



WHO Country Office in Ukraine annual report 2023

Abstract

This report provides an overview of the operations and activities of the WHO Country Office in Ukraine in 2023. Despite the acute health impacts of the war in Ukraine, the Country Office continued its work according to its core mandate. WHO supported the Government of Ukraine in managing the health emergency and pursued existing priorities set out in WHO's Thirteenth General Programme of Work 2019–2023, the European Programme of Work 2020–2025, and the Biennial Collaborative Agreement 2022–2023 signed with the Government of Ukraine. The report presents the achievements of the WHO Country Office in Ukraine in 2023 in the context of the war's impact on the lives, health, and well-being of Ukrainians.

Keywords

UKRAINE; EUROPE; EMERGENCIES; UNIVERSAL HEALTH COVERAGE; HEALTH REFORM; HEALTHIER POPULATIONS; COVID-19

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Foreword

The year 2023 was a time of great resilience for the people of Ukraine, with the health sector standing strong despite considerable pressure. Building on the foundations established in previous years, our team continued to navigate the immense challenges brought about by the Russian Federation's invasion, which significantly escalated on 24 February 2022. Even in the face of ongoing conflict, WHO Country Office in Ukraine remains dedicated to supporting the country's health needs. We stand resolutely behind health-care workers, facilities, and services as we work towards addressing both immediate and long-term health priorities.

The response to the evolving situation in Ukraine has showcased the exemplary collaboration across WHO's three levels of organization. Under the leadership of WHO Director-General Dr Tedros Adhanom Ghebreyesus and the Regional Director for Europe, Dr Hans Henri P. Kluge, our coordinated efforts have continued to save lives and strengthen health systems amidst the ongoing crisis. The newly launched Country Cooperation Strategy (CCS) for Ukraine 2024–2030 has further solidified our strategic framework for the future, ensuring that we focus on response, recovery, and reforms at all times (1). The CCS aligns with

Ukraine's health priorities, fostering resilience and partnership to achieve measurable improvements in health outcomes.

Our preparedness activities and years of health systems groundwork in Ukraine enabled WHO to respond swiftly and effectively from the outset of the full-scale invasion. In 2023, WHO's support encompassed a wide range of initiatives, including the dispatch of essential medical supplies to health facilities close to the front line, the provision of much-needed generators and ambulances, and the deployment of health experts. These efforts were made possible by the generous contributions of our partners and donors that supported WHO's Emergency Appeal and our development programmes.

Ukraine's health system has demonstrated remarkable resilience, thanks in part to ongoing health programmes that aim to achieve universal health coverage (UHC) and improve overall population health. These programmes, which include health governance, financing, public health, and preparedness activities, are essential for strengthening the health system and ensuring a robust recovery. The CCS emphasizes a people-centred, human rights approach to health care, guided by innovation, quality data, and adaptability.

The long-term impacts of the war on Ukraine's health system include damaged facilities, challenges in managing population movements, strained health budgets, increased risk factors for noncommunicable diseases (NCDs), and significant mental health repercussions. WHO's activities have underscored the importance of continued support for systemic transformation in line with the draft National Health Strategy 2030, ensuring that health reforms are sustained and expanded.

The successes achieved in Ukraine's health reform since 2015 have been instrumental in maintaining resilience during this crisis. Institutions such as the National Health Service of Ukraine (NHSU), the Medical Procurement of Ukraine (MPU), and the Ukrainian Public Health Centre (UPHC) have been pivotal in implementing these reforms. Our collaboration with the Government of Ukraine, United Nations agencies, international organizations, national and international nongovernmental organizations (NGOs), and public health experts has been crucial in advancing these efforts.

WHO plays a leading role in convening and leading such collaborative efforts in Ukraine, across multiple health sectors, always striving to address the key contemporary policy questions in Ukraine. WHO's unique position in the global health space, having an organizational presence at national, regional and international level, allows it to bring together actors from these settings. It is by partnering for better health outcomes in areas such as public health systems

reform, mental health and health financing, that Ukraine is pushing its health reform process forward.

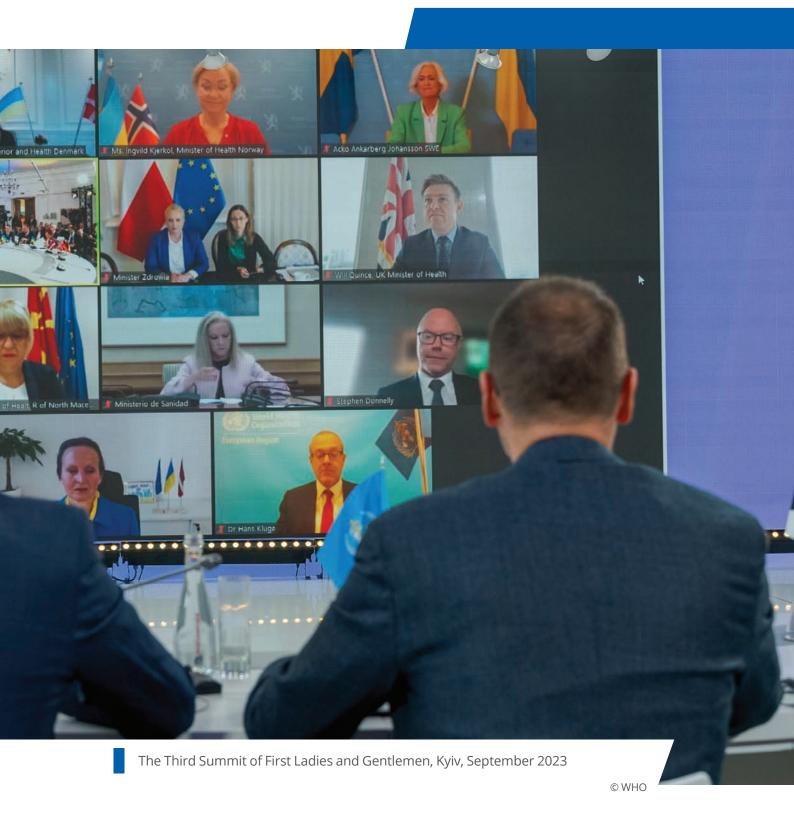
In 2023, the WHO Country Office in Ukraine continued to grow and adapt. Some field offices were consolidated, especially in the western oblasts of Ukraine. New offices were established, such as in Kharkiv, to ensure our presence where it is needed most. Our dedicated support teams focused on critical areas such as personnel health and well-being, security, preventing and responding to sexual exploitation, abuse, and harassment (PRSEAH), communications, and programme management. These units work closely with our entire team to integrate the principles of safety, security, visibility, and effectiveness into all WHO initiatives in Ukraine.

On behalf of the WHO Country Office in Ukraine, I extend my deepest gratitude to all partners who supported our health response in 2023. We honour the resilience and dedication of Ukraine's health workforce, who continue to deliver care under incredibly challenging circumstances. WHO remains committed to providing essential elements to Ukraine's health-care system, including emergency supplies, direct services, and technical and policy advice. As we move forward, WHO's agenda will continue to focus on emergency response, early recovery efforts, and health sector reforms, all aimed at improving the health system and the well-being of all in Ukraine.

Dr. Jarno Habicht

WHO Representative and Head of the Country Office in Ukraine





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GAVI, the Vaccine Alliance

Global Affairs Canada

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Ministry for Development Cooperation and Humanitarian Affairs, Luxembourg

Ministry of Foreign Affairs, Denmark

Ministry of Foreign Affairs, Netherlands

Ministry of Foreign Affairs, Norway
Ministry of Foreign and European Affairs, Slovenia
Norwegian Agency for Development Cooperation
Swiss Development Cooperation Agency (SDC/DDC)
Ukraine Humanitarian Fund
United Nations Multi-Partner Trust Fund Office
Unitaid
United States Agency for International Development (USAID)
United States Department of State
United States President's Emergency Plan for AIDS Relief
WHO Foundation

Abbreviations and acronyms

AMP Affordable Medicines Programme

AMR antimicrobial resistance

ASPHER Association of Schools of Public Health in the European

Region assistive technologies

AT assistive technologies

ATLS advanced trauma life support

BCA Biennial Collaborative Agreement

BCI behavioural and cultural insights

BOS Business Operations Support

CBRN chemical, biological, radiological and nuclear CCPM Cluster Coordination Performance Monitoring

CCS Country Cooperation Strategy
CMHT community mental health team
CRSV conflict-related sexual violence

EIOS Epidemic Intelligence from Open Sources

EMS emergency medical services
EMT emergency medical team

ESS Electronic Surveillance System

EUCAST European Committee on Antimicrobial Susceptibility Testing

GBV gender-based violence

GIC Generic Instructor Course

HeRAMS Health Resources and Services Availability Monitoring System

HR human resources
ICU intensive care unit

IDP internally displaced person

IHR International Health Regulations (2005)

ILI influenza-like illness

IPC infection prevention and control

JID joint infectious diseases

mhGAP WHO Mental Health Gap Action Programme

MHPSS mental health and psychosocial support

MHU mobile health unit
MoH Ministry of Health

MPU Medical Procurement of Ukraine
N-EMT national emergency medical team

NCD noncommunicable disease

NGO nongovernmental organization NHS2030 National Health Strategy 2030

NHSU National Health Service of Ukraine

OAMT opioid agonist maintenance treatment

OCDC Oblast Centre for Disease Control and Prevention

OSL operational support and logistics

PCR polymerase chain reaction

PHC primary health care

PHWF public health workforce

PMU Programme Management Unit

polio poliomyelitis

PrEP pre-exposure prophylaxis

PRSEAH preventing and responding to sexual exploitation,

abuse and harassment

RCCE risk communication and community engagement

SARI severe acute respiratory infections

SOPs standard operating procedures

SRP WHO's Strategic Response Plan in Ukraine

SWG sectoral working group

TB tuberculosis

TWG technical working group
UHC universal health coverage

UNICEF United Nations Children's Fund
UPHC Ukrainian Public Health Centre

USPC for ECDM Ukrainian Scientific and Practical Centre for Emergency

Care and Disaster Medicine

VPI vaccine-preventable infections
WASH water, sanitation and hygiene

WASH FIT Water and Sanitation for Health Facility Improvement Tool

WHO-PEN WHO package of essential

noncommunicable disease interventions

WSP water safety plan

1. Health at the centre of the Ukraine response

The humanitarian crisis in Ukraine is unfolding amidst significant structural changes in global health. In an increasingly interconnected world, both new risks and opportunities emerge for emergency response and long-term recovery efforts. In Ukraine, innovative approaches to humanitarian health care are becoming evident, with the resilience of the national health system being a key distinguishing factor. This resilience is underpinned by the dedication of Ukraine's health-care workforce, the success of long-term strategies aimed at strengthening local health systems, and financial and material support from the international community. WHO carried out over 3900 health evacuations in 2023, delivered critical trauma supplies to more than 135 200 people, and reached over 7 million people by providing medical supplies.

Through the WHO-Ukraine Biennial Collaborative Agreement (BCA) 2022–2023, WHO continued to prioritize strengthening health systems in Ukraine. This strategic engagement focused on emergency response, recovery support, and ongoing health system reform. Since 2014–2015, Ukraine has implemented fundamental reforms to accelerate progress towards UHC. With support from WHO and other partners, these reforms not only continued but expanded in 2023.

Building on the *Principles to guide health system recovery and transformation in Ukraine (2)* policy note and the *Priorities for Health System Recovery in Ukraine* report *(3)*, which set the agenda for health reform in Ukraine; WHO in 2023 worked to keep health recovery at the centre of national dialogue through the report *Case Studies of Health System Recovery in Ukraine*, presented at the 2023 Ukraine Recovery Conference in London *(4)*. It serves as a practical guide for international support in Ukraine, providing insights and strategies for the ongoing recovery process. A WHO financial protection study also reviewed the impact of extensive health financing reforms implemented from 2017, highlighting the importance of these reforms in the health system's response to the war.

Across Ukraine, access to health services and medicines has been maintained at high levels despite increased needs in areas such as emergency medical services (EMS), trauma and burn care, rehabilitation, and mental health care. The geographical distribution of these needs has shifted significantly due to large-scale population displacement; with fighting in the north and east of the



country, then concentrating in the east. In 2023, there were 3 670 000 IDPs in the country.

WHO distributed emergency medical kits, consumables, ambulances, generators, refrigerators for temperature-sensitive storage, vehicles, and other medical equipment to 1016 functioning health facilities across 24 oblasts in Ukraine. In total, an impressive 2015 metric tonnes of medical supplies, valued at US\$ 61.85 million, were delivered in 2023. This support was built upon a functioning health-care system with trained health-care workers dedicated to improving lives across Ukraine. Unfortunately, the health sector has been a primary target of attacks, with over 1800 confirmed attacks on the health system as of May 2024, resulting in 140 deaths and 338 injuries among health workers, patients, and civilians, including children.

In areas where the health system was particularly stressed, WHO extended its support to maintain access, constructing modular primary health care (PHC)

facilities and prefabricated emergency medical service (EMS) units and training national emergency medical teams (N-EMTs) and mobile health units (MHUs). Community mental health teams (CMHTs) also continued to be supported by WHO, now in many parts of Ukraine. This innovative alternative to hospital-based treatment involves health-care professionals visiting patients in the field to treat mental health and psychosocial support (MHPSS) conditions.

WHO brought its global knowledge network to bear on these initiatives, which are part of Ukraine's innovative approach to strengthening its health system. WHO contributed expertise through training and other measures to build capacity within national health authorities, to ensure a sustainable health systems approach.

Long-term development of public health systems also continued in 2023. WHO intensified actions in support of public health system development by supporting three retreats for health leaders from across the Ministry of Health (MoH), UPHC and OCDCs. Participants shared updates and discussed emerging public health challenges and plans in areas such as immunization, antimicrobial resistance (AMR), and epidemiological surveillance. WHO experts ensured that modern worldwide evidence-based approaches and trends in public health development were reflected in the country's plans, tailored to the local context. WHO also provided in-depth analysis for health leaders in Ukraine on programmes and interventions that require alignment with the European Union (EU) acquis and EU health standards and frameworks. As the global normative lead agency in health with access to broad networks of EU health institutions, WHO provided comprehensive technical assistance to Ukraine to align with regional policies on cross-border threat management, strengthening the One Health approach to animal-to-human disease management and food safety policies, among other things.

In this way, WHO plays a pivotal role in Ukraine by facilitating dialogue between national, regional and international health partners, while also providing high-level policy advice and technical support. Other crucial areas of public health systems reform in 2023 included a new public health workforce (PHWF) programme aligned with WHO guidelines and those of the Association of Schools of Public Health in the European Region (ASPHER); and managing NCDs through more effective taxes on tobacco products, alcohol and sugar-sweetened beverages. Tobacco legislation and medicine standards have also seen new legislation and practical steps towards regulations. WHO has also been there every step of the way as Ukraine has undertaken to align its health reforms with EU and international standards.

Conversely, Ukraine has supported the global health agenda by sharing health authorities and local experts' knowledge and experiences with other countries. The Ukrainian delegation conducted over 30 key missions, participating in regional dialogue sessions focused on areas such as medicine, trauma care, and rehabilitation. In October, Ukraine also hosted a large international Mental Health Forum in Kyiv, which served as a major international platform for sharing knowledge on transforming MHPSS systems in emergency response contexts. The event brought together 550 participants in person and more than 3100 online. The experience of the Coordination Center for Mental Health partners working in Ukraine was showcased and complemented by inputs and reflections by speakers from WHO and health professionals from various countries.

As an active WHO Member State, Ukraine plays a significant role in shaping the global health agenda. Ukraine took on a leadership role in 2023 (for 2023–2026) by being elected to the WHO Executive Board, as well as the Standing Committee of the Regional Committee for Europe. The Standing Committee comprises representatives from 12 countries and ensures that the Regional Committee's decisions and policies are implemented. It counsels the WHO Regional Director for Europe as appropriate and reports to the Regional Committee on its work. Ukraine thereby helps to guide health policy for the Region. The country has actively participated in these roles, demonstrating dedication to regional health policy and strategy development.



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Ukrainian Minister of Health Dr Viktor Liashko makes his first official visit to the WHO Regional Office for Europe, May 2023



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WHO Regional Director for Europe Dr Hans Henri P. Kluge's visit to Kyiv, February 2023

In May, Minister of Health of Ukraine Dr Viktor Liashko made his first official visit to the WHO Regional Office for Europe in Copenhagen to meet with WHO Regional Director for Europe Dr Hans Henri P. Kluge and WHO Representative in Ukraine Dr Jarno Habicht. Discussions were also held with Regional Office programme directors on PHC in Ukraine during and after the war, work in health financing, the importance of tracking and responding to infectious disease outbreaks, and people's growing health needs and priorities encompassing chronic diseases. The discussions addressed the necessity of strengthening MHPSS services and the importance of rehabilitation services for Ukrainian patients, including the provision of assistive technologies (AT). Further, Dr Viktor Liashko reported on the need to nurture and support the country's strained health and care workforce, including by introducing and implementing digital health approaches that help to reach and monitor patients in remote areas.

At the 78th session of the United Nations General Assembly, First Lady of Ukraine Olena Zelenska and WHO Director-General Dr Tedros Adhanom Ghebreyesus highlighted the importance of international medical partnerships. Under the auspices of the Third Summit of First Ladies and Gentlemen, an initiative was launched in August to pair Ukrainian medical institutions with "sister"

"

The unwavering support provided by the WHO Regional Office for Europe and WHO Country Office in Ukraine during this protracted crisis is having a real impact in the country. I feel a special connection with Ukraine and my numerous visits to the country underline our commitment to meeting its health needs and standing in solidarity with the Ministry of Health, the entire Ukrainian health workforce whose tireless efforts are truly heroic. I commend the progress made in Ukraine – including the commitment to health reform even amid fullscale war - through our solid partnership with the Ministry of Health and our many local and international health partners, including donors and funders from Europe and well beyond, without whose support we could not carry out our lifesaving work.

Dr Hans Henri P. Kluge, WHO Regional Director for Europe

institutions abroad, facilitating experience-sharing, adoption of best practices, and knowledge exchanges. Speaking about the emergency health response, the First Lady stated that, "Ukraine's experience should serve the entire civilized world and be reflected in global policies on both emergency medical care and strengthening international cooperation, cross-border information exchange, management of joint stockpiles, and so on" (5).

In June, WHO responded to the destruction of the Kakhovka Dam, which caused widespread human suffering and disrupted health services, water supplies, sanitation, and sewage systems. WHO's Dnipro hub delivered critical medical aid to the affected areas. The event highlights the complex challenges for which health systems must be prepared and brings into focus the long-term threats from flooding in agricultural and industrial zones, potentially leading to chemical contamination of water supplies. WHO is assisting Ukraine in preparing for chemical, biological, radiological, and nuclear (CBRN) risks, implementing measures under the International Health Regulations (2005) (IHR) to manage cross-border threats. WHO's work with national laboratories to strengthen surveillance and diagnostics capacity at regional level has been crucial in this regard.

Long-term coordination between the MoH and WHO was the cornerstone of the successful conclusion of a circulating vaccine-derived poliovirus type 2 outbreak that began in 2021 in Rivne and Zakarpattya oblasts. A comprehensive response led by the Government involved extensive vaccination campaigns, and rigorous surveillance and monitoring of poliomyelitis (polio) cases. Healthcare workers showed resilience in carrying out the vaccination campaigns, particularly in proximity to conflict zones. In 2023, an external outbreak response assessment team concluded that there was no evidence to suggest continued transmission in Ukraine.

The WHO Barcelona Office for Health Systems Financing conducted numerous missions to Ukraine, providing ongoing support and global expertise to the MoH and NHSU to ensure that health remained a financial priority under challenging budget constraints. Both regional and in-country teams provided daily support to the Government. This work is summarized in the report titled *Can people afford to pay for health care? New evidence on financial protection in Ukraine 2023 (6)*.

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In the face of adversity, Ukraine stands resilient, united, and unwavering in our commitment to safeguarding the health and well-being of our people. As we confront the challenges, we extend our deepest gratitude to WHO Country Office in Ukraine for their steadfast support. Together, we forge ahead, not only in confronting the immediate threats in our emergency response, but also in laying the groundwork for lasting health reforms. Our resolve is unyielding, our gratitude – boundless.

Dr Viktor Liashko, Minister of Health of Ukraine

The Government, WHO and partners working through the Ukraine Health Cluster bridged the humanitarian-development divide in Ukraine by strengthening PHC services delivered by MHUs in conflict-affected areas. The war has not only caused traumas requiring immediate care, but also exacerbated chronic conditions. Many of these can be addressed through PHC interventions to tackle NCDs. MHUs operate in areas with limited health-care access and focus on managing chronic conditions, including NCDs, and providing mental



WHO-Ukraine BCA 2024-2025, December 2023

health support and infectious disease care. By the end of 2023, 43 MHUs were operational in six regions.

WHO forged another connection between the emergency response and long-term service delivery when a WHO-designed mobile laboratory became operational in 2023. Manufactured in Ukraine, the laboratory can be transported across the country to expand the identification, diagnosis, and treatment of infectious diseases. Such creative health initiatives bring into focus the synergy between addressing individual health needs in emergencies and reducing the long-term collective risks of diseases through early intervention.

Ukraine's health response offers valuable insights and lessons for future humanitarian and development efforts worldwide. Many of Ukraine's immediate health measures are delivering health dividends for Europe and the global community by preventing health risks that can cross borders. Innovations include the digitization of services, enhanced analytics, and data use for policy development. These approaches are setting new standards for conducting health emergency responses, with an eye towards recovery and reform.

2. Health emergency response in Ukraine

Since the invasion in February 2022 and throughout 2023, WHO fortified its emergency response efforts by establishing an Incident Management Team. This specialized team is mandated with addressing critical areas in emergency health care, which include improving trauma and EMS; ensuring continued provision of PHC in conflict-affected regions; coordinating humanitarian interventions; and building up the resilience of health systems through the provision of essential services and preparedness measures, with a particular emphasis on CBRN threats.

Furthermore, WHO prioritizes emergency preparedness by strategically positioning supplies, devising contingency plans, and collaborating with authorities to establish a responsive network. These efforts are supported by readiness and biomedical initiatives, which focus on constructing resilient health facilities to ensure uninterrupted health-care services through modular PHC facilities, prefabricated EMS units, generators, and biomedical equipment.

Strong Operations, Support, and Logistics (OSL) within the Organization underpin these and other deliveries. WHO also implemented comprehensive risk communication and community engagement (RCCE) activities, which include distributing emergency public health information on CBRN and other important topics during the war.

In pursuit of its objectives, WHO has implemented tangible measures, including the establishment of a response presence in all affected areas through a hub-based strategy. This strategy encompasses direct interventions, provision of supplies based on identified needs, and coordination with partners. Efforts to strengthen medical response capacity, such as EMS and PHC, involve training initiatives and ongoing collaboration and coordination with stakeholders. Gender-based violence (GBV) training programmes exemplify WHO's commitment to addressing this important human rights and public health issue. Community engagement and understanding local needs are also central to WHO's approach, highlighting the importance of public involvement in emergency health-care endeavours.

This work is coordinated with the Government of Ukraine, various United Nations agencies, and numerous partners through the Ukraine Health Cluster (see Section 2.2.4). WHO's emergency health efforts were supported in 2023 by



the WHO 2023 Emergency Appeal (7). Through these concerted efforts, WHO is committed to addressing both immediate and long-term health challenges in Ukraine, thereby advancing global health security and resilience, particularly in conflict- and crisis-affected areas.

Despite the appalling level of destruction and damage that Russian Federation's invasion caused to hospitals and clinics across Ukraine, the health system continues to stand and provide much-needed services. Over the past two years, health workers in Ukraine have shown remarkable resilience and worked day and night to ensure their communities could receive life-saving treatments. We know it has not been easy; we know doctors and nurses work in extreme hardship, amongst other enormous challenges. They face the constant threat of attacks and too often have limited supplies. The humanitarian community, with the support from our donors, has complemented these efforts and also supported the Ukrainian health system with supplies, equipment, repairs, and training to ensure it could continue its vital work. The support will continue for as long as necessary and until the health system has recovered

from the devastation caused by the war.

Denise Brown, United Nations Resident and Humanitarian Coordinator in Ukraine

Hub offices

A cornerstone of WHO's strategy to reinforce Ukraine's emergency health system are its hub offices in Dnipro, Odesa, and Kharkiv. They play a critical role in coordinating response efforts, ensuring the distribution of medical supplies, and collaborating closely with local partners to address the health needs of the people of Ukraine, including those in high-risk conditions.

Through these emergency field offices, WHO facilitates technical assistance, humanitarian aid, and guidance for local health authorities, addressing immediate crises and promoting recovery and reconstruction of the health system. WHO's efforts encompass delivering trauma care, supporting mental health services, managing chronic diseases, and responding to infectious disease outbreaks.

The Kharkiv office, established in 2023, has faced significant challenges due to the war. It serves a population of up to 10 million, which includes over 800 000 internally displaced persons (IDPs). Since moving the hub in November, WHO's focus in Kharkiv has been on providing complete care and rehabilitation for people injured on the battlefield or by bombardments and shelling. Efforts have concentrated on ensuring access to both primary and specialized health care, enhancing local expertise in emergency surgery, traumatology, and burn treatment, and repairing health facilities damaged during the conflict.

The Dnipro hub, established in April 2022, addresses health-care needs in southeastern Ukraine. This area is home to approximately nine million people, including over 500 000 IDPs. This hub extends its support to Donetsk and Zaporizhzhya oblasts, which have been heavily impacted by ongoing fighting. Following the destruction of the Kakhovka Dam in June 2023, the Dnipro hub played a central role in delivering critical support to the affected areas and hospitals to ensure sustained medical aid.

Operating since October 2022, the Odesa hub aids IDPs and has rebuilt medical infrastructure in Odesa, Mykolayiv, and Kherson oblasts. The hub has responded to challenges such as extensive missile strikes in Odesa oblast, and supported the response to the Kakhovka Dam collapse. The Odesa hub has been instrumental in distributing medical supplies, training laboratory personnel, and establishing modular bases for emergency medical teams (EMTs).



2.1. Emergency health operations

WHO engaged in multifaceted efforts in Ukraine in 2023 to ensure the continuity and advancement of health-care services amidst the ongoing conflict. Collaborative measures were implemented in tandem with Ukrainian health authorities to ensure service delivery in emergency contexts while maintaining emergency medical systems nationally, including readiness structures and risk prevention efforts. Strategies employed to sustain and improve health-care access and quality in this crisis situation included EMTs and MHUs, particularly in conflict zones and recently liberated areas.

This support included the provision of essential medical supplies, such as oxygen systems, which have significantly increased the capacity of health-care facilities to handle emergencies and chronic conditions. WHO's contributions to upgrading Ukraine's pre-hospital and trauma care systems included delivering

ambulances, conducting specialized training for health-care professionals, and facilitating medical evacuations. The initiatives to train and equip EMTs and the establishment of new policies and frameworks highlight the ongoing efforts to develop a responsive emergency medical system in Ukraine.

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In 2023, Ukraine achieved significant health milestones through the unwavering collaboration of the United States Agency for International Development, WHO and other development partners. We've tackled diverse challenges head-on, delivering essential health supplies and aid, while also enhancing disease surveillance and response capabilities. Our joint efforts have expanded access to mental health and physical rehabilitation services and driven transformative reforms to foster a healthier, more resilient future for Ukraine.

James Hope, Mission Director in Ukraine, United States Agency for International Development

2.1.1. Service delivery in emergencies

In 2023, WHO's prompt response to emergencies, such as a missile strike on a Dnipropetrovsk health-care facility and the Kakhovka Dam destruction, demonstrated a commitment to addressing humanitarian crises in Ukraine through systematic needs assessments and strategic interventions.

These efforts extended to installing oxygen systems in hospitals in Kharkiv and Chernihiv, providing crucial assistance to patients with respiratory ailments and injuries through collaborative efforts with the State Emergency Service of Ukraine and international partners. WHO provided medical care in recently retaken areas and facilitated treatments abroad.

Essential medical supplies were distributed to health-care facilities in Zaporizhzhya city and high-risk zones in Kharkiv and Zaporizhzhya oblasts. WHO's participation in 85% of Humanitarian Operations Coordination Centre convoys underscores the Organization's significant impact in Ukraine.

In anticipation of winter, WHO ensured that health facilities were equipped with alternative heating solutions and generators to sustain continuous health-care services. Furthermore, temporary health-care facilities in damaged areas were established using prefabricated modular structures.

WHO continued its support for MHUs to address health-care challenges arising from infrastructure damage, workforce displacement, and supply chain disruptions. WHO initiated the MHUs project in collaboration with the MoH and the Academy of Family Medicine of Ukraine in 2022. The units operate in areas with limited health-care access, particularly near conflict zones, and focus on managing chronic conditions.

The units provided a wide range of services, including treatment for NCDs, mental health support, infectious disease care, palliative care, and reproductive health services. They focused on conditions such as hypertension, cardiovascular diseases, diabetes, asthma, and chronic obstructive pulmonary disease. By the end of 2023, the programme had expanded from 27 to 43 MHUs operating across six regions. These units accomplished 890 field visits and conducted 27 000 consultations.



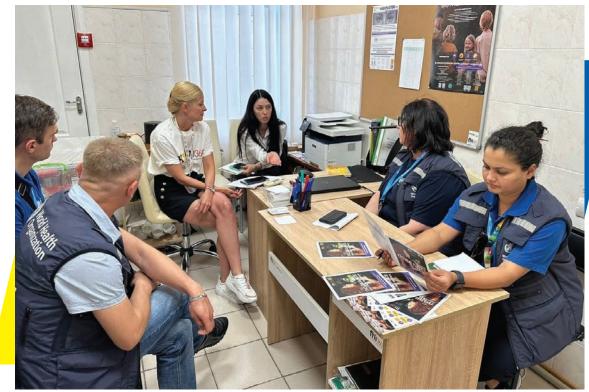
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Delivery of laboratory equipment in Dnipro, April 2023

To tackle the crucial issue of GBV in 2023, WHO worked with the MoH and the Ukrainian Foundation for Public Health to organize a training programme aimed at strengthening medical services for survivors of GBV and conflict-related sexual violence (CRSV). GBV represents a critical issue concerning gender and public health in Ukraine, leading to significant violations of human rights. Around two thirds of women in the country have experienced GBV, including psychological, physical, or sexual violence, and CRSV cases have increased following the Russian Federation's full-scale invasion of Ukraine in 2022.

The programme consisted of 11 capacity-building training activities to improve the knowledge and skills of 319 emergency and PHC professionals. Using updated WHO guidelines, training materials, and national legislation, the training emphasized the delivery of fundamental services for survivors, recognizing that health workers are often the first point of contact. These fundamental services include primary psychological care, clinical management of rape, case documentation, and referrals to social and legal services. It is essential to integrate such GBV services into the health-care system.

These concerted efforts by WHO and the Ukrainian health authorities have aimed to address the immediate health-care needs of all Ukrainians while building a resilient health-care system capable of effectively responding to future emergencies.



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Technical mission to Kharkiv aimed at improving access to health-care services

2.1.2. Emergency medical services (EMS) and emergency medical teams (EMTs)

WHO provided comprehensive support for EMS in Ukraine, encompassing pre-hospital care, including medical evacuations and emergency and surgical care. This assistance has been crucial during the escalating conflict due to the rising number of trauma patients in the national health-care system. In 2023, WHO continued to raise the quality of clinical care for conflict-related trauma through targeted training initiatives and the provision of medical supplies such as trauma kits.

Training efforts focused on further developing preparedness and response capabilities for managing mass casualties, mass evacuations, damage control surgical care, critical care transportation, and the management of acute traumatic injuries. WHO consciously shifted its training approach to prioritize capacity development for sustainability at national, regional, and local level. Close collaboration in training continued throughout 2023 with the endorsement of accredited training by the MoH and collaboration with the Ukrainian Scientific and Practical Centre for Emergency Care and Disaster Medicine (USPC for ECDM).

WHO's training initiatives reached a wide range of health-care professionals:

- 2029 health-care and administration staff from 67 hospitals received training in mass casualty management;
- 1950 health-care staff, predominantly nurses, across 23 hospitals were trained in trauma essentials, infection prevention and control (IPC) and critical care through onsite delivery;
- 36 EMS staff underwent training via the European Resuscitation Council's Generic Instructor Course (GIC);
- 88 surgeons and anesthetists participated in specialized Hostile Environment Surgical and Anaesthesia Training;
- 324 health-care staff from various hospital levels received short training sessions such as Stop the Bleed;
- 296 doctors and feldshers improved their skills in managing critical care patients;
- 60 EMS staff from high-risk oblasts received training in deployment readiness and mass evacuation;
- 16 doctors were trained in advanced trauma life support (ATLS);
- 50 instructors were trained in advanced life support; and
- 53 instructors, with two representatives from each oblast, participated in the pilot Critical Care Transfers training.

WHO continued its technical and resource support to the MoH's Medical Evacuation and Coordination Unit throughout 2023. This collaboration facilitated the successful completion of 1821 out of 2259 requests for evacuation from Ukraine to other countries, particularly for patients with complex trauma injuries and those requiring specialized treatments such as cancer care. Most medical evacuations were supported through the European Union medical evacuation pathway or other bilateral agreements established by the MoH.

Additionally, WHO supported 251 patient transfers, of which 191 required specialist critical transport support. Twenty-seven critical care transports were facilitated through a joint crewing initiative as part of a peer-to-peer critical care training programme. By June 2023, the Lviv regional EMS ambulance teams were fully equipped to manage all cross-border patient transfers, marking the phase-out of international EMT support. This transition facilitated cooperation between Ukrainian and Polish national ambulance services, thereby strengthening emergency preparedness and response to catastrophic events.

Strategic EMS developments, discussed in early March between WHO and 26 regional EMS directors, led to the endorsement of National Decree No.586 in July 2023 on defining the function of disaster medicine aimed at fortifying the disaster medicine framework in Ukraine. Subsequently, a national volunteer database was established to address the shortage of medical specialists and support surge requests, with 405 professionals enlisted. Among them, 340 (comprising 216 doctors and 124 nurses) were deployed to support the Kakhovka Dam response by increasing staffing levels in health-care facilities between June and December in Kherson, Mykolayiv, and Zaporizhzhya.

National emergency medical teams (N-EMTs)

Between March and June 2023, Ukraine's EMS underwent a significant transformation. Intensive WHO training programmes and strategic developments greatly improved the capabilities of the N-EMTs from 23 Ukrainian regions and reinforced the skills of health-care providers.

Targeted mass casualty management trainings were held for 270 health workers from hospitals in Zaporizhzhya, Donetsk, Volyn, and Kharkiv oblasts. These trainings improved the critical skills of N-EMTs. Additionally, a two-day workshop in Kyiv on mass casualty management at pre-hospital level identified critical gaps in emergency response coordination, leading to the establishment of a working group tasked with updating regulations for emergency responses.



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Simulation exercise in Kyiv, December 2023

Health-care providers were equipped to effectively manage emergencies during conflict through 10 international ATLS training courses. These involved 180 providers from oblasts such as Chernihiv, Dnipropetrovsk and Donetsk. For example, an ATLS course held in Chisinau, Republic of Moldova, engaged 16 health-care providers from cities such as Kharkiv, Mykolayiv, Kyiv, and Dnipro. A Basic Emergency Care course to train the trainers was also conducted in Chisinau.

Specialized training was provided to 50 instructors from 25 regional simulation centres in ATLS and Disaster Team Response, supplemented by GIC training to prepare future instructors. Workshops aimed at strengthening Ukraine's emergency medical care and disaster medicine system, in alignment with WHO recommendations, were also held.

The MoH of Ukraine issued vital Decree No.586, which included revising the role of the USPC for ECDM as an implementing agency for the Ministry and liaising with stakeholders in emergency medical care and disaster medicine. The order also focused on the training and retraining of emergency medical care employees, emphasizing the importance of high-quality, evidence-based training. Plans for N-EMT improvements were also set out, along with the approval of Standard Operating Procedures (SOPs).

Despite persistent challenges, such as standardizing specialist training, the development of N-EMTs remains crucial, particularly in deoccupied territories. Tasks for the future include strengthening the network of regional training departments, providing continuous instructor training, establishing a certification system, and creating a transit programme. WHO-guided preparation of N-EMTs is critical for enhancing the quality of medical care.

Ongoing efforts for the future include training medical university teachers, organizing additional GIC trainings, and convening interagency working group meetings, with a focus on supporting the international certification of disaster medicine teams.

The coordination of Ukraine's N-EMTs within the emergency medical system significantly improved in 2023, including through advancements in training, policy development, and strategic planning. The system is becoming stronger, more efficient and more standardized, and thus better equipped for emergencies in a war-affected environment.

2.1.3. Readiness, structures and biomed

Since the full-scale invasion of Ukraine in 2022, WHO has remained committed to constructing resilient health facilities using innovative health-care solutions and providing essential medical supplies.

The establishment of modular health-care facilities in areas where PHC infrastructure was compromised was central to these efforts in 2023. With 13 modular units constructed in four key oblasts, these facilities delivered PHC services in the regions most impacted by the conflict. In addition, a pilot project involving the installation of two modular EMS units further addressed the growing need to reach people in need. WHO not only facilitated the set-up of these facilities, but also led workshops and developed guidelines for repurposing underground shelters into makeshift health-care centres, finding practical solutions to the challenging realities of providing care in conflict zones.

WHO's support extended to architectural and design aspects of health care, evident in projects such as the Vinnytsya rehabilitation centre and specialized facilities in Rivne for burn injuries and rehabilitation. Collaboration between WHO Country Office in Ukraine, the global WHO-led network Techne (technical science for health network), and the Polytechnic University of Turin was pivotal in redesigning and upgrading health facilities to make them environmentally resilient (8). This has set new standards for infrastructure in crisis-affected areas.



To address energy instability in conflict zones, WHO facilitated the delivery of 193 generators to ensure uninterrupted health-care services across Ukraine and supported the installation of generators in 15 facilities.

WHO's support also extended to critical areas such as transportation and oxygen supplies. The organization delivered 53 ambulances equipped with advanced medical equipment and distributed significant oxygen support, including portable concentrators, cylinders, and oxygen generators. This initiative was enhanced by comprehensive staff training on equipment maintenance, focusing on the technical design and installation of oxygen systems in hospitals.

In addition to material support, WHO also organized a multidisciplinary all-Ukrainian conference in Kyiv on improving the quality of treatment in intensive care units (ICUs). This was a pivotal event for health-care professionals to advance ICU treatments and discuss health-care reforms and priorities. The conference played a crucial role in enhancing ICU service quality and laying the groundwork for a people-centric health-care system in Ukraine.

2.1.4. CBRN risk prevention

The threat posed by CBRN risks in Ukraine is significant and demands proactive measures. WHO has partnered closely with Ukrainian health professionals to strengthen the country's preparedness to deal with such threats. The support provided by WHO has been comprehensive, encompassing both responding to CBRN incidents and ensuring the preparedness of Ukraine's emergency services infrastructure for CBRN threats. This is especially important considering the presence of five nuclear power plants and many chemical factories in the country.



Collaboration with Ukraine's MoH has

been pivotal in leading efforts to enhance capacity in mass casualty management, pre-hospital care, and evacuation protocols for contaminated areas. These endeavours are carried out in conjunction with the Centre for Disaster Medicine and Ukraine's emergency medical system. Over 35 training sessions were conducted, benefiting more than 750 health professionals across critical regions in Ukraine. A training-of-trainers approach was adopted to maximize knowledge dissemination.

In oblasts such as Zaporizhzhya and Rivne, specialized training sessions focusing on radiation preparedness were organized in collaboration with Kyiv's National Research Centre for Radiation Medicine. In response to a request from Ukraine's MoH, WHO also supplied essential equipment for managing technological hazards and spearheaded public awareness campaigns on nuclear and chemical safety. These initiatives reached over 1.1 million people between 2022 and 2023.

Through these concerted efforts, WHO has shown its commitment to ensuring that Ukraine is well-prepared to confront CBRN challenges amidst the ongoing conflict. Emphasis is placed on preparedness initiatives and raising public awareness to effectively mitigate the risks associated with CBRN incidents.



2.1.5. Risk communication and community engagement (RCCE)

In 2023, WHO worked closely with the MoH of Ukraine to promptly address emerging health risks. This collaboration involved the distribution of over 830 000 printed materials focused on preventive health measures, thereby strengthening the country's RCCE plan. Tailored RCCE interventions are vital for addressing health emergencies and encouraging health-conscious behaviours and access to health services.

Chairing the RCCE technical working group (TWG) within the Ukraine Health Cluster, WHO ensured the alignment of risk communication messages to facilitate coordinated responses. WHO's RCCE interventions implemented throughout the year also extended to social media outreach and advocacy efforts aimed at raising risk awareness. In order to hear directly from the most vulnerable communities, the RCCE team organized six focus group discussions with IDPs in Dnipro and Zaporizhzhya following the Kakhovka Dam explosion in June, which caused flooding, water source contamination, and outbreaks of communicable diseases, WHO swiftly developed and disseminated printed materials focusing on the prevention of diarrhoeal diseases, cholera, and botulism. These materials



© WHO

Surveillance training, December 2023

reached over 270 000 people in six oblasts. Furthermore, over 21 800 cholera posters were distributed to 23 Oblast Centers for Disease Control and Prevention (OCDCs), guiding health-care professionals in the early detection, notification, and case management of cholera cases. These materials were further disseminated through health facilities and hospitals.

In late 2023, in response to a hepatitis A outbreak in Vinnytsya and cases reported in other oblasts, WHO developed a joint RCCE plan with the MoH, UPHC, Vinnytsya OCDC, and the United Nations Children's Fund (UNICEF). This plan facilitated risk communication activities and supported the production and distribution of leaflets and posters, reaching over 41 000 people. Social media outreach was also conducted to disseminate risk communication and preventive messaging.

In addition, public health advice leaflets on radiation safety were produced and distributed in territories near the Zaporizhzhya nuclear power plant, reaching 350 000 people.



HeRAMS Interpretation workshop, June 2023

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2.2. Health information in emergencies

Ukraine is facing persistent public health challenges that require up-to-date and efficient information systems to support health services and improve patient care outcomes. In 2023, WHO conducted a detailed disease prioritization exercise in Ukraine to identify and address the most pressing health challenges.

Akey aspect of WHO's health information work has been the strategic development and expansion of the Health Resources and Services Availability Monitoring System (HeRAMS). Launched in November 2022, HeRAMS showcases WHO's commitment to fortifying Ukraine's health infrastructure by monitoring service availability nationwide, including in conflict-affected areas. The system grew rapidly in 2023, compiling data from over 2300 health-care facilities initially to over 9000 facilities by October.

This significant expansion has enabled the generation of real-time reports that guide data-driven health-care responses. HeRAMS data is crucial for precise resource allocation and informed decision-making. It benefits WHO's partners in the Ukraine Health Cluster and WASH Cluster, and informs numerous official reports and external missions. The widespread use of this data emphasizes the crucial role of accurate, real-time information in emergency response planning and execution.

WHO's commitment to enhancing Ukraine's health surveillance capabilities has also included expanding sentinel sites. Crucial for monitoring acute respiratory infections like influenza, the sites have proliferated across the country. This expansion broadens the geographical coverage of health monitoring and ensures seamless integration of high-quality data into the Electronic Surveillance System (ESS). Such integration underscores WHO's commitment to leveraging insightful data analytics and reporting as essential tools for the implementation of timely and effective health interventions.

A nationwide syndromic surveillance training programme targeting trainers was also supported by WHO. This initiative increased the widespread understanding and application of advanced surveillance systems, which play a critical role in enhancing the nation's capacity to prepare for and respond to health emergencies.

WHO's preparedness and response strategies were put to the test following the explosion at the Kakhovka Dam and the ensuing emergency. In the immediate response, the UPHC, supported by WHO, deployed Epidemic Intelligence from Open Sources (EIOS), a methodology for collecting data from media and other open sources for epidemiological purposes. This rapid deployment exemplified the capability of this global WHO-led initiative for agile and time-sensitive surveillance, which is crucial in times of crisis.

Ensuring data integrity is paramount in WHO's health information efforts. This is achieved through painstaking data cleaning, logic checks, and third-party verification processes. This meticulous approach resulted in a commendable 6.37% variation in data quality. A year-long verification process ensures the reliability and quality of collected data, supporting effective humanitarian operations.

To gain a better understanding of Ukraine's health needs WHO conducted several health needs assessments. These consisted of two representative assessments for a broad understanding of the current level of need (9,10); two rapid assessments on the immediate crisis response, and four front-line assessments specifically addressing the impacts of the conflict. These assessments were crucial for designing targeted health interventions, shaping policy decisions, and ensuring the continuity of health-care services under challenging conditions.



2.3. Operations, Support and Logistics (OSL)

In 2023, the OSL team navigated a challenging environment and showed resilience in managing the WHO Country Office's supply chain and transportation fleet.

WHO distributed a remarkable 2015 megatonnes of medical supplies in Ukraine, valued at US\$ 61.85 million. These supplies were delivered to 1016 health facilities across 24 oblasts. The items delivered included emergency medical kits, consumables, ambulances, generators, vehicles, and other medical equipment. To address several Ukrainian health facilities' limited temperature-sensitive storage capacity, WHO identified and provided the necessary equipment such as refrigerators and generators.

WHO delivered these crucial supplies to high-risk areas, navigating supply chain disruptions while leveraging well-coordinated interagency convoys. The OSL team strategically coordinates these deliveries with partners, planning alternative routes to bypass damaged or blocked road networks.

Partnerships were crucial to the OSL team's success, collaborating through Ukraine's Logistics Cluster and Health Cluster. The Health Request Planning and Response platform facilitates coordination with the Health Cluster and its 190 partners, and serves as a model of effective partnership. WHO has fulfilled 334 requests, offering operational and logistical support and technical guidance for partners.

The OSL teams at WHO Country Office in Ukraine and WHO headquarters also work together, solving problems such as delayed shipments or navigating global supply shortages. Proactive market research and sourcing strategies were pursued together in 2023, as well as adaptations, including local procurement and procuring supplies from neighbouring countries when items were not available in the local market.

Managing the Country Office's diverse fleet of vehicles is another indispensable part of the OSL team's work, facilitating the transportation of over 360 colleagues and visitors around the country. A team of 23 dedicated drivers provides this service, enabling constant movement by the Organization in and outside of Ukraine. The fleet comprises 65 vehicles, including armoured vehicles, light vehicles, mini-vans, and buses.

Looking ahead, WHO aims to enhance and expand its supply distribution network, leveraging the Organization's experiences and lessons learned in the past year to make them even more sustainable and responsive.

2.4. Health Cluster

The Ukraine Health Cluster comprised 323 partners in 2023, categorized as active members, associates, and observers. These were made up of national and international NGOs, United Nations agencies, and civil society organizations. WHO is the Cluster Lead Agency with a mandate to provide leadership and coordination to support the MoH of Ukraine. The broad reach of the Cluster enabled a strong response to Ukraine's health needs from the entire health sector, providing consistent and dependable services, while ensuring that humanitarian health assistance is delivered according to international standards.

Although the health system has remained resilient, the war has limited access to health-care services and medicines, particularly for people living close to the front line or in areas not controlled by the Government of Ukranie. Health Cluster partners provided life-saving medications, PHC, mental health support, and other critical health services to navigate this volatility.



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The war in Ukraine has put millions of people at risk. Increasing attacks on health deprive vulnerable people of urgently needed care, undermine health systems and endanger long-term public health. In 2023, Health Cluster partners, including WHO, reached 7.6 million people with health-related humanitarian aid across the country. For most of them, this support was a lifeline. Our coordinated humanitarian assistance will continue for as long as it is needed.

Sarah Hilding der Weduwen, Head of United Nations Office for the Coordination of Humanitarian Affairs, Ukraine

In 2023, the Health Cluster targeted 7.8 million people out of an estimated 14.6 million people in need of health assistance according to the 2023 Humanitarian Response Plan (11). Local health authorities were supported to coordinate health partners involved in the response across 24 oblasts to deliver services in more than 3260 towns and villages. This led to the successful delivery of health-care services to 7.6 million people and support for over 1200 health facilities.



A Strategic Advisory Group steered the Health Cluster through well-informed and thorough decision-making processes. Eleven active TWGs offered specialized guidance and oversight across various thematic areas. A team focusing on cash and voucher assistance for health achieved significant progress in rolling out a cash-for-health approach aimed at minimizing financial obstacles to accessing health-care services.

Newly accessible areas were targeted with humanitarian health assistance, despite challenges such as damaged infrastructure and insecurity. The Cluster operated close to people in need to strengthen accountability while localizing the response. Local organizations played a critical role in community engagement, outreach and distributing medical supplies as part of last-mile delivery efforts. Close collaboration with national actors allowed the response to be built on extensive, pre-existing networks for faster deliveries of humanitarian health assistance to hard-to-reach areas.

The Health Cluster provided partners with timely and reliable information during humanitarian response operations. This enabled decision-makers to assess and monitor the health status and risks faced by affected populations by mapping the availability and functionality of health services, including the performance of the health system.

In December 2023, a Cluster Coordination Performance Monitoring (CCPM) workshop was held in Kyiv, physically bringing together 43 partner organizations. The workshop discussed the results of an earlier CCPM survey to review activities based on the core functions of the Health Cluster (12). Other discussions involved



partners' perceptions of the categorization of activities within the Health Cluster and the humanitarian-development divide (the role of humanitarian organizations focused on emergency relief versus long-term development goals). The participants documented and discussed the lessons learned from the 2023 response, while identifying areas for improvement in 2024.

In preparation for 2024, the participants were also involved in the election of a new Strategic Advisory Group to provide strategic guidance for the Health Cluster's activities in 2024. Four international NGOs and two national NGOs were voted to join the Group, in addition to representation from the MoH, United Nations Agencies, and Observers.

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We extend our sincere thanks to WHO Country Office in Ukraine Coordinating Cluster for their efficient coordination and delivery of crucial aid. Their efforts have made a tangible difference in our ability to address emergencies promptly and effectively. Through collaboration and partnership, EU and WHO continue to demonstrate the importance of working together to ensure the well-being of all.

Claudia Amaral, Head of EU Humanitarian Aid in Ukraine (European Commission's Directorate-General for European Civil Protection and Humanitarian Aid Operations)

3. Health programmes: system strengthening, reform and recovery

WHO is supporting Ukraine's health system amidst the ongoing conflict. In 2023, WHO's efforts underscored the critical importance of continuing to build and strengthen health systems even during emergencies. This approach ensures that Ukraine not only meets its immediate health needs, but also maintains momentum on essential reforms and recovery initiatives.

WHO's support in 2023 focused on adapting health governance structures to the dynamic challenges posed by the war. This included updating the National Health Strategy 2030 to reflect current recovery needs and incorporating elements from the National Health System Post-War Recovery Plan. Collaborations with the Ukrainian MoH, local health authorities, and international partners have been crucial in aligning health policies and strategies to navigate the war's impacts and prepare for a robust recovery.

Health financing reforms continued to be a cornerstone of WHO's work, aiming to enhance transparency, reduce informal payments, and improve the efficiency of public health spending. Service delivery improvements, particularly in PHC, AMR and IPC, have been key areas of focus. WHO's initiatives in these areas have increased Ukraine's long-term development of high-quality, accessible medical services, supported by detailed policy guidance and capacity-building efforts.

In addition, WHO played a significant role in strengthening public health capacities in Ukraine, focusing on critical areas such as the development of the PHWF, water, sanitation, and hygiene (WASH), and building the health system's capacity to respond to infectious diseases.

Despite the challenges of the war, Ukraine has remained committed to curbing NCDs, particularly through tobacco control initiatives. In parallel, WHO Country Office in Ukraine intensified efforts in vaccine-preventable infections (VPI), ensuring comprehensive vaccination campaigns for diseases such as measles, COVID-19, and polio.

WHO's contribution to public health surveillance in Ukraine expanded significantly in 2023, enhancing data collection, analysis, and workforce capacity through advanced ESSs and tailored training programmes. Furthermore, WHO's



engagement in behavioural and cultural insights (BCI) underscored the importance of understanding social and cultural factors in health service effectiveness.

3.1. Health governance

WHO supported Ukraine to adapt health governance structures, including policies and partnerships, amidst the challenges posed by the ongoing war. These circumstances require flexibility and resourcefulness to address resource constraints and ever-pressing health needs.

WHO actively engaged in discussions with the Government of Ukraine, local and international health NGOs, and local health authorities regarding Ukraine's

health sector recovery, exerting considerable influence on policy direction in an economy impacted by war.

WHO is playing an instrumental role in Ukraine by guiding the country's health sector reforms to align with EU standards. This is in response to Ukraine's moves towards EU accession. WHO's global presence and extensive understanding of EU health institutions have enabled it to offer comprehensive technical assistance for developing key national health programmes for consistency and quality.

As a preliminary analysis, WHO identified the key chapters of the EU acquis relevant to Ukraine's health sector and communicated this to the Government. The WHO Country Office in Ukraine has provided continuous practical support to the MoH, engaging in consultations and mapping of the health governance landscape between Ukraine and Europe. This included support for Ukraine's national health authorities to participate in EU-related meetings, negotiations and events, facilitating connections and dialogue between local and EU health experts.

A significant achievement for Ukraine was the revision and update of the draft National Health Strategy 2030, the development of which was paused due to the war in February 2022. The revised strategy now reflects the current wartime situation and the recovery needs of the health-care sector. It integrates elements from the pre-war plan with components from the National Health System Post-War Recovery Plan, presented at the Ukraine Recovery Conference in Lugano in July 2022. Pending government approval, this strategy embodies a commitment to health reform despite the adversity of the war. Its release is expected in 2024.

WHO's support to the MoH involved contributing to the development and future implementation of the National Health Strategy 2030, addressing urgent health needs, and nurturing international health partnerships.

In June, WHO published a report titled "Case studies of health system recovery in Ukraine" in preparation for the 2023 Ukraine Recovery Conference in London (4). The report expands on the previous year's work of identifying the priorities for health system recovery in Ukraine (3). The 2023 publication details recovery efforts and serves as a practical guide for international support, emphasizing the crucial role of ongoing aid.

In collaboration with other agencies, WHO provided a health sector perspective on evaluating the war's impact, participating in comprehensive needs assessments such as the Human Impact Assessment, the Kakhovka Dam Post-Disaster

Needs Assessment (13) and the rapid Damage and Needs Assessment (14). The rapid Damage and Needs Assessment took stock of almost two years of war, estimated damage and losses, and recovery and reconstruction costs over the next 10 years. It also provided qualitative descriptions and assessment of how people's lives have been altered since the invasion. These research reports were pivotal for planning recovery strategies for the health sector in both the immediate and long term.

WHO supported the MoH to receive regular international technical assistance by leading regular health sector meetings and discussions with health partners, fostering continuous policy dialogue and collaborative efforts among stakeholders. WHO facilitated discussions and coordinated policies on PHC financing, new health financing mechanisms, public health law, tobacco control, and patient rehabilitation and biosafety legislation.

WHO also supported the MoH's newly established Recovery and Reform Delivery Office, which is preparing national health institutions for increased responsibilities and challenges during the war, including anticipated budget and staff reductions.

3.2. Health financing

Sectoral Working Group "Health"

The WHO Country Office in Ukraine collaborates with the Government of Ukraine on health governance via the high-level Sectoral Working Group (SWG) "Health". SWGs facilitate coordination between development partners and the Government, ensuring that international aid is delivered both effectively and efficiently.

In 2023, WHO worked closely with the Government, facilitating the SWG "Health", which is co-chaired by the Minister of Health of Ukraine, WHO, and USAID representatives. The group's meetings helped to synchronize health efforts throughout the country, streamlining the delivery of international assistance and planning health policies for response, reform, and recovery. The primary focus for 2023 was on national recovery plans and health reform, which facilitated enhanced dialogue among health agencies in Ukraine.

The health financing landscape evolved rapidly in the years leading up to 2023. Public health spending as a share of gross domestic product rose from 3% to 4% between 2018 and 2021. However, the Russian Federation's invasion in 2022 shook Ukraine's economic foundations. The Government managed to uphold the same nominal level of public health spending and received a boost from international donor support. However, pressures from inflation, rising poverty and unmet medical needs meant that out-of-pocket expenses remain a substantial burden on Ukrainians.

Against this backdrop, WHO intensified its commitment to equitable health access in Ukraine in 2023. Addressing the chronic issue of underfunding and inefficient use of resource, WHO Country Office in Ukraine focused on capacity building, training modules for policy-makers, and promoting data-driven decision-making tools, working closely with the MoH, NHSU, and the Ministry of Finance.

WHO highlighted the progress and challenges in PHC financing reform in Ukraine by conducting several studies. Between 2021 and 2023, Ukraine conducted a costing analysis for provider payments in PHC (15). The analysis underscored the resilience of the reforms during the COVID-19 pandemic and the ongoing war, presenting policy recommendations to improve health outcomes, optimize public spending, and make each spending unit more impactful. A time-use survey was also conducted to assess the allocation of tasks and time spent among PHC staff, shedding light on potential improvements to costing methodologies (16).



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WHO Barcelona course on health financing for UHC in Bukovel, August 2023

With the support of WHO, the NHSU also conducted a study on the cost of PHC services and developed a methodology for updating capitation payments for providers. This methodology improved annual budget preparation processes by providing transparent calculations regarding the budgetary implications of various PHC policy proposals. WHO Country Office in Ukraine also collaborated with the WHO Barcelona Office for Health Systems Financing on a situation analysis of Ukraine's PHC financing (17).

WHO analysed financial protection in Ukraine, reviewing the impact of health financing reforms post-2017, prior to the Russian Federation's invation (6).





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Meeting in Barcelona between WHO Country Office in Ukraine and WHO Barcelona Office for Health Systems Financing, PHC financing report launch, October 2023

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The NHSU and the WHO Country Office in Ukraine have always been in continuous close collaboration to maintain and increase the resilience and stability of the health-care system of Ukraine. For a few years now, WHO's international consultants have been engaged in the further development of the Programme of Medical Guarantees, jointly with NHSU carrying out comprehensive studies of the quality of the medical services delivered and investigating the coverage of the population to which they have been provided. WHO's international experts' contributions to implementing new digital tools and instruments cannot be overestimated.

On behalf of the NHSU, I would like to express our sincere appreciation to the WHO Country Office in Ukraine for their dedication and commitment in providing to the NHSU their significant sustained support for the financial transformation of the health-care system implemented by the NHSU in 2023. Together with WHO experts, we developed the strategy behind our financial policy to address war-time challenges efficiently. Our shared goal is to improve access to qualitative medical services for every Ukrainian, making them free, and to strengthen the resilience of the health-care system to respond effectively to the war and its numerous impacts. We strongly believe that our continued cooperation will provide Ukraine with a unique chance to learn from other countries' experiences to make the best use of existing practices on the way to reform.

Natalia Husak, Head of the NHSU

This joint analysis by WHO Country Office in Ukraine and WHO Barcelona was launched at the WHO Barcelona Forum on Financial Protection in Europe in June 2023. The results showed the state of financial protection in Ukraine and provided guidance to health authorities about policy options. Ukraine was the first country in Europe to publish a second report on financial protection, and one of few to use data up to 2021. A third issue of the study is planned for 2024. A panel discussion with representatives from the Ukrainian MoH and the NHSU discussed the results of the study, and considerations about the impact of the war on financial protection, providing an opportunity to share Ukraine's experience with a wider community of international health financing experts.

WHO's capacity-building initiatives enhance the skills of health authorities through events and regular interaction with experts. The Barcelona Office's flagship course on health financing for UHC was introduced in Ukraine, tailored to the country's needs. A group of Ukrainian policy-makers attended the three-day training course in Bukovel, Ukraine, in late August and early September.

The course is designed to enhance the understanding of health financing among local policy-makers and representatives of health institutions. It draws on global and regional policy experiences, having been refined by the Barcelona Office for over a decade. It reviews an array of effective policy tools aimed at advancing UHC, improving service quality and ensuring financial protection. The adapted course in Ukraine aimed to address the country's current health-care challenges and positive strategies.

Another report assessed the policy framework regarding private health service providers in Ukraine (18). WHO also assisted the State Statistics Service of Ukraine to improve health expenditure tracking and produced a 2021 National Health Accounts study based on international methodology.

WHO developed key tools to aid the NHSU in data-driven decision-making for contracting health-care services. WHO also participated in NHSU strategy development, emphasizing strategic purchasing, contracting, and monitoring for improved health services.

Health financing reforms for strengthening mental health services were reviewed by the WHO team, which led to the publishing of a report focused on understanding how significant shifts in the overall financing of health services have contributed to promoting the transformation of mental health services delivery (19).

3.3. Service delivery

WHO offers support across a wide range of health sectors to assist Ukraine in developing affordable, high-quality medical services over the long term. In 2023, this included enhancements to PHC, AMR, IPC, guidance on medicines policy, and projects to advance nursing education and other capacity-building initiatives to expand the country's health-care workforce.



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A paediatrician in the Children's Department of the Brovary City Centre for Primary Medical and Sanitary Aid conducts a mandatory examination of a child before a scheduled vaccination

3.3.1. Primary health care (PHC)

In 2023, WHO in Ukraine collaborated with the MoH, NHSU, and the Academy of Family Medicine of Ukraine to convene a landmark National Primary Health Care Conference in Lviv. The event brought together over 200 participants, including family doctors, nurses, PHC facility managers, and representatives from health authorities. The conference defined PHC priorities for the medium- and long-term, and underscored the importance of integrated, patient-centred PHC services.

During the Conference, the Ukrainian edition of WHO's *Pocket Book of Primary Health Care for children and adolescents* was launched *(20)*. The pocket book became very popular among family doctors. Over 4000 copies were distributed upon request to paediatricians, family doctors and nurses nationwide to support evidence-based clinical decision-making and improve the quality of care.



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PHC conference, May 2023

The adaptation of PHC services during the war was high on the agenda in 2023. WHO conducted a facility study in January and February to assess the continuity of essential health services. Some 500 PHC facilities were surveyed across the country using the WHO Continuity of essential health services: Facility assessment tool. The analysis captured the impact of the war on Ukraine's PHC system. As a result of the study, a factsheet titled *Continuity of essential health services during the war in Ukraine (21)* was published, and recommendations were shared with the MoH and other relevant stakeholders.

WHO also released a detailed report on PHC services in Ukraine, drawing on assessments and data gathered in 2020–2021 *(22)*. The report identified significant challenges and offered recommendations for policy-makers on addressing these issues. Amid the ongoing war in Ukraine, this report contributed to discussions on the post-war recovery of the country's health sector.

These reports were published and shared among international colleagues, while continuous feedback was provided to Ukrainian health authorities from WHO's regional and global experts. WHO Country Office in Ukraine support for PHC in Ukraine is informed by the global WHO Special Programme on Primary Health Care and the UHC Partnership, which aim to support countries by bringing to bear financial and intellectual resources from the global, regional and country levels.

WHO continued to support the development of PHC performance monitoring at national and regional level in Ukraine. The Lviv City Council, with technical support from WHO and the participation of a community network, health facilities, and the private sector, successfully launched a pilot project to systematically monitor the provision of PHC services. A system of indicators was introduced, with public access to this data through online city dashboards. The WHO Country Office in

Ukraine provided technical expertise to align the indicators with international recommendations, national legislation, country health priorities, and eHealth feasibility. Local legislation now mandates quarterly reviews of PHC performance to start in 2024, marking a significant step towards improving the quality of care. The Lviv City pilot project set an example for other municipalities to introduce the PHC performance framework. The initiative is expected to be scaled up throughout the country.

3.3.2. Antimicrobial resistance (AMR)

WHO supported Ukraine's National AMR Surveillance System in 2023. This system tracks antibiotic-resistant infections and helps to shape intervention strategies.

AMR develops when microorganisms mutate and no longer respond to antimicrobial medications. WHO pursues global strategies to curb AMR, which include regulating antibiotic distribution in pharmacies, preventing infections and the spread of resistant pathogens in health-care settings, and restricting the use of antibiotics in agriculture and veterinary practices.

In 2023, Ukraine's Cabinet of Ministers released a draft Resolution on the National Action Plan on AMR for 2023–2025. The plan aims to tackle AMR through the One Health framework (see Section 4.4.3).

WHO implemented stewardship programmes in more than 20 Ukrainian health-care facilities. These programmes ensured that antibiotics were prescribed and used with the utmost care to minimize the risk of resistance development.

The diagnostic capabilities of 21 bacteriology laboratories were also expanded by providing them with the necessary equipment and consumables for detecting AMR. In 2023, 60 representatives from bacteriology laboratories across Ukraine were trained in implementing the laboratory operations methodology of the European Committee on Antimicrobial Susceptibility Testing (EUCAST). This is to ensure the accurate determination of sensitivity of microorganisms to antimicrobial agents. Over 30 technical advisory visits were made to microbiological laboratories in Ukrainian health-care institutions. These initiatives improved diagnostic accuracy, strengthened treatment outcomes, and enriched the national AMR database. The first nationwide congress of health-care institutions participating in the National AMR Surveillance System was held in 2023 to support the effective functioning of the System.



WHO also developed an AMR strategy reaffirming the Organization's commitment to managing evolving microbes in Ukraine in the context of war and global interconnectivity. The strategy includes expanding IPC and AMR training to every health-care facility by 2025, deepening international collaboration, and thoroughly monitoring IPC practices to ensure widespread compliance.

3.3.3. Infection prevention and control (IPC)

Ukraine stands more prepared for health infection security due to significant achievements in 2023. In a broad capacity-building initiative, WHO trained over 2000 health-care professionals nationwide, significantly enhancing their IPC capabilities. The training sessions concentrated on crucial areas such as hand hygiene, environmental cleaning, care bundles, and health-care-associated infection surveillance. WHO's IPC training fosters a culture of infection safety and vigilance.

WHO also conducted an three-month in-depth training programme for 50 Ukrainian IPC specialists, following the global WHO-recommended IPC competency framework.

Over 40 facilities benefited from the IPC equipment provided by WHO, such as technology to support the latest medical device reprocessing and environmental cleaning. This will help to safeguard the health of over 20 000 patients annually for years to come, and has already played a crucial role in promoting broader adoption of health-care-associated infection prevention practices across Ukraine.

A significant policy development was achieved in Ukraine in 2023 with the shift towards mandatory implementation of WHO-recommended minimum requirements for IPC in health facilities. This policy, which will take effect in 2024, marks an immense step forward in transforming Ukrainian health facilities into modern IPC centres.

3.3.4. Human resources for health

WHO's support for Ukraine also involves long-term planning and training to improve the health-care workforce. Recognizing the crucial need for a strong health-care system in Ukraine, WHO has intensified its focus on developing the necessary education and training programmes to achieve this goal.

The WHO Regional Office for Europe and the WHO Country Office in Ukraine collaborated to create a detailed plan to assist the MoH in forecasting health-care workforce requirements. The plan includes conducting labour market analysis and establishing sustainable international medical partnerships involving hospitals and public health institutions.

In 2023, Ukraine saw notable advancements in nursing education and development. The MoH organized 10 workshops that focused on various aspects of nursing. A WHO nursing mission in Ukraine aimed to build connections with nurses associations, understand regional nursing practices and facilitate knowledge exchange. As part of this mission, eight regional roundtables led to the launch of a pilot community nurse project in Volyn oblast. With WHO support, the Center for Nursing Development also developed a strategic nursing plan for 2024–2029.

In December 2023, a workshop was held on establishing and maintaining effective international partnerships in health-care management, which included sharing professional experiences. The workshop, titled "Partnership for transformation: shaping the future of health care in Ukraine", aimed to design international partnerships that benefit both Ukrainian health-care facilities and foreign partner institutions. These benefits range from collaborating on joint medical operations



and training for medical and non-medical staff to donations of essential equipment such as mammography machines.

3.3.5. Medicines

In 2023, WHO implemented a wide-ranging set of measures to strengthen Ukraine's medical policies and regulations. Support was provided to the MoH to align the regulation of medical devices and in-vitro diagnostics with EU standards. WHO also supported the UPHC in analysing antimicrobial consumption data and implementing the Access, Watch, and Reserve (AWaRe) classification of antibiotics, which is used to guide the prescribing of antibiotics and curb AMR.

An mRNA transfer technology programme was launched through the collaboration between the MoH of Ukraine and WHO, including all three levels of the Organization: WHO headquarters, WHO Regional Office for Europe and the WHO Country Office in Ukraine. To promote local production and coordination between the parties, meetings were held to determine the best ways to implement the programme in Ukraine. Attention was paid to the development of technical knowledge within a pharmaceutical manufacturer selected as a recipient of technology from the WHO mRNA Vaccine Technology Transfer Hub.

WHO provided expertise to build the long-term capacity of Ukraine's National Regulatory Authority through a pre-benchmarking mission. Benchmarking is an internationally consistent process whereby WHO identifies strengths and areas for improvement in national regulatory systems that ensure the quality and safety of medical products circulating in Ukraine. WHO engaged experts to address the pre-benchmarking comments and prepare the National Regulatory Authority for a full assessment.

The MPU also received support from WHO to enhance procurement, supply management, and external relations. For example, WHO supported the MPU in preparing its application for a license for wholesale medicine trade and future Good Distribution Practice certification.

WHO validated and suggested improvements to the external reference pricing methodology used in the National Essential Medicines List to improve medicine affordability and budgetary expenditures. Analyses were conducted to identify drivers of out-of-pocket expenses leading to financial hardship, which will inform the priorities for expanding the Affordable Medicines Programme.

3.4. Public health

WHO played a significant role in strengthening public health capacities in Ukraine in 2023, focusing on public health system reform in critical areas of such as development of the PHWF, water, sanitation, and hygiene (WASH), and building the capacity of the health system to respond to infectious diseases. WHO also worked with the Government of Ukraine and international partners to implement international best practices such as One Health for tackling zoonotic diseases and responsibilities enshrined in the IHR. In October, Ukraine's new Public Health System Law also came into effect, incorporating One Health into the legal system. WHO directly supported the development of these initiatives through policy support and direct interventions.

3.4.1 Public health, regulation and capacity

WHO conducted three important public health retreats in 2023, in collaboration with the MoH, UPHC, and OCDCs. These retreats brought together leaders and technical experts, providing a forum for meaningful interactions to strategize on public health issues. Some of the topics discussed and developed included immunization strategies, AMR, and epidemiological surveillance. WHO experts played a key role in these discussions, providing modern, global, evidence-based public health perspectives and up-to-date protocols and practices to be integrated into Ukraine's strategic plans. The final retreat emphasized project design and pitching skills, leading to 12 high-impact projects for strengthening regional public health systems.

A new programme aimed at developing the PHWF in Ukraine was launched in collaboration with the MoH and Maastricht University. The programme aligns with the European approach to professionalizing the PHWF, following guidelines set out by WHO and ASPHER. The aim is to put in place factors enabling professionalization and expansion of the workforce, such as relevant regulations, financing mechanisms, and hiring and retention strategies. A central part of the programme in 2023 was a leadership initiative for 82 participants selected from across Ukraine, who were trained to lead during challenges such as disease outbreaks and shortages of staff.

WHO recognized the profound impact of GBV on people and public health, and responded by providing specialized training for health managers. This training concentrated on tools and protocols designed to address violence against women, adapted to the Ukrainian context. These train-the-trainer sessions significantly enhanced the capacity of health managers to deliver effective training and support to other health-care professionals in Ukraine.



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Participants problem-solving at a public health retreat conducted by WHO with the MoH, UPHC and OCDCs

At the 16th European Public Health Conference in Dublin, the WHO Country Office in Ukraine facilitated a workshop highlighting the role of female health leadership and the unique challenges faced by women in Ukraine due to the war and as Ukrainian refugees in European countries. The workshop was organized in collaboration with Women in Global Health and other European health organizations. It emphasized the importance of adopting a gender-equity lens in addressing health-related challenges, particularly in conflict and post-conflict settings.

3.4.2. Water, sanitation and hygiene (WASH)

Due to the war in Ukraine, water source contamination and infrastructure damage have intensified, challenging the provision of safe drinking-water. WHO developed a WASH readiness checklist for local health authorities and facilities on water system management and infrastructure maintenance, preparing them for emergencies and restoring services quickly.

WHO supported health-care facilities in several oblasts to enhance their WASH services using the WHO/UNICEF Water and Sanitation for Health Facility

Improvement Tool (WASH FIT). This included delivering essential supplies to improve sanitation and waste management, assessing WASH services, and developing facility-level improvement plans. The expected integration of WASH FIT into national legislation will raise health-care facility standards across Ukraine.

A workshop in July marked progress in adopting the WHO-recommended water safety plan (WSP) approach, aligned with the EU Drinking Water Directive. Participants included health authorities, water suppliers, and NGOs. A roadmap for implementing WSPs in Ukraine linked to EU standards emerged from the workshop. In November, a national WASH meeting was held in Kyiv in which partners from the health, water, and sanitation sectors produced a consensus statement outlining actions for improving long-term WASH resilience and sustainability, with a focus on WSPs.

3.4.3. International Health Regulations (IHR)

The IHR are an important instrument of international law defining a country's rights and obligations in handling public health emergencies that have the potential to cross borders. WHO supports Ukraine to ensure the country's capabilities are in place to manage risks and fulfil the country's responsibilities under the IHR.

In 2023, WHO trained specialists on the Event Information System to strengthen epidemic intelligence and enhance data integration efforts, while surveillance protocols were updated following a thorough review of national documents on priority diseases. Rapid response teams on biological hazards were also trained, targeting team leads and epidemiologists from across Ukraine. This training equipped approximately 60 staff with the skills to tackle biological threats effectively.

WHO supported Ukrainian laboratories with intensive training, procurement of equipment and maintenance support. Workshops on PCR testing and webinars on laboratory biosafety and biosecurity were facilitated for hundreds of laboratory professionals. WHO provided equipment and maintenance support for autoclaves, biosafety cabinets, refrigeration units and calibration of laboratory instruments.

WHO facilitated the procurement of 30 bacterial reference strains, aiming to enhance microbiological assays. This effort is part of strengthening Ukraine's laboratory systems in response to ongoing health challenges. The Organization procured over US\$ 293 000 worth of equipment and reagents to boost

bacteriological testing capabilities. This is a component of the over US\$ 6 million worth of equipment supplied to Ukrainian laboratories in 2023.

3.4.4. One Health

Ukraine made remarkable progress in public health management by promoting the One Health approach across all health sectors. This approach integrates human, animal, and environmental health to tackle the emergence of zoonotic diseases such as COVID-19, avian influenza, and rabies.

The new Public Health System Law came into effect in 2023, incorporating One Health into the fundamentals of Ukraine's legal system. A draft Resolution on the National Action Plan on AMR for 2023–2025 was also released, aiming to tackle AMR through the One Health framework.

The Rabies Conference in Ukraine: Collaborate, Educate, Eliminate! was also held, underscoring the critical importance of the One Health approach for rabies prevention and control. The conference emphasized multisectoral collaboration and the sharing of global best practices.

WHO collaborated with the United States Centers for Disease Control and Prevention to lead a first-of-its-kind three-day workshop on One Health Zoonotic Disease Prioritization in Ukraine, held in Rzeszów, Poland. The workshop convened 35 stakeholders from Ukraine's human health, animal health, and environmental protection sectors. It led to significant progress in establishing a disease selection methodology for disease priority ranking and a Joint Risk Assessment Operational Tool.

A WHO webinar for medical and veterinary students was held on One Health Day, marking a step forward in education in One Health and reflecting growing interest among future health professionals. WHO Country Office in Ukraine planned and promoted this and other educational initiatives with support from the WHO Regional Office for Europe and WHO headquarters. The event provided insights for updating educational curricula with One Health content.

3.4.5. Infectious disease management

WHO's collaboration with the UPHC was crucial in 2023 for addressing the potential for outbreaks of infectious diseases in Ukraine. These concerted efforts enhanced Ukraine's capacity to address prioritized diseases, improving both epidemiological surveillance and preparedness for health emergencies.

"

Our collaboration with WHO, particularly in comprehensive programmes against HIV and tuberculosis, alongside extensive vaccination campaigns, has played a crucial role in fostering a culture of healthy living among Ukrainians. As we look ahead, our continued cooperation will be directed towards preserving and improving the health of our citizens, striving to enhance their comfort, longevity, and overall quality of life.

Mykhailo Rosada, Director-General of the UPHC

Ukraine's embedded capacity to manage infectious disease outbreaks became especially important in the aftermath of the Kakhovka Dam disaster. A steering committee was established among partners to guide the response, aligned with WHO's framework and criteria for managing infectious disease events. Biological risks were assessed with national stakeholders to improve readiness and response to potential outbreaks.

At the time, the focus was on training health-care professionals in Odesa and Mykolayiv in the clinical management of cholera and other acute intestinal infections. The training covered steps towards treatment, including case definition, triage, treatment protocols, and the effective use of cholera treatment kits and rapid diagnostic tests.

3.5. Mental health and psychosocial support (MHPSS)

Ukraine faced a challenging mental health situation in 2023 due to the ongoing war, prompting a strong response from WHO to address the growing needs of the population. WHO is the main technical partner supporting the All-Ukrainian Mental Health Programme, launched by First Lady of Ukraine Olena Zelenska in 2022.

The ongoing war led to a significant rise in mental health conditions. WHO estimates that 22% of people in conflict-affected areas, approximately 9.6 million people in Ukraine, suffered from mental health conditions in 2023. Symptoms frequently observed include chronic fatigue, recurrent headaches, and sleep disturbances, often heralding conditions such as depression.



In recent years, Ukraine has received significant support on mental health from the three levels of WHO's organization (local, regional and international): WHO Country Office in Ukraine, WHO Regional Office for Europe through the Pan-European Mental Health Coalition, and WHO headquarters through the Director-General's Special Initiative for Mental Health.

In 2023, the Coordination Center for Mental Health of the Cabinet of Ministers was established in Ukraine with WHO support. The Center leads the development and implementation of the All-Ukrainian Mental Health Programme and provides technical support to sectors relevant to mental health, including the ministries at national level and local authorities at oblast level.

In 2023, following on from the WHO-supported operational roadmap launched in December 2022 (Ukrainian Prioritized Multisectoral Mental Health and Psychosocial Support Actions During and After the War), coordination and cooperation in mental health grew between the government, UN and nongovernment sectors. This allowed for more targeted actions across health, social work and education, reaching different population groups such as veterans and their families, IDPs, people with disabilities, and people who



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Field visit to a client of CMHT in Berehove, Zakarpattya oblast

have experienced GBV. In cooperation with the Coordination Center, WHO collected inputs for updating the roadmap through a series of consultations with stakeholders, in order to publish the next edition featuring 2023 developments and revised MHPSS actions.

WHO and the Coordination Center also worked together to organize the year's major mental health event in Ukraine – an international forum in Kyiv designed to encourage an exchange of views and experiences between sectors and across countries. The event was titled "Moving Towards Mental Health System and Services of the Future: A Case of Building Back and Forward Better in Ukraine".

The forum functioned as a platform for cross-sectoral and cross-country learning about the transformation of mental health systems in crisis settings. Common problems, barriers and solutions were discussed, showcasing experiences and lessons learned in Ukraine. Some of the topics included raising mental health awareness and fostering a culture of self-help, creating scalable MHPSS systems in different sectors, and human rights and engagement of people with experience of mental health conditions. The event included presentations, workshops, discussion platforms, and interactive zones organized around various thematic areas for the participants. Approximately 550 people attended

in person, with more than joining 3100 online to share knowledge and learn about the transformation of mental health systems in a crisis context.

Technical support in specific areas was facilitated through the MHPSS TWG Ukraine, co-chaired by WHO, the Coordination Center and International Medical Corps. Since 2015, the MHPSS TWG has facilitated the coordination of mental health and humanitarian assistance, and provided technical support to organizations within the humanitarian coordination system. In 2023, the MHPSS TWG supported more than 300 organizations.

The MHPSS TWG has played a key role in the Government and NGOs' efforts to provide MHPSS services in the context of massive need, dispersed capacity for response, and new international partners arriving in the sector. A system of oblast-level coordinators and focal points liaising between the high-level Coordination Center and the MHPSS TWG coordinating partners in the field has led to a unified mental health response. Significant practical steps have been facilitated in capacity-building and knowledge exchange between organizations and mental health-care workers. This coordinated approach has also helped to promote collaboration between humanitarian aid organizations and long-term development agencies.

WHO has led the Mental Health Gap Action Programme (mhGAP) in Ukraine since 2018, focused on training health-care workers on mental, neurological and substance use disorders in non-specialist health settings (23). More than 20 000 PHC workers have since been trained in face-to-face and online courses. As of December 2023, 21 health partners had joined WHO's mhGAP initiative in Ukraine. An additional 148 mhGAP trainers were trained during the year, bringing the total number in Ukraine to 292.

Based on mhGAP, the MoH and NHSU launched a new service package for the provision of mental health services at PHC level, as part of the Programme of Medical Guarantees. Over 860 PHC centres applied for the new service package, which provided mental health services to over 231 000 people. This was possible due to new capacity built up in the system over several years through mhGAP, the work of the Government and many health partners, as well as the new service package. The new package focused on support for groups such as women over 30, new mothers, older people, and increasingly children and adolescents. The objective is not only to offer treatment but to build trust between patients and health-care providers for effective mental health care.



Natasha Azzopardi-Muscat during her field visit to support the mental health team in Ivano-Frankivsk, August 2023

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An online self-paced course on the management of mental health conditions in PHC settings was developed and made available to all PHC workers in Ukraine (approximately 57 500 workers) in stages between February and November. The course is based on mhGAP and tailored to the Ukrainian context. As of December 2023, more than 16 000 PHC doctors (63% of all PHC doctors in Ukraine) have successfully completed the initial six modules of the course. Online learning is especially important during the war due to the disrupted contact with health-care workers in or near occupied territories, mass population displacement, limited opportunities for health-care workers to participate in face-to-face trainings, as well as high workloads and security issues.

Another significant achievement broadening mental health services at PHC level was the further strengthening of the CMHT service model. CMHTs were introduced in Ukraine through successive WHO pilot projects, starting in 2016. As of 2023, 83 CMHTs operated in Ukraine, with 32 receiving training and technical support from WHO.

Each CMHT consists of a psychiatrist, a psychologist, a social worker and a nurse, and provides recovery-oriented support for people with severe mental health conditions to help them live fulfilling lives in the community. These teams offer an innovative alternative to hospital-based treatment models, which has achieved high satisfaction levels among service users and staff. Over 6200 people with severe mental health conditions received care from CMHTs in 2023.

WHO also promoted self-help strategies among the people of Ukraine by training almost 500 trainers in Self-Help Plus, a stress management course aimed at swiftly deploying quality mental health support (24). These trainers, in turn, train course facilitators who directly assist adults experiencing adversities in managing their stress, enabling large-scale cascade training. WHO and the Coordination Center also conducted a communication campaign to promote a culture of self-care and to encourage broader use of stress management techniques.

Through these actions, WHO's support promoted and implemented an approach whereby emergency mental health services were deployed through existing structures and aligned with international best practice, while also further developing the long-term capacity of the Ukrainian mental health system.

3.6. Rehabilitation and disability inclusion

In Ukraine, progress in health, rehabilitation services and AT, including prosthetics, is laying the foundation for a more inclusive and accessible future. These are especially important during the war. The rehabilitation system focuses on immediate services for patients following acute trauma or disorders, extending through subacute rehabilitation phases and community support.

In 2023, WHO aligned its support with government requests for rehabilitation and AT, aiming to establish a modern rehabilitation system amidst the ongoing conflict. WHO held biweekly coordination meetings with operational partners focused on rehabilitation and AT.



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Kyiv Okhmatdyt rehab centre, February 2023



WHO continued to support the MoH in expanding the network of non-specialized in-patient rehabilitation departments in a capable hospital network, including eight adult hospitals and five children's hospitals across eastern, northern, and central Ukraine. This included training local multidisciplinary rehabilitation teams and providing equipment, AT, hospital beds, and IT equipment.

WHO supported the establishment of a new non-specialized in-patient rehabilitation department in Rivne Oblast Clinical Hospital by delivering training for local health workers. International and local rehabilitation experts trained a multidisciplinary rehabilitation team, including a joint-team training at the Dnipro Clinical Multidisciplinary Rehabilitation Training Centre of Excellence. WHO also donated hospital beds, medical and rehabilitation equipment, AT, and consumables. Equipment for conducting splinting and a workshop on the topic were provided. The new department in the oblast is in addition to the National Rehabilitation Centre for Spinal Cord Injuries, established in 2022 and also located in Rivne.

To support the provision of assistive products for people with rehabilitation needs upon discharge from hospital rehabilitation settings, WHO also equipped 40 health-care facilities with AT cabinets that follow MoH requirements.

The challenges faced by persons with disabilities and older people during conflicts were also addressed by providing kits containing ten mobility and self-care products (AT10 kits) to IDPs. The distribution of the AT10 kits was complemented by training service providers and promoting a service delivery framework to ensure the appropriate selection and fitting of assistive products and follow-up.



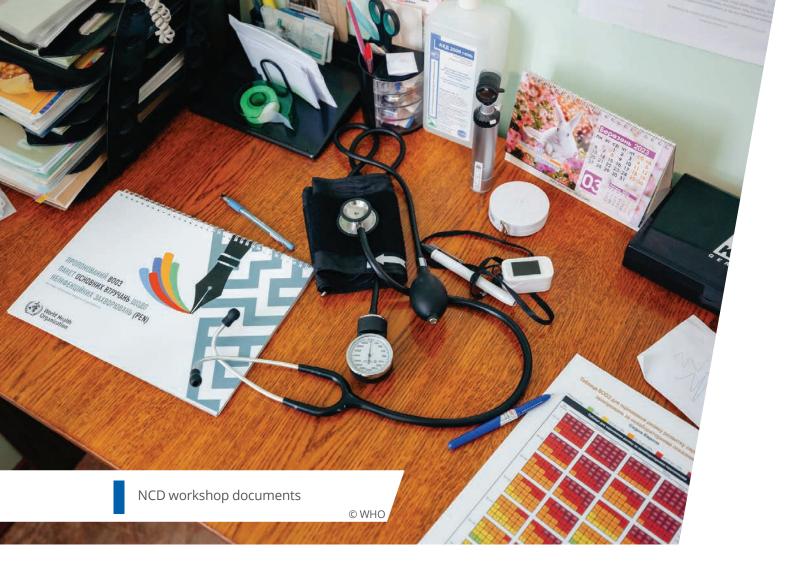
Collaboration between WHO and the International Society of Wheelchair Professionals also resulted in training 39 Ukrainian rehabilitation professionals, granting them international certification. The objective is to have at least two national trainers in each region within three to five years.

3.7. Noncommunicable diseases (NCDs)

Despite the war, Ukraine has shown a commitment to maintaining health initiatives that reduce NCDs. In collaboration with WHO, the MoH and UPHC made significant progress in 2023 in the areas of tobacco control, stroke management, nutrition, and alcohol consumption.

WHO supported the leadership of Ukraine's health sector in their continued work on NCDS, including cooperation with local research and academic institutions, to foster and promote a multidisciplinary life-course approach to reduce mortality, morbidity and disability related to NCDs. WHO supported a dual-track approach of addressing NCDs in the emergency response to build resilience and supporting long-term development on NCDs promoting recovery and reform. This includes addressing NCD risk factors such as tobacco use and healthy nutrition.

In July, Ukraine achieved the implementation of legislation banning the sale of cigarettes and e-cigarette liquids with aromatic additives. This policy, passed in 2022, is in line with Ukraine's commitment to reinforce tobacco policy and



protect public health from industry interference. The new regulations implement key features of the WHO Framework Convention on Tobacco Control and the EU Tobacco Products Directive.

To further understand adult tobacco use in Ukraine, WHO conducted a major national survey in partnership with the MoH and the Kyiv International Institute of Sociology. The survey's insights were crucial in evaluating the new regulations, finding that banning indoor use and restricting flavoured products significantly reduced their prevalence. The survey also highlighted the demand for smoking cessation services, underscoring the role of PHC workers. This aligns with the findings from the PHC Conference, which emphasized the importance of front-line health-care providers in NCD control.

PHC outreach services were supported to address the NCD needs of the population in areas close to the front line. This was achieved through the MHUs, which include PHC workers trained in treating NCDs, and the modular PHC facilities installed where services were disrupted (see Sections 3.1.1. and 3.1.3). People living with NCDs in humanitarian settings are among the most at risk of not being able to move to safer areas. Addressing the urgent need



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Transfats training, June 2023

for appropriate treatment and continuity of care for these patients is crucial to mitigate the escalating burden of NCDs in Ukraine.

Training for health-care workers was promoted using the WHO package of essential noncommunicable disease interventions (WHO-PEN) for PHC. Live courses for PHC workers and nurses were conducted, and additional capacity-building tools were made available, including online training and a WHO-PEN Ukraine app. Other initiatives in capacity-building among health-care workers included using the internationally recognized Practice-based Evidence in Nutrition online training course.

A wide range of NCDs and risk factors were addressed throughout the year in Ukraine. Stroke management was high on the national health agenda, in response to a 47% increase in stroke incidences in Ukraine in the previous year. WHO supported the MoH and NHSU to improve stroke care. As the Stroke Action Plan for Europe has recently been implemented in Ukraine, the WHO Country Office in Ukraine held a technical meeting with the WHO Regional Office for Europe to evaluate the results so far.

Ukraine has taken a holistic approach to NCD management, as evidenced by a review of the National Cancer Strategy and Plan. WHO conducted situation assessments comparing pre-war cancer care needs with the current context. Technical assistance was provided to modernize national cancer treatment

guidelines, including screening tests, while cancer medication was provided to children and adults as part of humanitarian assistance packages.

WHO supported Ukraine to obtain more NCD surveillance data to inform policy decisions. Such data was operationalized from WHO sources, such as health needs assessments for front-line oblasts, HeRAMS, and human resources (HR) assessments of staffing levels and time use (see Sections 3.2 and 4.11).

Data collection and dissemination extended to NCD risk factor research, including WHO's FEEDcities survey on transfat prevalence; completing the third round of the Global Youth Tobacco Survey; and implementing the European Childhood Obesity Surveillance Initiative in Ukraine for 2023. A sociological survey was conducted on alcohol consumption behaviours and attitudes (25) and a National Report on Alcohol Taxation was produced.

3.8. Vaccine-preventable infections (VPIs)

WHO provides advice and practical assistance for vaccination initiatives throughout Ukraine, with the goal of realizing the comprehensive advantages of vaccines for citizens throughout their lives. In 2023, crucial vaccination campaigns were supported for measles, COVID-19, polio, rabies, and other vaccine-preventable diseases. This work is carried out in line with the WHO Regional Office for Europe's VPI and immunization programme, to implement and achieve the goals of the European Immunization Agenda 2030.

WHO provided essential technical guidance for COVID-19 vaccinations and routine immunization planning, anticipating needs and updating the National Deployment and Vaccination Plan for 2023–2024. This helped the Government to successfully apply for Ukraine's 2023–2024 COVID-19 vaccine supply through the COVAX Facility, integrating COVID-19 vaccinations into regular immunization schedules.

To reach priority population groups, WHO launched new promotional and informational campaigns on COVID-19 and routine immunizations. These campaigns were targeted at older people and those living in remote rural areas, emphasizing the importance of universal access and a comprehensive strategy for vaccination throughout the life course.

WHO conducted an analysis of the immunization information system and offered recommendations that included developing system concepts and analytical



tools within the eHealth framework to provide data on immunization coverage for informed decision-making.

Collaboration between WHO's OSL and VPI teams facilitated the distribution of much-needed vaccination supplies throughout Ukraine in a timely manner. This ensured the rapid provision of vaccines and immunoglobulins for diseases such as rabies, tetanus, and hepatitis A. The addition of 59 vaccination buses significantly boosted WHO's outreach, aiding in timely delivery of vaccinations to remote communities and areas most affected by the war.

The implementation of the Measles Outbreak Preparedness and Response Action Plan received special attention in 2023. This initiative is crucial for Ukraine due to increased vulnerability in the country to outbreak-prone diseases such as measles as a result of the war. WHO played a vital role in ensuring that measles immunization campaigns penetrated hard-to-reach areas and high-risk population groups, including IDPs. This was made possible thanks to the



Outreach vaccination in rural areas, Lviv oblast, 2023

remarkable dedication and perseverance of health-care workers carrying out these immunization campaigns in conflict-affected areas.

External assessments confirmed the successful conclusion of the outbreak of circulating vaccine-derived poliovirus type 2, which originated in 2021 in the country's Rivne and Zakarpattya oblasts. No ongoing transmission was detected. This success was achieved through a series of measures, including vaccination campaigns, meticulous surveillance, and broad public communication efforts. WHO supported these measures by launching vaccination campaigns, enhancing surveillance, training health-care workers, and initiating public awareness campaigns.

Additionally, WHO is actively supporting regular monitoring of medical waste management practices in Ukraine's western and central regions, in line with EU and global standards. This is crucial due to the large volume of waste generated from COVID-19 vaccinations. The Government's commitment to managing post-vaccination waste demonstrates its efforts towards environmental health while addressing public health needs.

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3.9. Joint infectious diseases

The WHO Country Office in Ukraine supports efforts to prevent and control HIV, tuberculosis (TB), and viral hepatitis in Ukraine. WHO provided technical assistance to regional and national health authorities, including UPCD – WHO's critical partner on joint infectious diseases (JID). WHO also works with UNAIDS and other UN agencies on the country's HIV response, and with community-based organizations to reach groups such as men who have sex with men, people who inject drugs, transgender persons, people in prisons, and sex workers.

Within the Ukraine Health Cluster, a TWG co-convened by WHO coordinates the immediate needs of people receiving life-saving antiretroviral medicines, other HIV services, TB treatment, services such as rapid diagnostics, and ensures access to equipment such as laboratory reagents.

In 2023, WHO focused on in-person technical assistance visits to PHC facilities, aiming to expand HIV services. This assistance included helping with testing, pre-exposure prophylaxis (PrEP), assessing challenges and opportunities in treatment at PHC level, and providing tailored recommendations to individual facilities and local health-care authorities. WHO carried out 42 technical assistance missions to PHC service providers throughout the year. To accelerate the scale-up of oral PrEP, WHO led in providing international technical assistance and capacity-building to the UPHC and its implementing partners. This advice fostered innovative approaches such as long-acting injectable cabotegravir,

an injectable form of PrEP. WHO also provided support for a delegation of Ukrainian medical PrEP teams, UPHC experts, and civil society representatives who participated in the annual European AIDS Conference held in Warsaw, Poland, in October.

The JID team also expanded its work in opioid agonist maintenance treatment (OAMT), the most evidence-based long-term treatment for patients with opioid dependency. WHO hosted a national dialogue meeting on the topic, while supporting the opening of new sites providing OAMT.

WHO conducted a viral hepatitis programme review in late 2023, aiming to expand upon its recommendations in the future.

WHO seeks to foster existing partnerships to promote the integration of HIV, TB, and OAMT services in Ukraine, ensuring that advocacy and pragmatic steps forward can be made, particularly at PHC level. Opportunities exist for new synergies between the health sector and civil society actors in the pursuit of reduced incidence of these diseases.

3.10. Pandemic influenza preparedness

WHO is proactively advancing integrated health surveillance in Ukraine, specifically focusing on improving epidemiological and laboratory systems for severe acute respiratory infections (SARI) and influenza-like illnesses (ILI). These efforts are part of the Pandemic Influenza Preparedness Framework, and the initiative enhancing influenza response capabilities (26).

In 2023, despite challenges posed by ongoing conflicts and COVID-19, Ukraine's sentinel surveillance system remained operational, reporting epidemiological and virological data to the UPHC, the European Centre for Disease Prevention and Control and WHO.

WHO conducted online training sessions to strengthen influenza and SARS-CoV-2 surveillance capacities, and provided testing kits, laboratory supplies and IT equipment. This supported data collection and reporting across 35 surveillance sites in 12 regions.

WHO also aided the UPHC to develop new surveillance modules for SARI and ILI, and provided 94 laptops and power banks to ILI and SARI sentinel surveillance sites.

These efforts are part of a global WHO strategy to improve pandemic preparedness and response, ensuring that countries such as Ukraine can effectively manage and mitigate the impacts of influenza outbreaks.

3.11. Surveillance

WHO contributed to Ukraine's public health surveillance system by directly contributing to data collection and analysis, strengthening surveillance information management, and developing the PHWF.



© WHO

Mission dedicated to measles outbreak preparedness and response, May 2023 $\,$

WHO supported the UPHC in the development of several modules of the ESS, covering syndromic and infectious disease surveillance. A series of ESS training sessions were conducted for 68 public health specialists from the OCDCs. Throughout the training, participants familiarized themselves with key components of the system and gained a solid understanding of the software fundamentals they will employ in their work at OCDCs. Participants engaged with the system using the example of routine and sentinel epidemiological surveillance for respiratory viruses.

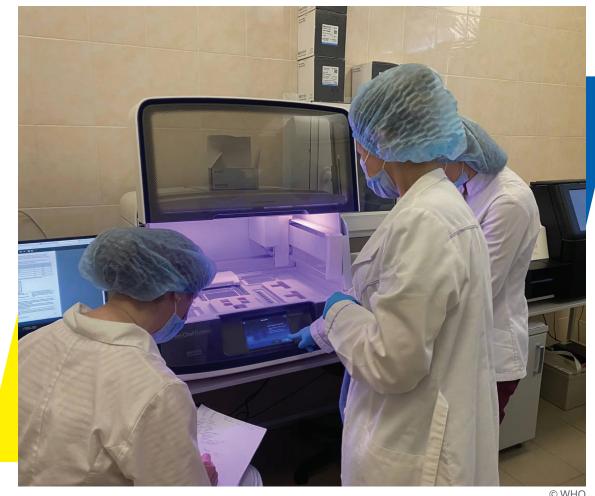
WHO also established a regular EIOS report on priority signals to enhance routine media monitoring for epidemiological information. Criteria for selecting signals were developed, and boards were configured to monitor infectious diseases in Ukraine and neighbouring countries, alongside chemical and nuclear threats. An electronic tool was developed to track these signals, and a weekly bulletin is now being produced based on monitoring results. National sources were revised and prioritized, and consultants were trained on adding sources to the EIOS system. Throughout this initiative, nine weekly bulletins were developed, and 66 signals were identified from over 13 000 pieces of information.

WHO provided a wide range of other training programmes for UPHC and OCDC staff throughout the year, covering topics such as the use of geoinformation systems among epidemiologists, disease-specific training courses, and training for rapid response teams. These programmes are building Ukraine's capacity for both emergency response and long-term improvements in health achieved through public health surveillance.

The procurement of essential equipment significantly enhanced the surveillance system infrastructure. Laptops and power banks were provided to the UPHC and OCDCs, including 26 to emergency operation centres at both national and regional level. Thirty-four laptops were distributed to statistical and analysis departments, strengthening their capacity for data management and analysis.

3.12. National laboratories

The WHO Country Office in Ukraine played a key role in modernizing and advancing Ukraine's public health laboratory sector in 2023. Throughout the year, WHO equipped more than 140 facilities across the country with laboratory equipment, including reagents, consumables, and personal protective equipment. The total value of this equipment exceeded US\$ 6 million.



© WHO

Launch of the Ion Chef instrument for next-generation sequencing at UPHC

Technical support to laboratories included reinforcing the capabilities of laboratories in the area of sequencing, polymerase chain reaction (PCR) testing, quality and laboratory management, repairs, maintenance, and calibration of laboratory equipment. WHO provided advice, recommendations, problemsolving, and mentoring for laboratory staff.

WHO undertook critical interventions, including addressing infrastructure challenges like repairing a roof in an especially heavily damaged infection lab. WHO also certified biosafety cabinets and provided seven SOPs to aid in quality management and accreditation processes.

Two mobile laboratories, of which one was designed by WHO and manufactured in Ukraine, were donated to Ukraine with support from WHO and became operational in Zhytomyr and Ternopil oblasts in 2023, enabling swift augmentation or replacement of laboratory capacities in the most affected areas.

WHO also contributed to enhancing the skills of Ukraine's laboratory workforce. Throughout the year, WHO facilitated over 40 face-to-face laboratory-based training sessions in public health and hospital clinical laboratories, with more than 1000 participants. Topics covered included haematology assays, SOP development, next-generation sequencing, and PCR quality management.

Two comprehensive five-day online courses were also introduced: PCR Basics and Quality Control and PCR Diagnostics of Cholera and Other Waterborne Infections. These courses engaged 2126 participants. An additional 18 webinars on various laboratory-related subjects were conducted for over 3700 laboratory specialists.

To collect data, assessments of 163 clinical and public health laboratories were conducted, amassing invaluable data on testing capacities, staffing, available equipment and reagents, quality management, biosafety and biosecurity. This provided a basis for identifying the nuanced needs of each facility. WHO crafted and introduced several assessment tools including for hospital clinical labs, water testing capacities and the assessment of radiology testing capacities; and began two External Quality Assessment projects on influenza+, COVID-19 and mpox virus.

3.13. Behavioural and cultural insights (BCI)

By engaging in social sciences beyond the biomedical sphere, BCI can help health authorities to improve the effectiveness of health services. This approach responds to people's social and cultural needs. Health can be positively or adversely affected by these factors, which are often overlooked in policy design.

The WHO Country Office in Ukraine works with the WHO Regional Office for Europe's flagship initiative, "Healthier behaviours: incorporating behavioural and cultural insights", with the aim of building a culture of health that enables people to make healthier choices. The themes covered by BCI are broad, such as how people access and use health services, health literacy, belief systems including conflicting beliefs, fear and mistrust versus as opposed to positive views of health authorities, and information and experiences of disrespect or discrimination. BCI can also be applied to understanding the behaviour of health workers.

In 2023, three Ukrainian hospitals participated in a trial applying BMI research conducted by the Regional Office to help to address the rise of AMR, especially among people with war-related injuries. The Healthier behaviours programme provided a step-by-step tool for applying BCI knowledge in this context. Factors

include the proficiency of health workers, their motivation and confidence, peer norms and values and interaction with managers, and physical factors such as easy access to necessary equipment. The hope is that the measures implemented will generate insights that can be scaled up nationally to reduce AMR through appropriate antibiotic prescribing and use.

3.14 Health information and digital health

Digitizing health services and using newly accessible data have become a permanent feature of innovation in health care in recent years. The COVID-19 pandemic underscored the need for digital tools to conduct teleconsultations and digital contact tracing. Alongside this, a plethora of new innovations in eHealth services across diverse areas have flourished in the global drive to maximize the benefits of new digital technologies. However, there are legitimate concerns about new technologies that need to be addressed to ensure uptake of the digital health services, including data protection and equitable access. The impacts of many innovative digital health solutions are also yet to be evaluated.

For these reasons, the WHO Regional Office for Europe established a flagship Empowerment through Digital Health programme to maximize the benefits of new technologies while managing risks. The initiative complements work being undertaken in various countries by partner institutions, providing technical and policy guidance and expertise on the safety and efficacy of digital health solutions. Managing risks means preserving health equity, gender equality and human rights as core values where new technologies are deployed.

In Ukraine, developments in health information include authorities keeping abreast of resources ready for deployment in emergencies through an expansion of the HeRAMS system, and new public health surveillance tools such as EIOS. The new Informatics and Data Science for Health fellowship programme established by WHO for health professionals across eastern Europe and central Asia includes Ukraine. The first cohort of 20 fellows are receiving training on topics such as automating data analysis and visualization for diseases, expanding digital immunization registries, and more.

4. Cross-cutting units

The WHO Country Office in Ukraine continued to reform its internal processes and organizational structure throughout 2023 to align with an evolving context in Ukraine and escalating needs. These adjustments were crucial in maintaining and improving the effectiveness and responsiveness of WHO's interventions. Many dedicated WHO staff members in Ukraine work behind the scenes to ensure continuous provision of medical services, technical support, and policy advice throughout the country.

4.1. Executive Office

Established to meet the growing needs of WHO personnel in the region, the WHO Country Office in Ukraine's Executive Office marked its first year of operation in 2023. The Executive Office supports the WHO Representative in Ukraine, Dr Jarno Habicht, and the WHO Country Office in Ukraine management team to provide strategic leadership, effective coordination, and transparent communications, ensuring the smooth functioning of the Country Office.

Operating in an ever-changing context, Dr Habicht and the Executive Office provided oversight of WHO Country Office in Ukraine's health programmes and emergency efforts in 2023, ensuring these programmes were effectively implemented while adhering to the Organization's established rules, regulations, and procedures.

These efforts focused on development goals and coordinating humanitarian emergency relief. To these ends, WHO convened and chaired eight Health Partners meetings to discuss key changes in public institutions, as well as new and ongoing projects involving development partners. These forums were an important venue for continuous policy dialogue, including in-depth debates on key health issues in Ukraine such as mental health and physical rehabilitation. The Executive Office fostered collaboration with the relevant people and organizations, such as United Nations agencies, international development organizations, and development banks, and the diplomatic community in Ukraine.

The Executive Office has played a key role in supporting Ukraine's Minister of Health, Dr Liashko, in his role as a member of the WHO Executive Board and participant in the United Nations General Assembly. The Office has also



provided guidance to the MoH on effectively participating in these global health-governance institutions. The Executive Office organized numerous high-level visits, including Dr Liashko at the Executive Board and First Deputy Minister of Health Serhii Dubrov at the Standing Committee of the Regional Committee of WHO/Europe. Ukraine's participation in WHO international events was facilitated, as was engaging in strategic dialogues with health authorities, roundtable discussions, and conducting dialogues with embassies and partners.

The Executive Office also welcomed visits by senior WHO officials in 2023. The WHO Regional Director for Europe, Dr Hans Henri P. Kluge, visited Ukraine in February to discuss Ukraine's mental health programme, visit vaccination facilities, and address the one-year mark of the war in Ukraine. Dr Natasha Azzopardi-Muscat, Director of the Division of Country Health Policies and Systems at the WHO Regional Office for Europe, visited in March to participate in the PHC conference, and in August – to support the mental health team in Ivano-Frankivsk and participate in the WHO Barcelona Course on Health Financing for Universal

Coverage in Bukovel. In April and October, the Executive Office organized a three-level mission involving personel from WHO headquarters, WHO Regional Office for Europe, and WHO Country Office in Ukraine to assess Ukraine's overall health response. In December, Dr Gundo Weiler, Director of the Division for Country Support and Partnerships and acting WHO Regional Emergency Director, also visited for the signing of the WHO-Ukraine BCA 2024–2025.

The Executive Office also supported WHO Country Office in Ukraine daily coordination, organized WHO Country Office in Ukraine staff retreats in 2023 and promoted initiatives for a respectful workplace. This included providing regular support for staff meetings, coordination, and follow-up activities.

4.2. Business Operations Support (BOS)

The WHO Country Office in Ukraine's Business Operations Support (BOS) team provides essential support to all WHO staff and hubs across Ukraine. The team ensures the well-being and safety of WHO personnel and manages budgets to ensure prompt and accountable expenditure of donor funding.

A significant 2023 achievement was receiving a strong report from an audit conducted by WHO's Office of Internal Oversight Services, which assessed efficiency across the office's many and varied health programmes. The auditors stated that the Country Office's results were notable compared to similar WHO grade 3 emergency office settings. Audit recommendations included new improvements for better vendor management and increased inventory and asset management, which were implemented by the end of 2023. Procurement processes were further improved by developing a local supplier database.

The Country Office experienced a significant turning point with the successful relocation from a 70-seat office to a new 160-seat office in Kyiv, providing space for all parts of the Organization to grow and maximize productivity. WHO's hub locations were also adjusted due to shifting needs across the country. The Vinnytsya and Poltava offices were closed, while a new office was opened in Kharkiv, and the Dnipro hub also relocated to a larger office. These strategic changes aimed to optimize the impact of the funds spent in the field. The BOS team was intimately involved in each of these transitions.

ICT services markedly improved as the Country Office staff headcount increased to 360 people across seven locations. The BOS team implemented back-up

internet systems, as well as satellite phones and radios to ensure connectivity and cybersecurity measures in emergencies.

Risk management protocols were also reviewed, focusing on travel arrangements to prioritize staff safety, while guaranteeing continuous delivery of services. Risk management exercises were conducted to ensure readiness for high-risk events, such as having a CBRN response plan in place. An extensive review of the risk register was conducted twice in 2023, to ensure that all risks were reassessed and recalibrated to reflect real-time hazards and uncertainties. In addition, a country readiness checklist was also produced with input from the leadership team. A tabletop exercise to test business continuity during a CBRN-related incident was carried out with personnel from security, emergency teams and management, to check the Office's preparedness.

The BOS unit now also manages WHO Country Office in Ukraine PRSEAH programme. In 2023, WHO trained over 1529 people, including WHO staff, external partners and health-care professionals. These sensitization and refresher courses raised awareness through 10 missions in nine cities across the country, with 45% of trainings being conducted face-to-face and 55% online. The effectiveness of these trainings was evidenced by questionnaires indicating nearly 20% improvements in general PRSEAH knowledge and up to 54% in specific areas.

To further empower partners to maintain sustainable PRSEAH systems, WHO conducted three train-the-trainer sessions to prepare over 100 future PRSEAH trainers. Two train-the-trainer forums empowered participants to communicate the highest-quality PRSEAH skills and preventive measures to medical and human rights workers in Ukraine. This further maintained active interagency collaboration on PRSEAH, especially close to the front line. WHO also developed an online PRSEAH video course for health-care workers, local humanitarian organizations, and the public, to broaden education, support survivors, and prevent future incidents. The video course teaches the basics on PRSEAH, accountability frameworks and how to support survivors, specifically in the context of Ukrainian emergency operations (27).

The HR functions within the office were improved and approximately 70 new staff were hired throughout the year. The Country Office is positioning itself to take over the management of all consultant contracting in 2024 to ensure faster processing and ease pressure on the HR unit in the Regional Office. In addition, onboarding processes were streamlined and improved for new personnel to ensure that incoming staff receive counselling briefing before arrival to properly prepare for the stressors inherent in such an environment.

Staff health and well-being was a priority in 2023. A new staff health and well-being strategy was developed by the BOS team in 2023 and implemented via new support mechanisms such as counselling services, a comprehensive staff survey, a new personnel-oriented office layout, training sessions on mental health issues, a pet-friendly environment, and new breastfeeding facilities. Special leave arrangements were enhanced to mitigate burnout and turnover, and to elevate productivity.

4.3. Communications

In 2023, the WHO Country Office in Ukraine Communications team ensured that the impact of WHO and its partners in the country was well-understood and appreciated locally and abroad, and the generosity of donors was highly visible.

This work entailed creating and disseminating up-to-date, informative content, including website articles, social media posts, donor reports, and opinion editorials, as well as organizing public events hosting WHO officials, Ukrainian leaders, and health-care professionals. The Country Office conducted regular press briefings in Ukraine and supported WHO's international press briefings on the crisis. During 2023, 10 major media events were conducted, including joint press briefings with health authorities and donations-related events during missions to regions in Ukraine by the WHO Regional Director for Europe and the WHO Representative in Ukraine.

These efforts were fruitful. In 2023, an estimated 182 000 articles in international media mentioned Ukraine and WHO in the same piece. This included more than 43 000 articles that mentioned attacks on health, WHO, and Ukraine in the same piece. Inside Ukraine, WHO generated nearly 34 400 news mentions, and social media content reached over 25.5 million people.

Media engagement was particularly important in the days following the collapse of the Kakhovka Dam in Kherson oblast. The WHO Representative in Ukraine Dr Jarno Habicht held a special media briefing at the Palais des Nations in Geneva, and the Communications team facilitated high-profile international interviews with media outlets, including the BBC. An additional Palais briefing was held in mid-December to update the media on the state of Ukraine's health system nearly two years after the full-scale invasion.

The Communications team produced high-quality multimedia materials to tell the many stories on the work of WHO in Ukraine, as well as the stories of



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Meeting with the Minister of Health of Ukraine Viktor Liashko, August 2023

front-line health-care workers and patients. For example, a video with English subtitles explaining the role of WHO-supported N-EMTs was produced and shared on Facebook and Instagram. Another video and website article profiling a patient highlighted Ukrainian refugees in Poland undergoing treatment for TB (28). Many of WHO Country Office in Ukraine videos and website articles included personal accounts by patients, pharmacists, doctors and nurses, offering valuable lessons on resilience and perseverance in times of war. WHO produced and shared other stories dedicated to community mental health services, vaccination campaigns, laboratory work, and much more.

Other public events and stories brought attention to WHO's in-depth work in a range of health areas in Ukraine, such as the inauguration of modular clinics in remote war-hit regions. One example was the inauguration of a newly installed, prefabricated PHC structure in Izyum, in Kharkiv oblast, to serve a population of over 10 000 people. WHO in Ukraine's website stories explained the specialized role WHO experts play to a wide audience both inside and outside of Ukraine.

4.4. Security

As widespread air strikes and military activity continued in the country, WHO spared no effort to keep its staff and operations safe. The security team maintained its commitment to ensuring the viability of WHO's mission and the safety of its personnel and health assets throughout the year.

A major accomplishment for the Security team was supporting WHO's humanitarian aid deliveries and health operations in high-risk areas in eastern and southern Ukraine. This included organizing and participating in over 100 interagency convoys throughout conflict zones. The team also delivered safety training for WHO personnel, achieving a 95% certification rate, with plans in place to continue this training until all staff are fully certified.

Extensive security risk management practices were implemented across the Country Office's operations, covering policy adherence, compliance, oversight, training, and safety. This work followed the guidelines of the United Nations Security Management System and directives from the United Nations Department of Safety and Security. All security measures were up to par, and all offices met safety standards. Security officers were on hand 24/7 to provide continuous security services.

The year also focused on strengthening the Security team by recruiting more security officers and upgrading physical security at the premises. This has helped to ensure staff safety and alignment with United Nations security policies, standardizing security practices across the Organization.

4.5. Programme Management Unit (PMU)

The Programme Management Unit (PMU) plays a crucial role in ensuring that WHO teams are well-equipped and efficient during health crises. The unit focuses on planning, budgeting, monitoring, and reporting processes to meet the demands of emergency response and health programme management.

In 2023, the unit adapted its operations to the evolving situation, working to ensure that WHO leadership had the necessary tools to use resources effectively. This included improving accountability and transparency, which are essential in the context of emergency response and global health support.

A major achievement was the successful development and launch of the comprehensive CCS for 2023–2030. The PMU supported the WHO Representative and the Country Office to develop this planning document, which provides a framework for WHO's engagement in Ukraine aligned with the country's national health priorities.

The CCS draws from WHO's longstanding presence in Ukraine and serves as a roadmap for WHO's future engagement in Ukraine and a tool to coordinate efforts with other international partners, optimizing resource allocation and impact. Its guiding principles are innovation, quality data, and adaptability, as well as a people-centred approach to health care. The strategy outlines key areas of collaboration between WHO and the Government of Ukraine, ensuring that all initiatives are tailored to address the country's most pressing health challenges. Aligned with WHO's global and regional priorities, including the Sustainable Development Goals, the CCS demonstrates WHO's commitment to Ukraine through all stages of response, recovery, and reforms.

The PMU also facilitated a series of consultations with various stakeholders to discuss the CCS, including national health authorities, international partners, and civil society organizations. This inclusive approach ensured that the CCS reflected diverse perspectives and needs, and was a collaborative effort involving all key players.

The PMU played a crucial role in developing the BCA for 2024–2025 between WHO Country Office in Ukraine and the Government of Ukraine. The BCA outlines three main goals: achieving UHC, addressing health emergencies, and promoting healthier populations. It serves as a practical framework for collaboration, agreed upon through consultations between national health authorities and the WHO Regional Office for Europe. The overall aim is to achieve the targets of WHO's Fourteenth General Programme of Work (2025–2028), the European Programme of Work, 2020–2025 – "United Action for Better Health in Europe", and the national health policies of Ukraine. The BCA was signed in December 2023.

As part of this work, the PMU developed a programme budget, resource allocation, and work plan for the 2024–2025 period. This involved a comprehensive analysis of the strategic priorities set by WHO Country Office in Ukraine, ensuring efficient resource allocation for maximum impact across critical health interventions in collaboration with the authorities. The PMU's efforts included close collaboration with various technical units and stakeholders to design a work plan aligned

with the overarching goals of the country's cooperation strategy, positioning WHO Country Office in Ukraine to address evolving health needs in the region.

To improve the effectiveness of the Country Office, the PMU implemented planning tools such as regular kick-off and check-in meetings for all received grants. These meetings are critical for teams to understand each grant's scope, expected results, activities, timelines, budget, reporting requirements, and supporting documentation. This approach significantly enhances the Country Office's ability to plan, implement, monitor, and report on its activities effectively. It also streamlines the proposal development process and strengthens the quality of submissions, improving the likelihood of successful funding and implementation. Additionally, the PMU increased training in programme and project management for technical staff and health professionals, recognizing the importance of these skills.

A comprehensive monitoring and evaluation strategy was also developed to ensure effective oversight of WHO's interventions in Ukraine. This was crucial to ensure that WHO Country Office in Ukraine efforts were responsive to needs on the ground amid ongoing health challenges. WHO contracted a third-party monitor to independently assess the distribution and utilization of supplies and equipment provided to over 760 health facilities nationwide from March 2022 to March 2023. The results of the monitoring revealed positive feedback from health facilities and beneficiaries, confirming that the supplies and equipment provided by WHO were crucial in meeting immediate needs during this period. Regular reviews of programme implementation and finances were also conducted, and their results were communicated. The PMU also provided regular internal reports indicating financial utilization against the Country Office's work plan, including information about awards, top priorities and responsible officers. This enabled technical officers and award managers to act promptly based on financial performance.

The PMU is dedicated to obtaining sustainable funding to meet WHO's diverse programme needs now and in the future. In the past year, the PMU played a key role in raising substantial funds from donors for WHO Country Office in Ukraine programmes, emergency response, and recovery operations. The estimated cost of WHO's emergency response was US\$ 160 million, of which US\$ 92 million was received from various donors, securing 58% of the required funding. The PMU handled over 100 grants, from identifying opportunities to developing proposals and managing awards. A forward-looking funding approach is aimed at effectively tackling the complexities of global health challenges, enabling WHO to continue its crucial work in improving public health and responding to emergencies in Ukraine according to international standards.

Three appeal reports were issued in 2023, including WHO's main 2023 Emergency Appeal for Ukraine and Refugee-Receiving Countries (7). This crisis response appeal supports critical, life-saving health care for over 11.4 million vulnerable people affected by the conflict in Ukraine. The PMU contributed to highlighting WHO's involvement in providing necessary health care in conflict-affected areas of Ukraine, along with local and international partners.

The PMU has played a key role in developing and sharing a variety of reports with a wider audience, including donors and partners. These reports include 71 donor-specific reports, 24 biweekly situation reports (sitreps), two output reports, one annual report, and numerous briefings tailored for donors and relevant authorities. This comprehensive reporting effort ensures transparency, accountability, and the continuous flow of critical information to all stakeholders involved in the development and humanitarian response.

The unit also supported WHO Country Office in Ukraine participation in the first Partners Forum organized by WHO Europe in Istanbul, Türkiye, in June. The forum brought together over 100 representatives from across Europe, the Caucasus, and central Asia for a day and a half. The goal of the forum was to improve health sector partnerships through panel discussions and presentations on key health and well-being challenges in the WHO European Region. The Partners Forum aimed to take advantage of the current momentum for public health, providing a platform to consider various expertise and policy perspectives. It also sought to explore opportunities for sustainable health funding across the Region and to strengthen both new and well-established partnerships. Additionally, the forum aimed to foster stronger ties with United Nations agencies, aiming for seamless coordination and efficient resource use across humanitarian and development sectors.

5. Looking forward

The year 2023 was another extremely challenging one for the people of Ukraine, and a period of demanding work for WHO staff. February marked one year since the Russian Federation's full-scale invasion. However, the work of the WHO Country Office in Ukraine continues to save lives. This remains the central focus of the Organization as it pursues its core mission to progress towards UHC, protect against health emergencies, and promote health and well-being.

To achieve these goals, WHO continued to grow its cohort of dedicated employees in Ukraine. The Country Office in Kyiv reached another milestone by moving to a larger facility, and staff working in hubs and offices around the country also experienced significant change as their locations were adjusted. WHO will remain agile and vigilant in addressing new health challenges in Ukraine as they emerge.

Developing new health programmes to meet new needs in a rapidly evolving country and warzone requires year-on-year reflection on WHO Country Office in Ukraine activities. At the 2023 end-of-year retreat, staff and management reviewed their achievements, lessons learned, and the systemwide changes to health care in Ukraine. The emergency health mobilization in Ukraine has evolved into a build-back-better campaign aimed at addressing the immediate health needs of the country while laying a firm foundation for recovery. The launch of the CCS 2024–2030 and the BCA 2024–2025 were key milestones for the Country Office; the CCS being the first of its kind to be created during a humanitarian response; and the BCA renewing the long-standing cooperation between WHO and the Government to achieve UHC, addressing health emergencies and promoting healthier populations in Ukraine.

In this new context, the Organization will continue to grow and provide support to Ukraine, with new programmes and teams in the future. Maintaining the Ukrainian health-care system relies on the dedication of Ukraine's health workforce, support from the international community through organizations such as WHO, and the ongoing health reform process. WHO in Ukraine will continue to prioritize the health response to the war, and continues to call for its end to save lives. However, the success of many of the health strategies pursued by WHO and its partners in Ukraine over the past year shows that the international community can act effectively to reinforce local health systems in the short term and should continue to do so.

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