

# One hundred million cases in one hundred weeks

## Working towards better COVID-19 outcomes in the WHO European Region





Norway's Emergency Medical Team was received in Lesvos, Greece by WHO and the Hellenic National Public Health Organization following a catastrophic fire.

# **One hundred million cases in one hundred weeks**

Working towards better COVID-19 outcomes  
in the WHO European Region

Address requests about publications of the WHO Regional Office for Europe to: Publications, **WHO Regional Office for Europe, UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark**  
Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (<http://www.euro.who.int/pubrequest>).

Document number: WHO/EURO:2022-4888-44651-63377

© World Health Organization 2022

**Some rights reserved.** This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition: One hundred million cases in one hundred weeks: working towards better COVID-19 outcomes in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2022".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization. (<http://www.wipo.int/amc/en/mediation/rules/>)

**Suggested citation.** One hundred million cases in one hundred weeks: working towards better COVID-19 outcomes in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2022. Licence: CC BY-NC-SA 3.0 IGO.

**Cataloguing-in-Publication (CIP) data.** CIP data are available at <http://apps.who.int/iris>.

**Sales, rights and licensing.** To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/about/licensing>.

**Third-party materials.** If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

**General disclaimers.** The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Cover photos: © WHO; © WHO/Petru Cojocaru;  
© WHO/Zubaydullo Ismatov; © WHO

Art Direction and Layout: [www.freightdesign.co.uk](http://www.freightdesign.co.uk)

# Contents

<b>Foreword by the Regional Director and Regional Emergency Director</b>	iv
<b>Acknowledgements to the authors and IMST</b>	vi
<b>Abbreviations</b>	viii
<b>A.</b> Situation overview	1
<b>B.</b> Delivering the COVID-19 response in the European Region	3
<b>C.</b> Selected challenges of the regional response and mitigation measures	7
<b>D.</b> Implementation and operational support – the IMST in action	8
Leadership and IMST coordination	9
Surveillance, analytics and laboratory	15
Public health and social measures	19
Clinical and health interventions	23
Operational support and logistics	25
Maintaining essential health systems and services	29
COVID-19 vaccine deployment	31
Special projects on vulnerable populations	35
<b>E.</b> Lessons learned and looking ahead	37
<b>The way forward – continued regional and global commitment and solidarity</b>	38
<b>WHO/Europe’s priorities for the COVID-19 response in 2022</b>	39
<b>References</b>	41

## Foreword

We are pleased to present the work undertaken by the WHO Regional Office for Europe (WHO/Europe)'s COVID-19 Incident Management Support Team (IMST) from the advent of COVID-19 into the European Region to the end of 2021. This represents 100 weeks of emergency response, 100 million COVID-19 cases, and one operational team that has worked hand-in-hand with our Member States and partners to protect lives and livelihoods.

As SARS-CoV-2 began to spread internationally, and as we were both taking up new institutional roles at WHO/Europe, we stepped into unknown and unprecedented territory. Neither of us knew in those very early days that the COVID-19 pandemic would enter a third year. Neither of us knew that the human, social and economic costs would be so high. Yet, even in those early days, we both recognized that this emerging crisis had the potential to define WHO's standing. That the emerging calamity would require a WHO that could be relevant to all countries, whether large or small, rich or poor, at peace or at war. That the international community, more than ever in recent history, would need a trusted and recognized source of knowledge, guidance and information.

So, the small emergency team, set up in those early days in January 2020 to monitor an unknown disease reported on the other side of the world, transformed rapidly into the fully functional WHO/Europe COVID-19 IMST. Regional and country office staff were extensively redeployed into an incident management system established to provide high-quality technical support at the country level using the most efficient means possible.

The COVID-19 IMST has been the engine of WHO/Europe's response to COVID-19, generating and sharing critical knowledge. This knowledge has been used not only by national governments to define their COVID-19 strategies and policies, but also by WHO itself, to monitor the response to the pandemic and ensure that WHO recommendations are timely, feasible and relevant to the diverse settings in the Region.

However, the pandemic has not only been a technical and public health challenge. It has also required WHO teams to step into the multisectoral policy domain, lifting the public health agenda, recognizing that the pandemic has been not just a public health crisis, but a humanitarian one. All sectors of society have been affected, and all communities have needed to engage in the response. Health and care workers in particular have worked tirelessly to protect the world during COVID-19. Their commitment and professionalism throughout the pandemic are evident to all: they are extraordinary people, performing extraordinary work.

While engaging with ministers of health and heads of State in the Region, we have witnessed, with immense pride, WHO's impact, its voice heard in all parts of the Region, and its expertise called on and respected.



WHO Regional for Europe Regional Director,  
**Dr Hans Kluge**

And with immense pride we have seen response personnel, who have prepared their whole lives for this type of event, rise to the recurring challenges. We are reassured to see the reputation of WHO/Europe not only maintained but strengthened. Working on the COVID-19 response has also reinforced the relevance of the European Programme of Work, 2020–2025, and its four flagship initiatives: the Mental Health Coalition, Empowerment through Digital Health, the European Immunization Agenda 2030 and Healthier behaviours: incorporating behavioural and cultural insights.

As we move into the third year of the pandemic, we enter it with the innovations, knowledge and the tools gained from the first 100 weeks. We are certain that we will take, together with our Member States and our partners, further steps towards exiting the current pandemic better equipped for the next. We wish to extend our deepest respect to all the deceased and our condolences to their families, as well as all those who have been so greatly affected by the pandemic. We would also like to recognize the whole of WHO/Europe, including country offices, hubs and geographically displaced offices, for supporting the COVID-19 response and for working together to form the IMST. Finally, we wish to thank the entire IMST workforce for working around the clock, with never-ending energy, professionalism and dedication, under the operational leadership of Catherine Smallwood, and all WHO staff and advisors who have contributed to this work. Solidarity, collegiality, friendship and teamwork are making the difference, driving us from good to great.

**Dorit Nitzan** Regional Emergency Director  
**Hans Kluge** Regional Director

WHO Europe's Regional Emergency  
Director, **Dr Dorit Nitzan** at the  
71st Session of the Regional  
Committee in Copenhagen  
September 2021.



# Acknowledgements to the authors and IMST

The COVID-19 Incident Management Support Team (IMST) in the WHO Regional Office for Europe led the development of this document with specific drafting by Miranda Tran Ngoc, Daphna Raz, and J. Sam Meyer, under the supervision of Dr Dorit Nitzan, Regional Emergency Director, and Dr Catherine Smallwood, COVID-19 Incident Manager. This document is the result of the contributions from across all pillars of the IMST, working together in support of the Member States' response to COVID-19.

The COVID-19 IMST is composed by the following individuals: Ahmed Aboushady, Jennifer Addo, Altug Akin, Vusala Allahverdiyeva, Maria Valerie Amante, Tamar Amar, Anne-Marie Andersen, Anna Aronis, Nazira Poolatovna Artykova, Bibigul Aubakirova, Filipa Azevedo E Silva, Olexander Babanin, Jozef Bartovic, Kazim Beebeejaun, Oleg Benes, Claire Blackmore, Nina Lillian Blinkenberg, Philippe Borremans, Halyna Borysyuk, Mina Brajovic, Caroline Sarah Brown, Christine Elisabeth Brown, Jeremy Brown, Tatjana Buzeti, Osman Niyazi Cakmak, Carina Ferreira-Borges, Ka Yeung Cheng, Elena Chulkova, Silviu Ciobanu, Dominic Cocciolone, Maria Mercedes Collazo Alos, Ana Paula Coutinho Rehse, James Creswick, Siddhartha Sankar Datta, Tim Deibel, Lucia Dell Amura, Nune Dolyan, Benjamin Paul Duncan, Soudeh Ehsani, Mohamed Abdalla Elamein Boshara, Ute Sylvia Enderlein, Vasily Esenamanov, Nicholas Fry, Stanislav Gaievskiy, Christian Gapp, Sarah Garner, Regina Gatina, Nathalie Germain Julskov, Stela Gheorghita, Giorgia Gon, Justine Gosling, Ogtay Gozalov, Alina Guseinova, Katrine Bach Habersaat, José Hagan, Krystyna Hagebro, Mohamed Hamad, Fatos Hande Harmanci, Shoab Hassan, Michala Hegermann-Lindencrone, Lucia Hernandez Garcia, Peter Sousa

Hoejskov, Holtz, Andrew Mark, Tifenn Lucile Marie Humbert, Alexis Luis, Rawi Ibrahim, Seide Isamadyrova, Marijan Ivanusa, Olha Izhyk, Melitta Jakab, Charles Johnston, Pernille Jorgensen, Ioannis Karagiannis, Amelia Kasper, Mark Avram Katz, Fedor Keredzin, Claire Kilpatrick, Kayla King, Giorgia Knechtlin, Patricia Judith M. Kormoss, Arta Kuli, Wiebe Külper-Schiek, Elsa Laino, Aimee Latta, Gabriela Lima Rita, Sandra Lindmark, Lauren Elizabeth Macdonald, Marco Marklewitz, Adelheid Marschang, Khadimul Anam Mazhar, Jason Mcknight, Ababayehu Assefa Mengistu, Margaux Marie Mesle, J. Sam Meyer, Theodoros Michalas, Satish Mishra, Piers Andrew Nicholas Mook, Liudmila Mosina, Khaled Mostafa, Antons Mozalevskis, Melita Murko, Mark Muscat, Ayjeren Myratdurdyeva, Karen Nahapetyan, Elsa Negro Caldach, Jimmi Nielsen, Siff Malue Nielsen, Aasa Hanna Mari Nihlén, Dorit Nitzan, Lisa Owen, Celik Ozuduru, Mirza Palo, Leonardo Palumbo, Anna Pashalishvili, Roberta Pastore, Gabriele Pastorino, Richard Pebody, Ihor Perehinets, Govin Permanand, Dina Pfeifer, Jeffrey Pires, Dorina Pircari, Jukka Tapani Pukkila, Priyamvada Raghavan, Kimberly Rambaud, Daphna Raz, Boris Rebac, Jetri Regmi, Marge Reinap, Catharina Margaretha Reynen-De Kat, Pierre Roca, Gerald Rockenschaub, Celine Roman, Yuster Ronoh, Kristina Ronsin, Michael Rowland, Cristiana Salvi, Jussi Sane, Martha Scherzer, Tanja Schmidt, Mark Shapiro, Danielle Lucia Shaw-Mathiassen, Manyando Simbotwe, Isaac Singini, Mary Anissa Sinnathamby, Laila Skrowny, Catherine Smallwood, Oleg Nikolayevich Storozhenko, Kristian Sumabat, Akbar Suvanbekov, Tyrone Reden Sy, Ara Tadevosyan, Ardita Tahirukaj, Yoko Tatsuno, Florian Tille, Miranda Tran Ngoc, Assel Tuyakbayeva, Sarah Tyler,



WHO/Europe's  
COVID-19 Incident Manager  
**Dr Catherine Smallwood**,  
during a press conference

Simon Van Woerden, Maarten Vanhaverbeke, Paula Virginia Vasconcelos Lopes, Aisling Marie Vaughan, Stefan Voinea, Elena Vovc, Elisabeth Waagensen, Christoph Wippel, Ian Woolverton, Ardian Xinxo, Isabel Yordi Aguirre, Tomas Zapata, Joanna Zwetyenga.

## Special dedication

This document is dedicated to all those whose work is reflected here. Namely, the numerous WHO staff and consultants (across the WHO Regional Office for Europe, Hubs, and country offices) without whom the COVID-19 IMST would not have been able to sustain a strong and agile response over the course of the last 708 days, or two years of response.

## A note on this report

This special summary report is intended to shed light on the way in which WHO has responded to the SARS-CoV-2 pandemic in the WHO European Region over the past two years. Select key achievements and impact stories are highlighted alongside glimpses of on-the-ground narratives. For further details and examples one can refer to the companion Two Year Timeline (1), as well as the “European Operational updates archive”.





Emergency Medical Team (EMT) from Poland mission to support the COVID-19 emergency response in Kyrgyzstan

# Abbreviations

<b>CIS</b>	Commonwealth of Independent States	<b>IHR</b>	International Health Regulations (2005)	<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS
<b>CC</b>	cohort and case control	<b>IMS</b>	Incident Management System	<b>UNCT</b>	UN Country Team
<b>CSO</b>	civil society organization	<b>IMST</b>	Incident Management Support Team	<b>UNICEF</b>	United Nations International Children's Emergency Fund
<b>ECDC</b>	European Centre for Disease Prevention and Control	<b>IMT</b>	Incident Management Team	<b>UNICEF ECARO</b>	United Nations Children's Fund Eastern Europe and Central Asia
<b>EIOS</b>	Epidemic Intelligence from Open Sources	<b>IPC</b>	infection prevention and control	<b>VE</b>	vaccine effectiveness
<b>EMT</b>	emergency medical team	<b>LMIC</b>	low- and middle-income countries	<b>VOC</b>	variant of concern
<b>ERF</b>	Emergency Response Framework	<b>PHSM</b>	public health and social measures	<b>WHE</b>	WHO Health Emergencies Programme
<b>EU</b>	European Union	<b>PPE</b>	personal protective equipment	<b>WHO</b>	World Health Organization
<b>EU/EEA</b>	European Union and European Economic Area	<b>QMS</b>	Quality Management System	<b>WHO/ Europe</b>	WHO Regional Office for Europe
<b>FFX</b>	first few COVID-19 X cases and contacts	<b>RC</b>	Regional Committee		
<b>GISRS</b>	Global Influenza Surveillance and Response System	<b>RCCE</b>	risk communication and community engagement		
<b>GOARN</b>	Global Outbreak Alert and Response Network	<b>SARI</b>	severe acute respiratory infection		
<b>HCW/ HW</b>	health-care worker	<b>SARI VE</b>	COVID-19 vaccine effectiveness against severe acute respiratory infections		
<b>HH</b>	household transmission of COVID-19	<b>SERO</b>	seroepidemiological investigation protocol for COVID-19 infection		
<b>IAR</b>	intra-action review	<b>SNP</b>	single nucleotide polymorphism assay		
<b>IDP</b>	internally displaced people	<b>SPRP</b>	Strategic Preparedness and Response Plan		
<b>IFRC</b>	International Federation of Red Cross and Red Crescent Societies	<b>TAG</b>	Technical Advisory Group		
		<b>TESSy</b>	The European Surveillance System		
		<b>UN</b>	United Nations		



WHO supports Romania with a shipment of 34,000 rapid diagnostic tests to strengthen the country-level response.

© WHO/Europe

## A. Situation overview

From the first COVID-19 cases in Europe reported on 24 January 2020, the pandemic reached 1 million cases within 3 months, 10 million cases within 8 months, and 100 million cases in Europe alone within 2 years. Over the course of its two years, COVID-19 has claimed over 1.6 million lives across Europe and Central Asia. The World Health Organization (WHO) European Region has accounted for close to a third of the cumulative global COVID-19 cases and deaths.

The pandemic has had, and continues to have, a profound impact on health, disproportionately affecting older age groups across the European Region. In early 2020, people 50 years and older accounted for about 70% of cases and close to 100% of deaths. Over the course of the pandemic, as testing expanded, vaccination rolled out, and transmission dynamics changed, these demographics shifted. By the end of 2021, nearly 70% of those infected were between the ages of 5 and 49 years, while those over 50 continued to account for the majority of reported deaths.

The epidemiological trends in the Region were heavily impacted by the successive emergence of severe acute coronavirus-2 (SARS-CoV-2) variants of concern (VOCs), leading to waves of transmission spreading across the entire Region, accelerated by the regional calendar of events, holidays, and celebrations. By April 2021, the more transmissible Alpha VOC had become dominant

in the European Region, detected in 90.1% of sequenced samples. As cases started to stabilize in the Region, a new variant, Delta VOC, spread rapidly across the Region, replacing Alpha as the dominant virus by August 2021. With higher transmissibility and limited immune escape, the resurgence linked to the spread of Delta led to increased infections across the European Region, and increased mortality where vaccination uptake was low, with regional cases reaching peak levels in the third quarter of 2021. The Omicron VOC, first detected in Europe at the end of November 2021, presents clear evidence of the continued and significant evolution of SARS-CoV-2, with obvious implications for the Region and the world with its widespread transmission anywhere in the world.

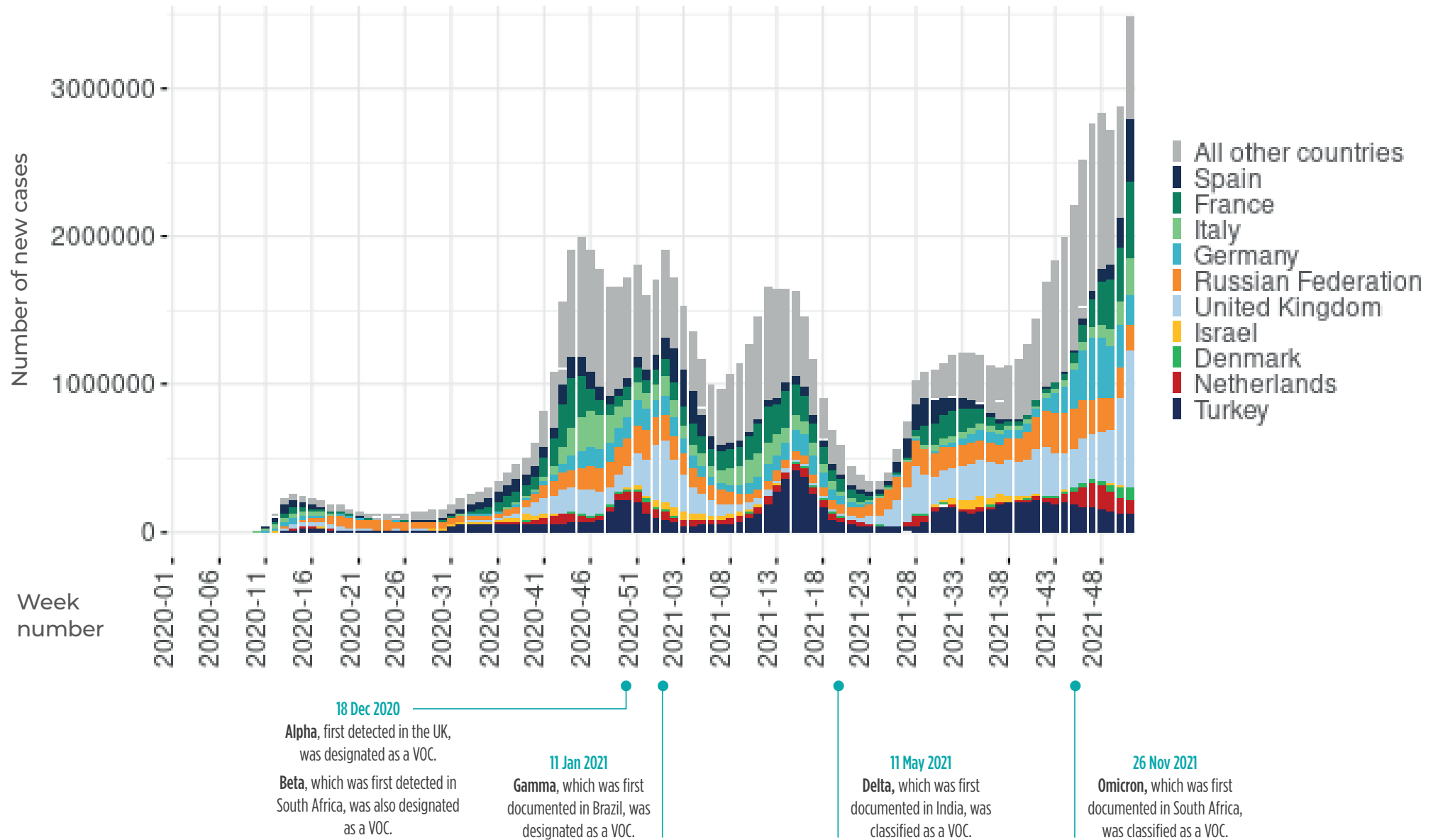
Following the rapid roll-out of vaccines, many high-income countries, particularly in the western part of the Region, began seeing signs of stabilization marked by reduced mortality and hospitalization rates. Uptake across the Region increased rapidly and, as of November 2021, over 53% of the total population had received a complete vaccination series. A study<sup>1</sup>(2) published in November 2021, by the WHO Regional Office for Europe and European Centre for Disease Prevention and Control (ECDC) estimates that 470 000 lives have been saved among those aged 60 years and over since the start of COVID-19 vaccination roll-out in 33 countries across the WHO European Region.

However, from September 2021, the European Region saw a significant resurgence of cases as it approached the winter season. The start of 2022 will bring new challenges as countries face this most recent wave of transmission, coupled with the fight against vaccine hesitancy and the new circulating Omicron variant.

In the context of the pandemic, a combination of vaccination and strong public health measures offer the clearest path to getting transmission under control. The trajectory of COVID-19 in the coming weeks, months, and year will be largely determined by the decisions and actions taken by individuals, communities and governments. With the support of Member States and partners at the global, regional, national, and community levels, WHO/Europe continues to work to reduce transmission across the European Region.

1. The 33 countries analysed are: Austria, Belgium, Croatia, Cyprus, Czechia, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom (England), and United Kingdom (Scotland).

Number of new confirmed COVID-19 cases reported by epi-week in the WHO European Region, from 16/02/2020 (epi-week 8) to 31/12/2021 (epi-week 2021-52)



## B. Delivering the COVID-19 response in the European Region

© WHO / Uka Borregaard



WHO's Emergency Response Framework (ERF), adopted in 2017, sets out WHO's Incident Management System (IMS) as a standardized structure and approach adopted to manage responses to public health events and emergencies. The use of six regional incident management support teams (IMSTs) drove WHO's implementation of the COVID-19 Strategic Preparedness and Response Plan (SPRP). (3, 4)

Since its activation on the morning of 23 January 2020, the WHO Regional Office for Europe's (WHO/Europe) COVID-19 IMST has provided an agile, adaptive framework to respond to the specific COVID-19 preparedness and response needs of a highly diverse Region (A timeline of WHO's response to COVID-19 in the WHO European Region: a living document) (7). A tailored strategy and concept of operations was developed for the Region to prevent the spread of the pandemic, save lives, and minimize adverse impacts on populations, guiding the response and WHO's actions to support countries.

The WHO Regional Office for Europe's response is built around the comprehensive global SPRP to end the acute phase of the pandemic and build resilience and readiness for the future by establishing four main goals: (i) prepare and be ready, (ii) detect, protect and treat, (iii) reduce transmission, and (iv) innovate and learn.

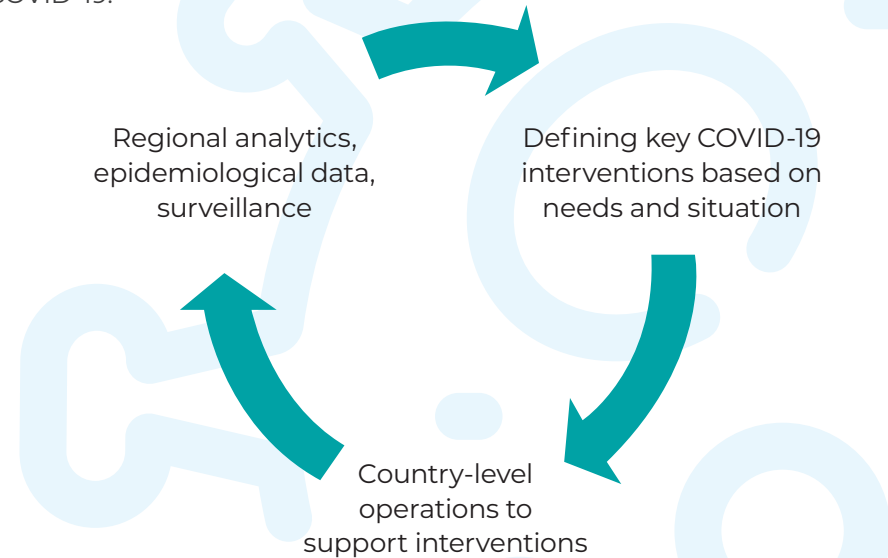
The WHO/Europe response framework has relied on a dual track of continued health system functionality and emergency response operations in a cycle of (i) defining interventions for countries, (ii) delivering support through country operations, and (iii) collecting/analysing regional epidemiology, surveillance and other health information. It also looks towards phasing in new learning and opportunities for capacity-strengthening into resilient health systems that address everyone and leave no one behind. As such, the WHO/Europe response included, from the very beginning, health systems experts and functions.

COVID-19 testing centre in Copenhagen, Denmark

### WHO/Europe's IMST structure and cross-cutting work streams

Cross-cutting Work Streams	<ul style="list-style-type: none"> <li>Prevent outbreaks, delay spread, slow and stop transmission.</li> <li>Provide optimized care for all patients, especially the seriously ill.</li> <li>Minimize the impact of the epidemic on health systems, social services, and economic activity.</li> </ul>			
	Public Health & Social Measures	Clinical & Health Interventions	Surveillance & Laboratory	COVID-19 Vaccine
Operations Support	[Horizontal purple arrow]			
Communication	[Horizontal purple arrow]			
Essential Health Services & Symptoms	[Horizontal purple arrow]			
Country Operations & Partnership	[Horizontal purple arrow]			
Special Projects	[Horizontal red arrow]			
Planning, Info Management & Reports	[Horizontal yellow arrow]			
	[Vertical green arrow]	[Vertical green arrow]	[Vertical green arrow]	[Vertical green arrow]

The IMST was designed and organized to meet a range of country needs and built in the following features to the WHO/Europe concept of operations for COVID-19:



- **Strategic**, providing continuously updated guidelines and technical recommendations, combined with capacity-building activities such as webinars and training sessions.
- **Technical**, providing global and regional expertise, channelling financial resources and delivering essential supplies to where they are needed most.
- **Operational**, providing continuous country-specific support through on-the-ground deployments and missions staffed by technical experts, and through technical assistance delivered remotely.

To best serve its Member States, WHO's response has been adapted to the diverse contexts across the European Region, where countries implement a wide range of national and subnational responses. This has required a flexible and adaptable approach to national and subnational contexts, which is helping to prepare countries for a phased transition from widespread transmission to a steady state of low-level or no transmission. This approach also accommodates the need to look to the future and incorporate new lessons and opportunities to strengthen capacity and build resilient health systems that will leave no one behind.

### **Countries at the centre, with subregional hubs steering the response**

Countries witnessing widespread transmission of COVID-19 rapidly saw public health systems, particularly intensive hospital care, pushed to their limits. WHO/Europe's immediate strategy for countries was: (i) to slow and stop transmission, prevent outbreaks where possible and delay spread where not; (ii) to provide optimized care for all patients, especially the seriously ill; and (iii) to minimize the impact of the epidemic on health systems, social services and economic activity.

WHO/Europe configured its response to COVID-19 using the scenario of many countries of the Region entering a state of community transmission. The focus quickly moved towards sustained response with continued and broad engagement required across European and Central Asian countries.

WHO/Europe's IMST extends well beyond the WHO Regional Office for Europe. The existing hub-and-spoke structure in place for the WHO Health Emergencies Programme (WHE) in the Region has been heavily utilized in the context of COVID-19. WHO/Europe's country offices maintain IMSTs. The IMSTs engage directly with United Nations country teams (UNCTs) and take a whole-of-government approach to reinforce and strengthen the role of national and subnational health authorities.

During the COVID-19 pandemic, the hub-and-spoke structure prioritized 17 countries and territories in the Region based on the following characteristics: health systems in transition, ongoing conflict, political challenges or political instability. As part of the COVID-19 IMST, three WHE Hubs (Balkans, South Caucasus and Central Asia) have served as technical and operational extensions of the Regional Office

in Copenhagen, positioned directly to accelerate operational support to priority countries.

### **Partner coordination**

The COVID-19 response of WHO/Europe's COVID-19 IMST has relied heavily on fostering existing and new strategic partnerships with hundreds of international, regional, national, and local partners to promote multisectoral responses in the Region. Such partners include the European Centre for Disease Prevention and Control (ECDC), which is a critical partner for WHO both within and beyond the European Union/European Economic Area (EU/EEA). In May 2020, WHO/Europe established a joint task force with the Central European Initiative (CEI) to step up regional coordination regarding the COVID-19 response. This task force has enabled experts in various health fields to work together to equip Member States with robust mechanisms to tackle common challenges and strengthen their COVID-19 response, with tangible results for the entire Region. Additionally, WHO/Europe has convened high-level meetings with representatives of the ministries of health of countries of the Commonwealth of Independent States (CIS), health-care experts and representatives of other United Nations (UN) agencies, such as the Joint



United Nations Programme for HIV/AIDS (UNAIDS), issuing joint memorandums that address new pandemic challenges and other health-care issues in the CIS.

Other new and existing platforms were established and strengthened to coordinate the response, such as the Regional Working Group on COVID-19 vaccination, UN–Red Cross Movement and WHO coordination platform, and the joint WHO–ECDC networks for laboratory and COVID-19 surveillance in the Region. Partnering with local communities has also been a strategic element of WHO’s response. In April 2021, for example, WHO launched an initiative to empower civil society organizations (CSOs), as these have made a critical impact in reducing the effects of COVID-19 on individuals and communities, particularly the most vulnerable.

These critical strategic partnerships have been developed and cultivated in parallel with the operational partnerships that have enabled WHO/ Europe to translate these strategies to lifesaving outcomes in the field. Operational partners have continued to play a critical role, especially in the first six months of 2020. These include emergency medical teams (EMTs), the Global Outbreak Alert and Response Network (GOARN), rapid response mobile laboratories, public health institutes, and academic institutions such as the London School of Hygiene and Tropical Medicine, among others.

Though long recognized by WHO, the responses to this pandemic have only reinforced the notion that no single country or organization alone can protect people’s health in times of emergency. An effective response depends on collaboration among the work of many partners dedicated to improving the health and well-being of populations affected by crises. Leaving no one behind and building back better remain the ultimate goals of WHO’s work in the European Region.

### Public communication and analysis

In addition to the operational nature of the IMST’s COVID-19 response, WHO/Europe has ensured continuous communication and transparency with the public, ranging from media updates (i.e. interviews with news outlets), statements by the Regional Director, technical briefings, and beyond. Feeding into this delivery of important information is analysis of the latest science to increase the understanding of the disease. Such analysis efforts include assessment missions, behavioural insights work, and more.



Visit to Caraiova health centre in Romania as part of the COVID-19 response mission

## C. Selected challenges of the regional response and mitigation measures

### Providing consistent support in responding to COVID-19 for all countries in the Region

WHO/Europe used the WHE hub-and-spoke model, which had a key role in the response as a means to organize the response and have strong in-country support.

WHE priority countries were also identified to have a more targeted response.

SPRP funds were distributed based on assessed need to the Regional Office and WHO country offices.

### Tailoring WHO recommendations to very different contexts in an ever-changing environment

WHO/Europe mobilized partnerships and communication channels with Member States to have a rapid understanding of the situation.

Technical working and advisory groups were also established to develop consensus on guidance for the European context, including for schools, and for vaccination roll-out.

Strategic advisory groups were also established directly by the Regional Director for Europe.

### Rapid changes to the COVID-19 response and trends across the Region

WHO/Europe established innovative data collection, monitoring and visualization systems to track countries' COVID-19 response and trends across the Region (e.g. PHSM calibration tool (5) and dashboard/platform (6), and subnational data collection (7) and visualization).

### Massive volume of information and data generated by the pandemic needs to be effectively managed to create knowledge

WHO/Europe has allocated significant efforts to documenting the WHO/Europe response through the creation of an innovative knowledge management system, including the development of public monitoring of the regional response (8), timeline (1), operational updates (9).

These efforts aim to foster transparency and increase credibility.

### Maintaining a strong and motivated workforce throughout the protracted and wide-ranging COVID-19 response

WHO/Europe repurposed Regional Office staff to support the response in early 2020. The COVID-19 IMST ramped up human resources by hiring new staff and consultants.

WHO/Europe fostered existing and new operational partnerships (e.g. GOARN, EMT, ECDC, etc.) to bolster the response workforce on the ground.

WHO/Europe maintained workforce motivation and a spirit of comradeship through team-strengthening initiatives.

### High regional burden of COVID-19 disease and mortality

WHO/Europe has ramped up and established consistent channels of support and communication to disseminate the latest guidance (e.g. providing tailored support for Member States, facilitating deep dives, individual calls with WHO Representatives, and other policy-level dialogues).

## D. Implementation and operational support – the IMST in action



**340**

Number of missions

**25**

Member States/  
territories with  
missions

**1.4M**

Essential COVID-19  
supplies to Member  
States (kg)

**89.6M**

Shipments to  
Member States  
(US\$)

**772**

Webinars,  
training sessions,  
workshops

**4.27K**

Participants in  
webinars, training,  
and workshops

## Leadership and IMST coordination

Leadership and coordination of the COVID-19 response have been critical determinants of the impact of WHO's work in countries. The leadership of WHO across a diverse Region has required continuous engagement at the highest levels of the WHO Regional Office for Europe with national leaders and regional institutions.

Within WHO, the pandemic required massive repurposing of staff, which remains in place, and extensive coordination of the operational response, ensuring that subject matter experts have the information they need; monitoring and tracking needs and activities at the country level; organizing financial, supply and human resources; and reporting across WHO and beyond it to the public.

### Key highlights and impact across Europe and Central Asia

#### 1. Establishing leadership of WHO across Europe and Central Asia

WHO/Europe has promoted and facilitated learning for Member States to help them optimize the COVID-19 response and adjust approaches. The Regional Director and the Regional Emergency Director have engaged with regional bodies and held policy dialogues with ministers of health and heads of States from across the Region, which allowed for an exchange of best practices and lessons learned between countries and regions. Since March 2020, more than 64 multilateral, subregional discussions regarding the response to COVID-19 have been held with ministers of health from 50 European countries and territories.

#### 2. Defining the shape and the form of WHO/Europe's response

Flexibility and an agile management system are essential for the coordination of the widespread COVID-19 response. The incident management team (IMT) has played a key role in supporting the incident management of the COVID-19 response by providing regular updates to the whole of the IMST on the COVID-19 situation throughout the Region, and in sharing critical information across the entire IMST. This facilitated overall improved coordination and enhanced tailoring of response activities.

#### 3. Operationalizing the strategy

From the activation of the IMST in Europe, the WHO Regional Office for Europe deployed emergency planners, public health professionals and partners to support countries to prepare for

cases and respond to the various waves of the COVID-19 pandemic. The IMT has supported the overall coordination of operations through regular meetings with the WHE Hubs and weekly data collection from the WHO/Europe country offices. Through regular communication across the IMST and with those working on the ground, the IMT was able to register all identified challenges and tailor the COVID-19 response to the specific needs of individual countries.

Deployments have been a critical part of WHO/Europe's COVID-19 response through the deployment of technical WHO experts or partners, including through GOARN and EMTs. Over the past two years, there have been 343 missions to 25 Member States, of which 39 have been operational partner deployment missions. WHO's deployments included

“The IMST is like a chariot that is loaded with all the necessary resources and people to deal with an emergency, led by expert managers who quickly run where we need to go, steering everybody in the right direction. We bring in all the necessary “brains” from across the Organization and beyond, so that the expertise relevant for that particular emergency is available in one place. If we need an expert on vaccines, we bring them in. Likewise, for health systems or whatever it may be.”

**Dr Dorit Nitzan**  
WHO/Europe Regional  
Emergency Director

8 EMTs providing life-saving care to COVID-19 patients, 26 GOARN partners, including mobile laboratories, epidemiologists, and other public health experts to 10 Member States.

In addition, through regular reporting on IMST activities, the IMT has been able to further demonstrate the extent of the work being executed across the Region. Reports, including operational updates, timelines and highlights from the field, are published to further document the roll-out of the response.

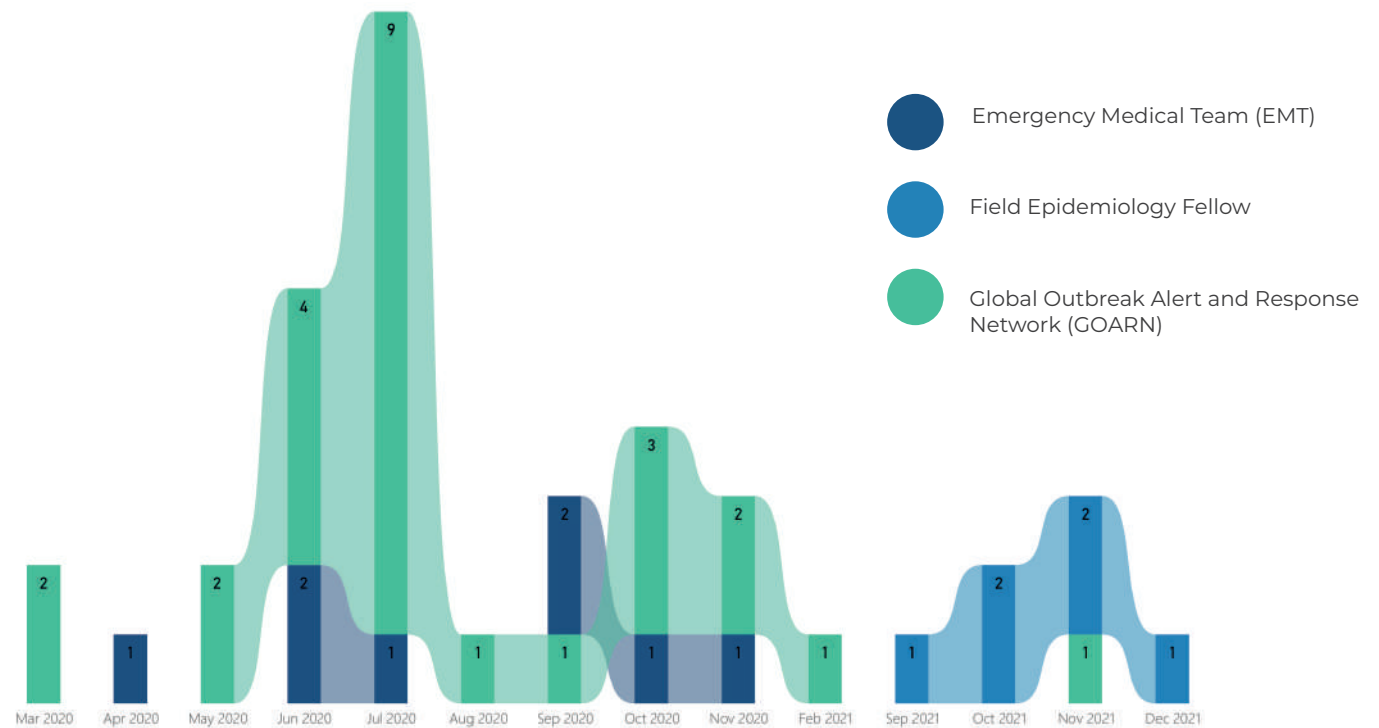
#### 4. Knowledge management and reporting

Information management remains a key aspect of the COVID-19 response and has been essential in the decision-making process at both the regional and country levels. WHO/Europe has allocated efforts to the development of data visualization and data-sharing systems, such as dashboards (8) to inform decision-making and strategies to best support countries with the resources available, and enable timely and transparent external reporting and information-sharing.

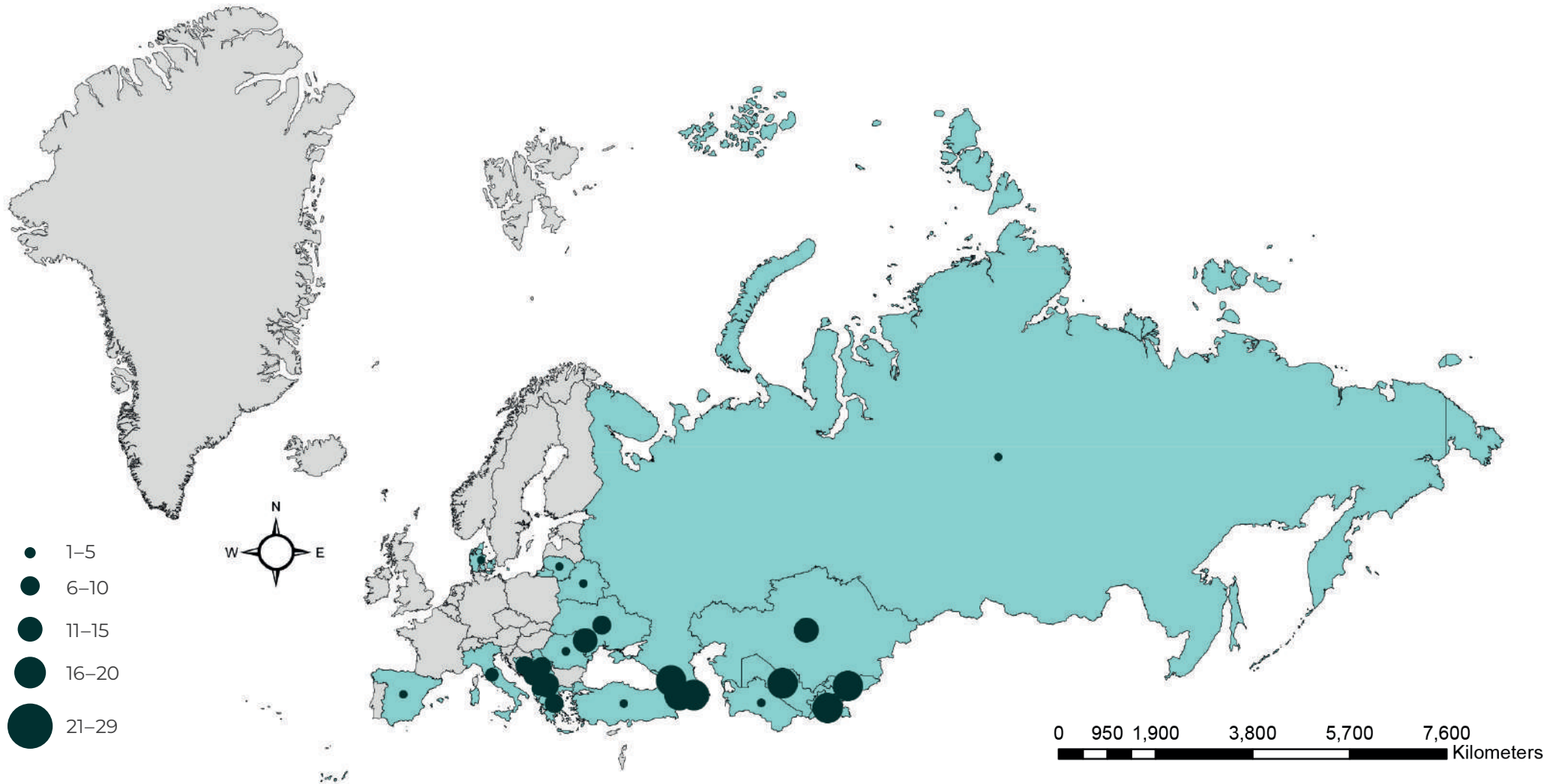
These tools have been critical in documenting the IMST's response and tracking the various activities being carried out across the Region.

Furthermore, WHO has simultaneously been working to integrate strong information management practices extending beyond this current response. These practices focus on lessons learned to enable stronger knowledge management in the years to come.

Operational partner deployments by month



# Number of WHO missions 2020–2021



The designations employed and the presentation of this material do not imply the expression of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries. **Note:** this map is based on collected data from the WHO Regional Office for Europe IMST Pillar reports.



# Communication

## Engaging and mobilizing communities

Communicating COVID-19 risks and engaging communities has been central to the ever-evolving nature of the pandemic and its response. The Communication Pillar has been supporting Member States in the European Region with accurate and relevant health messages to governments and individuals, accessible and timely Regionwide campaigns, tailored capacity-building, and inclusive partnerships to understand communities and co-design interventions.

## Key highlights and impact across Europe and Central Asia

### 1. Putting countries at the centre

The diversity of the 53 Member States in our Region means that no “one-size-fits-all” approach to the pandemic response works, especially for communication. Throughout the pandemic, the Communication Pillar’s dedicated focal points have tailored communications to local needs, ensuring that responses were both accurate and appropriate. WHO/Europe has provided support with strategies and tools, virtual and on-site missions, campaigns and influencers’ engagement, not only to help countries improve their response efforts, but also to strengthen risk communication and community engagement (RCCE) systems and skills for the future.

### 2. Providing guidance and tools for tailored interventions

Shortly after COVID-19 was declared a Public Health Emergency of International Concern in January 2020, WHO/Europe developed RCCE strategy templates for COVID-19 for health authorities to adapt to their situations and contexts. All tools – including RCCE for vaccination and contact tracing, tips to speak to the media and set up hotlines, and guidance to engage health workers, youth, journalists and religious leaders – have been informed with data from social listening and behavioural insights, and feedback from RCCE research.

WHO/Europe communications experts have taken infodemic management to the next level, monitoring platforms, working with fact checkers, developing guidance and building skills to manage the spread of dangerous rumours and misinformation.

“Risk communication and community engagement has never been so vital as a public health intervention and never so high in government agendas as during the COVID-19 pandemic. Its role in health emergency preparedness and response will never be the same.”

**Ms Cristiana Salvi**  
Communication Team Lead

### 3. Fostering coalitions to amplify our impact

WHO/Europe joined forces with the United Nations Children’s Fund Eastern Europe and Central Asia (UNICEF ECARO) early in the pandemic to optimize RCCE resources and maximize impacts at the country level. This partnership became part of a task force with the International Federation of Red Cross and Red Crescent Societies (IFRC) and the ECDC to develop RCCE acceleration plans for countries of epidemiological concern. The Communication Pillar established a one-year collaboration with a community of 2000 youth influencers for message outreach and peer influence, and a network of national and regional CSOs to bridge authorities and communities for emergency resilience.



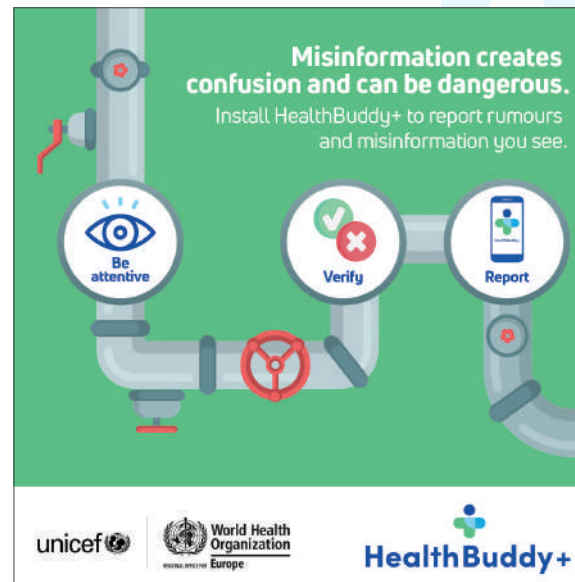
#### 4. Engaging the community – the Civil Society Organization Initiative

The CSO Initiative was launched in early 2021 and invested in 11 organizations with a potential reach of over 2.3 million people in eight countries of the European Region. The projects engaged diverse communities – such as refugees and migrants, Roma populations, people living with disabilities or impacted by conflict, religious leaders, older people, and women – to build community structures, deliver services, train volunteers, and establish community dialogues. Overall, the initiative empowered CSOs to become “agents of change”, strengthening the “3 Rs” of community readiness, response, and resilience to health emergencies. It also started WHO/Europe’s transformation to working with communities in a more bottom-up way.

HealthBuddy+ was launched online in May 2020 by the WHO Regional Office for Europe and UNICEF ECARO to answer people’s questions and monitor perceptions about COVID-19. The tool, available on the web and as an app, has been translated into 20 languages and embedded in over 15 partner platforms. At the end of 2021, HealthBuddy+ reached about 4 million individuals with accurate and tailored COVID-19 information.

#### 5. Communicating risks and preventive measures

Over the past 2 years, WHO/Europe has been continuously reporting on this pandemic with timeliness, accuracy, relevance and transparency as guiding principles. Through stories, tiles and videos, news and interviews, communications have never been more open and regular in updating governments and communities on evolving situations, response measures and health advice, thus building WHO’s reputation as a trusted source of information.



#### 6. Communication Pillar achievements

Some key figures from 2020–2021

##### Country Support

**300+**  
RCCE messages & materials created

**43**  
language translations

##### Risk Communication

**35K**  
COVID-19 related media articles

**3.4M**  
engagements on social posts

##### Community Engagement (2021)

**8**  
projects by 11 CSOs

**2.3M**  
overall reach in 8 countries

##### Infodemic Management

**4M**  
people used HealthBuddy+

**11**  
countries received IM training

##### Capacity-building

**75+**  
national trainings & webinars

**3K**  
frontline responders participated

## Surveillance, analytics and laboratory

### Detecting and containing emerging threats

As governments around the world, including those in the WHO European Region, turned to their scientists for answers and indicators to guide their public health policy-making, the COVID-19 IMST built on the existing joint network between WHO/Europe and ECDC influenza surveillance and laboratory and International Health Regulations (IHR, 2005) national focal points.

This created a network of public health epidemiologists and laboratory specialists collaborating and sharing their growing understanding of the characteristics of this novel virus and best practices on how to detect, sequence, and contain SARS-CoV-2. This work, developed through the Surveillance, Analytics and Laboratory Pillar, has proven invaluable to the European Region as it monitored the epidemiology of the infection and emergence of new VOCs, and published applied research to understand the impact of public health interventions such as vaccination.

© WHO / Uka Borregaard



COVID-19 preparedness in North-West Syria

“These insights helped form our messages to countries in terms of disease surveillance and the preparations their laboratories and hospitals needed to take.”

**Dr Richard Pebody**  
Surveillance Team Lead

### Key highlights and impact across Europe and Central Asia

#### 1. Rapidly understanding SARS-CoV-2 and variants

The European Region has had a high burden of COVID-19 disease, but it has also been able to generate knowledge rapidly and share it widely for the benefit of the world. Throughout the pandemic, WHO/Europe has maintained 24/7 communication regarding the IHR (2005) with national IHR focal points for real-time monitoring of the SARS-CoV-2 situation as it unfolds, as well as an exchange of emergency information.

There has also been rapid development and dissemination of WHO UNITY special studies (10) across the Region, and technical, financial and laboratory guidance provided to support Member States, in particular low- and middle-income countries (LMICs), to understand the key characteristics of this novel virus, including transmissibility, severity of infection and seroprevalence. These developments have evolved to address gaps in current knowledge, for example, the emergence of new variants.

## UNITY studies

- **Transmission studies:** The first few COVID-19 X cases and contacts (FFX) (11); household transmission of COVID-19 (HH) (12).
- **Risk factor studies:** Assessment of COVID-19 risk factors among health workers – cohort and case control (HW CO (13) and HW CC (14)).
- **Seroprevalence studies:** Population-based age-stratified seroepidemiological investigation protocol for COVID-19 infection (SERO) (15).
- **Vaccine effectiveness studies:** Cohort study to measure COVID-19 vaccine effectiveness among health workers (HW VE) (16); COVID-19 vaccine effectiveness against hospitalizations for severe acute respiratory infections (SARI VE) (17).

In total, 16 Member States and areas were supported by WHO/Europe to conduct a UNITY study(ies) – Albania (FFX, SERO, HW VE), Armenia (SERO, HW CO), Azerbaijan (HW VE), Belgium (HW CO), Belarus (SERO), Bosnia and Herzegovina (FFX, SERO), France (HW CO), Georgia (FFX, SERO, HW, SARI VE, HCW VE), Italy (HW CC), Kazakhstan (FFX, SERO, HW CC), Kyrgyzstan (SERO, SARI VE), North Macedonia (SERO, SARI VE), Republic of Moldova (SERO), Serbia (HW, SARI VE), Ukraine (FFX, HW) and Kosovo<sup>2</sup> (SERO, SARI VE, HW CC).

<sup>2</sup> All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

## 2. Establishing networks to share scientific and public health developments in real time

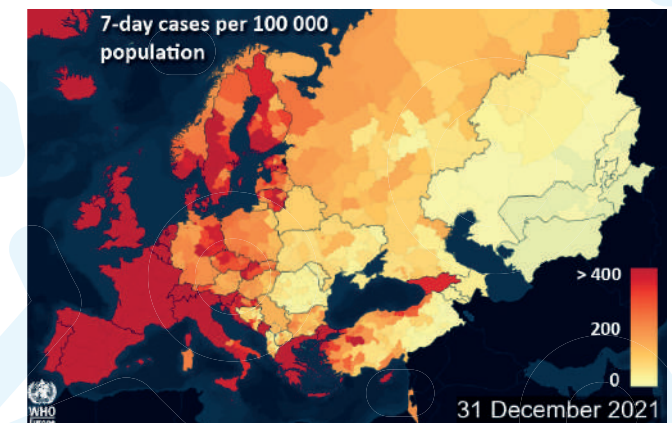
Through this network of national epidemiology and laboratory focal points, scientific and public health developments have been shared through a series of joint WHO Europe/ECDC webinars regarding surveillance, VE, sero-epidemiology studies and variant viruses. WHO/Europe has continued working to strengthen information-sharing capacities by organizing workshops focused on scientific writing, data management, and analysis. The Surveillance and Laboratory Pillar has also coordinated technical advice on the application of the tripartite joint risk assessment on the transmission of SARS-CoV-2 in the animal–human–environment interface.

## 3. Establishing systems to monitor COVID-19 spread and impact of virus and effectiveness of interventions

WHO/Europe has continuously monitored open-source information for COVID-19 early warning and context assessment using Epidemic Intelligence from Open Sources (EIOS), which is successfully employed to monitor for signals on rapid changes in epidemiological trends, pressures on health systems, outbreaks in specific settings (schools, prisons, long-term care) or populations (vulnerable groups, areas where official reporting may be weak).

WHO/Europe has supported countries to leverage influenza surveillance and laboratory systems developed as part of the Global Influenza Surveillance and Response System (GISRS) for monitoring COVID-19 and expediting the development of regional and national epidemiology and laboratory networks for SARS-CoV-2 detection and characterization together with ECDC.

A regional COVID-19 cases and deaths dashboard (6) (in both English and Russian) has been engineered and continuously developed to provide daily information on the COVID-19 situation. This platform has now been viewed 12.3 million times.



WHO/Europe's subnational heat map, developed to further analyse epidemiological trends.

Source: WHO European Region COVID19 Subnational Explorer (7).

WHO/Europe has also developed a subnational explorer (7) showing epidemiological hotspots within each country. This platform receives over 800 views every day and the data are used in visualizations by external sources, including media and research institutions, adding up to nearly 250 000 daily requests.

A regional weekly surveillance bulletin was developed, with subsequent development of a Joint WHO/Europe/ECDC COVID-19 surveillance bulletin (18) on an interactive web platform with regional- and country-level outputs pertaining to epidemiology, health system data, public health and social measures (PHSM), and vaccination uptake in different population groups.

The Surveillance Pillar, together with the Vaccinations Pillar, have led a multi-agency modelling network to identify optimal vaccine strategies for reducing COVID-19-related morbidity and mortality and coordinating the development of two country-level scenario modelling tools by academic partners (Imperial College London and London School of Hygiene and Tropical Medicine).

WHO/Europe is now working with several Member States and areas, including Albania, Georgia, Azerbaijan, Kyrgyzstan, Serbia, North

Macedonia, and Kosovo<sup>3</sup>, in implementing HCW and SARI VE studies to evaluate the performance of newly introduced COVID-19 vaccines in diverse geographical settings.

#### **4. Increasing SARS-CoV-2 laboratory systems to detect, monitor and characterize circulating viruses and variants**

As the virus continues to evolve, it is necessary to strengthen national and regional capacities for genetic and antigenic characterization, which require large-scale technology transfers, procurement of laboratory reagents, and supplies for reverse transcriptase-polymerase chain reaction (RT-PCR), antigen rapid tests, serology, single nucleotide polymorphism (SNP) assays, and genomic sequencing.

WHO/Europe has provided support and guidance to ensure high-quality laboratory investigations for SARS-CoV-2 through external quality assessment programmes in over 800 laboratories. This support included 20 training sessions in quality management systems (QMS) and over 200 mentoring visits for QMS implementation in more than 50 laboratories in the Region. WHO/Europe has also begun paving the way towards sustainability in the future, aiming for better preparedness and response to emerging respiratory and non-respiratory

threats through high-level dialogues addressing regulation of laboratory quality through laboratory licensing, accreditation and designation of national reference laboratories.

#### **5. Strengthening contact tracing during all transmission scenarios of COVID-19**

WHO/Europe has supported capacity-building in contact tracing and information exchange across the European Region by providing multicountry workshops for contact tracing focal points from 20 priority countries, as well as through tailored country training in contact tracing and RCCE, with participation of nearly 700 epidemiologists from 11 countries. These activities helped strengthen the contact tracing workforce in participating countries and facilitate the establishment of data collection on contact tracing indicators to monitor the timeliness and completeness of contact tracing efforts. Furthermore, case studies have been conducted to document COVID-19 contact tracing experiences across Member States to inform future national and international guidelines on case investigation and contact tracing.

<sup>3</sup> All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).



Laboratory training on single nucleotide polymorphism assay analysis for national specialists in Kazakhstan

## Public health and social measures

### Supporting agile and informed decision-making

Countries across Europe and Central Asia have had to make decisions to introduce, adapt or lift PHSM to mitigate the impact of the pandemic, taking into account both public health and socioeconomic impacts. WHO/Europe has worked with governments and partner organizations across sectors to ensure that such decision-making is agile, primarily based on the capacity of the health system to respond, and on a situational assessment of the intensity of transmission, while considering the effects these measures might have on the overall welfare of individuals and society.

### Key highlights and impact across Europe and Central Asia

#### 1. Monitoring, analysis, and data sharing on response measures implemented by countries

Continuous alignment and data sharing with the European Commission and ECDC on PHSM implemented by Member States, starting with a database, was initiated at the beginning of the pandemic when the first travel measures were implemented. Data sharing with Member States was done through technical briefings, online outreach, and digital tools such as the EURO Dashboard on public health and social measures (19) ("PHSM" tab), which has been viewed over 2.5 million times since its launch on 10 November 2020, as well as the recently launched PHSM platform (20) (November 2021).

“For all of us, it has been a continually evolving learning curve, with the biggest challenge being how quickly we can adapt to new knowledge and circumstances.”

**Dr Ihor Perehinets**

Public Health and Social Measures Pillar Lead

© WHO / Europe



Manas International Airport, Kyrgyzstan using signs to remind people to adhere to physical distancing rules



Assessment of COVID-19 readiness at points of entry of key border crossings in Armenia

## 2. Guiding coordinated decision-making on PHSM

WHO/Europe developed evidence-based policy briefs, tools and technical guidance, and facilitated consultations and dialogues to inform coordinated decision-making of PHSM across the Region and beyond. For example, the PHSM Calibration (5) tool helps define the situation at a country or regional level and provides policy recommendations on the types of mitigating measures that could be implemented in response. Since its launch on 15 September 2021, WHO/Europe has supported 18 Member States with PHSM calibration exercises.

## 3. Reviewing the response in real time (intra-action review (21))

WHO launched a new type of cross-cutting review methodology, intra-action review (IAR) in the summer of 2020 (first IAR in WHO/Europe was in August 2020 in Uzbekistan). This promotes continuous learning and improvement of the outbreak response at the country level, across pillars. WHO/Europe has supported several country IARs as well as provided training and lessons learnt webinars in collaboration with the European Union for Strengthened International Health Regulations and Preparedness Joint Action (EU JA SHARP) and ECDC.

WHO/Europe's guidance has had a special focus on the following PHSM:

**14 IARs** were conducted in the European Region utilizing WHO guidance. WHO directly supported missions on the ground in seven countries and areas, three in 2020 (Kyrgyzstan, Republic of Moldova, Uzbekistan) and four in 2021 (Montenegro, North Macedonia, Ukraine, Kosovo<sup>4</sup>).

<sup>4</sup> All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

### A. Points of entry and travel-related public health measures

WHO has supported online consultations with Member States, organized assessments of and training on points of entry for several countries, including Azerbaijan, Armenia, Georgia, Republic of Moldova, Tajikistan, Turkmenistan, and Ukraine. WHO has coordinated weekly meetings with IHR national focal points and the European Commission to align policies around travel and to inform on national decision-making regarding additional health measures that significantly

interfere with international traffic under Article 43 of the IHR (2005). Furthermore, in 2021, WHO produced and disseminated a new Operational framework for international travel-related public health measures in the context of COVID-19 (22) that intended to guide decisions on introducing, reintroducing or easing international travel measures.

### B. Mass gatherings and schools

- Jointly with the IMST surveillance team, a situation update procedure and methodology was developed to monitor mass gathering restrictions utilizing EIOS and the PHSM severity index. This has been operationalized throughout the European Region, including during the 2021 Union of European Football Associations (UEFA) tournaments.
- A Technical Advisory Group (TAG) on Safe Schooling During the COVID-19 Pandemic (first meeting on 26 October 2020) has served to identify findings from emerging evidence to inform policy decisions in terms of education, social, development and health outcomes for children and adolescents.





Health care workers at the Refugee Health Centre in Turkey

© WHO/Çelik Özürü

## Clinical and health interventions

### Preventing and mitigating COVID-19 disease

WHO has emphasized the importance of saving the lives of those who are most vulnerable, whether in the community, presenting to a health facility or residing in long-term care facilities. The Clinical and Health Interventions Pillar of the WHO COVID-19 IMST in the WHO European Region constitutes four main areas: (1) clinical management, (2) infection prevention and control (IPC), (3) medical supply chains, and (4) hospital readiness and surge planning.

WHO has worked to ensure that Member States in the WHO European Region are equipped with updated guidance in all relevant languages. WHO has ensured access to the tools, training and educational resources that translate the multidisciplinary guidelines into practice. WHO has worked to support the reorganization of health service delivery, the scale up and scale down of facilities, and oxygen provision and safety. Furthermore, WHO has ensured that health workers have access to all the necessary training and appropriate quality-assured supplies (personal protective equipment [PPE], medical equipment and therapeutics) to provide safe care to those most in need.

### Key highlights and impact across Europe and Central Asia

#### 1. Training and capacity-building for health-care and front-line workers

WHO provided capacity-building and informed health workers on evolving knowledge and updated WHO guidance. The Regional Office has held capacity-building webinars and online training modules in English and Russian with a wide range of experts in Member States and territories. A key resource to help reach additional frontline workers from across the Region was the OpenWHO platform, WHO's interactive web-based platform, which offers online courses translated into the local languages to increase their reach.

Clinical management training of acutely ill patients with COVID-19 in Kazakhstan.

“We need to recognize that throughout this period we have put people at the heart of our responses, using the best information available at the time and consulting with communities, countries and partners to make optimal decisions.”

**Dr Caroline Brown**

Clinical and Health Interventions  
Pillar Lead



## 2. From evidence-based guidance to action

WHO has produced numerous guidance documents related to clinical and health interventions throughout the course of the pandemic. The Regional Office has engaged with Member States to develop clinical guidelines that are evidence based and that support the appropriate standard of care, clinical management in emergency coordination and response mechanisms and establish fit-for-purpose workforces.

Participants from 53 Member States and territories engaged in webinars on infection prevention and control (IPC) and clinical management of COVID-19 patients.

**55 314**

participants attended OpenWHO courses from the European Region.



Health workers and patients in a COVID-19 treatment centre, Samarkand, Uzbekistan

© WHO/Europe

## 3. Assessments to strengthen clinical and health interventions and programmes

The Regional Office has supported countries in assessing their IPC and clinical health management capacities. For example, WHO has directly supported national IPC focal points in reviewing national IPC guidance for COVID-19 (in 13 countries) and strengthening national IPC programmes. Furthermore, the Regional Office has helped countries to establish pharmaceutical supply chains for emergency operations using the UNICEF maturity model.

## 4. Readiness, preparedness, and scale up/ scale down of the COVID-19 surge

WHO has provided technical support for hospital readiness, including surge planning and oxygen scale up and safety practices, to support Member States in increasing the capacity of care for COVID-19. This has included development of operational response plans and supporting individual hospitals and facilities through in-country missions and remote support.

## Operational support and logistics

### Delivering essential supplies

Ensuring sustainable access to essential supplies and health commodities has been a priority of the Regional Office throughout the pandemic response. Supply procurement has been based on the assessment and prioritization of Member States' needs and the allocation of different types of supplies in the context of COVID-19. Within WHO/Europe, teams have been working on the ground to strengthen logistics and supply chains and ensure that these supplies reach the most crucial end-points and are utilized in the most effective and efficient means possible to save lives.

### Key highlights and impact across Europe and Central Asia

As part of the COVID-19 response, a regional emergency stockpile was created. The stockpile stores supplies in two locations, at the WHO Regional Office for Europe in Copenhagen, Denmark and at the UN Humanitarian Response Depot in Brindisi, Italy. The current value of the supplies stored is US\$ 158 307. More supplies are expected to be received with a total value of US\$ 254 357. This stock comprises PPE, biomedical devices, laboratory supplies and visibility items. In addition, a new position for an operational support and logistics officer was created for the first time at the regional level to further support the coordination and distribution of supplies across the Region.

1. Supplies (in numbers) delivered by the WHO Regional Office for Europe to support Member States in the COVID-19 response

# 539

Total shipments

# 1.4M

Supplies received in kg

# 31

Member States that received supplies

# 89.57M

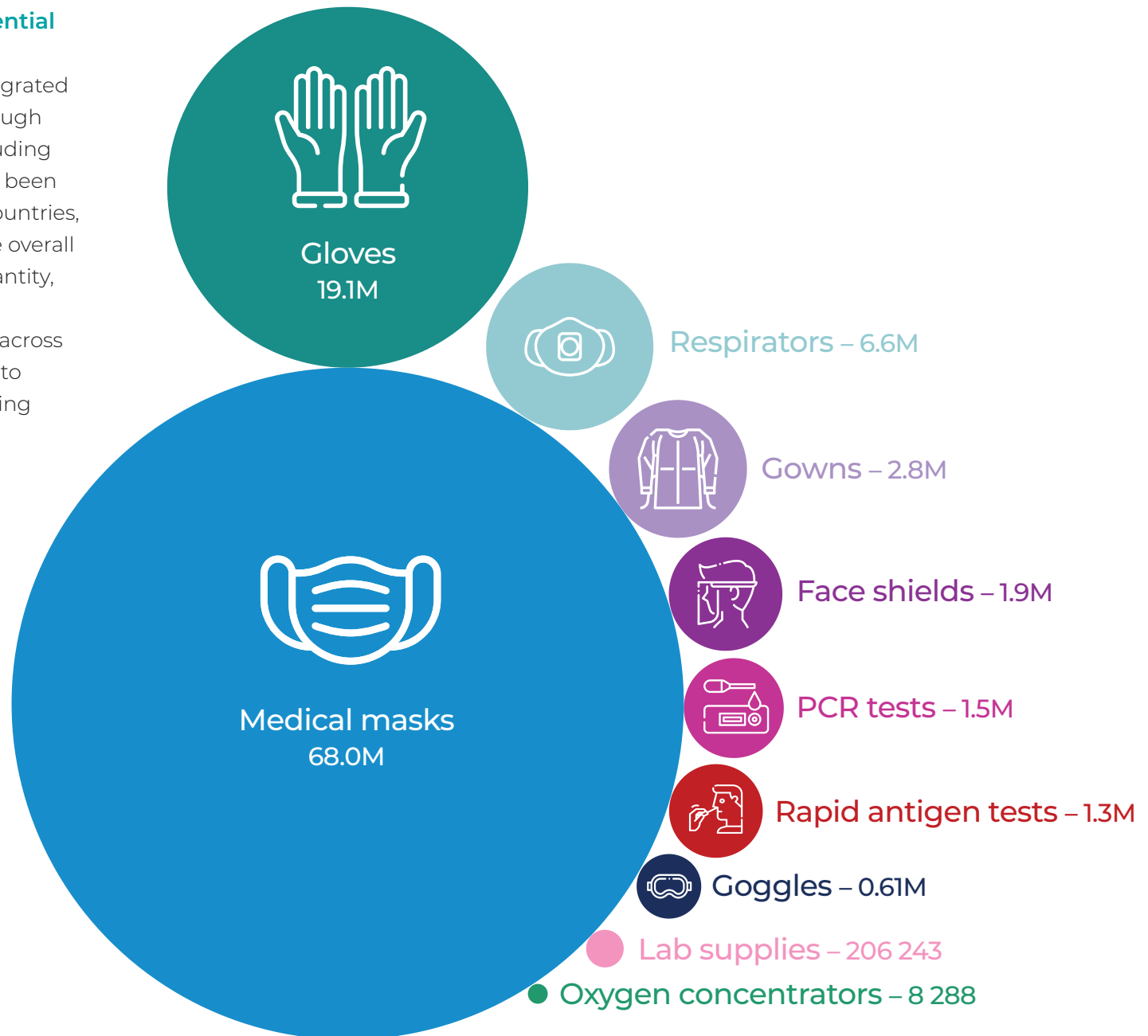
Supplies received in US\$



WHO Country Office in Kazakhstan receives and distributes shipments in August 2021.

## 2. Monitoring the provision of essential COVID-19 supplies

The distribution of supplies is fully integrated as part of the COVID-19 response. Through the development of various tools, including a supply dashboard, WHO/Europe has been able to closely monitor the needs of countries, track the shipments and report on the overall distribution of supplies in terms of quantity, weight and cost (US\$). The dashboard highlights the distribution of supplies across the countries of the Region and helps to see what categories of supplies are being shipped.





**PPE and laboratory equipment delivery to Kyrgyzstan on 30 April 2020.**

The WHO Country Office in Kyrgyzstan, together with the Ministry of Health of Kyrgyzstan, received a shipment of PPE and laboratory consumables as part of the fight against COVID-19.

**WHO/Europe increases support to countries during critical phases of the COVID-19 response.**

On 18 October 2021, as part of a broader mission to strengthen country-level response activities, WHO donated 34 000 COVID-19 rapid diagnostic tests to Romania, provided 200 oxygen concentrators in response to a shortage of oxygen and additional COVID-19 protective equipment.



**Value of supplies distributed by WHO**

- < \$100 001
- \$100 001 – \$1 000 000
- \$1 000 001 – \$10 000 000
- \$10 000 001 – \$50 000 000
- > \$50 000 000
- other countries



**COVID-19 operational support and logistics mission to the western Balkans.**

Between 15 and 23 March 2021, health emergency logistics experts from the WHO Regional Office for Europe conducted a mission to support several countries in the western Balkans. During the mission, rapid assessments were conducted in procurement, logistics, customs clearance and human resource capacities.

The designations employed and the presentation of this material do not imply the expression of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

**Note:** based on collected data from the WHO Regional Office for Europe Operation, support and logistics unit.



Clinical management training of acutely ill patients with COVID-19 in Kazakhstan.

# Maintaining essential health systems and services

## Providing routine and emergency services

Health systems became overwhelmed and health services were constrained due to the large number of COVID-19 cases and hospitalizations. During the pandemic, the focus of health service delivery needed to change, requiring rapid shifts in priorities and allocation of resources while maintaining a baseline functionality for a dual-track approach (23). WHO/Europe has provided support in maintaining the population's access to non-COVID-19 essential health services throughout the COVID-19 pandemic and the developing of a functional and inclusive health-care system.

## Key highlights and impact across Europe and Central Asia

### 1. Ensuring the continuity of essential health services

WHO/Europe has worked to build a better understanding of the challenges and barriers in accessing essential health services within the Region. Through three rounds of the national pulse survey (24) on continuity of essential health services during the COVID-19 pandemic, data collection has been coordinated on the impact of COVID-19 on health systems and essential health services, as well as on countries' strategies to address backlogs of health services accumulated due to COVID-19. Findings have helped to inform policy dialogues and support decision-makers at national and local levels. Adding to this, household pulse surveys were developed to gather up-to-date information on

the population's physical and mental well-being, and access to safe, quality, people-centred essential health-care services throughout the pandemic. A systematic four-step approach was also developed as a tool for countries to rapidly assess the impact of COVID-19 on essential health services and develop an action plan based on the findings, which could restore and maintain the continuity of these services. Further technical assistance was provided to support countries and areas in implementing this approach in Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Republic of Moldova, and Tajikistan, and Kosovo.<sup>5</sup>

<sup>5</sup> All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

“At the beginning of the pandemic, we had online meetings with our counterparts in all the other WHO regions to discuss how to respond to COVID-19 from a health workforce perspective. Connecting remotely has enabled a much greater cross-fertilization of ideas than would have happened prior to the pandemic. This has also helped us provide flexible and fast responses to meet the needs of countries.”

**Dr Tomas Zapata**  
Essential Health Services  
Pillar Lead

### 2. Supporting Member States through high-level policy dialogues

WHO/Europe has been providing policy advice to Member States, particularly through the coordination of a high-level technical meeting held on 15 November 2021, which included chief medical officers and Directors-General of Health, on health system resilience and strategies to promote health services recovery. Support is also being provided to Member States on managing hospital capacities for the COVID-19 response and developing hospital strategic plans to improve access to and quality of health services, including but not limited to COVID-19 units.



### 3. Evidence-based guidance

Since early in the pandemic, technical guidance, policy recommendations, as well as research planning and monitoring tools, case studies and technical briefs have been supporting Member States in tailoring their national responses to manage COVID-19 while maintaining core essential services across the continuum of care. Other guidance has been supporting the integration of COVID-19 as part of routine health services, such as immunization services, cancer care, noncommunicable disease treatment, influenza management, among others.

Through a repository of up-to-date information launched together with the European Observatory on Health Systems and Policies and the European Commission Health System Response Monitor (HSRM) (25), the strategies on how countries have been responding to the COVID-19 outbreak have been analysed with a focus on the responses of health systems.

### 4. Addressing post-COVID-19 conditions

As the pandemic continued to evolve, WHO/Europe engaged with countries on the post-COVID-19 conditions (also known as “long COVID”) to develop national guidance to manage patients with these conditions, and to support health systems to adapt to them. Addressing

patients, providing guidance on disability and rehabilitation after COVID-19-related illness has been successfully translated in over 20 languages.

In addition, WHO/Europe convened two key events on this topic:

- The first ministerial meeting on post-COVID-19 conditions on 19 March 2021 (26) provided a vehicle for Member States of the WHO European Region to share experiences on data

utilization, burden sharing, and management of health systems’ response to people with post-COVID-19 conditions.

- The regional technical briefing on rehabilitation after COVID-19 on 28 September 2021 offered Member States information and resources to support the rehabilitation of patients after a COVID-19 infection.



Maintaining essential health services in Azerbaijan

# COVID-19 vaccine deployment

## Accelerating equitable access to vaccines

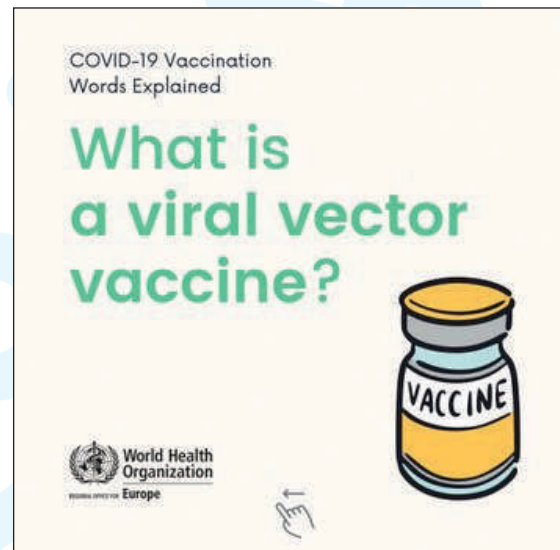
COVID-19 vaccines are a vital tool to help end the pandemic. The rapid roll-out of these vaccines to nearly all age groups in all countries has required an unprecedented effort at global, regional, national and local levels. WHO/Europe has provided support to its Member States since the start of the pandemic in preparing for and implementing COVID-19 vaccine deployment.

## Key highlights and impact across Europe and Central Asia

### 1. Providing consistent guidance throughout the response

In anticipation of the first available vaccine supplies, WHO/Europe developed and published a series of operational guidance documents (27) to help countries prepare for eventual vaccine deployment. These guidelines extensively covered all strategic and operational aspects of the vaccine roll-out, such as health workforce and security, service delivery modalities, legal and regulatory framework, acceptance and uptake, data and information management, development of national strategies, management and advocacy, post-introduction VE studies. As vaccines were granted approval for emergency use by WHO, resources for health workers (28) were swiftly developed based on the needs identified by WHO/Europe, including policy guidance, training modules, vaccine-specific job aids and fact sheets. The resources equipped

health workers in their roles as service providers and enabled them to become trusted sources of information on COVID-19 vaccines and vaccination.



“Special thanks are due to the health workers in every country who have worked tirelessly to roll-out COVID-19 vaccination as well as to sustain vital routine immunization. Looking ahead beyond the pandemic, WHO/Europe will work with Member States to ensure that the lessons learned through COVID-19 vaccination help us to build stronger and resilient immunization systems.”

**Dr Siddhartha Datta**  
Vaccination Pillar Lead

### 2. Mitigating the impact on control of vaccine-preventable diseases

The broader impact of the COVID-19 pandemic has included increased pressure on routine immunization systems, which have struggled in some countries to sustain the same level of coverage despite repurposed staff and public health measures to reduce population movement and virus transmission. A series of consultations with routine immunization programmes across the Region, country missions, as well as published guidance (29) have allowed WHO to assess the impact and provide support for sustaining routine systems and organizing catch-up services.



Ongoing COVID-19 vaccination  
at a centre in Romania

### 3. Country-focused support

Through subregional focal points, WHO/Europe has followed developments closely in every country and provided in-country support for COVID-19 vaccination in a range of technical areas. Country missions, training courses and webinars have focused on supply and procurement, cold chain capacity, communications, contraindications, safety surveillance, data management, and vaccination uptake and demand. Post-introduction VE studies have either already been initiated or are planned to take place in seven countries in collaboration with national authorities.

#### Key figures:

- **13** guidance documents (available in English and Russian)
- **1337** participants in health-care worker training sessions
- **4086** participants in webinars
- Over **25** country missions
- **12** countries conducted qualitative research to identify barriers to vaccination
- **11** data-for-action country consultations

### 4. Tracking vaccination coverage to follow progress and identify gaps

Data on COVID-19 vaccine doses administered are officially reported on a weekly basis to WHO by representatives from countries, territories and areas in the WHO European Region through The European Surveillance System (TESSy), which is curated by ECDC. WHO/Europe displays data on coverage per country, utilization rates of available doses, uptake among health workers and per age group where available (WHO/Europe COVID-19 vaccine programme monitor (30)). Gathering and analysing these data as well as other sources of information have made it possible to identify strengths, challenges and actions to improve COVID-19 vaccination through in-depth “data-for-action” reviews. So far, these reviews have been completed to support 11 countries/territory, with six more under way or planned for early 2022.

2021 was the first year of a 3-year joint effort of the EU and WHO Regional Office for Europe in six countries of the Eastern Partnership – Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova, and Ukraine – to help prepare for deployment of COVID-19 vaccines, plan for and implement vaccination campaigns, facilitate and monitor COVID-19 vaccination uptake (items include freezers, refrigerators, refrigerated vehicles, boxes, temperature indicators, thermometers, etc.).

### 5. EU/WHO joint project progress in 2021:



**35 930**

health-care workers and community influencers (teachers and religious leaders) have received training on COVID-19 vaccines and vaccination.



**6488**

items have been distributed to strengthen the countries' cold chain system.



**2200**

items have been procured to help administer vaccines (anaphylaxis kits and mobile vaccination kits).



**24 000**

stationery items, **75 000** information products, **8 million** gloves and masks have been procured.



**620**

IT equipment units (laptops, printers, etc.) have been procured.



**2**

buses have been procured for accessing vaccination centres.



**87 100**

awareness-raising products have been distributed, including videos, printed material, and billboards.

## 6. External communication

Transparency and open communication are vital to sustaining trust in WHO and uptake of COVID-19 vaccines. Therefore, all WHO/Europe press briefings have included a vaccine expert and, to date, these experts have participated in over 60 media interviews at global, regional and country levels and the impact has reverberated across the globe. The Regional Advisor of the Vaccine-preventable Diseases and Immunization Programme has been quoted in 1646 articles reaching a potential audience of 17 billion. Additionally, social media has been used effectively to disseminate evidence-based information on COVID-19 vaccination to the public with a series of posts on word definitions that reached the most viewers on Facebook and a brand lift study gathered data on the impact of these messages.

Together with the WHO Collaborating Centre on Vaccine Safety, a web platform (31) was created to support health workers by providing answers to frequently asked questions on WHO-approved vaccines, side-effects, contraindications, vaccine safety and effectiveness, etc. Each month, thousands of users visit the site to find answers to their questions in English, Czech, Russian, Spanish or Ukrainian with other languages still to come.



COVID-19 vaccination at the Bognor Health Center in West Sussex, United Kingdom.

## Special projects on vulnerable populations

### Leaving no one behind

Our experience during the COVID-19 response has shown that the risk of vulnerability has increased. Moreover, we have seen how vulnerabilities can change and vary from country to country, depending on the dynamics of the outbreak and the measures taken. Throughout the response to COVID-19, WHO/Europe's special projects focused on vulnerable populations have worked with national authorities and alongside international partners to tailor their responses specifically to humanitarian settings and high-risk groups, such as people living in informal settlements, long-term care facilities, prisons and youth detention centres. Other such groups include residents of refugee, migrant and internally displaced people (IDP) accommodation, and high-risk groups, including migrant workers, irregular migrants, people who experience homelessness, have disabilities and those with substance-use disorders, to ensure that they are not being forgotten in the wake of the pandemic.

In situations of need, the Vulnerable Populations Group has also provided support for on-the-ground emergencies, including in Belarus, Greece, Lithuania, Serbia and Turkey, addressing the COVID-19 response in migrant facilities. Support to outbreaks in prisons, including training and high-level

meetings, has also been arranged for Armenia, Lithuania, Montenegro, Republic of Moldova,, Tajikistan, Turkmenistan and Ukraine.

“It’s very important that COVID-19 responses are inclusive. Refugees and migrants as well as other vulnerable populations can face particular challenges, such as crowded living conditions, exclusion from COVID-19 testing, vaccination and treatment as well as working conditions with high exposure to COVID-19.”

**Dr Elisabeth Waagensen**

Technical Officer in the Migration and Health Programme and Vulnerable Populations Group



Operational partners and WHO/Europe deployed to support refugee populations in Lesvos, Greece

### 1. Training and capacity-building

A variety of training sessions and capacity-building webinars have been provided to health-care workers to better support vulnerable groups:

- in prison settings, to strengthen COVID-19 response capacities by reducing transmission and improving clinical management;
- training sessions on adaptation to the reception of migrants and webinars for people living in immigration detention;
- training sessions on mental health and psychosocial support for migrants and health-care providers in health-care facilities (i.e. hospitals, health centres, social and welfare institutions) as well as health-care facilities within refugee camps, centres for asylum, reception centres and refugee health training centres;
- training sessions on cultural competency and continuity of care to health-care providers and decision-makers.

### 2. Evidence-based guidance

Through the development of guidance, research, and rapid assessments, the Vulnerable Populations Group has supported Member States in tailoring their national responses to address the needs of vulnerable populations across Europe.

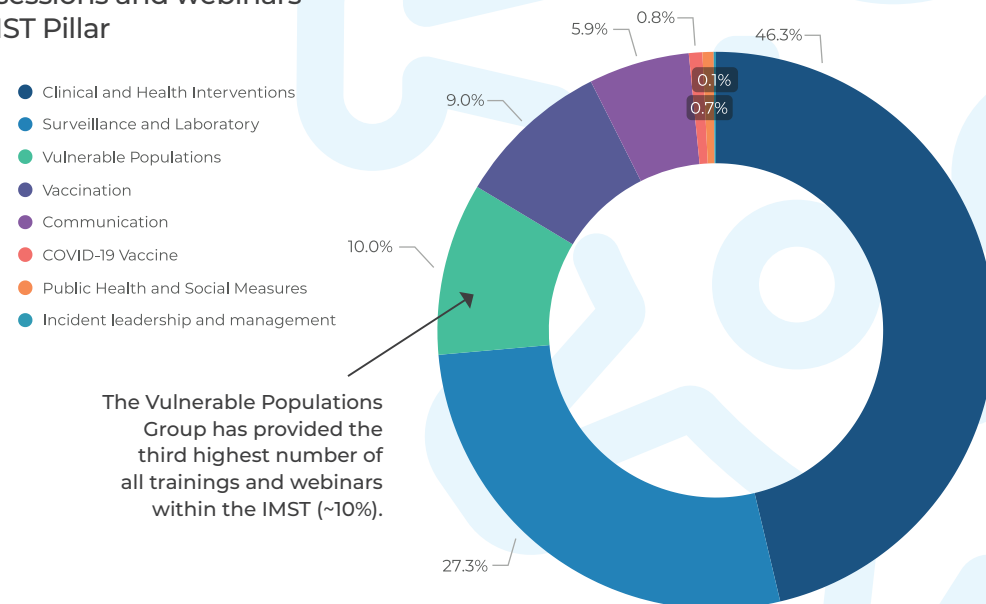
### 3. Communicating with vulnerable communities

An essential part of the work within the Vulnerable Populations Group is to provide accurate information on COVID-19 prevention, treatment, and vaccination to the most susceptible (i.e. particularly vulnerable migrants, refugees, people in care facilities, and people in detention). This has been done by translating and adapting RCCE materials and communication strategies into the local languages as well as working with UN partners, civil society and national authorities on the development of country-specific materials.

### 4. Paving the way for post-COVID-19 care

The ongoing work of the Vulnerable Populations Group is also helping to address the impact of the COVID-19 pandemic on mental health. By participating in meetings by the TAG on mental health within WHO/Europe, in addition to other high-level policy dialogues on this topic, support is being provided for all those who have been affected by the COVID-19 pandemic. Identified good practices of initiatives that promoted inclusion of refugees and migrants into the care provided by national health systems, regardless of legal status, will serve as a foundation to enhance this work in the future.

Training sessions and webinars by the IMST Pillar



## E. Lessons learned and looking ahead

After two years of response, and as we continue to think about recovery and building back better, we can list some of the major lessons identified thus far (originally presented in full in the Regional Committee document “Lessons learned...”). These are by no means comprehensive and will continue to be developed as the pandemic evolves and changes.

The lessons identified (32) may be summarized by ten themes.



**When health is at stake, the entire social/economic system is also at stake:** investing in preparedness – such as in essential public health functions, primary and hospital services – considerably pays back the investment in significant ways.



**Recognize the reciprocity and interdependence of the health system and emergency preparedness:** health systems must be strengthened at the centre of national agendas, while emergency preparedness needs to be embedded across all aspects of the health system and move to the core of societal actions.



**Response systems need to be designed ahead of time:** emergency preparedness activities proved to be critical but having response frameworks and systems in place before the pandemic served to achieve a better organized and coordinated response throughout.



**Anchor all actions in a trusted social contract:** the norms and values of equity, solidarity, responsiveness, and leaving no one behind must be embedded in actions directed at pursuing access to well-prepared health, social, and education services with financial protection.



**Filling known capacity gaps is a priority:** as we move towards ensuring resilience against health emergencies at all levels of society, we must address the known gaps identified through existing frameworks and pursue an accelerated and diversified portfolio of coordinated and multisectoral action.



**Leverage health information for immediate action:** the importance of rapid sharing of data has become apparent throughout the pandemic. The value of data as a determinant of resilience against health emergencies comes from its use in the context of foresight and preventive actions against future public health threats.



**End-to-end systems are necessary to transform scientific discoveries made at the laboratory bench into accessible public health goods in communities.** Global research, development, and advances in many areas such as in biotechnology, genetics, epidemiology, medicine, health and social sciences, and digital technology have revealed the strengths of humanity.



**Invest fully in health and health-care infrastructure and workforce:** adequate training and material support to front-line health workers must be strengthened alongside new mechanisms for activating the required surge capacity. Additional workforce for emergencies, including volunteers and CSOs, should be trained and safe infrastructure should be built in advance to support different needs.



**Engage public health services and UHC:** more weight should be given to universal health coverage (UHC) principles in preparedness and response to quickly activate surge capacity and provide continuous quality “dual-track” services (emergency-related and routine), remove out-of-pocket costs, repurpose a digital health information system to implement basic response measures, and integrate core health programmes such as mental health into emergency management.



**Bring resilience to the forefront:** resilience is the ability of a system, community or society exposed to hazards to resist, absorb, accommodate, and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.



# The way forward – continued regional and global commitment and solidarity

The past two years of response have yielded the above lessons learned as well as many others, which have further illuminated the importance of the WHO European Region's commitment to cooperation and solidarity. Without the commitment to work together, large parts of the response would not have been possible.

In this spirit, the WHO Regional Committee for the WHO European Region is a great example of cooperation. This existing forum utilized the pandemic as a springboard to initiate collaborative action plans across the Region. WHO/Europe's 70th and 71st Regional Committees brought together all 53 Member States, which were used as important forums for the Region to pass resolutions and discuss important issues in line with the global commitments made at the Forty-first and Forty-second World Health Assemblies. Both of these forums have enabled the development of achievements and mandates across the Region relating to scaling up COVID-19 vaccination campaigns, reinventing primary health care, investing in mental health and social care, setting the immunization agenda for 2030, scaling up action on climate change and health, bolstering uptake of digital health, and ensuring sustainable financing of WHO.

In this light, the way forward both in terms of the COVID-19 response as well as other health emergencies will depend on the continued strengthening of collaboration and cooperation between WHO, partners, and Member States, and the commitment by all to put health at the centre, leave no one behind, and build back better.

© WHO / Uka Borregaard



WHO Europe's Regional Emergency Director, Dr Dorit Nitzan at the 71st Session of the Regional Committee in Copenhagen September 2021.

## WHO/Europe's priorities for the COVID-19 response in 2022

Moving forward into 2022, WHO/Europe will continue to use the IMS, as outlined in WHO's ERF, and the response priorities will continue to be operationalized through the established SPRP Pillar approach. The WHO Regional Office for Europe's COVID-19 response plan for 2022 aims to bring an end to the acute phase of the response for all countries in the WHO European Region. The regional strategic objectives are in alignment with the WHO global response strategy and plans (i) to mobilize and engage all sectors and communities; (ii) to identify and control sporadic cases and clusters; (iii) to prevent and suppress community transmission; (iv) to build resilient health systems; (v) to save lives by ensuring provision of essential health and social services; (vi) to innovate and learn from the European experience; and (vii) to leverage effective partnerships to mitigate the socioeconomic impacts.

Some of the priorities for WHO/Europe in 2022 are:

- continuing to respond to the immediate lifesaving needs of the pandemic through all 10 pillars of the COVID-19 IMST;
- supporting countries in integrating COVID-19 systems as part of their national disease prevention and control and health programmes;

- institutionalizing the innovations developed during the pandemic;
- building for the future, with an emphasis on developing emergency capacities through the COVID-19 response.

To do so, WHO/Europe will continue to provide on-the-ground support through WHO country offices, supported by the Regional IMST and response hubs. WHO will deploy technical experts, provide funding and provision of essential supplies, and facilitate capacity-building activities as needed. Throughout this, WHO/Europe's response teams will remain agile, and adapt their operations and activities to best support countries in the Region.

Using WHO/Europe's interconnected systems, extensive integrated networks, and partnerships, the Organization translates global capacities into local action in the service of communities. With the development of innovative COVID-19 tools such as vaccines, along with our increased knowledge of the effectiveness of proven PHSM, we are now equipped with the knowledge and technical solutions to end the pandemic. With strong commitment and backing from Member States, WHO can provide the leadership and support that the world needs to stay the course. "Through solidarity, perseverance and patience, we will defeat this virus together" (Dr Hans P. Kluge, WHO Regional Director for Europe).





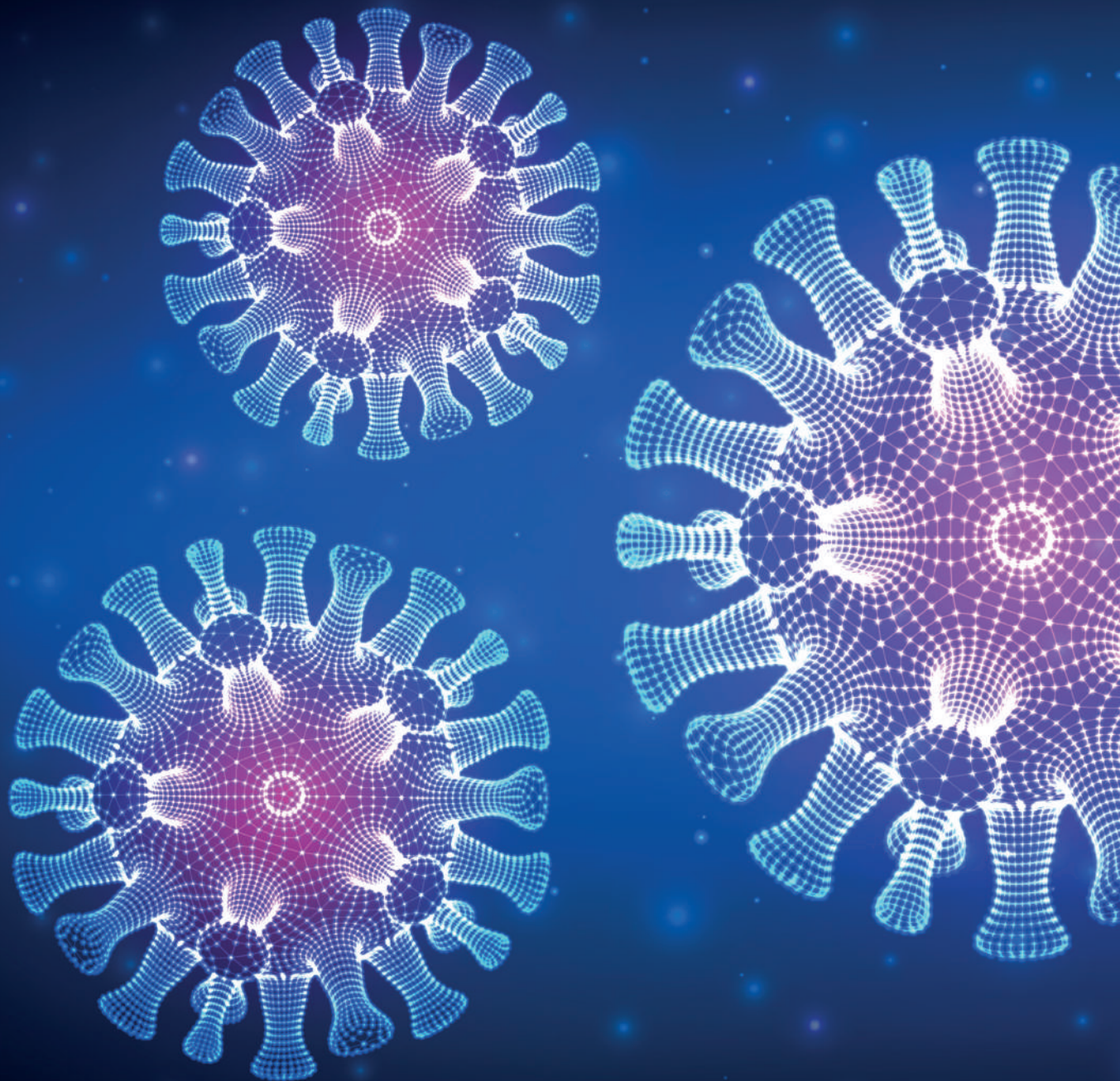
Attendees of the 71st Session of the Regional  
Committee Copenhagen

# References

1. A timeline of WHO's response to COVID-19 in the WHO European Region: a living document ( Version 2.0 from 31 December 2019 to 31 December 2020). Copenhagen: WHO Regional Office for Europe;2021 (<https://apps.who.int/iris/bitstream/handle/10665/351782/WHO-EURO-2022-1772-41523-63024-eng.pdf?sequence=1&isAllowed=y>, accessed 23 January 2022).
2. Meslé Margaux MI, Brown Jeremy, Mook Piers, Hagan José, Pastore Roberta, Bundle Nick, Spiteri Gianfranco, Ravasi Giovanni, Nicolay Nathalie, Andrews Nick, Dykhanovska Tetiana, Mossong Joël, Sadkowska-Todys Małgorzata, Nikiforova Raina, Riccardo Flavia, Meijerink Hinta, Mazagatos Clara, Kyncl Jan, McMenamin Jim, Melillo Tanya, Kaoustou Stella, Lévy-Bruhl Daniel, Haarhuis Freek, Rich Rivka, Kall Meaghan, Nitzan Dorit, Smallwood Catherine, Pebody Richard G. Estimated number of deaths directly averted in people 60 years and older as a result of COVID-19 vaccination in the WHO European Region, December 2020 to November 2021. *Euro Surveill.* 2021;26(47):pii=2101021. doi:10.2807/1560-7917.ES.2021.26.47.2101021.
3. 2019 Novel Coronavirus (2019-nCoV): Strategic preparedness and response plan. Geneva: World Health Organization; 2020 (<https://www.who.int/publications/i/item/strategic-preparedness-and-response-plan-for-the-new-coronavirus>, accessed 23 January 2022).
4. COVID-19 strategic preparedness and response plan: 1 February 2021 to 31 January 2022. Geneva: World Health Organization;2021 (<https://apps.who.int/iris/handle/10665/340072>, accessed 23 January 2022).
5. COVID-19 Public Health and Social Measures (PHSM) Calibration Tool. In: Public Health and Social Measures in response to COVID-19. [website]. Copenhagen: WHO Regional Office for Europe; 2021 (<https://presenter.preview.com.ua/calibrationTool>, accessed 23 January 2022).
6. COVID-19 situation in the WHO European Region [online database]. Copenhagen: WHO Regional Office for Europe; 2020 (<https://who.maps.arcgis.com/apps/dashboards/ead3c6475654481ca51c248d52ab9c61>, accessed 23 January 2022).
7. WHO European Region COVID19 Subnational Explorer [online database]. Copenhagen: WHO Regional Office for Europe; 2020 (<https://experience.arcgis.com/experience/3a056fc8839d47969ef59949e9984a71>, accessed 23 January 2022).
8. EURO COVID-19 IMST Response Dashboard [online database]. Copenhagen: WHO Regional Office for Europe; 2020 (<https://app.powerbi.com/view?r=eyJrIjojMmY5MmFhYTUyM2FiOC00NTM4LTNmOGYtOWE4ZWnkYTZhNjAzIiwidCI6ImY2MTBjMGI3LWJkMjQtNGIzOS04MTBiLTNkYzI4MGFmYjU5MCIslmMiOjJh9&pageName=ReportSectionbdf6778d2d002960394e>, accessed 23 January 2022).
9. WHO European Region operational updates. In: WHO/Europe Coronavirus disease (COVID-19) outbreak [website]. Copenhagen: WHO Regional Office for Europe; 2020 (<https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/who-european-region-operational-updates>, accessed 23 January 2022).
10. The Unity Studies: WHO Sero-epidemiological Investigations Protocols. In: Coronavirus disease (COVID-19) technical guidance: The Unity Studies: Early Investigation Protocols [website]. Copenhagen: WHO Regional Office for Europe; 2020 (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/early-investigations>, accessed 23 January 2022).
11. The first few X cases and contacts ( FFX) investigation protocol for coronavirus disease 2019 (COVID-19), 23 February 2020, version 2.2. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/handle/10665/332023>, accessed 23 January 2022).
12. Household transmission investigation protocol for 2019-novel coronavirus (COVID-19), 23 March 2020, version 2.2. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/handle/10665/332040>, accessed 23 January 2022).
13. Protocol for assessment of potential risk factors for 2019-novel coronavirus (COVID-19) infection among health care workers in a health care setting, 23 March 2020, version 2.2. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/handle/10665/332071>, accessed 23 January 2022).
14. Assessment of risk factors for coronavirus disease 2019 (COVID-19) in health workers: protocol for a case-control study: protocol for a case-control study, 26 May 2020, version 1.0. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/handle/10665/332187>, accessed 23 January 2022).

15. Population-based age-stratified seroepidemiological investigation protocol for coronavirus 2019 (COVID-19) infection, 26 May 2020, version 2.0. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/handle/10665/332188>, accessed 23 January 2022).
16. Cohort study to measure COVID-19 vaccine effectiveness among health workers: guidance document. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/handle/10665/340217>, accessed 23 January 2022).
17. Estimating COVID-19 vaccine effectiveness against severe acute respiratory infections (SARI) hospitalizations associated with laboratory-confirmed SARS-CoV-2: an evaluation using the test-negative design. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/handle/10665/341111>, accessed 23 January 2022).
18. Joint ECDC-WHO Regional Office for Europe Weekly COVID-19 Surveillance Bulletin [online database]. Copenhagen: WHO Regional Office for Europe; 2021 (<https://worldhealthorg.shinyapps.io/euro-covid19/>, accessed 10 November 2021).
19. WHO-EURO COVID-19 PHSM Explorer. In: COVID-19 situation in the WHO European Region [website]. Copenhagen: WHO Regional Office for Europe; 2020 (<https://who.maps.arcgis.com/apps/dashboards/ead3c6475654481ca51c248d52ab9c61>, accessed 23 January 2022).
20. Public Health and Social Measures in response to COVID-19 [online database]. Copenhagen: WHO Regional Office for Europe; 2022 (<https://phsm.euro.who.int/countries/41>, accessed 23 January 2022).
21. Guidance for conducting a country COVID-19 intra-action review (IAR): addendum 1, 28 April 2021. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/handle/10665/341024>, accessed 23 January 2022).
22. Operational framework for international travel-related public health measures in the context of COVID-19. Copenhagen: WHO Regional Office for Europe; 2021 (<https://apps.who.int/iris/handle/10665/346165>, accessed 23 January 2022).
23. Technical guidance and check lists. In: Strengthening the health system response to COVID-19 [website]. Copenhagen: WHO Regional Office for Europe; 2020 (<https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/publications-and-technical-guidance/health-systems/strengthening-the-health-system-response-to-covid-19/technical-guidance-and-check-lists>, accessed 23 January 2022).
24. National pulse survey on continuity of essential health services during the COVID-19 pandemic. In: Monitoring health services [website]. Geneva: World Health Organization; 2020 (<https://www.who.int/teams/integrated-health-services/monitoring-health-services/national-pulse-survey-on-continuity-of-essential-health-services-during-the-covid-19-pandemic>, accessed 23 January 2022).
25. COVID-19 Health System Response Monitor (HSRM) [website]. Brussels: European Observatory on Health Systems and Policies; 2021 (<https://eurohealthobservatory.who.int/monitors/hsrm/analyses>, accessed 23 January 2022).
26. High-level Meeting on Post-COVID Conditions (Long COVID): a virtual meeting hosted by the WHO Regional Office for Europe, 19 March 2021. Copenhagen: WHO Regional Office for Europe; 2021 (<https://apps.who.int/iris/handle/10665/341050>, accessed 23 January 2022).
27. Operational guidance to support Member States in preparing for and implementing COVID-19 vaccination. In: COVID-19 vaccines and vaccination – Country Preparedness [website]. Copenhagen: WHO Regional Office for Europe; 2021 (<https://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/covid-19-vaccines-and-vaccination/country-preparedness/operational-guidance-to-support-member-states-in-preparing-for-and-implementing-covid-19-vaccination>, accessed 23 January 2022).
28. COVID-19 and vaccination. In: COVID-19 and vaccination [website]. Copenhagen: WHO Regional Office for Europe; 2020 (<https://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/covid-19-and-vaccination>, accessed 23 January 2022).
29. Mitigating the impact of COVID-19 on control of vaccine-preventable diseases: a health risk management approach focused on catch-up vaccination. Copenhagen: WHO Regional Office for Europe; 2020 (<https://apps.who.int/iris/handle/10665/334248>, accessed 23 January 2022).
30. WHO/Europe COVID-19 Vaccine Programme Monitor [online database]. Copenhagen: WHO Regional Office for Europe; 2020 ([https://worldhealthorg.shinyapps.io/EURO\\_COVID-19\\_vaccine\\_monitor/](https://worldhealthorg.shinyapps.io/EURO_COVID-19_vaccine_monitor/), accessed 23 January 2022).

31. COVID-19 vaccines and vaccination explained [website]. WHO Collaborating Centre for Vaccine Safety, Hospital Clínico Universitario de Santiago de Compostela; 2021 (<https://www.covid19infovaccines.com/>, accessed 23 January 2022).
32. Response to the COVID-19 pandemic: lessons learned to date from the WHO European Region. Seventy-first Regional Committee for Europe: virtual session, 13–15 September 2021. Copenhagen: WHO Regional Office for Europe; 2021 (EUR/RC71/6 Rev. 1: <https://apps.who.int/iris/handle/10665/343157>, accessed 23 January 2022).





Health worker in full PPE examines adolescent girl  
at Emilian Cotaga Children Hospital Moldova.

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.

### Member States

Albania	Luxembourg
Andorra	Malta
Armenia	Monaco
Austria	Montenegro
Azerbaijan	Netherlands
Belarus	North Macedonia
Belgium	Norway
Bosnia and Herzegovina	Poland
Bulgaria	Portugal
Croatia	Republic of Moldova
Cyprus	Romania
Czechia	Russian Federation
Denmark	San Marino
Estonia	Serbia
Finland	Slovakia
France	Slovenia
Georgia	Spain
Germany	Sweden
Greece	Switzerland
Hungary	Tajikistan
Iceland	Turkey
Ireland	Turkmenistan
Israel	Ukraine
Italy	United Kingdom
Kazakhstan	Uzbekistan
Kyrgyzstan	
Latvia	
Lithuania	

World Health Organization  
Regional Office for Europe  
UN City, Marmorvej 51,  
DK-2100 Copenhagen Ø,  
Denmark

**TEL** +45 45 33 70 00

**FAX** +45 45 33 70 01

**EMAIL** [eurocontact@who.int](mailto:eurocontact@who.int)

**WEB** [www.euro.who.int](http://www.euro.who.int)