Key updates

- On 24 March WHO started the establishment of a logistics hub in the city of Dnipro in collaboration with the United Nations High Commissioner for Refugees (UNHCR), the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and other United Nations (UN) partners, to facilitate the delivery of medical supplies and humanitarian assistance to areas in eastern Ukraine most severely affected by the ongoing conflict.
- WHO has developed tools to estimate the need for antiviral treatment and burden of tuberculosis (TB) among refugees from Ukraine to other countries. Both these tools are meant to support resource planning for the refugee-hosting countries. Based on the preliminary estimates, more than 30,000 people living with HIV may need HIV services in refugee-hosting countries.
- In Poland WHO conducted a joint mission to assess the availability and accessibility of health services in the border region of Lublin on 25–26 March.
- In the Republic of Moldova, WHO and the MoH conducted a rapid assessment of the health services available to refugees on 27 March.

1. SITUATION UPDATE

Figure 1. Distribution of internally displaced persons (IDPs) and refugees in Ukraine and neighbouring countries as of 30 March 2022
1.1 Population displacement and refugees

The overall situation continues to deteriorate across Ukraine. To date, over 18 million people have been affected by the conflict. According to the latest government data compiled by UNHCR, over four million refugees have left Ukraine for surrounding countries in the last five weeks of the conflict, with 58% of them in Poland, followed by Romania (15%).

1.2 Current risk assessment and priority public health concerns in Ukraine

1.2.1 Access to health care

There are many challenges to accessing health care, with active hostilities and a lack of public transport restricting movement. Close to 1000 health facilities are in proximity to conflict areas or are in changed areas of control, which leaves the health system vulnerable to infrastructural damage and severe disruptions in critical services. As a consequence, there is limited or no access to medicines, health facilities, and health-care workers in some areas. Between 24 February and 30 March, according to WHO, a total of 82 attacks on health care have been reported, resulting in 43 injuries and 72 deaths. Further attacks are being verified.

Several hospitals have been repurposed from providing essential services and primary health care to supporting and providing care for conflict-related trauma and injuries, which has led to disruptions in basic and routine health-care services including maternal and child health. Nearly 50% of Ukraine’s pharmacies are presumed to be closed and many health workers are either displaced or unable to work.

Vaccination for COVID-19 has been disrupted. Prior to the conflict at least 50 000 people per day were receiving vaccination. This number has dropped significantly, with only 175 000 people being vaccinated between 24 February and 15 March despite suboptimal vaccination coverage. Between 23 February and 30 March, the overall number of beds available and beds occupied by patients with COVID-19 has decreased by 29% and 85% respectively, reflecting potential challenges in accessing hospitals, limited data reporting, and a potential decrease in actual hospitalizations following the peak of the Omicron wave earlier in February.

WHO working to deliver life-saving medical supplies and medical equipment on the ground in Ukraine. ©WHO

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1 Attacks on health care include those against health facilities, transport, personnel, patients, supplies and warehouses.
2 Surveillance System for Attacks on Health Care (SSA)
### 1.2.2 Priority public health concerns

Current health priorities are described below, while WHO awaits a response from the Government of Ukraine regarding the collection of health emergency data from health facilities.

| Conflict-related and injuries | Between 24 February and 30 March 2022, the Office of the High Commissioner for Human Rights recorded at least 3167 civilian casualties in Ukraine, including 1232 deaths. Civilian casualties continue to be caused by the use of explosive weapons. Limited access to health care may increase the risk of wound infections and trauma-related deaths. Furthermore, given the previous high rates of over-the-counter antimicrobials and limited access to treatment, the potential for multidrug-resistant infections remains a big concern. |
| Maternal and newborn health | Disruptions to antenatal care may increase the risk of obstetric and neonatal complications. There is also a reduced ability to manage obstetric complications, including performing procedures such as caesarean sections, and providing neonatal intensive care due to challenges in accessing health care, limited power and oxygen supply, and attacks on health-care centres, including maternity hospitals. |
| Food security and nutrition | The large-scale population displacement, damage to agricultural infrastructure, disruption to markets and food supply chains are likely to have significant impacts on food security and nutrition. Ukraine has low rates of exclusive breastfeeding, with a high percentage of infants partially or fully dependent on infant formula. As the normal environment for accessing and hygienically preparing infant formula is disrupted, a priority for WHO is to support families to safely and appropriately feed their infants in these difficult times. WHO is also providing guidance on safe and appropriate complementary foods to be supplied to infants and children six-months-old and above as needed. |
| Risk of emergence and spread of infectious diseases | **Ongoing epidemics**

The incidence of COVID-19 continues to decrease, with 18 814 new cases and 194 new deaths reported between 24 and 30 March. However, these numbers should be interpreted carefully, as from 23 February to 30 March, the seven-day average number of polymerase chain reaction tests and antigen-rapid diagnostic tests has dropped significantly, with a 96% (from 42 460 to 1577) and 88% (from 51 484 to 6100) decrease respectively, which suggests underreporting of COVID-19 cases and deaths. The vaccination uptake remains low, particularly in vulnerable populations, and the disruption in testing and treatment puts those most vulnerable at increased risk of severe illness and death. **Epidemic risk**

- Poor ventilation and overcrowding increase the risk of spread of respiratory infections, including COVID-19. Lack of access to water, sanitation and hygiene (WASH) heightens the risk of emergence of foodborne and waterborne diseases. According to OCHA, 1.4 million people across Ukraine do not have access to safe water. Of note, an outbreak of cholera was reported in 2011 in the Mariupol region, while a single case was reported in 2016 in the Zaporizhzhya oblast, highlighting the risk of cholera outbreaks. An outbreak of acute diarrhoea and vomiting was reported at a refugee reception centre in Przemyśl, Poland, starting 23 March 2022. Investigations were initiated by an international aid organization and local sanitary inspection authorities, and with WHO coordination support. Many patients had been reporting to first aid stations and health points with symptoms of diarrhoea and vomiting, including young children, teenagers and adults. Isolation facilities are available, but they are limited in size and most patients prefer to stay with their families. There were no reports of severe illness requiring hospitalization.

- Suboptimal vaccination coverage for routine and childhood immunizations, including measles and poliomyelitis (polio), increases the risk of re-emergence and transmission of vaccine-preventable diseases. Notably, two cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) were reported in Ukraine in 2021. On 1 February 2022 a national supplemental polio immunization campaign targeting nearly 140 000 children was launched, but due to the current situation it has been deprioritized and significantly slowed down.³

- With the arrival of spring and rising temperatures, disrupted access to WASH and damage to homes may increase the risk of vector-borne diseases such as West Nile fever and tick-borne encephalitis. |

³ Global Polio Eradication Initiative: [https://polioeradication.org/ukraine/](https://polioeradication.org/ukraine/)
Management of chronic diseases

The provision of medicines and care for patients with chronic communicable diseases such as HIV and TB and with noncommunicable diseases (NCDs), including but not limited to cardiovascular disease, hypertension, diabetes, chronic kidney disease, chronic respiratory disease, epilepsy and cancer, remains challenging. Interruptions in treatment for NCDs can result in life-threatening complications. Long-term disruption to treatment for HIV or TB may result in the development of drug resistance and poor disease outcomes. Based on the preliminary estimates by WHO, using UNHCR data, more than 30,000 refugees are living with HIV and will need antiretroviral treatment services. The burden of TB among the refugee population is high, particularly among older age groups. For example, using pre-crisis data for Ukraine, WHO estimates that there will be on average one case of active TB in:
- 2000 female displaced persons aged 15 years and above (estimated prevalence among girls and women aged 15 years and above is 0.05%);
- 5000 displaced persons aged 0–14 years (estimated prevalence among children aged 0–14 years is 0.02%); and
- 1600 male displaced persons aged 65 years and above (estimated prevalence among men aged 65 years and above is 0.06%).

Meeting the medical needs of people with long-term illnesses such as mental illness, renal disease, diabetes, and cancer in Ukraine and neighbouring countries is a key priority. Furthermore, outreach to older people in remote areas, who belong to the most vulnerable groups, and provision of basic commodities including water and food, and urgently needed medicines to continue treatment of chronic diseases, is hampered by security concerns and destruction of infrastructure.

Technological hazards and health risks

There are 15 nuclear reactors at four operational nuclear power plants (NPPs) in Ukraine and a decommissioned Chernobyl NPP. There are concerns about the Zaporizhzhya NPP located in the vicinity of the military operations. The risk of a nuclear emergency as a result of direct damage due to shelling of NPPs or failure of a reactor’s power supply, or the inability to provide necessary maintenance, remains high, as underlined in the International Atomic Energy Agency’s daily updates. In addition, seasonal forest fires in the Chernobyl Exclusion Zone are reported to be of concern, as regular firefighting services are not able to cope due to the actions of the occupation forces interfering with the normal operations of the Chernobyl facilities and services. Ukraine is a country with many recently active and abandoned industrial and mining sites. The risk of collateral damage at chemical storage sites, including oil and fuel storage and leaks of hazardous industrial chemicals, is relatively high. Several fires at oil depots leading to air pollution with toxic chemicals and ammonia leaks at industrial sites (Sumy region) have been reported.

Mental health and psychosocial health

As the conflict continues, the risk of development or exacerbation of mental health problems including anxiety, post-traumatic stress disorder and depression increases.

Protection issues: risk of human trafficking and escalated risk of sexual and gender-based violence (SGBV)

As people leave their homes to flee the conflict, there is a risk of human trafficking. There are numerous children and young women travelling unaccompanied to countries receiving refugees, who are at particular risk. The risk of SGBV increases during periods of conflict as a result of insecurity and absence of law. Most of those fleeing Ukraine are women and children, often travelling alone and therefore particularly vulnerable. Lack of access to contraception and heightened threat of SGBV increases the risk of sexually transmitted infections.

2. WHO ACTIONS IN UKRAINE TO DATE

Leadership and coordination

- WHO continues to work closely with the Ministry of Health (MoH) of Ukraine to identify gaps and needs in the country’s health system and support response activities.

Health information

- The mapping of health facilities and other key information is ongoing, with WHO supporting the assessment of health facilities. A needs assessment tool has been developed, and as of 18 March 125 health facilities have submitted data.
• Event-based surveillance (EBS) activities continue for the various potential hazards. These include the use of Epidemic Intelligence from Open Sources. Further discussions are ongoing to establish EBS in regions with large IDP populations.

**Health operations**

• WHO is in consultation with the European Union (EU) on medical evacuation and continues to support neighbouring countries to provide care for refugees at points of entry and in refugee centres. Mass casualty and trauma capacity building is being conducted.

• WHO has developed a rehabilitation strategy focusing on decompressing the acute trauma system and improving rehabilitation care by supporting the strengthening of designated inpatient rehabilitation facilities in key oblasts, and rapidly building specialist inpatient and outpatient rehabilitation capacity in western Ukraine at centres designated for trauma cases.

• The Inter-Agency Standing Committee resource kit, Mental Health and Psychosocial Support: Humanitarian Response in Ukraine and Neighbouring Countries, has been widely distributed in Ukraine and neighbouring countries and translated into multiple languages. Additionally, on 24 March WHO published the mhGAP Humanitarian Intervention Guide (mhGAP-HIG) training of health-care providers – a training manual that is an adaptation of WHO’s mhGAP Intervention Guide intended for use in humanitarian emergencies.

• WHO, in cooperation with the MoH and partners, is preparing a rapid assessment of health status and needs, to be followed by a qualitative assessment study on perceived health service needs and gaps, barriers and drivers of uptake of health services by refugees from Ukraine in neighbouring countries.

• WHO is working with Member States in the European Region and relevant institutions to overcome challenges to accessing certain generic medicines that are not registered in the EU, including medicines for the treatment of TB and HIV.

**Supplies and logistics**

• WHO continues to work with health partners, suppliers, and procurement and logistics partners to deliver medical supplies to the hardest-hit areas across Ukraine.

• As of 30 March approximately 180 metric tonnes of medical supplies have been delivered to Ukraine. These supplies include trauma and emergency surgery kits, interagency emergency medical supplies and medicines to support trauma, surgical and primary health care needs of the most critically affected populations in Ukraine. Procurement and preparations to deliver a further 125 metric tonnes of medical supplies are under way to support the emergency response in Ukraine.

• On 24 March WHO personnel in Ukraine announced the establishment of a logistics hub in the city of Dnipro, in collaboration with UNHCR, OCHA, WHO and other UN partners, to facilitate the delivery of medical supplies and humanitarian assistance to areas in eastern Ukraine most severely affected by the ongoing conflict.

• To date, WHO has delivered trauma and emergency medical supplies to the cities of: Cherkasy, Dnipro, Kharkiv, Kherson, Kyiv, Odesa, Sumy, Zaporizhzhya and Zhytomyr. WHO continues to urge for guarantees of safe passage to deliver supplies to Mariupol and other besieged cities in urgent need of life-saving supplies, medicines and humanitarian assistance.

• WHO has issued guidelines for supply donations to support the Ukraine emergency response, including a list of critical supplies for which support is urgently needed. The Guidance Note for Medical Supply Donations is available on the WHO website.

**Operational partnerships**

• **Emergency Medical Teams (EMTs)**
  
  o More than 40 EMTs are currently in Ukraine and neighbouring countries.
  
  o EMT support needs inside Ukraine include medical evacuation to neighbouring countries, intensive care, traumatology, rehabilitation as well as outpatient care in some regions.
  
  o EMT support in neighbouring countries focuses on ensuring access to universal health coverage, by delivering primary care services to refugee population, including maternal and child health, chronic diseases and mental health and psychosocial support (MHPSS).
Three EMT Coordination Cells have been established in Poland, Republic of Moldova and Ukraine, with the support of the Trauma and Rehabilitation Working Group under the Health Cluster for Ukraine towards optimizing a joint response.

The Japan Disaster Relief Team is deployed in the Republic of Moldova, supporting the information management of EMTs in Ukraine and neighbouring countries.

**Global Outbreak Alert and Response Network (GOARN)**

- Offer for support: 83 experts from 28 GOARN partners from seven countries across regions have expressed readiness to support different response activities, including information management, health operations, case management, risk communications and community engagement, coordination, epidemiology, surveillance and laboratory.
- Strategizing and deployment for GOARN partners is taking place in Ukraine and neighbouring countries.

**Health Cluster**

- Preparations are ongoing to launch household- and community-level needs assessment on access to health services.
- Members of the Communicable Disease Technical Working Group are reviewing an assessment tool to be launched in the coming days.
- The Health Needs Planning and Response tool was presented to the Minister of Health of Ukraine. Further discussions involving data security are ongoing.
- Partners continue to use the Health Cluster’s Referral Tracking Tool to report and respond to the most urgent health-care needs.

**Standby Partners**

- Standby Partners have strengthened WHO’s capacity for this response by confirming support for 11 positions so far to operations in Ukraine, Hungary and Poland. Five of the 11 experts have already been deployed.
- Roles mobilized through Standby Partners include: MHPSS, geographic information systems, risk communication and community engagement (RCCE), information management, supply and logistics, prevention of sexual exploitation and abuse, Health Cluster coordination support, and communications.
- All these deployments have been mobilized through the following Standby Partners: NORCAP, IMMAP, CANADEM, UK-Med, Dutch Surge Support, with funding also from the Foreign, Commonwealth and Development Office.

**RCCE**

- **RCCE material production, including health information and tracking health information gaps and misinformation**
  - The first rapid assessment of RCCE messages related to radiation (specifically the appropriate use of potassium iodide) will be launched at the end of this week. FAQs on radiation are posted here.
- **Sociobehavioural insights and listening**
  - A social listening working group is planned in the coming days with different European partners (including the European Commission and ECDC); early operational work is planned for this week.
- **Civil society organizations (CSOs)**
  - WHO is developing guidance for CSOs working with displaced populations on health needs and ways in which countries can map existing CSOs and community-based organizations.
**Partners**

- WHO continues to coordinate RCCE efforts in collaboration with UNHCR, the United Nations Children’s Fund (UNICEF), the International Federation of Red Cross and Red Crescent Societies and GOARN. Coordination will also include Collective Service partners who focus on risk communication and community engagement expertise.

**Funding**

- To support the response efforts, WHO has so far released US$ 10.2 million from the Contingency Fund for Emergencies.
- To date, WHO has received US$ 20.9 million (36%) against its appeal for US$ 57.5 million over the next three months.
- WHO would like to thank Canada, Ireland, Norway, Switzerland and the UN Central Emergency Response Fund for their timely contributions. Funding remains critical to enable WHO to deliver urgent life-saving assistance.
3. SPECIFIC ACTIVITIES IN REFUGEE-RECEIVING COUNTRIES

Countries neighbouring or close to Ukraine have triggered emergency response systems for receiving refugees. In other countries WHO is strengthening operations to support the needs of refugees. Updates on the situation in these countries and key WHO actions are given below.

Czechia

**Situation update**
- Between 24 February and 30 March 2022, an estimated 300 000 Ukrainian refugees have entered Czechia.
- The Czech General Health Insurance issued about 200 000 insurance policies free of charge to refugees who hold a temporary protection visa. In Czechia, a joint project on Blue Dots to include cash points and distribution of information leaflets for refugees has been developed with UNICEF and UNHCR Blue Dots.

**WHO actions to date**
- The WHO Regional Director for Europe visited Czechia on 24–25 March. The visit involved meetings with the MoH, WHO collaborating centres, the Ministry of Foreign Affairs, and the Mayor of Prague. In addition, WHO visited the Regional Assistance Centre for Refugees.

Hungary

**Situation update**
- Between 24 February and 30 March 2022, approximately 368 807 Ukrainian refugees entered Hungary. Hungary has the fourth largest number of refugees arriving from Ukraine, accounting for 9% of the total refugee population.
- Upon registration for temporary protection all refugees are granted full access to health services in the Hungarian health-care system.

**WHO actions to date**
- WHO continues to engage with the Government across multiple sectors, including health, foreign affairs, the interior, and the National Emergency Command Centre.
- WHO is mapping cancer treatment facilities in Hungary as part of a broader strategy within the WHO European Region to provide services for cancer patients arriving from Ukraine.
- WHO is regularly participating in UN partner coordination meetings and will co-chair a working group on health with the Hungarian health authorities.

Poland

**Situation update**
- Between 24 February and 30 March 2022, approximately 2 362 044 Ukrainian refugees entered Poland, accounting for 58% of the total refugee population.
- As of 24 March approximately 2030 Ukrainian patients have been treated in Polish hospitals.
- Between 13 and 26 March, 21 patients were transferred to other European countries, including Austria, Denmark, Germany, Italy and Norway.
- Refugees receive psychological first aid at the border and in reception centres. Psychosocial services and training for volunteers and other responders are provided.
WHO actions to date

- WHO and the sanitary inspectorate of the city of Chelm conducted a joint mission to assess the availability and accessibility of health services in the border region of Lublin on 25–26 March. ECDC, in coordination with WHO, conducted a complementary mission to the cities of Medyka, Przemyśl and Rzeszów near the Ukrainian border.
- WHO conducted a second scoping mission to the Ptak Warsaw Expo refugee accommodation centre on 23 March.
- The WHO community and CSO engagement mission in Poland took place from 22 to 27 March. During the mission WHO visited the main NGOs, local authorities and relevant UN organizations working on community engagement for refugees in the cities of Katowice, Kraków, Warsaw and Wrocław. The mission helped to map the civil society response, collect community feedback on health needs and knowledge, attitude and practice, and RCCE needs, and identify focal points and set recommendations.
- On 24 March WHO and the UNHCR MHPSS team visited a community mental health centre for children and adolescents. The visit helped to assess the centre’s capacity and planning to receive Ukrainian refugees for services and identify needs.
- From 28 March to 8 April WHO is carrying out a mission for vaccine-preventable diseases to assess the capacity and needs in the Rzeszów Logistics Cluster for the storage and transportation of vaccines for Ukraine. In addition, the team will provide guidance on operationalizing the recommendations on immunization services for refugees in Poland and identify needs for further operational or technical support for strengthening the immunization system.
- WHO prepared a leaflet for refugees with information regarding specialized medical services (for diabetes, cancer, TB, HIV/AIDS etc.) for all major cities. The leaflet is distributed at border crossings, reception centres and accommodation centres as well as through UNHCR cash distribution points.

Republic of Moldova

Situation update

- Between 24 February and 30 March 2022, approximately 388,837 refugees entered the Republic of Moldova.
- As of 28 March a total of 107 centres authorized by the Government to host refugees were functional, of which 44 are in Chisinau.
- On 29 March the National Agency for Social Assistance will authorize the opening of new temporary placement centres for refugees on condition that existing refugee centres in an administrative-territorial unit have a minimum occupancy of 90%.
- As of 28 March 1423 refugees have received medical care.

WHO actions to date

- WHO has received requests for support from Moldova and has sent 9.5 metric tonnes of trauma and emergency medical supplies, as well as antigen rapid diagnostic tests, to support the arrival of large numbers of refugees from Ukraine.
- On 27 March, WHO and the MoH continued to conduct rapid assessments of the health services available to refugees. The Briceni and Ocniţa district hospitals were visited, and the capacity to manage mass casualties was estimated. Follow-up visits to health services at points of entry in the northern region and the nearby refugee camp in the Calaraseuca commune were also conducted to assess surge capacity.
- A GOARN partner, the Pasteur Institute, is conducting a scoping mission from 27 to 31 March for a rapid response mobile laboratory/GOARN deployment in the Republic of Moldova to support surveillance and health needs for refugees. Based on the assessment, a list of necessary laboratory equipment, consumables and reagents will be developed.
• A WHO community and CSO engagement mission to the Republic of Moldova is ongoing from 28 March to 1 April. During the mission WHO will map NGOs and reception centres and meet with health authorities and UN partners.
• WHO and the MoH conducted a meeting with the Institute of Oncology of the Republic of Moldova to finalize a rapid needs assessment and to identify the best opportunities to ensure continuity of cancer prevention, care and treatment services for both refugees from Ukraine and the host population of the Republic of Moldova.
• Following the WHO rapid assessment of WASH facilities in temporary placement centres for refugees conducted from 14 to 17 March, a series of recommendations were drawn up to help the country’s authorities to manage the hygiene and sanitation of their refugee facilities to protect the health of those staying there. Read more about the assessment recommendations here.

Romania

Situation update
• Between 24 February and 30 March, approximately 616,592 Ukrainian refugees entered Romania. However, most are in transit to other countries, primarily to Hungary (45%) and Bulgaria (19%). Overall, the occupancy rate at accommodation centres is 19.6%. As of 29 March, 421 refugees have received medical care in hospitals.
• In Romania UNICEF has opened three Blue Dot locations at the Siret, Sighetu Marmatiei and Isaccea border crossing points.

WHO actions to date
• On 24 March WHO and the MoH organized the first meeting of the MHPSS sub-working group. The next meeting will be held on 1 April. After the first meeting WHO shared translated guidance materials and tools on MHPSS with the MoH and partners.
• On 24 March WHO conducted a joint event with the MoH’s National TB Programme for World TB Day and for continued treatment of refugees.
• On 29 March WHO met with the UNHCR health coordinator and UNICEF as part of the health working group led by the MoH and WHO. The first meeting of the health working group is planned for the coming week.

Slovakia

Situation update
• Between 24 February and 30 March, approximately 283,824 Ukrainian refugees entered Slovakia.
• Seven paediatric oncology patients from Ukraine have been admitted to the Department of Paediatric Haematology and Oncology in Bratislava.
• On 28 March a refugee assistance centre was established in a former temporary main bus station in Bratislava.

WHO actions to date
• On 28 March the WHO Senior Emergency Coordinator and the MHPPS coordinator visited Bratislava for a short mission to support the establishment of a platform for technical discussions with MHPSS actors.
• During the mission WHO representatives also went to the city of Košice and surrounding areas to visit the Ukrainian Care Centre at the University Hospital, the refugee centre, and entry points at the border with Ukraine.
• On 28 March WHO met with the MoH State Secretary to discuss and coordinate WHO emergency support for refugee health with the MoH.
• WHO continues to engage with the national health authorities and with UNHCR in the overall UN coordination mechanism.

Resources
• Public Health Situation Analysis (PHSA) Ukraine, 3 March 2022
• Public health situation analysis: refugee-hosting countries, 17 March 2022
• Previously published Situation Reports: Emergency in Ukraine
• Guidance Note for Medical Supply Donations
• Ukraine emergency webpage