

The war in Ukraine and refugee health care: considerations for health care providers in Canada

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The war in Ukraine has driven global counts of displaced people and refugees to an all-time high, with numbers expected to continue to increase as a result of global instability and the impacts of climate change.1 As of May 25, 2022, 8 million people were internally displaced from Ukraine and more than 6.6 million had fled the country.^{2,3} Most have entered neighbouring Eastern European countries, but Western European countries, the United States and Canada have also accepted people fleeing from Ukraine. 4 Canada has granted 112035 temporary visas for Ukrainians; 241620 people have applied; and as of May 18, 2022, 32 201 had arrived.⁴ Refugees fleeing traumatic situations face socioeconomic stressors and barriers to services after arrival and are more likely to transition to poor health than other immigrants, but this can be mitigated by supportive resettlement services.5-7 Although Canada has a long history of welcoming and integrating refugee groups and other humanitarian migrants, the concurrent arrival of Ukrainians displaced by the war and refugees from Afghanistan into health systems strained by COVID-19 requires an examination of current refugee health practices and programs and demands creative solutions.² We outline clinical considerations for health providers caring for people displaced by the war in Ukraine, based on available evidence and guidance (Box 1), and discuss how Canada can strengthen its measures to provide health care to currently arriving refugees and prepare for future refugee waves.

Box 1: Evidence used in this article

We searched PubMed and MEDLINE for English-language articles published up to May 16, 2022, using the words "refugees," "Ukraine," "health services" and "health equity." We selected systematic reviews, meta-analyses, guidance and guidelines on refugee care. We also searched for grey literature from various Canadian and international websites including Immigration Refugees and Citizenship Canada, the Public Health Agency of Canada, United Nations High Commissioner for Refugees, International Organization for Migration, World Health Organization and the European Centre for Disease Prevention and Control.

Key points

- Canada has launched a 3-year temporary visa pathway to shelter nationals fleeing from Ukraine, which may allow for more rapid approval and integration than regular refugee pathways, but may also leave gaps in access to essential medications and social and refugee protection services.
- Clinical considerations for practitioners caring for people fleeing conflict in Ukraine include screening for noncommunicable and infectious diseases, anticipating mental health conditions and offering available vaccinations as needed.
- Key gaps in the health system in Canada include lack of universal access to interpreters and lack of supports for coordination of care across health services; addressing these will require a multistakeholder approach and multisectoral partnerships.
- Health care providers and civil society should take a traumaand violence-informed care approach when engaging with people fleeing the war in Ukraine.

What is the process of migration for people fleeing from Ukraine?

The Government of Canada has announced 2 pathways for Ukrainian people to enter Canada: as temporary residents with 3-year visas in the Canada-Ukraine Authorization for Emergency Travel (CUAET) or via a family reunification sponsorship pathway for those wishing to become permanent residents.8 Under the CUAET program, Ukrainian nationals can apply for temporary resident visas for up to 3 years.8 Visas will be processed within 14 days, with all processing fees waived. Those approved will be eligible to apply for a free open work permit and to attend primary and secondary school, and will be eligible for provincial health coverage.8

Canada has yet to announce a refugee program for displaced people from Ukraine. Refugees are granted permanent residence and are entitled to access to social and resettlement service. Designating people fleeing from Ukraine as "temporary residents" and not "refugees" could allow for more rapid sheltering but may also result in a lack of access to social and resettlement services

such as housing and language supports provided to refugees who are permanent residents; this may lead to more difficult integration and could leave people vulnerable to sexual exploitation and human trafficking. The details of the second pathway, family reunification for immigration to Canada, are still being defined.

What medical examinations will Canada require for people newly arriving from Ukraine?

People from Ukraine entering via the CUAET program will not require the usual mandatory pre-arrival immigration examination. Only medical diagnostic tests focused on detecting active tuberculosis, HIV and syphilis must be completed within 90 days of arrival, with the cost borne by the applicant (representative from Migration Health Branch, Immigration, Refugees and Citizenship Canada [IRCC], personal communication, Apr. 14, 2022). Canada will not exclude applicants based on their test results. Panel physicians conducting these examinations must refer new arrivals with abnormal test results to appropriate medical specialists and will inform public health. People from Ukraine will be exempt from Canada's SARS-CoV-2 vaccination entry requirements but will need to quarantine after arrival. 8,11

How will Canada's health systems support newly arriving Ukrainians?

Ukrainians arriving under the CUAET program will be entitled to provincial health coverage for the duration of the 3-year authorization. They must apply for provincial health insurance and coverage will begin immediately. However, provincial health coverage varies across Canada and practitioners will need to verify whether all services, including medications, are covered. Outside of the required immigration diagnostic tests, no other health assessments are required. Newly arriving Ukrainians, with the support of their Canadian sponsors or their communities, will need to seek health information and services as needed through the health system (i.e., public health vaccination clinics, virtual and community-based primary care, hospitals, and pharmacies).

What clinical considerations should providers be aware of for people fleeing the war in Ukraine?

A summary of clinical considerations for people arriving from Ukraine is provided in Box 2. Refugees and displaced populations are diverse and the health risks for each group are influenced by the epidemiology of noncommunicable and infectious diseases in their countries of origin, the circumstances and conditions of the migration journey and barriers to accessing health care after arrival. Ukraine has among the highest global burdens of noncommunicable diseases and chronic infectious diseases such as tuberculosis (TB), HIV and viral hepatitis, and the lowest vaccination coverage in Europe. Ukrainian people displaced by the war, however, may not have the same prevalence of disease as reported among the general Ukrainian population. Most people

fleeing the war and seeking refuge in Canada are likely to be women, children and older adults, given that men between the ages of 18 and 60 years have been conscripted to fight in Ukraine.¹⁹

Evidence-based guidance is available for practitioners that outlines the complexities of refugees' health needs and optimal approaches to management. Ukrainian people with temporary visas may not have access to all the services outlined in these guidelines, however. Ukrainian resources for practitioners working with refugee populations also include those offered by the Canadian Collaboration for Immigrant and Refugee Health (www.ccirhken.ca) and the Canadian Pediatric Society, as well as some in the United Kingdom. 20,21

Noncommunicable diseases

Noncommunicable diseases are the leading cause of morbidity and mortality in Ukraine. The most common causes of premature death and disability include ischemic heart disease, stroke, cirrhosis, lung cancer, cardiomyopathy and alcohol use disorders. Diabetes prevalence is 7.1%, and disability-adjusted life years are driven mainly by risk factors such as tobacco and alcohol misuse and poor diet. Noncommunicable diseases cause 91% of all deaths, with cardiovascular disease accounting for the majority (67%). The age-adjusted death rate in Ukraine from ischemic heart disease is more than 6 times greater than that in European

Box 2: Clinical considerations for people fleeing to Canada from the war in Ukraine^{13,18,19}

Diagnostic tests, conducted by immigration panel physicians, will include age-based screening for tuberculosis, HIV and syphilis

- Age 15 years or older: Chest radiograph, HIV, syphilis serology
- Age 11–14 years: Chest radiograph
- Age 0–10 years: Identify signs and symptoms of communicable disease

Clinical considerations for health care providers13-15

- Verify disruption of treatment for noncommunicable diseases and chronic infections.
- Be alert for mental health conditions including posttraumatic stress disorder, anxiety and depression, and refer for further assessment and treatment as appropriate.
- Update routine vaccinations, including SARS-CoV-2, using strategies to address vaccine hesitancy as needed.
- Offer testing for tuberculosis infection. An interferon-γ release assay is the preferred test, but a tuberculin skin test is an acceptable alternative.
- Consider offering testing for chronic hepatitis B infection, if there is access to hepatitis B vaccine that prevents transmission, or antiviral medications that suppress active infection, or both.
- Consider offering testing for chronic hepatitis C infections for those older than 15 years, if there is access to curative antiviral treatments.
- Address women's health issues and contraceptive needs.
- Address urgent dental and visual health needs; does not require a practitioner assessment and can be primarily initiated by sponsors in the community.

Union countries.¹⁷ According to the 2017 Global Adult Tobacco Survey, of the total population, 23% use tobacco products, with men more likely to smoke than women (40.1% v. 8.9%).^{23,24}

Mental health

Ukraine's general population has a high reported prevalence of mental illness, with about 33% of its population having experienced mental illness in their lifetime.17 The prevalence of alcohol use disorders in men is much higher in Ukraine than globally (6.0% v. 1.5%), and prevalence of drug use disorder is estimated at 0.7%.25 According to a 2020 World Health Organization (WHO) report, Ukraine has among the highest suicide rate globally, with 30.6 deaths per 100 000 people, compared with the global average of 10.4 deaths per 100 000 people.²⁵ Those fleeing the current conflict and arriving in Canada are expected to have experienced substantial trauma, which may increase risk of mental health disorders. The current evidence-based guideline does not recommend routine screening for trauma or posttraumatic stress disorder, but does recommend diagnosing and treating any mental disorders associated with disability.13 A trauma- and violence-informed approach to care can reduce the risk of disabling mental illness, which includes resisting immediate evocation of traumatic stories.13 Keeping families and close friends together can promote a sense of physical and emotional safety, enabling choice and collaborative decision-making, focusing on hope and refugee strengths, and providing space for personal and social identities, which may improve outcomes. 13,26

Vaccine-preventable diseases and chronic infections

The risk of vaccine-preventable diseases, particularly measles, polio and COVID-19, is high among people from Ukraine owing to low immunization coverage in the country, which a recent Public Health Ontario evidence brief ascribes to lack of available vaccines and distrust of vaccines among parents and medical providers.23 In 2020, the national coverage in Ukraine was 81% for diphtheria, tetanus and polio; 82% for measles, mumps and rubella; and 84% for polio.²³ Nationwide measles epidemics occurred between 2017 and 2020, and an outbreak of vaccine-derived poliovirus type 2 was confirmed in October 2021.18 Ukraine had planned a catch-up polio (inactivated polio vaccine) vaccination campaign beginning Feb. 1, 2022, but this was interrupted by the current conflict. COVID-19 is an important concern, given that only 34% of the population is fully vaccinated.²³ As vaccinations will not be updated as part of Canada's mandatory diagnostic tests required by the IRCC in the current context, health practitioners should counsel new arrivals from the Ukraine to update their vaccinations, paying attention to the need to address vaccine hesitancy and considering cultural preferences.

Tuberculosis — and, particularly, drug-resistant TB — is a major public health problem in Ukraine. In 2019, Ukraine had the second-highest number of TB cases (28 539) and the fourth-highest incidence rate of new cases (71 cases/100 000 population) in the WHO European Region. 27,28 In 2018, drug-resistant TB occurred among 27% of new patients with TB in Ukraine. 27 In comparison, the rate of TB in Canada in 2020 was 4.7 cases per

100 000 population with multidrug-resistant (MDR) rates of 1.8%. 29 Canada will conduct chest radiography for all arriving Ukrainians aged 11 years and older, to rule out active TB. Testing for TB infection and treating those found to be positive is recommended. 29,30 Until 2018, Bacillus Calmette–Guérin (BCG) vaccination coverage included 2 doses, with the first dose given at birth and the second at age 7 years. 31 The optimal diagnostic test for TB infection in this population, therefore, is an interferon- γ release assay, but a tuberculin skin test is an acceptable alternative. 29 Treatment of MDR-TB may present a challenge for Canadian providers as treatment is longer, less well tolerated and more costly than that for drug-sensitive TB.

According to information provided by Public Health Ontario, Ukraine has the second-highest burden of HIV in the Eastern European region, with a prevalence about fivefold higher than that in the Canadian population in 2018 (0.9%–1% v. 0.17%).^{23,32–34} As in Canada, groups at highest risk for acquiring HIV include people who inject drugs, female sex workers and men who have sex with men.^{18,23} Chronic viral hepatitis is also an important consideration. The prevalence of hepatitis C virus is almost sixfold higher (3.6% v. 0.64%), and the prevalence of chronic hepatitis B virus (1.8% v. 0.13%) is almost 14-fold higher among the Ukrainian than the Canadian population.^{23,35–39} Canada does mandate testing for HIV for people arriving from Ukraine, but not for viral hepatitis. Practitioners should screen for hepatitis B and C, if hepatitis B vaccination or antiviral medications or both are accessible.

What health system infrastructure gaps exist that can affect refugees and other migrant populations in Canada?

Despite Canada's commitment to refugee resettlement, a few key gaps should be acknowledged and addressed. Box 3 outlines the health system and policy solutions that are urgently needed to provide equitable health care for all refugees and migrants in Canada.

Timely access to health care is key to successful integration and settlement for refugees and people fleeing conflict or disaster. ^{13,40} Best-practice primary care delivery models for refugees include coordination with settlement services and the community, establishing corridors for care with other health services, and using professional interpreters for all patient encounters. ^{41–44}

Box 3: What are key policy considerations to provide equitable refugee health care in Canada?

- National accreditation standards that require universal access to medical interpretation should be developed and implemented.
- Local institutional- and provincial-level programs that support and facilitate the coordination of care between multiple providers, services and sectors to address transition gaps must be developed and funded.
- Health and social data on migration status, country of birth and ethnicity must be routinely collected at the institutional, provincial and national levels, to inform health interventions and resource allocation.

Medical interpretation improves refugee trust, refugee–provider rapport and health outcomes; reduces medical errors, length of hospital stay and preventable use of acute care; and decreases health care inefficiencies, including fewer missed or cancelled appointments. Medical interpreters are not available in many health settings in Canada. The major barrier to implementation of universal access to interpreters is the perception by policymakers and health administrators that this service is too costly.

Peers and community members who can assist with navigation of the health system may also be key to ensuring linkage to care and treatment uptake and completion. Transitioning patients between services and sectors (i.e., refugee clinics to community clinics, or acute hospital to community care, and primary care to specialty care) requires advocacy and networks. Acade Canada does not routinely collect data on immigration status or country of birth in health data sets in most jurisdictions. These data are required to inform health policy and resource allocation so that programs can be tailored to the needs of groups with the highest health burdens.

The global response to the complex needs of people fleeing Ukraine, compared with its response to previous migration and refugee crises involving other groups of refugees who are not white and not Christian, has been starkly preferential and welcoming. Other humanitarian crises, such as in Afghanistan, Ethiopia, Syria and Yemen, must not be neglected from a human rights and humanitarian perspective.

Conclusion

Now more than ever, with an overstretched health care system in Canada, a coordinated multistakeholder approach — with partnerships between policy-makers, health administrators, practitioners and communities — is needed to protect refugees and other migrants, promote their self-reliance and health, and build responsive health systems in host communities. ⁵⁰ Canada must commit to strengthening its health systems to support the needs of refugee and other migrant populations and support health equity for all who reside in Canada.

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