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# ACTIONS TO STRENGTHEN RESILIENCE OF HEALTH WORKERS IN SOUTH-EASTERN EUROPE IN RESPONSE TO COVID-19 AND BEYOND

Implementation of WHO/ILO guidance  
and mapping of priority needs for  
occupational health and safety  
programmes for health workers

Project implementation report

## Abstract

The “Actions to strengthen resilience of health workers in south-eastern Europe in response to COVID-19 and beyond: implementation of WHO/ILO guidance and mapping of priority needs for occupational health and safety programmes for health workers” project was implemented by the South-East European Network on Workers’ Health. This publication provides an overview of the training and communication activities undertaken in the implementing countries.

### Keywords

HEALTH WORKFORCE  
OCCUPATIONAL HEALTH  
CAPACITY BUILDING  
SAFETY  
COVID-19

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Implementation of the project was coordinated by Jovanka Bislimovska and Dragan Mijakoski, (WHO Collaborating Centre for Occupational Health, Institute of Occupational Health of Republic of North Macedonia, and Faculty of Medicine, Ss. Cyril and Methodius University in Skopje, Skopje, North Macedonia).

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# Abbreviations

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<b>ILO</b>	International Labour Organization
<b>OHS</b>	occupational health and safety
<b>PPE</b>	personal protective equipment
<b>SEENWH</b>	South-East European Network on Workers' Health
<b>SEENWH OHS in health workers</b>	Actions to strengthen resilience of health workers in south-eastern Europe in response to COVID-19 and beyond: implementation of WHO/ILO guidance and mapping of priority needs for occupational health and safety programmes for health workers (project)
<b>ToT</b>	training of trainers

# Background

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The COVID-19 pandemic has been exerting strong pressure on health systems across the world. Health workers are the key element in these systems: a well-educated, qualified and motivated workforce is crucial to provide efficient, effective and quality patient-centred care.

Even before the COVID-19 pandemic, the health sector was among the most hazardous sectors to work in. Health workers often have poor working conditions and suffer from infections, musculoskeletal disorders and injuries, workplace violence and harassment, burnout, and allergies. Too few programmes are in place for managing health and safety at work at a health-care facility. For example, globally, more than one in three health facilities lack hygiene stations at the point of care (1). Fewer than one in six countries have a national policy on a healthy and safe working environment in the health sector (1).

The COVID-19 pandemic has placed a heavy burden on health workers and highlighted multiple challenges to their health, safety and well-being. It has also revealed an urgent need to increase the resilience of health workers in response to the COVID-19 pandemic and beyond by improving occupational and environmental health.

Sustaining the health-care response under the prolonged demanding conditions caused by the pandemic relies heavily on safeguarding the health of health workers, who are the first-line responders. Initiatives and actions are needed to better protect their physical and mental health and safety, including through providing access to reliable, up-to-date information.

In addition to strengthening capacities among health workers at national level, exchanging experiences in addressing the multiple demands faced in the context of COVID-19 is essential. Leveraging professional networks and engaging with other partners can enable the sharing of experiences and good practices at subregional level. Such actions can help to strengthen capacities and better protect health workers during COVID-19 preparedness, response and recovery phases.

## WHO resources to support occupational health and safety for health workers

Through working with partners, in particular the International Labour Organization (ILO), WHO has been developing various resources for the COVID-19 response. Specifically, the 2021 WHO/ILO interim guidance document, COVID-19: occupational health and safety for health workers (2), promotes the following points:

- the right of health workers to decent, healthy and safe working conditions in the context of COVID-19;
- risk assessment and the introduction of appropriate measures as a primary prevention of COVID-19 among health workers;



- occupational risks that are amplified by the COVID-19 pandemic, including violence, harassment, stigma, discrimination, heavy workload and the prolonged use of personal protective equipment (PPE);
- provision of occupational health and safety (OHS), mental health and psychosocial support, adequate sanitation and hygiene in health-care facilities;
- occupational health programmes with programmes for infection prevention and control; and
- the responsibilities of employers and rights and duties of health workers in health prevention and protection of health and safety at work in accordance with ILO standards.

In addition, multiple WHO free online courses are available in several languages via the OpenWHO platform. One of the most useful and applicable is entitled Occupational health and safety for health workers in the context of COVID-19 (3).

In February 2022 WHO and ILO published a new guide on developing and implementing stronger OHS programmes for health workers in response to continuing pressure exerted by the COVID-19 pandemic (World Health Organization and International Labour Organization, 2022). This marks the next step in efforts to better protect the health and safety of health workers worldwide.

## South-East European Network on Workers' Health

The South-East European Network on Workers' Health (SEENWH) is a subregional network of experts in the field of occupational health that was established in 2006 (4). It is coordinated by the WHO Collaborating Centre for Occupational Health at the Institute of Occupational Health of Republic of North Macedonia, Skopje, North Macedonia. SEENWH comprises occupational health professionals from nine Member countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, North Macedonia, Romania, Serbia and Türkiye. It includes representatives of WHO collaborating centres, occupational health institutes and WHO national focal points and experts on occupational health, and collaborates with the WHO Regional Office for Europe.

The goal of SEENWH is to improve workers' health and well-being; strengthen occupational health systems, policies and services; build human and institutional capacities; and work together through implementing WHO, ILO and European Union strategic documents and directions in SEENWH Member countries. SEENWH provides an opportunity to make the best possible use of the available resources by providing a sustainable framework for strengthening occupational health systems in these countries, a forum for exchanging information and knowledge, a platform for developing and sharing good practices, a basis for developing training and educational programmes for occupational health professionals, and stimulation for joint bilateral and multilateral projects.

## Objectives and implementation of the project

WHO has been supporting Member States to enhance the dissemination and uptake of relevant guidance and to undertake actions to strengthen capacities in the health sector. In addition to efforts at national level, leveraging professional networks (such as SEENWH) and engaging with other partners provides an excellent opportunity to share experiences and good practices at subregional level.

The main objective of the “Actions to strengthen resilience of health workers in south-eastern Europe in response to COVID-19 and beyond: implementation of WHO/ILO guidance and mapping of priority needs for occupational health and safety programmes for health workers” project (hereafter, the SEENWH OHS in health workers project) was to promote dissemination and uptake of the available WHO/ILO guidance on OHS for health workers and other relevant materials in order to strengthen capacities of health workers in SEENWH countries. The project delivered a series of online training courses that were adapted to national circumstances and presented in national languages, along with dedicated communication materials. In this way, the project contributed to increasing the resilience of health workers in SEENWH countries in response to COVID-19 and new and emerging risks. It also promoted the adoption of WHO/ILO guidance and identified needs for further national OHS programmes for health workers.

The SEENWH OHS in health workers project started in August 2021 with a series of online consultations among SEENWH members. Following this, a project plan and road map for the implementation was developed and agreed with WHO. On 28 and 29 October the project coordinator, the Institute of Occupational Health of North Macedonia, organized an online regional training of trainers (ToT) course on interventions to increase awareness and knowledge of various OHS aspects among health workers in SEENWH countries in the context of COVID-19 and beyond. The ToT course, entitled Health workers for health workers, consisted of lectures and presentations, with short discussions. It was delivered by recognized experts in occupational health and members of SEENWH, and included developing a training and communication package in English. Target recipients of this package were health-care professionals and representatives of the SEENWH countries involved in the project, as well as experienced academics and practitioners of occupational health and young, well-educated health professionals keen to improve their competence and skills through training.

The regional ToT was followed by a series of online training courses held in individual countries between November and December 2021. In addition, two information exchange meetings for network members were held in September and December 2021. Eight online training courses were organized in seven SEENWH Member countries (Bosnia and Herzegovina, Bulgaria, Montenegro, North Macedonia, Romania, Serbia and Türkiye) using the prepared training and communication package (including video and leaflets) in the national language. Participants were health workers across different segments and levels of health-care system. Before each training course, participants completed an online questionnaire (translated into the national language) to serve as the baseline. The same questionnaire was distributed to the participants immediately after the training course. Both questionnaires were analysed to assess individual and group progress. National data on the activities implemented in SEENWH countries were evaluated and presented as a final report, with lessons learned and further directions, at the final SEENWH project meeting in February 2022.

The SEENWH OHS in health workers project’s approach of building on a well-established subregional professional network created opportunities for:

- sharing experience and good practices
- mutual support and exchange of ideas
- mapping country-specific priorities
- discussing common challenges and identifying opportunities.

This publication provides an overview of the training activities implemented in the seven SEENWH countries involved in the project. It presents brief reports from the training courses, key messages and lessons learned from the project, and possible next steps.

# Bosnia and Herzegovina

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**Lead institutions:** Department of Occupational Medicine, Medical Faculty, University of Tuzla, Tuzla, Federation of Bosnia and Herzegovina; and Institute of Occupational Health and Sport of the Republika Srpska, with support from the Ministry of Health and Social Welfare of the Republika Srpska

## National context

Bosnia and Herzegovina consists of two entities – the Federation of Bosnia and Herzegovina (consisting of 10 cantons) and the Republika Srpska – as well as the Brčko District of Bosnia and Herzegovina. To provide national coverage for the training course, health authorities of the Federation of Bosnia and Herzegovina and of the Republika Srpska were each asked to nominate a coordinator and implementing institution for the SEENHW OHS in health workers project.

In both entities, the main objective of the online training course was to highlight interventions to strengthen the resilience of health workers in the context of COVID-19 and of new and emerging risks for the health workers. A particular aim was to build the capacity of health professionals using customized training materials and a ToT approach in order to create a network of trainers capable of delivering training sessions.

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## Main elements of the training course



### Organization and structure

In the Federation of Bosnia and Herzegovina, the online training course was held (via Zoom) on 30 November and 1 December 2021. In the Republika Srpska, the online training course was held on 16 and 17 December 2021 via Zoom. In both entities, modules were based on implementing WHO/ILO interim guidance and mapping the priority needs of OHS programmes for health workers. The two-day training courses consisted of 10 (Federation of Bosnia and Herzegovina) or 11 (Republika Srpska) lectures with short feedback discussions. Teaching materials included a PowerPoint presentation and summary for each module.

In the Federation of Bosnia and Herzegovina, the training course included the following 10 modules:

- How to protect the health and safety of health workers in the workplace;
- How to increase the resilience of health professionals in south-eastern Europe in response to COVID-19 and beyond;
- Prevention of exposure to SARS-CoV-2, and other occupational infections: risk assessment;
- Prolonged use of PPE and toxic effects of disinfectants;
- Scope of work, schedule of working hours and organization of work during the pandemic;
- Occupational health services (occupational medicine) during the COVID-19 pandemic;
- Violence, psychological harassment and stigma in health-care facilities;
- Mental health of health workers during a pandemic;
- Tasks, rights, and responsibilities of health professionals; and
- COVID-19 crisis management in health-care institutions.

In the Federation of Bosnia and Herzegovina, an additional context-specific module was included: COVID-19 pandemic, and a new occupational diseases of health workers.

In the Republika Srpska, the training course included the following eight modules:

- Health and safety of health workers;
- Risk assessment and prevention of exposure to SARS-CoV-2 and occupational infections;
- Prolonged use of PPE and toxic effects of disinfectants;
- Violence, harassment, discrimination and stigma;
- Mental health and psychosocial support;
- Occupational medicine services;
- Duties, rights, and responsibilities for health and safety at work; and
- Functioning of organizations in a pandemic – crisis management.

In the Republika Srpska, additional context-specific modules were:

- Increasing the resistance of health workers in SEENWH countries in response to COVID-19;
- Workload, work time and work organization; and
- Occupational health services during the COVID-19 pandemic.



## Trainers

In the Federation of Bosnia and Herzegovina, lectures were prepared and delivered by university professors, assistant professors and specialists in occupational medicine in the Federation of Bosnia and Herzegovina.

In the Republika Srpska, lectures were prepared and delivered by occupational health experts from the Institute of Occupational Health and Sport of the Republika Srpska, experts from the Federation of Bosnia and Herzegovina, and international experts from Montenegro and Serbia.



## Participants

In the Federation of Bosnia and Herzegovina, an invitation to the training course was sent out twice to occupational medicine services, occupational medicine teams, occupational medicine and public health departments of the Medical faculty, University of Tuzla, Federation of Bosnia and Herzegovina. A total of 44 health workers participated in the training course, including occupational medicine physicians, nurses, university professors and assistant professors, students and occupational medicine residents.

In the Republika Srpska, health-care institutions received an official invitation containing information about the training course and a request to nominate representatives. A total of 79 health workers participated in the training course, including medical doctors (internists, infectious disease specialists, intensivists), nurses, quality coordinators, and psychologists from primary, secondary and tertiary health-care units.



## Training and communication package

In the Federation of Bosnia and Herzegovina, the main communication instruments developed for the training course were a video that was posted on social media platforms and a leaflet containing key messages from the training course. Teaching materials included a PowerPoint presentation and summary for each module.

After the training course in the Republika Srpska, the accredited trainers (who had completed the pre- and post-training questionnaires) were given a weblink to the training materials (a PowerPoint presentation for each module) used during the training course and to WHO/ILO guidance translated into Serbian. Health institutions were asked to put the guidance on their official website, as already done by the Ministry of Health and Social Welfare of the Republika Srpska. The video and leaflet have been completed and are ready to post on the Ministry website.



## Main discussion points

In the Federation of Bosnia and Herzegovina, topics of particular interest were the COVID-19 pandemic; new occupational risks; and new occupational diseases among health workers. Other topics of interest were research on the epidemiological characteristics of SARS-CoV-2 transmission; overload, long-term shiftwork with night work and other specific psychosocial stressors, exposure to workplace violence and stigma; and effects of long-term exposure to PPE on the physical and mental health of health workers in health-care facilities. Discussions during the training course focused on risk assessment and management as the first step of preventive activities; a need for improved organization of work and better communication skills; a need to register all COVID-19 cases, verification of workplace accidents and COVID-19 as an occupational disease, and the development of a register of occupational diseases; awareness raising on violence against health workers; recognition of burnout as an occupational disease; protecting the mental health of health workers; and improving working conditions in consultation with health workers. The main message was “to develop national support programmes for the health of health workers”. Pre- and post-testing showed that participants had limited knowledge in domains such as the responsibilities of health professionals, tasks of the national health and safety authority in the workplace for health workers, and common mental health disorders among health workers. These limitations indicate a need for continued educational efforts and the importance of engaging with responsible ministries and managers of health facilities.

In the Republika Srpska, the main topics of interest were duties, rights and responsibilities for health and safety at work; prevention of exposure to SARS-CoV-2 and occupational infections; and occupational health services. Discussions during the training course focused on whether COVID-19 should be considered an occupational disease or injury at work. Some participants argued that milder forms of COVID-19 should be declared an injury at work, whereas more severe, prolonged and complicated forms should be treated as an occupational disease. Other participants supported the current legislation that recognizes COVID-19 as an occupational disease, regardless of the form and severity, through the Rulebook on the list of occupational diseases (5).



## Lessons learned and next steps

*In the Federation of Bosnia and Herzegovina, the main outcomes of the training course were information dissemination and increased knowledge in participants. The course was a useful tool to create and rapidly disseminate training materials during the COVID-19 pandemic, in partnership with colleagues. It was also a means of identifying additional educational topics to enhance the training course. Every new training session increases the resilience of health workers in the COVID-19 response, while motivating participants to spread the knowledge to students, occupational health residents and specialists, and other health workers. Senior university students are preparing brochures of the key messages about protection of health for health workers during the COVID-19 pandemic, to be presented on 7 April 2022, World Health Day.*

*In the Republika Srpska, the main conclusion was that the training course would allow the creation of a network of trainers who are ready to spread information to their colleagues, thereby exponentially increasing the outreach of the course. New communication channels should be sought to support dialogue on occupational health among health workers. Future activities could involve capacity-building for risk assessment in the workplace, including the topic of whether COVID-19 should be recognized an occupational disease or injury at work.*

# Bulgaria

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**Lead institution:** WHO Collaborating Centre for Occupational Health, National Centre of Public Health and Analysis, Sofia

## National context

The SEENWH OHS in health workers project aimed to strengthen the resilience of health workers in SEENWH countries in response to COVID-19 and new and emerging risks, facilitate the uptake of WHO/ILO guidance, map the needs of OHS programmes for health workers, and enhance protection of the physical and mental health and safety of health workers.

At national level, a list of target groups of health workers for capacity-building activities was developed, followed by communication with possible stakeholders and identification of relevant participants in ToT activities. Seven experts from Bulgaria participated in the regional ToT course; their specific contribution to the training package was on the following module: Workload, working time and work organization.

The first training course of the project took place in Bulgaria and was accredited by the Bulgarian Medical Association. The main objective was aligned with the regional ToT course: to highlight activities to strengthen the protection/resilience of health workers in the context of COVID-19 and new and emerging risks for health workers.

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## Main elements of the training course



### Organization and structure

The training course took place on 29 and 30 November 2021 (via Zoom), with nine modules that were based on the WHO/ILO interim guidance:

- OHS for all health workers – care for those who care;
- Prevention of exposure to SARS-CoV-2 and occupational infections;
- Ergonomic risks and prolonged use of PPE;
- Chemical risk factors in health care and toxic effects of disinfectants;
- Workload, working time and work organization;
- Violence, harassment, discrimination and stigma;
- Mental health and psychosocial support;
- Occupational health services; and
- Duties, rights and responsibilities for health and safety at work.

To take account of the national context, the modules also included topics such as ageing workforces, return to work after long-term sickness, and adaptation of workload and working time after long COVID.



### Trainers

The training course was delivered by academics (recognized national experts), the WHO representative in Bulgaria and a representative from the WHO European Centre for Environment and Health. The introductory presentation was given by the leader of occupational health work at WHO headquarters, and other presentations were given by the project coordinator.



### Participants

The training course was attended by 84 health workers, including experienced experts from medical universities and university hospitals, some of whom practise in occupational health services; junior health workers and PhD students; specialists in mental health, psychology and toxicology; representatives from the Ministry of Health; and a medical doctor from the trade union of health workers.



### Training and communication package

The training course provided good quality materials in Bulgarian, including PowerPoint presentations and scripts for each module, based on WHO/ILO guidance. Other relevant WHO/ILO guidance and scientific publications were disseminated as part of the training course. A communication package developed during the training course (video and leaflet) was translated into Bulgarian and posted on social media platforms.





## Main discussion points

The training course included country-specific data such as national statistics data on COVID-19 and the health workforce, and research data on working time, fatigue and burnout of hospital health workers.

Participants raised several discussion points. They thought that COVID-19 should be recognized as an occupational disease, and so have a compensation mechanism, given that more than 17 000 cases of health workers had been registered with COVID-19 by the end of November 2021. Furthermore, sufficient staffing to comply with the WHO recommendation on working time (6–8) was considered crucial. Assessment of toxicological risk due to disinfectants, interventions to support mental health, and provision of PPE and evaluation of the effect of their long-term use were also considered important.



## Lessons learned and next steps

*Participants considered the training course important for strengthening the resilience of health workers in SEENWH countries in response to COVID-19 and beyond by bringing new scientific data to support practice and methodological guidance. Pre- and post-training questionnaires showed that the training course improved the participants' knowledge on all topics. For mapping the priority needs for developing an OHS programme for health workers, more than 70% of the participants considered the topics highly relevant and a large proportion considered them relevant.*

*Further capacity-building for strengthening OHS of health workers for emerging risks, facing biological, physical and organizational risks, and developing OHS programmes for health workers are crucial for improving OHS for health workers.*

# Montenegro

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**Lead institution:** Medical Faculty, University of Montenegro, Podgorica

## National context

A major goal of the SEENWH OHS in health workers project for the National Project Team was to prepare and implement a training course comprising an online seminar and written materials to disseminate current WHO/ILO guidance and other related documents to Montenegrin health workers. All National Project Team members successfully completed the SEENWH online ToT course and received a complete package of teaching materials.

## Main elements of the training course



### Organization and structure

A two-day national online training course for health professionals was created and conducted. The course introduced participants to WHO/ILO guidance and other official sources, and presented the results of national and SEENWH research conducted in this field. Before the national online training course, all available ToT course materials were translated into Montenegrin, including the WHO/ILO guidance, all PowerPoint presentations and scripts from the SEENWH experts, and used as learning materials. Participants were also given several weblinks related to those topics. The national training course, entitled Health workers for health workers, was held via Zoom on 13 and 14 December 2021. The course was organized by the National Project Team, with information technology support, and was accredited by the Montenegrin Medical Chamber (3 points for participants, 6 points for lecturers).

A total of nine modules were included:

- Health and safety of health workers – role of SEENWH;
- Risk assessment and prevention of exposure to SARS-CoV-2 and occupational infections;
- Adverse effects of prolonged use of PPE and toxic effects of disinfectants;
- Violence, psychological harassment and stigma;
- Workload, work time and work organization;
- Mental health of health workers during the pandemic;
- OHS during and after the COVID-19 pandemic;
- Rights, obligations and responsibilities related to health and safety at work; and
- Functioning of organizations in pandemic conditions – crisis management.

All modules comprised a 30-minute PowerPoint presentation, along with written abstracts in Microsoft Word.

After the course, participants received the teaching materials for the training course, comprising PowerPoint presentations and scripts (in English and translated into the national language), all national seminar PowerPoint presentations and abstracts, a weblink to recordings from the two-day training course, including all presentations and discussions.



## Trainers

The lecturers were occupational health professors (two from North Macedonia, one from Bosnia and Herzegovina, and one from Montenegro), as well as a professor of microbiology and manager of the Institute for Public Health of Montenegro, an occupational health specialist, a family medicine specialist and an anaesthesiologist (all from Montenegro).



## Participants

An invitation to attend the online training course was sent from the National Project Team Coordinator to almost all public and private health institutions in Montenegro, and to some personal contacts. Participants applied via email and all communications for the course were done via email.

A total of 51 health workers from Montenegro participated in the training course: occupational health specialists, general practitioners/family medicine specialists, psychiatrists, medical chemistry specialists, internal medicine specialists, and psychologists, nurses and managers from primary care, general hospitals, a special hospital for pulmonary diseases, and a clinical centre; pharmacists, nurses, residents, and a few managers and engineers working in health units, and one person from the Ministry of Health. Most participants were physicians. All participants were active in discussions that took place at the end of each day.



## Training and communication package

All training materials were collected, translated and sent to participants via email in two stages: before and after the national seminar. Certificates were given to all participants who successfully completed the course, together with a short video made as a learning tool. Participants were asked to forward the video to colleagues within their institution, and the video was also posted on social media platforms (Viber groups, Facebook). A paper leaflet containing important conclusions of the project was created and a total of 500 copies were mailed to all primary health institutions, general and special hospitals, and the Clinical Centre of Montenegro.



## Main discussion points

Since Montenegro has no national institution for OHS, many related issues are not harmonized. At the course, discussions covered the need to regulate policies for SARS-CoV-2 infection and other occupational infections in health workers. Uncertainties and different approaches to regulations for sick leave and other COVID-19-related policies were highlighted, regarding whether it is considered an injury at work or professional disease for health workers.



## Lessons learned and next steps

*Many participants were satisfied with the content and form of delivery of the national training course. They emphasized the importance of SEENWH training courses in general, not only those for health workers or related to the COVID-19 pandemic. The SEENWH OHS in health workers project demonstrated the strength and unity of SEENWH in working together for workers' health in Member countries.*

# North Macedonia

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**Lead institutions:** WHO Collaborating Centre for Occupational Health, Institute of Occupational Health of Republic of North Macedonia; and Faculty of Medicine, Ss. Cyril and Methodius University in Skopje, Skopje

## National context

The Institute of Occupational Health aimed to raise awareness in health workers of OHS issues during and after the COVID-19 pandemic. The online training course was prepared using WHO/ILO guidance on OHS measures for health workers, occupational health services in the context of the COVID-19 pandemic, updated rights and responsibilities for health and safety at work for health workers, and other relevant sources.

Information about the training course was disseminated via a flyer and video presenting the key messages of SEENWH, by sharing the core training material on the Macedonian Medical Association website, and via other social media platforms (such as LinkedIn and Twitter). All material used in the online training and communication package was translated into Macedonian.

The online training course focused on different categories of health workers. Feedback from both lecturers and participants will be used to identify the priority needs of the OHS programme for health workers, with input from the Ministry of Health and Ministry of Labour and Social Policy.

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## Main elements of the training course



### Organization and structure

A package of teaching materials was prepared during the regional ToT course. Using this training package, a two-day national training course for health workers was prepared and implemented. The training package and PowerPoint presentations delivered by SEENWH experts were translated into Macedonian and disseminated to all participants.

The online training course, entitled Health and safety at work for health workers: COVID-19 and new emerging risks, was held via Zoom on 9 and 10 December 2021. The course was accredited by the Macedonian Medical Association and the Doctors' Chamber of North Macedonia. In total, nine modules were based on the WHO/ILO interim guidance document, COVID-19: occupational health and safety for health workers:

- OHS in health workers – COVID-19 and new and emerging risks;
- Prolonged use of PPE and toxic effects of disinfectants;
- Workload, work time and work organization;
- Mental health and psychosocial support;
- Occupational health services during the COVID-19 pandemic and beyond;
- Workplace risk assessment and prevention of exposure to SARS-CoV-2 and other occupational infections in health workers;
- Violence, harassment, discrimination and stigma;
- Sanitation, hygiene and rest facilities; and
- Duties, rights and responsibilities for health and safety at work.



### Trainers

A team from the Institute of Occupational Health prepared and delivered the lectures on OHS for health workers, with a special focus on COVID-19 and on new and emerging risks. The team included university professors and assistant professors, specialists in occupational medicine, a specialist in psychiatry, and PhD students.



### Participants

Medical doctors (specialists and residents in occupational medicine), medical doctors and nurses working in COVID centres, medical doctors and nurses from other departments and institutions, and students in the final year of medical studies were invited to participate through communications with health-care institutions and COVID-19 centres, professional organizations of health workers, and medical student organizations. A total of 81–85 health workers participated on both days, representing more than 90% of the invited health professionals. Most actively participated in discussions on both days and were highly motivated to participate in further activities related to improving health and safety at work for health workers.



## Training and communication package

Using the training package prepared within the ToT course, PowerPoint presentations and scripts were developed for each module (based on WHO/ILO interim guidance) and translated into Macedonian. These were used during the two-day national online training course for health workers.

Key messages of the SEENWH OHS in health workers project were dissemination via a flyer and video (in Macedonian), and by sharing the core material on the Macedonian Medical Association website and on other social media platforms (LinkedIn and Twitter).



## Main discussion points

The training course in North Macedonia revealed the importance of providing high-quality health and safety at work as a prerequisite to minimize occupational risks for health workers during the pandemic and beyond. Participants stressed the urgent need to develop OHS programmes for health workers. The main findings of the SEE Survey on job stress in health workers during COVID-19 pandemic (9) were also presented.

Participants emphasized the weaknesses of health-care systems in SEENWH countries. The training course highlighted the most important OHS issues for health workers. They also pointed out that health systems have to engage with all stakeholders at all levels since adequate occupational health for health workers also leads to a better quality of patient care.



## Lessons learned and next steps

*The national training course strongly supported the resilience of health workers in SEENWH countries in response to the COVID-19 pandemic and beyond and emphasized the need to develop comprehensive OHS programmes for health workers.*

*Discussions and conclusions of the training course revealed that collaboration within the SEENWH, sharing experiences, development of a common training package for SEENWH countries, and raising awareness at a country level, added value at both the network and country levels. As the next steps, SEENWH activities should focus on further joint collaborations, creating a platform for education in OHS, and support for research activities in SEENWH countries.*

# Romania

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**Lead institution:** Directorate of Public Health, Ministry of Health, Bucharest

## National context

Challenges related to human capacity (such as burnout syndrome in health workers) during the COVID-19 pandemic need to be addressed, including through policy development. The SEENWH OHS in health workers project aimed to strengthen the resilience of Romanian health workers in the contexts of COVID-19 and beyond and of new and emerging risks, and to support policy-makers and the OHS community by providing a means of mutual learning and voluntary support.

All SEENWH countries had the same goal: to strengthen the resilience of health workers in response to COVID-19 and to new and emerging risks; facilitate the adoption of WHO/ILO guidance and mapping needs for OHS programmes for health workers; and contribute to protecting the physical and mental health and safety of health workers.

The regional training course was supported by the PROTECT.INVEST. TOGETHER. campaign launched by the United Nations, ILO and WHO.

In agreement and with the support of the Ministry of Health of the Republic of Moldova, the training course was also available to eight participants from the Republic of Moldova, representing the National Public Health Agency and the State University of Medicine and Pharmacy “Nicolae Testemitanu”.

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## Main elements of the training course



### Organization and structure

The training course was based on the WHO/ILO interim guide on OHS for health workers, and also covered the findings of national research and the lecturers' experiences in adapting their working practices to strengthen resilience. The course comprised 12 modules:

- WHO/ILO guidance for OHS of health workers – communication aims and mapping tools;
- Prevention of exposure to SARS-CoV-2 and other occupational infections;
- PPE and risks of prolonged use, and toxic effects of disinfectants;
- Workload, working time and work organization;
- Identification of risks in the health-care sector – health, safety and digital applications platform;
- Occupational medicine services;
- Mental health and psychosocial support in the context of the COVID-19 pandemic;
- Violence, harassment, discrimination and stigmatization;
- Rights, responsibilities and duties for health and safety at work;
- Responsible collaborative digitization for the Romanian health system;
- Practical lessons learned during the COVID-19 pandemic in the clinical hospital – a case study; and
- Crisis management.

The national event also included the presentation of two modules highlighting the mental health of health workers during pandemics:

- Integrative approach to insomnia during the COVID-19 pandemic in the practice of occupational medicine; and
- ORCHESTRA project in Romania – a prospective occupational cohort to study the impact of the COVID-19 pandemic on health workers.



### Trainers

The accredited lecturers were either experienced experts in academia and/or practice in occupational health/medicine or young, highly motivated health workers from institutions (such as the Directorate of Public Health Bucharest), public and private universities (such as the University of Medicine and Pharmacy “Carol Davila” Bucharest and Spiru Haret University), Safety and Health at Work Consultia, the National Institute of Public Health, Fundeni Clinic Hospital and NeoPrivacy.



### Participants

The event was promoted to health workers via a weblink (70) with the following message: “The COVID-19 pandemic, beside new emerging risks is having strong impact on workers exposed to the virus in their work environment. But it is not necessarily so! By mapping our priorities and acting accordingly we can be that point of change. Let’s keep doing it together!”.

The online training course was delivered free of charge via a national digital platform in an accredited format. A total of 409 participants attended, mainly health workers (occupational medicine and family doctors) and OHS professionals, along with representatives of the main health institutions (doctors from medical offices, institutes and public health authorities; occupational medicine representatives from hospitals; medical experts from the health insurance body (National Pension House, an insurance fund for accidents at work and occupational diseases), medical treatment and diagnostic centres, safety professionals, and representatives of ministries/governmental bodies).



## Training and communication package

Training materials were shared on the conference.ro information technology platform, including videos, weblinks to the virtual PowerPoint presentations and script library, and a weblink to a statistical assessment of the event;



## Main discussion points

In all, 60% of participants completed the online questionnaire: the main topics of interest (in descending order) were prevention of occupational infections; infection prevention and control policy in the health unit; immunization of health workers who may be exposed to vaccine-preventable diseases; policies for managing work schedules, shifts, and rest and recovery periods to prevent fatigue in the health facility; OHS management; procedures for post-exposure prophylaxis, such as for HIV and hepatitis B; system for investigating exposure to infection in health-workers; prevention of physical risk factors for OHS in health facilities; prevention of psychosocial risks; access for health workers to psychosocial support and counselling in the health unit; and workplace violence and harassment prevention.



## Lessons learned and next steps

*Raising awareness about preventing exposure to SARS-CoV-2 and occupational infections in health workers requires an integrated approach by infection prevention and control programmes, which are often prioritized jointly with OHS programmes. The post-training questionnaire showed that these programmes are more or less supported in the health-care system (at the financial, organizational and strategic levels). Future activities should aim to:*

- *improve comprehensibility of the workers' health strategy;*
- *extend and improve accessibility of the OHS programmes plan;*
- *improve resources by ensuring well-trained health workers, reliable technology and innovation;*
- *enhance the sustainability of the results of the training, as embedded in the proposal to converge efforts to evaluate, regulate and implement measures to recognize COVID-19 as an occupational disease and to ensure decent working conditions; and*
- *find sources of financing.*

# Serbia

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**Lead institutions:** Serbian Institute of Occupational Health, and Faculty of Medicine, University of Belgrade, Belgrade

## National context

During the COVID-19 pandemic, caring for one's own health was not high on the priority list for health workers. Infection with SARS-CoV-2 is the main risk of health workers engaged in the treatment of COVID-19 patients. However, other specific COVID-19-related challenges that negatively affect the health of health workers include intense physical and mental effort, work overload, increased working hours, frequent night shifts, frequent shift changes, aggression by patients and their families and psychological stress due to empathy for patients but also to caring for family members. With this in mind, the organizers in collaboration with WHO and SEENWH wanted to draw attention to health workers and lay public on the adverse health effects related to work in health-care institutions providing health care to COVID-19 patients.

The main goal of the SEENWH OHS in health workers project implemented in Serbia was to raise awareness in health workers of the threat to their health and inform them how to prevent adverse health effects. Another goal was to highlight to policy-makers, managers of health institutions and the public the need to support health workers to successfully cope with the challenges of working during the COVID-19 pandemic. In order to reach as many health workers as possible, the Serbian Medical Chamber was involved in organizing the training course. The Medical Chamber forwarded information about the project and training course to almost all doctors in Serbia. The course was accredited by the Health Council of Serbia, which also motivated health workers to enrol for the course. As a consequence of these efforts, 869 participants registered for the training course.

## Main elements of the training course



### Organization and structure

The first stage was to assess via a questionnaire health workers' knowledge of the risks posed by the COVID-19 pandemic and ways to reduce or even eliminate these risks (40 questions: 20 from SEENWH and 20 prepared by local organizers). The educational material provided by SEENWH and WHO was modified based on an analysis of the responses. A two-day training course, entitled Actions to strengthen resilience of health workers in south-eastern Europe in response to COVID-19 and beyond: implementation of WHO/ILO guidance and mapping priority needs for OHS programmes for health workers, took place on 8 and 9 December 2021 online via Microsoft Teams. The course included the 10 modules:

- Health workers – OHS for health workers;
- Prevention of exposure to SARS-CoV-2 and other occupational infections;
- Prolonged use of PPE and toxic effects of disinfectants;
- Workload, work time and work organization;
- Occupational health services;
- OHS for all health workers;
- Mental health and psychosocial support;
- Violence, harassment, discrimination and stigma;
- Duties, rights and responsibilities for health and safety at work; and
- Crisis management.



### Trainers

The course lecturers were well-known international and local experts in the field of occupational health, each with more than 20 years of educational experience. To ensure gender equality, five lecturers were women and four were men.



### Participants

A total of 1290 registrations were received from across south-eastern Europe; however, of these, some were incomplete and others duplicates. so the total number of participants was 869. After the course, participants who passed the post-course test received four continuing medical education credits (of the 298 participants who took the test, 25 did not pass).



### Training and communication package

The initial training materials received from the project coordinator were translated into Serbian and modified to meet local needs and WHO/ILO guidance "COVID-19: OHS for health workers". The training materials were also amended to address the knowledge gaps identified in the pre-course test. After the pre-course test, all registered participants received a video containing key messages from the whole south-eastern European subregion.



## Main discussion points

Participants were particularly interested in the module on mental health and psychosocial support, and the lecturer was a psychiatrist with great experience in supporting victims of workplace mobbing. They were also interested in the module on violence and harassment, which included data from a large study on aggression and violence towards Serbian health workers.

A lively discussion took place at the end of the second day of the course. Although participants had different backgrounds, there was clear agreement that health-care professionals need more information on OHS and on a need for urgent development of a national OHS programme for health workers. During the discussion, attempts were made to dispute the importance of vaccination, but the lecturers and course organizers successfully silenced these.



## Lessons learned and next steps

*During the training course in Serbia, health workers expressed a notable hunger for information on OHS. In the discussion, participants expressed a desire to attend regular training courses every year. The consensus was that this type of education should be free of charge in order to enable as many health workers as possible to participate. For this, training courses should be organized through an online platform so that health workers can gain knowledge without being absent from work. To increase interest in OHS training, the course should be accredited by the Health Council of Serbia so that health workers have the additional motive of gaining continuing medical education points.*

# Türkiye

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**Lead institution:** Occupational Physicians Association, İstanbul

## National context

The National Information Meeting for Health Workers took place on 4 and 5 December 2021 in Türkiye; it was organized by the National Project Team with the support of SEENWH, the WHO European Centre for Health and Environment and the WHO Country Office Türkiye.

The key message was that working conditions for health workers should be improved by consulting representatives of the health workforce. A key component of such improvements is national support programmes. WHO/ILO guidance “COVID-19: OHS for health workers” was translated into Turkish by the National Project Team. Announcements about the National Information Meeting were prepared by the National Project Team and shared with the Ministry of Labour, Ministry of Health, Turkish Medical Association, Occupational Physicians Association, Workplace Health-care Workers Association, Occupational Nurses Association, Risk Management Association for distribution among health workers.

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## Main elements of the training course



### Organization and structure

The webinars collected good quality teaching materials as part of the training agenda, including PowerPoint presentations and written summaries for each module. Training materials will be used in further training on interventions to strengthen the resilience of health workers in the context of COVID-19 and new and emerging risks for health at national level.

The training courses improved the dissemination and uptake of relevant WHO/ILO guidance and actions to strengthen the capacities in the health sector.

## Trainers



Members of the Turkish National Project Team prepared and delivered OHS training for health workers, with special focus on COVID-19 and new and emerging risks. Two lecturers worked at state universities, one worked at a city hospital and was affiliated to the Ministry of Health, one was an occupational physician and another (the team coordinator) was a freelance. In addition, two lecturers had a PhD in occupational health, one had an MSc in public health and two were occupational disease specialists. The national coordinator of the National Project Team, who has 30 years' experience of OHS, formed and coordinated the National Project Team, collaborated with the WHO Country Office in Türkiye and other stakeholders, organized the training courses and project reports, and participated in SEENWH meetings.

## Participants



A total of 421 people participated in the national training course (70 by Zoom, 351 by YouTube). They included health workers (physicians, nurses and other health-care staff), occupational safety experts, representatives of the Ministry of Labour, Turkish Medical Association, Occupational Physicians Association, Workplace Health-care Workers Association, Occupational Nurses Association, and Risk Management Association. At the start of the training course, the presentations kept to a question-answer format, but discussions became more active during the first day; towards the end of day two, very intense and dynamic discussions took place.

## Training and communication package



The training material was prepared in accordance with the relevant WHO/ILO guidance and PowerPoint presentations and scripts were translated into Turkish.

Leaflets, invitations and key messages were prepared by the National Project Team and distributed to the stakeholders via email and social media platforms (such as WhatsApp and LinkedIn). The training materials were presented as PowerPoint slides and simultaneously streamed via Zoom and YouTube. Questions and contributions were controlled and transferred to the lecturer by other team members.

## Main discussion points

In addition to the framework of WHO training material, examples of good practice in the country and solutions to problems encountered during the COVID-19 pandemic were of particular interest. The examples included counselling and communication units developed to monitor



the psychosocial risks faced by employees in large university hospitals during the epidemic and workplace health and safety units that have completed their institutionalization. Similarly, local and central surveillance systems and contact-tracing processes for the pandemic were also examined during the training course.

The main topic of discussion was acceptance of COVID-19 as an occupational disease and the Government of Türkiye's responsibility to protect the rights of and compensate workers with COVID-19. Discussions also highlighted that:

- there is insufficient coordination and cooperation between the relevant institutions, organizations and nongovernmental organizations to protect health workers during the COVID-19 pandemic;
- a priority is to create a National OHS Policy and National Action Plan for Health Workers by involving all stakeholders;
- OHS services are not common as health prevention services for health workers in the health sector;
- OHS services within primary health care should be improved to comply with ILO/WHO guidance;
- a need to analysis of SARS-CoV-2 transmission, to register all cases, and to verify accidents or occupational disease after SARS-CoV-2 infection;
- verify new occupational health risks related to prolonged use of PPE or disinfection;
- risk assessment about health symptoms and signs is the first stage of preventive activities; and
- violence, harassment, discrimination and stigma towards health workers is growing in the country, and they need psychosocial support and greater focus on prevention.

## Lessons learned and next steps



*The two-day training course introduced the WHO training material and made the worn-out and tired health workers feel that they are not alone in the pandemic. In-depth discussions took place on consolidating of the available information on prevention, and combating psychosocial risks and PPE-use processes. Health-care professionals readily accepted a guideline that they could use themselves and share with colleagues, and that would easily find a place in their daily practice.*

*At the start of the learning-outcomes part of the two-day training course, it was understood that the problems faced by health workers during the COVID-19 pandemic in Türkiye are being faced by health workers globally. The Government of Türkiye should prepare guidelines for all health-care providers and their workplaces on preventing COVID-19. Emergency action plans for health workers should be prepared for future pandemics and other health-care emergencies. Health insurance and social security systems should consider pandemics an important workplace hazard for health workers. The number of qualified health workers should be increased to prevent burnout and exhaustion during pandemics and other health-care emergencies.*



# Main outcomes of the project

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The SEENWH OHS in health workers project was successfully implemented in all participating countries, which were members of SEENWH.

## Number of health workers trained

Within the activities of the SEENWH OHS in health workers project (one regional ToT and eight national training courses), more than 1600 health workers from SEENWH countries received training on the key messages of the WHO/ILO guidance about the importance of health and safety of health workers during COVID-19 and beyond.

## Main outcomes

The main outcomes of the SEENWH OHS in health workers project were:

- improved knowledge and increased awareness in health workers on OHS issue during the COVID-19 pandemic and beyond via online training courses developed in seven SEENWH countries;
- provision of training products – a good quality training package and communication materials in national languages, developed with contributions from occupational health experts from SEENWH;
- dissemination and uptake of relevant WHO/ILO guidance and actions undertaken to strengthen capacities in the health sector;
- identification of a need to develop national OHS programmes for health workers, including country-specific priorities; and
- confirmation that SEENWH is a forum for knowledge and information exchange on occupational health and a well-established platform for collaboration between occupational health professionals in south-eastern European subregion.

## Country-specific priorities

Discussions among participants at the regional and national training courses, as well as the evaluation of the results of pre- and post-training questionnaires, provided a good overview of the different topics and questions relevant for the health and safety of health workers in the SEE countries.

As feedback on the WHO/ILO guidance, country-specific priorities related to OHS for health workers were identified and discussed. The main problems in all SEENWH countries that participated in the SEENWH OHS in health workers project were:

- insufficient staffing in ageing workforces in the health-care sector;
- specific hot topics – the return to work after long-term sickness, long COVID (recognition, ability to work assessment), adaptation of workload and working time after long COVID;
- emerging new issues – assessment of the toxicological risk due to disinfectants, mental health and the provision/adequacy of PPE;
- adapting the work and functions of health-care institutions to the new working conditions imposed by the COVID-19 pandemic, with adequate crisis management;
- a need to create a register of occupational diseases, along with verification of new occupational diseases related to SARS-CoV-2 infection and occupational burnout;
- regulating policies for SARS-CoV-2 and the other occupational infections in health workers (regulation of sick leave, recognition as an occupational disease or injury at work);
- preventing and prohibiting of violence, harassment and stigmatization towards health workers;
- placing special focus on occupational health services for the health-care sector;
- encouraging and promoting vaccination for health workers; and
- improving communication between health workers and defining clear channels of communication within all relevant health-care stakeholders.

## Communication materials in national languages

Dissemination of the conclusions, lessons learned and key messages of the SEENWH OHS in health workers project, as well as awareness raising in health workers in SEENWH countries was achieved by preparing and distributing flyers, leaflets and videos in national languages (the communication package) and by sharing the core training material and recordings of the training sessions on various websites and social media platforms (LinkedIn and Twitter). This was done in collaboration with national medical associations, medical chambers and professional associations in SEENWH countries. All communication materials, whether printed or posted, were used to further disseminate the WHO/ILO guidance in order to strengthen the resilience of health workers in SEENWH countries in response to COVID-19 and beyond.

## Assessment of the training course

An online questionnaire was developed to assess the efficacy of the training courses for health workers in selected SEENWH countries. Survey questions were presented in sections based on the key elements of the WHO/ILO guidance and on the training curricula. Participants also gave their opinions on mapping the priority needs of OHS programmes for health workers.

All participants completed the questionnaire before and after the training course, with a large increase in correct answers after the training course. This demonstrated improvements in the knowledge and attitudes of trained health workers on OHS related to COVID-19, indicating that the training course had a positive influence on knowledge across all topics. According to the post-training questionnaire, the topics with the highest priority needs for OHS programmes for health workers were: a policy and system for infection prevention and control in the health facility (93.1%), and policies for managing working hours, shifts, rest periods and OHS training/education for health workers (89.7%).

## Next steps

SEENWH should be used as a subregional platform for collaboration to improve workers' health by responding to the common challenges and identifying opportunities for joint actions in south-eastern Europe. The national SEENWH training courses clearly demonstrated that providing high-quality OHS is essential to maintain the health of health workers and their ability to work in relation to the COVID-19 pandemic and new and emerging risks. It is notable that SEENWH countries have an urgent need to develop comprehensive OHS programmes for health workers. SEENWH representatives agreed that the SEENWH OHS in health workers project created new opportunities for SEENWH countries to develop further steps and initiatives in the field of workers' health. As the next steps, SEENWH activities should focus on further joint SEENWH collaborations, creation of a platform for education in OHS, and support for research activities in SEENWH. Furthermore, more efforts are needed to promote awareness of the strong connection between increased health and safety in health workers and higher quality patient care.

## Areas for support

Fruitful discussions during the ToT and national training courses, as well as opinions expressed by experts and participants, highlighted several areas for support:

- during the COVID-19 pandemic, attempts should be made to provide appropriate and timely information to health workers;
- safe staffing levels, manageable and fairly allocated workloads, management of working time and work organization of health workers are needed to meet the demands during the COVID-19 pandemic and in future public health emergencies;
- improvements in mental health/psychosocial support for health workers were noted as significant issues in SEENWH countries;
- efficient and effective occupational health services for health workers in health-care facilities were highlighted as the main instrument to implement OHS activities;
- organization and implementation of adequate crisis management are required in health-care institutions; and
- providing high-quality health and safety at work is a prerequisite for minimizing the risks of impaired health and ability to work in health workers during the pandemic and beyond.

## Lessons learned

In the last two years, the lessons learned about the COVID-19 pandemic have shown the next steps and directions in OHS for health workers tackling new and emerging risks.

The COVID-19 pandemic has focused attention on the importance of protecting health workers by emphasizing the need to ensure that OHS for health workers is a priority. This is fundamental to enabling them to do their jobs and protect the health of patients and populations.

Healthy and safe health workers are a prerequisite for well-functioning and resilient health systems and for good-quality health care.

The development and implementation of national programmes to protect the health and safety of all health workers is an effective way to ensure that national OHS legislation is applied and policies are tailored to the needs of the health sector.

By working together towards workers' health and translating research into practice, the aim is to stimulate and strengthen the SEENWH as a platform for excellent collaboration at subregional level.



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## The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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