.
4. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
5. Implementation of measures defined by the Health Council of the municipality of Arilje; education of the population.

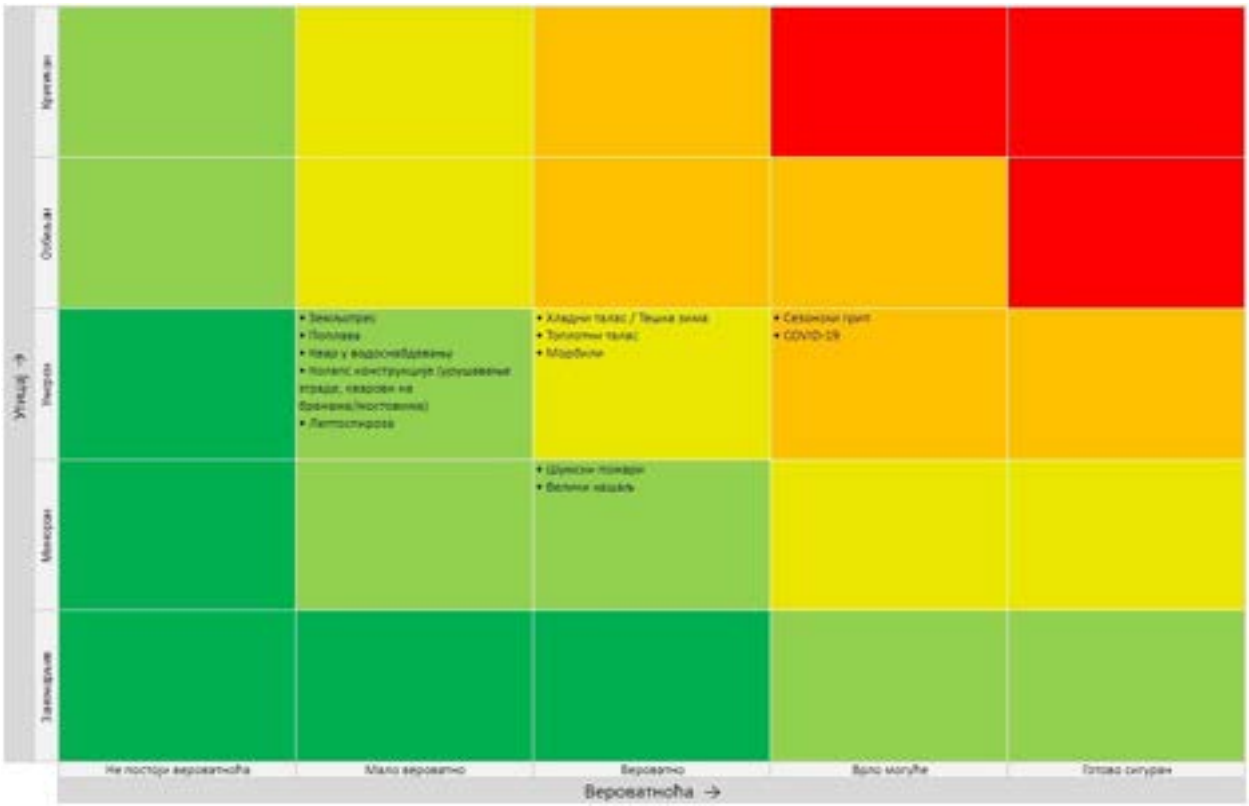
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Municipality of Bajina Bašta

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Вероватно	Миноран	Делимична	Делимична
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична
Колапс конструкције	Низак	Мало вероватно	Умерен	Висок	Делимична
Велики кашаљ	Низак	Вероватно	Миноран	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Низак

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Bajina Bašta.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Bajina Bašta.
7. Education of the population.

Seasonal Influenza

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Bajina Bašta.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Bajina Bašta.
7. Education of the population.

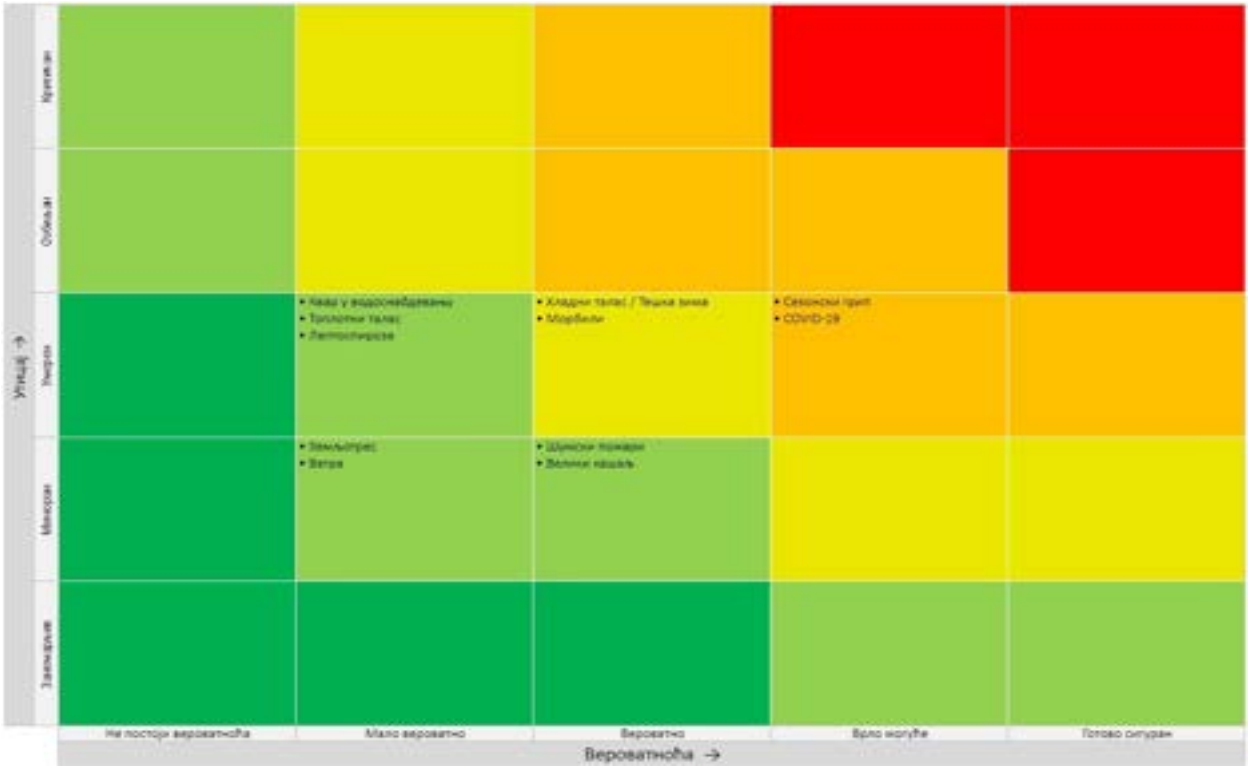
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Čajetina

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Минoран	Делимична	Делимична
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Низак	Делимична
Ватра	Низак	Мало вероватно	Минoран	Низак	Делимична
Топлотни талас	Низак	Мало вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Вероватно	Минoран	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Низак

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Čajetina.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Čajetina.
7. Education of the population.

Seasonal Influenza

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Čajetina.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Čajetina.
7. Education of the population.

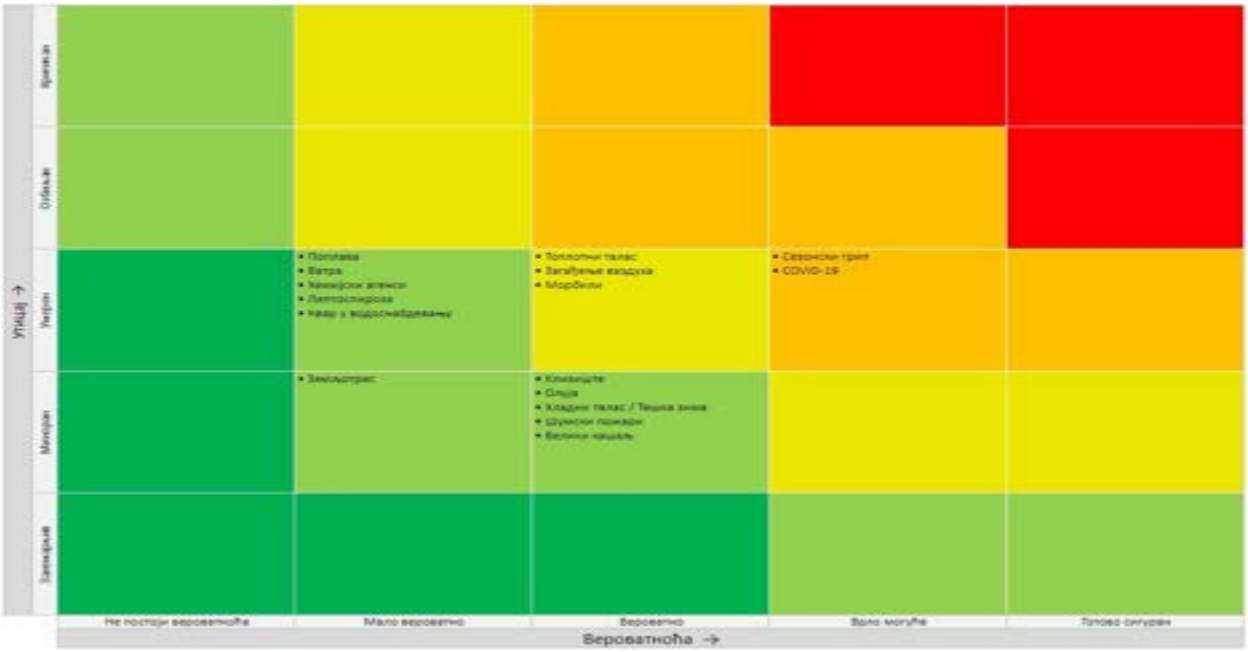
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Kosjerić

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Минoран	Делимична	Делимична
Клизиште	Низак	Вероватно	Минoран	Низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Олуја	Низак	Вероватно	Минoран	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Низак	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Низак	Делимична
Загађење ваздуха	Умерен	Вероватно	Умерен	Делимична	Низак
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Вероватно	Минoран	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Низак
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Kosjerić.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Kosjerić.
7. Education of the population.

Seasonal Influenza

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Kosjerić.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Kosjerić.
7. Education of the population.

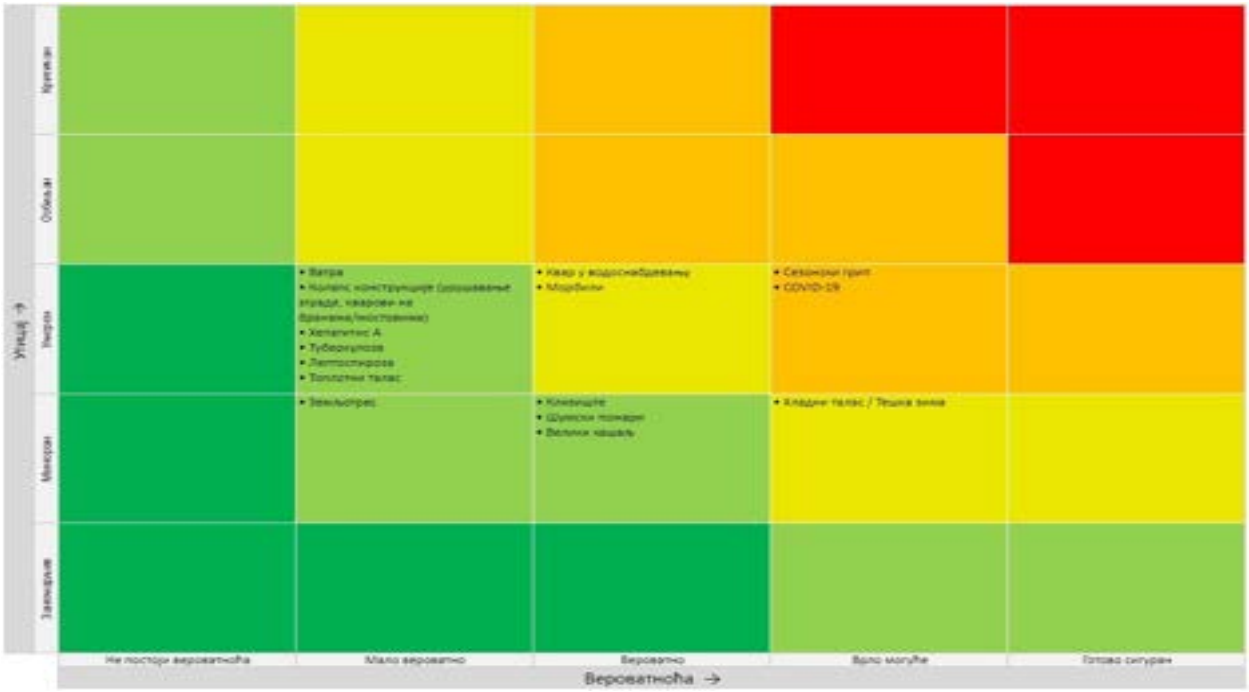
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Nova Varoš

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Минoран	Делимична	Делимична
Клизиште	Низак	Вероватно	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Умерен	Врло могуће	Минoран	Делимична	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Низак	Делимична
Ватра	Низак	Мало вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Делимична	Делимична
Колапс конструкције	Низак	Мало вероватно	Умерен	Висок	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Вероватно	Минoран	Делимична	Делимична
Хепатитис А	Низак	Мало вероватно	Умерен	Делимична	Низак
Туберкулоза	Низак	Мало вероватно	Умерен	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Низак
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Топлотни талас	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Nova Varos.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Nova Varos.
7. Education of the population.

Seasonal Influenza

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Nova Varos.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Nova Varos.
7. Education of the population.

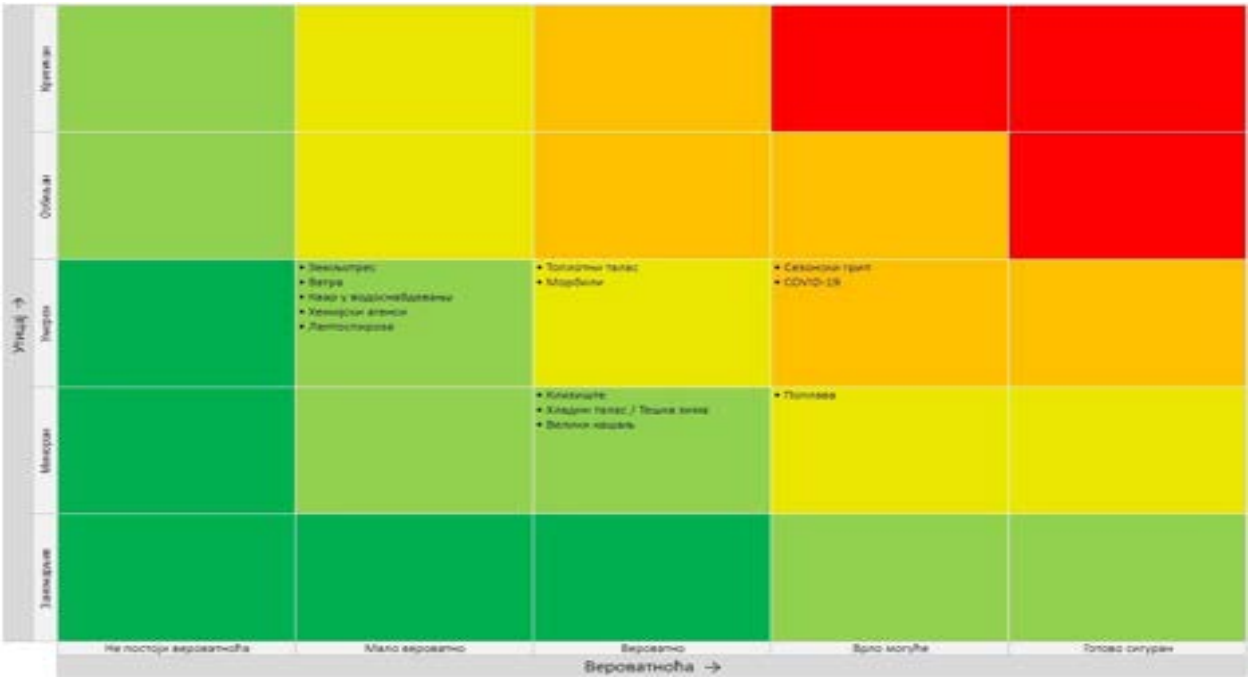
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. Municipality of Požega

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Врло могуће	Минoран	Низак	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Вероватно	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Низак	Делимична
Ватра	Низак	Мало вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Вероватно	Минoран	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Низак

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Požega.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Požega.
7. Education of the population.

Seasonal Influenza

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Požega.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Požega.
7. Education of the population.

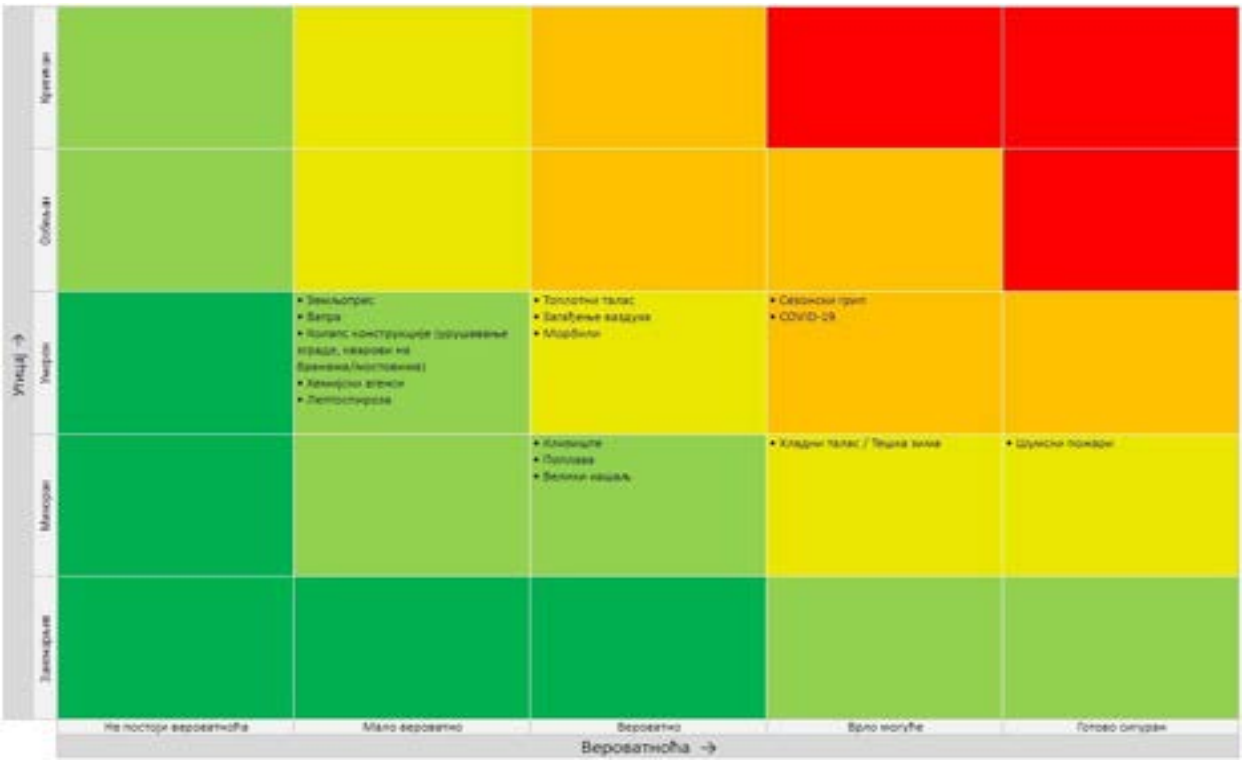
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

8. Municipality of Priboj

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Врло могуће	Минoран	Низак	Делимична
Шумски пожари	Умерен	Готово сигуран	Минoран	Низак	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Загађење ваздуха	Умерен	Вероватно	Умерен	Делимична	Низак
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Вероватно	Минoран	Низак	Делимична
Поплава	Низак	Вероватно	Минoран	Делимична	Делимична
Ватра	Низак	Мало вероватно	Умерен	Делимична	Делимична
Колапс конструкције	Низак	Мало вероватно	Умерен	Висок	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Вероватно	Минoран	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Низак

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Priboj.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Priboj.
7. Education of the population.

Seasonal Influenza

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Priboj.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Priboj.
7. Education of the population.

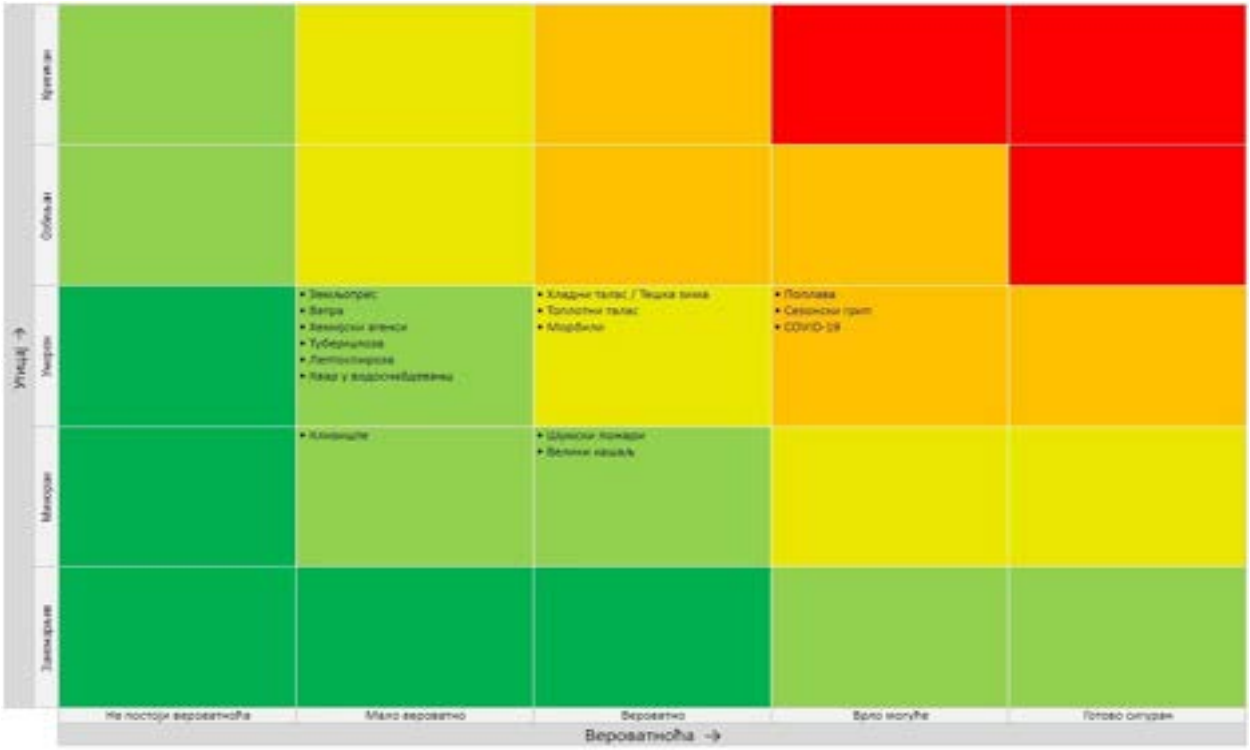
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Municipality of Prijepolje

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Мало вероватно	Минoран	Низак	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Низак	Делимична
Ватра	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Вероватно	Минoран	Делимична	Делимична
Туберкулоза	Низак	Мало вероватно	Умерен	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Prijepolje.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Prijepolje.
7. Education of the population.

Flood

1. Procurement of a sufficient number of field vehicles and pumping systems.
2. Strengthening the capacity of healthcare institutions at all levels of healthcare engaged in case of emergencies; implementation of measures defined by the Flood Defense Operational Plan.
3. Implementation of measures defined by the Health Council of the municipality of Prijepolje.
4. Education of the population.

Seasonal Influenza

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Prijepolje.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Prijepolje.
7. Education of the population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

10. Municipality of Sjenica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Врло могуће	Минoран	Делимична	Делимична
Хладни талас / Тешка зима	Висок	Готово сигуран	Умерен	Делимична	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Вероватно	Минoран	Делимична	Делимична
Хепатитис А	Низак	Мало вероватно	Умерен	Делимична	Низак
Туберкулоза	Низак	Мало вероватно	Умерен	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Низак
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Sjenica.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Sjenica.
7. Education of the population.

Cold Wave / Severe Winter

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Ensuring adequate machinery and personnel for maintaining transportation infrastructure during snowstorms; creating and continuously updating a database with a list of facilities, roadways, critical infrastructure parts, and households that may be threatened by snowstorms and snowdrifts.
3. Education of civil protection units and citizens on procedures in the event of snowstorms and snowdrifts.
4. Implementation of measures defined by the Health Council of the municipality of Sjenica.

Seasonal Influenza

1. Strengthening the capacity of healthcare institutions at all levels engaged in case of emergencies.
2. Procurement of an ambulance for the Health Center in Sjenica.
3. Renovation of the infectious disease department in the General Hospital in Užice.
4. Procurement of ventilators.
5. Procurement of a field vehicle and disinfection pumps for the Public Health Institute in Užice.
6. Implementation of measures defined by the Health Council of the municipality of Sjenica.
7. Education of the population.

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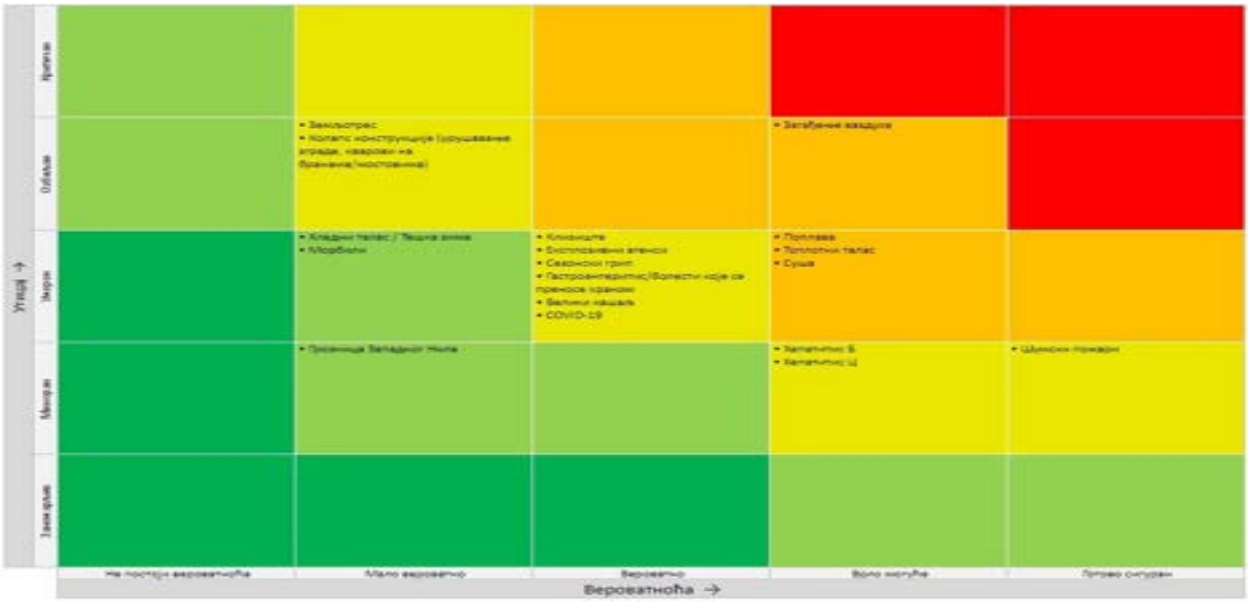
KOLUBARA ADMINISTRATIVE DISTRICT

1. City of Valjevo

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Топлотни талас	Висок	Врло могуће	Умерен	Делимична	Делимична
Суша	Висок	Врло могуће	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Озбиљан	Висок	Низак
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Умерен	Вероватно	Умерен	Низак	Делимична
Шумски пожари	Умерен	Готово сигуран	Минoран	Низак	Делимична
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Б	Умерен	Врло могуће	Минoран	Веома низак	Делимична
Хепатитис Ц	Умерен	Врло могуће	Минoран	Веома низак	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Делимична
COVID-19	Умерен	Вероватно	Умерен	Висок	Делимична
Колапс конструкције	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Низак	Мало вероватно	Минoран	Веома низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Development of a Disaster Risk Reduction Plan.
2. Formation of a Civil Protection Unit.
3. Procurement of field vehicles and pumping equipment.
4. Enhancing the audibility of the warning system throughout the territory.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Heat Wave

1. Development of a Disaster Risk Reduction Plan.
2. Formation of a Civil Protection Unit.
3. Procurement of field vehicles and water tanks.
4. Strengthening the staffing capacity of the Valjevo Health Center and the Valjevo Public Health Institute.
5. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Drought

1. Development of a Disaster Risk Reduction Plan.
2. Formation of a Civil Protection Unit.
3. Procurement of field vehicles and water tanks.
4. Strengthening the staffing capacity of the Valjevo Public Health Institute.
5. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Air Pollution

1. Development of a Disaster Risk Reduction Plan.
2. Formation of a Civil Protection Unit.

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3. Subsidies for households from local government for transitioning from individual heating systems to solid fuels for remote heating.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Procurement of equipment necessary for the analysis and monitoring of air quality for the chemical laboratory of the Valjevo Public Health Institute (e.g., PM particle samplers, Atomic Absorption Spectrometer, Gas Chromatograph), increasing the number of monitoring sites.
6. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

MODERATE RISK

Earthquake

1. Development of a Disaster Risk Reduction Plan.
2. Formation of a Civil Protection Unit.
3. Enhance the audibility of the warning system throughout the territory.
4. Establish continuous education for the population on actions to take in case of an earthquake.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Landslide

1. Development of a Disaster Risk Reduction Plan.
2. Formation of a Civil Protection Unit.
3. Procurement of field vehicles.
4. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Explosive Agents

1. Development of a Disaster Risk Reduction Plan.
2. Formation of a Civil Protection Unit.
3. Build a quality hydrant network in the city area.
4. Procurement of field vehicles and water tanks.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Procurement of equipment necessary for the analysis and monitoring of air quality for the Valjevo Public Health Institute.

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7. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Forest Fires

1. Development of a Disaster Risk Reduction Plan.
2. Formation of a Civil Protection Unit.
3. Procurement of field vehicles and water tanks.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Strengthening the staffing and technical capacities of firefighting and rescue units and forming volunteer fire departments.
6. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Seasonal

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
3. Procurement of PCR devices.
4. Establishment of a Health Council and inclusion of representatives from the Valjevo Public Health Institute, and the need to adopt a Public Health Plan.

Gastroenteritis/Foodborne Diseases

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Strengthening the capacities of inspection services.
3. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
4. Procurement of PCR devices.
5. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Hepatitis B

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Identification of vulnerable social groups with risky behaviors by local government.
3. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
4. Procurement of PCR devices.

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5. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Hepatitis C

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Identification of vulnerable social groups with risky behaviors by local government.
3. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
4. Procurement of PCR devices.
5. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Pertussis (Whooping Cough)

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Identification of vulnerable social groups by local government.
3. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
3. Procurement of PCR devices.
4. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Structural Collapse (Building Collapse, Dam/Bridge Failures)

1. Development of a Disaster Risk Reduction Plan.
2. Formation of a Civil Protection Unit.
3. Evacuation Plan.
4. Procurement of field vehicles, boats, rescue equipment, pumping equipment, and water tanks.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

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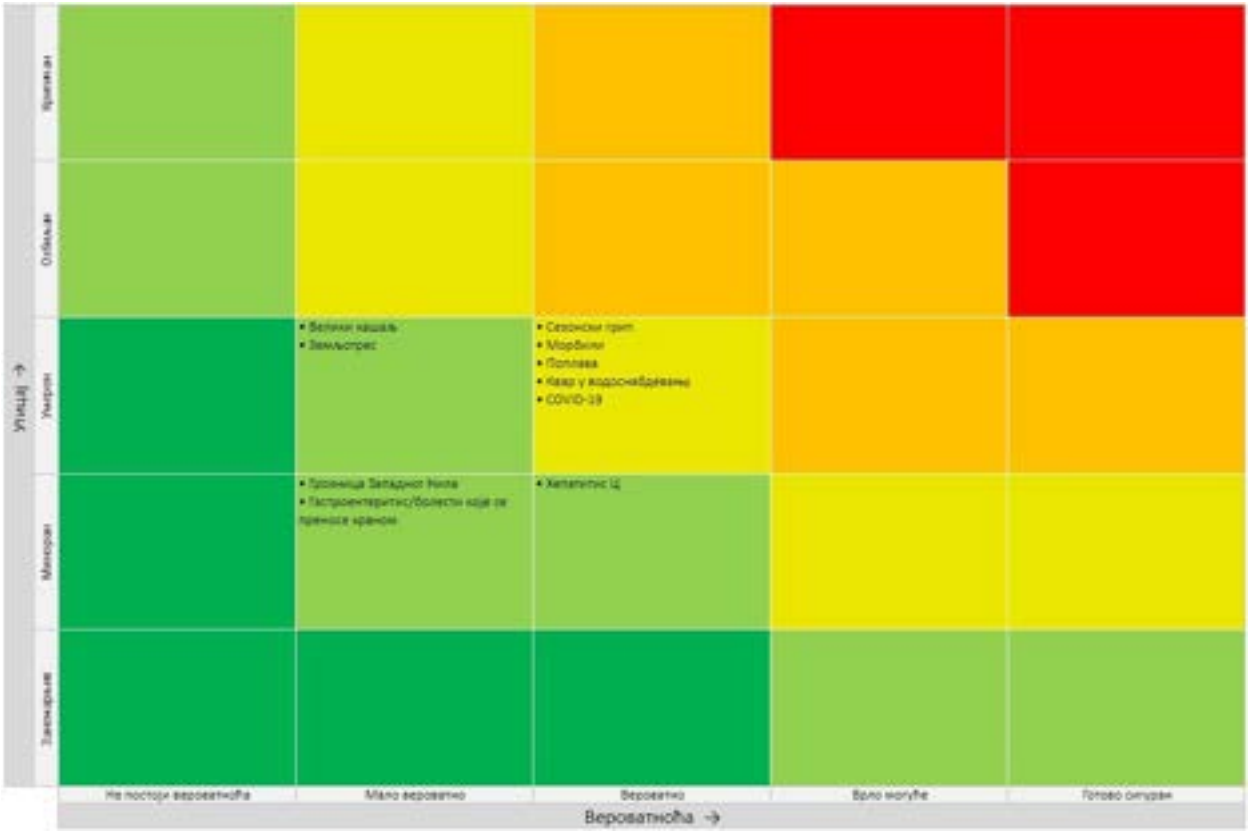
2. Municipality of Lajkovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Делимична	Низак
COVID-19	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Мало вероватно	Минoран	Низак	Делимична
Хепатитис Ц	Низак	Вероватно	Минoран	Веома низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

MODERATE RISK

Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
3. Procurement of PCR devices.
4. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Measles

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Identification of vulnerable social groups by local government.
3. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Flood

1. Development of a Disaster Risk Reduction Plan.
2. Equipping and training civil protection units.
3. Education for commissioners.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Water Supply Failure

1. Development of a Disaster Risk Reduction Plan.
2. Equipping and training civil protection units.
3. Education for commissioners.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

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COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
3. Procurement of PCR devices.
4. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

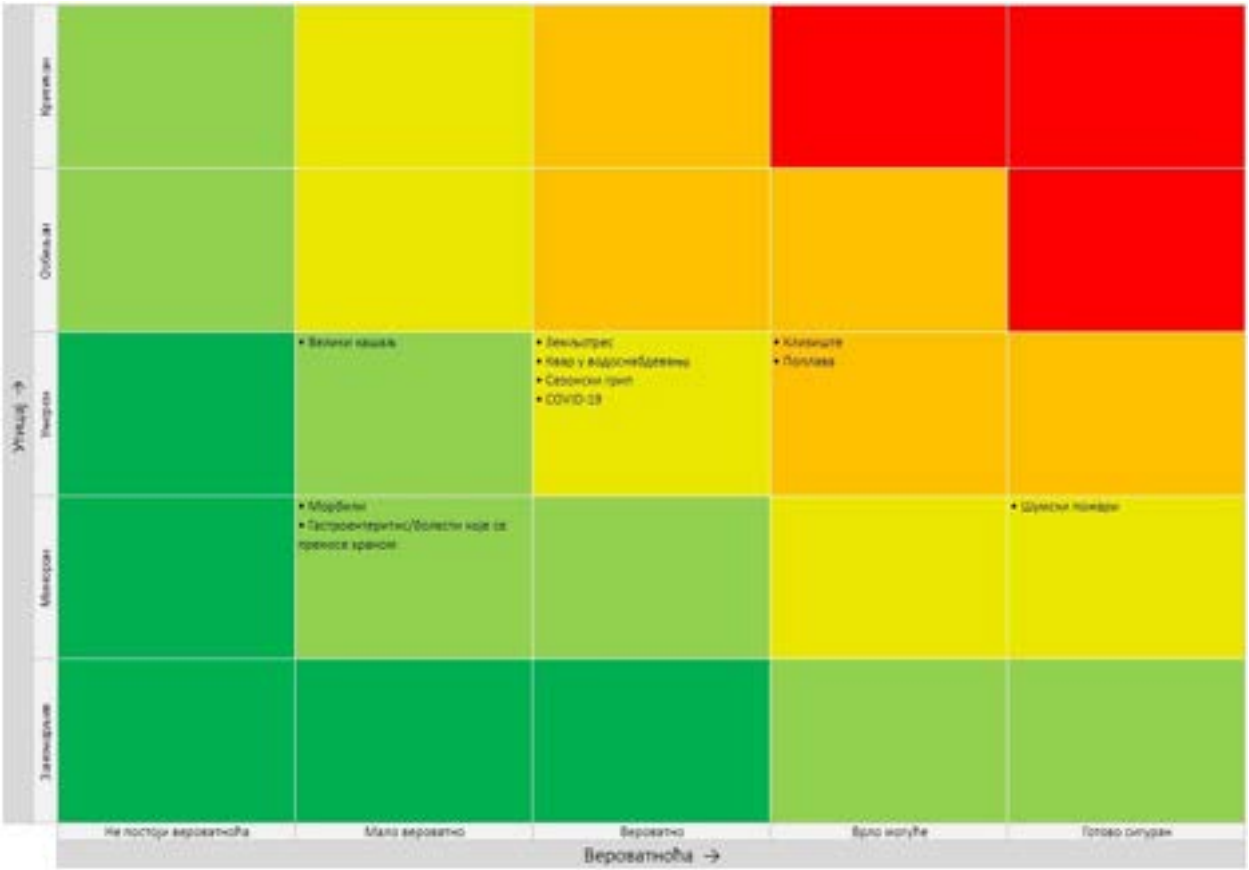
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Municipality of Ljig

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Готово сигуран	Минoран	Делимична	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Висок	Низак
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Велики кашаљ	Низак	Мало вероватно	Умерен	Делимична	Делимична
COVID-19	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Landslide

1. Development of a new Disaster Risk Reduction Plan.
2. Equipping and training civil protection units.
3. Education for commissioners.
4. Creation of a registry of active and passive landslides in the municipality of Ljig.
5. Procurement of field vehicles.
6. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
7. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Flood

1. Development of a new Disaster Risk Reduction Plan.
2. Equipping and training civil protection units.
3. Education for commissioners.
4. Creation of a registry of active and passive landslides in the municipality of Ljig.
5. Procurement of field vehicles.
6. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
7. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

MODERATE RISK

Earthquake

1. Development of a new Disaster Risk Reduction Plan.
2. Equipping and training civil protection units.
3. Education for commissioners.
4. Establishing continuous education for the population on procedures in case of an earthquake.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.

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6. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Wildfires

1. Development of a new Disaster Risk Reduction Plan.
2. Procurement of field vehicles.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Water Supply Failure

1. Development of a new Disaster Risk Reduction Plan.
2. Procurement of field vehicles and water tanks.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Involvement of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

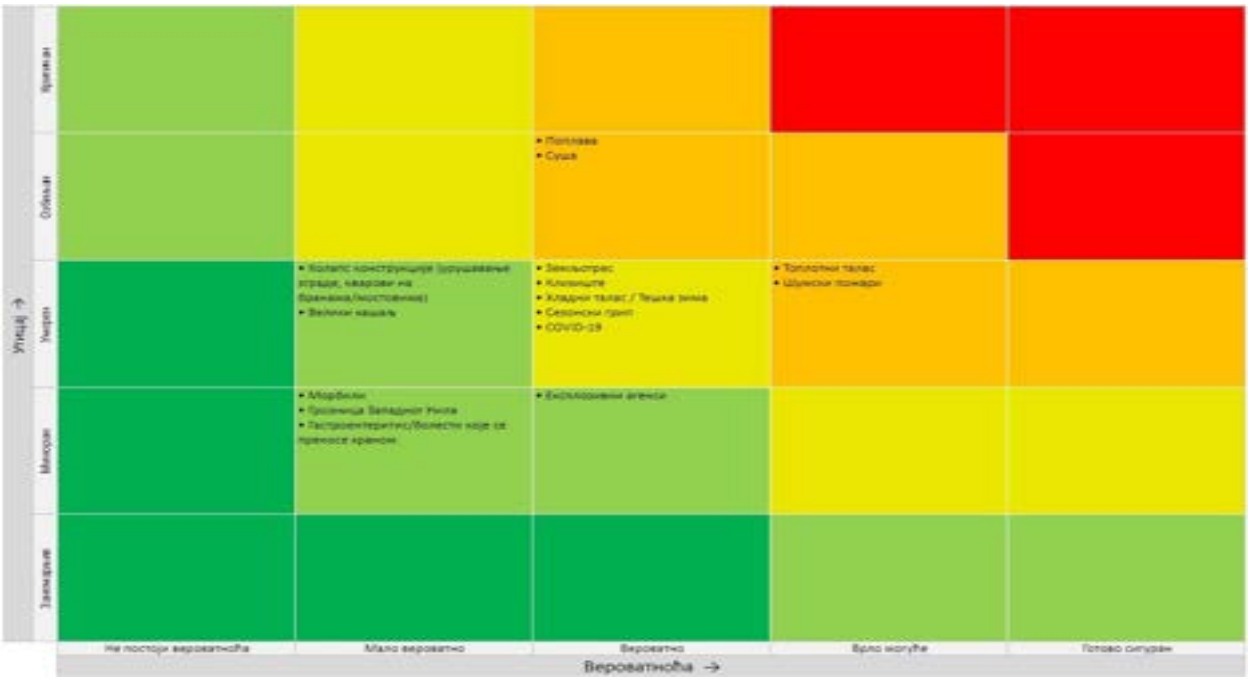
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Mionica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Вероватно	Озбиљан	Висок	Делимична
Топлотни талас	Висок	Врло могуће	Умерен	Висок	Делимична
Суша	Висок	Вероватно	Озбиљан	Висок	Делимична
Шумски пожари	Висок	Врло могуће	Умерен	Делимична	Делимична
Земљотрес	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
COVID-19	Умерен	Вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Низак	Вероватно	Минoран	Делимична	Делимична
Колапс конструкције	Низак	Мало вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Велики кашаљ	Низак	Мало вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Мало вероватно	Минoран	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Development of a Disaster Risk Reduction Plan.
2. Equipping the Civil Protection Unit.
3. Procurement of field vehicles and missing equipment for public utility companies.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Procurement of ambulance vehicles for the health center.
6. Formation of a Health Council and inclusion of representatives from the Valjevo Public Health Institute in the Health Council, and the need to adopt a Public Health Plan.

Heat Wave

1. Development of a Disaster Risk Reduction Plan.
2. Equipping the Civil Protection Unit.
3. Procurement of field vehicles and increasing the capacity of public utility companies (water tanks) and construction of a new water supply network.
4. Strengthening the staffing capacity at all levels of health care.
5. Procurement of ambulance vehicles for the health center.
6. Formation of a Health Council and inclusion of representatives from the Valjevo Public Health Institute in the Health Council, and the need to adopt a Public Health Plan.

Drought

1. Development of a Disaster Risk Reduction Plan.
2. Equipping the Civil Protection Unit.
3. Procurement of field vehicles and increasing the capacity of public utility companies (water tanks) and construction of a new water supply network.
4. Strengthening the staffing capacity at all levels of health care.
5. Procurement of ambulance vehicles for the health center.
6. Formation of a Health Council and inclusion of representatives from the Valjevo Public Health Institute in the Health Council, and the need to adopt a Public Health Plan.

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Wildfires

1. Development of a Disaster Risk Reduction Plan.
2. Equipping the Civil Protection Unit.
3. Conducting an acoustic study and procurement of sirens.
4. Development of a fire protection plan.
5. Strengthening the staffing capacity at all levels of health care.
6. Procurement of ambulance vehicles for the health center.
7. Formation of a Health Council and inclusion of representatives from the Valjevo Public Health Institute in the Health Council, and the need to adopt a Public Health Plan.

MODERATE RISK

Earthquake

1. Development of a Disaster Risk Reduction Plan.
2. Establishing continuous education for the population on procedures in case of an earthquake.
3. Planning and implementation of evacuation exercises in case of an earthquake.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Procurement of ambulance vehicles for the health center.
6. Inclusion of representatives from the Valjevo Public Health Institute in the Health Council and the need to adopt a Public Health Plan.

Landslide

1. Development of a Disaster Risk Reduction Plan.
2. Creation of a registry of active and passive landslides in the municipality of Mionica.
3. Procurement of field vehicles.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Procurement of ambulance vehicles for the health center.
6. Formation of a Health Council and inclusion of representatives from the Valjevo Public Health Institute in the Health Council, and the need to adopt a Public Health Plan.

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5. Municipality of Osečina

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Шумски пожари	Висок	Врло могуће	Умерен	Делимична	Делимична
Топлотни талас	Висок	Врло могуће	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
COVID-19	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Вероватно	Минoран	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Development of a Disaster Risk Reduction Plan.
2. Equipping and training the Civil Protection Units.
3. Procurement of field vehicles and pumping equipment.
4. Nature-inspired solutions – creating a larger number of retention areas (redirecting excess water from flood waves away from populated areas).
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.

Wildfires

1. Development of a Disaster Risk Reduction Plan.
2. Equipping and training the Civil Protection Units.
3. Procurement of firefighting vehicles with characteristics suited to terrains where wildfires may occur.
4. Firefighting vehicles with greater clearance, smaller tank capacity for extinguishing, and increased mobility.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Strengthening the staffing and technical capacities of firefighting and rescue units and forming volunteer fire departments.

Heat Wave

1. Development of a Disaster Risk Reduction Plan.
2. Equipping and training the Civil Protection Units.
3. Procurement of field vehicles and water tanks.
4. Strengthening the staffing capacity at all levels of health care.

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MODERATE RISK

Landslide

1. Development of a Disaster Risk Reduction Plan.
2. Equipping and training the Civil Protection Units.
3. Procurement of field vehicles.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.

Drought

1. Development of a Disaster Risk Reduction Plan.
2. Equipping and training the Civil Protection Units.
3. Procurement of field vehicles and water tanks.
4. Strengthening the staffing capacity of the Valjevo Public Health Institute.

Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
3. Procurement of PCR equipment.

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
3. Procurement of PCR equipment.

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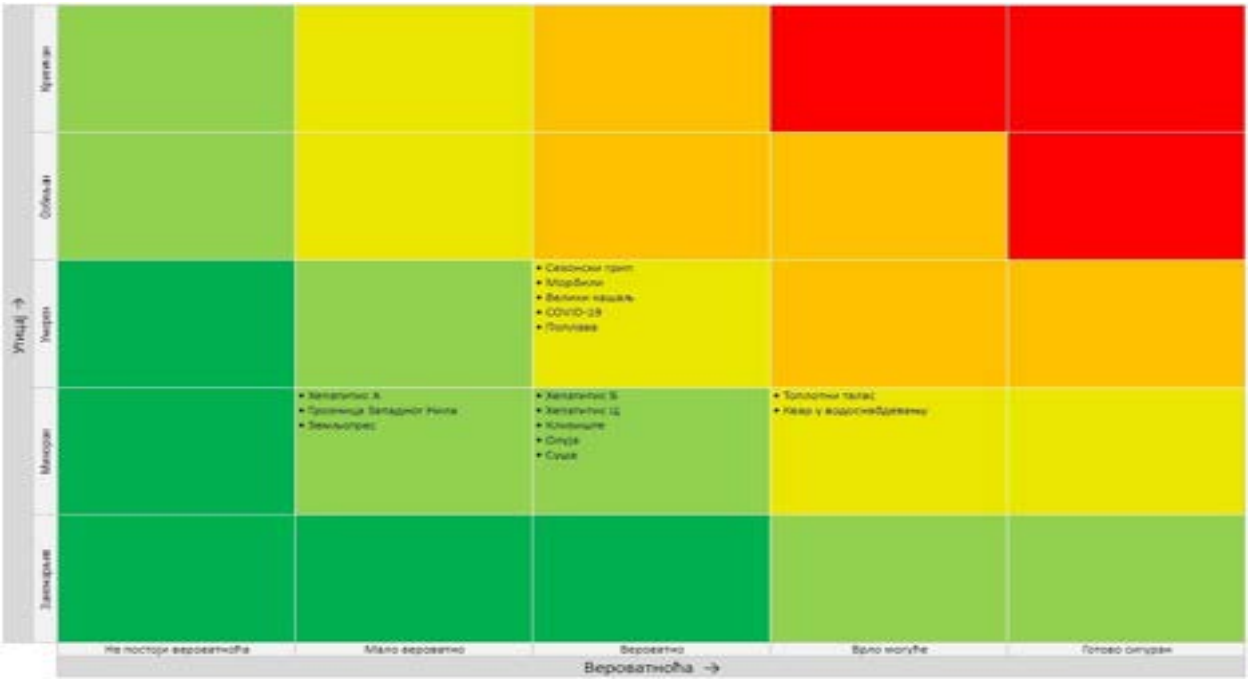
6. Municipality of Ub

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Умерен	Вероватно	Умерен	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
COVID-19	Умерен	Вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Врло могуће	Минoран	Делимична	Делимична
Квар у водоснабдевању	Умерен	Врло могуће	Минoран	Низак	Делимична
Хепатитис А	Низак	Мало вероватно	Минoран	Низак	Делимична
Хепатитис Б	Низак	Вероватно	Минoран	Веома низак	Делимична
Хепатитис Ц	Низак	Вероватно	Минoран	Веома низак	Делимична
Грозница Западног Нила	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Земљотрес	Низак	Мало вероватно	Минoран	Делимична	Делимична
Клизиште	Низак	Вероватно	Минoран	Делимична	Делимична
Олуја	Низак	Вероватно	Минoран	Низак	Делимична
Суша	Низак	Вероватно	Минoран	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

MODERATE RISK

Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
3. Procurement of PCR equipment.
4. Inclusion of representatives from the Valjevo Public Health Institute in the Health Council and the need to develop a Public Health Plan.

Measles

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Inclusion of representatives from the Valjevo Public Health Institute in the Health Council and the development of a Public Health Plan.

Pertussis (Whooping Cough)

1. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
2. Procurement of PCR equipment.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Inclusion of representatives from the Valjevo Public Health Institute in the Health Council and the development of a Public Health Plan.

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Equipping the microbiological laboratory of the Valjevo Public Health Institute and introducing new health technologies.
3. Procurement of PCR equipment.
4. Inclusion of representatives from the Valjevo Public Health Institute in the Health Council and the development of a Public Health Plan.

Flood

1. Development of a Disaster Risk Reduction Plan.
2. Strengthening the staffing capacity of healthcare institutions at all levels of health care.

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3. Inclusion of representatives from the municipal emergency response team and the Valjevo Public Health Institute in the Health Council, and the need to develop a Public Health Plan.

Heat Wave

1. Development of a Disaster Risk Reduction Plan.
2. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
3. Inclusion of representatives from the municipal emergency response team and the Valjevo Public Health Institute in the Health Council, and the need to develop a Public Health Plan.

Water Supply Failure

1. Development of a Disaster Risk Reduction Plan.
2. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
3. Inclusion of representatives from the municipal emergency response team and the Valjevo Public Health Institute in the Health Council, and the need to develop a Public Health Plan.

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MAČVA ADMINISTRATIVE DISTRICT

1. City of Šabac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Умерен	Врло могуће	Минoран	Делимична	Висок
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Ц	Низак	Мало вероватно	Умерен	Низак	Делимична
Туберкулоза	Низак	Мало вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Низак	Мало вероватно	Умерен	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Air Pollution

1. Adoption of a protection and rescue plan.
2. Formation of a Civil Protection Unit.
3. Regular checks on the quantity and functionality of all material and technical resources.
4. Enhance the audibility of the alert system across the entire territory.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Empowering the role of the Health Council at the local self-government level.
7. Strengthening the capacity of the Šabac Public Health Institute for regular and emergency air quality monitoring.

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

MODERATE RISK

Flood

1. Adoption of a protection and rescue plan.
2. Formation of a Civil Protection Unit.
3. Regular checks on the quantity and functionality of all material and technical resources.
4. Enhance the audibility of the alert system across the entire territory.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Empowering the role of the Health Council at the local self-government level.

Landslide

1. Adoption of a protection and rescue plan.
2. Formation of a Civil Protection Unit.

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3. Regular checks on the quantity and functionality of all material and technical resources.
4. Enhance the audibility of the alert system across the entire territory.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Empowering the role of the Health Council at the local self-government level.

Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Measles

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Establishing better cooperation with border health institutions in RS/BiH.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

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2. City of Loznica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Низак	Вероватно	Минoран	Делимична	Делимична
Сезонски грип	Умерен	Врло могуће	Минoран	Делимична	Висок
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Ц	Низак	Мало вероватно	Умерен	Низак	Низак
Туберкулоза	Низак	Мало вероватно	Умерен	Низак	Делимична
ХИВ/АИДС	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

MODERATE RISK

Flood

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Landslide

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Measles

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.

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2. Establishing better cooperation with border health institutions in RS/BiH.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

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3. Municipality of Vladimirci

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Умерен	Готово сигуран	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Низак	Вероватно	Минoран	Делимична	Делимична
Сезонски грип	Умерен	Врло могуће	Минoран	Делимична	Висок
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Туберкулоза	Низак	Мало вероватно	Умерен	Низак	Делимична
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

MODERATE RISK

Flood

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Water Supply Failure

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Landslide

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

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Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Gastroenteritis/Foodborne Diseases

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Strengthening the capacity of inspection services.
3. Widespread implementation of routine work with new health technologies - PCR machines.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Storm

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

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4. Municipality of Bogatić

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Низак	Вероватно	Минoран	Делимична	Делимична
Сезонски грип	Умерен	Врло могуће	Минoран	Делимична	Висок
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Туберкулоза	Низак	Мало вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Низак	Мало вероватно	Умерен	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

MODERATE RISK

Flood

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Gastroenteritis/Foodborne Diseases

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Strengthening the capacity of inspection services.
3. Widespread implementation of routine work with new health technologies - PCR machines.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Measles

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.

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2. Establishing better cooperation with border health institutions in RS/BiH.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Drought

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

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5. Municipality of Koceljeva

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Сезонски грип	Умерен	Врло могуће	Минoран	Делимична	Висок
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Топлотни талас	Низак	Вероватно	Минoран	Делимична	Делимична
Хепатитис Ц	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

MODERATE RISK

Flood

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Landslide

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Measles

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.

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2. Establishing better cooperation with border health institutions in RS/BiH.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Gastroenteritis/Foodborne Diseases

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Strengthening the capacity of inspection services.
3. Widespread implementation of routine work with new health technologies - PCR machines.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Krupanj

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Умерен	Мало вероватно	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Низак	Вероватно	Минoран	Делимична	Делимична
Сезонски грип	Умерен	Врло могуће	Минoран	Делимична	Висок
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Ц	Низак	Мало вероватно	Умерен	Низак	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

MODERATE RISK

Flood

1. Adoption of a protection and rescue plan.
2. Formation of a Civil Protection Unit.
3. Regular checks on the quantity and functionality of all material and technical resources.
4. Enhance the audibility of the alert system across the entire territory.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Empowering the role of the Health Council at the local self-government level.

Water Supply Breakdown

1. Adoption of a protection and rescue plan.
2. Formation of a Civil Protection Unit.
3. Regular checks on the quantity and functionality of all material and technical resources.
4. Enhance the audibility of the alert system across the entire territory.
5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Empowering the role of the Health Council at the local self-government level.

Landslide

1. Adoption of a protection and rescue plan.
2. Formation of a Civil Protection Unit.
3. Regular checks on the quantity and functionality of all material and technical resources.
4. Enhance the audibility of the alert system across the entire territory.

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5. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
6. Empowering the role of the Health Council at the local self-government level.

Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Gastroenteritis/Foodborne Diseases

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Strengthening the capacity of inspection services.
3. Widespread implementation of routine work with new health technologies - PCR machines.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

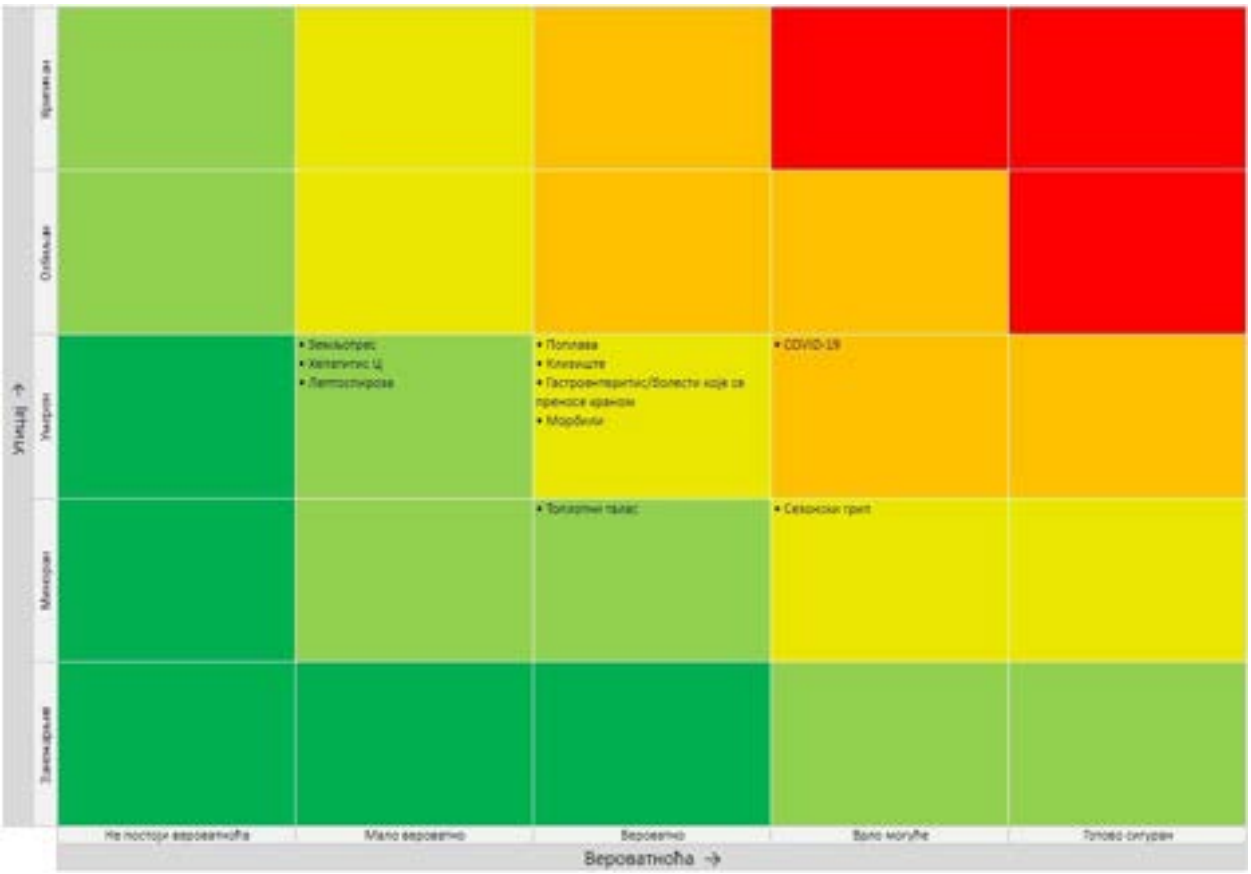
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. Municipality of Ljubovija

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Низак	Вероватно	Минoран	Делимична	Делимична
Сезонски грип	Умерен	Врло могуће	Минoран	Делимична	Висок
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Ц	Низак	Мало вероватно	Умерен	Низак	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

MODERATE RISK

Flood

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Landslide

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Gastroenteritis/Foodborne Diseases

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.

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2. Strengthening the capacity of inspection services.
3. Widespread implementation of routine work with new health technologies - PCR machines.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Measles

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Establishing better cooperation with border health institutions in RS/BIH.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

8. Municipality of Mali Zvornik

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Низак	Вероватно	Минoран	Делимична	Делимична
Сезонски грип	Умерен	Врло могуће	Минoран	Делимична	Висок
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Туберкулоза	Низак	Мало вероватно	Умерен	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Лептоспироза	Низак	Мало вероватно	Умерен	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

MODERATE RISK

Flood

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Landslide

1. Formation of a Civil Protection Unit.
2. Regular checks on the quantity and functionality of all material and technical resources.
3. Enhance the audibility of the alert system across the entire territory.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Seasonal Influenza

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Widespread implementation of routine work with new health technologies - PCR machines.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level.

Gastroenteritis/Foodborne Diseases

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.

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2. Strengthening the capacity of inspection services.
3. Widespread implementation of routine work with new health technologies - PCR machines.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Empowering the role of the Health Council at the local self-government level.

Measles

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Establishing better cooperation with border health institutions in RS/BIH.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Empowering the role of the Health Council at the local self-government level

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POMORAVLJE ADMINISTRATIVE DISTRICT

1. City of Jagodina

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Висок
Хепатитис Ц	Висок	Врло могуће	Умерен	Делимична	Низак
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Не постоји вероватноћа	Озбиљан	Висок	Низак
Шумски пожари	Низак	Мало вероватно	Умерен	Делимична	Низак
Гастроентеритис/болести које се преносе храном	Низак	Мало вероватно	Миноран	Делимична	Висок
Морбили	Низак	Мало вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK
COVID-19

1. Ensure continuous supply of antigen and PCR tests for healthcare institutions.
2. Provide the Public Health Institute of Ćuprija with a PCR machine for faster and more efficient diagnostics.
3. Provide next-generation vaccines.
4. Educate healthcare workers and the population about the importance of preventing the spread of infectious diseases and the significance of immunization.

Seasonal Influenza

1. Increase the vaccination coverage of healthcare workers against the flu.
2. Educate healthcare workers on the importance of monitoring flu and the quality of the data collected.

Hepatitis C

1. Identify members of marginalized social groups with risky behaviors by local government.
2. Implement preventive programs by associations and NGOs for marginalized groups (providing clean syringes and needles, condoms).
3. Equip the microbiological laboratory of the Public Health Institute of Ćuprija with a PCR machine to stop underreporting of cases.

Flood

1. Involve representatives of the Public Health Institute "Pomoravlje" in Ćuprija in the Health Council of the local government unit in Svilaijnac and develop a Public Health Plan.
2. Establish continuous education for the population on how to act in case of floods.
3. Improve the notification system throughout the territory of the municipality of Jagodina.

MODERATE RISK

Pertussis (Whooping Cough)

1. Establish official surveillance of whooping cough as a matter of public interest.
2. Ensure accessible diagnostics (procurement of a PCR machine for the Public Health Institute of Ćuprija).
3. Educate pediatricians on the importance of mandatory vaccination.

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2. Municipality of Ćuprija

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Не постоји вероватноћа	Озбиљан	Висок	Низак
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Делимична	Низак
Експлозивни агенси	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Висок
Морбили	Низак	Мало вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Мало вероватно	Миноран	Делимична	Висок

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK
COVID-19

1. Ensure continuous supply of antigen and PCR tests for healthcare institutions.
2. Provide the Public Health Institute of Ćuprija with a PCR machine for faster and more efficient diagnostics.
3. Provide next-generation vaccines.
4. Educate healthcare workers and the population about the importance of preventing the spread of infectious diseases and the significance of immunization.

Seasonal Influenza

1. Increase the vaccination coverage of healthcare workers against the flu.
2. Educate healthcare workers on the importance of monitoring flu and the quality of the data collected.
3. Intensify the immunization campaign against Seasonal Influenza for all population categories.

MODERATE RISK
Pertussis (Whooping Cough)

1. Establish official surveillance of whooping cough as a matter of public interest.
2. Ensure accessible diagnostics (procurement of a PCR machine for the Public Health Institute of Ćuprija).
3. Educate pediatricians on the importance of mandatory vaccination.

West Nile Fever

1. Ensure more accessible diagnostics (procurement of a PCR machine for the Public Health Institute of Ćuprija).
2. Transition to ecological and more effective methods of controlling mosquito larvae and adult populations (Bacillus thuringiensis israelensis).
3. Provide continuous education for the population about the transmission of the pathogen and personal protective measures.

Flood

1. Involve representatives of the Public Health Institute "Pomoravlje" in Ćuprija in the Health Council of the local government unit in Svilaijnac and develop a Public Health Plan.
2. Establish continuous education for the population on how to act in case of floods.
3. Improve the notification system throughout the territory of the municipality of Ćuprija.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Municipality of Despotovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Не постоји вероватноћа	Озбиљан	Висок	Низак
Клизиште	Низак	Мало вероватно	Умерен	Низак	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Ватра	Низак	Мало вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Делимична
Рударске опасности	Низак	Мало вероватно	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Висок

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Ensure continuous supply of antigen and PCR tests for healthcare institutions.
2. Provide the Public Health Institute of Ćuprija with a PCR machine for faster and more efficient diagnostics.
3. Provide next-generation vaccines.
4. Educate healthcare workers and the population about the importance of preventing the spread of infectious diseases and the significance of immunization.

Seasonal Influenza

1. Increase the vaccination coverage of healthcare workers against the flu.
2. Educate healthcare workers on the importance of monitoring flu and the quality of the data collected.
3. Intensify the immunization campaign against Seasonal Influenza for all population categories.

MODERATE RISK

Flood

1. Regular maintenance and cleaning of riverbeds, drainage channels, and stormwater systems.
2. Reforestation.
3. Educate the population on behavioral rules before, during, and after a flood wave to prevent the occurrence of intestinal infectious diseases.

Drought

1. Ensure alternative sources of drinking water.
2. Educate the population on the importance of water conservation during heat waves.
3. Educate the population about the dangers of staying outdoors during the hottest part of the day.

Cold Wave / Severe Winter

1. Educate the population about the risks of staying outdoors during blizzards or icy conditions.

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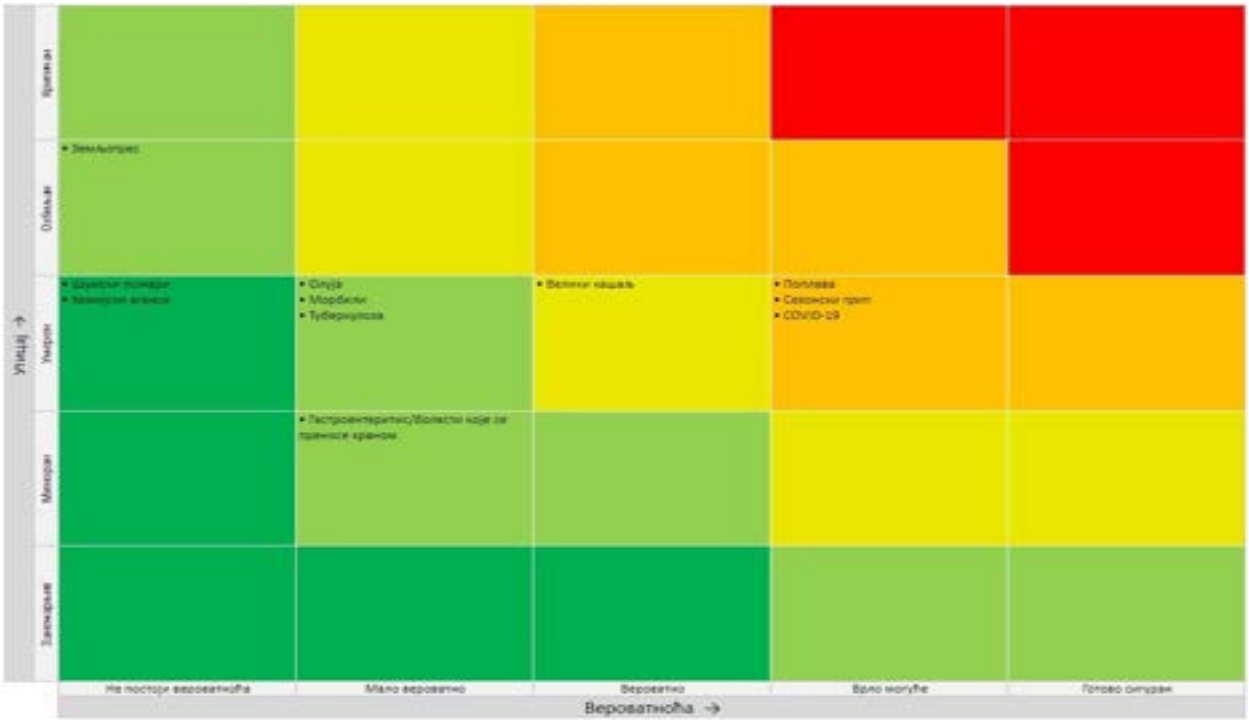
4. Municipality of Paraćin

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Не постоји вероватноћа	Озбиљан	Висок	Низак
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Олуја	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак
Хемијски агенси	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Висок
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Морбили	Низак	Мало вероватно	Умерен	Делимична	Делимична
Туберкулоза	Низак	Мало вероватно	Умерен	Висок	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Мало вероватно	Минoран	Делимична	Висок
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Ensure continuous supply of antigen and PCR tests for healthcare institutions.
2. Provide the Public Health Institute of Ćuprija with a PCR machine for faster and more efficient diagnostics.
3. Provide next-generation vaccines.
4. Educate healthcare workers and the population about the importance of preventing the spread of infectious diseases and the significance of immunization.

Seasonal Influenza

1. Increase the vaccination coverage of healthcare workers against the flu.
2. Educate healthcare workers on the importance of monitoring flu and the quality of the data collected.

Flood

1. Include representatives from the Public Health Institute "Pomoravlje" Ćuprija in the Health Council of the Local Government Unit of Paraćin and develop a Public Health Plan.
2. Establish continuous education for the population on how to act in the event of floods.
3. Improve the notification system throughout the municipality of Paraćin.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Rekovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Не постоји вероватноћа	Озбиљан	Висок	Низак
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Делимична	Низак
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Висок
Морбили	Низак	Мало вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Мало вероватно	Миноран	Делимична	Висок
Хепатитис А	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Ensure continuous supply of antigen and PCR tests for healthcare institutions.
2. Provide the Public Health Institute of Ćuprija with a PCR machine for faster and more efficient diagnostics.
3. Provide next-generation vaccines.
4. Educate healthcare workers and the population about the importance of preventing the spread of infectious diseases and the significance of immunization.

Seasonal Influenza

1. Increase the vaccination coverage of healthcare workers against the flu.
2. Educate healthcare workers on the importance of monitoring the flu and the quality of the data collected.

Flood

1. Include representatives from the Public Health Institute "Pomoravlje" Ćuprija in the Health Council of the Local Government Unit of Rekovac and develop a Public Health Plan.
2. Establish continuous education for the population on how to act in the event of floods.
3. Improve the notification system throughout the municipality of Rekovac.

MODERATE RISK

Pertussis (Whooping Cough)

1. Establish official general interest surveillance for whooping cough.
2. Ensure accessible diagnostics (procurement of a PCR machine for the Public Health Institute of Ćuprija).
3. Educate pediatricians on the importance of mandatory vaccination.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Svilajnac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Висок
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Висок
Хепатитис Ц	Висок	Врло могуће	Умерен	Делимична	Низак
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Не постоји вероватноћа	Озбиљан	Висок	Низак
Клизиште	Низак	Мало вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Мало вероватно	Миноран	Делимична	Висок

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase the vaccination coverage of healthcare workers against the flu.
2. Educate healthcare workers about the importance of monitoring the flu and the quality of the data obtained.

Hepatitis C

1. Identify members of marginalized social groups with risky behavior by local government.
2. Implement preventive programs by associations and NGOs for marginalized groups (providing clean syringes and needles, condoms).
3. Equip the microbiological laboratory of the Public Health Institute of Ćuprija with a PCR machine to stop the underreporting of cases.

MODERATE RISK

Pertussis (Whooping Cough)

1. Establish official general interest surveillance for whooping cough.
2. Ensure accessible diagnostics (procurement of a PCR machine for the Public Health Institute of Ćuprija).
3. Educate pediatricians on the importance of mandatory vaccination.

Flood

1. Include representatives from the Public Health Institute "Pomoravlje" Ćuprija in the Health Council of the Local Government Unit of Svilajnac and develop a Public Health Plan.
2. Establish continuous education for the population on how to act in the event of floods.
3. Improve the notification system throughout the municipality of Svilajnac.

Storm

1. Include representatives from the Public Health Institute "Pomoravlje" Ćuprija in the Health Council.
2. Local government units in Svilajnac and develop a Public Health Plan.
3. Establish continuous education for the population on how to act in the event of a storm and hail.
4. Improve the notification system throughout the municipality of Svilajnac.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

PODUNAVLJE ADMINISTRATTIVE DISTRICT

1. City of Smederevo

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Низак	Делимична
Ватра	Умерен	Готово сигуран	Минoран	Низак	Висок
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Минoран	Низак	Висок
Олуја	Низак	Мало вероватно	Минoран	Низак	Висок
Гастроентеритис/болести које се преносе храном	Низак	Вероватно	Минoран	Низак	Делимична
Хепатитис А	Низак	Мало вероватно	Минoран	Низак	Висок

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Involving representatives from the Public Health Institute in the Health Council, and it is necessary to develop a Public Health Plan.
4. Intensive promotion of vaccination for the population.

Pertussis (Whooping Cough)

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Involving representatives from the Public Health Institute in the Health Council, and it is necessary to develop a Public Health Plan.
4. Promoting vaccination for sensitive population categories.

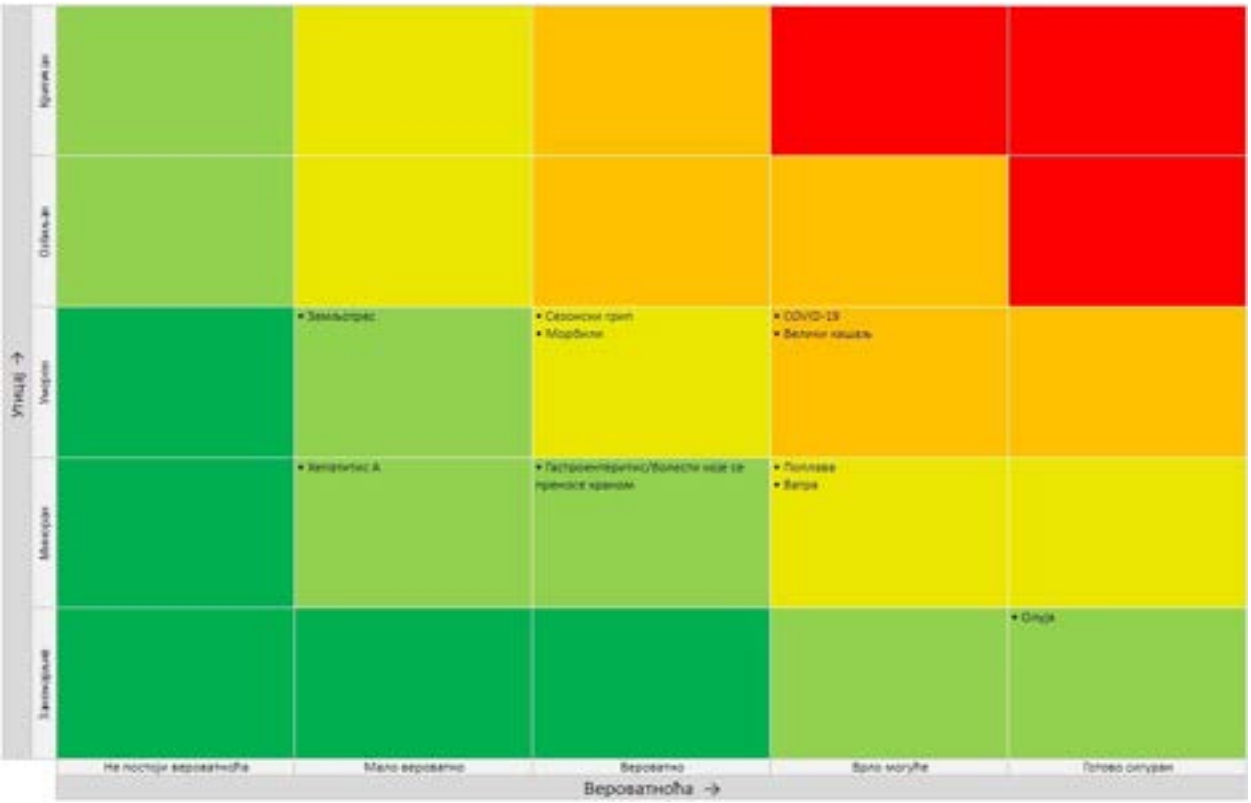
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

2. Municipality of Smederevska Palanka

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Низак	Делимична
Поплава	Умерен	Врло могуће	Минoран	Низак	Делимична
Ватра	Умерен	Врло могуће	Минoран	Веома низак	Делимична
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Олуја	Низак	Готово сигуран	Занемарљив	Веома низак	Висок
Гастроентеритис/болести које се преносе храном	Низак	Вероватно	Минoран	Низак	Делимична
Хепатитис А	Низак	Мало вероватно	Минoран	Низак	Висок

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Involving representatives from the Public Health Institute in the Health Council, and it is necessary to develop a Public Health Plan.
4. Intensive promotion of vaccination for the population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Municipality of Velika Plana

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Низак	Делимична
Ватра	Умерен	Готово сигуран	Миноран	Низак	Висок
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Миноран	Низак	Висок
Олуја	Низак	Мало вероватно	Миноран	Низак	Висок
Гастроентеритис/болести које се преносе храном	Низак	Вероватно	Миноран	Низак	Делимична
Хепатитис А	Низак	Мало вероватно	Миноран	Низак	Висок

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Involving representatives from the Public Health Institute in the Health Council, and it is necessary to develop a Public Health Plan.
4. Intensive promotion of vaccination for the population.

Pertussis (Whooping Cough)

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Involving representatives from the Public Health Institute in the Health Council, and it is necessary to develop a Public Health Plan.
4. Promoting vaccination for sensitive categories of the population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

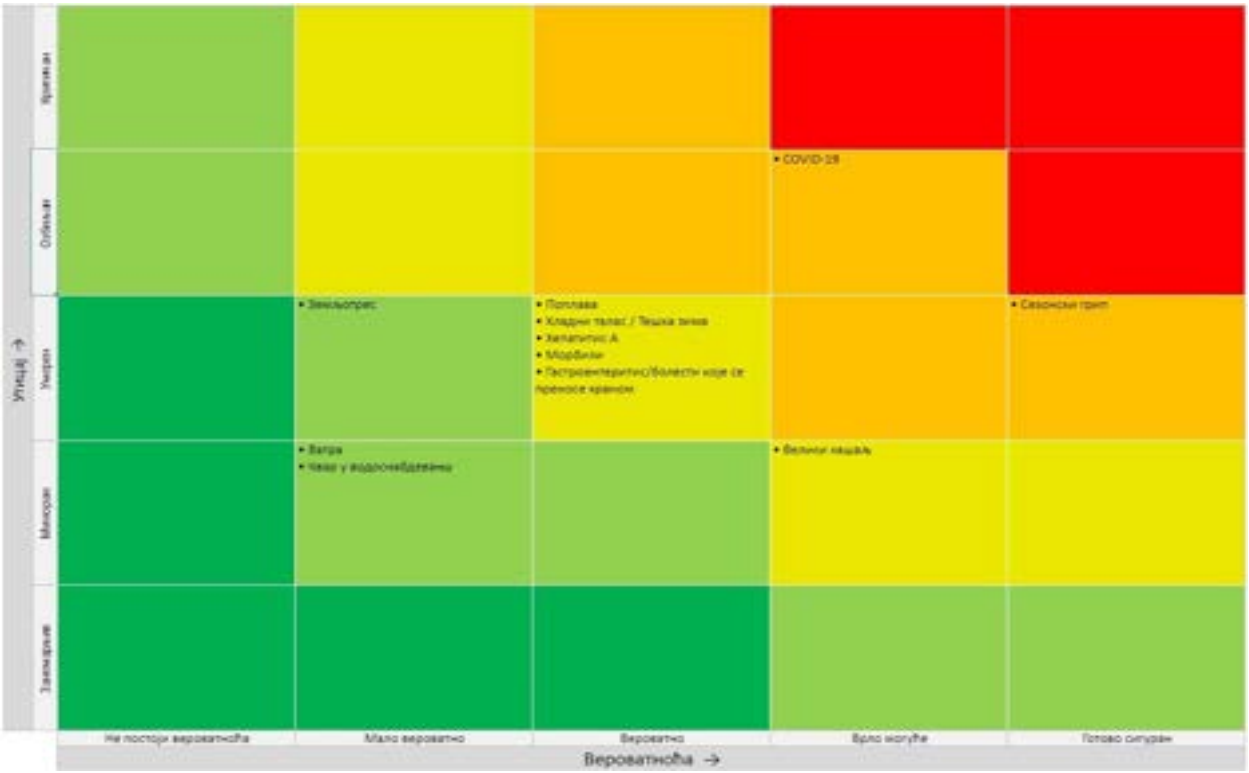
BRANIČEVO ADMINISTRATIVE DISTRICT

1. City of Požarevac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Озбиљан	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Хепатитис А	Висок	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Вероватно	Умерен	Низак	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Врло могуће	Минoран	Низак	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Делимична
Ватра	Низак	Мало вероватно	Минoран	Делимична	Делимична
Квар у водоснабдевању	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Involving representatives from the Public Health Institute in the Health Council and developing a Public Health Plan.

Seasonal Influenza

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Involving representatives from the Public Health Institute in the Health Council and developing a Public Health Plan.

Hepatitis A

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Involving representatives from the Public Health Institute in the Health Council and developing a Public Health Plan.
4. Increasing hygiene standards in unsanitary settlements, schools, and preschools.

Gastroenteritis/Foodborne Diseases

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Involving representatives from the Public Health Institute in the Health Council and developing a Public Health Plan.
4. Increasing hygiene standards in the production and distribution of food and water.
5. Educating the population about hygiene practices.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

2. Municipality of Veliko Gradište

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Делимична
Клизиште	Низак	Вероватно	Минoран	Низак	Делимична
Поплава	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична
Ватра	Умерен	Вероватно	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Низак	Делимична
Хепатитис А	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Вероватно	Минoран	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Seasonal Influenza

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Pertussis (Whooping Cough)

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Municipality of Žabari

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Хепатитис А	Висок	Врло могуће	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Низак	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Низак	Делимична
Ватра	Умерен	Вероватно	Умерен	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Seasonal Influenza

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Hepatitis A

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on hygiene maintenance.

Pertussis (Whooping Cough)

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Gastroenteritis/Foodborne Diseases

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

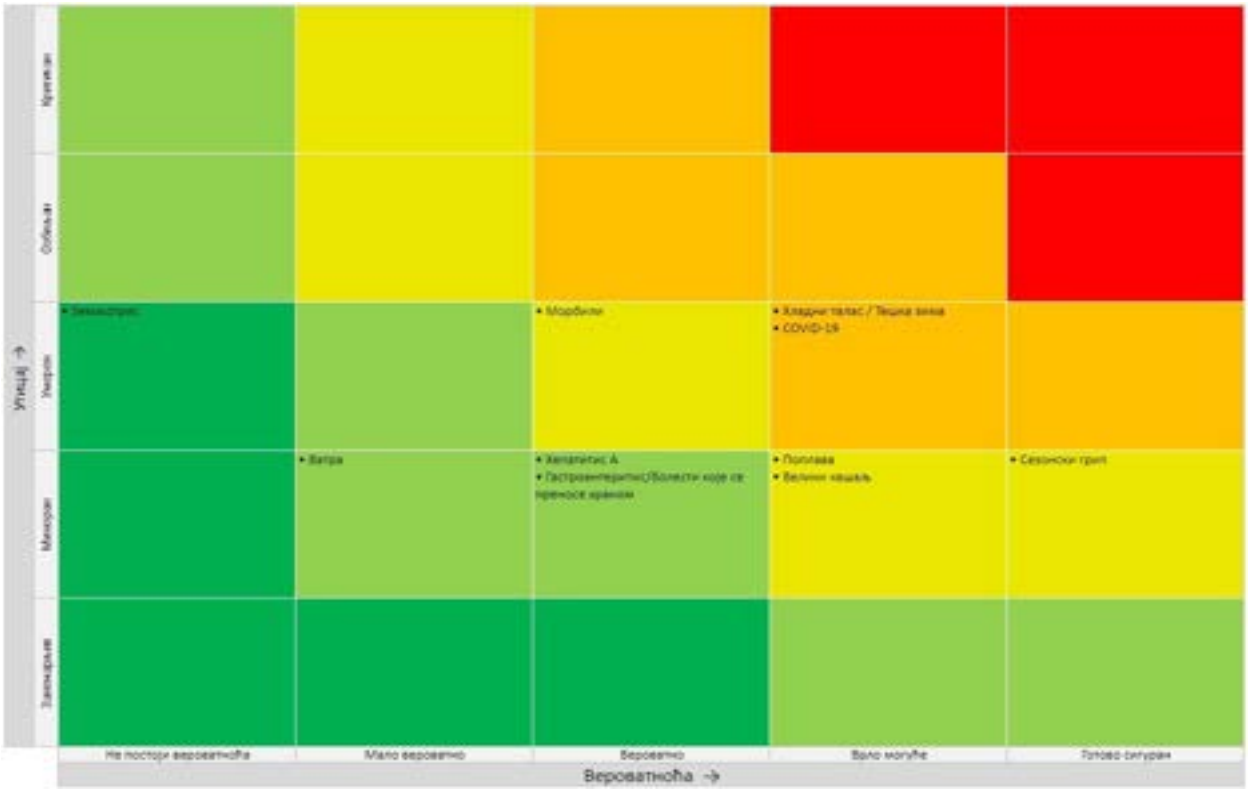
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Žagubica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Хладни талас / Тешка зима	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Вероватно	Минoран	Низак	Делимична
Поплава	Умерен	Врло могуће	Минoран	Низак	Делимична
Сезонски грип	Умерен	Готово сигуран	Минoран	Низак	Делимична
Велики кашаљ	Умерен	Врло могуће	Минoран	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Мало вероватно	Минoран	Низак	Делимична
Хепатитис А	Низак	Вероватно	Минoран	Низак	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Делимична

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Cold Wave / Severe Winter

1. Improving road infrastructure and acquiring machinery for snow and ice removal.

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Gastroenteritis/Foodborne Diseases

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Increasing hygiene standards in food and water production and distribution.
4. Educating the population about hygiene practices.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Golubac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Низак	Делимична
Хепатитис А	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Делимична
Поплава	Низак	Вероватно	Минoран	Низак	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Вероватно	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична
Суша	Веома низак	Не постоји вероватноћа	Минoран	Веома низак	Делимична
Ватра	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Seasonal Influenza

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Pertussis (Whooping Cough)

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Кучево

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Низак	Делимична
Поплава	Умерен	Вероватно	Умерен	Веома висок	Делимична
Хепатитис А	Умерен	Вероватно	Умерен	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Низак	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Мало вероватно	Умерен	Делимична	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Gastroenteritis/Foodborne Diseases

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.
4. Educating the population about preventive measures for foodborne diseases at the level of preschool institutions, schools, businesses, and other entities in the food supply chain.

Seasonal Influenza

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population about the need for immunization.

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7. Municipality of Malo Crniće

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис А	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Делимична
Поплава	Низак	Мало вероватно	Минoран	Низак	Делимична
Ватра	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Seasonal Influenza

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Pertussis (Whooping Cough)

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

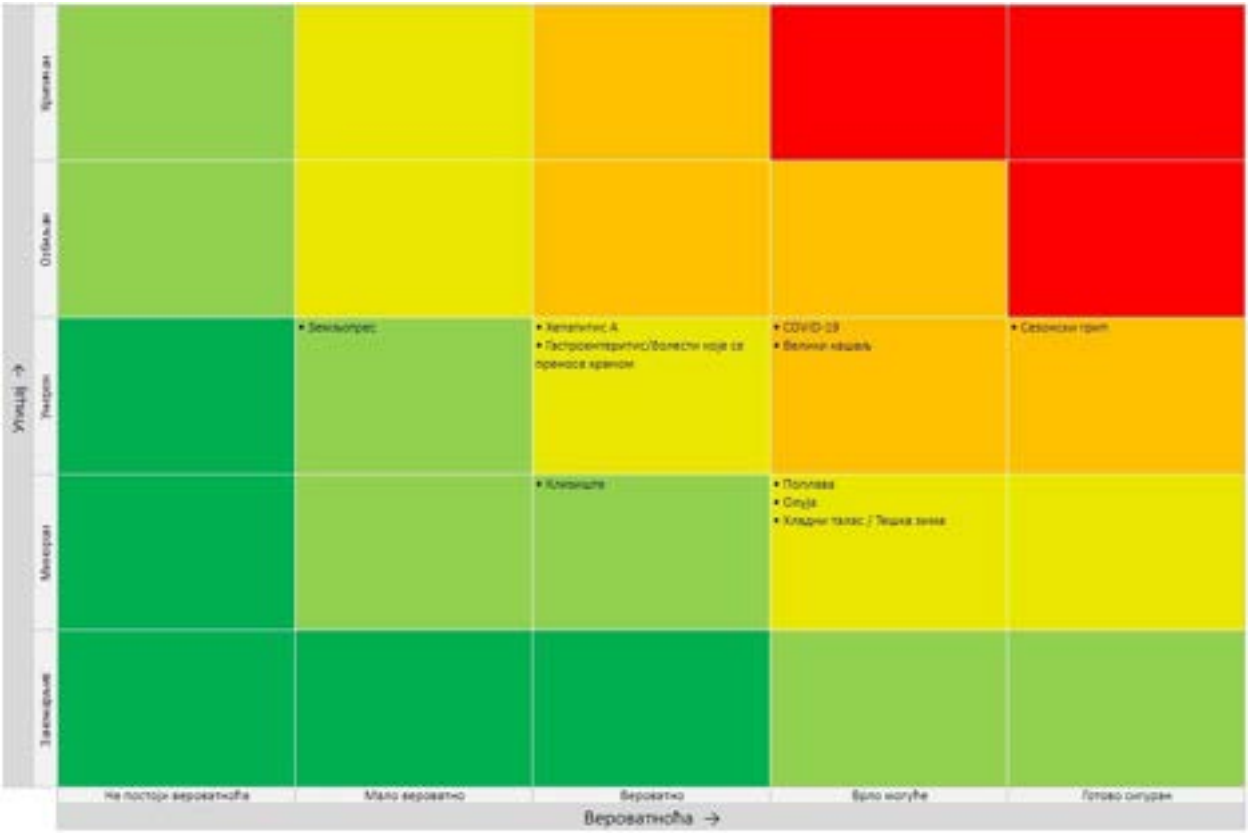
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

8. Municipality of Petrovac na Mlavi

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Низак	Делимична
Поплава	Умерен	Врло могуће	Минoран	Низак	Делимична
Олуја	Умерен	Врло могуће	Минoран	Веома низак	Делимична
Хладни талас / Тешка зима	Умерен	Врло могуће	Минoран	Низак	Делимична
Хепатитис А	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Делимична
Клизиште	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Seasonal Influenza

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

Pertussis (Whooping Cough)

1. Strengthening the workforce capacity of healthcare institutions at all levels of health care.
2. Identifying members of vulnerable social groups by local government.
3. Educating the population on the need for immunization.

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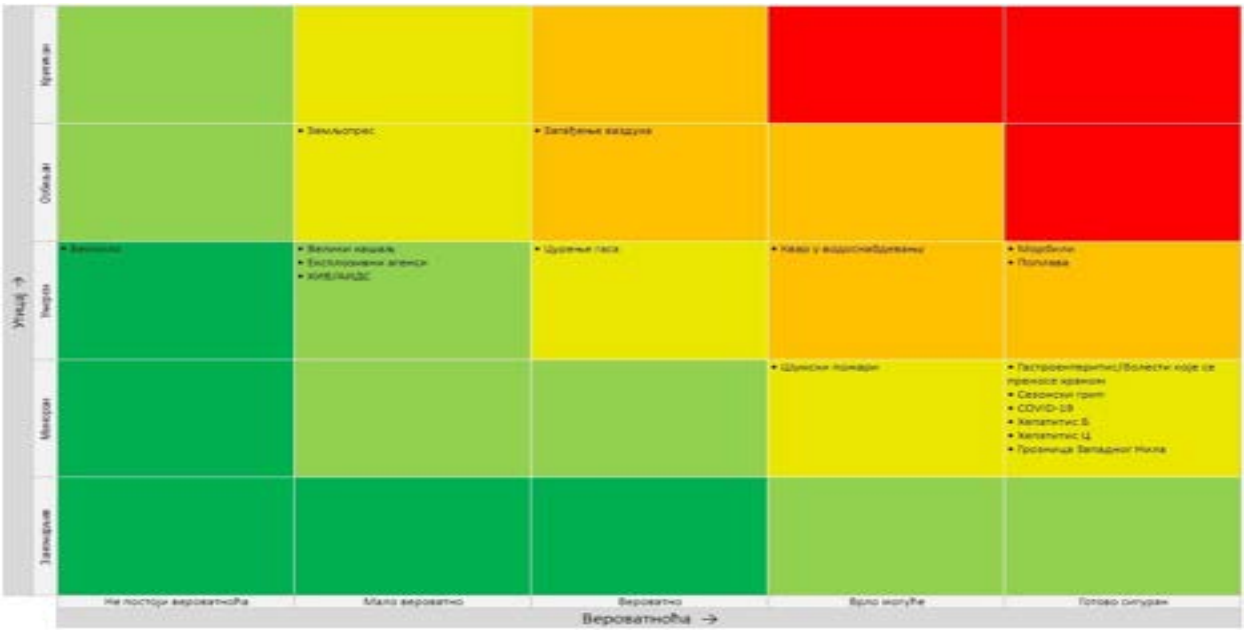
RASINA ADMINISTRATIVE DISTRICT

1. City of Kruševac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Морбили	Висок	Готово сигуран	Умерен	Висок	Делимична
Поплава	Висок	Готово сигуран	Умерен	Низак	Делимична
Квар у водоснабдевању	Висок	Врло могуће	Умерен	Висок	Делимична
Загађење ваздуха	Висок	Вероватно	Озбиљан	Висок	Низак
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Готово сигуран	Минoран	Низак	Делимична
Сезонски грип	Умерен	Готово сигуран	Минoран	Низак	Делимична
COVID-19	Умерен	Готово сигуран	Минoран	Низак	Делимична
Хепатитис Б	Умерен	Готово сигуран	Минoран	Низак	Делимична
Хепатитис Ц	Умерен	Готово сигуран	Минoран	Низак	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Низак	Делимична
Цурење гаса	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Врло могуће	Минoран	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Низак	Мало вероватно	Умерен	Висок	Делимична
ХИВ/АИДС	Низак	Мало вероватно	Умерен	Висок	Делимична
Беснило	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Measles

1. Increase vaccination coverage for children under 5 years of age.
2. Strengthen surveillance.
3. Strictly enforce legal regulations regarding children's enrollment in collective settings conditioned by proper vaccination status, and hold parents accountable for failure to comply with mandatory vaccination laws.
4. Continue educating pediatricians.
5. Continue educating parents through mass media, social networks, and public forums.

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Regularly clean riverbeds.
4. Construct embankments.
5. Prohibit the construction of new facilities in flood-prone areas.
6. Avoid littering in these zones.
7. Organize drills for all entities involved in protection and rescue efforts.
8. Create a database listing facilities, roads, and bridges that may be threatened by flooding, and determine alternative routes.
9. Train and equip public enterprises and private companies for response in case of flooding.
10. Maintain communication with surrounding municipalities regarding precipitation and water levels.
11. Conduct regular inspections of roadways, and repair damages.

Water Supply Failure

1. Place local water supply sources under the supervision of the Public Health Institute of Kruševac and the Republic Sanitary Inspection, conducting regular monitoring of local waterworks, public faucets, artesian wells, and individual wells.
2. Create a registry of alternative sources of drinking and technical water.

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3. Ensure an adequate number of stationary tanks and water trucks to supply the population with safe drinking water.
4. Institutions like the "Pionir" kitchen for preschool nutrition must secure their own tanks for safe drinking water, and the "Branko Perišić" bakery industry must provide field vehicles and sufficient equipment for field monitoring of residual chlorine.
5. Rationalize consumption during summer months.
6. Issue orders regulating the rational use of water (prohibition on watering gardens, washing streets, washing cars, filling pools, etc.) and control their enforcement.
7. Develop programs and systems for the processing and use of technical water (rainwater, household wastewater, etc.).
8. Prohibit the construction of building and residential facilities in the vicinity of the accumulation that belongs to the first zone of sanitary protection and monitor compliance with measures.
9. Perform reconstruction of the chlorine station.
10. Replace outdated equipment and install new equipment at the Water Factory (pumps at pumping stations, etc.).
11. Acquire and install new shut-off valves on the water supply network in sufficient quantities.
12. Acquire and install pressure gauges in adequate quantities.

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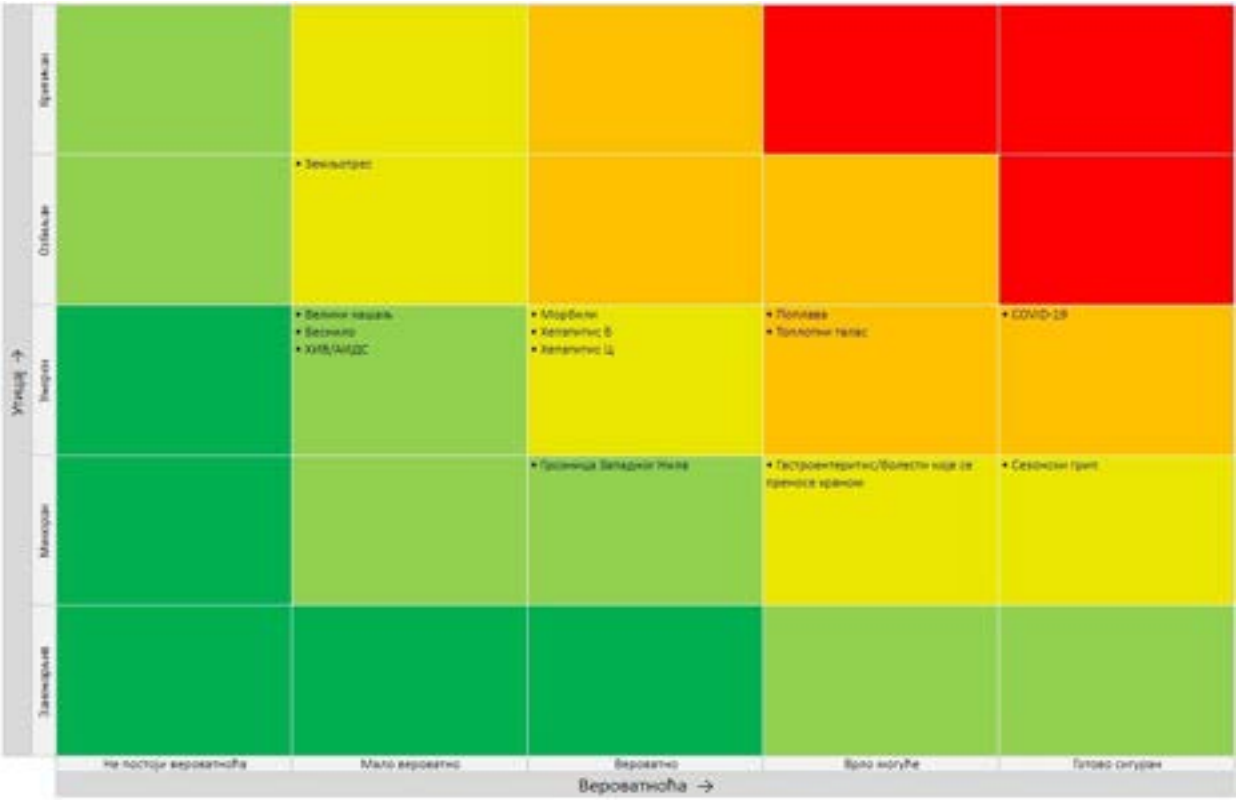
2. Municipality of Aleksandrovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Врло могуће	Умерен	Висок	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Висок	Делимична
Топлотни талас	Висок	Врло могуће	Умерен	Делимична	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Сезонски грип	Умерен	Готово сигуран	Минoран	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Б	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Ц	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Умерен	Делимична	Делимична
Беснило	Низак	Мало вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Делимична
ХИВ/АИДС	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Develop a Disaster Risk Reduction Plan.
2. Plan for a greater number of stationary and mobile tanks with safe drinking water.
3. Involve Red Cross activists more significantly in providing and delivering safe drinking water and necessary medications to the elderly and sick in affected areas.
4. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
5. Regularly clean riverbeds.
6. Construct embankments.
7. Prohibit the construction of new facilities in flood-prone areas.
8. Avoid littering in these zones.
9. Organize drills for all entities involved in protection and rescue efforts.
10. Create a database listing facilities, roads, and bridges that may be threatened by flooding, and determine alternative routes.
11. Train and equip public enterprises and private companies for response in case of flooding.
12. Maintain communication with surrounding municipalities regarding precipitation and water levels.
13. Conduct regular inspections of roadways and repair damages.

COVID-19

1. Continue educating healthcare workers on the benefits of COVID-19 vaccination.
2. Strengthen the capacities of the healthcare sector: infectious disease specialists, pulmonologists, microbiologists.
3. Improve laboratory diagnostics in Kruševac - consider introducing PCR testing at the Public Health Institute of Kruševac.

Heatwave

1. Develop a Disaster Risk Reduction Plan.
2. Ensure alternative water supply sources as well as water for technical use in emergency situations.

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3. Provide safe drinking water through stationary tanks and water trucks.
4. Place local water supply sources under the supervision of the Public Health Institute of Kruševac and the Republic Sanitary Inspection, conducting regular monitoring of local waterworks, public faucets, artesian wells, and individual wells.
5. Create a registry of alternative water supply sources based on water quality, for drinking or technical use.
6. Increase the engagement of veterinary services for the extermination of mosquitoes and ticks.
7. Enhance the capacities of the healthcare sector: infectious disease specialists, pediatricians, general practitioners.

MODERATE RISK

Earthquake

1. Develop a Disaster Risk Reduction Plan.
2. Strengthen cooperation among healthcare, non-healthcare, and local community response capacities; create communication lists.
3. Develop a warning system.
4. Educate the population on actions to take in the event of an earthquake.
5. Plan for a greater number of stationary and mobile tanks with safe drinking water.
6. Enhance evacuation capacities.
7. Increase the capacities of the healthcare sector - surgery, orthopedics, and psychiatry.
8. Develop a Disaster Risk Reduction Plan.

Gastroenteritis/Foodborne Diseases

1. Enhance control of fast-food production and sales facilities during the summer months.
2. Strengthen sanitary and hygienic oversight in centralized kitchens.
3. Increase the range of microbiological analyses to identify a greater number of pathogens at the Public Health Institute of Kruševac.
4. Consider introducing PCR diagnostics in Kruševac.

Seasonal Influenza

1. Increase vaccination coverage for individuals over 65, chronic patients, pregnant women, and employees in healthcare facilities, nursing homes, kindergartens, schools, and public enterprises.
2. Strengthen staffing capacities in healthcare.

Measles

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1. Increase vaccination coverage for children under 5 years of age.
2. Strengthen surveillance.
3. Strictly enforce legal regulations concerning children's enrollment in collective settings based on proper vaccination status.

Hepatitis B

1. Strengthen the capacities of the healthcare sector: infectious disease specialists, microbiologists.
2. Increase vaccination opportunities for the adult population against hepatitis B.
3. Improve laboratory diagnostics in Kruševac - consider introducing PCR testing at the Public Health Institute of Kruševac.

Hepatitis C

1. Strengthen the capacities of the healthcare sector: infectious disease specialists, microbiologists.
2. Improve laboratory diagnostics in Kruševac - consider introducing PCR testing at the Public Health Institute.

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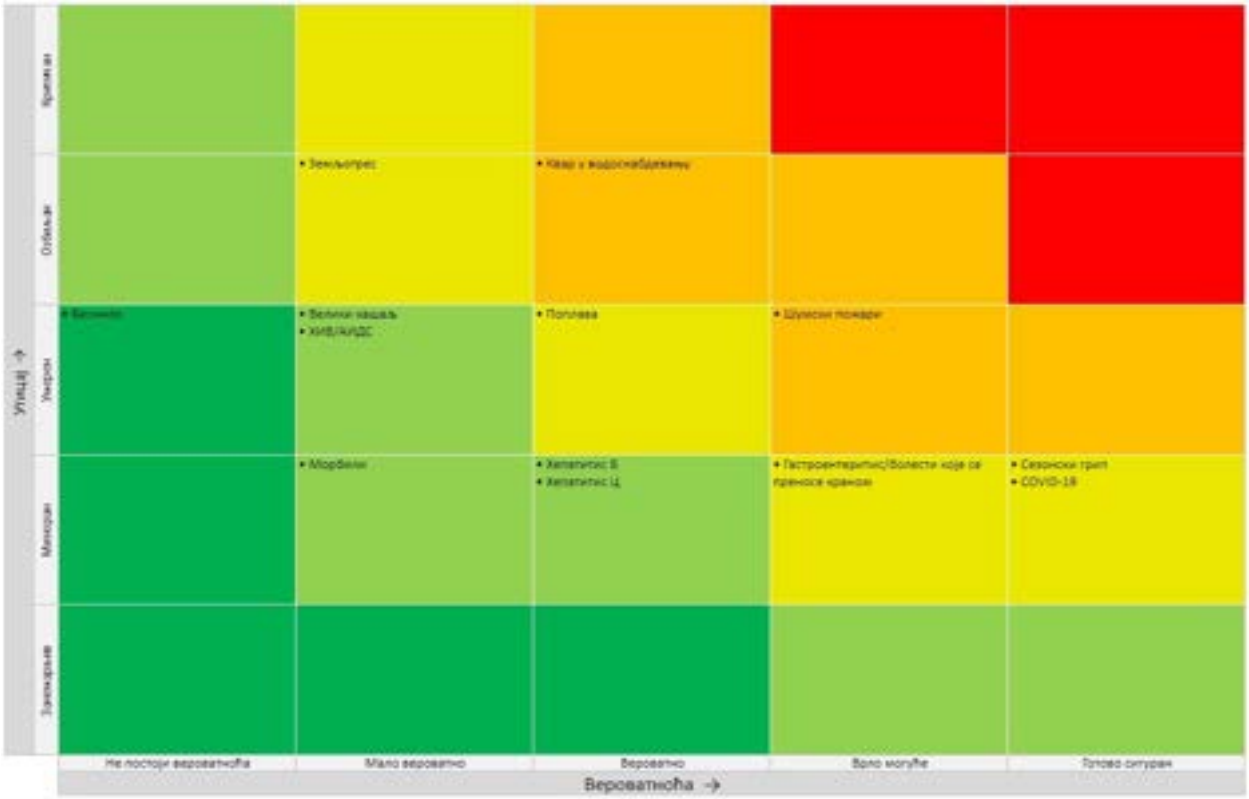
3. Municipality of Brus

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Квар у водоснабдевању	Висок	Вероватно	Озбиљан	Висок	Делимична
Шумски пожари	Висок	Врло могуће	Умерен	Делимична	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Сезонски грип	Умерен	Готово сигуран	Минoран	Низак	Делимична
Поплава	Умерен	Вероватно	Умерен	Низак	Делимична
COVID-19	Умерен	Готово сигуран	Минoран	Низак	Делимична
Морбили	Низак	Мало вероватно	Минoран	Низак	Висок
Хепатитис Б	Низак	Вероватно	Минoран	Низак	Делимична
Хепатитис Ц	Низак	Вероватно	Минoран	Низак	Делимична
Велики кашаљ	Низак	Мало вероватно	Умерен	Делимична	Делимична
ХИВ/АИДС	Низак	Мало вероватно	Умерен	Висок	Делимична
Беснило	Веома низак	Не постоји вероватноћа	Умерен	Висок	Низак

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Water Supply Disruption

1. Place local water supply sources under the supervision of the Public Health Institute of Kruševac and the Republic Sanitary Inspection, and conduct regular monitoring of local water systems, public faucets, artesian wells, and individual wells.
2. Ensure an adequate number of stationary tanks as well as mobile water trucks.
3. Provide field vehicles and sufficient equipment for on-site residual chlorine monitoring.
4. Increase water supply from new wells.
5. Upgrade the water supply network by replacing outdated pipes and repairing leaks to prevent water loss.
6. Rationalize water consumption during the summer months.
7. Issue regulations for the rational use of water (prohibiting watering yards, washing streets, washing cars, filling pools, etc.) and monitor compliance.
8. Develop programs and systems for processing and using technical water (rainwater, household wastewater, etc.).
9. Prohibit the construction of buildings in areas around water accumulations that fall within the first zone of sanitary protection and monitor compliance.
10. Execute the reconstruction of the chlorine station.
11. Replace outdated equipment and install new equipment in the water supply system (pumps in pumping stations, etc.).
12. Procure and install new valves in the water supply network in sufficient quantities.
13. Procure and install pressure gauges in sufficient quantities.

Forest Fires

1. Develop a Forest Fire Risk Reduction Plan.
2. Local communities should educate the population on reducing fire risks.
3. Implement legal regulations regarding penalties for intentionally starting fires, ensuring cooperation between municipal police and misdemeanor courts.
4. Increase the number of mountain rescue teams.
5. Regularly inspect illegal dumps and critical areas where outdoor fires are initiated, and take preventive and punitive measures against potential fire starters.

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6. Increase the number of fire rescue teams.
7. Donate more field vehicles with tanks for firefighting to teams.
8. Increase the number of municipal inspectors.
9. Enhance the capacities of the healthcare sector - surgery, emergency medicine.
10. Educate the population on providing first aid and self-help in field conditions.

MODERATE RISK

Earthquake

1. Strengthen cooperation between health and non-health sectors and local community response capacities; create communication lists.
2. Develop a warning system.
3. Educate the population on actions to take in the event of an earthquake.
4. Plan for a greater number of stationary and mobile tanks with safe drinking water.
5. Enhance evacuation capacities.
6. Increase the capacities of the healthcare sector - surgery, orthopedics, and psychiatry.
7. Develop a Disaster Risk Reduction Plan.

Gastroenteritis/Foodborne Diseases

1. Strengthen control of fast food production and sales facilities during the summer months.
2. Increase sanitary and hygiene oversight in centralized kitchens.
3. Expand the range of microbiological analyses to identify a greater number of pathogens at the Public Health Institute of Kruševac.
4. Consider introducing PCR diagnostics in Kruševac.

Seasonal Influenza

1. Increase vaccination coverage for individuals over 65, chronic patients, pregnant women, and employees in healthcare facilities, nursing homes, kindergartens, schools, and public enterprises.
2. Introduce PCR diagnostics at the Public Health Institute of Kruševac.
3. Strengthen staffing capacities in healthcare.

Flood

1. Develop a Disaster Risk Reduction Plan.
2. Plan for a greater number of stationary and mobile tanks with safe drinking water.

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3. More actively involve Red Cross activists in providing and delivering safe drinking water and necessary medications to elderly and sick individuals in affected areas.
4. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
5. Regularly clean riverbeds.
6. Construct embankments.
7. Prohibit the construction of new facilities in flood-prone areas.
8. Avoid littering in these zones.
9. Organize drills for all entities involved in protection and rescue.
10. Create a database listing facilities, roads, and bridges that may be threatened by flooding, and determine alternative routes.
11. Train and equip public enterprises and private companies for response in case of flooding.
12. Maintain communication with surrounding municipalities regarding precipitation and water levels.
13. Conduct regular inspections of roadways and repair damages.

COVID-19

1. Improve laboratory diagnostics in Kruševac - consider introducing PCR testing at the Public Health Institute of Kruševac.
2. Strengthen the capacities of the healthcare sector: infectious disease specialists, pulmonologists, microbiologists.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Ćićevac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Морбили	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Сезонски грип	Умерен	Готово сигуран	Минoран	Низак	Делимична
COVID-19	Умерен	Вероватно	Умерен	Делимична	Делимична
Хемијски агенси	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Висок	Делимична
Хепатитис Б	Низак	Вероватно	Минoран	Низак	Делимична
Хепатитис Ц	Низак	Вероватно	Минoран	Низак	Делимична
ХИВ/АИДС	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Measles

1. Maintain a high vaccination coverage for children under 5 years of age.
2. Strengthen surveillance.
3. Enforce legal regulations regarding the attendance of children in group settings, contingent on up-to-date vaccination status.

Flood

1. Develop a Disaster Risk Reduction Plan.
2. Plan for a greater number of stationary tanks and mobile water trucks with safe drinking water.
3. More actively involve Red Cross activists in providing and delivering safe drinking water and necessary medications to elderly and sick individuals in affected areas.
4. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
5. Regularly clean riverbeds.
6. Construct embankments.
7. Prohibit the construction of new facilities in flood-prone areas.
8. Avoid littering in these zones.
9. Organize drills for all entities involved in protection and rescue.
10. Create a database listing facilities, roads, and bridges that may be threatened by flooding and determine alternative routes.
11. Train and equip public enterprises and private companies for response in case of flooding.
12. Maintain communication with surrounding municipalities regarding precipitation and water levels.
13. Conduct regular inspections of roadways and repair damages.

MODERATE RISK

Gastroenteritis/Foodborne Diseases

1. Strengthen control of fast food production and sales facilities during the summer months.

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2. Increase sanitary and hygiene oversight in centralized kitchens.
3. Expand the range of microbiological analyses to identify a greater number of pathogens at the Public Health Institute of Kruševac.
4. Consider introducing PCR diagnostics in Kruševac.

Seasonal Influenza

1. Increase vaccination coverage for individuals over 65, chronic patients, pregnant women, and employees in healthcare facilities, nursing homes, kindergartens, schools, and public enterprises.
2. Introduce PCR diagnostics at the Public Health Institute of Kruševac.
3. Strengthen staffing capacities in healthcare.

COVID-19

1. Improve laboratory diagnostics in Kruševac - consider introducing PCR testing at the Public Health Institute of Kruševac.
2. Strengthen the capacities of the healthcare sector: infectious disease specialists, pulmonologists, microbiologists.

Chemical Agents

1. Develop a Disaster Risk Reduction Plan.
2. Improve toxicological diagnostics in Kruševac and establish communication with relevant institutions.
3. Establish communication with the Faculty of Occupational Safety in Niš (Department of Quality of Work and Living Environment) as well as with the Military Medical Academy in Belgrade.

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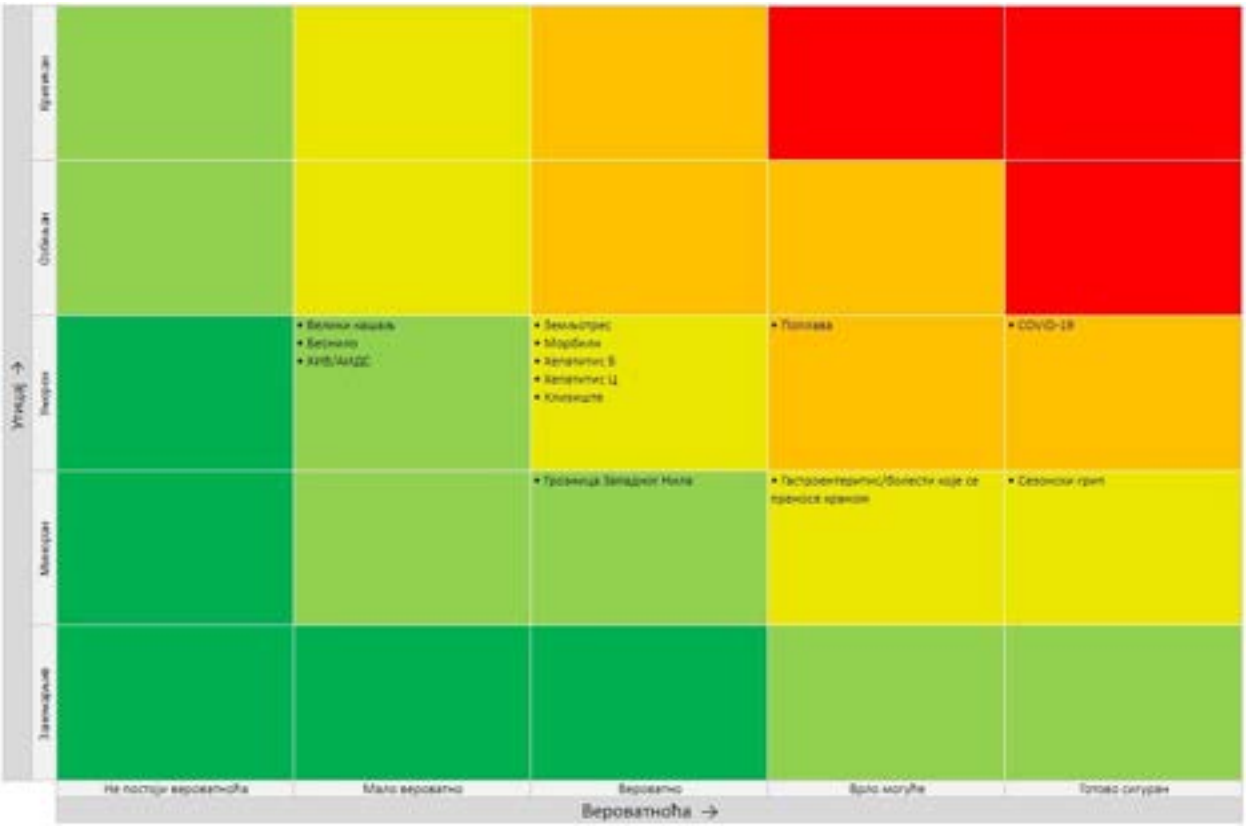
5. Municipality of Trstenik

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Врло могуће	Умерен	Низак	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Земљотрес	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Сезонски грип	Умерен	Готово сигуран	Минoран	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис Б	Умерен	Вероватно	Умерен	Низак	Делимична
Хепатитис Ц	Умерен	Вероватно	Умерен	Низак	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Мало вероватно	Умерен	Делимична	Делимична
Беснило	Низак	Мало вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Низак	Вероватно	Минoран	Низак	Делимична
ХИВ/АИДС	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Develop a Disaster Risk Reduction Plan.
2. Plan for a greater number of stationary tanks and mobile water trucks with safe drinking water.
3. More actively involve Red Cross activists in providing and delivering safe drinking water and necessary medications to elderly and sick individuals in affected areas.
4. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
5. Regularly clean riverbeds.
6. Construct embankments.
7. Prohibit the construction of new facilities in flood-prone areas.
8. Avoid littering in these zones.
9. Organize drills for all entities involved in protection and rescue.
10. Create a database listing facilities, roads, and bridges that may be threatened by flooding and determine alternative routes.
11. Train and equip public enterprises and private companies for response in case of flooding.
12. Maintain communication with surrounding municipalities regarding precipitation and water levels.
13. Conduct regular inspections of roadways and repair damages.

COVID-19

1. Strengthen the capacities of the healthcare sector: infectious disease specialists, pulmonologists, microbiologists.
2. Continuously educate the population about the benefits of COVID-19 vaccination.
3. Consider introducing laboratory diagnostics for COVID-19 at the Public Health Institute of Kruševac using PCR methods.

MODERATE RISK

Earthquake

1. Develop a Disaster Risk Reduction Plan.
2. Strengthen cooperation between health and non-health sectors and local community response capacities; create communication lists.

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3. Develop an alert system.
4. Educate the population on actions to take in the event of an earthquake.
5. Strengthen the capacities of the healthcare sector: surgery with orthopedics and psychiatry.

Gastroenteritis/Foodborne Diseases

1. Strengthen control of fast food production and sales facilities during the summer months.
2. Increase sanitary and hygiene oversight in centralized kitchens.

Seasonal Influenza

1. Increase vaccination coverage for individuals over 65, chronic patients, pregnant women, and employees in healthcare facilities, nursing homes, kindergartens, schools, and public enterprises.
2. Enhance staffing capacities at the Health Center in Trstenik.

Measles

1. Increase vaccination coverage for children under 5 years of age.
2. Improve the timeliness of vaccinations.
3. Strengthen surveillance.
4. Enforce legal regulations regarding the attendance of children in group settings, contingent on up-to-date vaccination status.

Hepatitis B

1. Strengthen the capacities of the healthcare sector: infectious disease specialists, microbiologists.
2. Increase vaccination opportunities for the adult population against Hepatitis B.

Hepatitis C

1. Strengthen the capacities of the healthcare sector: infectious disease specialists, microbiologists.

Landslide

1. Develop a Disaster Risk Reduction Plan.
2. Do not build structures in landslide-affected areas.
3. Reforest landslide-affected areas.
4. Strengthen cooperation between health and non-health sectors and local community response capacities; create communication lists.
5. Develop an alert system.
6. Educate the population on actions to take in the event of a landslide.
7. Strengthen the capacities of the healthcare sector: surgery with orthopedics and psychiatry.

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6. Municipality of Varvarin

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Готово сигуран	Минoран	Веома низак	Делимична
Сезонски грип	Умерен	Готово сигуран	Минoран	Низак	Делимична
Морбили	Умерен	Врло могуће	Минoран	Низак	Делимична
Поплава	Умерен	Вероватно	Умерен	Низак	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Хепатитис Б	Низак	Вероватно	Минoран	Низак	Делимична
Хепатитис Ц	Умерен	Вероватно	Умерен	Низак	Низак
Велики кашаљ	Низак	Мало вероватно	Умерен	Делимична	Делимична
Беснило	Умерен	Мало вероватно	Озбиљан	Висок	Низак
Топлотни талас	Висок	Врло могуће	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Enhance laboratory diagnostics in Kruševac—consider introducing PCR testing at the Public Health Institute of Kruševac.
2. Strengthen the capacities of the healthcare sector: infectious disease specialists, pulmonologists, microbiologists.
3. Continue educating healthcare workers about the benefits of vaccination against COVID-19.

Heatwave

1. Develop a Disaster Risk Reduction Plan.
2. Ensure alternative water supply sources as well as water for technical use in emergencies.
3. Provide safe drinking water—stationary tanks and mobile water trucks.
4. Monitor local water supply sources to be used in emergencies, with regular oversight from the Public Health Institute of Kruševac and the Republic Sanitary Inspection.
5. Create a registry of alternative water supply sources based on water quality for drinking or technical use.
6. Increase engagement of veterinary services for the control of mosquitoes and ticks.
7. Strengthen the capacities of the healthcare sector: infectious disease specialists, pediatricians, general practitioners.

MODERATE RISK

Earthquake

1. Strengthen cooperation between health and non-health sectors and local community response capacities; update communication lists.
2. Develop an alert system.
3. Educate the population on actions to take in the event of an earthquake.
4. Plan for a greater number of stationary tanks and mobile water trucks with safe drinking water.
5. Enhance evacuation capacities.
6. Strengthen the capacities of the healthcare sector—surgery with orthopedics and psychiatry.
7. Develop a Disaster Risk Reduction Plan.

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Gastroenteritis/Foodborne Diseases

1. Expand the range of microbiological analyses to identify a greater number of pathogens at the Public Health Institute of Kruševac.
2. Consider introducing PCR diagnostics in Kruševac.
3. Strengthen control of fast food production and sales facilities during the summer months.
4. Increase sanitary and hygiene oversight in centralized kitchens.

Seasonal Influenza

1. Increase vaccination coverage for individuals over 65, chronic patients, pregnant women, and employees in healthcare facilities, nursing homes, kindergartens, schools, and public enterprises.
2. Introduce PCR diagnostics at the Public Health Institute of Kruševac.
3. Enhance staffing capacities in healthcare.

Measles

1. Increase vaccination coverage for children under 5 years of age.
2. Strengthen surveillance.
3. Enforce legal regulations regarding the attendance of children in group settings, contingent on up-to-date vaccination status.

Flood

1. Develop a Disaster Risk Reduction Plan.
2. Plan for a greater number of stationary tanks and mobile water trucks with safe drinking water.
3. More actively involve Red Cross activists in providing and delivering safe drinking water and necessary medications to elderly and sick individuals in affected areas.
4. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
5. Regularly clean riverbeds.
6. Construct embankments.
7. Prohibit the construction of new facilities in flood-prone areas.
8. Avoid littering in these zones.
9. Organize drills for all entities involved in protection and rescue.
10. Create a database listing facilities, roads, and bridges that may be threatened by flooding and determine alternative routes.
11. Train and equip public enterprises and private companies for response in case of flooding.

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12. Maintain communication with surrounding municipalities regarding precipitation and water levels.
13. Conduct regular inspections of roadways and repair damages.

Hepatitis C

1. Enhance laboratory diagnostics in Kruševac—consider introducing PCR testing at the Public Health Institute.
2. Strengthen the capacities of the healthcare sector: infectious disease specialists, microbiologists.

Rabies

1. Establish a dog shelter.
2. Implement sterilization and rabies vaccination in the dog shelter, as well as adoption programs for treated dogs.
3. Increase the number of veterinarians and veterinary inspectors.
4. Vaccinate as many pets—dogs and cats—as possible against rabies.
5. Continue aerial vaccination of foxes and other wild animals.

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JABLANICA ADMINISTRATIVE DISTRICT

1. City of Leskovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Висок	Врло могуће	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Мало вероватно	Умерен	Делимична	Делимична
Топлотни талас	Висок	Вероватно	Озбиљан	Висок	Низак
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Делимична	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Regularly clean riverbeds.
4. Build embankments.
5. Prohibit the construction of new structures in flood-prone areas.
6. Do not litter in these areas.
7. Organize exercises for protection and rescue involving all relevant entities.
8. Create a database with a list of facilities, roads, and bridges that may be at risk during floods and determine alternative routes.
9. Train and equip public enterprises and companies for response in case of floods.
10. Maintain communication with neighboring municipalities about precipitation and water levels.
11. Regularly inspect roads, including repairs for any damage.

Heat Wave

1. Acquire field vehicles.
2. Strengthen the staffing capacities of the Health Center in Leskovac, the General Hospital in Leskovac, and the Public Health Institute in Leskovac.
3. Actively involve representatives from the Public Health Institute in the Health Council and the development of the Public Health Plan.

Seasonal Influenza

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Leskovac.
3. Increase the number of hospital beds at the General Hospital in Leskovac.
4. Strengthen staffing capacities.
5. Activate the Health Council to develop Operational Plans.

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COVID-19

1. Strengthen health infrastructure: expand hospital capacity and procure modern medical equipment.
2. Educate healthcare workers.
3. Improve laboratory diagnostics at the Public Health Institute in Leskovac—consider implementing PCR testing.
4. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
5. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
6. Increase the population's access to COVID-19 testing.
7. Collaborate with local governments and international organizations to coordinate measures and activities (intensify activities of the Health Council and develop operational plans).

Gastroenteritis/Foodborne Illnesses

1. Strengthen staffing capacities at health institutions at all levels of healthcare.
2. Strengthen the capacities of inspection services.
3. Equip the microbiological laboratory at the Public Health Institute in Leskovac and introduce new health technologies—procure PCR equipment.
4. Include representatives from the Public Health Institute in the Health Council and develop a Public Health Plan.

MODERATE RISK

Cold Wave / Harsh Winter

1. Acquire field vehicles.
2. Strengthen the staffing capacities of the Health Center in Leskovac, the General Hospital in Leskovac, and the Public Health Institute in Leskovac.
3. Actively involve representatives from the Public Health Institute in the Health Council and the development of the Public Health Plan.

Measles

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Leskovac.
3. Strengthen staffing capacities.
4. Activate the Health Council to develop Operational Plans.

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5. Implement supplementary vaccination for unvaccinated and under-vaccinated individuals.

Pertussis (Whooping Cough)

1. Introduce PCR diagnostics at the Public Health Institute in Leskovac.
2. Enhance staffing capacities in healthcare: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).

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2. Municipality of Vlastonice

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Leskovac.
3. Increase the number of hospital beds at the General Hospital in Leskovac.
4. Strengthen staffing capacities.
5. Activate the Health Council to develop Operational Plans.

COVID-19

1. Strengthen health infrastructure: expand hospital capacity and procure modern medical equipment.
2. Educate healthcare workers.
3. Improve laboratory diagnostics at the Public Health Institute in Leskovac—consider implementing PCR testing.
4. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
5. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
6. Increase the population's access to COVID-19 testing.
7. Collaborate with local governments and international organizations to coordinate measures and activities (intensify activities of the Health Council and develop operational plans).

Gastroenteritis/Foodborne Illnesses

1. Strengthen staffing capacities at health institutions at all levels of healthcare.
2. Strengthen the capacities of inspection services.
3. Equip the microbiological laboratory at the Public Health Institute in Leskovac and introduce new health technologies—procure PCR equipment.
4. Include representatives from the Public Health Institute in the Health Council and develop a Public Health Plan.

MODERATE RISK

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.

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2. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Regularly clean riverbeds.
4. Build embankments.
5. Prohibit the construction of new structures in flood-prone areas.
6. Do not litter in these areas.
7. Organize exercises for protection and rescue involving all relevant entities.
8. Create a database with a list of facilities, roads, and bridges that may be at risk during floods and determine alternative routes.
9. Train and equip public enterprises and companies for response in case of floods.
10. Maintain communication with neighboring municipalities about precipitation and water levels.
11. Regularly inspect roads, including repairs for any damage.

Cold Wave / Harsh Winter

1. Acquire field vehicles.
2. Strengthen the staffing capacities of the Health Center in Vlasotince, the General Hospital in Leskovac, and the Public Health Institute in Leskovac.
3. Actively involve representatives from the Public Health Institute in the Health Council and the development of the Public Health Plan.

Whooping Cough

1. Introduce PCR diagnostics at the Public Health Institute in Leskovac.
2. Enhance staffing capacities in healthcare: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).

Measles

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Leskovac.
3. Strengthen staffing capacities.
4. Activate the Health Council to develop Operational Plans.
5. Implement supplementary vaccination for unvaccinated and under-vaccinated individuals.

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3. Municipality of Medvedja

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Gastroenteritis/Foodborne Illnesses

1. Strengthen the staffing capacities of health institutions at all levels of healthcare.
2. Strengthen the capacities of inspection services.
3. Equip the microbiological laboratory at the Public Health Institute in Leskovac and introduce new health technologies—procure PCR equipment.
4. Include representatives from the Public Health Institute in the Health Council and develop a Public Health Plan.

COVID-19

1. Strengthen health infrastructure: expand hospital capacity and procure modern medical equipment.
2. Educate healthcare workers.
3. Improve laboratory diagnostics at the Public Health Institute in Leskovac—consider introducing PCR testing.
4. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
5. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
6. Increase the population's access to COVID-19 testing.
7. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council and develop operational plans).

Seasonal Influenza

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Leskovac.
3. Increase the number of hospital beds at the General Hospital in Leskovac.
4. Strengthen staffing capacities.
5. Activate the Health Council to develop operational plans.

MODERATE RISK

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.

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2. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Regularly clean riverbeds.
4. Build embankments.
5. Prohibit the construction of new structures in flood-prone areas.
6. Do not litter in these areas.
7. Organize exercises for protection and rescue involving all relevant entities.
8. Create a database with a list of facilities, roads, and bridges that may be at risk during floods and determine alternative routes.
9. Train and equip public enterprises and companies for response in case of floods.
10. Maintain communication with neighboring municipalities about precipitation and water levels.
11. Regularly inspect roads, including repairs for any damage.

Pertussis (Whooping Cough)

1. Introduce PCR diagnostics at the Public Health Institute in Leskovac.
2. Enhance staffing capacities in healthcare: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).

Storm

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper actions during severe weather and storms.
3. Regularly maintain trees in public areas.
4. Organize exercises for protection and rescue involving all relevant entities.
5. Train and equip public enterprises and companies for response in case of storms.

Cold Wave / Harsh Winter

1. Acquire field vehicles.
2. Strengthen staffing capacities at the Health Center in Medveđa, the General Hospital in Leskovac, and the Public Health Institute in Leskovac.
3. Actively involve representatives from the Public Health Institute in the Health Council and the development of the Public Health Plan.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Bojnik

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Олуја	Умерен	Вероватно	Умерен	Висок	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Висок	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Leskovac.
3. Increase the number of hospital beds at the General Hospital in Leskovac.
4. Strengthen staffing capacities.
5. Activate the Health Council to develop operational plans.

COVID-19

1. Strengthen health infrastructure: expand hospital capacity and procure modern medical equipment.
2. Educate healthcare workers.
3. Improve laboratory diagnostics at the Public Health Institute in Leskovac—consider introducing PCR testing.
4. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
5. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
6. Increase the population's access to COVID-19 testing.
7. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council and develop operational plans).

Gastroenteritis/Foodborne Illnesses

1. Strengthen the staffing capacities of health institutions at all levels of healthcare.
2. Strengthen the capacities of inspection services.
3. Equip the microbiological laboratory at the Public Health Institute in Leskovac and introduce new health technologies—procure PCR equipment.
4. Include representatives from the Public Health Institute in the Health Council and develop a Public Health Plan.

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MODERATE RISK

Measles

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Leskovac.
3. Strengthen staffing capacities.
4. Health Council—develop operational plans.
5. Implement additional vaccination for unvaccinated and partially vaccinated individuals.

Pertussis (Whooping Cough)

1. Introduce PCR diagnostics at the Public Health Institute in Leskovac.
2. Enhance staffing capacities in healthcare: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).

Storm

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper actions during severe weather and storms.
3. Regularly maintain trees in public areas.
4. Organize exercises for protection and rescue involving all relevant entities.
5. Train and equip public enterprises and companies for response in case of storms.

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Regularly clean riverbeds.
4. Build embankments.
5. Prohibit the construction of new structures in flood-prone areas.
6. Do not litter in these areas.
7. Organize exercises for protection and rescue involving all relevant entities.
8. Create a database with a list of facilities, roads, and bridges that may be at risk during floods and determine alternative routes.
9. Train and equip public enterprises and companies for response in case of floods.

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10. Maintain communication with neighboring municipalities about precipitation and water levels.
11. Regularly inspect roads, including repairs for any damage.

Cold Wave / Harsh Winter

1. Acquire field vehicles.
2. Strengthen staffing capacities at the Health Center in Bojnik, the General Hospital in Leskovac, and the Public Health Institute in Leskovac.
3. Actively involve representatives from the Public Health Institute in the Health Council and the development of the Public Health Plan.

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5. Municipality of Crna Trava

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Клизиште	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Висок	Делимична
Хладни талас / Тешка зима	Висок	Врло могуће	Озбиљан	Висок	Делимична
Олуја	Низак	Мало вероватно	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Делимична	Делимична
Топлотни талас	Низак	Мало вероватно	Умерен	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Cold Wave / Harsh Winter

1. Acquire field vehicles.
2. Strengthen staffing capacities at the Health Center in Vlasotince, the General Hospital in Leskovac, and the Public Health Institute in Leskovac.
3. Actively involve representatives from the Public Health Institute in the Health Council and the development of the Public Health Plan.

Seasonal Influenza

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Leskovac.
3. Increase the number of hospital beds at the General Hospital in Leskovac.
4. Strengthen staffing capacities.
5. Activate the Health Council to develop operational plans.

COVID-19

1. Strengthen health infrastructure: expand hospital capacity and procure modern medical equipment.
2. Educate healthcare workers.
3. Improve laboratory diagnostics at the Public Health Institute in Leskovac—consider introducing PCR testing.
4. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
5. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
6. Increase the population's access to COVID-19 testing.
7. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council and develop operational plans).

Gastroenteritis/Foodborne Illnesses

1. Strengthen the staffing capacities of health institutions at all levels of healthcare.
2. Strengthen the capacities of inspection services.

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3. Equip the microbiological laboratory at the Public Health Institute in Leskovac and introduce new health technologies—procure PCR equipment.
4. Include representatives from the Public Health Institute in the Health Council and develop a Public Health Plan.

MODERATE RISK

Earthquake

1. Education.
2. Organize workshops and seminars for the population on how to prepare for an earthquake and how to act during and after one.
3. Informational materials.
4. Distribute brochures, posters, and other materials explaining safety measures and preparations.
5. Development of plans.
6. Develop and regularly update emergency response plans in case of an earthquake, including evacuation routes, temporary shelters, and coordination of rescue teams.
7. Drills and simulations.
8. Organize regular earthquake drills and simulations to test the preparedness and effectiveness of emergency response plans.
9. Maintenance and strengthening.
10. Regularly maintain and strengthen vital infrastructure such as bridges, roads, electricity, and water supply networks to reduce the potential for damage during an earthquake.
11. Backup systems.
12. Install backup systems for water and electricity supply to ensure continuity of services in case of damage.
13. Inter-institutional cooperation.
14. Ensure close cooperation between local authorities, NGOs, rescue services, and the community.

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Regularly clean riverbeds.
4. Build embankments.
5. Prohibit the construction of new structures in flood-prone areas.

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6. Do not litter in these areas.
7. Organize exercises for protection and rescue involving all relevant entities.
8. Create a database with a list of facilities, roads, and bridges that may be at risk during floods and determine alternative routes.
9. Train and equip public enterprises and companies for response in case of floods.
10. Maintain communication with neighboring municipalities about precipitation and water levels.
11. Regularly inspect roads, including repairs for any damage.

Forest Fires

1. A priority action for fire prevention in the municipality of Crna Trava is to establish and maintain firebreaks and clear vegetation in at-risk areas.
2. This includes regularly removing dry grass, shrubs, and other combustible materials in residential areas and along roads, as well as forming protective belts around forested areas.
3. It is also important to improve local firefighting equipment and strengthen the capacities of fire units, as well as educate the population on preventive measures and proper behavior in case of a fire.

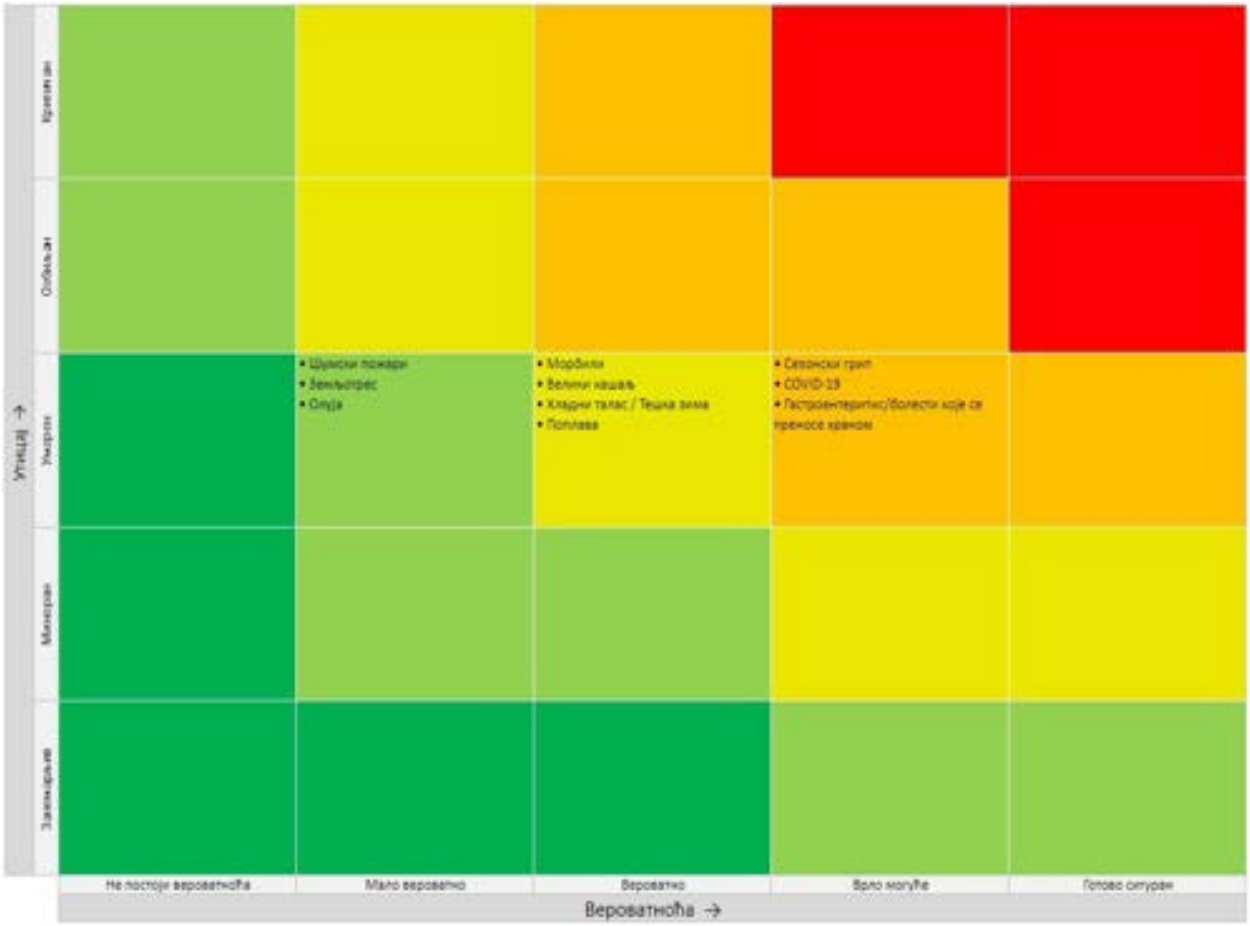
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Lebane

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Делимична	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Висок	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Олуја	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Leskovac.
3. Increase the number of hospital beds at the General Hospital in Leskovac.
4. Strengthen staffing capacities.
5. Activate the Health Council to develop operational plans.

COVID-19

1. Strengthen health infrastructure: expand hospital capacities and procure modern medical equipment.
2. Educate healthcare workers.
3. Improve laboratory diagnostics at the Public Health Institute in Leskovac—consider introducing PCR testing.
4. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
5. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
6. Increase the population's access to COVID-19 testing.
7. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council and develop operational plans).

Gastroenteritis/Foodborne Illnesses

1. Strengthen the staffing capacities of health institutions at all levels of healthcare.
2. Strengthen the capacities of inspection services.
3. Equip the microbiological laboratory at the Public Health Institute in Leskovac and introduce new health technologies—procure PCR equipment.
4. Include representatives from the Public Health Institute in the Health Council and develop a Public Health Plan.

MODERATE RISK

Measles

1. Increase vaccination coverage.
2. Consider PCR diagnostics at the Public Health Institute in Leskovac.

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3. Strengthen staffing capacities.
4. Health Council - develop operational plans.
5. Implement supplementary vaccination for unvaccinated and incompletely vaccinated individuals.

Pertussis (Whooping Cough)

1. Introduce PCR diagnostics at the Public Health Institute in Leskovac.
2. Strengthen staffing capacities in healthcare: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).

Cold Wave / Harsh Winter

1. Acquire field vehicles.
2. Strengthen staffing capacities at the Health Center in Lebane, the General Hospital in Leskovac, and the Public Health Institute in Leskovac.
3. Actively involve representatives from the Public Health Institute in the Health Council and the development of the Public Health Plan.

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Regularly clean riverbeds.
4. Build embankments.
5. Prohibit the construction of new structures in flood-prone areas.
6. Do not litter in these areas.
7. Organize exercises for protection and rescue involving all relevant entities.
8. Create a database with a list of facilities, roads, and bridges that may be at risk during floods and determine alternative routes.
9. Train and equip public enterprises and companies for response in case of floods.
10. Maintain communication with neighboring municipalities about precipitation and water levels.
11. Regularly inspect roads, including repairs for any damage.

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PČINJA ADMINISTRATIVE DISTRICT

1. City of Vranje

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Вероватно	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper actions before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Regularly clean riverbeds.
4. Build embankments.
5. Prohibit the construction of new structures in flood-prone areas.
6. Do not litter in these areas.
7. Organize exercises for protection and rescue involving all relevant entities.
8. Create a database with a list of facilities, roads, and bridges that may be at risk during floods and determine alternative routes.
9. Train and equip public enterprises and companies for response in case of floods.
10. Maintain communication with neighboring municipalities about precipitation and water levels.
11. Regularly inspect roads, including repairs for any damage.
12. Enhance the capacities of the health and non-health sectors (equip mobile health teams to improve the quality of healthcare).

Seasonal Influenza

1. Increase vaccination coverage for vulnerable population groups (those over 65, chronic patients, pregnant women, etc.), as well as for employees in healthcare institutions, nursing homes, kindergartens, schools, and public enterprises.
2. Educate the population about the importance of vaccination in protecting against Seasonal Influenza, especially among vulnerable groups.
3. Introduce PCR diagnostics at the Public Health Institute in Vranje.
4. Strengthen staffing capacities in healthcare.

Air Pollution

1. To improve air quality in the municipality of Vranje and reduce the impact of air pollution on human health, the following measures need to be taken:
2. Build new biomass heating plants—transition from heating oil to biomass; enable better traffic flow regulation.

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3. Procure modern equipment needed for air quality analysis and monitoring for the chemical laboratory at the Public Health Institute in Vranje (PM particle sampler, Atomic Absorption Spectrometer, Gas Chromatograph, etc.).
4. Regular maintenance of municipal hygiene.
5. Continue activities for gasification and heating projects, which have been partially implemented, to cover as much of the city as possible; provide subsidies for households from local government for transitioning from individual heating systems to district heating.
6. Continue building traffic bypasses and modernizing existing city roads while improving traffic regulation in the city.
7. Conduct thorough inspections of exhaust emissions from motor vehicles during technical inspections.
8. Increase the frequency and number of streets that are regularly cleaned and washed; continue planned enhancement and maintenance of green spaces and tree-lined avenues in the city, and establish protective green belts between industrial zones and urban areas.
9. Prohibit the transport of waste materials through city streets that may negatively affect air pollution.
10. Continue monitoring the impact of air pollution on human health and the environment.
11. Work on ongoing education of the population to raise awareness about reducing air pollution through field actions involving citizens.

COVID-19

1. Strengthen health infrastructure: procure modern medical equipment. Educate healthcare workers.
2. Improve laboratory diagnostics at the Public Health Institute in Vranje—introduce PCR testing. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
4. Increase the population's access to COVID-19 testing.
5. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council and develop operational plans).

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2. Municipality of Bosilegrad

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Вероватно	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthen health infrastructure: procure modern medical equipment. Educate healthcare workers.
2. Improve laboratory diagnostics at the Public Health Institute in Vranje—introduce PCR testing. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
4. Increase access to COVID-19 testing for the population.
5. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council and develop operational plans).

Flood

1. Organize a protection and rescue exercise involving all relevant entities.
2. Create a database with a list of facilities, roads, and bridges that may be at risk during floods and determine alternative routes.
3. Train and equip public enterprises and companies to respond in case of floods.
4. Maintain communication with neighboring municipalities regarding precipitation and water levels.
5. Regularly inspect roads, including repairs for any damage.
6. Enhance the capacities of the health and non-health sectors (equip mobile health teams to improve the quality of healthcare).

Seasonal Influenza

1. Increase vaccination coverage for vulnerable population groups (those over 65, chronic patients, pregnant women, etc.), as well as for employees in healthcare institutions, nursing homes, kindergartens, schools, and public enterprises.
2. Educate the population about the importance of vaccination in protecting against Seasonal Influenza, especially among vulnerable groups.
3. Introduce PCR diagnostics at the Public Health Institute in Vranje.
4. Strengthen staffing capacities in healthcare.

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MODERATE RISK

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases.
2. Ongoing control by Veterinary, Sanitary, and Agricultural Inspection.
3. Sanitary-hygienic oversight with the implementation of pest control activities.
4. The Public Health Institute in Vranje conducts health examinations for certain categories of employees in facilities under sanitary supervision.

Measles

1. Increase vaccination coverage.
2. Continuous informing of the population, especially parents, by pediatricians and epidemiologists to enhance parental knowledge about the importance of vaccination, provide accurate information, and strengthen parental trust in this method of child healthcare.
3. Implement supplementary immunization for unvaccinated and partially vaccinated individuals.
4. Strengthen staffing and technical capacities.
5. Within the Health Council of Bosilegrad, improve intersectoral cooperation between local government and the Public Health Institute in Vranje in defining planning documents to implement the Public Health Law.

Heatwave

1. Develop a Disaster Risk Reduction Plan and establish a civil protection unit.
2. Procure field vehicles and a larger number of water tankers.
3. Provide larger spaces with cooling devices for socially vulnerable and at-risk population groups.
4. Strengthen staffing capacities in the health sector: Health Center Bosilegrad and Public Health Institute Vranje. Actively involve representatives of the Public Health Institute in the Health Council. Educate the population on how to behave during prolonged periods of extreme heat.

Forest Fires

1. Develop a Disaster Risk Reduction Plan and a Forest Fire Risk Reduction Plan.
2. Establish civil protection units for these purposes and increase the number of mountain rescue teams.
3. Increase the number of fire rescue teams.
4. Intensify cooperation among services: Public Enterprise "Serbia Forests" in Belgrade, the Vranje Forest Management, and the Hunting Association "Pheasant" in Vranje, as well as with relevant city and national inspections for prevention and removal of outdoor fires.
5. Ensure a larger number of field vehicles and water tankers for firefighting.

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6. Establish cooperation with local villagers, educate them, and provide them with equipment for rapid reporting to relevant services in case of a fire outbreak.
7. Regularly inspect illegal dumpsites and critical areas where outdoor fires may initiate, and take preventive and repressive measures against potential fire starters.
8. Strengthen staffing capacities in the health sector: General Hospital Vranje, Health Center Vranje, and Public Health Institute Vranje.
9. Educate the population on reducing fire risk and how to behave during a fire outbreak, as well as on providing first aid and self-help in field conditions.

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3. Municipality of Bujanovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening health infrastructure: procurement of modern medical equipment. Education for healthcare workers.
2. Improve laboratory diagnostics at the Public Health Institute in Vranje—introduction of PCR testing.
3. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
4. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
5. Increase the testing coverage of the population for COVID-19.
6. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council and develop operational plans).

Seasonal Influenza

1. Increase vaccination coverage for vulnerable population groups (those over 65, chronic patients, pregnant women, etc.), as well as for employees in healthcare institutions, nursing homes, kindergartens, schools, and public enterprises.
2. Educate the population about the importance of vaccination in protecting against Seasonal Influenza, especially among vulnerable groups.
3. Introduce PCR diagnostics at the Public Health Institute in Vranje.
4. Strengthen staffing capacities in healthcare.

MODERATE RISK

Landslides

1. Priority action for combating landslides is mapping and monitoring at-risk areas.
2. This includes detailed mapping of landslide-prone terrains, regular monitoring of soil stability changes, and establishing an early warning system.
3. Additionally, measures for soil stabilization must be implemented, such as constructing retaining walls, improving drainage, and reforestation of affected areas.

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Measles

1. Increase vaccination coverage.
2. Continuous information dissemination to the population, especially parents, by pediatricians and epidemiologists to enhance parents' knowledge about the importance of vaccination, provide accurate information, and strengthen parental trust in this method of child healthcare.
3. Implement supplementary immunization for unvaccinated and partially vaccinated individuals.
4. Strengthen staffing and technical capacities.
5. Within the Health Council of Bujanovac, improve intersectoral cooperation between local government and the Public Health Institute in Vranje when defining planning documents to implement the Public Health Law.

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper actions before, during, and after flood recedes to reduce the risk of intestinal infectious diseases.
3. Conduct regular cleaning of riverbeds.
4. Construct levees.
5. Prohibit the construction of new facilities in flood-prone areas.
6. Do not litter in these areas.
7. Organize exercises for protection and rescue involving all significant entities for protection and rescue.
8. Create a database listing facilities, roads, and bridges that may be at risk in the event of floods and determine alternative routes.
9. Train and equip public enterprises and companies to respond in case of floods.
10. Maintain communication with neighboring municipalities regarding precipitation and water levels.
11. Regularly inspect roads, including repair and remediation of damage.
12. Enhance the capacities of the health and non-health sectors (equip mobile health teams to improve healthcare quality).

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Preševo

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Вероватно	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper actions before, during, and after floods to reduce the risk of intestinal infectious diseases.
3. Conduct regular cleaning of riverbeds.
4. Construct levees.
5. Prohibit the construction of new facilities in flood-prone areas.
6. Do not litter in these zones.
7. Organize protection and rescue exercises involving all significant entities for protection and rescue.
8. Create a database listing facilities, roads, and bridges that may be at risk in the event of floods and determine alternative routes.
9. Train and equip public enterprises and companies to respond in case of floods.
10. Maintain communication with neighboring municipalities regarding precipitation and water levels.
11. Regularly inspect roads, including repair and remediation of damage.
12. Regularly monitor drinking water, disinfect flooded facilities after water recedes, and disinfect individual wells.

COVID-19

1. Strengthen health infrastructure: procurement of modern medical equipment. Education for healthcare workers.
2. Improve laboratory diagnostics at the Public Health Institute in Vranje—introduction of PCR testing. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
4. Increase the testing coverage of the population for COVID-19.
5. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council and develop operational plans).

Seasonal Influenza

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

1. Increase vaccination coverage for vulnerable population groups (those over 65, chronic patients, pregnant women, etc.), as well as for employees in healthcare institutions, nursing homes, kindergartens, schools, and public enterprises.
2. Educate the population about the importance of vaccination in protecting against Seasonal Influenza, especially among vulnerable groups.
3. Introduce PCR diagnostics at the Public Health Institute in Vranje. Strengthen staffing capacities in healthcare.

MODERATE RISK
Measles

1. Increase vaccination coverage.
2. Continuously inform the population, especially parents, through pediatricians and epidemiologists to enhance their knowledge about the importance of vaccination, provide accurate information, and strengthen parental trust in this method of child healthcare.
3. Implement supplementary immunization for unvaccinated and partially vaccinated individuals.
4. Strengthen staffing and technical capacities.
5. Within the Health Council of Preševo, improve intersectoral cooperation between local government and the Public Health Institute in Vranje when defining planning documents to implement the Public Health Law.

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases.
2. Continuous control by Veterinary, Sanitary, and Agricultural Inspection.
3. Sanitary-hygienic supervision with the implementation of pest control activities.
4. The Public Health Institute in Vranje conducts health examinations for certain categories of employees in facilities under sanitary supervision.

Landslides

1. Priority action for combating landslides is mapping and monitoring at-risk areas.
2. This includes detailed mapping of landslide-prone terrains, regular monitoring of soil stability changes, and establishing an early warning system.
3. Additionally, measures for soil stabilization must be implemented, such as constructing retaining walls, improving drainage, and reforestation of affected areas.

Forest Fires

1. Procurement of field vehicles and motorized sleds.
2. Strengthen staffing capacities.
3. Enhance the capacities of the Health Center in Preševo and the Public Health Institute in Vranje.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Sudrulica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Вероватно	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Compliance with legal and sub-legal acts governing the management of defined risks.
2. Increase vaccination coverage against the flu among vulnerable population groups.
3. Educate the population, especially at-risk groups.
4. Raise awareness among healthcare workers about the importance of immunizing healthcare staff.
5. Increase vaccination coverage against the flu among healthcare workers.
6. Conduct inspection oversight and impose penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensify cooperation with gerontological centers and pensioner associations.

Flood

1. Compliance with legal and sub-legal acts governing the management of defined risks.
2. Implement oversight of the defined legal and sub-legal acts.
3. Act according to the assessed level of risk for the defined danger and inform the professional and general public about it (expectation of possible disasters).
4. Clearly and unequivocally inform all leading authorities about the assessed risks and potential consequences based on existing response capacities.
5. Inform the population about the risk map and the expected timeframe for the defined danger according to previous assessments of the identified risk.
6. Define and implement action plans.
7. Enhance the capacities of both the health and non-health sectors regarding staffing capacities, equipment, machinery, and infrastructure.
8. Improve the capacity in the existing infrastructure of the relevant geographical area.

COVID-19

1. Strengthen health infrastructure: procurement of modern medical equipment. Education for healthcare workers.
2. Improve laboratory diagnostics at the Public Health Institute in Vranje—introduction of PCR testing. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.

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3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
4. Increase testing coverage of the population for COVID-19.
5. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council and develop operational plans).

MODERATE RISK

Measles

1. Compliance with legal and sub-legal acts governing the management of defined risks.
2. Increase coverage of the MMR vaccine through intensive promotion of vaccination and various campaigns aimed at the entire population, especially vulnerable groups.
3. Train healthcare workers to raise awareness about this disease and the importance of immunization.
4. Continuous monitoring of vaccination implementation and more intensive tracking of vaccination coverage.
5. Collaborate with non-governmental organizations, citizen associations, school staff, preschool institutions, parents, and workplaces... Conduct inspection oversight and impose monetary penalties on parents in case of refusal to vaccinate their children.

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases.
2. Continuous control by Veterinary, Sanitary, and Agricultural Inspection.
3. Sanitary-hygienic supervision with the implementation of pest control activities.
4. The Public Health Institute in Vranje conducts health examinations for certain categories of employees in facilities under sanitary supervision.

Landslides

1. The priority action for combating landslides is mapping and monitoring at-risk areas.
2. This includes detailed mapping of landslide-prone terrains, regular monitoring of changes in soil stability, and establishing an early warning system.
3. Additionally, measures for soil stabilization must be implemented, such as constructing retaining walls, improving drainage, and reforesting affected areas.

Forest Fires

1. Procurement of field vehicles and motorized sleds.
2. Strengthening staffing capacities.
3. Enhance the capacities of the Health Center in Surdulica and the Public Health Institute in Vranje.

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6. Municipality of Trgovište

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Вероватно	Озбиљан	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening health infrastructure: procurement of modern medical equipment. Education for healthcare workers.
2. Improve laboratory diagnostics at the Public Health Institute in Vranje—introduction of PCR testing. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
4. Increase the population's coverage for COVID-19 testing.
5. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council and develop operational plans).

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper conduct before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Conduct regular cleaning of riverbeds.
4. Construct embankments.
5. Prohibit the construction of new structures in flood-prone areas.
6. Do not dispose of waste in these areas.
7. Organize protection and rescue exercises for all entities significant for protection and rescue.
8. Create a database listing structures, routes, and bridges that could be endangered in the event of flooding and identify alternative routes.
9. Train and equip public enterprises and private companies for response in the event of flooding.
10. Maintain communication with surrounding municipalities regarding precipitation and water levels.
11. Regularly inspect routes, repair damage, and conduct maintenance.
12. Enhance the capacities of the health and non-health sectors (equipping health mobile teams to improve healthcare quality).

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Seasonal Influenza

1. Increase vaccination coverage among vulnerable population groups (those over 65, chronic patients, pregnant women, etc.), as well as employees in healthcare facilities, nursing homes, kindergartens, schools, and public enterprises.
2. Educate the population about the importance of immunization in protecting against Seasonal Influenza, especially among vulnerable groups.
3. Introduce PCR diagnostics at the Public Health Institute in Vranje.
4. Strengthen staffing capacities in healthcare.

MODERATE RISK

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases.
2. Continuous control by Veterinary, Sanitary, and Agricultural Inspection.
3. Sanitary-hygienic supervision with the implementation of pest control activities.
4. The Public Health Institute in Vranje conducts health examinations for certain categories of employees in facilities under sanitary supervision.

Landslides

1. The priority action for combating landslides is mapping and monitoring at-risk areas.
2. This involves detailed mapping of landslide-prone terrains, regular monitoring of changes in soil stability, and establishing an early warning system.
3. Additionally, measures for soil stabilization must be implemented, such as constructing retaining walls, improving drainage, and reforesting affected areas.

Measles

1. Increase vaccination coverage.
2. Continuous education of the population, especially parents, by pediatricians and epidemiologists to enhance parents' knowledge about the importance of immunization, provide accurate information, and strengthen parents' trust in this form of children's healthcare.
3. Implement supplementary immunization for unvaccinated and partially vaccinated individuals.
4. Strengthen staffing and technical capacities.
5. Improve inter-sectoral cooperation between the local government and the Public Health Institute in Vranje in defining planning documents, aiming to implement the Law on Public Health.

Cold Wave / Severe Winter

1. Develop a Disaster Risk Reduction Plan and establish a civil protection unit.

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2. Procure field vehicles and a larger number of water tankers.
3. Provide more space with cooling devices for socially vulnerable and at-risk population groups.
4. Strengthen staffing capacities in the health sector: Health Center in Trgoviste and Public Health Institute in Vranje. Active participation of representatives from the Public Health Institute in Vranje in the Health Council.
5. Educate the population on behavior during prolonged periods of extreme high temperatures.

Forest Fires

1. Procure field vehicles and motorized sleds.
2. Strengthen staffing capacities at the Health Center in Trgoviste and the Public Health Institute in Vranje.

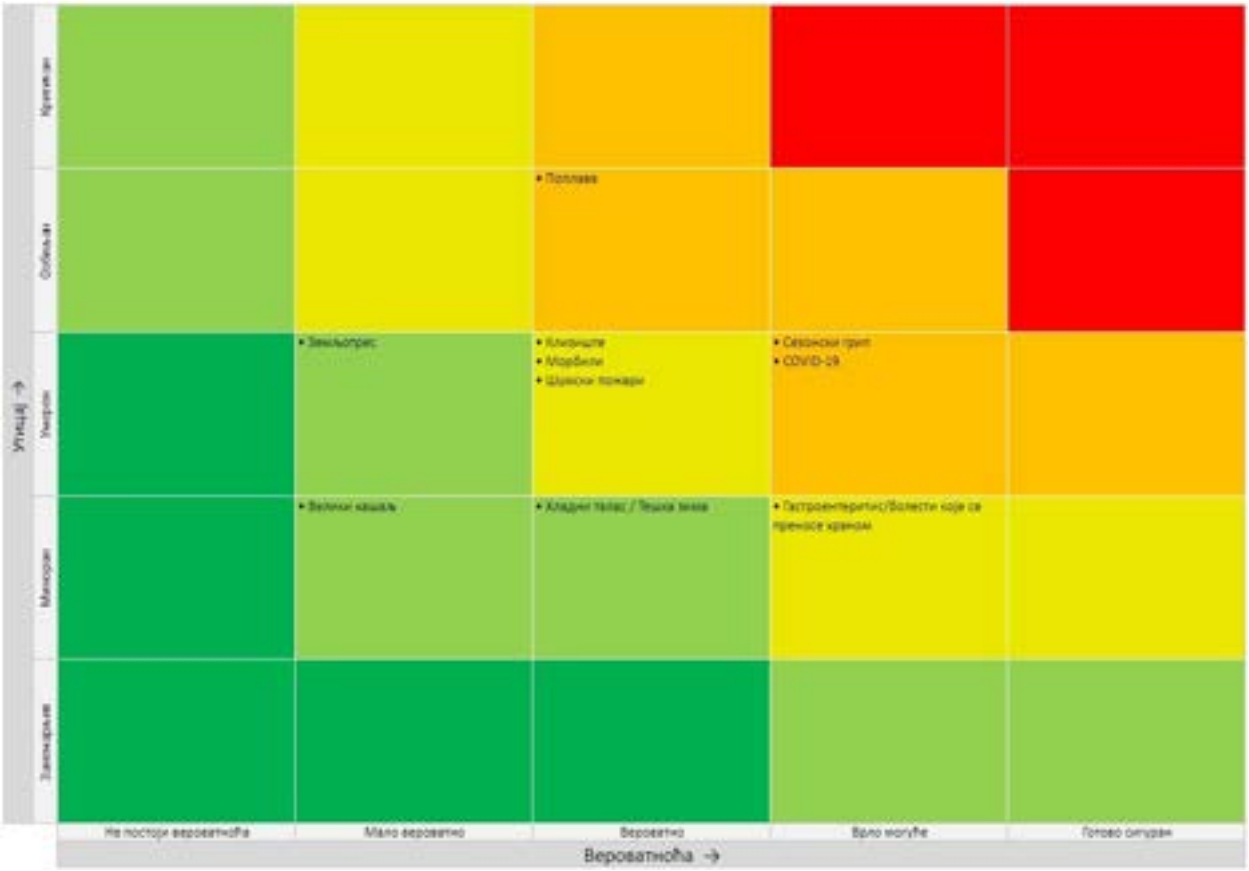
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. Municipality of Vladičin Han

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Вероватно	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Клизиште	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Врло могуће	Минoран	Низак	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Делимична	Делимична
Велики кашаљ	Низак	Мало вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK
COVID-19

1. Strengthening health infrastructure: procurement of modern medical equipment. Education for healthcare workers.
2. Improve laboratory diagnostics at the Public Health Institute in Vranje—introduction of PCR testing. Enhance the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
4. Increase the population's coverage for COVID-19 testing.
5. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council, develop operational plans).

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper conduct before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Conduct regular cleaning of riverbeds.
4. Construct embankments.
5. Prohibit the construction of new structures in flood-prone areas.
6. Do not dispose of waste in these areas.
7. Organize protection and rescue exercises for all entities significant for protection and rescue.
8. Create a database listing structures, routes, and bridges that could be endangered in the event of flooding and identify alternative routes.
9. Train and equip public enterprises and private companies for response in the event of flooding.
10. Maintain communication with surrounding municipalities regarding precipitation and water levels.
11. Regularly inspect routes, repair damage, and conduct maintenance.
12. Enhance the capacities of the health and non-health sectors (equipping health mobile teams to improve healthcare quality).

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Seasonal Influenza

1. Increase vaccination coverage among vulnerable population groups (those over 65, chronic patients, pregnant women, etc.), as well as employees in healthcare facilities, nursing homes, kindergartens, schools, and public enterprises.
2. Educate the population about the importance of immunization in protecting against Seasonal Influenza, especially among vulnerable groups.
3. Introduce PCR diagnostics at the Public Health Institute in Vranje.
4. Strengthen staffing capacities in healthcare.

MODERATE RISK

Landslides

1. The priority action for combating landslides is mapping and monitoring at-risk areas.
2. This involves detailed mapping of landslide-prone terrains, regular monitoring of changes in soil stability, and establishing an early warning system.
3. Additionally, measures for soil stabilization must be implemented, such as constructing retaining walls, improving drainage, and reforesting affected areas.

Gastroenteritis/Foodborne Diseases

1. Mandatory reporting based on the Law on Protection of the Population from Infectious Diseases.
2. Continuous control by Veterinary, Sanitary, and Agricultural Inspection.
3. Sanitary-hygienic supervision with the implementation of pest control activities.
4. The Public Health Institute in Vranje conducts health examinations for certain categories of employees in facilities under sanitary supervision.

Measles

1. Increase vaccination coverage.
2. Continuous education of the population, especially parents, by pediatricians and epidemiologists to enhance parents' knowledge about the importance of immunization, provide accurate information, and strengthen parents' trust in this form of children's healthcare.
3. Implement supplementary immunization for unvaccinated and partially vaccinated individuals.
4. Strengthen staffing and technical capacities.
5. Improve inter-sectoral cooperation between the local government and the Public Health Institute in Vranje in defining planning documents, aiming to implement the Law on Public Health.

Forest Fires

1. Develop a Disaster Risk Reduction Plan and a Wildfire Risk Reduction Plan.
2. Strengthen staffing capacities at the Health Center in Vladicin Han and the Public Health Institute in Vranje.

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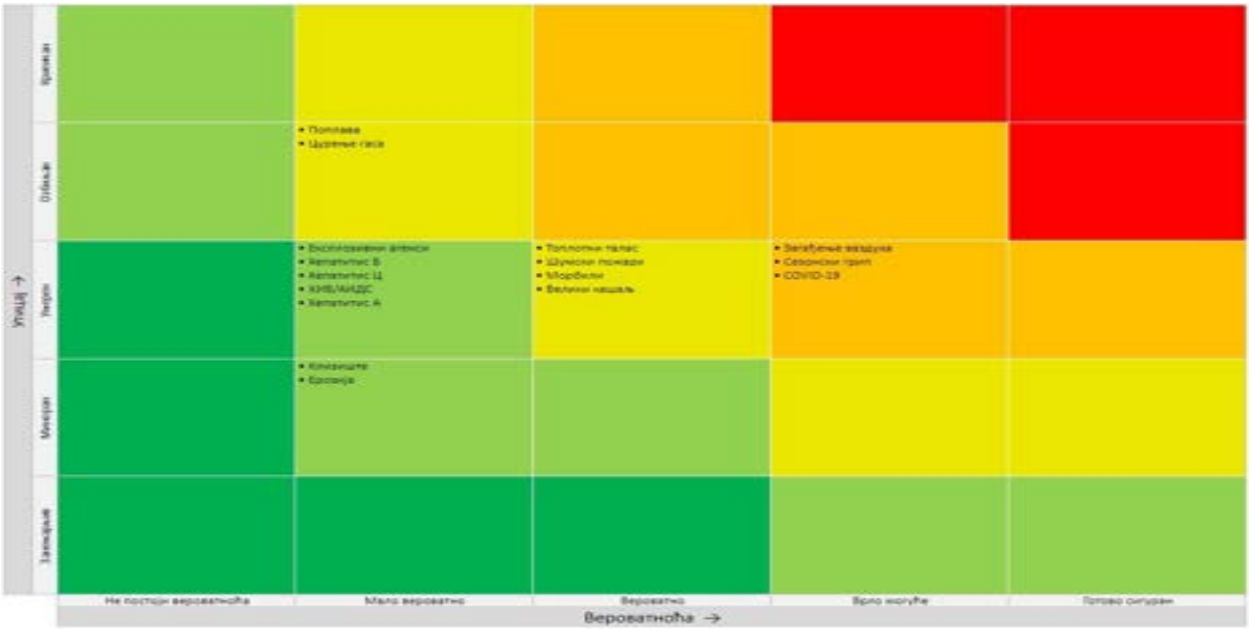
PIROT ADMINISTRATIVE DISTRICT

1. City of Pirot

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Загађење ваздуха	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Висок	Делимична
Цурење гаса	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	умерен	Вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Низак	Делимична
Ерозија	Низак	Мало вероватно	Минoран	Низак	Делимична
Експлозивни агенси	Низак	Мало вероватно	Умерен	Висок	Делимична
Хепатитис Б	Низак	Мало вероватно	Умерен	Низак	Низак
Хепатитис Ц	Низак	Мало вероватно	Умерен	Низак	Низак
ХИВ/АИДС	Низак	Мало вероватно	Умерен	Низак	Низак
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак
Колапс конструкције	Низак	Мало вероватно	Умерен	Веома висок	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Air Pollution

1. To improve air quality in the municipality of Pirot and reduce the impact of air pollution on human health, the following measures need to be implemented:
2. Enable better regulation of traffic flow, procure modern equipment needed for air quality analysis and monitoring for the chemical laboratory of the Public Health Institute in Pirot (PM particle sampler, Atomic Absorption Spectrometer (AAS), Gas Chromatograph, etc.).
3. Increase the number of measuring sites, ensure regular maintenance of municipal hygiene, continue with gasification and heating projects that have been partially implemented to cover as much of the city as possible, and provide subsidies for households from local government for the transition from individual solid fuel heating to district heating.
4. Continue the construction of bypass roads (especially railroads currently passing through the city) and modernize existing city roads while improving traffic regulation in the city.
5. Conduct thorough exhaust gas checks from motor vehicles during technical inspections.
6. Increase the frequency and number of streets that are regularly cleaned and washed; continue with the planned enhancement and maintenance of green areas and tree-lined streets in the city and establish protective green belts between industrial zones and urban areas.
7. Prohibit the transportation of waste materials through city streets that may negatively affect air pollution.
8. Continue monitoring the impact of air pollution on human health and the environment.
9. Work on the continuous education of the population to raise awareness about reducing air pollution through field actions involving citizens.

Seasonal Influenza

1. Increase vaccination coverage among vulnerable population groups (those over 65, chronic patients, pregnant women, etc.), as well as employees in healthcare facilities, nursing homes, kindergartens, schools, and public enterprises.
2. Introduce PCR diagnostics at the Public Health Institute in Pirot.
3. Strengthen staffing capacities in healthcare.

COVID-19

1. Strengthen health infrastructure: expand hospital capacities and procure modern medical equipment.
2. Educate healthcare workers.

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3. Improve laboratory diagnostics in Pirot—consider introducing PCR testing.
4. Strengthen the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
5. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
6. Increase the population's coverage for COVID-19 testing.
7. Collaborate with local governments and international organizations to coordinate measures and activities (intensify the activities of the Health Council, develop operational plans).

MODERATE RISK

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper conduct before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Conduct regular cleaning of riverbeds. Construct embankments.
4. Prohibit the construction of new structures in flood-prone areas. Do not dispose of waste in these areas.
5. Organize protection and rescue exercises for all entities significant for protection and rescue.
6. Create a database listing structures, routes, and bridges that could be endangered in the event of flooding and identify alternative routes.
7. Train and equip public enterprises and private companies for response in the event of flooding.
8. Maintain communication with surrounding municipalities regarding precipitation and water levels. Regularly inspect routes, repair damage, and conduct maintenance.

Heat Wave

1. Develop a Disaster Risk Reduction Plan and establish a civil protection unit. Procure field vehicles and a larger number of water tankers.
2. Provide greater space in the city equipped with cooling devices for socially vulnerable and at-risk population groups.
3. Strengthen staffing capacities in the health sector: Pirot General Hospital, Health Center Pirot, and the Public Health Institute in Pirot. Actively involve representatives of the Public Health Institute in the Health Council. Educate the population on behavior during prolonged periods of extreme heat.

Forest Fires

1. Develop a Disaster Risk Reduction Plan and a Wildfire Risk Reduction Plan.

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2. Form civil protection units for these purposes and increase the number of mountain rescue teams.
3. Increase the number of fire rescue teams.
4. Intensify cooperation between services: Public Enterprise "Serbia Forests" Belgrade, Forest Management Pirot, and the Hunting Association Pirot "Ponišavlje," as well as the relevant city and national inspections on prevention and removal of outdoor fires.
5. Ensure a greater number of field vehicles and tankers for fire extinguishing.
6. Establish cooperation with residents of the Stara Planina villages, educate them, and provide them with equipment for quickly reporting to the relevant services in case of a fire outbreak.
7. Regularly inspect illegal dumps and critical sites where outdoor fires are initiated and take preventive and punitive measures against potential fire starters.
8. Strengthen staffing capacities in the health sector: Pirot General Hospital (surgery, emergency medicine), Health Center Pirot, and Public Health Institute Pirot. Educate the population on reducing fire risks and behavior during fire outbreaks, as well as providing first aid and self-aid in field conditions.

Gas Leak

1. Develop a Disaster Risk Reduction Plan.
2. Strengthen the capacities of the health sector—ophthalmology, pneumonology, emergency medicine.

Measles

1. Increase vaccination coverage for children under 5 years of age.
2. Strengthen supervision.
3. Enforce stricter legal regulations regarding children's stay in collective facilities conditioned by proper vaccination status, and address parental responsibility in case of non-compliance with mandatory vaccination laws.
4. Continue educating pediatricians.
5. Continue educating parents through mass media, social networks, forums, etc. (active role of local media in informing citizens about risks and prevention). Improve laboratory diagnostics in Pirot—consider introducing PCR testing.

Pertussis (Whooping Cough)

1. Introduce PCR diagnostics at the Public Health Institute in Pirot.
2. Strengthen staffing capacities in healthcare: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

2. Municipality of Babušnica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Врло могуће	Умерен	Низак	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Низак	Делимична
Експлозивни агенси	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Шумски пожари	Низак	Мало вероватно	Умерен	Висок	Делимична
Клизиште	Низак	Мало вероватно	Миноран	Низак	Делимична
Хепатитис А	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper conduct before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Conduct regular cleaning of riverbeds. Construct embankments.
4. Prohibit the construction of new structures in flood-prone areas. Do not dispose of waste in these areas.
5. Organize protection and rescue exercises for all entities significant for protection and rescue.
6. Create a database listing structures, routes, and bridges that could be endangered in the event of flooding and identify alternative routes.
7. Train and equip public enterprises and private companies for response in the event of flooding.
8. Maintain communication with surrounding municipalities regarding precipitation and water levels. Conduct regular inspections of routes and repair damages.

COVID-19

1. Strengthen health infrastructure: expand hospital capacities and procure modern medical equipment.
2. Educate healthcare workers.
3. Improve laboratory diagnostics in Pirot—consider introducing PCR testing.
4. Strengthen the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
5. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
6. Increase population coverage for COVID-19 testing.
7. Collaborate with local governments and international organizations to coordinate measures and activities (intensify activities of the Health Council, develop operational plans).

MODERATE RISK

Cold Wave / Severe Winter

1. Develop a Disaster Risk Reduction Plan and establish civil protection units.

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2. Procure field vehicles and equipment for maintaining road accessibility (snow clearance).
3. Strengthen staffing capacities: Pirot General Hospital, Health Center Dimitrovgrad, and Public Health Institute Pirot.

Explosive Agents

1. Develop a Disaster Risk Reduction Plan for explosions.
2. Form civil protection units and increase the number of fire rescue teams.
3. Train more people living near hazardous areas in fire protection.
4. Provide more fire extinguishing devices in facilities that work with explosive materials.
5. Ensure a greater number of field vehicles and tankers for fire extinguishing.
6. Strengthen the capacities of the health sector: surgery, orthopedics, pneumonology, emergency medicine, ophthalmology.
7. Procure equipment needed for air quality analysis and monitoring for Public Health Institute Pirot.
8. Organize joint exercises for responding to large-scale fires and explosions.
9. Educate as many residents as possible on how to respond in the event of an explosion.
10. Actively involve representatives of the Public Health Institute Pirot in the Health Council and develop a Public Health Plan.

Measles

1. Increase vaccination coverage for children under 5 years of age.
2. Strengthen supervision.
3. Enforce stricter legal regulations regarding children's stay in collective facilities conditioned by proper vaccination status, and address parental responsibility for non-compliance with mandatory vaccination laws.
4. Continue educating pediatricians.
5. Continue educating parents through mass media, social networks, forums, etc. (active role of local media in informing citizens about risks and prevention). Improve laboratory diagnostics in Pirot—consider introducing PCR testing.

Pertussis (Whooping Cough)

1. Introduce PCR diagnostics at the Public Health Institute in Pirot.
2. Strengthen staffing capacities in healthcare: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).

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3. Municipality of Bela Palanka

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Врло могуће	Минoран	Низак	Делимична
Клизиште	Умерен	Врло могуће	Минoран	Низак	Делимична
Ерозија	Умерен	Врло могуће	Минoран	Низак	Делимична
Шумски пожари	Умерен	Врло могуће	Минoран	Низак	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	умерен	Делимична	Делимична
Хепатитис А	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage for vulnerable population categories (people over 65, chronic patients, pregnant women...), as well as for employees in healthcare institutions, nursing homes, kindergartens, schools, and public enterprises.
2. Introduce PCR diagnostics at the Public Health Institute in Pirot.
3. Strengthen staffing capacities in healthcare.

COVID-19

1. Strengthen health infrastructure: expand hospital capacities and procure modern medical equipment.
2. Educate healthcare workers.
3. Improve laboratory diagnostics in Pirot—consider introducing PCR testing.
4. Strengthen the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
5. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
6. Increase population coverage for COVID-19 testing.
7. Collaborate with local governments and international organizations to coordinate measures and activities (intensify activities of the Health Council, develop operational plans).

MODERATE RISK

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper conduct before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Conduct regular cleaning of riverbeds. Construct embankments.
4. Prohibit the construction of new structures in flood-prone areas. Do not dispose of waste in these areas.
5. Organize protection and rescue exercises for all entities significant for protection and rescue.

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6. Create a database listing structures, routes, and bridges that could be endangered in the event of flooding and identify alternative routes.
7. Train and equip public enterprises and private companies for response in the event of flooding.
8. Maintain communication with surrounding municipalities regarding precipitation and water levels. Conduct regular inspections of routes and repair damages.

Landslides

1. The priority action against landslides is mapping and monitoring risk areas.
2. This involves detailed mapping of landslide-prone terrains, regularly monitoring changes in soil stability, and establishing an early warning system.
3. Additionally, measures for soil stabilization need to be implemented, such as building retaining walls, improving drainage, and reforestation of endangered areas.

Erosion

1. The priority action against erosion is mapping and monitoring risk areas.
2. This involves detailed mapping of erosion-prone terrains, regularly monitoring changes in soil stability, and establishing an early warning system.
3. Additionally, measures for soil stabilization need to be implemented, such as building retaining walls, improving drainage, and reforestation of endangered areas.

Forest Fires

1. Develop a Disaster Risk Reduction Plan and a Forest Fire Risk Reduction Plan.
2. Form civil protection units for these purposes and increase the number of mountain rescue teams.
3. Increase the number of fire rescue teams.
4. Intensify cooperation between services: JP "Srbijašume" Belgrade, Pirot Forest Management, and Pirot Hunting Association "Ponišavlje," as well as relevant city and national inspections for fire prevention and removal in open areas.
5. Provide more field vehicles and tankers for fire extinguishing.
6. Establish cooperation with the residents of Stara Planina, educate them, and provide equipment for quick reporting to relevant authorities in the event of a fire outbreak.
7. Regularly patrol illegal dumps and critical areas where fires are likely to occur, and take preventive and punitive measures against potential fire starters.
8. Strengthen the staffing capacities of the health sector: Pirot General Hospital (surgery, emergency medicine), Health Center Pirot, and Public Health Institute Pirot.
9. Educate the population on reducing fire risk, behavior during fire outbreaks, and providing first aid and self-aid in field conditions.

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Measles

1. Increase vaccination coverage for children under 5 years of age.
2. Strengthen supervision.
3. Enforce stricter legal regulations regarding children's stay in collective facilities conditioned by proper vaccination status and address parental responsibility for non-compliance with mandatory vaccination laws.
4. Continue educating pediatricians.
5. Continue educating parents through mass media, social networks, forums, etc. (active role of local media in informing citizens about risks and prevention).
6. Improve laboratory diagnostics in Pirot—consider introducing PCR testing.

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4. Municipality of Dimitrovgrad

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Цурење гаса	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Врло могуће	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Низак	Делимична
Експлозивни агенси	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Низак	Низак
Земљотрес	Низак	Мало вероватно	Минoран	Низак	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Веома висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Gas Leaks

1. Develop a Disaster Risk Reduction Plan.
2. Strengthen the capacities of the health sector—ophthalmology, pneumophysiology, emergency medicine.

COVID-19

1. Strengthen health infrastructure: expand hospital capacities and procure modern medical equipment.
2. Educate healthcare workers.
3. Improve laboratory diagnostics in Pirot—consider introducing PCR testing.
4. Strengthen the capacities of the health sector: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
5. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).
6. Increase population coverage for COVID-19 testing.
7. Collaborate with local governments and international organizations to coordinate measures and activities (intensify activities of the Health Council, develop operational plans).

Seasonal Influenza

1. Increase vaccination coverage for vulnerable population categories (people over 65, chronic patients, pregnant women...), as well as for employees in healthcare institutions, nursing homes, kindergartens, schools, and public enterprises.
2. Introduce PCR diagnostics at the Public Health Institute in Pirot.
3. Strengthen staffing capacities in healthcare.

MODERATE RISK

Flood

1. Continue regular updates of the existing Disaster Risk Reduction Plan.
2. Educate the population on proper conduct before, during, and after floods to reduce the risk of gastrointestinal infectious diseases.
3. Conduct regular cleaning of riverbeds. Construct embankments.

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4. Prohibit the construction of new structures in flood-prone areas. Do not dispose of waste in these areas.
5. Organize protection and rescue exercises for all entities significant for protection and rescue.
6. Create a database listing structures, routes, and bridges that could be endangered in the event of flooding and identify alternative routes.
7. Train and equip public enterprises and private companies for response in the event of flooding.
8. Maintain communication with surrounding municipalities regarding precipitation and water levels. Conduct regular inspections of routes and repair damages.

Cold Wave / Severe Winter

1. Develop a Disaster Risk Reduction Plan and form civil protection units.
2. Procure field vehicles and machinery for maintaining road accessibility (snow clearing).
3. Strengthen staffing capacities: Pirot General Hospital, Dimitrovgrad Health Center, and Public Health Institute Pirot.

Explosive Agents

1. Develop a Disaster Risk Reduction Plan—explosions.
2. Form civil protection units and increase the number of fire rescue teams.
3. Train more people living near hazardous areas for fire protection.
4. Provide more fire extinguishing equipment in facilities that work with explosive materials.
5. Provide more field vehicles and tankers for fire extinguishing.
6. Strengthen the capacities of the health sector—surgery, orthopedics, pneumophysiology, emergency medicine, ophthalmology.
7. Procure equipment necessary for air quality analysis and monitoring at Public Health Institute Pirot.
8. Organize joint exercises for response in the event of large-scale fires and explosions.
9. Educate as many residents as possible on procedures in the event of an explosion.
10. Actively involve representatives from Public Health Institute Pirot in the Health Council and develop a public health plan.

Measles

1. Increase vaccination coverage for children under 5 years of age.
2. Strengthen supervision.
3. Enforce stricter legal regulations regarding children's stay in collective facilities conditioned by proper vaccination status, and address parental responsibility for non-compliance with mandatory vaccination laws.

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4. Continue educating pediatricians.
5. Continue educating parents through mass media, social networks, forums, etc. (active role of local media in informing citizens about risks and prevention).
6. Improve laboratory diagnostics in Pirot—consider introducing PCR testing.

Pertussis (Whooping Cough)

1. Introduce PCR diagnostics at the Public Health Institute in Pirot.
2. Strengthen staffing capacities in healthcare: infectious disease specialists, epidemiologists, pulmonologists, microbiologists.
3. Promote vaccination and educate the population about the benefits of vaccination (awareness-raising campaigns).

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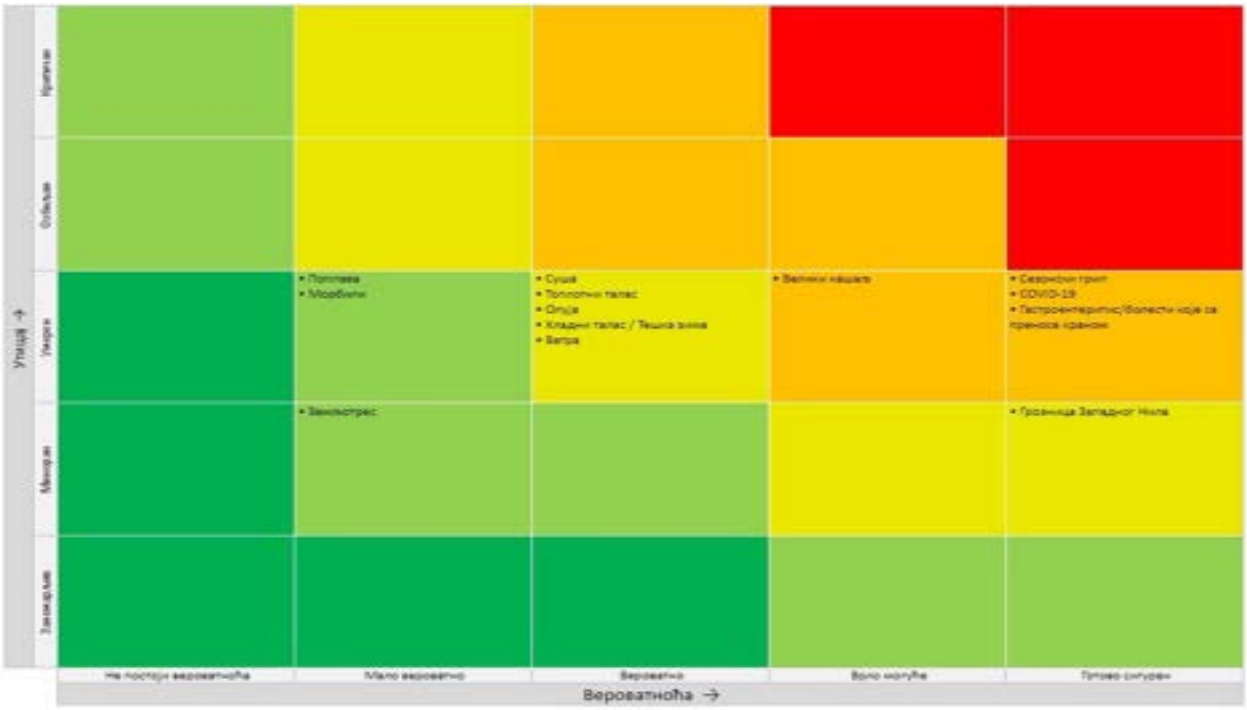
WEST BAČKA ADMINISTRATIVE DISTRICT

1. City of Sombor

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Висок	Делимична
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Низак	Делимична
Ватра	Умерен	Вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Умерен	Низак	Делимична
Морбили	Низак	Мало вероватно	Умерен	Делимична	Делимична
Земљотрес	веома низак	Мало вероватно	минoран	Висок	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

COVID-19

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

Gastroenteritis/Foodborne Illnesses

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS.
2. Management and treatment of patients, hygienic and epidemiological monitoring.

Pertussis (Whooping Cough)

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

MODERATE RISK

Drought

1. Inform the population about extreme weather conditions.
2. Provide water to the affected population.
3. Implement measures to reduce water consumption, establish and maintain irrigation systems and agronomic measures.

Heat Wave

1. Inform the population about extreme weather conditions, ensure access to drinking water in public places.

Storm

1. Inform the population about extreme weather conditions.

Cold Wave / Severe Winter

1. Inform the population about extreme weather conditions.

West Nile Fever

1. Control mosquito populations, educate the population about preventive measures.

Fire

1. Localize the fire, evacuate the affected population.

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2. Municipality of Apatin

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Висок	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Низак	Делимична
Ватра	Умерен	Вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Умерен	Низак	Делимична
Олуја	Низак	Мало вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

COVID-19

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

Gastroenteritis/Foodborne Illnesses

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS.
2. Management and treatment of patients, hygienic and epidemiological monitoring.

Pertussis (Whooping Cough)

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

MODERATE RISK

Earthquake

1. Receive and treat the injured, manage consequences.

Drought

1. Inform the population about extreme weather conditions.
2. Provide water to the affected population.
3. Implement measures to reduce water consumption, establish and maintain irrigation systems and agronomic measures.

Heat Wave

1. Inform the population about extreme weather conditions, ensure access to drinking water in public places.

Cold Wave / Severe Winter

1. Inform the population about extreme weather conditions.

West Nile Fever

1. Control mosquito populations, educate the population about preventive measures.

Fire

1. Localize the fire, evacuate the affected population.

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3. Municipality of Kula

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Висок	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Низак	Делимична
Ватра	Умерен	Вероватно	Умерен	Делимична	Делимична
Олуја	Низак	Мало вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Мало вероватно	Умерен	Висок	Делимична
Земљотрес	Низак	Мало вероватно	Минoран	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

COVID-19

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

Gastroenteritis/Foodborne Illnesses

1. Implement protocols according to the E Expert-Methodological Guidelines of IPHS.
2. Management and treatment of patients, hygienic and epidemiological monitoring.

Pertussis (Whooping Cough)

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

MODERATE RISK

Drought

1. Inform the population about extreme weather conditions.
2. Provide water to the affected population.
3. Implement measures to reduce water consumption, establish and maintain irrigation systems and agronomic measures.

Heat Wave

1. Inform the population about extreme weather conditions, ensure access to drinking water in public places.

Cold Wave / Severe Winter

1. Inform the population about extreme weather conditions.

West Nile Fever

1. Control mosquito populations, educate the population about preventive measures.

Fire

1. Localize the fire, evacuate the affected population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Odžaci

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Делимична
Земљотрес	Умерен	Мало вероватно	Озбиљан	Висок	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Низак	Делимична
Ватра	Умерен	Вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Умерен	Низак	Делимична
Олуја	Низак	Мало вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

COVID-19

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

Gastroenteritis/Foodborne Illnesses

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS.
2. Management and treatment of patients, hygienic and epidemiological monitoring.

Pertussis (Whooping Cough)

1. Implement protocols according to the Expert-Methodological Guidelines of IPHS, treatment of patients, epidemiological surveillance.

MODERATE RISK

Earthquake

1. Reception and treatment of the injured, remediation of consequences.

Drought

1. Inform the population about extreme weather conditions.
2. Provide water to the affected population.
3. Implement measures to reduce water consumption, establish and maintain irrigation systems and agronomic measures.

Heat Wave

1. Inform the population about extreme weather conditions, ensure access to drinking water in public places.

Cold Wave / Severe Winter

1. Inform the population about extreme weather conditions.

West Nile Fever

1. Control mosquito populations, educate the population about preventive measures.

Fire

1. Localize the fire, evacuate the affected population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

NORTH BAČKA ADMINISTRATIVE DISTRICT

1. City of Subotica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Веома висок	Готово сигуран	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Олуја	Висок	Врло могуће	Умерен	Делимична	Делимична
Шумски пожари	Висок	Врло могуће	Умерен	Делимична	Делимична
Несреће у саобраћају	Висок	Вероватно	Озбиљан	Висок	Низак
Урбана поплава	Висок	Готово сигуран	Умерен	Делимична	Делимична
Топлотни талас	Висок	Врло могуће	Озбиљан	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Мало вероватно	Озбиљан	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

When it comes to biological risks, it is essential to improve general and specific prevention measures (vaccination), early diagnosis, isolation, hospitalization, and treatment.

To enhance the City of Subotica's response to biological, hydrometeorological, natural, and technological hazards, the Public Health Institute of Subotica proposes the following measures:

For the Healthcare Sector:

1. Improve the energy efficiency of facilities housing primary, secondary, and tertiary healthcare institutions.
2. Equip healthcare facilities with renewable energy sources (solar panels, generators, air conditioning units) as a timely preparation for public health hazards.
3. Ensure the availability of generators for operation in case of power outages.

To Enhance Community Capacities:

1. Raise awareness and sensitization of the community regarding the importance of disaster risk management and response methods through building resilience among the population (organizing and conducting educational workshops and training for the general public on protective measures).
2. Organize and conduct public drills and training for emergency response.
3. Implement education for the population on disaster risk management; conduct a campaign targeting the general population utilizing at least three intermediaries to raise citizens' awareness about reducing disaster risks (intermediaries include television—news, documentaries; printed media—newspapers, flyers; internet—content on city websites, social media; posters—on advertising boards, in community offices, etc.).

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2. Municipality of Mali Idjoš

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Веома висок	Готово сигуран	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Олуја	Висок	Врло могуће	Умерен	Делимична	Делимична
Шумски пожари	Висок	Врло могуће	Умерен	Делимична	Делимична
Несрећа у саобраћају	Висок	Вероватно	Озбиљан	Висок	Низак
Поплава	Висок	Готово сигуран	Умерен	Делимична	Делимична
Топлотни талас	Висок	Врло могуће	Озбиљан	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Умерен	Мало вероватно	Озбиљан	Висок	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

When it comes to biological risks, it is essential to improve general and specific prevention measures (vaccination), early diagnosis, isolation, hospitalization, and treatment.

To enhance the City of Subotica's response to biological, hydrometeorological, natural, and technological hazards, the Public Health Institute of Subotica proposes the following measures:

For the Healthcare Sector:

1. Improve the energy efficiency of facilities housing primary, secondary, and tertiary healthcare institutions.
2. Equip healthcare facilities with renewable energy sources (solar panels, generators, air conditioning units) as a timely preparation for facing public health hazards.
3. Ensure the availability of generators for operation in case of power outages.

To Enhance Community Capacities:

1. Raise awareness and sensitization within the community regarding the importance of disaster risk management and response methods through building resilience among the population (organizing and conducting educational workshops and training for the general public on protective measures).
2. Organize and conduct public drills and training for emergency response.
3. Implement education for the population on disaster risk management; conduct a campaign targeting the general population utilizing at least three intermediaries to raise citizens' awareness about reducing disaster risks (intermediaries include television—news, documentaries; printed media—newspapers, flyers; internet—content on city websites, social media; posters—on advertising boards, in community offices, etc.).

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3. Municipality of Bačka Topola

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Веома висок	Готово сигуран	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Олуја	Висок	Врло могуће	Умерен	Делимична	Делимична
Шумски пожари	Висок	Врло могуће	Умерен	Делимична	Делимична
Несрећа у саобраћају	Висок	Вероватно	Озбиљан	Висок	Низак
Поплава	Висок	Готово сигуран	Умерен	Делимична	Делимична
Топлотни талас	Висок	Врло могуће	Озбиљан	Висок	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Умерен	Вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

When it comes to biological risks, it is essential to improve general and specific prevention measures (vaccination), early diagnosis, isolation, hospitalization, and treatment.

To ensure a more effective response from the City of Subotica to biological, hydrometeorological, natural, and technological hazards, the Public Health Institute of Subotica proposes the following measures:

For the Healthcare Sector:

1. Improve the energy efficiency of facilities housing primary, secondary, and tertiary healthcare institutions.
2. Equip healthcare facilities with renewable energy sources (solar panels, generators, air conditioning units) as a timely preparation for facing public health hazards.
3. Ensure the availability of generators for operation in case of power outages.

To Enhance Community Capacities:

1. Raise awareness and sensitization within the community about the importance of disaster risk management and response methods through building resilience among the population (organizing and conducting educational workshops and training for the general public on protective measures).
2. Organize and conduct public drills and training for emergency response.
3. Implement education for the population on disaster risk management; conduct a campaign targeting the general population utilizing at least three intermediaries to raise citizens' awareness about reducing disaster risks (intermediaries include television—news, documentaries; printed media—newspapers, flyers; internet—content on city websites, social media; posters—on advertising boards, in community offices, etc.).

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

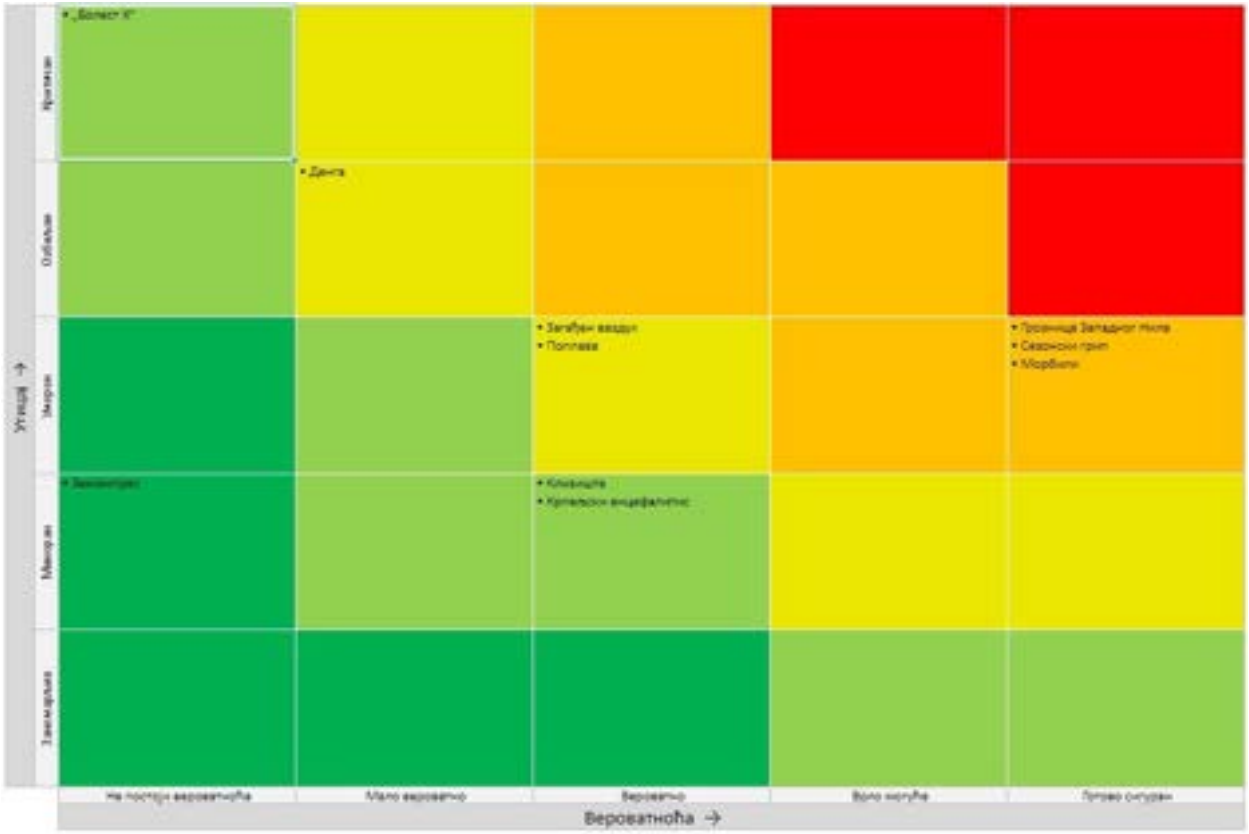
SOUTH BAČKA ADMINISTRATIVE DISTRICT

1. City of Novi Sad

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Грозница Западног Нила	Висок	Готово сигуран	Умерен	Низак	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Морбили	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађен ваздух	Умерен	Вероватно	Умерен	Висок	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Денга	Умерен	Мало вероватно	Озбиљан	Висок	Низак
Клизиште	Низак	Вероватно	Миноран	Веома низак	Делимична
Крпељски енцефалитис	Низак	Вероватно	Миноран	Низак	Делимична
„Болест X“	Низак	Не постоји вероватноћа	Критичан	Веома висок	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Миноран	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

West Nile Virus

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Intensify education for at-risk groups about protective measures against mosquito bites, along with enhanced media campaigns.
3. Map risk zones in the city of Novi Sad based on continuous monitoring of mosquito populations, species, and levels of infection, as well as sentinel animal studies.
4. Publish maps on the websites of the Public Health Institute and the city of Novi Sad.
5. Educate the population, especially in risk zones, on mosquito control methods to prevent their breeding near homes and apartments.
6. Allocate budgetary funds for timely larvicidal and adulticidal mosquito treatments.
7. Strengthen laboratory diagnostics by introducing neutralization testing.

Seasonal Influenza

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Increase vaccination coverage against influenza among vulnerable population groups.
3. Educate the population, particularly at-risk groups.
4. Raise awareness among healthcare workers about the importance of vaccinating healthcare employees.
5. Increase vaccination coverage among healthcare workers.
6. Conduct inspections and impose penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensify collaboration with gerontological centers and pensioner associations.

Measles

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Increase coverage with the MMR vaccine through intensive vaccination promotion and campaigns aimed at the entire population, especially vulnerable groups.
3. Train healthcare workers to raise awareness about this disease and the importance of immunization.
4. Continuously monitor vaccination implementation and intensively track vaccination coverage.

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5. Collaborate with NGOs, civic associations, educational staff in schools and preschools, parents, and workplaces.
6. Conduct inspections and impose financial penalties on parents who refuse to vaccinate their children.

Antimicrobial Resistant Microorganisms

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Maintain continuous oversight of compliance with standard prevention measures in healthcare institutions.
3. Conduct frequent education for medical and non-medical staff on the importance of preventing and controlling hospital infections.
4. Ensure rational use of antimicrobial medications in healthcare institutions in accordance with the National Guidelines for Good Clinical Practice.
5. Raise awareness among the general population about the proper use of antimicrobial medications.
6. Address the issue of antimicrobial resistance through a One Health approach.
7. Initiate the Global Antimicrobial Resistance Surveillance System (GLASS) while strengthening multisectoral collaboration.

MODERATE RISK

Air Pollution

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Implement oversight of defined legal and regulatory acts.
3. Act according to the assessed risk level for defined hazards and inform both experts and the general public (anticipating possible disasters).
4. Clearly and unequivocally inform all leading authorities about assessed risks and possible consequences based on evaluated existing response capacities.
5. Inform the population about the risk map and the expected timeline for the identified hazard based on previous assessments.
6. Define and implement Action Plans.
7. Enhance the capacities of both the health and non-health sectors regarding staffing, equipment, machinery, and infrastructure.
8. Improve the capacity of existing infrastructure in the relevant geographic area.

Flood

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Implement oversight of defined legal and regulatory acts.

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3. Act according to the assessed risk level for defined hazards and inform both experts and the general public (anticipating possible disasters).
4. Clearly and unequivocally inform all leading authorities about assessed risks and possible consequences based on evaluated existing response capacities.
5. Inform the population about the risk map and the expected timeline for the identified hazard based on previous assessments.
6. Define and implement Action Plans.
7. Enhance the capacities of both the health and non-health sectors regarding staffing, equipment, machinery, and infrastructure.
8. Improve the capacity of existing infrastructure in the relevant geographic area.

Dengue

1. Develop a response plan for the occurrence of dengue in healthcare institutions (Clinical Center of Vojvodina, Health Center Novi Sad, Public Health Institute).
2. Increase accommodation capacities at the Infectious Diseases Clinic of the Clinical Center of Vojvodina and the Institute for Public Health (provide sufficient rooms with physical barriers, such as screens on windows and around beds).
3. Educate healthcare staff (primary healthcare doctors, especially pediatricians) about recognizing dengue.
4. Strengthen laboratory diagnostics for dengue.
5. Educate the population about this disease.
6. Map risk zones in the city of Novi Sad based on continuous monitoring of Aedes mosquitoes.
7. Publish maps on the websites of the Public Health Institute and the city of Novi Sad.
8. Educate the population, especially in risk zones, on mosquito control methods to prevent their breeding near homes and apartments.
9. Allocate budgetary funds for timely larvicidal and adulticidal mosquito treatments.

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2. Municipality of Bač

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Делимична
Олуја	Низак	Вероватно	Минoран	Низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Делимична	Делимична
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Крпељски енцефалитис	Низак	Мало вероватно	Минoран	Низак	Делимична
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Низак
Респираторни патогени са пандемијским потенцијалом	Низак	Не постоји вероватноћа	Критичан	Веома висок	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

West Nile Virus

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Intensify education for at-risk groups about protective measures against mosquito bites, along with enhanced media campaigns.
3. Map risk zones in the municipality based on continuous monitoring of mosquito populations, species, and levels of infection, as well as sentinel animal studies.
4. Publish maps on the municipal administration's websites.
5. Educate the population, especially in risk zones, on mosquito control methods to prevent their breeding near homes and apartments.
6. Allocate budgetary funds for timely larvicidal and adulticidal mosquito treatments.

MODERATE RISK

Seasonal Influenza

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Increase vaccination coverage against influenza among vulnerable population groups.
3. Educate the population, particularly at-risk groups.
4. Raise awareness among healthcare workers about the importance of vaccinating healthcare employees.
5. Increase vaccination coverage among healthcare workers.
6. Conduct inspections and impose penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensify collaboration with gerontological centers and pensioner associations.

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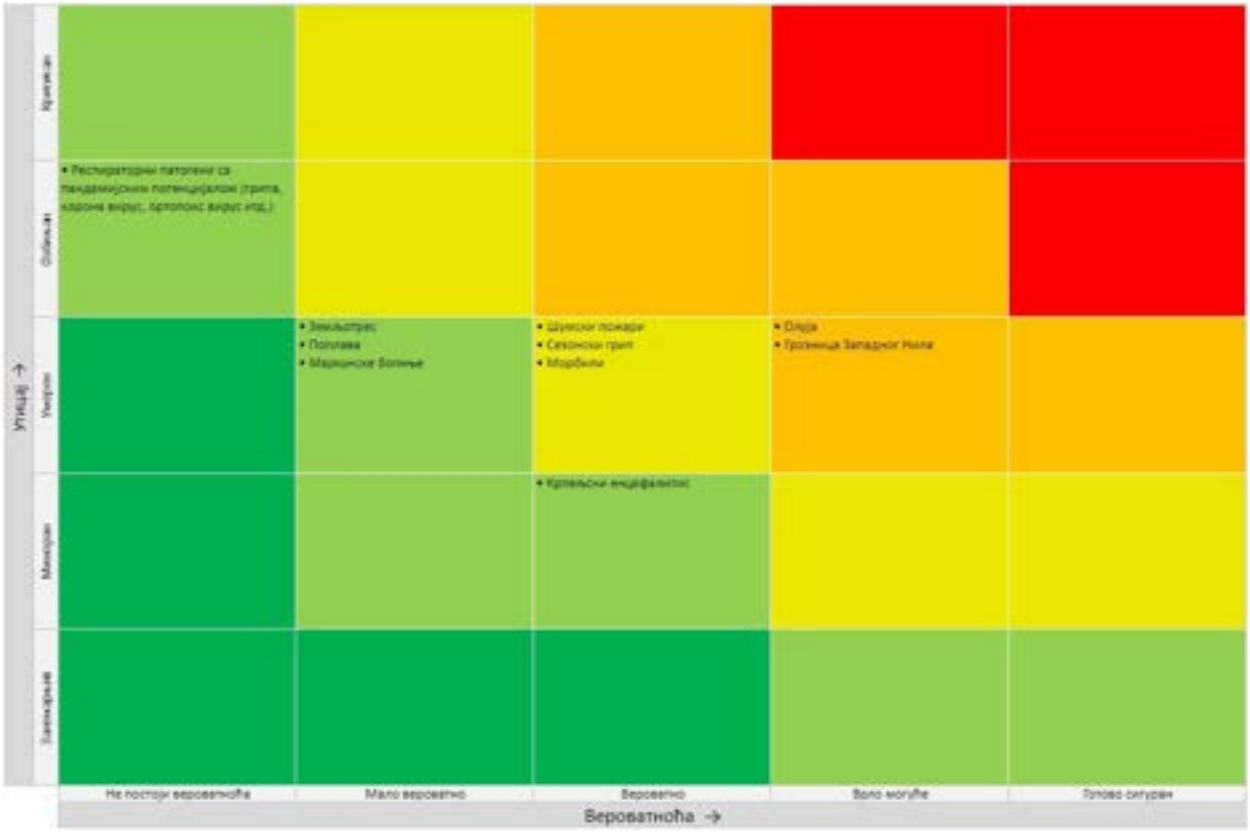
3. Municipality of Bačka Palanka

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Олуја	Висок	Врло могуће	Умерен	Веома низак	Веома низак
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Делимична	Низак
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Низак	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Крпељски енцефалитис	Низак	Вероватно	Миноран	Низак	Делимична
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Низак
Респираторни патогени са пандемијским потенцијалом	Низак	Не постоји вероватноћа	Озбиљан	Веома висок	Низак

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Storm

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Implement supervision over defined legal and regulatory acts.
3. Act according to the assessed level of risk for the defined hazard and inform both professionals and the general public about the same (expectation of possible disasters).
4. Clearly and unambiguously inform all leading authorities about assessed risks and possible consequences based on current response capacity.
5. Inform the population about the risk map and the timeline for expected hazards according to previous assessments.
6. Define and implement action plans.
7. Enhance the capacity of both the health and non-health sectors in terms of personnel, equipment, machinery, and infrastructure.
8. Improve capacity in existing infrastructure within the geographical area.

West Nile Fever

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Intensify education for at-risk groups regarding protective measures against mosquito bites, along with enhanced media campaigns.
3. Map risk zones in the municipality based on continuous monitoring of mosquito populations, species, and infection levels, as well as sentinel animal studies.
4. Publish maps on the municipal administration's websites.
5. Educate the population, especially in risk zones, on mosquito control methods to prevent their breeding near homes and apartments.
6. Allocate budgetary funds for timely larvicidal and adulticidal treatments of mosquitoes.

MODERATE RISK

Forest Fires

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Implement supervision over defined legal and regulatory acts.

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3. Act according to the assessed level of risk for the defined hazard and inform both professionals and the general public about the same (expectation of possible disasters).
4. Clearly and unambiguously inform all leading authorities about assessed risks and possible consequences based on current response capacity.
5. Inform the population about the risk map and the timeline for expected hazards according to previous assessments.
6. Define and implement action plans.
7. Enhance the capacity of both the health and non-health sectors in terms of personnel, equipment, machinery, and infrastructure.
8. Improve capacity in existing infrastructure within the geographical area.

Seasonal Influenza

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Increase vaccination coverage against influenza among vulnerable population groups.
3. Educate the population, particularly at-risk groups.
4. Raise awareness among healthcare workers about the importance of vaccinating healthcare employees.
5. Increase vaccination coverage among healthcare workers.
6. Conduct inspections and impose penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensify collaboration with gerontological centers and pensioner associations.

Measles

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Increase MMR vaccination coverage to over 95% through intensive promotion and various campaigns aimed at the entire population, especially vulnerable groups.
3. Train healthcare workers to raise awareness about this disease and the importance of vaccination.
4. Monitor the implementation of vaccinations continuously and enhance tracking of vaccination coverage.
5. Collaborate with NGOs, civic associations, educational staff in schools and preschools, parents, and workplaces.
6. Conduct inspections and impose financial penalties on parents in case of refusal to vaccinate their children.

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4. Municipality of Бачки Petrovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Низак	Мало вероватно	Минoран	Низак	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Низак	Низак
Шумски пожари	Низак	Вероватно	Минoран	Низак	Низак
Цурење гаса	Низак	Мало вероватно	Умерен	Делимична	Низак
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Крпељски енцефалитис	Низак	Мало вероватно	Минoран	Низак	Делимична
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

West Nile Fever

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Intensify education for at-risk groups about protective measures against mosquito bites, along with enhanced media campaigns.
3. Map risk zones in the municipality based on continuous monitoring of mosquito populations, species, and infection levels, as well as sentinel animal studies.
4. Publish maps on the municipal administration's websites.
5. Educate the population, especially in risk zones, about mosquito control methods and preventing their breeding in the immediate vicinity of their homes and apartments.
6. Allocate budgetary funds for timely larvicidal and adulticidal treatments of mosquitoes.

MODERATE RISK

Seasonal Influenza

1. Adhere to legal and regulatory acts governing the management of defined hazards.
2. Increase vaccination coverage against influenza among vulnerable population groups.
3. Educate the population, particularly at-risk groups.
4. Raise awareness among healthcare workers about the importance of vaccinating healthcare employees.
5. Increase vaccination coverage among healthcare workers.
6. Conduct inspections and impose penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensify collaboration with gerontological centers and pensioner associations.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Bečej

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак
Шумски пожари	Низак	Вероватно	Минoран	Низак	Низак
Суша	Низак	Вероватно	Минoран	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Висок	Низак
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Крпељски енцефалитис	Низак	Мало вероватно	Минoран	Низак	Делимична
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

West Nile Fever

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Intensifying education for at-risk groups about protective measures against mosquito bites, along with increased media campaigns.
3. Mapping risk zones in the municipality based on continuous monitoring of mosquito population, species, and infection levels, as well as studies on sentinel animals.
4. Posting maps on the municipal administration's websites.
5. Educating the population, especially in risk zones, about mosquito control methods and preventing their breeding in the immediate vicinity of their homes and apartments.
6. Allocating budgetary funds for timely larvicidal and adulticidal treatments of mosquitoes.

Seasonal Influenza

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing vaccination coverage against influenza among vulnerable population groups.
3. Educating the population, especially at-risk groups.
4. Raising awareness among healthcare workers about the importance of immunizing healthcare employees.
5. Increasing vaccination coverage against influenza among healthcare workers.
6. Conducting inspections and imposing penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensifying cooperation with gerontological centers and pensioner associations.

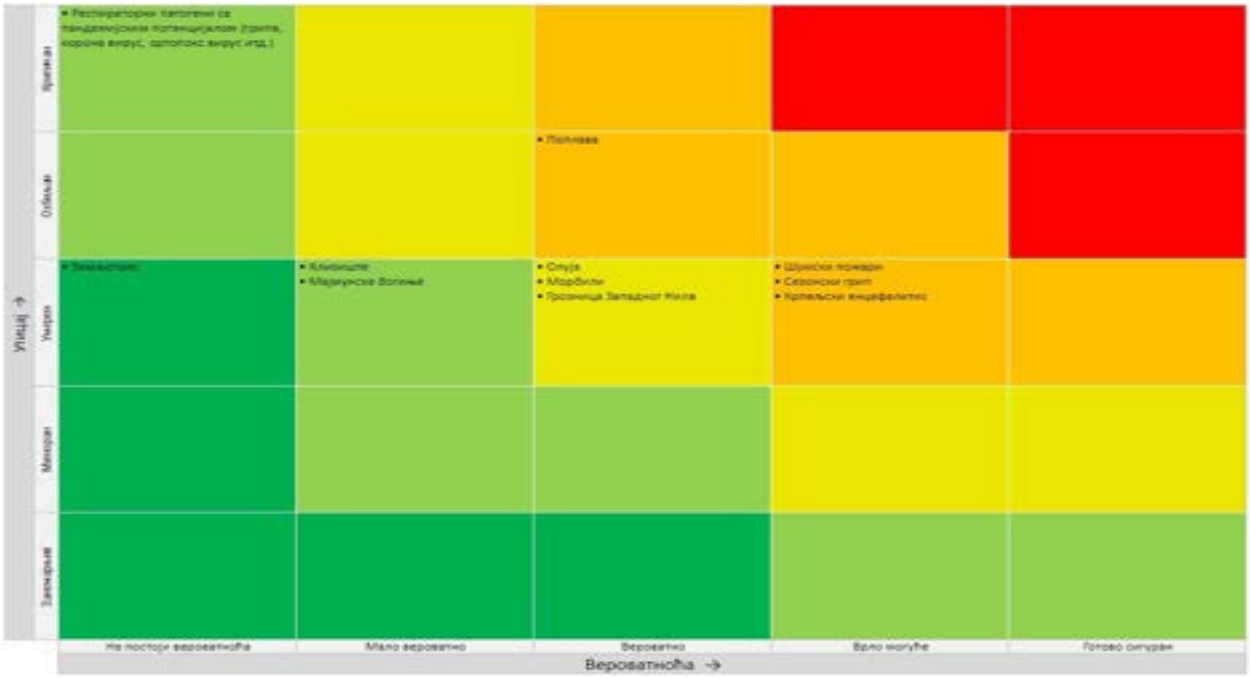
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Beočin

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Висок	Вероватно	Озбиљан	Висок	Низак
Шумски пожари	Висок	Врло могуће	Умерен	Низак	Низак
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Крпељски енцефалитис	Висок	Врло могуће	Умерен	Низак	Делимична
Олуја	Умерен	Вероватно	Умерен	Низак	Низак
Морбили	Умерен	Вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Мало вероватно	Умерен	Делимична	Низак
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Низак
Респираторни патогени са пандемијским потенцијалом	Низак	Не постоји вероватноћа	Критичан	Веома висок	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Flood

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Implementing oversight of the defined legal and regulatory acts.
3. Acting in accordance with the assessed level of risk for the defined hazard and informing both professionals and the general public about the expected potential disasters.
4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the evaluated existing response capacities.
5. Familiarizing the population with the risk map and the timeline for expecting the defined hazard according to previous assessments.
6. Defining and implementing action plans.
7. Enhancing the capacity of both the health and non-health sectors in terms of human resources, equipment, machinery, and infrastructure.
8. Strengthening the capacity related to the existing infrastructure in the geographical area concerned.

Forest Fire

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Implementing oversight of the defined legal and regulatory acts.
3. Acting in accordance with the assessed level of risk for the defined hazard and informing both professionals and the general public about the expected potential disasters.
4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the evaluated existing response capacities.
5. Familiarizing the population with the risk map and the timeline for expecting the defined hazard according to previous assessments.
6. Defining and implementing action plans.
7. Enhancing the capacity of both the health and non-health sectors in terms of human resources, equipment, machinery, and infrastructure.
8. Strengthening the capacity related to the existing infrastructure in the geographical area concerned.

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Seasonal Influenza

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing vaccination coverage against influenza among vulnerable population groups.
3. Educating the population, especially at-risk groups.
4. Raising awareness among healthcare workers about the importance of immunization for healthcare employees.
5. Increasing vaccination coverage against influenza among healthcare workers.
6. Conducting inspections and imposing penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensifying cooperation with gerontological centers and pensioner associations.

Tick-Borne Encephalitis

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Conducting continuous monitoring of ticks every year during their peak activity period.
3. Mapping risk zones in the municipality based on continuous monitoring of tick population, species, and infection levels, as well as studies on sentinel animals.
4. Posting maps on the municipality's website.
5. Marking natural tick habitats with clearly visible signs.
6. Educating the population, especially residents of risk zones and those exposed professionally or recreationally, about protective measures against tick bites and recognizing the first symptoms of tick-borne encephalitis.
7. Allocating budgetary funds for timely tick treatment.
8. Raising awareness among primary healthcare physicians (especially in Bodjani, Plavna, Bačko Novo Selo) about this disease.
9. Conducting seroprevalence studies on a representative sample of the population.

MODERATE RISK

Storm

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Implementing oversight of the defined legal and regulatory acts.
3. Acting in accordance with the assessed level of risk for the defined hazard and informing both professionals and the general public about the expected potential disasters.
4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the evaluated existing response capacities.

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5. Familiarizing the population with the risk map and the timeline for expecting the defined hazard according to previous assessments.
6. Defining and implementing action plans.
7. Enhancing the capacity of both the health and non-health sectors in terms of human resources, equipment, machinery, and infrastructure.
8. Strengthening the capacity related to the existing infrastructure in the geographical area concerned.

Measles

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing MMR vaccination coverage to over 95% through intensive promotion of vaccination and various campaigns aimed at the entire population, especially vulnerable groups.
3. Training healthcare workers to raise awareness about this disease and the importance of immunization.
4. Continuous monitoring of immunization implementation and more intensive tracking of vaccination coverage.
5. Collaborating with non-governmental organizations, citizen associations, educational staff in schools, preschool institutions, parents, and workplaces.
6. Conducting inspections and imposing financial penalties on parents in case of refusal to vaccinate their child.

West Nile Fever

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Intensifying education for at-risk groups about protective measures against mosquito bites, along with increased media campaigns.
3. Mapping risk zones in the municipality based on continuous monitoring of mosquito population, species, and infection levels, as well as studies on sentinel animals.
4. Posting maps on the municipal administration's websites.
5. Educating the population, especially in risk zones, about mosquito control methods and preventing their breeding in the immediate vicinity of their homes and apartments.
6. Allocating budgetary funds for timely larvicidal and adulticidal treatments of mosquitoes.

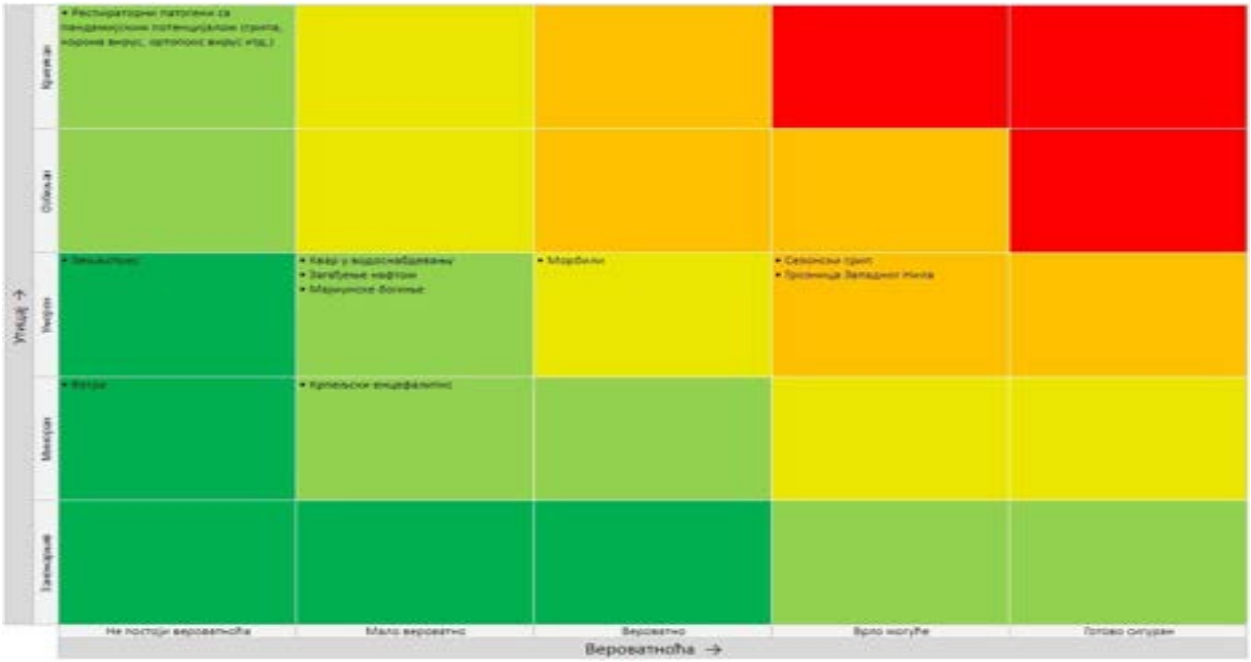
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. Municipality of Srbobran

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Низак	Делимична
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Загађење нафтом	Низак	Мало вероватно	Умерен	Делимична	Веома низак
Крпељски енцефалитис	Низак	Мало вероватно	Миноран	Низак	Делимична
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Низак
Респираторни патогени са пандемијским потенцијалом	Низак	Не постоји вероватноћа	Критичан	Веома висок	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак
Ватра	Веома низак	Не постоји вероватноћа	Миноран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing vaccination coverage against influenza among vulnerable population groups.
3. Educating the population, especially at-risk groups.
4. Raising awareness among healthcare workers about the importance of immunization for healthcare employees.
5. Increasing vaccination coverage against influenza among healthcare workers.
6. Conducting inspections and imposing penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensifying cooperation with gerontological centers and pensioner associations.

West Nile Fever

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Intensifying education for at-risk groups about protective measures against mosquito bites, along with increased media campaigns.
3. Mapping risk zones in the municipality based on continuous monitoring of mosquito population, species, and infection levels, as well as studies on sentinel animals.
4. Posting maps on the municipal administration's websites.
5. Educating the population, especially in risk zones, about mosquito control methods and preventing their breeding in the immediate vicinity of their homes and apartments.
6. Allocating budgetary funds for timely larvicidal and adulticidal treatments of mosquitoes.

MODERATE RISK

Measles

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing MMR vaccination coverage to over 95% through intensive promotion of vaccination and various campaigns aimed at the entire population, especially vulnerable groups.
3. Training healthcare workers to raise awareness about this disease and the importance of immunization.

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4. Continuous monitoring of immunization implementation and more intensive tracking of vaccination coverage.
5. Collaborating with non-governmental organizations, citizen associations, educational staff in schools, preschool institutions, parents, and workplaces.
6. Conducting inspections and imposing financial penalties on parents in case of refusal to vaccinate their child.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

8. Municipality of Sremski Karlovci

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Веома висок	Готово сигуран	Озбиљан	Висок	Низак
Шумски пожари	Висок	Готово сигуран	Умерен	Делимична	Низак
Клизиште	Висок	Врло могуће	Умерен	Делимична	Низак
Морбили	Висок	Врло могуће	Умерен	Делимична	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Крпељски енцефалитис	Умерен	Вероватно	Умерен	Делимична	Делимична
Хемијски агенси	Низак	Мало вероватно	Минoран	Низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Низак	Низак
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Делимична
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Делимична
Олуја	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

Seasonal Influenza

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing vaccination coverage against influenza among vulnerable population groups.
3. Educating the population, especially at-risk groups.
4. Raising awareness among healthcare workers about the importance of immunization for healthcare employees.
5. Increasing vaccination coverage against influenza among healthcare workers.
6. Conducting inspections and imposing penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensifying cooperation with gerontological centers and pensioner associations.

HIGH RISK

Wildfires

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Implementing oversight of defined legal and regulatory acts.
3. Acting in accordance with the assessed level of risk for the defined hazard, as well as informing professionals and the general public about the expected potential disasters.
4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the existing response capacities.
5. Familiarizing the population with the risk map and the expected time frame for the defined hazard based on previous assessments.
6. Defining and implementing action plans.
7. Enhancing the capacity of the health and non-health sectors regarding staffing, equipment, machinery, and infrastructure.
8. Increasing capacity in the area of existing infrastructure within the geographic area.

Landslide

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Implementing oversight of defined legal and regulatory acts.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Acting in accordance with the assessed level of risk for the defined hazard, as well as informing professionals and the general public about the expected potential disasters.
4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the existing response capacities.
5. Familiarizing the population with the risk map and the expected time frame for the defined hazard based on previous assessments.
6. Defining and implementing action plans.
7. Enhancing the capacity of the health and non-health sectors regarding staffing, equipment, machinery, and infrastructure.
8. Increasing capacity in the area of existing infrastructure within the geographic area.

Measles

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing MMR vaccination coverage to over 95% through intensive promotion of vaccination and various campaigns aimed at the entire population, especially vulnerable groups.
3. Training healthcare workers to raise awareness about this disease and the importance of immunization.
4. Continuous monitoring of immunization implementation and more intensive tracking of vaccination coverage.
5. Collaborating with non-governmental organizations, citizen associations, educational staff in schools, preschool institutions, parents, and workplaces.
6. Conducting inspections and imposing financial penalties on parents in case of refusal to vaccinate their child.

West Nile Fever

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Intensifying education for at-risk groups about protective measures against mosquito bites, along with increased media campaigns.
3. Mapping risk zones in the municipality based on continuous monitoring of mosquito population, species, and infection levels, as well as studies on sentinel animals.
4. Posting maps on the municipal administration's websites.
5. Educating the population, especially in risk zones, about mosquito control methods and preventing their breeding in the immediate vicinity of their homes and apartments.
6. Allocating budgetary funds for timely larvicidal and adulticidal treatments of mosquitoes.

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MODERATE RISK

Tick-Borne Encephalitis

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Conducting annual monitoring of ticks during their peak activity periods.
3. Mapping risk zones in the municipality based on continuous monitoring of tick population, species, and infection levels, as well as studies on sentinel animals.
4. Posting maps on the municipality's website.
5. Marking natural tick habitats with clearly visible signs.
6. Educating the population, especially residents of risk zones and those professionally or recreationally exposed, about protective measures against tick bites and recognizing the first symptoms of tick-borne encephalitis.
7. Allocating budgetary funds for timely tick treatments.
8. Raising awareness among primary healthcare physicians (especially in Bodjani, Plavna, Bačko Novo Selo) about this disease.
9. Conducting seroprevalence studies on a representative sample of the population.

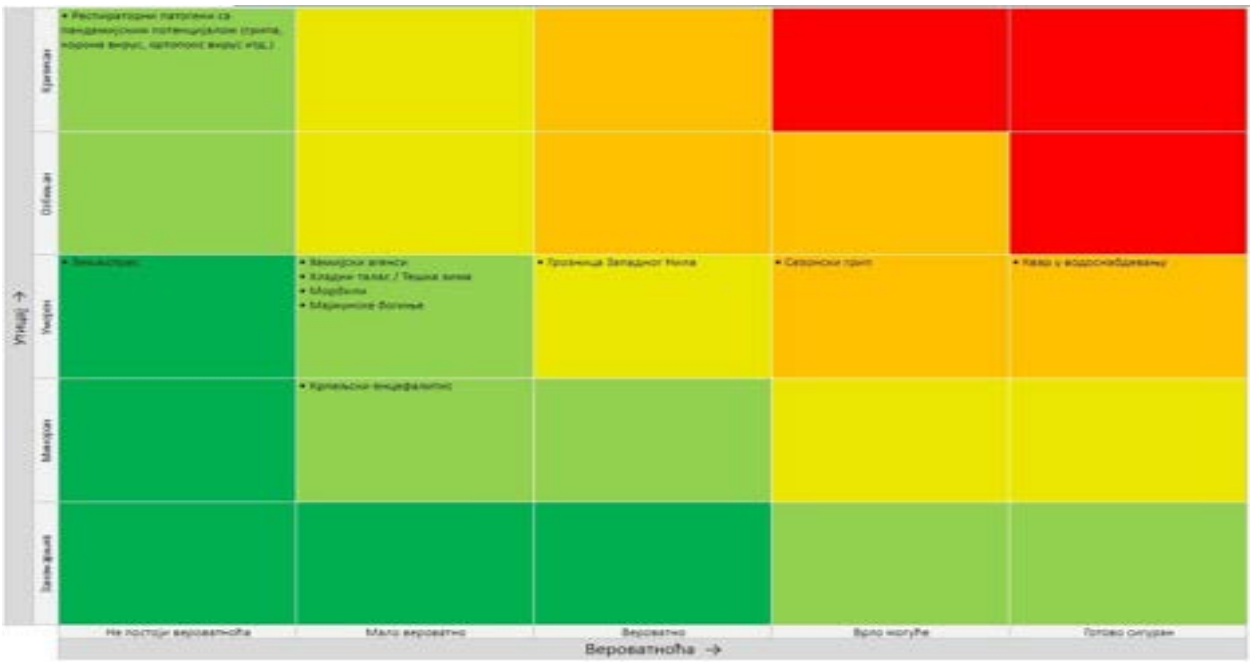
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Municipality of Temerin

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Квар у водоснабдевању	Висок	Готово сигуран	Умерен	Низак	Низак
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Низак	Низак
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Низак	Делимична
Крпељски енцефалитис	Низак	Мало вероватно	Минoран	Низак	Делимична
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Низак
Респираторни патогени са пандемијским потенцијалом	Низак	Не постоји вероватноћа	Критичан	Веома висок	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Water Supply Contamination

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Implementing oversight of defined legal and regulatory acts.
3. Acting in accordance with the assessed level of risk for the defined hazard, as well as informing professionals and the general public about the expected potential disasters.
4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the existing response capacities.
5. Familiarizing the population with the risk map and the expected time frame for the defined hazard based on previous assessments.
6. Defining and implementing action plans.
7. Enhancing the capacity of the health and non-health sectors regarding staffing, equipment, machinery, and infrastructure.
8. Increasing capacity in the area of existing infrastructure within the geographic area.

Seasonal Influenza

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing vaccination coverage against influenza among vulnerable population groups.
3. Educating the population, especially at-risk groups.
4. Raising awareness among healthcare workers about the importance of immunization for healthcare employees.
5. Increasing vaccination coverage against influenza among healthcare workers.
6. Conducting inspections and imposing penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensifying cooperation with gerontological centers and pensioner associations.

MODERATE RISK

West Nile Fever

1. Compliance with legal and regulatory acts governing the management of defined hazards.

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2. Intensifying education for at-risk groups about protective measures against mosquito bites, along with increased media campaigns.
3. Mapping risk zones in the municipality based on continuous monitoring of mosquito population, species, and infection levels, as well as studies on sentinel animals.
4. Posting maps on the municipal administration's websites.
5. Educating the population, especially in risk zones, about mosquito control methods and preventing their breeding in the immediate vicinity of their homes and apartments.
6. Allocating budgetary funds for timely larvicidal and adulticidal treatments of mosquitoes.

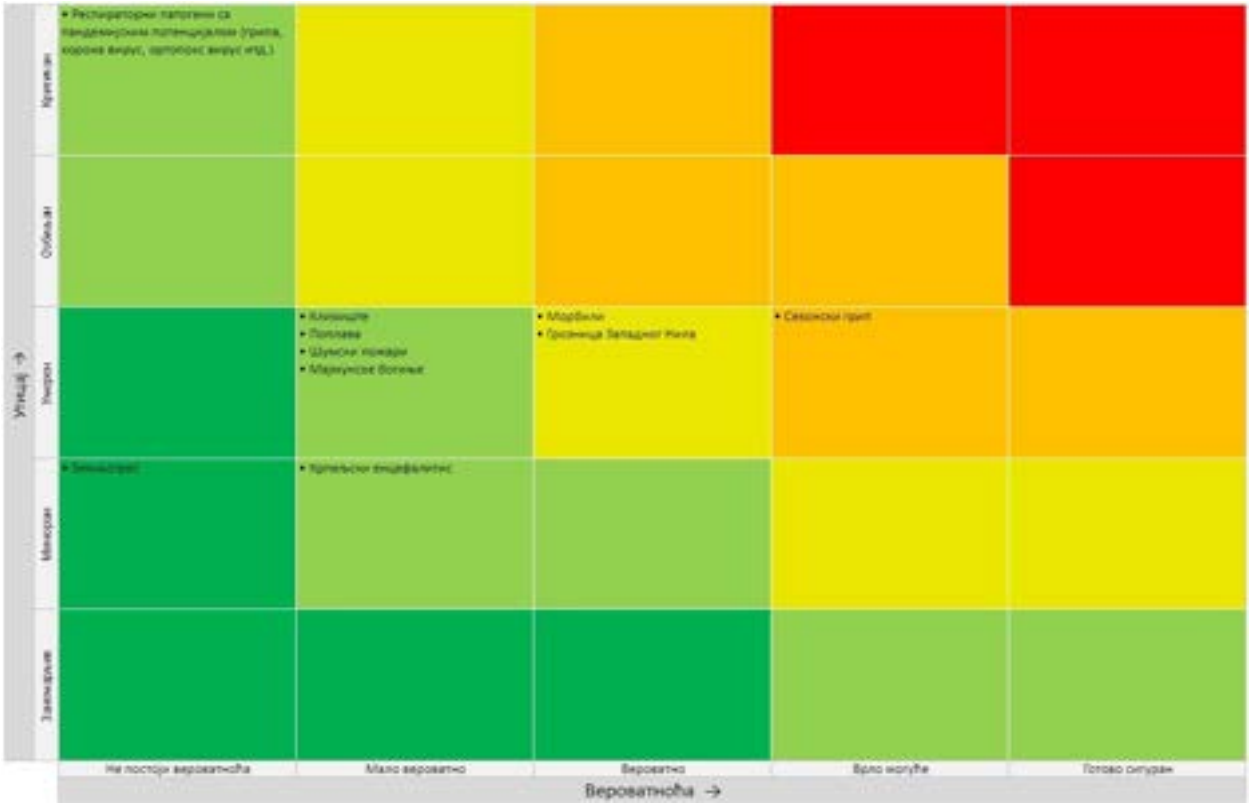
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

10. Municipality of Titel

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична
Клизиште	Низак	Мало вероватно	Умерен	Низак	Низак
Поплава	Низак	Мало вероватно	Умерен	Висок	Низак
Шумски пожари	Низак	Мало вероватно	Умерен	Низак	Низак
Крпељски енцефалитис	Низак	Мало вероватно	Минoран	Низак	Делимична
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Низак
Респираторни патогени са пандемијским потенцијалом	Низак	Не постоји вероватноћа	Критичан	Веома висок	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Минoран	Низак	Низак

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing vaccination coverage against influenza among vulnerable population groups.
3. Educating the population, especially at-risk groups.
4. Raising awareness among healthcare workers about the importance of immunization for healthcare employees.
5. Increasing vaccination coverage against influenza among healthcare workers.
6. Conducting inspections and imposing penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensifying cooperation with gerontological centers and pensioner associations.

MODERATE RISK

Measles

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing MMR vaccination coverage to over 95% through intensive promotion of vaccination and various campaigns targeting the entire population, especially vulnerable categories.
3. Training healthcare workers to raise awareness about this disease and the importance of immunization.
4. Ongoing monitoring of vaccination implementation and intensifying oversight of vaccination coverage.
5. Collaboration with non-governmental organizations, citizen associations, educational staff in schools and preschools, parents, and workplaces.
6. Conducting inspections and imposing financial penalties on parents in case of refusal to vaccinate their children.

West Nile Fever

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Intensifying education for at-risk groups about protective measures against mosquito bites, along with increased media campaigns.

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3. Mapping risk zones in the municipality based on continuous monitoring of mosquito population, species, and infection levels, as well as studies on sentinel animals.
4. Posting maps on the municipal administration's websites.
5. Educating the population, especially in risk zones, about mosquito control methods and preventing their breeding in the immediate vicinity of their homes and apartments.
6. Allocating budgetary funds for timely larvicidal and adulticidal treatments of mosquitoes.

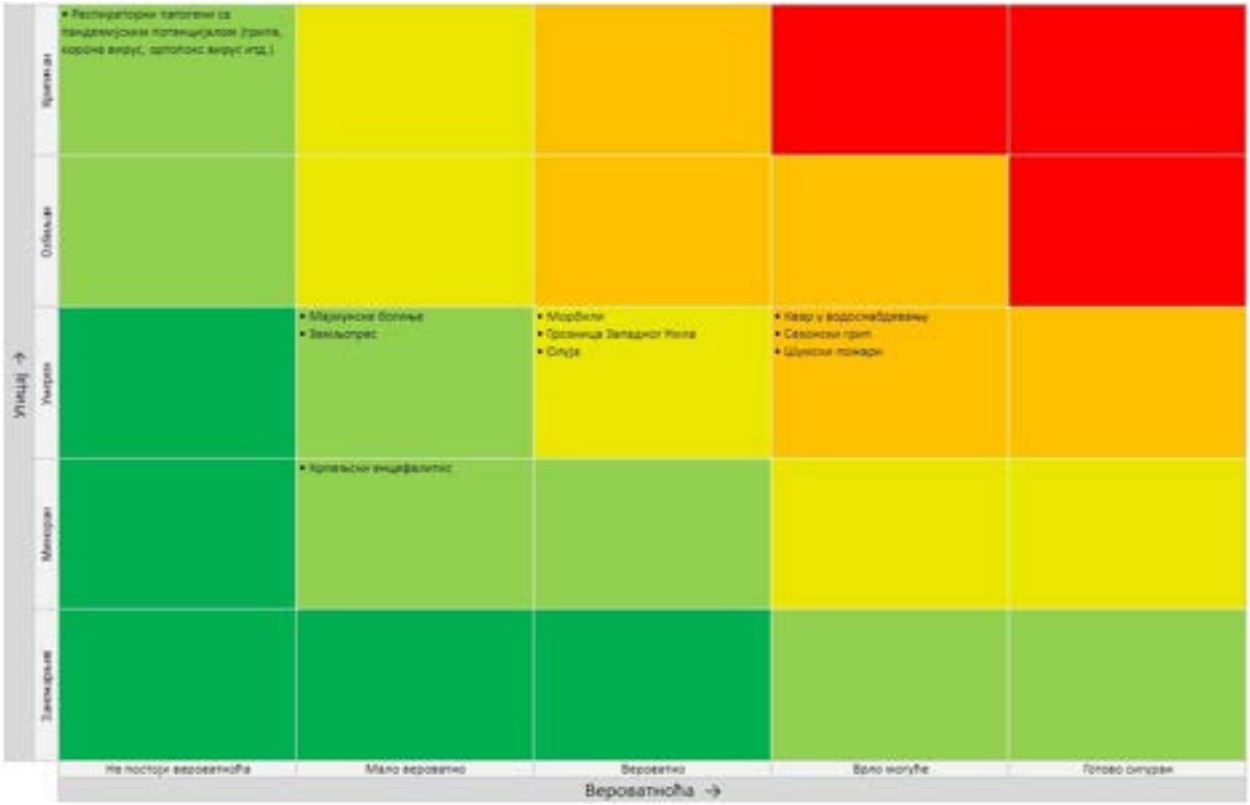
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

11. Municipality of Vrbas

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Квар у водоснабдевању	Висок	Врло могуће	Умерен	Делимична	Низак
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Шумски пожари	Висок	Врло могуће	Умерен	Делимична	Низак
Морбили	Умерен	Вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична
Олуја	Умерен	Вероватно	Умерен	Низак	Низак
Крпељски енцефалитис	Низак	Мало вероватно	Минoран	Низак	Делимична
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Низак
Респираторни патогени са пандемијским потенцијалом	Низак	Не постоји вероватноћа	Критичан	Веома висок	Низак
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Низак

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Water Supply Failure

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Conducting oversight of defined legal and regulatory acts.
3. Acting in accordance with the assessed level of risk for the defined hazard, as well as informing the professional and general public about it (expectation of possible disasters).
4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the existing assessed response capacities.
5. Familiarizing the population with the risk map and the time frame for the expected hazard according to previous assessments of the identified hazard.
6. Defining and implementing action plans.
7. Increasing the capacities of the health and non-health sectors regarding human resources, equipment, machinery, and infrastructure.
8. Enhancing capacities in the area of existing infrastructure in the relevant geographic area.

Seasonal Influenza

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing vaccination coverage against influenza among vulnerable population groups.
3. Educating the population, especially at-risk groups.
4. Raising awareness among healthcare workers about the importance of immunization for healthcare employees.
5. Increasing vaccination coverage against influenza among healthcare workers.
6. Conducting inspections and imposing penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensifying cooperation with gerontological centers and pensioner associations.

Forest Fires

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Conducting oversight of defined legal and regulatory acts.
3. Acting in accordance with the assessed level of risk for the defined hazard, as well as informing the professional and general public about it (expectation of possible disasters).

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4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the existing assessed response capacities.
5. Familiarizing the population with the risk map and the time frame for the expected hazard according to previous assessments of the identified hazard.
6. Defining and implementing action plans.
7. Increasing the capacities of the health and non-health sectors regarding human resources, equipment, machinery, and infrastructure.
8. Enhancing capacities in the area of existing infrastructure in the relevant geographic area.

MODERATE RISK

Measles

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing MMR vaccination coverage through intensive promotion of vaccination and various campaigns targeting the entire population, especially vulnerable categories.
3. Training healthcare workers to raise awareness about this disease and the importance of immunization.
4. Ongoing monitoring of vaccination implementation and intensifying oversight of vaccination coverage.
5. Collaborating with non-governmental organizations, citizen associations, educational staff in schools and preschools, parents, and workplaces.
6. Conducting inspections and imposing financial penalties on parents in case of refusal to vaccinate their children.

West Nile Fever

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Intensifying education for at-risk groups about protective measures against mosquito bites, along with increased media campaigns.
3. Mapping risk zones in the municipality based on continuous monitoring of mosquito population, species, and infection levels, as well as studies on sentinel animals.
4. Posting maps on the municipal administration's websites.
5. Educating the population, especially in risk zones, about mosquito control methods and preventing their breeding in the immediate vicinity of their homes and apartments.
6. Allocating budgetary funds for timely larvicidal and adulticidal treatments of mosquitoes.

Storm

1. Compliance with legal and regulatory acts governing the management of defined hazards.

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2. Conducting oversight of defined legal and regulatory acts.
3. Acting in accordance with the assessed level of risk for the defined hazard, as well as informing the professional and general public about it (expectation of possible disasters).
4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the existing assessed response capacities.
5. Familiarizing the population with the risk map and the time frame for the expected hazard according to previous assessments of the identified hazard.
6. Defining and implementing action plans.
7. Increasing the capacities of the health and non-health sectors regarding human resources, equipment, machinery, and infrastructure.
8. Enhancing capacities in the area of existing infrastructure in the relevant geographic area.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

12. Municipality of Žabalj

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Шумски пожари	Висок	Врло могуће	Умерен	Делимична	Низак
Хладни талас / Тешка зима	Висок	Врло могуће	Умерен	Низак	Низак
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Низак	Мало вероватно	Умерен	Низак	Делимична
Крпељски енцефалитис	Низак	Мало вероватно	Минoран	Низак	Делимична
Мајмунске богиње	Низак	Мало вероватно	Умерен	Делимична	Низак
Респираторни патогени са пандемијским потенцијалом	Низак	Не постоји вероватноћа	Критичан	Веома висок	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак
Олуја		Вероватно		Низак	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Forest Fires

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Conducting oversight of defined legal and regulatory acts.
3. Acting in accordance with the assessed level of risk for the defined hazard, as well as informing the professional and general public about it (expectation of possible disasters).
4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the existing assessed response capacities.
5. Familiarizing the population with the risk map and the time frame for the expected hazard according to previous assessments of the identified hazard.
6. Defining and implementing action plans.
7. Increasing the capacities of the health and non-health sectors regarding human resources, equipment, machinery, and infrastructure.
8. Enhancing capacities in the area of existing infrastructure in the relevant geographic area.

Cold Wave / Severe Winter

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Conducting oversight of defined legal and regulatory acts.
3. Acting in accordance with the assessed level of risk for the defined hazard, as well as informing the professional and general public about it (expectation of possible disasters).
4. Clearly and unambiguously informing all leading authorities about the assessed risks and possible consequences based on the existing assessed response capacities.
5. Familiarizing the population with the risk map and the time frame for the expected hazard according to previous assessments of the identified hazard.
6. Defining and implementing action plans.
7. Increasing the capacities of the health and non-health sectors regarding human resources, equipment, machinery, and infrastructure.
8. Enhancing capacities in the area of existing infrastructure in the relevant geographic area.

Seasonal Influenza

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Increasing vaccination coverage against influenza among vulnerable population groups.

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3. Educating the population, especially at-risk groups.
4. Raising awareness among healthcare workers about the importance of immunization for healthcare employees.
5. Increasing vaccination coverage against influenza among healthcare workers.
6. Conducting inspections and imposing penalties in accordance with the provisions of the Law on Protection of the Population from Infectious Diseases.
7. Intensifying cooperation with gerontological centers and pensioner associations.

MODERATE RISK

West Nile Fever

1. Compliance with legal and regulatory acts governing the management of defined hazards.
2. Intensifying education for at-risk groups about protective measures against mosquito bites, along with increased media campaigns.
3. Mapping risk zones in the municipality based on continuous monitoring of mosquito population, species, and infection levels, as well as studies on sentinel animals.
4. Posting maps on the municipal administration's websites.
5. Educating the population, especially in risk zones, about mosquito control methods and preventing their breeding in the immediate vicinity of their homes and apartments.
6. Allocating budgetary funds for timely larvicidal and adulticidal treatments of mosquitoes.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

NORTH BANAT ADMINISTRATIVE DISTRICT

1. City of Kikinda

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Ватра	Висок	Врло могуће	Умерен	Делимична	Делимична
Суша	Висок	Вероватно	Озбиљан	Висок	Низак
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Низак	Делимична
Велики кашаљ	Умерен	Врло могуће	Минoран	Низак	Делимична
Цурење гаса	Умерен	Мало вероватно	Озбиљан	Висок	Низак
Поплава	Низак	Мало вероватно	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Минoран	Низак	Делимична
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increasing the vaccination coverage.

COVID-19

1. Increasing the vaccination and revaccination coverage.

Fire

1. Training services and residents to respond to the given hazard through simulation.

Gastroenteritis/Foodborne Illnesses

1. Continuous education for children and adults regarding hand hygiene.

Drought

1. Establishing an adequate network of irrigation channels.

MODERATE RISK

Heat Wave

1. Acquiring drinking water tanks. Increasing the number of public fountains.

Gas Leak

1. Training services and residents to respond to the given hazard through simulation.

Whooping Cough

1. Revaccination in the eighth grade of primary school.

West Nile Fever

1. Increasing the number of regular and emergency disinsectization of adult forms and larvae.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

2. Municipality of Ada

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Веома висок	Готово сигуран	Озбиљан	Висок	Низак
Ватра	Висок	Готово сигуран	Умерен	Делимична	Делимична
Суша	Висок	Вероватно	Озбиљан	Висок	Низак
Сезонски грип	Висок	Готово сигуран	Умерен	Висок	Низак
Грозница Западног Нила	Висок	Готово сигуран	Умерен	Делимична	Низак
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Низак
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Умерен	Делимична	Низак
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Низак
Поплава	Низак	Мало вероватно	Умерен	Делимична	Низак
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак
Квар у водоснабдевању	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

COVID-19

1. Increasing the vaccination and revaccination coverage.

HIGH RISK

Pertussis (Whooping Cough)

1. Revaccination in the eighth grade of primary school.

Seasonal Influenza

1. Increasing the vaccination coverage.

Fire

1. Training services and residents to respond to the given hazard through simulation.

West Nile Fever

1. Increasing the number of regular and emergency disinsectization of adult forms and larvae.

Gastroenteritis/Foodborne Illnesses

1. Continuous education for children and adults regarding hand hygiene.

Drought

1. Establishing an adequate network of irrigation channels.

MODERATE RISK

Heat Wave

1. Acquiring drinking water tanks.
2. Increasing the number of public fountains.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Municipality of Čoka

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Веома висок	Готово сигуран	Озбиљан	Висок	Низак
Ватра	Висок	Готово сигуран	Умерен	Делимична	Делимична
Суша	Висок	Вероватно	Озбиљан	Висок	Низак
Сезонски грип	Висок	Готово сигуран	Умерен	Висок	Низак
Грозница Западног Нила	Висок	Готово сигуран	Умерен	Делимична	Низак
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Низак
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Умерен	Делимична	Низак
Олуја	Висок	Вероватно	Озбиљан	Висок	Низак
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Низак
Поплава	Низак	Мало вероватно	Умерен	Делимична	Низак
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

COVID-19

1. Increasing the vaccination and revaccination coverage.

HIGH RISK

Pertussis (Whooping Cough)

1. Revaccination in the eighth grade of primary school.

Seasonal Influenza

1. Increasing the vaccination coverage.

Fire

1. Training services and residents to respond to the given hazard through simulation.

West Nile Fever

1. Increased number of regular and emergency disinsectization of adult forms and larvae.

Gastroenteritis/Foodborne Illnesses

1. Continuous education for children and adults regarding hand hygiene.

Drought

1. Establishing an adequate network of irrigation channels.

Storm

1. A system for notifying citizens about weather emergencies.

MODERATE RISK

Heat Wave

1. Acquiring drinking water tanks.
2. Increasing the number of public fountains.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Kanjiža

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Веома висок	Готово сигуран	Озбиљан	Висок	Низак
Ватра	Висок	Готово сигуран	Умерен	Делимична	Делимична
Суша	Висок	Вероватно	Озбиљан	Висок	Низак
Сезонски грип	Висок	Готово сигуран	Умерен	Висок	Низак
Грозница Западног Нила	Висок	Готово сигуран	Умерен	Делимична	Низак
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Низак
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Умерен	Делимична	Низак
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Низак
Поплава	Низак	Мало вероватно	Умерен	Делимична	Низак
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

COVID-19

1. Increasing the vaccination and revaccination coverage.

HIGH RISK

Pertussis (Whooping Cough)

1. Revaccination in the eighth grade of primary school.

Seasonal Influenza

1. Increasing the vaccination coverage.

Fire

1. Training services and residents to respond to the given hazard through simulation.

West Nile Fever

1. Increased number of regular and emergency disinsectization of adult forms and larvae.

Gastroenteritis/Foodborne Illnesses

1. Continuous education for children and adults regarding hand hygiene.

Drought

1. Establishing an adequate network of irrigation channels.

MODERATE RISK

Heat Wave

1. Acquiring drinking water tanks.
2. Increasing the number of public fountains.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Novi Kneževac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Веома висок	Готово сигуран	Озбиљан	Висок	Низак
Ватра	Висок	Готово сигуран	Умерен	Делимична	Делимична
Суша	Висок	Вероватно	Озбиљан	Висок	Низак
Сезонски грип	Висок	Готово сигуран	Умерен	Висок	Низак
Грозница Западног Нила	Висок	Готово сигуран	Умерен	Делимична	Низак
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Низак
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Умерен	Делимична	Низак
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Низак
Поплава	Низак	Мало вероватно	Умерен	Делимична	Низак
Хладни талас / Тешка зима	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Умерен	Делимична	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

COVID-19

1. Increasing the vaccination and revaccination coverage.

HIGH RISK

Pertussis (Whooping Cough)

1. Revaccination in the eighth grade of primary school.

Seasonal Influenza

1. Increasing the vaccination coverage.

Fire

1. Training services and residents to respond to the given hazard through simulation.

West Nile Fever

1. Increased number of regular and emergency disinsectization of adult forms and larvae.

Gastroenteritis/Foodborne Illnesses

1. Continuous education for children and adults regarding hand hygiene.

Drought

1. Establishing an adequate network of irrigation channels.

MODERATE RISK

Heat Wave

1. Acquiring drinking water tanks.
2. Increasing the number of public fountains.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Senta

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Ватра	Висок	Врло могуће	Умерен	Делимична	Делимична
Суша	Висок	Вероватно	Озбиљан	Висок	Низак
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Готово сигуран	Умерен	Делимична	Делимична
Топлотни талас	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Низак	Делимична
Велики кашаљ	Умерен	Врло могуће	Минoран	Низак	Делимична
Цурење гаса	Умерен	Мало вероватно	Озбиљан	Висок	Низак
Поплава	Низак	Мало вероватно	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Минoран	Низак	Делимична
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Висок	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increasing the vaccination coverage.

COVID-19

1. Increasing the vaccination and revaccination coverage.

Fire

1. Training services and residents to respond to the given hazard through simulation.

Gastroenteritis/Foodborne Illnesses

1. Continuous education for children and adults regarding hand hygiene.

Drought

1. Establishing an adequate network of irrigation channels.

MODERATE RISK

Heat Wave

1. Acquiring drinking water tanks.
2. Increasing the number of public fountains.

Gas Leak

1. Training services and residents to respond to the given hazard through simulation.

Pertussis (Whooping Cough)

1. Revaccination in the eighth grade of primary school.

West Nile Fever

Increased number of regular and emergency disinsectization of adult forms and larvae.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

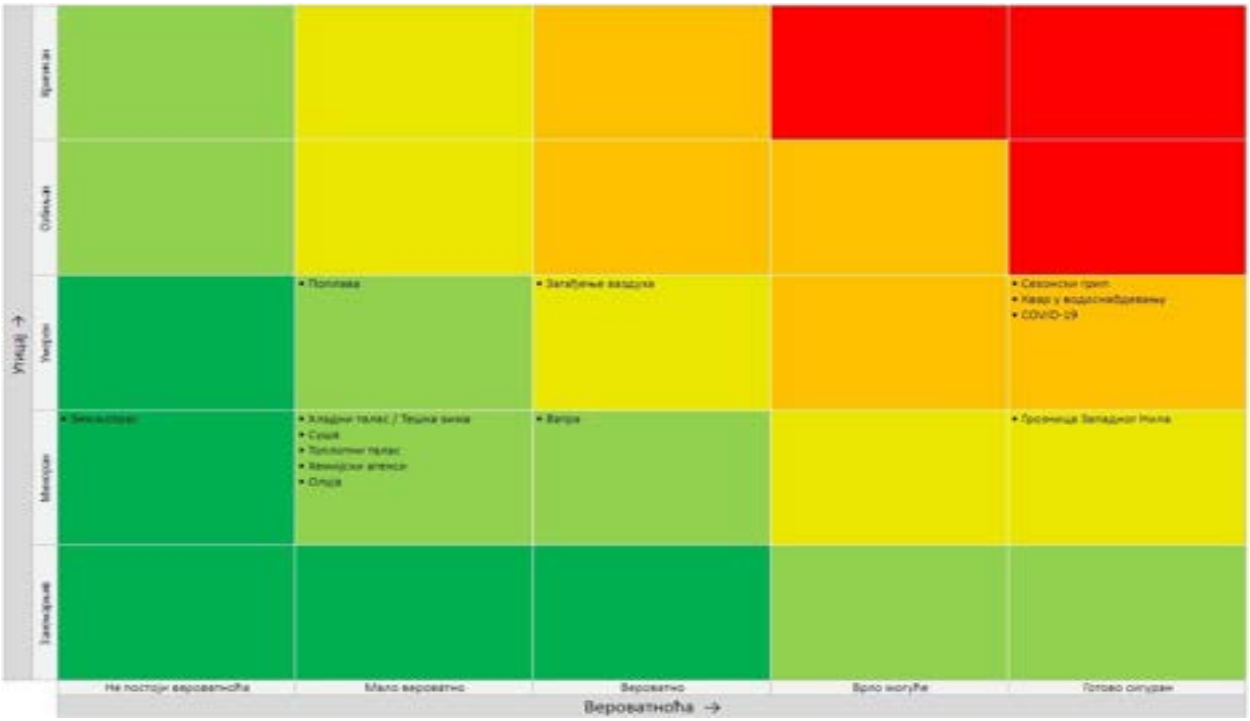
CENTRAL BANAT ADMINISTRATIVE DISTRICT

1. City of Zrenjanin

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Квар у водоснабдевању	Висок	Готово сигуран	Умерен	Веома низак	Низак
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Умерен	Вероватно	Умерен	Висок	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Минoран	Низак	Делимична
Суша	Низак	Мало вероватно	Минoран	Низак	Делимична
Топлотни талас	Низак	Мало вероватно	Минoран	Низак	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Минoран	Низак	Делимична
Олуја	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection Against Infectious Diseases and the Expert-Methodological Guidelines of IPHS regarding vaccination.
4. Increase vaccination coverage among healthcare workers with the flu vaccine.
5. Intensify vaccination campaigns against the flu for all population categories, especially for at-risk groups.

Water Supply Failure

1. Ensure adequate water treatment or find new water supply sources, ensuring that water quality meets legal standards.
2. Reconstruct the water supply network.
3. Enhance inspection oversight of the water supply system.

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection Against Infectious Diseases.
4. Increase vaccination coverage among healthcare workers with the COVID-19 vaccine.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially for at-risk groups.

MODERATE RISK

Air Pollution

1. Comply with environmental protection regulations (install adequate air purification filters).
2. Conduct regular inspections to ensure compliance with legal regulations.
3. Encourage the population to use alternative heating sources and transportation methods that do not negatively impact air pollution.

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West Nile Fever

1. Intensify monitoring of the West Nile virus in natural reservoirs.
2. Regularly conduct larvicide and adult mosquito control from both the air and ground.
3. Improve monitoring of the West Nile virus in the human population and enhance diagnostic capabilities.
4. Educate the population about protective measures against mosquito bites.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

2. Municipality of Žitište

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Минoран	Низак	Делимична
Суша	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Топлотни талас	Низак	Мало вероватно	Минoран	Низак	Делимична
Ватра	Низак	Мало вероватно	Минoран	Низак	Делимична
Цурење гаса	Низак	Мало вероватно	Минoран	Низак	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection Against Infectious Diseases and the Expert-Methodological Guidelines of IPHS regarding vaccination.
4. Increase vaccination coverage among healthcare workers with the flu vaccine.
5. Intensify vaccination campaigns against the flu for all population categories, especially for at-risk groups.

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection Against Infectious Diseases.
4. Increase vaccination coverage among healthcare workers with the COVID-19 vaccine.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially for at-risk groups.

MODERATE RISK

West Nile Fever

1. Intensify monitoring of the West Nile virus in natural reservoirs.
2. Regularly conduct larvicide and adult mosquito control from both the air and ground.
3. Improve monitoring of the West Nile virus in the human population and enhance diagnostic capabilities.
4. Educate the population about protective measures against mosquito bites.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Municipality of Sečanj

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Земљотрес	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Минoран	Низак	Делимична
Топлотни талас	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Суша	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Ватра	Низак	Мало вероватно	Минoран	Низак	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Веома низак	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Олуја	Низак	Мало вероватно	Минoран	Веома низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection Against Infectious Diseases and the Expert-Methodological Guidelines of IPHS regarding vaccination.
4. Increase vaccination coverage among healthcare workers with the flu vaccine.
5. Intensify vaccination campaigns against the flu for all population categories, especially for at-risk groups.

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection Against Infectious Diseases.
4. Increase vaccination coverage among healthcare workers with the COVID-19 vaccine.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially for at-risk groups.

MODERATE RISK

West Nile Fever

1. Intensify monitoring of the West Nile virus in natural reservoirs.
2. Regularly conduct larvicide and adult mosquito control from both the air and ground.
3. Improve monitoring of the West Nile virus in the human population and enhance diagnostic capabilities.
4. Educate the population about protective measures against mosquito bites.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Novi Bečej

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Минoран	Низак	Делимична
Суша	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Топлотни талас	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Олуја	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Ватра	Низак	Мало вероватно	Минoран	Низак	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection Against Infectious Diseases and the Expert-Methodological Guidelines of IPHS regarding vaccination.
4. Increase vaccination coverage among healthcare workers with the flu vaccine.
5. Intensify vaccination campaigns against the flu for all population categories, especially for at-risk groups.

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection Against Infectious Diseases.
4. Increase vaccination coverage among healthcare workers with the COVID-19 vaccine.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially for at-risk groups.

MODERATE RISK

West Nile Fever

1. Intensify monitoring of the West Nile virus in natural reservoirs.
2. Regularly conduct larvicide and adult mosquito control from both the air and ground.
3. Improve monitoring of the West Nile virus in the human population and enhance diagnostic capabilities.
4. Educate the population about protective measures against mosquito bites.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Nova Crnja

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Готово сигуран	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Олуја	Низак	Мало вероватно	Минoран	Низак	Делимична
Суша	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Хладни талас / Тешка зима	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Топлотни талас	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Ватра	Низак	Мало вероватно	Минoран	Низак	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Seasonal Influenza

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection Against Infectious Diseases and the Expert-Methodological Guidelines of IPHS regarding vaccination.
4. Increase vaccination coverage among healthcare workers with the flu vaccine.
5. Intensify vaccination campaigns against the flu for all population categories, especially for at-risk groups.

COVID-19

1. Increase vaccination coverage.
2. Educate healthcare workers at all levels of health protection about the importance of vaccination.
3. Adhere to the Law on Protection Against Infectious Diseases.
4. Increase vaccination coverage among healthcare workers with the COVID-19 vaccine.
5. Intensify vaccination campaigns against COVID-19 for all population categories, especially for at-risk groups.

MODERATE RISK

West Nile Fever

1. Intensify monitoring of the West Nile virus in natural reservoirs.
2. Regularly conduct larvicide and adult mosquito control from both the air and ground.
3. Improve monitoring of the West Nile virus in the human population and enhance diagnostic capabilities.
4. Educate the population about protective measures against mosquito bites.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

SOUTH BANAT ADMINISTRATIVE DISTRICT

1. City of Pančevo

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Грозница западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Озбиљан	Висок	Низак
Експлозивни агенси	Умерен	Мало вероватно	Озбиљан	Висок	Низак
Земљотрес	Низак	Вероватно	Миноран	Низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Низак	Делимична
Туберкулоза	Низак	Мало вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Мало вероватно	Миноран	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Air Pollution

1. **Reduction of air pollution from thermal plants and heating systems**: Optimize production processes at the Kotjež and Sodara heating plants, use renewable energy sources through solar panels and geothermal energy, increase the number of connections to the district heating system, improve energy efficiency of public buildings and residential complexes through co-financing projects by local self-governments, and provide subsidies for gasification.
2. **Reduction of air pollution from traffic**: Develop strategic planning documents and technical project documentation for traffic regulation, reduce air pollution from public transportation, improve the quality of public transport and the fleet of public enterprises, encourage the use of public transport and alternative transport options, and build cycling infrastructure.
3. **Sanitation and reclamation of unsanitary landfills**: Remove illegal dumpsites and rehabilitate old landfills.
4. **Construction of green infrastructure**: Build protective belts along roadways, plant new greenery, construct windbreak green belts around the city landfill, establish a registry of public green spaces through an information system, revitalize parks and green areas, create a register of allergenic plant species in public green spaces and plan the replacement of highly allergenic species, build windbreak belts along agricultural roads, eliminate ragweed in urban and rural areas, and reforest the Poňavica park.
5. **Improvement of monitoring**: Optimize the network of measuring points, develop a smart air quality monitoring system (including forecasting and management of air quality and periodic evaluation and updating of air quality scenarios).
6. **Raising public awareness about the importance of air quality**: Increase awareness about the harmful effects of household heating with solid fuels, promote alternative energy sources, raise awareness about the health impacts of allergenic pollen species and prevention options, ensure adequate media coverage, and reduce the impact of re-emission of suspended particles on air pollution through preventive and regular measures at construction sites, alongside increased oversight.

West Nile Fever

1. There is no specific preventive measure (vaccine) against West Nile Fever, so it is crucial to raise the general population's awareness about the application of general protective measures against mosquito bites and implement measures to reduce mosquito populations in the environment.
2. Improve the quality of epidemiological surveillance of West Nile Fever by expanding the diagnostic capabilities of the microbiological laboratory of the Public Health Institute of Pančevo and the infectious disease specialists at the Pančevo Health Center.

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3. Educate the population about prevention measures for West Nile Fever before and during the surveillance season via media and social networks.
4. Inform the population about the current epidemiological situation regarding West Nile Fever, continuously implement measures to control mosquitoes within the jurisdiction of the local self-government unit.
5. Monitor the presence of the West Nile virus among mosquitoes throughout the entire territory under the jurisdiction of the local self-government unit by engaging the Veterinary Institute, Agricultural Faculty, and the Biocide Institute.

MODERATE RISK

Explosive Agents

1. Reduce the risk of explosions and spills of hazardous materials in road, rail, and river transport; enhance the safety of SEVESO facilities, identify potential unexploded bombs in the Danube River near the Port of Danube in Pančevo and the Ritoprek-Ivanovo power line.

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2. City of Vršac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Туберкулоза	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Вероватно	Минoран	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Олуја	Низак	Вероватно	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Низак	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Improve the quality of epidemiological surveillance for influenza and COVID-19 by expanding diagnostic and staffing capacities, including infectious disease specialists, pulmonologists, and pediatricians.
2. Ensure timely reporting of every new case by healthcare professionals in primary, secondary, and tertiary healthcare institutions through the Electronic Public Health Service.
3. Continue to enhance the Electronic Public Health Service for reporting infectious diseases and connect it with primary and tertiary healthcare facilities, enabling daily, continuous monitoring of infectious diseases and speeding up information flow for timely responses and implementation of epidemiological measures.
4. Ensure a continuous supply of vaccines against influenza and COVID-19 for the current season.
5. Conduct vaccinations against influenza and COVID-19 with maximum coverage of at-risk groups, healthcare workers, and adults employed in the public sector and educational institutions.
6. Develop an educational plan for the general population and healthcare workers regarding the importance of immunization against influenza and COVID-19, implementing it to cover as many individuals as possible.
7. Before the influenza/COVID-19 surveillance season, conduct a serious media campaign aimed at promoting immunization, highlighting the advantages of high vaccination coverage for all residents at risk of developing complications.
8. Continuously raise awareness among the population about preventing the emergence and spread of influenza/COVID-19 by emphasizing the importance of general prevention measures on websites and in mass media.
9. Through activities of the Hospital Infection Commission at all levels of healthcare, ensure that all healthcare workers are vaccinated before the influenza season, and that all risk categories are identified in accordance with the applicable Immunization Regulation for vaccination implementation.
10. Ensure "reserve" accommodation capacities in every hospital department specifically for isolating patients suspected of having influenza/COVID-19 and those with laboratory-confirmed influenza/COVID-19, restock equipment and materials necessary for quick responses in the event of an epidemic caused by a respiratory pathogen in the area, and ensure sufficient quantities of antiviral medications.
11. Develop an emergency response plan and procedures for the specific risk – Respiratory Pathogen: Influenza/COVID-19, at the level of the Health Center.

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12. Timely inform the general public about the current epidemiological situation regarding influenza/COVID-19 throughout the surveillance season and provide recommendations accordingly.
13. Involve sanitary inspection in the oversight of all measures recommended by the relevant Institute, in accordance with the Law on Protection of the Population from Infectious Diseases.
14. Continuously work on raising awareness among the population about preventing influenza illness.
15. Monitor the implementation of all the aforementioned measures to ensure their enforcement.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

3. Municipality of Alibunar

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Туберкулоза	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Врло могуће	Минoран	Низак	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Олуја	Низак	Вероватно	Минoран	Низак	Делимична
Суша	Низак	Вероватно	Минoран	Низак	Делимична
Земљотрес	Низак	Вероватно	Минoран	Низак	Делимична
Шуга	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Improve the quality of epidemiological surveillance for influenza and COVID-19 by expanding diagnostic and staffing capacities, including infectious disease specialists, pulmonologists, and pediatricians.
2. Ensure timely reporting of every new case by healthcare professionals in primary, secondary, and tertiary healthcare institutions through the Electronic Public Health Service.
3. Continue to enhance the Electronic Public Health Service for reporting infectious diseases and connect it with primary and tertiary healthcare facilities, enabling daily, continuous monitoring of infectious diseases and speeding up information flow for timely responses and implementation of epidemiological measures.
4. Ensure a continuous supply of vaccines against influenza and COVID-19 for the current season.
5. Conduct vaccinations against influenza and COVID-19 with maximum coverage of at-risk groups, healthcare workers, and adults employed in the public sector and educational institutions.
6. Develop an educational plan for the general population and healthcare workers regarding the importance of immunization against influenza and COVID-19, implementing it to cover as many individuals as possible.
7. Before the influenza/COVID-19 surveillance season, conduct a serious media campaign aimed at promoting immunization, highlighting the advantages of high vaccination coverage for all residents at risk of developing complications.
8. Continuously raise awareness among the population about preventing the emergence and spread of influenza/COVID-19 by emphasizing the importance of general prevention measures on websites and in mass media.
9. Through activities of the Hospital Infection Commission at all levels of healthcare, ensure that all healthcare workers are vaccinated before the influenza season, and that all risk categories are identified in accordance with the applicable Immunization Regulation for vaccination implementation.
10. Ensure "reserve" accommodation capacities in every hospital department specifically for isolating patients suspected of having influenza/COVID-19 and those with laboratory-confirmed influenza/COVID-19.
11. Restock equipment and materials necessary for quick responses in the event of an epidemic caused by a respiratory pathogen in the area and ensure sufficient quantities of antiviral medications.
12. Develop an emergency response plan and procedures for the specific risk of Respiratory Pathogen: Influenza/COVID-19, at the level of the Health Center.

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13. Timely inform the general public about the current epidemiological situation regarding influenza/COVID-19 throughout the surveillance season and provide recommendations accordingly.
14. Involve sanitary inspection in the oversight of all measures recommended by the relevant Institute, in accordance with the Law on Protection of the Population from Infectious Diseases, and continuously work on raising awareness among the population about preventing influenza illness.
15. Monitor the implementation of all the aforementioned measures to ensure their enforcement.

West Nile Fever

1. Improve the quality of epidemiological surveillance for West Nile Fever by expanding the diagnostic capacities of the microbiological laboratory in Pančevo and training infectious disease specialists in the local health institution. Educate the population about preventive measures against West Nile Fever before and during the surveillance season through media and social networks.
2. Inform the population about the current epidemiological situation regarding West Nile Fever.
3. Continuously implement measures to control mosquito populations within the jurisdiction of local government units.
4. Conduct surveillance for the presence of the West Nile virus among mosquitoes in the jurisdiction of local government units through collaboration with the Veterinary Institute, the Agricultural Faculty, and the Biocide Institute.

Tuberculosis

1. Improve the quality of epidemiological surveillance for tuberculosis by expanding diagnostic capacities.
2. Continue to enhance the Electronic Public Health Service for reporting infectious diseases and connect it with primary and tertiary healthcare facilities, enabling daily, continuous monitoring of infectious diseases and speeding up information flow for timely responses and implementation of epidemiological measures.
3. Develop an educational plan for the general population and healthcare workers regarding the importance of tuberculosis prevention, early detection, and treatment.

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4. Municipality of Bela Crkva

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Туберкулоза	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Висок
Шумски пожари	Умерен	Вероватно	Умерен	Низак	Делимична
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Вероватно	Миноран	Низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Низак	Делимична
Експлозивни агенси	Низак	Мало вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Improve the quality of epidemiological surveillance for influenza and COVID-19 by expanding diagnostic and staffing capacities, including infectious disease specialists, pulmonologists, and pediatricians.
2. Ensure timely reporting of every new case by doctors in healthcare institutions at primary, secondary, and tertiary levels through the Electronic Public Health Service.
3. Continue to enhance the Electronic Public Health Service for reporting infectious diseases and connecting with primary and tertiary healthcare facilities, enabling daily, continuous monitoring of infectious diseases and speeding up information flow for timely responses and implementation of epidemiological measures.
4. Ensure a continuous supply of vaccines against influenza and COVID-19 for the current season.
5. Conduct vaccinations against influenza and COVID-19 with maximum coverage of at-risk groups, healthcare workers, and adults employed in the public sector and educational institutions.
6. Develop an educational plan for the general population and healthcare workers about the importance of immunization against influenza and COVID-19, implementing it to reach as many individuals as possible.
7. Prior to the influenza/COVID-19 surveillance season, conduct a serious media campaign aimed at promoting immunization, highlighting the advantages of high vaccination coverage for all residents at risk of developing complications.
8. Continuously raise awareness among the population about preventing the emergence and spread of influenza/COVID-19 by emphasizing the importance of general prevention measures on websites and in mass media.
9. Through the activities of the Hospital Infection Commission at all levels of healthcare, ensure that all healthcare workers are vaccinated before the influenza season and that all risk categories are identified in accordance with the applicable Immunization Regulation for vaccination implementation.
10. Ensure "reserve" accommodation capacities in every hospital department specifically for isolating patients suspected of having influenza/COVID-19 and those with laboratory-confirmed influenza/COVID-19. Restock equipment and materials necessary for quick responses in the event of an epidemic caused by a respiratory pathogen in the area and ensure sufficient quantities of antiviral medications.
11. Develop an emergency response plan and procedures for the specific risk of Respiratory Pathogen: Influenza/COVID-19 at the level of the Health Center.

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12. Timely inform the general public about the current epidemiological situation regarding influenza/COVID-19 throughout the surveillance season and provide recommendations accordingly.
13. Involve sanitary inspection in the oversight of all measures recommended by the relevant Institute, in accordance with the Law on Protection of the Population from Infectious Diseases.
14. Continuously work on raising awareness among the population about preventing influenza illness.
15. Monitor the implementation of all the aforementioned measures to ensure their enforcement.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Kovačica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Туберкулоза	Умерен	Вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Низак	Мало вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Вероватно	Миноран	Низак	Делимична
Суша	Низак	Вероватно	Миноран	Низак	Делимична
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Експлозивни агенси	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Improve the quality of epidemiological surveillance for influenza and COVID-19 by expanding diagnostic and staffing capacities, including infectious disease specialists, pulmonologists, and pediatricians.
2. Ensure timely reporting of every new case by doctors in healthcare institutions at primary, secondary, and tertiary levels through the Electronic Public Health Service.
3. Continue to enhance the Electronic Public Health Service for reporting infectious diseases and connecting with primary and tertiary healthcare facilities, enabling daily, continuous monitoring of infectious diseases and speeding up information flow for timely responses and implementation of epidemiological measures.
4. Ensure a continuous supply of vaccines against influenza and COVID-19 for the current season.
5. Conduct vaccinations against influenza and COVID-19 with maximum coverage of at-risk groups, healthcare workers, and adults employed in the public sector and educational institutions.
6. Develop an educational plan for the general population and healthcare workers about the importance of immunization against influenza and COVID-19, implementing it to reach as many individuals as possible.
7. Prior to the influenza/COVID-19 surveillance season, conduct a serious media campaign aimed at promoting immunization, highlighting the advantages of high vaccination coverage for all residents at risk of developing complications.
8. Continuously raise awareness among the population about preventing the emergence and spread of influenza/COVID-19 by emphasizing the importance of general prevention measures on websites and in mass media.
9. Through the activities of the Hospital Infection Commission at all levels of healthcare, ensure that all healthcare workers are vaccinated before the influenza season and that all risk categories are identified in accordance with the applicable Immunization Regulation for vaccination implementation.
10. Ensure "reserve" accommodation capacities in every hospital department specifically for isolating patients suspected of having influenza/COVID-19 and those with laboratory-confirmed influenza/COVID-19. Restock equipment and materials necessary for quick responses in the event of an epidemic caused by a respiratory pathogen in the area and ensure sufficient quantities of antiviral medications.
11. Develop an emergency response plan and procedures for the specific risk of Respiratory Pathogen: Influenza/COVID-19 at the level of the Health Center.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

12. Timely inform the general public about the current epidemiological situation regarding influenza/COVID-19 throughout the surveillance season and provide recommendations accordingly.
13. Involve sanitary inspection in the oversight of all measures recommended by the relevant Institute, in accordance with the Law on Protection of the Population from Infectious Diseases.
14. Continuously work on raising awareness among the population about preventing influenza illness.
15. Monitor the implementation of all the aforementioned measures to ensure their enforcement.

West Nile Fever

1. There is no specific preventive measure (vaccine) against West Nile Fever, so it is essential to raise the level of education among the general population regarding general protective measures against mosquito bites and implement measures to reduce mosquito populations in the environment.
2. Improve the quality of epidemiological surveillance for West Nile Fever by expanding the diagnostic capacities of the microbiological laboratory and the infectious disease specialists at the Public Health Institute of Pančevo.
3. Educate the population about prevention measures for West Nile Fever before and during the surveillance season through media and social networks.
4. Inform the population about the current epidemiological situation of West Nile Fever. Continuously implement measures to control mosquito populations in the jurisdiction of the local government unit.
5. Conduct surveillance of the presence of the West Nile virus among mosquitoes across the entire territory of the local government unit by engaging the Veterinary Institute, Faculty of Agriculture, and Biocide Institute.

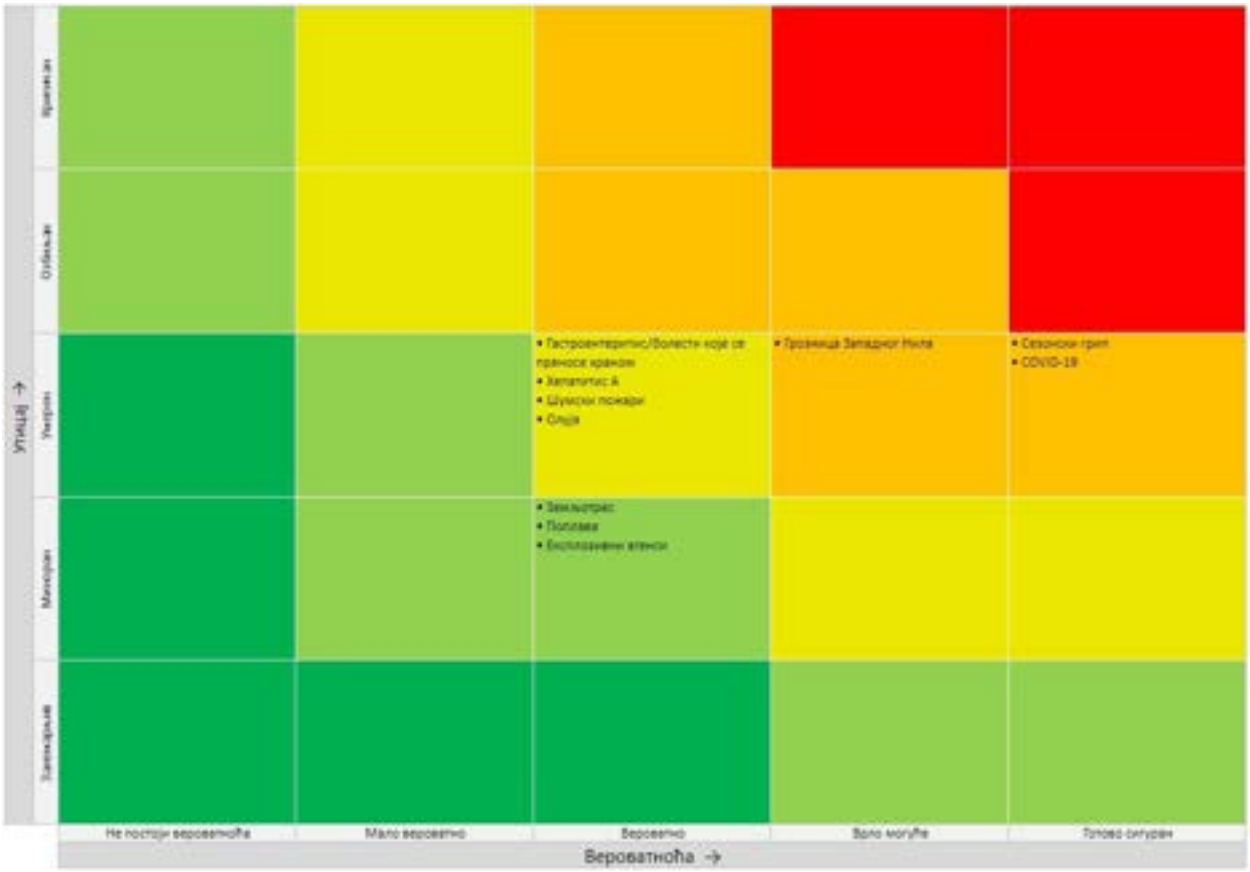
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Kovin

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Хепатитис А	Умерен	Вероватно	Умерен	Делимична	Делимична
Шумски пожари	Умерен	Вероватно	Умерен	Низак	Делимична
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Вероватно	Миноран	Низак	Делимична
Поплава	Низак	Вероватно	Миноран	Низак	Делимична
Експлозивни агенси	Низак	Вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Improve the quality of epidemiological surveillance for influenza and COVID-19 by expanding diagnostic and staffing capacities, including infectious disease specialists, pulmonologists, and pediatricians.
2. Ensure timely reporting of every new case by doctors in healthcare institutions at primary, secondary, and tertiary levels through the Electronic Public Health Service.
3. Continue to enhance the Electronic Public Health Service for reporting infectious diseases and connecting with primary and tertiary healthcare facilities, enabling daily, continuous monitoring of infectious diseases and speeding up information flow for timely responses and implementation of epidemiological measures.
4. Ensure a continuous supply of vaccines against influenza and COVID-19 for the current season.
5. Conduct vaccinations against influenza and COVID-19 with maximum coverage of at-risk groups, healthcare workers, and adults employed in the public sector and educational institutions.
6. Develop an educational plan for the general population and healthcare workers about the importance of immunization against influenza and COVID-19, implementing it to reach as many individuals as possible.
7. Prior to the influenza/COVID-19 surveillance season, conduct a serious media campaign aimed at promoting immunization, highlighting the advantages of high vaccination coverage for all residents at risk of developing complications.
8. Continuously raise awareness among the population about preventing the emergence and spread of influenza/COVID-19 by emphasizing the importance of general prevention measures on websites and in mass media.
9. Through the activities of the Hospital Infection Commission at all levels of healthcare, ensure that all healthcare workers are vaccinated before the influenza season and that all risk categories are identified in accordance with the applicable Immunization Regulation for vaccination implementation.
10. Ensure "reserve" accommodation capacities in every hospital department specifically for isolating patients suspected of having influenza/COVID-19 and those with laboratory-confirmed influenza/COVID-19. Restock equipment and materials necessary for quick responses in the event of an epidemic caused by a respiratory pathogen in the area and ensure sufficient quantities of antiviral medications.
11. Develop an emergency response plan and procedures for the specific risk of Respiratory Pathogen: Influenza/COVID-19 at the level of the Health Center.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

12. Timely inform the general public about the current epidemiological situation regarding influenza/COVID-19 throughout the surveillance season and provide recommendations accordingly.
13. Involve sanitary inspection in the oversight of all measures recommended by the relevant Institute, in accordance with the Law on Protection of the Population from Infectious Diseases.
14. Continuously work on raising awareness among the population about preventing influenza illness.
15. Monitor the implementation of all the aforementioned measures to ensure their enforcement.

West Nile Fever

1. There is no specific preventive measure (vaccine) against West Nile Fever, so it is essential to raise the level of education among the general population regarding general protective measures against mosquito bites and implement measures to reduce mosquito populations in the environment.
2. Improve the quality of epidemiological surveillance for West Nile Fever by expanding the diagnostic capacities of the microbiological laboratory and the infectious disease specialists at the Public Health Institute of Pančevo.
3. Educate the population about prevention measures for West Nile Fever before and during the surveillance season through media and social networks.
4. Inform the population about the current epidemiological situation of West Nile Fever. Continuously implement measures to control mosquito populations in the jurisdiction of the local government unit.
5. Conduct surveillance of the presence of the West Nile virus among mosquitoes across the entire territory of the local government unit by engaging the Veterinary Institute, Faculty of Agriculture, and Biocide Institute.

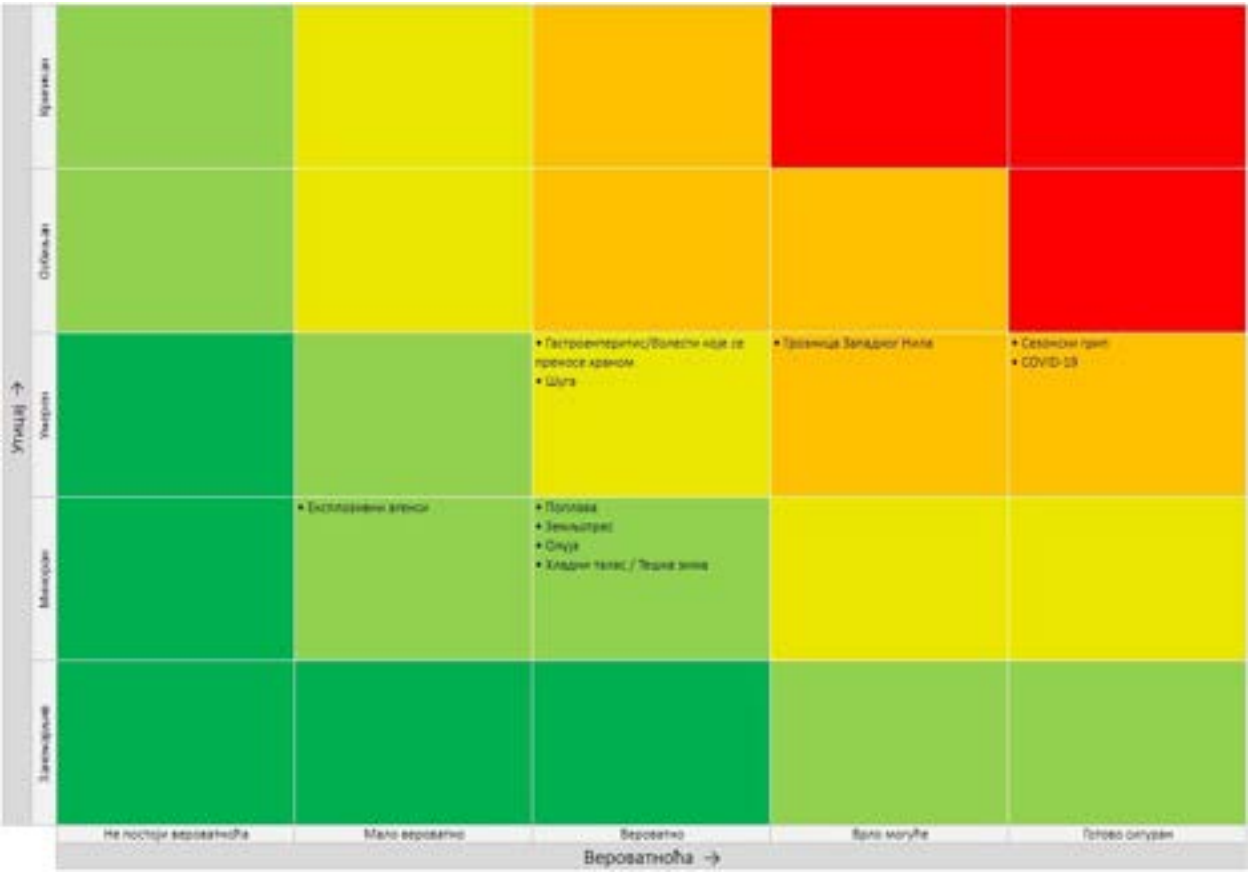
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. Municipality of Opovo

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Грозница Западног Нила	Висок	Врло могуће	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Шуга	Умерен	Вероватно	Умерен	Низак	Делимична
Поплава	Низак	Вероватно	Миноран	Низак	Делимична
Земљотрес	Низак	Вероватно	Миноран	Низак	Делимична
Олуја	Низак	Вероватно	Миноран	Низак	Делимична
Експлозивни агенси	Низак	Мало вероватно	Миноран	Низак	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Improve the quality of epidemiological surveillance for influenza and COVID-19 by expanding diagnostic and staffing capacities, including infectious disease specialists, pulmonologists, and pediatricians.
2. Ensure timely reporting of every new case by doctors in healthcare institutions at primary, secondary, and tertiary levels through the Electronic Public Health Service.
3. Further enhance the Electronic Public Health Service for reporting infectious diseases and connecting with primary and tertiary healthcare facilities, enabling daily, continuous monitoring of infectious diseases and speeding up information flow for timely responses and implementation of epidemiological measures.
4. Ensure a continuous supply of vaccines against influenza and COVID-19 for the current season.
5. Conduct vaccinations against influenza and COVID-19 with maximum coverage of at-risk groups, healthcare workers, and adults employed in the public sector and educational institutions.
6. Develop an educational plan for the general population and healthcare workers about the importance of immunization against influenza and COVID-19, implementing it to reach as many individuals as possible.
7. Prior to the influenza/COVID-19 surveillance season, conduct a serious media campaign aimed at promoting immunization, highlighting the advantages of high vaccination coverage for all residents at risk of developing complications.
8. Continuously raise awareness among the population about preventing the emergence and spread of influenza/COVID-19 by emphasizing the importance of general prevention measures on websites and in mass media.
9. Through the activities of the Hospital Infection Commission at all levels of healthcare, ensure that all healthcare workers are vaccinated before the influenza season and that all risk categories are identified in accordance with the applicable Immunization Regulation for vaccination implementation.
10. Ensure "reserve" accommodation capacities in every hospital department specifically for isolating patients suspected of having influenza/COVID-19 and those with laboratory-confirmed influenza/COVID-19. Restock equipment and materials necessary for quick responses in the event of an epidemic caused by a respiratory pathogen in the area and ensure sufficient quantities of antiviral medications.
11. Develop an emergency response plan and procedures for the specific risk of Respiratory Pathogen: Influenza/COVID-19 at the level of the Health Center.

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12. Timely inform the general public about the current epidemiological situation regarding influenza/COVID-19 throughout the surveillance season and provide recommendations accordingly.
13. Involve sanitary inspection in the oversight of all measures recommended by the relevant Institute, in accordance with the Law on Protection of the Population from Infectious Diseases.
14. Continuously work on raising awareness among the population about preventing influenza illness.
15. Monitor the implementation of all the aforementioned measures to ensure their enforcement.

West Nile Fever

1. There is no specific preventive measure (vaccine) against West Nile Fever, so it is essential to raise the level of education among the general population regarding general protective measures against mosquito bites and implement measures to reduce mosquito populations in the environment.
2. Improve the quality of epidemiological surveillance for West Nile Fever by expanding the diagnostic capacities of the microbiological laboratory and the infectious disease specialists at the Public Health Institute of Pančevo.
3. Educate the population about prevention measures for West Nile Fever before and during the surveillance season through media and social networks.
4. Inform the population about the current epidemiological situation of West Nile Fever. Continuously implement measures to control mosquito populations in the jurisdiction of the local government unit.
5. Conduct surveillance of the presence of the West Nile virus among mosquitoes across the entire territory of the local government unit by engaging the Veterinary Institute, Faculty of Agriculture, and Biocide Institute.

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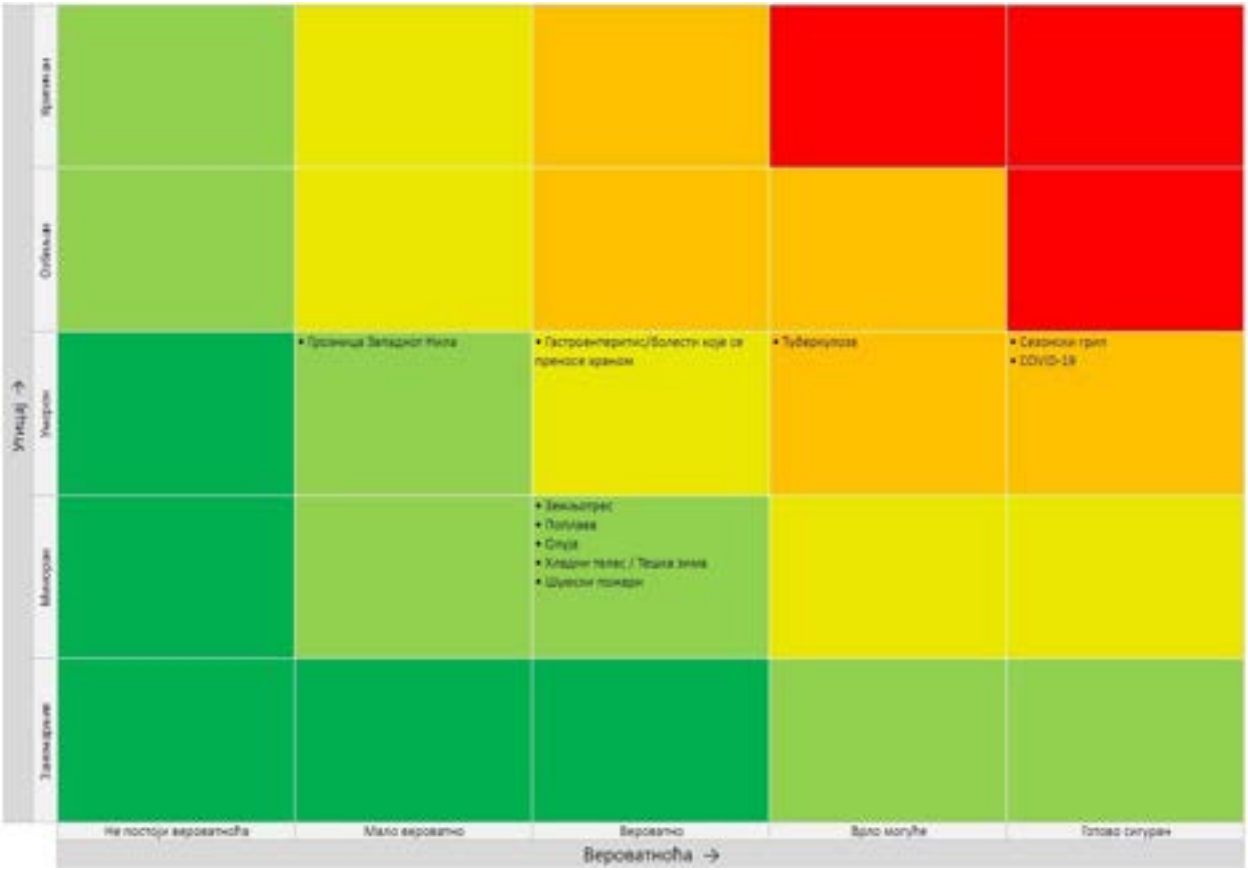
8. Municipality of Plandište

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Туберкулоза	Висок	Врло могуће	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Низак	Мало вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Вероватно	Минoран	Низак	Делимична
Поплава	Низак	Вероватно	Минoран	Низак	Делимична
Олуја	Низак	Вероватно	Минoран	Низак	Делимична
Хладни талас / Тешка зима	Низак	Вероватно	Минoран	Низак	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Improve the quality of epidemiological surveillance for influenza and COVID-19 by expanding diagnostic and staffing capacities, including infectious disease specialists, pulmonologists, and pediatricians.
2. Ensure timely reporting of every new case by doctors in healthcare institutions at primary, secondary, and tertiary levels through the Electronic Public Health Service.
3. Further enhance the Electronic Public Health Service for reporting infectious diseases and connecting with primary and tertiary healthcare facilities, enabling daily, continuous monitoring of infectious diseases and speeding up information flow for timely responses and implementation of epidemiological measures.
4. Ensure a continuous supply of vaccines against influenza and COVID-19 for the current season.
5. Conduct vaccinations against influenza and COVID-19 with maximum coverage of at-risk groups, healthcare workers, and adults employed in the public sector and educational institutions.
6. Develop an educational plan for the general population and healthcare workers about the importance of immunization against influenza and COVID-19, implementing it to reach as many individuals as possible.
7. Prior to the influenza/COVID-19 surveillance season, conduct a serious media campaign aimed at promoting immunization, highlighting the advantages of high vaccination coverage for all residents at risk of developing complications.
8. Continuously raise awareness among the population about preventing the emergence and spread of influenza/COVID-19 by emphasizing the importance of general prevention measures on websites and in mass media.
9. Through the activities of the Hospital Infection Commission at all levels of healthcare, ensure that all healthcare workers are vaccinated before the influenza season and that all risk categories are identified in accordance with the applicable Immunization Regulation for vaccination implementation.
10. Ensure "reserve" accommodation capacities in every hospital department specifically for isolating patients suspected of having influenza/COVID-19 and those with laboratory-confirmed influenza/COVID-19. Restock equipment and materials necessary for quick responses in the event of an epidemic caused by a respiratory pathogen in the area and ensure sufficient quantities of antiviral medications.
11. Develop an emergency response plan and procedures for the specific risk of Respiratory Pathogen: Influenza/COVID-19 at the level of the Health Center.

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12. Timely inform the general public about the current epidemiological situation regarding influenza/COVID-19 throughout the surveillance season and provide recommendations accordingly.
13. Involve sanitary inspection in the oversight of all measures recommended by the relevant Institute, in accordance with the Law on Protection of the Population from Infectious Diseases.
14. Continuously work on raising awareness among the population about preventing influenza illness.
15. Monitor the implementation of all the aforementioned measures to ensure their enforcement.

Tuberculosis

1. Improve the quality of epidemiological surveillance for tuberculosis by expanding diagnostic capacities.
2. Further enhance the Electronic Public Health Service for reporting infectious diseases and connecting with primary and tertiary healthcare facilities, enabling daily, continuous monitoring of infectious diseases and speeding up information flow for timely responses and implementation of epidemiological measures.
3. Develop an educational plan for the general population and healthcare workers about the importance of tuberculosis prevention, early detection, and treatment.

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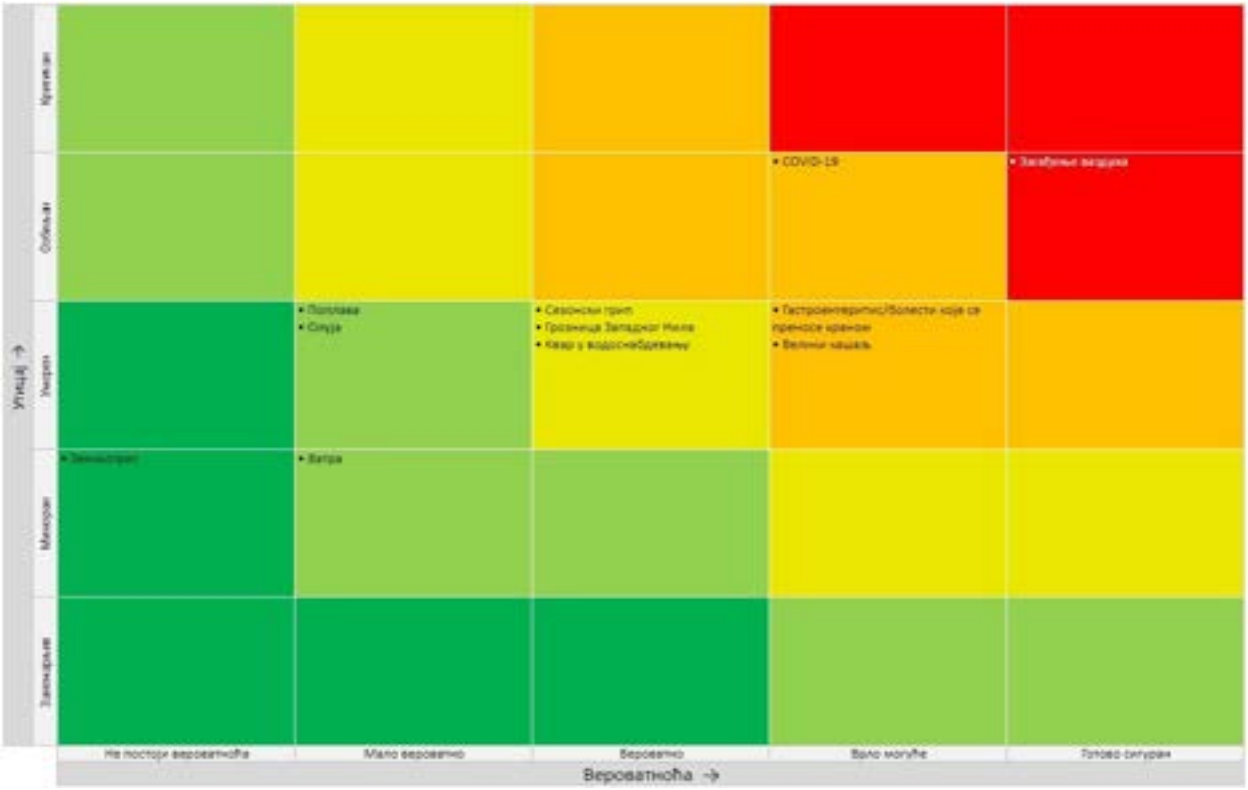
SREM ADMINISTARTIVE DISTRICT

1. City of Sremska Mitrovica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Поплава	Низак	Мало вероватно	Умерен	Низак	Делимична
Сезонски грип	Умерен	Вероватно	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Врло могуће	Озбиљан	Делимична	Низак
Земљотрес	Веома низак	Не постоји вероватноћа	Минoран	Веома низак	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Низак	Делимична
Олуја	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Мало вероватно	Минoран	Низак	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Делимична
Загађење ваздуха	Веома висок	Готово сигуран	Озбиљан	Висок	Низак

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

Air Quality Improvement

1. Updating the action plan for the city of Sremska Mitrovica.
2. Assessing vulnerability to natural disasters and other emergencies, as the data from 2011 and 2003 is outdated (study conducted in 2022).
3. Providing subsidies to households for transitioning from individual heating systems using solid fuels to remote heating.
4. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
5. Acquiring equipment necessary for air quality analysis and monitoring for the chemical laboratory of the Public Health Institute in Sremska Mitrovica (PM particle sampling apparatus, gas chromatograph) and increasing the number of measurement sites.

HIGH RISK

Gastroenteritis/Foodborne Diseases

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Strengthening the capacity of inspection services.

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Improving diagnostics through centralized procurement of tests for confirming diagnoses.

Whooping Cough

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Identifying members of vulnerable social groups by local government.
3. Introducing mandatory vaccination for certain categories of the adult population (vulnerable categories).

MODERATE RISK

Seasonal Influenza

1. Increasing the coverage of immunization with the Seasonal Influenza vaccine.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).

West Nile Fever

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Developing a plan for the dynamics of disinsection throughout the municipality and managing the banks of the Sava River.

Water Supply Failure

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Replacing older parts of the water supply network.

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2. Municipality of Stara Pazova

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Олуја	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Мало вероватно	Миноран	Низак	Делимична
Велики кашаљ	Висок	Готово сигуран	Умерен	Делимична	Делимична
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Низак	Делимична
Земљотрес	Веома низак	Не постоји вероватноћа	Миноран	Низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Низак	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Веома висок	Готово сигуран	Озбиљан	Висок	Низак
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

Air Pollution

1. Providing subsidies to households for transitioning from individual heating systems using solid fuels to remote heating.
2. Strengthening the staffing capacity of healthcare institutions at all levels of health care; acquiring equipment necessary for air quality analysis and monitoring for the chemical laboratory of the Public Health Institute in Sremska Mitrovica (PM particle sampling apparatus, gas chromatograph) and increasing the number of measurement sites.

HIGH RISK

Pertussis (Whooping Cough)

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Identifying members of vulnerable social groups by local government.
3. Introducing mandatory vaccination for certain categories of the adult population (vulnerable categories).

Seasonal Influenza

1. Increasing the coverage of immunization with the Seasonal Influenza vaccine.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Improving diagnostics through centralized procurement of tests for confirming diagnoses.

MODERATE RISK

Drought

1. Developing short-term and long-term action plans to address the occurrence of drought.
2. Reviewing existing water supply capacities and exploring the use of new sources.
3. Exploring alternative water supply methods.

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Water Supply Failure

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Upgrading the water supply network.

West Nile Fever

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Developing a plan for the dynamics of disinsection throughout the municipality and managing the banks of the Danube River.

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3. Municipality of Indjija

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Загађење ваздуха	Веома висок	Готово сигуран	Озбиљан	Висок	Низак
Олуја	Висок	Врло могуће	Умерен	Делимична	Низак
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Мало вероватно	Озбиљан	Висок	Низак
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Мало вероватно	Минoран	Низак	Низак

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

VERY HIGH RISK

Air Pollution

1. Development of plans and strategies at the local government level.
2. Providing subsidies to households for transitioning from individual heating systems using solid fuels to remote heating.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
4. Acquiring equipment necessary for air quality analysis and monitoring for the chemical laboratory of the Public Health Institute in Sremska Mitrovica (PM particle sampling apparatus, gas chromatograph).
5. Increasing the number of measurement sites.

HIGH RISK

Storm

1. Developing a protection and rescue plan; forming a response team for protection.
2. Empowering the local community.
3. Strengthening staffing capacities at all levels of health care (primarily primary care).

COVID-19

1. Developing a protection and rescue plan.
2. Forming a response team for protection.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
4. Improving diagnostics through centralized procurement of tests for confirming diagnoses.

Seasonal Influenza

1. Developing a protection and rescue plan.
2. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
3. Increasing the coverage of immunization with the Seasonal Influenza vaccine.

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Pertussis (Whooping Cough)

1. Developing a protection and rescue plan.
2. Raising vaccination coverage above 95%.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
4. Identifying members of vulnerable social groups by local government.
5. Introducing mandatory vaccination for certain categories of the adult population (vulnerable categories).

MODERATE RISK

Flood

1. Developing a protection and rescue plan.
2. Forming a response team for flood protection.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).

West Nile Fever

1. Developing a protection and rescue plan.
2. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
3. Developing a plan for the dynamics of disinsection throughout the municipality.

Measles

1. Increasing vaccination coverage.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).
3. Developing a protection and rescue plan.

Water Supply Failure

1. Developing a protection and rescue plan.
2. Forming a response team for protection.
3. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).

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4. Municipality of Irig

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Низак	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Делимична
Олуја	Висок	Вероватно	Озбиљан	Делимична	Низак
Поплава	Умерен	Вероватно	Умерен	Низак	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Низак	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Делимична
Клизиште	Низак	Мало вероватно	Минoран	Низак	Делимична
Шумски пожари	Низак	Мало вероватно	Умерен	Низак	Низак
Ватра	Низак	Мало вероватно	Умерен	Низак	Низак

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Improving diagnostics through centralized procurement of tests for confirming diagnoses.
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

Seasonal Influenza

1. Increasing the coverage of immunization with the Seasonal Influenza vaccine.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

Pertussis (Whooping Cough)

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Identifying members of vulnerable social groups by local government.
3. Introducing mandatory vaccination for certain categories of the adult population (vulnerable categories).
4. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

Storm

1. Empowering the local community.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).
3. Strengthening the capacity of the non-health sector and increasing investment in infrastructure.

MODERATE RISK

Flood

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).

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2. Strengthening the capacity of the non-health sector (procurement of field vehicles and pumping stations).
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

Water Supply Failure

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Renovating the aging water supply network.
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

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5. Municipality of Pećinci

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Готово сигуран	Умерен	Делимична	Делимична
Морбили	Висок	Врло могуће	Умерен	Низак	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Делимична	Делимична
Гастроентеритис/болести које се преносе храном	Умерен	Вероватно	Умерен	Делимична	Висок
Суша	Умерен	Вероватно	Умерен	Делимична	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Олуја	Низак	Мало вероватно	Умерен	Висок	Низак
Ватра	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Низак	Висок

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Improving diagnostics through centralized procurement of tests for confirming diagnoses.
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council, and it is necessary to adopt a Public Health Plan.

Seasonal Influenza

1. Increasing the coverage of immunization with the Seasonal Influenza vaccine.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council, and it is necessary to adopt a Public Health Plan.

Pertussis (Whooping Cough)

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Identifying members of vulnerable social groups by local government.
3. Introducing mandatory vaccination for certain categories of the adult population (vulnerable categories).
4. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council, and it is necessary to adopt a Public Health Plan.

Measles

1. Increasing the coverage of immunization.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council, and it is necessary to adopt a Public Health Plan.

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MODERATE RISK

Water Supply Failure

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council, and it is necessary to adopt a Public Health Plan.

Gastroenteritis/Foodborne Diseases

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
2. Strengthening the capacity of inspection services.
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council, and it is necessary to adopt a Public Health Plan.

Drought

1. Developing short-term and long-term action plans to address the occurrence of drought.
2. Reviewing existing water supply capacities and exploring the use of new sources.
3. Need for alternative methods of water supply.
4. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council, and it is necessary to adopt a Public Health Plan.

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6. Municipality of Ruma

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
COVID-19	Висок	Врло могуће	Озбиљан	Делимична	Низак
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Делимична
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Низак
Загађен ваздух	Висок	Врло могуће	Озбиљан	Висок	Низак
Поплава	Умерен	Вероватно	Умерен	Низак	Делимична
Ватра	Умерен	Вероватно	Умерен	Низак	Делимична
Грозница Западног Нила	Умерен	Вероватно	Умерен	Делимична	Делимична
Квар у водоснабдевању	Умерен	Вероватно	Умерен	Низак	Делимична
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Improving diagnostics through centralized procurement of tests for confirming diagnoses.
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council, and it is necessary to adopt a Public Health Plan.

Pertussis (Whooping Cough)

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Identifying members of vulnerable social groups by local government.
3. Introducing mandatory vaccination for certain categories of the adult population (vulnerable categories).
4. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

Seasonal Influenza

1. Increasing the coverage of immunization with the Seasonal Influenza vaccine.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

Air Pollution

1. Providing subsidies to households for transitioning from individual heating systems to solid fuels for district heating.
2. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
3. Procuring equipment needed for air quality analysis and monitoring for the chemical laboratory of the Public Health Institute of Sremska Mitrovica (PM particle sampling device, gas chromatograph).
4. Increasing the number of monitoring sites.
5. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

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MODERATE RISK

Flood

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Strengthening the capacity of the non-health sector (procurement of field vehicles and pumping stations).
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

Fire

1. Empowering the local community.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).
3. Strengthening the capacity of the non-health sector and increasing investment in infrastructure.
4. Regular education for employees (fire protection).
5. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

West Nile Virus

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Developing a plan with a schedule for disinsection throughout the municipality.
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

Water Supply Failure

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Renewing the water supply network.
3. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council, and it is necessary to adopt a Public Health Plan.

Storm

1. Empowering the local community.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).
3. Strengthening the capacity of the non-health sector and increasing investment in infrastructure.

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7. Municipality of Šid

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Олуја	Висок	Врло могуће	Озбиљан	Висок	Делимична
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Готово сигуран	Умерен	Делимична	Делимична
Велики кашаљ	Висок	Врло могуће	Умерен	Делимична	Делимична
Поплава	Умерен	Вероватно	Умерен	Делимична	Делимична
Ватра	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Низак	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Делимична	Делимична
Шумски пожари	Низак	Вероватно	Минoран	Веома низак	Низак

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

Storm

1. Empowering the local community.
2. Strengthening the staffing capacities at all levels of health care (primarily primary care).
3. Strengthening the capacity of the non-health sector and increasing investment in infrastructure.

Seasonal Influenza

1. Increasing the coverage of immunization with the Seasonal Influenza vaccine.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).

COVID-19

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Improving diagnostics through centralized procurement of tests for confirming diagnoses.

Air Pollution

1. Providing subsidies to households for transitioning from individual heating systems to solid fuels for district heating.
2. Strengthening the staffing capacity of healthcare institutions at all levels of health care.
3. Procuring equipment needed for air quality analysis and monitoring for the chemical laboratory of the Public Health Institute of Sremska Mitrovica (PM particle sampling device, gas chromatograph).
4. Increasing the number of monitoring sites.

Pertussis (Whooping Cough)

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Identifying members of vulnerable social groups by local government.
3. Introducing mandatory vaccination for certain categories of the adult population (vulnerable categories).
4. Increasing the number of monitoring sites.
5. Involving representatives from the Public Health Institute of Sremska Mitrovica in the Health Council.

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MODERATE RISK

Flood

1. Strengthening the staffing capacity of healthcare institutions at all levels of health care (primarily primary care).
2. Strengthening the capacity of the non-health sector (procurement of field vehicles and pumping stations).
3. Cross-border cooperation in flood protection.

Fire

1. Empowering the local community.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).
3. Strengthening the capacity of the non-health sector and increasing investment in infrastructure.

Measles

1. Increasing the coverage of immunization.
2. Strengthening staffing capacities at all levels of health care (primarily primary care).

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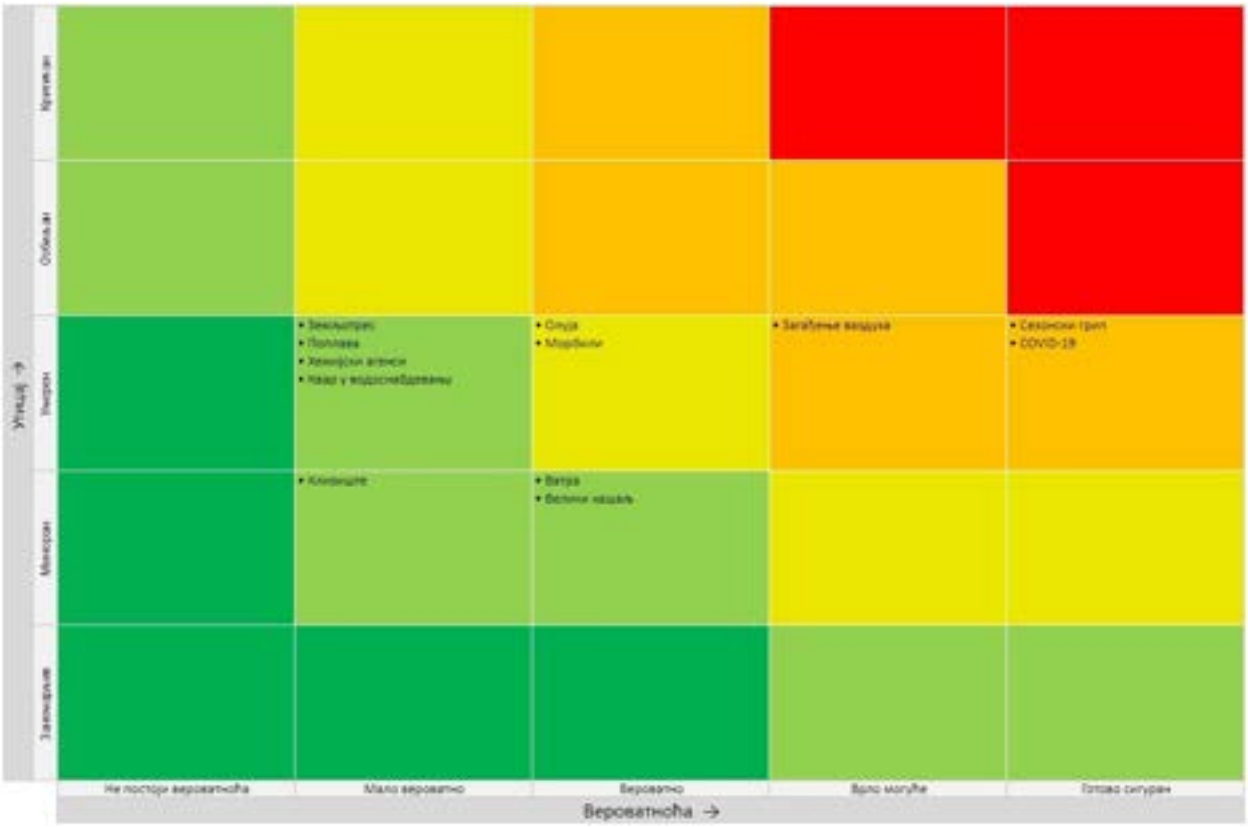
CITY OF BELGRADE

1. Municipality of Barajevo

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Загађење ваздуха	Висок	Врло могуће	Умерен	Делимична	Низак
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Низак
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Делимична
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all healthcare institutions in the territory of the City of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Institute of Public Health of Serbia "Dr. M.J. Batut," Public Health Institute of Belgrade, Clinical Center of Serbia, relevant health centers... to the responsible primary healthcare centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private nursing homes, preschool and school institutions, workplaces...).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resource capacities of healthcare institutions (especially appropriate health protection).
5. Modernizing medical equipment for diagnosing and treating patients.
6. Continuous education of healthcare workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procuring sufficient tests for diagnostics as an improvement in virus spread control; maintaining and enhancing a good contact tracing system.
8. Adhering to the law on protecting the population from infectious diseases.
9. Increasing immunization coverage of the entire population, including healthcare workers, against this disease.
10. Intensifying the vaccination campaign against this disease for all population categories, especially risk groups, and promoting vaccination, i.e., conducting campaigns to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, printed media...) about the importance of all preventive measures to prevent the occurrence and spread of this disease and the significance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all healthcare institutions in the territory of the City of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Institute of Public Health of Serbia "Dr. M.J. Batut," Public Health Institute of Belgrade, Clinical Center of Serbia, relevant health centers... to the responsible primary healthcare centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private nursing homes, preschool and school institutions, workplaces...).

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3. Strengthening the human resource capacities of healthcare institutions at all levels.
4. Modernizing medical equipment for diagnosing and treating patients.
5. Continuous education of healthcare workers on the importance of monitoring influenza and the quality of data obtained, as well as the significance of vaccination against this disease (especially for vulnerable population categories and healthcare workers) and adherence to all preventive measures (primarily wearing personal protective equipment).
6. Adhering to the law on protecting the population from infectious diseases and respecting legal and sublegal acts governing this hazard.
7. Increasing immunization coverage, especially among vulnerable population categories, as well as healthcare workers against this disease, and raising awareness among healthcare workers about the importance of their immunization.
8. Intensifying the vaccination campaign against this disease for all population categories, especially risk groups, and promoting vaccination, i.e., conducting campaigns to raise awareness about the importance of influenza immunization.
9. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, printed media...) about the importance of all preventive measures to prevent the occurrence and spread of this disease and the significance of consistent adherence to these measures by the entire population.
10. Conducting inspections and imposing penalties in accordance with the penal provisions of the Law on Protecting the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public transport (JLP), developing line networks, organizing and operating public transport, renewing the fleet of JKP "GSP Belgrade," building a metro system, constructing infrastructure for electric vehicles, improving traffic infrastructure, developing cycling infrastructure, promoting cycling, and favoring pedestrian movements.
2. **Reducing Emissions from Individual Heating Sources:** Identifying households using individual heating sources, providing subsidies or other forms of assistance to replace inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and rehabilitating the existing landfill in Vinča, building supporting infrastructure for waste management in the City of Belgrade, and cleaning up illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing the frequency of street cleaning and applying potassium chloride on streets.
5. **Reducing Emissions through Enhanced Energy Efficiency:** Providing subsidies for energy efficiency, raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Citizen Information:** Increasing the number of monitoring stations and locations for air quality control, expanding the number of parameters

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monitored within the local network, improving methods of informing citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising awareness about the importance of air quality.

7. **Purifying Polluted Air:** Afforestation of Belgrade, conducting studies on air circulation through the city center, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of pollutant emissions from industrial facilities.

MODERATE RISK

Storms

1. Priority activities would include fulfilling the legally prescribed obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continuously emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring the necessary resources.
4. Educating specialized services and the general population.
5. Conducting simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Taking priority activities in the prevention of the emergence and consequences of specific identified hazards.
8. Enhancing the entire community's capacity to respond to potential emergencies.
9. Developing and maintaining a functional early warning system and informing the population about specific hazards through mass media (TV, social networks, electronic media, portals, printed media...).

Measles

1. Good communication, interaction, and cooperation among all healthcare institutions in the territory of the City of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Institute of Public Health of Serbia "Dr. M.J. Batut," Public Health Institute of Belgrade, Clinical Center of Serbia, relevant health centers... to the responsible primary healthcare centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private nursing homes, preschool and school institutions, workplaces...).
3. Continuous monitoring and surveillance of vaccination implementation and intensifying the coverage of vaccination, as well as intensifying activities to identify and provide additional vaccinations for children from hard-to-reach population groups.

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4. Strengthening the human resource capacities of healthcare institutions at all levels of health protection.
5. Continuous education of healthcare workers at all levels of health protection (especially pediatricians) regarding the importance of vaccination and the obligation to implement and adhere to all preventive measures (primarily wearing personal protective equipment), as well as training healthcare workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the importance of vaccination and the obligation to implement and adhere to all preventive measures.
7. Adhering to and respecting the law on protecting the population from infectious diseases, as well as all other legal and sublegal acts governing the management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, especially vulnerable categories.
9. Conducting inspections and imposing penalties in accordance with the penal provisions of the Law on Protecting the Population from Infectious Diseases (financial penalties for parents in cases of refusing to vaccinate their children).
10. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, printed media...) about the importance of all preventive measures to prevent the occurrence and spread of this disease and the significance of consistent adherence to these measures by the entire population.

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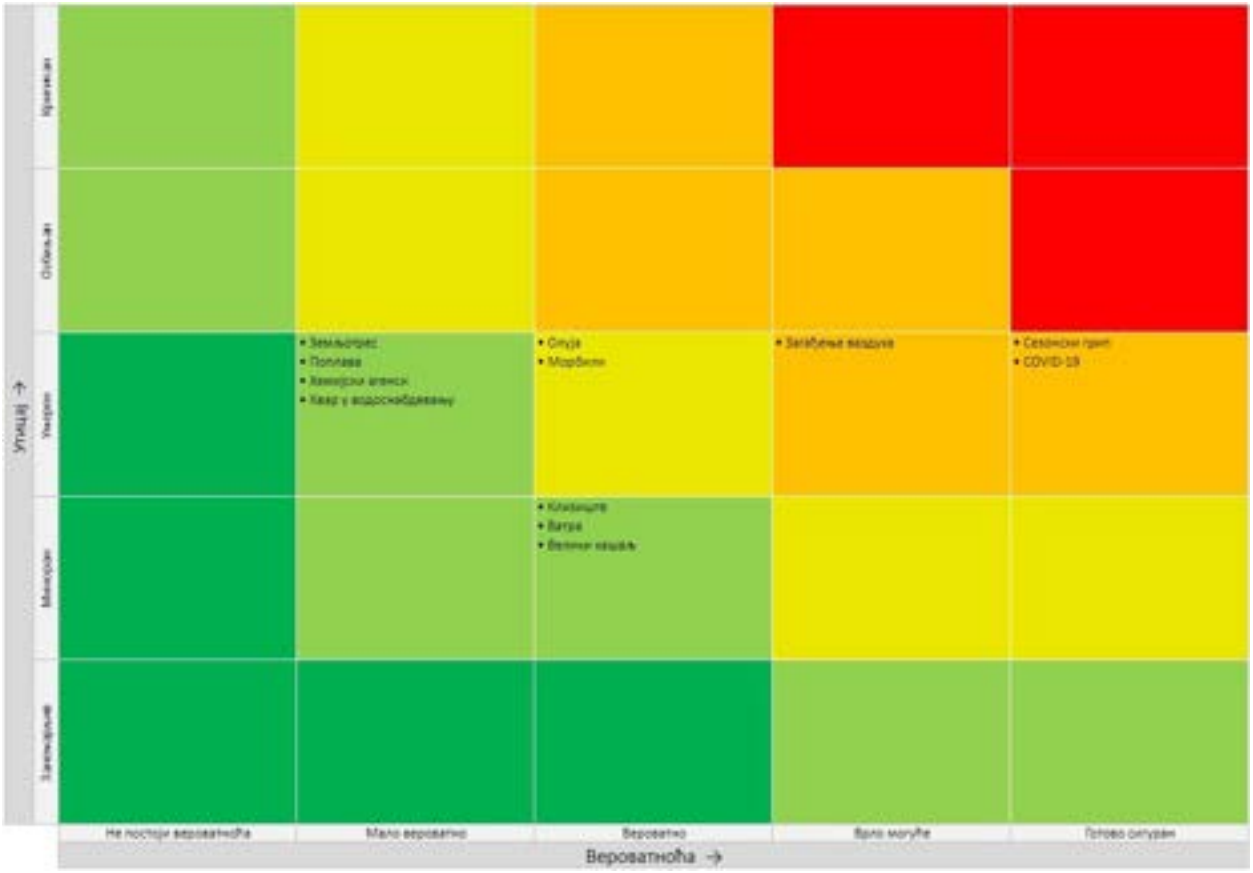
2. Municipality of Čukarica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Загађење ваздуха	Висок	Врло могуће	Умерен	Делимична	Низак
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Вероватно	Миноран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Миноран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards



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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all healthcare institutions in the city of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute "Dr. M.J. Batut," the Health Center of Belgrade, the University Clinical Center of Serbia, relevant Clinical Centers, the Institute for Public Health, and primary healthcare centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private nursing homes, preschool and school institutions, workplaces, etc.).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the staffing capacities of healthcare institutions (primarily in healthcare protection).
5. Updating medical equipment for the diagnosis and treatment of patients.
6. Continuous education of healthcare workers at all levels on the importance of vaccination and the obligation to implement and adhere to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procuring enough tests for screening and improving control of virus spread; maintaining and enhancing a good contact tracing system.
8. Adhering to laws on the protection of the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, including healthcare workers against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, especially at-risk groups, and promoting vaccination to raise awareness of its importance.
11. Continuously informing the population (especially target groups) through mass media (TV, electronic media, printed media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all healthcare institutions in the city of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute "Dr. M.J. Batut," the Health Center of Belgrade, the University Clinical Center of Serbia, relevant Clinical Centers, the Institute for Public Health, and primary healthcare centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private nursing homes, preschool and school institutions, workplaces, etc.).

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3. Strengthening the staffing capacities of healthcare institutions at all levels.
4. Updating medical equipment for the diagnosis and treatment of patients.
5. Continuous education of healthcare workers on the significance of monitoring influenza and the quality of collected data, as well as the importance of vaccination against this disease (primarily for vulnerable population categories and healthcare workers) and the obligation to implement and adhere to all preventive measures (primarily wearing personal protective equipment).
6. Adhering to laws on the protection of the population from infectious diseases and complying with legal and sub-legal acts regulating the management of this hazard.
7. Increasing vaccination coverage primarily for vulnerable population categories, as well as healthcare workers against this disease, and raising awareness among healthcare workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against this disease for all population categories, especially at-risk groups, and promoting vaccination to raise awareness of its significance against influenza.
9. Continuously informing the population (especially target groups) through mass media (TV, electronic media, printed media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the penal provisions of the Law on the Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Construction of traffic and other infrastructure for public passenger transport (JLPPT), development of route networks, organization and functioning of JLPPT, renewal of the vehicle fleet of the Public Transport Company "GSP Belgrade," construction of a metro system, construction of infrastructure for electric vehicles, construction of traffic infrastructure, construction of cycling infrastructure, promotion of cycling, and favoring pedestrian movement.
2. **Reduction of emissions from individual heating systems:** Identifying households using individual heating systems, subsidies or other forms of assistance for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating systems in industry, and expanding the existing gas and heating network.
3. **Reduction of emissions from municipal waste treatment:** Construction and equipping of a new sanitary landfill and the recultivation of the existing landfill in Vinča, construction of supporting infrastructure for waste management in the city of Belgrade, and sanitation of illegal landfills.
4. **Reduction of resuspension of suspended particles:** Increasing the frequency of street cleaning and spreading potassium chloride on the streets.
5. **Reduction of emissions through improved energy efficiency:** Subsidies for energy efficiency, raising awareness of the importance of energy efficiency.
6. **Improving air quality monitoring and informing citizens:** Increasing the number of measuring stations and measurement points for air quality control, increasing the number of parameters monitored within the local network, improving the way citizens are informed about current air

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quality, developing a system for predicting pollutant concentration, implementing an air quality management system, creating an emissions inventory, and raising awareness of the importance of air quality among the population.

7. **Purification of polluted air:** Afforestation of Belgrade, conducting a study on air circulation through the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally prescribed obligations of local self-governments concerning the development of strategic documents in the field of emergency situations.
2. Constantly emphasizing the importance of maintaining readiness to respond to emergencies.
3. Providing necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services of the local government (command, emergency response teams).
6. Establishing and regularly maintaining a communication system among all participants in responding to emergencies.
7. Undertaking priority activities to prevent the occurrence and consequences of specific identified hazards.
8. Raising the entire community's capacity to respond to possible emergencies.
9. Developing and maintaining the functionality of an early warning and informing system for the population about specific hazards through mass media (TV, social networks, electronic media, portals, printed media).

Measles

1. Good communication, interaction, and cooperation among all healthcare institutions in the city of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute "Dr. M.J. Batut," the Health Center of Belgrade, the University Clinical Center of Serbia, relevant Clinical Centers, the Institute for Public Health, and primary healthcare centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private nursing homes, preschool and school institutions, workplaces, etc.).
3. Continuous surveillance and monitoring of vaccination implementation and intensifying efforts to increase vaccination coverage, as well as intensifying activities to identify and provide supplemental immunization for children from hard-to-reach population groups.
4. Strengthening the staffing capacities of healthcare institutions at all levels of health protection.

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5. Continuous education of healthcare workers at all levels of health protection (primarily pediatricians) on the importance of vaccination and the obligation to implement and adhere to all preventive measures (primarily wearing personal protective equipment), as well as training healthcare workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teaching staff about the significance of vaccination and the obligation to implement and adhere to all preventive measures.
7. Adhering to and respecting laws on the protection of the population from infectious diseases, as well as all other legal and sub-legal acts regulating the management of this hazard.
8. Increasing the coverage of the MMR vaccine through intensive vaccination promotion and various campaigns targeting the entire population, especially vulnerable categories.
9. Inspection oversight and penalties in accordance with the penal provisions of the Law on the Protection of the Population from Infectious Diseases (monetary fines for parents in case of refusal to vaccinate their child).
10. Continuously informing the population (especially target groups) through mass media (TV, electronic media, printed media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

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3. Municipality of Grocka

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Умерен	Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Вероватно	Миноран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Миноран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards

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Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of the city of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute "Dr. M.J. Batut", Public Health Center of Belgrade, Clinical Center of Serbia, local health centers, and relevant health institutions... to the competent health centers);
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private nursing homes, preschool and school institutions, workplaces...);
3. Continuous monitoring of virus activity and dominant variants;
4. Strengthening the human resource capacities of health institutions (especially in adequate health protection);
5. Modernization of medical equipment for the diagnosis and treatment of patients;
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and the obligation to implement and adhere to all preventive measures (primarily wearing personal protective equipment);
7. Increasing testing capacity: procuring sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system;
8. Adhering to laws protecting the population from infectious diseases;
9. Increasing vaccination coverage of the entire population, including health workers, against this disease;
10. Intensifying vaccination campaigns against this disease for all population categories, especially at-risk groups, and promoting vaccination, i.e., conducting campaigns to raise awareness about the importance of vaccination;
11. Continuously informing the population (especially target groups) through mass media (TV, electronic media, print media...) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of strict adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in the territory of the city of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute "Dr. M.J. Batut", Public Health Center of Belgrade, Clinical Center of Serbia, local health centers, and relevant health institutions);
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private nursing homes, preschool and school institutions, workplaces...);

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3. Strengthening the human resource capacities of health institutions at all levels;
4. Modernization of medical equipment for the diagnosis and treatment of patients;
5. Continuous education of health workers on the importance of monitoring influenza and the quality of data obtained, as well as the significance of vaccination against this disease (especially vulnerable population categories and health workers) and the obligation to implement and adhere to all preventive measures (primarily wearing personal protective equipment);
6. Adhering to laws protecting the population from infectious diseases and respecting legal and subordinate regulations governing management of this threat;
7. Increasing vaccination coverage, especially among vulnerable population categories and health workers against this disease, and raising awareness among health workers about the importance and significance of their vaccination against this disease;
8. Intensifying vaccination campaigns against this disease for all population categories, especially at-risk groups, and promoting vaccination, i.e., conducting campaigns to raise awareness about the importance of influenza vaccination;
9. Continuously informing the population (especially target groups) through mass media (TV, electronic media, print media...) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of strict adherence to these measures by the entire population;
10. Inspections and penalties in accordance with the punitive provisions of the Law on Protecting the Population from Infectious Diseases.

Air Pollution

1. **TRANSPORT:** Building transportation and other infrastructure for the functioning of public passenger transport (PPT), developing line networks, organizing and operating PPT, renewing the vehicle fleet of JKP "GSP Belgrade", building a metro, creating infrastructure for electric vehicles, building traffic infrastructure, building bicycle infrastructure, promoting cycling, and favoring pedestrian movement;
2. **REDUCING EMISSIONS FROM INDIVIDUAL HEATING:** Determining the number of households using individual heating systems, providing subsidies or other forms of assistance for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating systems in the economy, and expanding the existing gas and heating networks;
3. **Reducing emissions from waste treatment:** Constructing and equipping a new sanitary landfill and recultivating the existing landfill in Vinča, building accompanying infrastructure for waste management in Belgrade, and sanitizing illegal landfills;
4. **REDUCING RESUSPENDED PARTICULATES:** Increasing the frequency of street washing and applying potassium chloride to streets;
5. **REDUCING EMISSIONS THROUGH ENERGY EFFICIENCY ENHANCEMENTS:** Providing subsidies for energy efficiency, raising awareness about the importance of energy efficiency;

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6. **IMPROVING AIR QUALITY MONITORING AND CITIZEN INFORMATION:** Increasing the number of measuring stations and locations for air quality control, expanding the number of parameters monitored within the local network, improving how citizens are informed about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, preparing emission inventories, and raising awareness among the population about the importance of air quality;
7. **CLEANING POLLUTED AIR:** Afforestation of Belgrade, conducting studies on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally prescribed obligations of local government units regarding the development of strategic documents in the field of emergency situations;
2. Constantly emphasizing the importance of maintaining readiness for emergency responses;
3. Ensuring necessary resources;
4. Educating specialized services and the general population;
5. Conducting simulation training for specialized bodies and emergency services (command centers, emergency teams);
6. Establishing and regularly maintaining a communication system among all participants in emergency response;
7. Undertaking priority activities to prevent the emergence and consequences of specific identified hazards;
8. Raising the capacity of the entire community for responding to possible emergencies;
9. Developing and maintaining the functionality of early warning and information systems about specific dangers through mass media (TV, social networks, electronic media, portals, print media...).

Measles

1. Good communication, interaction, and cooperation among all health institutions in the territory of the city of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute "Dr. M.J. Batut", Public Health Center of Belgrade, Clinical Center of Serbia, local health centers, and relevant health institutions);
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private nursing homes, preschool and school institutions, workplaces...);
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to improve vaccination coverage, as well as intensifying activities to identify and provide supplementary vaccinations for children from hard-to-reach population groups;

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4. Strengthening the human resource capacities of health institutions at all levels of health protection;
5. Continuous education of health workers at all levels of health protection (especially pediatricians) about the importance of vaccination and the obligation to implement and adhere to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination;
6. Educating parents, educators, and educational staff about the significance of vaccination and the obligation to implement and adhere to all preventive measures;
7. Adhering to and respecting the laws protecting the population from infectious diseases, as well as all other legal and subordinate acts regulating management of this threat;
8. Increasing coverage with the MMR vaccine through intensive promotion of vaccination and various campaigns aimed at the entire population, especially vulnerable categories;
9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protecting the Population from Infectious Diseases (monetary fines for parents in case of refusal to vaccinate their children);
10. Continuously informing the population (especially target groups) through mass media (TV, electronic media, print media...) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of strict adherence to these measures by the entire population.

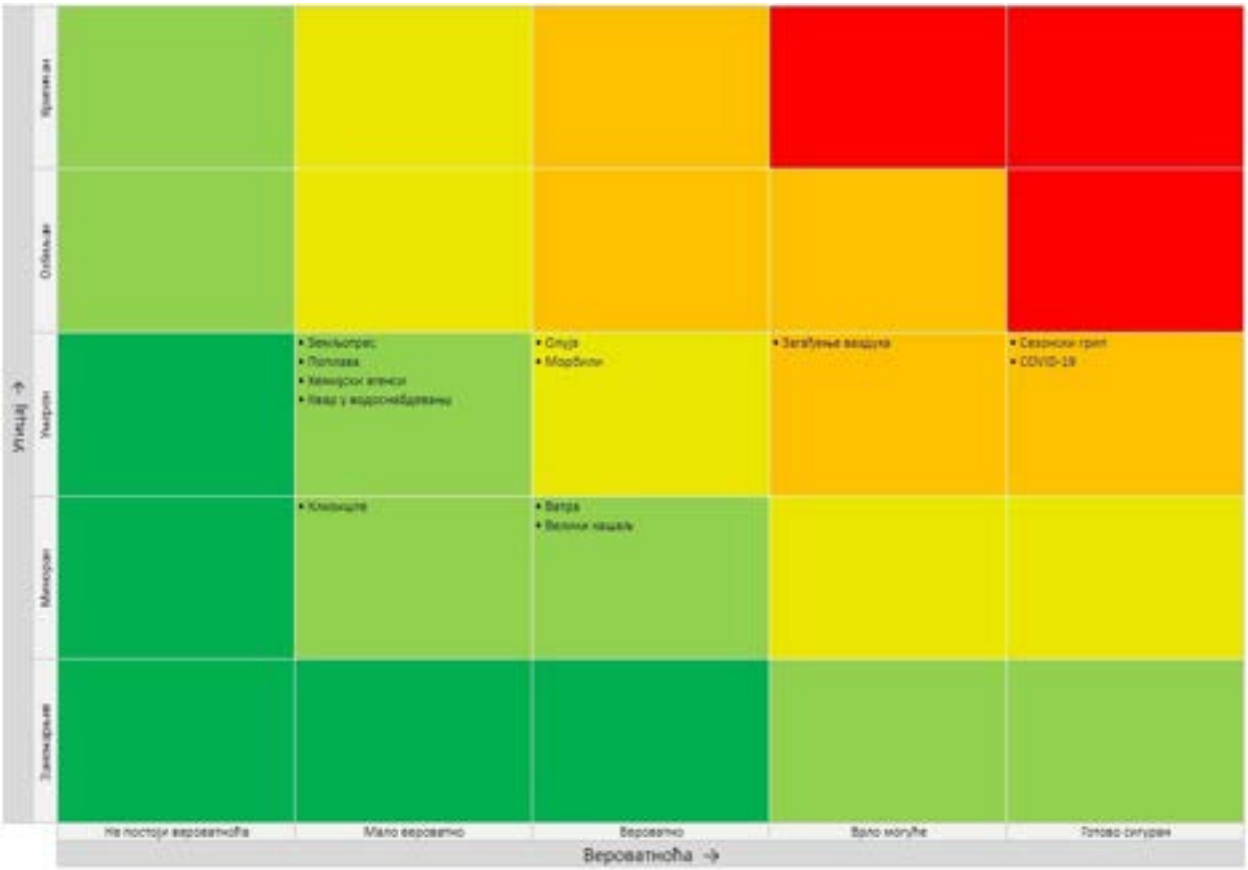
Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

4. Municipality of Lazarevac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Готово сигуран	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће	Умерен	Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards



Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

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5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

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7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

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9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Municipality of Mladenovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

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5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

6. Municipality of Novi Beograd

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

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5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. Municipality of Obrenovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Миноран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Миноран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

8. Municipality of Palilula

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.
9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Municipality of Rakovica

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

10. Municipality of Savski Venac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Миноран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Миноран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Миноран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

11. Municipality of Sopot

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

12. Municipality of Stari Grad

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

13. Municipality of Surčin

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

14. Municipality of Voždovac

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

15. Municipality of Vračar

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

16. Municipality of Zemun

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

17. Municipality of Zvezdara

Summary of Risks from Identified Hazards

Специфична опасност	Ниво ризика	Вероватноћа	Утицај	Рањивост	Капацитет суочавања
Сезонски грип	Висок	Врло могуће	Умерен	Делимична	Делимична
COVID-19	Висок	Готово сигуран	Умерен	Делимична	Делимична
Загађење ваздуха	Висок	Врло могуће		Делимична	Низак
Олуја	Умерен	Вероватно	Умерен	Делимична	Делимична
Морбили	Умерен	Вероватно	Умерен	Делимична	Делимична
Земљотрес	Низак	Мало вероватно	Умерен	Низак	Низак
Клизиште	Низак	Мало вероватно	Минoран	Веома низак	Делимична
Поплава	Низак	Мало вероватно	Умерен	Делимична	Делимична
Ватра	Низак	Вероватно	Минoран	Низак	Делимична
Хемијски агенси	Низак	Мало вероватно	Умерен	Делимична	Низак
Квар у водоснабдевању	Низак	Мало вероватно	Умерен	Делимична	Низак
Велики кашаљ	Низак	Вероватно	Минoран	Низак	Делимична

Risk matrix for identified hazards

Docusign Envelope ID: 99801ECA-17F9-4815-BF30-6D625356D265

Risk Treatment

Based on the obtained risk levels for identified hazards, the following priority actions are proposed to reduce the risk levels to an acceptable level:

HIGH RISK

COVID-19

1. Good communication, interaction, and cooperation among all health institutions in the territory of Belgrade (from the Ministry of Health of the Republic of Serbia, through the Public Health Institute of Serbia "Dr. M.J. Batut," the City Institute for Public Health of Belgrade, the University Clinical Center of Serbia, and relevant Clinical Centers, to the relevant Health Centers).
2. Good communication, interaction, and cooperation between health and non-health institutions (geriatric centers, private homes for the elderly, preschool and school institutions, workplaces).
3. Continuous monitoring of the virus's activity and dominant strain.
4. Strengthening the human resources of health institutions (primarily appropriate health protection).
5. Updating medical equipment for diagnosing and treating patients.
6. Continuous education of health workers at all levels of health protection regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment).
7. Increasing testing capacity: procurement of sufficient testing kits to improve virus spread control; maintaining and enhancing a good contact tracing system.
8. Compliance with laws on protecting the population from infectious diseases.
9. Increasing vaccination coverage of the entire population, as well as health workers, against this disease.
10. Intensifying vaccination campaigns against this disease for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the importance of immunization.
11. Continuously informing the population (primarily target groups) through mass media (TV, electronic media, print media) about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

Seasonal Influenza

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Strengthening human resources of health institutions at all levels.
4. Updating medical equipment for diagnosing and treating patients.

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5. Continuous education of health workers on the importance of monitoring influenza and the quality of data collected, as well as the significance of vaccination against this disease (particularly for vulnerable population categories and health workers) and adherence to all preventive measures.
6. Compliance with laws on protecting the population from infectious diseases and respecting legal and subordinate acts regulating the management of this hazard.
7. Increasing vaccination coverage, especially for vulnerable population categories and health workers, and raising awareness among health workers about the importance of their vaccination against this disease.
8. Intensifying vaccination campaigns against influenza for all population categories, particularly at-risk groups, and promoting vaccination to raise awareness about the significance of immunization.
9. Continuously informing the population (especially target groups) through mass media about the importance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.
10. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases.

Air Pollution

1. **Traffic:** Building traffic and other infrastructure for public passenger transport, developing line networks, organizing and operating public transport, renewing the fleet of the Public Utility Company "GSP Belgrade," constructing the metro, building infrastructure for electric vehicles, developing traffic infrastructure, building cycling infrastructure, promoting cycling, and favoring pedestrian movement.
2. **Reducing Emissions from Individual Heating Sources:** Determining the number of households using individual heating sources, subsidies or other forms of relief for replacing inefficient boilers, implementing an action plan to reduce emissions from individual heating sources, and expanding the existing gas and district heating networks.
3. **Reducing Emissions from Waste Treatment:** Constructing and equipping a new sanitary landfill and reclaiming the existing landfill in Vinča, building supporting infrastructure for waste management in Belgrade, and sanitizing illegal landfills.
4. **Reducing Resuspension of Suspended Particles:** Increasing street washing frequency and spreading potassium chloride on streets.
5. **Reducing Pollutant Emissions through Improved Energy Efficiency:** Subsidies for energy efficiency and raising awareness about the importance of energy efficiency.
6. **Improving Air Quality Monitoring and Informing Citizens:** Increasing the number of measurement stations for air quality control, expanding the number of monitored parameters within the local network, enhancing ways to inform citizens about current air quality, developing a forecasting system for pollutant concentrations, implementing an air quality management system, creating an emissions inventory, and raising public awareness about the importance of air quality.

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7. **Purifying Polluted Air:** Afforestation in Belgrade, conducting a study on air circulation in the urban core, defining areas for urban gardens, concentrating industrial activities, and increasing inspection oversight of emissions from industrial facilities.

MODERATE RISK

Storm

1. Priority activities would involve fulfilling the legally mandated obligations of local self-governments regarding the development of strategic documents in the field of emergency situations.
2. Continually emphasizing the importance of maintaining readiness for emergency responses.
3. Ensuring necessary resources.
4. Educating specialized services and the general population.
5. Maintaining simulation training for specialized bodies and services.
6. Establishing and regularly maintaining a communication system among all participants in emergency response.
7. Undertaking priority activities to prevent the occurrence and consequences of identified hazards.
8. Increasing the community's capacity to respond to potential emergencies.
9. Developing and maintaining the functionality of early warning and informing systems about specific dangers via mass media (TV, social networks, electronic media, portals, print media).

Measles

1. Good communication, interaction, and cooperation among all health institutions in Belgrade.
2. Good communication, interaction, and cooperation between health and non-health institutions.
3. Continuous monitoring and oversight of vaccination implementation and intensifying efforts to ensure coverage in hard-to-reach population groups.
4. Strengthening the human resources of health institutions at all levels of health protection.
5. Continuous education of health workers (primarily pediatricians) regarding the importance of vaccination and adherence to all preventive measures (primarily wearing personal protective equipment), as well as training health workers to raise awareness about this disease and the importance of vaccination.
6. Educating parents, educators, and teachers about the significance of vaccination and the necessity of adhering to all preventive measures.
7. Compliance with laws on protecting the population from infectious diseases and all other legal and subordinate acts regulating management of this hazard.
8. Increasing MMR vaccination coverage through intensive promotion and various campaigns aimed at the entire population, particularly vulnerable categories.

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9. Inspection oversight and penalties in accordance with the punitive provisions of the Law on Protection of the Population from Infectious Diseases (monetary penalties for parents refusing to vaccinate their children).
10. Continuously informing the population (especially target groups) through mass media about the significance of all preventive measures to prevent the occurrence and spread of this disease, as well as the importance of consistent adherence to these measures by the entire population.

5. ANALYSIS OF RESULTS

The analysis of the occurrence of natural disasters in previous years and responses to various emergency events, which unfortunately took on the characteristics of catastrophes, shows that the territory of the Republic of Serbia is highly exposed to the dangers of natural disasters and technological accidents. Considering the natural characteristics of the Republic of Serbia (geographical, hydrographic, meteorological-climatic characteristics, etc.), as well as the fact that societal progress and prosperity have influenced an increased range of technical and technological processes that can lead to accidents, twelve types of hazards have been identified for the entire Republic of Serbia. The degree of vulnerability of the territory varies depending on the type of hazard and the part of the country.

In defining the characteristics of each individual hazard, as well as the areas where they have been recorded, the way they impact human life and health, the economy, ecology, and social stability in the Republic of Serbia, all relevant institutions in the Republic of Serbia participated, presenting their nature and society's experiences in facing them in the Disaster Risk Assessment of the Republic of Serbia. This assessment was carried out in a way that summarizes the European Union guidelines on the content of disaster risk assessments, the process of preparation, particularly the process of determining the likelihood of their occurrence and the consequences they cause. This document was adopted by the Government of the Republic of Serbia in March 2019, following extensive work by a working group consisting of more than 200 participants and collaborators from various specialties.

Using the methodology for disaster risk assessment and protection and rescue plans in the territory of the Republic of Serbia, the following hazards and groups of hazards have been identified: earthquakes; landslides and erosion; floods; extreme weather phenomena (hail, storm winds, heavy rainfall, drought, heavy precipitation, snowstorms); lack of drinking water, epidemics, plant diseases, animal diseases; fires, technical-technological accidents; nuclear and radiological accidents.

Identified hazards at the national level served as the basis for hazards identification and risk assessment in local government units. These assessments represented a significant source of verified, reliable information in the development of public health risk assessments in emergencies using the WHO STAR methodology.

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6. CONCLUSION

The public health risk assessment project using the strategic tool - STAR (Strategic Tools for Assessing Risks) in the Republic of Serbia represents a significant step towards improving the health security of citizens as well as building a systematic and sustainable approach to health risk management in emergencies. The goal of this project was to conduct a detailed assessment of public health risks in various emergency situations in all local self-governments on the territory of the Republic of Serbia, determine the treatment of priority risks and ensure the coordinated action of all relevant actors in the field of public health as the first step towards the development of local protection and rescue plans, that is, preparedness plans for responding to public health risks in emergency situations.

The risk assessment was carried out in 144 local self-government units and 17 municipalities of the city of Belgrade, which enabled a comprehensive insight into the health threats faced by different communities in Serbia in the context of emergency situations. The internationally recognized methodology of the World Health Organization (WHO) was used to prepare the assessment, which ensures a high level of reliability and applicability of the results, while the Institute for Public Health of Serbia prepared the Expert Methodological Guide for "Assessment of public health risks in emergency situations in local self-government units on the territory of the Republic of Serbia - Strategic Toolkit for Assessing Risks - STAR" which gave this process added value and validity.

The analysis of public health risk assessments in emergency situations in local government units, resulting from the comparison of two different approaches to the same topic: a global framework of the internationally recognized WHO methodology for assessing public health risks and national specifics recognized by the Disaster Risk Assessment and Protection and Rescue Planning Methodology, based on the experiences of the coordination team and working group members, indicates that the significance of risk assessment is recognized and developed in those institutions that directly deal with disaster prevention and response: the Ministry of Interior - Sector for Emergency Situations, as an institution for prevention and response in all circumstances and all recognized hazards, as well as the Ministry of Health – Institute of Public Health of Serbia “Dr Milan Jovanović Batut” with its network of public health institutes and institutes responsible for prevention and response to public health risks and all other risks resulting in health risks for the population.

In addition to the identification of risks, their evaluation was carried out in relation to the severity of the potential impact on the health of the population and the capacities of the health system, the non-health system, and the capacity of communities to respond to those risks. This enabled the ranking of risks and the determination of priority areas of action, which is crucial for the effective management of public health threats. As a result of the project, priority actions for the treatment of public health risks were determined in all municipalities, with the implementation of which we can bring the impact of the risk to an acceptable level. The measures included both short-term actions for immediate risk reduction and long-term plans for continuous risk management in the future. These measures, with priority risks in each local self-government unit, will serve for the development of their protection and rescue plans, i.e., preparedness plans for public health threats in emergency situations. In this way, the conditions for improving the resistance of local communities to public health threats are ensured. In addition, constant communication and cooperation with representatives of local self-governments was established, which was crucial for the success of the project. Local health facilities, communities, and the project coordination team were involved in every step of the process, from risk assessment to implementation of

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risk reduction measures. This approach enabled a better understanding of specific local needs and challenges, as well as strengthening the capacity of communities to face health threats.

Challenges and Areas for Improvement

During the implementation of the project, several key challenges were identified. First, multisectoral cooperation, although crucial for the success of the project, was a challenge due to the need to coordinate a large number of actors. Cooperation between representatives of health institutions, local self-governments, the non-governmental sector, and other institutions required clearly defined procedures and protocols as well as constant communication.

Another significant challenge was financial support. Although the project succeeded in achieving its objectives, additional funding would be useful to strengthen capacity and ensure the long-term sustainability of the measures. This is especially important for areas such as staffing, equipping reference laboratories, and conducting simulation exercises that would enable better preparedness in the event of an emergency that requires a quick and effective health response. Given that this type of work is a pioneering endeavor in these regions, the achieved results represent a synergy of the efforts of all actors, inter-institutional cooperation, direct collaboration among local actors and alignment of international (WHO) with national regulations. This harmonization contributes to a better understanding of existing, identified risks in local government units, which were obtained as a result of the adopted Disaster Risk Assessment documents, and a unique challenge of "classifying" them into categories of the International Health Regulations.

In the upcoming period, there is a need for continuous monitoring of the obtained results, as well as updating disaster risk assessment documents at the local level. Simultaneously, the challenge for relevant institutions at the national level is the need for harmonizing regulatory acts:

- amendments to the national Methodology for Disaster Risk Assessment and Protection and Rescue Plans in order to comply with international standards and domestic experiences,
- development of standard operating procedures for coordination and response in all mentioned circumstances. This harmonization would enable the obtained results to achieve their maximum effect.

Strengthening the Role of Health Councils and Professional Support

One of the important achievements of the project was highlighting the role and importance of the Health Council in local self-government units. Increasing the activities of health councils with the development of clear guidelines and professional operational procedures will significantly increase the response capacity of the health system at the local level.

The Public Health Institute of Serbia, together with the network of public health institutes/institutes, will continue to provide professional support to local governments, which will ensure that the measures implemented within this project are applicable and sustainable on a long-term level. Also, the continuation of the education of health workers at the premises will be of great importance for ensuring the quality and efficiency of public health risk assessments in the future.

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Future Activities and Recommendations

The project established a solid foundation for further work in the field of public health risk management in the context of emergency situations in Serbia. Multisectoral cooperation and exchange of experiences among different actors will continue to be essential for effectively dealing with health threats. Further development of human resources, as well as financial support, will be crucial to ensure that this process is sustainable and effective.

The leading role in coordinating all stakeholders in emergency situations and directly managing them lies with emergency management teams, which have been established in accordance with the territorial organization of the Republic of Serbia as expert operational bodies of the authority that formed them (28 cities, 117 municipalities, 17 city municipalities, autonomous provinces, 24 districts, and Republic of Serbia).

In the future, it is advisable to hold regular multisectoral response simulation exercises and update risk assessments in accordance with new circumstances, knowledge, and practices. Also, it is important to ensure continuous monitoring and evaluation of public health risks in emergency situations with clear guidelines.

The project of assessment and management of public health risks in emergency situations in the Republic of Serbia successfully fulfilled its goals and laid the foundations for further improvement of the health system in the country. Thanks to the multisectoral cooperation, the support of the WHO, the Ministry of Health, and the expertise of institutes and institutes, a model has been established that can be sustainable and applicable in other areas of public health. Continuous education, financial support, and strengthening of personnel and institutional capacities remain key priorities for the future.

Institute of Public Health of Serbia

„Dr Milan Jovanović Batut"

Prof. dr Verica Jovanović

acting director

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7. ANEX NO.1 - FIELD VISITS TO LOCAL TEAM MEMBERS

Pictures No.1 - Field Visits to Local Team Members IPH Vojvodine

Pictures No.2 - Field Visits to Local Team Members IPH Kragujevac

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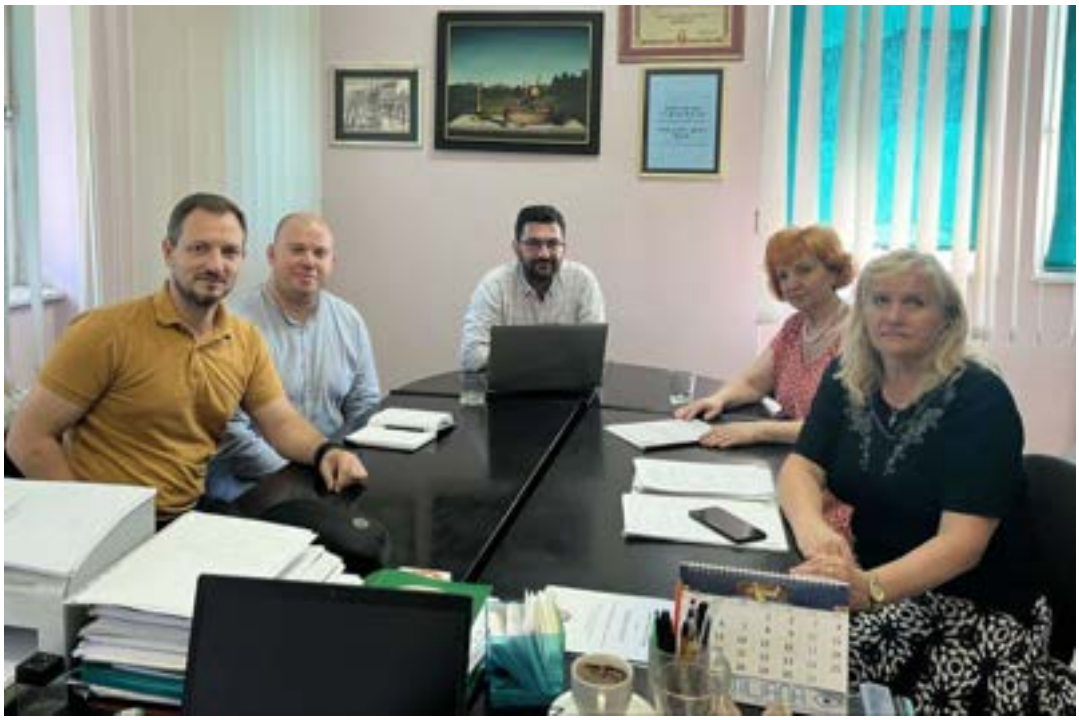

Pictures No.3 - Field Visits to Local Team Members IPH Pirot

Pictures No.4 - Field Visits to Local Team Members IPH Sremska Mitrovica

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Pictures No.5 - Field Visits to Local Team Members IPH Zrenjanin

Pictures No.6 - Field Visits to Local Team Members IPH Belgrade

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Pictures No.7 - Field Visits to Local Team Members IPH Čačak

Pictures No.8 - Field Visits to Local Team Members IPH Ćuprija

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Pictures No.9 - Field Visits to Local Team Members IPH Kikinda

Pictures No.10 - Field Visits to Local Team Members IPH Kraljevo

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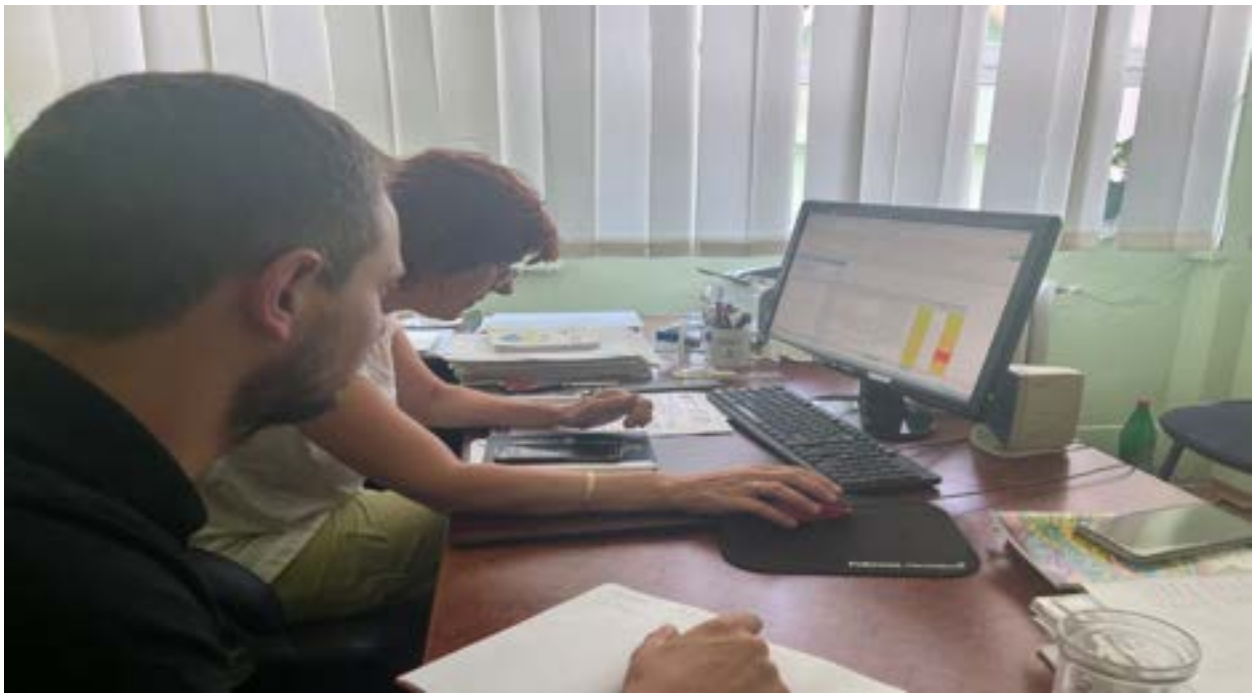

Pictures No.11 - Field Visits to Local Team Members IPH Kruševac

Pictures No.12 - Field Visits to Local Team Members IPH Leskovac

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Pictures No.13 - Field Visits to Local Team Members IPH Novi Pazar

Pictures No.14 - Field Visits to Local Team Members IPH Pančevo

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Pictures No.15 - Field Visits to Local Team Members IPH Požarevac

Pictures No.16 - Field Visits to Local Team Members IPH Šabac

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Pictures No.17 - Field Visits to Local Team Members IPH Sombor

Pictures No.18 - Field Visits to Local Team Members IPH Subotica

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Pictures No.19 - Field Visits to Local Team Members IPH Užice

Pictures No.20 - Field Visits to Local Team Members IPH Valjevo

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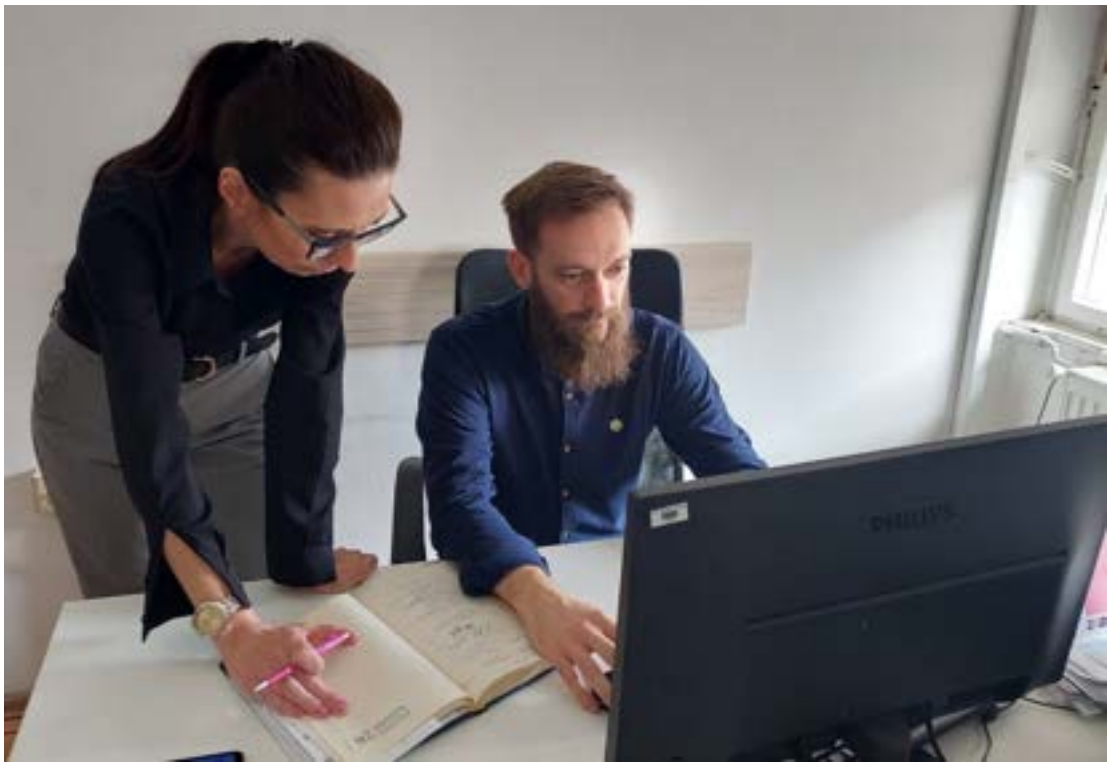
Pictures No.21 - Field Visits to Local Team Members IPH Vranje



Pictures No.22 - Field Visits to Local Team Members IPH Zaječar