WHO's Operational Update on Health Emergencies

Transferring patients and health care workers from Al-Shifa hospital in northern Gaza

Severely ill babies evacuated from Al-Shifa hospital to Al-Helal Al-Emirati Hospital in Rafah, located in the southern part of Gaza, where they are being stabilized. Credit: WHO

Since 7 October 2023, the escalating hostilities in Israel and the occupied Palestinian territory has taken a toll on the physical and mental health of civilians. As of November 2023, 1200+ deaths, 5400 to 8800 injuries, 167 hostages and 43 attacks on health care have been reported in Israel. Approximately 15,000 deaths and 36,000 injuries have been recorded in Gaza. 240 deaths and 3100 injuries have been reported in the West Bank. A total of 364 attacks on health have been reported in the occupied Palestinian territory.

WHO is supporting health authorities in both Israel and the occupied Palestinian territory. In line with International Humanitarian Law, WHO calls for unimpeded and safe access for humanitarian aid to all of Gaza, for patients to receive care where they are, for protection of health care at all times and for a sustained humanitarian ceasefire. WHO also calls for the immediate release of all the hostages, along with urgent access to each of them and delivery of medical care.

WHO is appealing for US$ 110 million to respond to the humanitarian needs in the occupied Palestinian territory, particularly in Gaza, and US$ 30 million for readiness in Egypt, Jordan, Lebanon and the Syrian Arab Republic. For more information click here and here.

Please note: the situation on the ground is changing rapidly. The below article presents WHO's actions in the occupied Palestinian territory as of 20 November 2023.

On 18 November 2023, WHO led a joint UN humanitarian assessment team to Al-Shifa Hospital in northern Gaza which aimed to conduct a rapid situational analysis, determine medical priorities and establish logistics options for further missions. The team included public health experts, logistics officers and security staff from the UN Office for the Coordination of Humanitarian Affairs (OCHA), the UN Department of Safety and Security (UNDSS), the UN Mine Action Service (UNMAS), the UN Office for Project Services (UNOPS), the UN Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) and WHO.

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In this issue

Key figures on WHO's work in emergencies (as of 20 November 2023)

US$ 74 929 866 has been released by WHO's Contingency Fund for Emergencies (CFE) to 19 health emergencies in 2023, including the Türkiye/Syria earthquakes, the conflict in the occupied Palestinian territory, the Ethiopia complex emergency, the global cholera (multi-country) crisis, the Sudan conflict and the Libya flooding (as of 20 November 2023). For more information about the CFE's work in 2022, see the CFE's 2022 annual report: Enabling quick action to save lives.

To date in 2023, Standby Partners have supported WHO's operations through the deployment of **43 experts** to respond to **14 graded emergencies,** including to the conflict in Israel and the occupied Palestinian territory, the multi-region cholera outbreak, the emergencies in the Democratic Republic of the Congo, Haiti, Sudan, and Ukraine, as well as to the Greater Horn of Africa drought and food insecurity emergency. In total, **17 countries** have been supported by Standby Partners' deployments in 2023. The average duration of each deployment is **5 months**. So far, these deployments have been facilitated by **7 Standby Partners**: CANADEM, Dutch SURGE Support, iMMAP, NORCAP, RedR Australia, the Center for International Peace (ZIF) and the Swedish Civil Contingencies Agency (MSB). These deployments are provided free of charge to WHO and Member States. In 2022, 80 Standby Partners deployments had been recorded for 16 emergencies in 30 countries. For more information, see the 2022 Standby Partners annual report.

12 GOARN deployments are currently ongoing across WHO's six regions. Since the beginning of 2022, GOARN has supported 175 deployments, of which 163 have been completed as of 20 November 2023.

912,000 online data analysed by WHO and the Africa Infodemic Response Alliance between 1-31 October 2023 as part of social listening and infodemic management support to Member States.

OpenWHO totaled **8 million enrolments** for online courses available in **72 national and local languages**, including 49 courses dedicated to the COVID-19 response.

For the latest data and information on WHO's work in emergencies, see the WHO Health emergencies page and the WHO Health Emergency Dashboard.

This high-risk operation followed an evacuation order issued by the Israel Defense Forces (IDF) and was undertaken as fighting continued near the hospital. It was deconflicted with the IDF to ensure safe passage along the agreed route.

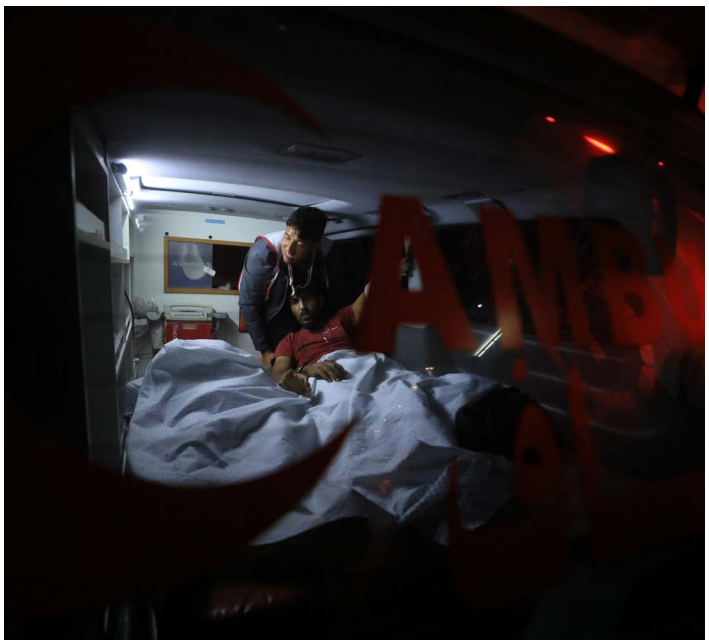
Bleak conclusions were drawn from the mission. The team described the hospital as a "death zone" and the situation as "desperate." Signs of shelling and gunfire were evident and a mass grave was seen at the entrance of the hospital, where over 80 people are estimated to be buried.

Lack of clean water, fuel, medicines, food and other essential aid since the start of the military operation have caused Al-Shifa Hospital—once the largest, most advanced, and best equipped referral hospital in Gaza—to essentially stop functioning as a medical facility. The hospital has been unable to carry out effective waste management, leaving corridors and grounds filled with medical and solid waste, which increases the risk of infection. Patients and staff with whom the mission spoke were terrified for their safety and health.

Given the current state of the hospital, WHO and partners are urgently developing plans for the immediate evacuation of the remaining patients, staff and their families to other health facilities.

As part of these plans, WHO led a second joint UN mission on 19 November 2023, in collaboration with the Palestine Red Crescent Society, UNICEF, UNMAS and UNRWA, during which 31 babies were evacuated from Al-Shifa Hospital to the neonatal intensive care unit at Al-Helal Al-Emarati Maternity Hospital in southern Gaza.

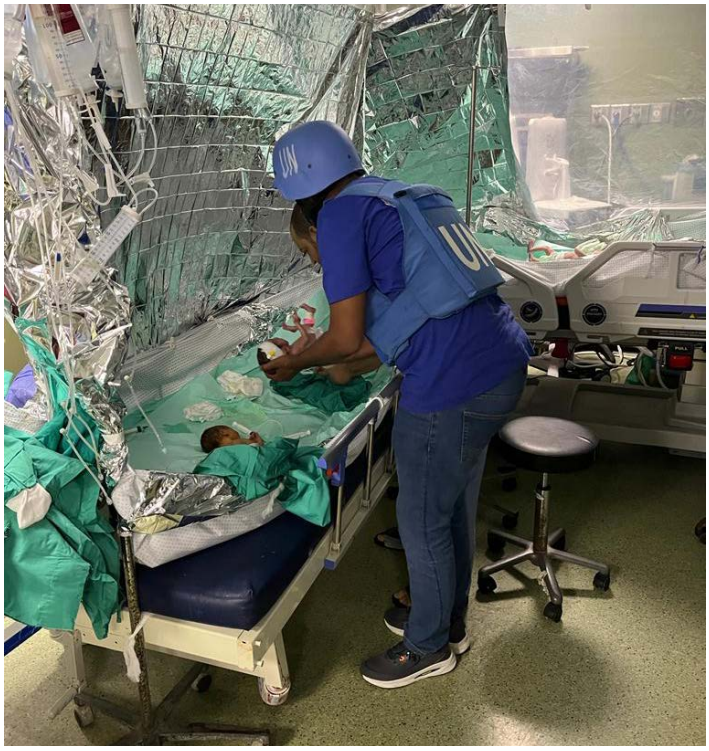
Following their successful transportation, babies are being assessed and stabilized and 28 of them were transferred to Egypt. All of them are fighting serious infections and 11 are in critical condition. Two babies had died before the evacuation could take place and none of the infants were accompanied by family members, as the Ministry of Health is not currently able to locate close family members.



Joint UN mission transfers critical patients from Al-Shifa Hospital in Gaza, under intense fighting - November 2023. Credit: WHO

Another six health workers and ten of their family members, who had been sheltering at the Al-Shifa hospital, were also evacuated as part of the mission. As of 20 November 2023, over 250 patients and 20 health workers remain at Al-Shifa, all of whom requested to be immediately evacuated. WHO and its partners are actively continuing to work on their evacuation to Nasser Medical Complex and European Gaza Hospital in the south of Gaza – both of which are already operating beyond their capacities – over the next days. On 22 November 2023, WHO and the Palestine Red Crescent Society participated in another joint-UN mission to transfer 151 patients, relatives and health workers accompanying them from Al-Shifa hospital in northern Gaza.

WHO reiterates its call for collective efforts to bring an end to the hostilities and humanitarian catastrophe in Gaza, and calls for a sustained ceasefire, the sustained flow of humanitarian assistance at scale, unhindered humanitarian access to all of those in need, the unconditional release of all hostages and the cessation of attacks on health care and other vital infrastructure.



WHO-led joint UN and Red Crescent mission evacuated 31 infants from Al-Shifa Hospital in Gaza - 19 November 2023. Credit: WHO

> "Attacks on medical facilities and civilians are unacceptable and are a violation of International Humanitarian and Human Rights Law and Conventions. They cannot be condoned. The right to seek medical assistance, especially in times of crisis, should never be denied."
>
> Joint statement by Ms. Laila Baker, UNFPA Arab States Regional Director; Ms. Adele Khodr, UNICEF Regional Director for the Middle East and North Africa; Dr. Ahmed Al-Mandhari, WHO Regional Director for the Eastern Mediterranean

For more information, click here and here.

Seven months since the escalation of the conflict in Sudan, health needs remain massive

Since the escalation of violence in Sudan on 15 April 2023, 11 million people are in need of urgent health assistance and 1.4 million people have been forced to flee to neighbouring Central African Republic, Chad, Egypt, Ethiopia, Libya and South Sudan. WHO is appealing for US$ 145.2 million to respond to the most urgent health needs until December 2023 in Sudan and neighboring countries. For more information, click here and here.

The Dialysis Centre in Wad Madani Hospital, Gezira, Sudan on 22 October 2023. Credit: WHO / Ala Kheir

Seven months of war in Sudan have had a deadly impact on people's lives, livelihoods and health. The health situation in Sudan is catastrophic.

As of 3 December 2023:

- 60 attacks on health care have been reported (since 15 April 2023)
- 100,000+ children under 5 years are suffering severe acute malnutrition with medical complications
- 6.49 million people have been newly displaced (since 15 April 2023)
- 3 million children have been displaced. Sudan is the largest child displacement crisis in the world
- 11 million people are in need of urgent health aid
- More than of 70% of health facilities are non-functional in conflict-affected states
- Nine states reported suspected cholera: South Kordofan, Gedaref, Khartoum, El Gezira, Kassala, Sennar Red Sea, White Nile and Blue Nile. Alerts have been reported in Central and North Darfur.
- Outbreaks of measles, malaria and dengue fever are ongoing
- 966 700+ clinical malaria cases and 123 deaths have been reported

Sudan's health system, which was already weak and struggling due to conflict, disease outbreaks and malnutrition is now buckling under the enormous pressure caused by the war. Health needs are greater than ever, including scaling up access to trauma and emergency care, mental health and psychosocial support, and treatment of chronic diseases and of medical complications of severe acute malnutrition. In addition, access issues to certain parts of the country are impeding the response.

WHO and its partners have been supporting health authorities from the start of the conflict to respond to the health needs of Sudan's people and strengthen emergency health response. Key achievements to date include:

- 2360 metric tons of medical supplies were delivered across Sudan
- 21 mobile and fixed primary health clinics were deployed to eight states
- Trainings were delivered on mass casualty management, first-line support, psychological first aid, nutrition emergency response, and case management
- The Port Sudan Public Health Laboratory's capacities were scaled up to provide nationwide services
- Disease surveillance and outbreak response were enhanced, through WHO's support to the Ministry of Health
- 2.3 million doses of Oral Cholera Vaccines were distributed in Gedaref and Gezira States. An additional 0.65 million doses are planned to arrive on 9 December 2023, for Khartoum

Moving forward, WHO's strategy in support of Sudan's health authorities will remain guided by four strategic priorities:

- Ensuring open channels of supply and logistics for emergency medical supplies and their accessibility to the most vulnerable populations
- Ensuring access to essential life-saving health services
- Addressing public health risks by ensuring surveillance, early detection, and timely response to disease outbreaks; and
- Ensuring effective coordination and leadership for health emergency preparedness and response at the federal and state levels, in collaboration with Health Cluster partners.

For more information, click here.

Building momentum against diphtheria outbreak in Nigeria

Aishatu Umar, a vaccinator in Ungogo local government area (LGA), Kano State. Credit: WHO

From 9 May 2022 to 25 October 2023, a cumulative total of 15 569 suspected (9772 confirmed) cases of diphtheria have been reported across Nigeria, of which 547 individuals have died (case fatality rate of 5%). Confirmed cases have been recorded in 19 States, with the Federal Capital Territory, Kano, Yobe and Bauchi States being the worst affected. Kano State bears the highest burden of the disease, with 8022 confirmed cases.

Diphtheria, a vaccine-preventable bacterial infection, is highly contagious and can lead to severe respiratory distress due to the formation of a greyish membrane in the throat. Without treatment, it obstructs breathing and can result in death.

Those who receive prompt treatment usually fully recover. This is the case of seven-year-old Jubrin, who was diagnosed with diphtheria in July 2023 and was immediately transferred from the health facility near his home in Alharini settlement, in Kano State, to a specialist hospital where he recovered. Jubrin's brother, a village head, is now using the experience and his position in the community to raise awareness and educate people on the importance of childhood immunization against diseases such as diphtheria.

> "Interrupting transmission in Kano State is crucial to reduce the risk of spread at the community level. WHO has been a valuable partner."
>
> **Dr Abubakar Labaran Yusuf**
> Kano State Commissioner of Health

Since the first cases were identified, WHO has been working with partners to support the government at national and subnational levels to strengthen the outbreak response. WHO has disbursed US$ 1.3 million from its Contingency Fund for Emergencies to enhance key outbreak control measures. These include vaccination for those those who are un- or under vaccinated, disease surveillance, laboratory testing, contract tracing, case investigation and treatment, training as well as collaboration with communities to support the response efforts. WHO is also providing technical expertise and has developed guidelines and strategic documents for the Federal Government, States and partners to ensure effective coordination.

With support from WHO and the United Nations Children's Fund (UNICEF), Kano State has carried out three phases of reactive routine immunization campaigns in February, April and August 2023, using a combination of tetanus-diphtheria and pentavalent vaccines. Three doses in the primary series are necessary for full protection against diphtheria. A further three doses provided in childhood and adolescence provide long term immunity. WHO has also provided and helped the country procure medicines to treat the disease.

As of the end of October 2023, almost 75 000 unvaccinated children under the age of two received the first dose of the pentavalent vaccine, while around 670 000 eligible children (4–14 years) were vaccinated with the tetanus-diphtheria vaccine in 18 high-burden local government areas in Kano State.

Moving forward, WHO and its partners will continue to support Nigeria to enhance its response and preparedness for diphtheria.

> "WHO is committed to work with the Government of Nigeria and partners to ensure that we respond swiftly and in a coordinated manner to this concerning outbreak of a vaccine-preventable disease. We cannot stop until we have reached all children who have not been fully vaccinated against diphtheria and continue encouraging all parents to bring their children for routine childhood immunizations."
>
> **Dr Walter Kazadi Mulombo**
> WHO Representative to Nigeria

For more information, click here and here.

WHO and Emergency Medical Teams care for burn victims in Armenia

Since September 2023, WHO has been supporting the Ministry of Health of Armenia with the health response for refugees from the Karabakh region. The UN estimates US$ 97 million are needed to provide urgent humanitarian aid and protection to refugees and host communities until March 2024, out of which US$ 10.8 million are needed for health. For more information, click here.

Emergency Medical Teams essential burn rehabilitation training of trainers in Armenia. Credit: WHO/ Nare Shahinyan

On Monday 25 September 2023, as thousands of refugees were moving towards Armenia from Karabakh region, a powerful explosion at a fuel storage depot killed over 200 people and seriously injured over 300 people. To support the ongoing care of burn survivors, WHO/Europe swiftly activated an Emergency Medical Teams (EMT) coordination cell under the leadership of the Ministry of Health of Armenia. Care teams specializing in burn management quickly arrived from several countries and have worked alongside Armenian medical staff to care for the exceptionally high number of burn patients, from the time of early treatment stages to rehabilitation.

Deployed EMTs include:

- **The Israeli EMT** was the first to be deployed to Armenia. The team consisted of plastic surgeons, an anaesthesiologist, nurses and specialists in pain management. During their two-weeks stay, the EMT supported Armenian medical teams to care for approximatively 250 people, some of whom had suffered serious burns on 70–90% of their bodies. WHO expresses its sincere thanks to this team who mobilized first but had to shorten its deployment due to the events of 7 October 2023 in Israel.
- **The Belgian B-FAST team** was specifically tasked with the evacuation of patients. In addition to burn specialists and other medical staff, B-FAST's management team ensured that each step of the complex evacuation process flowed smoothly, both medically and logistically. Under the European Union Civil Protection Mechanism, Bulgaria, Italy, Romania and Spain also supported further medical evacuations.
- **The Italian Medical Team:** at the request of the Armenian Government, the ITA Medical Team of the Italian Department of Civil Protection deployed a specialist burns team, which jointly worked with Armenian plastic surgeons and anesthetists at the Yerevan Medical Centre. When the specialist team left at the end of October 2023, skilled local doctors took over the complex process of burns reconstruction.
- **Samaritan's Purse EMT:** Samaritan's Purse brought 11 burns management experts to Armenia, who helped build hospital capacity and provide rehabilitation services, surgery and wound dressing in the National Centre for Burns and Dermatology. This team stayed from 6 to 28 October 2023.
- **UK-Med EMT:** With support from the Foreign, Commonwealth and Development Office, UK-Med sent a small surgical and physiotherapy team to support the Mikaelyan Hospital in Yerevan in providing surgical and rehabilitation treatment to survivors. The UK-Med EMT stayed until 28 October 2023.

> "In normal circumstances in Belgium, doctors see one of these severely burned people once a month. But here you see 200 of those patients at once. The Ministry of Health of Armenia and all the medical staff are doing a great job with the means they have, but this is really stretching their limits and it would be stretching the limits of many countries, including Belgium."
>
> **Bert Torfs**
> B-FAST Medevac's Team Lead

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Emergency Medical Teams essential burn rehabilitation training of trainers in Armenia.. Credit: WHO/ Nare Shahinyan

Beyond the deployments, WHO and EMTs are also closely supporting the Ministry of Health of Armenia to strengthen national capacity in burns rehabilitation. In this respect, WHO, UK-Med and Samaritan's Purse delivered a training of trainers course to Armenian rehabilitation physicians, physical therapists and occupational therapists health workforce on essential burn rehabilitation.

Supporting patients on the long road to recovery

Surgery is only the beginning of the healing process for burn patients, who then require intensive rehabilitation - a process which can take up to a year or even longer in some cases. For many patients in Armenia who were severely burned, the services provided with support from EMTs are just the beginning of the journey towards healing.

Moving forward, WHO/Europe will continue to work with the Armenian Government to support these patients and strengthen the physical and mental health care of refugees and host communities as part of the broader response to the refugee crisis.

WHO/Europe is currently preparing an EMT action plan for 2024–2030, with input from Member States, to reinforce health systems' emergency preparedness and resilience by integrating EMT capacities into national frameworks.

For more information, click here, here, and here.

Emergency Medical Teams essential burn rehabilitation training of trainers in Armenia. Credit: WHO/ Nare Shahinyan

Design for health care: Téchne, WHO and the Politecnico di Torino develop design proposals for the reconstruction of primary health care facilities in Ukraine

The Technical Science for Health Network (Téchne) is a WHO network of architects, engineers, designers and public health practitioners from several institutions globally, that aims to make health settings and structures safer and reduce the risk of hospital- acquired infections. Téchne has become a key logistical response network helping with preparedness and response to health emergencies.

Team of architects, engineers, professors and students from the Politecnico di Torino and Téchne working on the development of design proposals for primary health care facilities in Ukraine. Credits: Anna Silenzi

The ongoing conflict in Ukraine has significantly disrupted the provision of primary health care services for communities on the frontline: from 24 February 2022 to 10 November 2023, WHO recorded over 1,300 attacks on health care. To ensure continuity in the provision of health services for communities in the frontline, WHO has been installing modular health care facilities, in the form of prefabricated health care units. However, the actual reconstruction of health facilities – in particular those at primary health care level – is an urgent priority.

It is against this backdrop that **the Politecnico di Torino – a Téchne member – in partnership with Téchne and the WHO Country Office for Ukraine launched a knowledge-sharing initiative aiming to develop design proposals for scalable primary health care facilities models.**

Each proposal would provide an adaptable and easily replicable model for primary health care facilities, which could be built across Ukraine and adapted in terms of size to address the population's needs. This work builds on a prior needs assessment undertaken by the WHO Country Office for Ukraine, in collaboration with the Ministry of Health.

Rolled out from February to June 2023, the initiative harnessed the expertise of a dynamic team comprised of architects, engineers, professors from the Politecnico's Departments of Architecture and Design, and of Energy, as well as master's degree students from their Green Building Design Studio. The collaboration with the WHO-Téchne's operational support team has been instrumental in the project's fruition.

In total, 12 design proposals were developed, offering options for different types and sizes of primary health care facilities.

Each proposal championed the following principles:

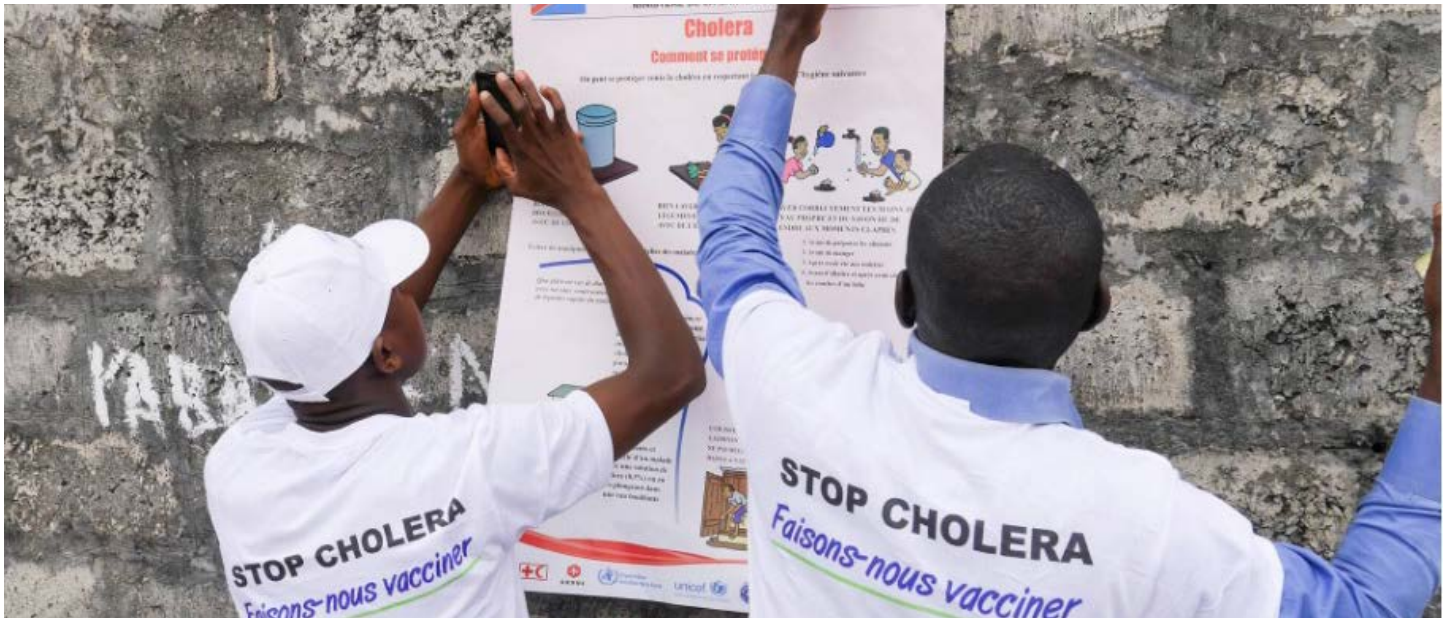
- **Accessibility and inclusiveness**, to ensure primary health care facilities are easily accessible by all patients.
- **Environmental sustainability and climate resilience**, by using local materials which are long-lasting, solid and adapted for their environment.
- **Technological innovation**: students were encouraged to develop innovative designs, using technological innovations.
- **User-centered design**: by placing the user's experience and needs at the forefront, each design proposal ensures that the health care environment considers the unique requirements and concerns of both patients and staff, as well as the community at large.
- **Feasibility**: each design proposal can be built within a reasonable timeframe and budget.
- **Modularity**: design proposals can be made smaller or larger, to adapt to the needs of each facility.

All design proposals were shared with the WHO Country Office of Ukraine in November 2023, and will support the Ministry of Health in the future reconstruction of primary health centers across the country.

Overall, by suggesting designs for innovative, functional and environmentally sustainable primary health care facilities, this project has the potential to drastically improve the health and wellbeing of communities in Ukraine. Beyond this context, this work also lays the foundation for the design of primary health care facilities in other countries.

The Democratic Republic of the Congo launches its revised multisectoral plan to eliminate cholera by 2030

Cholera continues to be a global crisis. As detailed in its global strategic preparedness, readiness and response plan for cholera, WHO requires US$ 160 million until April 2024 to prevent, prepare and respond to ongoing cholera outbreaks on a global scale. For more information, click here.



Health workers put up a poster on preventing cholera during an outbreak in Kinshasa in 2016. Credit: WHO / Eugène Kabambi Kabangu

Since the beginning of 2023, intercommunal clashes and armed conflict, combined with floods and landslides in the east of the Democratic Republic of the Congo (DRC) have forced thousands of people to flee their homes and seek refuge in overcrowded internally displaced persons' camps. At the same time, the country has been facing one of the deadliest outbreaks of cholera, burdening an already overstretched health system.

From January to September 2023, over 41 000 cases and 314 deaths have been reported. A concerning feature of this outbreak is the consistently high number of cases reported throughout the year: after an initial peak in April 2023, approximatively a thousand cases have been reported each week.

Since the beginning of the outbreak, WHO has been working closely with health authorities to support the response, including by providing medical supplies and expertise, facilitating the transport of test samples to laboratories, and building treatment centres to bring health care closer to the people.

In January 2023, the DRC carried out a massive reactive vaccination campaign, which reached over 360 000 internally displaced persons in the North Kivu region with single doses of the Oral Cholera Vaccine (OCV). Additional vaccination campaigns are planned in the near future, which will tentatively target a further 5 million people.

It is against this backdrop that **the DRC's government launched in October 2023 its revised Multisectoral Cholera Elimination Plan to eliminate the disease by 2030**. This plan has a total budget of US$ 192 million allocated to improve water, sanitation and hygiene (WASH) conditions to lower disease transmission within affected local communities. The plan also includes emergency interventions in cholera-affected areas, notably the North Kivu province, as well as investment for operational research to drive evidence-based solutions for effective cholera prevention and control.

More than 22 key ministries will be mobilized to achieve the plan's goal of eliminating cholera, highlighting the DRC's dedication to roll out a multisectoral approach.

The launch of the DRC's revised Multisectoral Cholera Elimination Plan has been celebrated by the Global Task Force on Cholera Control (GTFCC), which continues to provide multi-sectoral operational support in the country. Moving forward, WHO and its health partners will continue supporting the DRC's government in its efforts to sustainably control cholera.

> "DRC's revised Multisectoral Cholera Elimination Plan clearly sets out the multi-sector strategy on which the mobilization of partners is based. This plan allows the government to target priority areas and activities, as well as donors to support this effort by investing financially in activities that will have the greatest impact, not only on the reduction of mortality but also on prevention and sustainable control of cholera."
>
> **Dr Philippe Barboza**
> Head of the GTFCC Secretariat and WHO Team Lead for Cholera and Epidemic Diarrheal Diseases

For more information, click here.

Ten South American countries strengthen their capacities in risk communication and community engagement

Participants to the second sub-regional workshop on RCCE, held in Lima, Peru in October 2023. Credit: WHO

In all health emergency responses, especially those in which vaccination campaigns are organized, risk communication and community engagement (RCCE) is key to ensure understanding and adherence to public health measures.

The COVID-19 pandemic highlighted the critical need to enhance and incorporate RCCE as a comprehensive, multidisciplinary approach before and during an emergency, as well as in the recovery phase. RCCE goes beyond what is known as external communication and incorporates a wide range of aspects including science translation, behavioral analysis, infodemic management, and risk perception.

It is against this backdrop that Peru hosted in October 2023 a three-day subregional workshop on RCCE for health emergencies and vaccination in Lima. The workshop was attended by 70 participants from Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, Paraguay, Peru, Uruguay and Venezuela. Participants included communications, health promotion, risk management and emergency professionals. Communication professionals from health authorities in Peru's 24 departments also attended.

Organized by the Pan American Health Organization (PAHO/WHO), this workshop's objective was to consolidate a strategic framework for technical cooperation to address RCCE. The event also aimed to strengthen capacities and share knowledge, experiences and lessons learned in RCCE during preparedness and response to COVID-19 and other health emergencies, including in situations in which vaccination plays a fundamental role in the prevention and mitigation of threats.

This was the second subregional workshop on RCCE organized by PAHO/WHO this year. The first one had been held in March 2023 in Panama, gathering professionals from Central American countries.

Throughout the three days, participants listened to keynote speeches and exchanged on their national experiences and effective RCCE strategies. For instance, Uruguay stressed the participation of civil society and the collaboration of public and private institutions as key factors for the success of the national response to COVID-19 and the vaccination campaign. The importance of strengthening health personnel's capacities in risk communication was also highlighted by various countries. Participants then took part in practical exercises, which allowed them to develop a roadmap based on the tools and theoretical frameworks of the International Health Regulations (IHR 2005), focusing specifically on the three RCCE indicators of the Self-Assessment Tool for Annual Reporting by States Parties (SPAR).

One of the key conclusions of this subregional workshop is the need for RCCE trainings and capacity building activities to also reach local authorities in participating countries, in order to reach communities in an optimal and timely manner.

Moving forward, PAHO/WHO plans to organize a third workshop on the same topic in the spring of 2024, for the Caribbean subregion.

> "During critical situations such as epidemics and pandemics, effective communication plays a crucial role in coordinating emergency response. In addition, providing timely and relevant information to the population accelerates sound decision making, allowing people to make informed decisions and access quality services."
>
> **Dr Maureen Birmingham**
> PAHO/WHO Representative to Peru

For more information, click here.

Samoa advances national health security through its first Joint External Evaluation in partnership with the World Health Organization

International and national health security experts gather in Apia, Samoa from 30 October to 3 November for the Joint External Evaluation. Photo: WHO/Samoa Video Production

On 3 November 2023, the Government of Samoa completed its first Joint External Evaluation (JEE): a multisectoral, collaborative and voluntary process which helps the country to assess its national capacities to prevent, detect and respond quickly and efficiently to public health risks, as required by the International Health Regulations (IHR 2005).

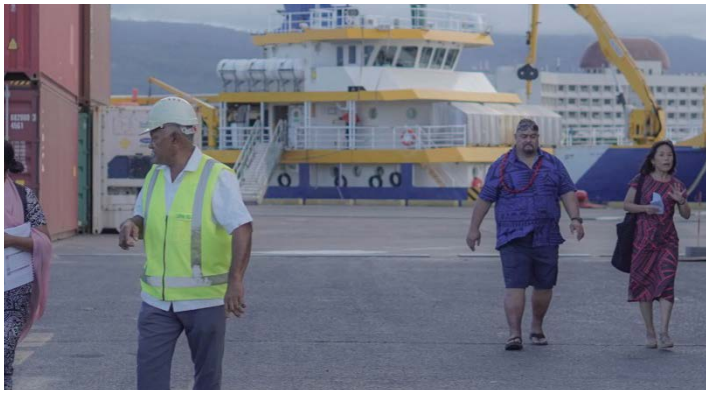
The JEE was undertaken in partnership with the WHO and the World Bank, with support from the United States Agency for International Development (USAID). It is the first such evaluation in the Southern Pacific Region since the JEE tool was updated to reflect lessons learned from the COVID-19 pandemic.

> "The COVID-19 pandemic and other disasters we face in Samoa have shown us that we must do more to prepare for emergencies before they occur. Monitoring and evaluation exercises like this JEE will advance our national efforts towards health security."
>
> **Honourable Valasi Luapitofanua Toogamaga Tafito Selesele**
> Minister of Health of Samoa

Like other small island developing states, Samoa is especially vulnerable to the impacts of climate change. This, combined with experiences linked to the measles outbreak in 2019 and COVID-19 has taught Samoa lessons that have strengthened its health system and made it more adaptable and ready to withstand other health emergencies.

The JEE mission evaluated Samoa's capacities in 19 technical areas through a one-week collaborative process mixing peer-to-peer discussions and field visits. Over 80 recommendations covering each of the technical areas were drawn by the end of the process. Altogether, they offer opportunities for Samoa to develop a national action plan for health security (NAPHS), improve its policy landscape and streamline coordination in ways that can strengthen all areas of public health. Recommendations to strengthen the national health workforce and encourage the human, animal and environmental health sectors to work closer together to ensure the country is better protected from infectious diseases, new pandemics and other threats were also included.

Moving forward, findings and recommendations from this JEE will help Samoa to revise its national health security action plans and identify work priorities to strengthen preparedness and readiness for emergencies, improve responses, and take better public health action. These recommendations will also help Samoa to implement regional commitments, including the Asia Pacific Health Security Action Framework, to build stronger, more resilient systems in health and other areas.



Health security experts visit Matautu Wharf as part of the week-long Joint External Evaluation in Apia, Samoa, to understand points of entry and border health. Photo: WHO/Samoa Video Production

> "Understanding what is working and what needs to be strengthened is critical to making sound public health emergency decisions. This requires ongoing monitoring of health security systems and functions. The JEE gives us an independent evaluation of the country's capacities."
>
> **Dr Kim Eva Dickson**
> Head of WHO Country Office and Representative of Samoa, American Samoa, Cook Islands, Niue and Tokelau

For more information, click here.

Assessing the quality of laboratory testing for mpox through external quality assessments

To support Member States in monitoring the quality of diagnostics performed in national laboratories and to inform global laboratory capacity building efforts, WHO has been coordinating global external quality assessment (EQA) programmes for pandemic and epidemic prone pathogens. The following article focuses on the EQA programme for laboratories performing molecular testing for mpox, conducted in 2023 by the WHO Lyon Office.

Mpox test kits donated by the National Institute of Infectious Diseases (NIID) of Japan to the National Center for Laboratory and Epidemiology in Vientiane, Lao People's Democratic Republic, 2022. Credit: WHO/ Enric Catala

Mpox is an infectious disease caused by the mpox virus, that belongs to the Orthopoxvirus genus of the Poxviridae family. Since May 2022, increasing numbers of mpox cases and clusters have been reported concurrently in non-endemic and endemic countries, in widely disparate geographical areas. Most reported cases were identified through sexual health or other primary and secondary health-care facilities and involved mainly, but not exclusively, men who have sex with men.

To help Member States reduce transmission and address the needs of affected populations, WHO rapidly scaled up its support to national public health laboratories, including through providing external quality assessment (EQA) programmes to laboratories testing for the mpox virus.

This EQA programme involved preparing a panel of five mpox positive and negative specimens and sending them to participating laboratories in order to assess their capacity to produce the expected results. EQA programmes are effective ways to assess laboratories' capacities to rapidly and reliably detect new cases. They ave also been implemented for various other health emergencies, including COVID-19, or viral hemoragic fevers such as Ebola or Marburg virus disease.

In total, 145 laboratories from 117 WHO Member States chose to participate and submit results to the programme, which was rolled out in mid-2023. Laboratories used a wide range of testing methods and platforms, with some detecting a range of different Orthopox viruses and others targeting only the mpox virus. Certain laboratories also used advanced genetic sequencing methods to identify viruses present in the samples.

Results were very encouraging, with 83.7% of laboratories submitting correct results for all five specimens involved in the EQA. These results provided a clearer understanding of the different testing strategies being used globally to detect both the mpox virus and other members of the Orthopox virus family. They also identified laboratories requiring further support, thereby guiding WHO's priorities to improve the quality of testing methodologies.

Moving forward, WHO encourages all its Member States to ensure laboratories participate in EQA as part of their regular quality management systems to sustainably strengthen laboratory capacities and be better prepared to respond to health emergencies. WHO continues to work with stakeholders involved in the delivery of EQA programmes for pandemic and epidemic prone pathogens to find solutions to enhance sustainable access to such EQA programmes for all Member States.

> "The information we have gathered from National Public Health Laboratories has provided us with an incredibly rich picture of the testing strategies and methods being used around the world, both for mpox and other high-threat pathogens, and enables us to better support readiness in national laboratory systems by directing efforts to the areas of greatest need."
>
> **Dr Nedret Emiroglu**
> Department Director, Country Readiness Strengthening, WHO Health Emergencies Programme

WHO responds to Nepal earthquake

WHO staff providing onsite monitoring and supervision for the establishment of medical camp kit in an affected area. Credit: WHO

Shortly before midnight on 3 November 2023, a 6.4 magnitude earthquake hit Nepal's Western Province of Karnali, resulting in 154 mortalities, 934 injured and thousands displaced. Jajarkot, which was the epicenter, Rukum West and Salyan are the most affected districts.

The earthquake and subsequent aftershocks have also caused damage to 47 health facilities in the province with severe damage to 13 health facilities resulting in structural non-functionality of health facilities, which affected the delivery of essential health services.

WHO personnel on the ground are working closely with the Ministry of Health and Population to support the response to urgent health needs. Staff stationed in the province have been mobilized to assist provincial health authorities to assess damage to health infrastructure, support the restoration of basic health services, conduct surveillance for disease outbreaks, and plan for immunization campaigns.

WHO provided two basic modules of interagency emergency health kits, one medical camp kit, 35 major trauma backpacks, 60 rapid response team personnel deployment kits and three multi-purpose tents to affected areas.

As part of efforts to strengthen the country's emergency preparedness and response, WHO had helped to set up provincial health emergency operation centers (PHEOCs) in all seven provinces of Nepal. The PHEOCs have played a vital role in supporting provincial authorities to coordinate with relevant health stakeholders across three tiers of government to support information management to guide response actions.

WHO staff supporting the Nepalese government on syndromic surveillance at affected health facilities. Credit: WHO

The International Pathogen Surveillance Network (IPSN) holds its first Global Partners Forum, reinforcing the importance of collaboration in global surveillance

Group photo of participants to the ISPN's first Global Partners Forum, Berlin, 13 October 2023. Credit: WHO

Around the world, the COVID-19 pandemic has shown the importance of genomic sequencing and analytics to track and predict the evolution of the virus, inform public health outcomes and prepare for future pandemics and epidemics. To capitalize on the new and rapidly evolving opportunities that genomics presents for public health surveillance, WHO and its partners launched in May 2023 the International Pathogen Surveillance Network (IPSN) which aims to protect people from infectious disease threats through the power of pathogen genomics.

The IPSN is a global network of pathogen genomic actors, brought together by the WHO Hub for Pandemic and Epidemic Intelligence to accelerate progress in pathogen genomics and improve public health decision-making. It envisions a world where every country has equitable access to sustained capacity for genomic sequencing and analytics as part of its public health surveillance system. Since its launch, the IPSN has witnessed a doubling in the number of countries actively participating.

On 13 October 2023, the IPSN convened its first Global Partners Forum at the WHO Hub for Pandemic and Epidemic Intelligence in Berlin. The aim was to bring together IPSN partners at country, regional, and global levels to foster collaboration, introduce innovations among pathogen genomic surveillance actors across sectors, geographies and diseases and galvanize support for political and financial commitments. Almost 200 participants, including public health practitioners, academics, policy makers and financial institutions attended the Forum either in-person or remotely.

Forming communities of practice that enable partners to collaboratively solve common challenges in pathogen genomics lies at the heart of the IPSN's work. Specifically, the Forum facilitated dedicated discussions around two communities of practices, namely on pathogen genomic data to harmonize data standards and protocols, as well as on environmental (including wastewater) and vector surveillance. The Forum also convened technical working sessions to build up country capacities, develop investment cases to provide equitable access to genomic surveillance and establish interdisciplinary workforce training as countries break disciplinary and geographic silos. Discussions also centered around elaborating clear use cases with standardized procedures and protocols, to incorporate genomics into public health surveillance systems.

Key takeaways from this first Forum included the importance of collaboration to leverage our collective knowledge and accelerate progress in pathogen genomics. Participants notably highlighted the importance of sustainably and equitably strengthening pathogen genomic surveillance to improve public health surveillance and decision-making. This is especially important as climate change continues to present more frequent and unpredictable threats.

Overall, this Forum helped reaffirm the relevance of the IPSN to collectively co-create solutions and enable innovations to overcome challenges in the equitable access to pathogen genomics. Moving forward, the IPSN will continue to amplify and accelerate the work of its members to provide an opportunity to sustain capacities and investment in pathogen genomics beyond COVID-19, build up the knowledge base, test innovations, and enhance financing coordination to improve access and equity in all Member States.

> "The IPSN is a manifestation of how WHO convenes partners globally to confront collective challenges. We look forward to supporting IPSN partners to advance shared priorities and co-create solutions for sustained genomic sequencing capacities as part of their public health surveillance systems."
>
> **Sara Hersey**
> Director of Collaborative Intelligence, WHO Hub for Pandemic and Epidemic Intelligence

Strengthening WHO's readiness capacities in-country: WHO launches the first online readiness checklist for WHO country offices

Vaccine assessment and monitoring, Amman, Jordan - March 2022. Credit: WHO

In all health emergencies, WHO's work in support of Member States is guided by its Emergency Response Framework (ERF). Ensuring WHO's institutional readiness at country, regional and headquarters offices is key to allow the ERF's successful implementation and ensure WHO can effectively manage risks and be ready to respond to emergencies in a timely, predictable and effective manner.

Operationalizing the ERF through WHO's readiness gaps assessment tool

It is against this backdrop that WHO launched the first-ever digital WHO country offices readiness checklist for readiness gaps assessment. This online tool seeks to operationalize the ERF by supporting WHO country offices with their operational readiness needs and requirements.

Hosted on the Partners Platform – a secure internal WHO environment - this tool provides a resource for WHO Country Offices to review internal readiness capabilities identified in the ERF, and provide regular updates to addressing any gaps identified.

Key areas for monitoring for country-level emergency capability include (but not limited to): updating a resource mobilization strategy, business continuity planning based on risk profiles, resilient supply chain management and ensuring sufficient steps have been taken for the protection and response to sexual abuse, exploitation and harassment (PSEAH).

> "Having the checklist available online will allow WHO Country Offices to rapidly assess their capabilities for any hazard and simplify the creation of readiness contingency plans. It represents a significant step forward for our goal of ensuring all WHO Country Offices are ready to respond at any time."
>
> **Dr Lucy Boulanger**
> Medical Officer, WHO

By using a traffic light system, WHO is able to see in real-time country office readiness capabilities and allows managers to prioritize critical actions and seek support.

In turn, WHO Regional and Headquarters' offices can provide prompt, tailored and trackable support through the online tool. For instance, if a gap has been identified in the PRSEAH, trainings could be organized on gender-responsive budgeting and gender markers. This smooth two-way communication will both efficiency and promote accountability across the Organization's three-levels.

The new WHO Country Office readiness assessment checklist is not a standalone tool but complements a suite of readiness tools including the Health Emergency Readiness for Operations Capability self-assessment (HERO) readiness checklist, which aims to support Ministries of Health to enhance their readiness capacities.

Deploying the readiness gaps assessment tool

The readiness checklist will be deployed in two phases:

1. A pilot was launched in October 2023 for 61 WHO Country and Sub-Country Offices delivering essential health programs in the most vulnerable contexts across WHO's six regions. WHO's three-levels are now testing the tool to suggest improvements. By the end of the phase (in the first quarter of 2024), feedback will be consolidated and recommendations made to ensure this digital solution is adaptive and efficient.
2. From April 2024 onwards, the tool will be opened to all WHO country offices globally.

On the long run, this checklist will help all WHO Country Offices strengthen their operational readiness and better support Ministries of Health and partners in their readiness and response to health emergencies.

> "The digital readiness checklist contributes to WHO Country Offices' business continuity improvement (…). It will provide real-time view on WHO Country Offices' readiness gaps and strength, contributing to inform future decision-making and prioritization."
>
> **Dr Frank Grenier**
> Chief Operations Officer, WHO Health Emergencies Programme

For more information, write to opsreadiness@who.int.

WHO Global Logistics Centers' Monthly Update

WHO's Global Logistics Center is based within the International Humanitarian City in Dubai, United Arab Emirates (UAE) continues to respond to an unprecedented number of acute health emergencies. With an average of two charter flights per month, the Center's operations are currently on-track to complete more emergency charter flights in 2023 than any previous year. As of November 2023, over 560 orders have been passed for this year. Responding to emergencies currently in AFRO and EMRO represents 84% of the volume of goods distributed.

Responding to the most pressing challenges across the world

In October and the first half of November 2023, the Dubai Global Logistics Center continued to ship lifesaving medical supplies and equipment across the world, to the most pressing health emergencies. Over this period, charter flights were completed to Afghanistan, Chad, Lebanon, Libya, Morocco, Nepal, the occupied Palestinian Territory, Sudan and Yemen, among others.

Responding to the crisis in Israel and the occupied Palestinian territory, the operation delivered over US$ 2.7 million in critical trauma and emergency surgery supplies through a series of charter flights to Al-Erish, Egypt. Working in close collaboration with other UN partners and the Egyptian Red Crescent, WHO delivered this vital humanitarian aid into Gaza.

In Afghanistan, the WHO Global Logistics Center completed its 28th charter flight of the year in response to the protracted health emergency and ongoing earthquake response. In partnership with the World Food Programme (WFP) and the European Civil Protection and Humanitarian Aid Operations (ECHO), WHO delivered 50 metric tons of health supplies valued at US$ 418,000. The supplies consisted of essential medicines, trauma and emergency surgery supplies, and emergency health kits designed to respond to pneumonia and will support WHO's ongoing efforts to respond to the health crisis.

Immense humanitarian needs are expected during the final weeks of 2023 and the Hub expects to operate additional charter flights to Chad, Libya, the Syrian Arab Republic, and Yemen.

OPERATIONS IN 2023 (AS OF MID-NOVEMBER 2023)

US$ 33.3.MILLION
Value of Goods Received
This represents 1400+ metric tons of health supplies.

US$ 30 MILLION
Value of Goods Delivered

110 EMERGENCY ORDERS
currently under process

29 CHARTER FLIGHTS COMPLETED
This includes flights to Afghanistan, Chad, Libya, Morocco, Sudan and Yemen

OVER 141 COUNTRIES IN ALL 6 WHO GEOGRAPHIC REGIONS ARE SUPPORTED

560+ REQUESTS RECEIVED

84% OF REQUESTS ARE FROM AFRO AND EMRO

AFRO- 20% | EMRO- 64%

WHO has released an innovative, interactive report that provides insights into the vast operations and global impact of WHO's Global Logistics Center.

WHO Cargo destined for Kabul, Afghanistan. The charter flight was funded by ECHO and operations support were provided by WFP. Credit: WHO

Reflecting on the EWARS in a box online course: insights from its launch in December 2022

The electronic early warning, alert, and response system (EWARS) in a box is WHO's simple, easily deployable and flexible toolkit designed to rapidly detect disease outbreaks in emergency, fragile, conflict-affected, and vulnerable settings. EWARS in a box supports real-time mobile reporting from the most challenging and remote field locations, regardless of internet or electricity reliability, and assists local epidemiologists and surveillance officers with interactive alert management, data analysis and visualization. To date, EWARS in a box is deployed in 31 countries across five WHO regions.

In December 2022, OpenWHO launched a free online course on EWARS in a box: electronic early warning, alert and response system implementation in emergencies. The 16 multilingual training package offers a comprehensive overview of how to establish EWARS in a box in the field, highlighting the tool's key features and functionalities.

Each video runs for about 10 minutes, covering all essential aspects of EWARS in a Box's implementation in emergency settings. It provides step-by-step instructions, real-life scenarios and examples to facilitate adult learning. Key course topics include: real-time electronic data collection, interactive alert management and data analysis, visualization and dissemination, all of which are crucial for early warning and disease outbreak response. Dedicated episodes also demonstrate how responders can establish EWARS in a box with SMS reporting and standalone applications in areas with unreliable internet connections.

This course addresses a longstanding need for online training on EWARS in a Box, which had become more pronounced during the COVID-19 pandemic when the use of this tool was expanded and face-to-face trainings could not be organized. Since in-person trainings have picked up again, OpenWHO's online package continues to serve as a refresher course for emergency responders who previously received in-person training. It also provides pre-deployment training in emergency settings and offers a valuable supplement for troubleshooting day-to-day configuration issues with EWARS.

From December 2022 to August 2023, the course recorded a total enrolment figure of 6,260+ learners from all six WHO regions.

In February 2023, the EWARS team conducted an assessment in Mauritania of the impact of OpenWHO's course and other training methods on early warning. Findings were positive, demonstrating a statistically significant improvement in knowledge on early warning for health professionals who followed trainings. They were presented in a poster at OpenWHO's July 2023 global virtual event that spotlighted how OpenWHO has been used to promote and protect public health across the world.

EWARS IN A BOX: ELECTRONIC EARLY WARNING, ALERT AND RESPONSE SYSTEM IMPLEMENTATION IN EMERGENCIES LEARNERS' GEOGRAPHIC DISTRIBUTION (9 DEC 2022 – 15 AUG 2023)

- 24% are from the Western Pacific Region
- 22% are from the Eastern Mediterranean Region
- 20% are from the African Region
- 17% are from the South-East Asia Region
- 9% are from the European Region
- 8% are from the Region of the Americas

Overall, the highest number of learners are from China (19%), followed by India (12%) and Egypt (7%).

EWARS IN A BOX: ELECTRONIC EARLY WARNING, ALERT AND RESPONSE SYSTEM IMPLEMENTATION IN EMERGENCIES LEARNERS' DEMOGRAPHICS

- 27% are students
- 19% are health professionals
- 65% are male
- 35% are female
- 20-29 38% are in the 20-29 age group
- 30-39 27% are in the 30-39 age group
- 20< 16% are younger than 20 years

EWARS IN A BOX: ELECTRONIC EARLY WARNING, ALERT AND RESPONSE SYSTEM IMPLEMENTATION IN EMERGENCIES LANGUAGES:

ENGLISH — **English is the main language.** Subtitles are available in French, Portuguese, Polish, Russian, Spanish, and Ukrainian. Arabic subtitles will soon be available.

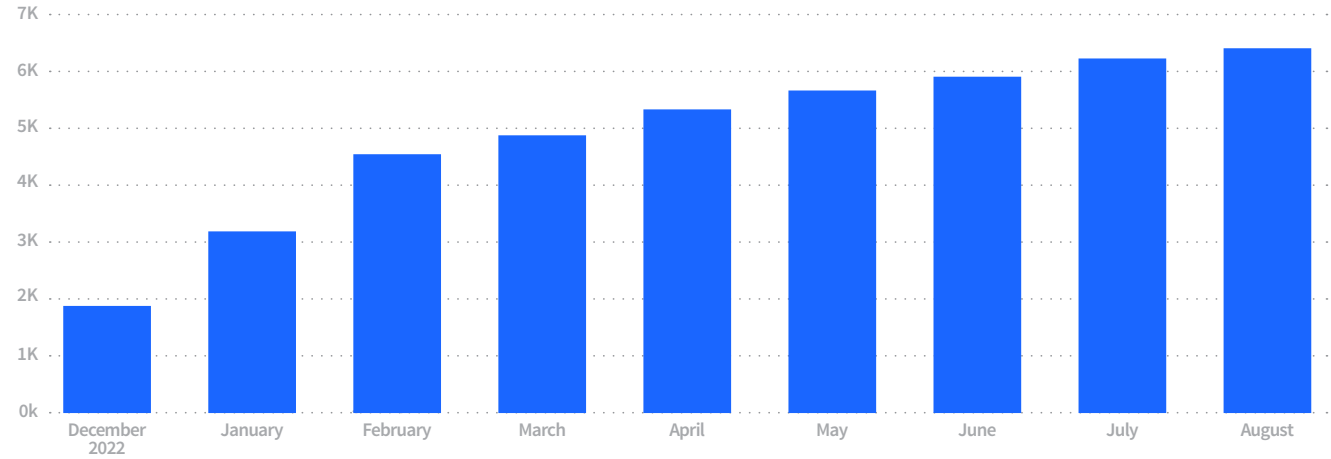
EWARS IN A BOX: ELECTRONIC EARLY WARNING, ALERT AND RESPONSE SYSTEM IMPLEMENTATION IN EMERGENCIES COURSE FORMAT:

THIS COURSE IS SELF-PACED COURSE AND INCLUDES:

16 VIDEOS OF 10 MINUTES EACH

For more information, write to ewars@who.int or click here.

Cumulative number of enrolments for OpenWHO's EWARS in a box course from December 2022 to August 2023



WHO's work in emergencies

For updated information on where WHO works and what is does, visit the WHO Health emergencies page, the WHO Health Emergency Dashboard, the Disease Outbreak News (DONs), and the Weekly Epidemiological Record.

Outbreak and Crisis Response Appeal 2023

In 2023, 339 million people are facing humanitarian crisis with sever health impacts. In 2023, WHO needs US$ 2.54bn to continue to fund cost-effective, high impact solutions that protect health, lives and livelihoods during a time of significant intersecting humanitarian emergencies. To read WHO's 2023 Outbreak and Crisis Response Appeal, click here.

GOARN

For updated GOARN network activities, click here.

Emergency Medical Teams (EMT)

For updated EMT Network activities, click here.

OpenWHO

For all OpenWHO courses, click here.

EPI-WIN

For EPI-WIN: WHO Information Network for Epidemics, click here.

WHO Publications and Technical Guidance

For updated WHO Publications and Technical Guidance, click here.

For more information WHO's regional response:

African Regional Office
Eastern Mediterranean Regional Office
European Regional Office
Regional Office of the Americas
South-East Asia Regional Office
Western Pacific Regional Office

News

- Nigeria to vaccinate 7.7 million girls against leading cause of cervical cancer
- Back to the future: harnessing the power of primary health care to transform our health systems
- UNHCR, WHO warn of deteriorating health conditions as 1200 children die of suspected measles, malnutrition in Sudan
- WHO outlines crucial research priorities for better refugee and migrant health
- Bangladesh eliminates visceral leishmaniasis, Maldives interrupts leprosy transmission and DPR Korea eliminates rubella
- WHO urges investing in "One Health" actions for better health of the people and the planet
- Lancet Countdown report calls for climate-driven health action
- Global measles threat continues to grow as another year passes with millions of children unvaccinated
- WHO launches commission to foster social connection
- New WHO campaign highlights tobacco industry tactics to influence public health policies
- The IPC expands global partnership to further tackle food insecurity and malnutrition – IFPRI, UNDP, World Bank and WHO join

Highlights

- WHO publishes the Global research agenda on health, migration and displacement: strengthening research and translating research priorities into policy and practice
- WHO updates guidelines on treatments for COVID-19
- 2023 World AMR Awareness Week: preventing antimicrobial resistance together
- WHO Director-General's remarks at the Informal Plenary Meeting of the United Nations General Assembly – 17 November 2023
- Infodemic management news flashes: Gendered experiences of the information environment (27 October 2023)
- Situation Report: Greater Horn of Africa Food Insecurity and Health - Grade 3 Emergency — 1 July 2023 - 31 August 2023
- Multi-country outbreak of cholera, External situation report #8 - 2 November 2023
- WHO issues new and updated recommendations on treatment of mental, neurological and substance use conditions
- WHO issues new guideline to tackle acute malnutrition in children under five
- Managing epidemics: key facts about major deadly diseases, 2nd edition

Science in 5 is WHO's conversation in science. In this video and audio series WHO experts explain the science related to COVID-19. Transcripts are available in Arabic, Chinese, English, French, Farsi, Hindi, Maithili, Nepali, Portuguese, Russian and Spanish.

How is climate change affecting your health? (10 November 2023)

Climate change is affecting your health every day. What are the future scenarios for health? How can you cope and protect your health? Dr Diarmid Campbell-Lendrum explains in Science in 5

Why should you care about Data? (27 October 2023)

Why should you care about data? what can data do for you? How does WHO work with data? Dr Samira Asma explains how data works to protect your health in Science in 5.