

## Tuberculosis services disrupted by war in Ukraine

The war in Ukraine is threatening continuity of care for patients with tuberculosis in the country. Ed Holt reports.



War in Ukraine could worsen what is already one of the world's most serious tuberculosis (TB) epidemics, those involved in the country's response to the disease have warned. Fighting, direct attacks on health-care facilities and medics, displacement of millions of people, and problems with access to and delivery of medicines are disrupting treatment for patients, they say.

Askar Yedilbayev, WHO TB team lead, told *The Lancet Infectious Diseases*: "For those escaping to other regions within Ukraine, or outside the country, continuity of treatment is at risk. Interruption of continuity of treatment for TB and DR-TB will have serious consequences, such as amplification of drug-resistance, transmission of infection, especially with resistant strains, and death".

Ukraine has the fourth-highest TB incidence in the WHO European Region and the fifth-highest number of confirmed cases of extensively drug-resistant TB in the world. Since the Russian invasion on Feb 24, Ukraine's health-care system has come under increasing pressure amid relentless bombardment of cities and targeting of hospitals and health-care workers by Russian forces.

At the time of writing, WHO said that treatment for TB and drug-resistant TB (DR-TB) was "largely available across Ukraine", with sufficient supply of medicines, especially for DR-TB. It admitted though that "external factors" were already affecting continuity of care, citing the example of warehouses in one region being bombed, forcing difficult reallocation of drugs from other regions.

Medical organisations already working in the country to deliver TB care before the war have said that they are continuing to provide services, including medicine deliveries, but are

finding it increasingly difficult due to security worries and transportation issues, with roads clogged with refugees or Russian troops.

Lyubov Berezhna, the head of the Red Cross in Kramatorsk, said: "We are trying to meet patients' needs and we are all doing the maximum we can. The situation is getting worse every day, and no one knows what tomorrow will bring". Meanwhile, other organisations have been forced to drastically cut back the scale of their operations.

Evgenia Geliukh of the Alliance for Public Health, one of the biggest non-state organisations involved in Ukraine's TB response, said: "Before, we and our partners provided a wide spectrum of services, but now in some places it's just checking that TB patients are sticking to their regimen, and in some places finding active TB cases has stopped".

Access to medicines is also problematic for the estimated almost 6 million internally displaced people in Ukraine. Internally displaced patients with TB can receive treatment at any health-care facility they can get to, but there is no guarantee drugs will be available. "With so many people leaving eastern Ukraine, other places further west are seeing higher demand and therefore problems with supply [of TB drugs]", said Geliukh.

The situation has prompted dire warnings from some experts. Yedilbayev said: "War and humanitarian crisis will have a negative impact on TB and DR-TB in Ukraine. Delayed diagnosis of TB and DR-TB will result in delays to initiation of appropriate treatment, eventually leading to...poor treatment outcomes, which will be aggravated by undiagnosed and, as a result, untreated TB cases, and continuous transmission of infection in communities".

Meanwhile, with more than 3 million people having fled the country since the start of the invasion, the risk of TB among refugees has also come into focus. In a report released earlier this month, the European Centre for Disease Prevention and Control (ECDC) urged Ukraine's neighbouring states to ensure refugees had access to health-care services to help in the early detection of infectious diseases.

Teymur Noori, ECDC expert in migrant health, said the organisation was "worried about TB, especially MDR-TB" among refugees but stressed the institution's recommendations were made with refugees, not local populations, in mind. "[The recommendations are] so healthcare systems outside Ukraine can prepare to mitigate the health impacts of the crisis on refugees themselves. We're not worried about local populations seeing outbreaks of infectious diseases because of refugees."

In all EU countries, and in the UK, Ukrainian refugees have been given access to local health care and Yedilbayev said WHO was working with health authorities of neighbouring countries to "ensure access to TB and DR-TB treatment for refugees requiring continuation of treatment and anyone diagnosed with TB outside Ukraine".

Michel Kazatchkine, UNAIDS special advisor for Eastern Europe and Central Asia, said he believed the numbers of Ukrainian refugees with TB would be between 1000 and 2000. "The war has been a setback for TB efforts in Ukraine. Covid-19 had already had a great effect on testing and detecting TB cases and the situation now is largely one of just safeguarding existing treatment", Kazatchkine added.

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Ed Holt/Agence France Presse  
border crossing

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For more on **tuberculosis in Ukraine** see <https://www.euro.who.int/en/countries/ukraine/news/news/2021/3/world-tuberculosis-day-supporting-ukraine-in-scaling-up-tb-diagnosis-and-treatment>

For the **ECDC report** see <https://www.ecdc.europa.eu/en/publications-data/operational-public-health-considerations-prevention-and-control-infectious>