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## Expanding travel medicine in the 21<sup>st</sup> century to address the health needs of the world's migrants

Nina Marano, D.V.M.<sup>1</sup>, Kristina Angelo, D.O., M.P.H. & T.M.<sup>1</sup>, Rebecca D. Merrill, Ph.D<sup>1</sup>, and Martin S. Cetron, M.D.<sup>1</sup>

<sup>1</sup>Division of Global Migration and Quarantine, Centers for Disease Control and Prevention, Atlanta Georgia USA

### Abstract

The body of knowledge needed to effectively practice travel medicine has expanded since the 1990s, as migrants begin to comprise an increasing proportion of the world's population. We describe the unique needs of migrants, and provide resources available to migration health practitioners. As the number of the world's migrants grows, collaboration across disciplines is key to achieving high-quality migration health practices.

### Keywords

migrant; health; travel medicine

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Travel medicine is a relatively new medical specialty, launched with the establishment of the International Society of Travel Medicine in 1991. Travel medicine's initial focus was research on travelers' diarrhea among mainly tourists and business travelers. However, the knowledge needed to practice travel medicine effectively in the 21st century has expanded as political, economic, and environmental factors have given rise to ever-increasing movements of people across the globe — these people are broadly described as migrants. The International Organization for Migration (IOM) defines a “migrant” as “any person who is moving or has moved across an international border or within a state away from his/her habitual place of residence, regardless of 1) the person's legal status; 2) whether the movement is voluntary or involuntary; 3) what the causes for the movement are; or 4) what the length of the stay is” (1). Generally, a distinction is made between short-term or temporary migration, covering movements with a duration between 3 and 12 months, and long-term or permanent migration, referring to a change of country of residence for a duration of one year or more (2). In 2017, there were an estimated 258 million long-term migrants, an increase of 85 million (49%) since 2000; this group constitutes 3.4% of the world population and would rank as the 5th most populated country in the world (3).

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Corresponding Author: Nina Marano, D.V.M., Centers for Disease Control and Prevention, 1600 Clifton Road MS H16-4, Atlanta Georgia 30333, Tel 404 639 3831, nbm8@cdc.gov.

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Many of the world's migrants encounter numerous legal, policy, financial, and cultural barriers to healthcare access, and miss opportunities for diagnosis, treatment, and prevention of illness. These barriers, and low uptake of pre-travel health advice and preventive interventions, increased risk behaviors and exposures during travel, and low awareness among healthcare providers of migrant health issues, put migrants at increased risk of acquiring infectious diseases as travel-related health conditions. Recent publications highlight the importance of embracing a more inclusive approach to migration health within travel medicine (4,5). Here we reinforce this theme, exploring the health needs of some groups of migrants, whose duration of migration may be temporary or long-term and describing strategies to better address those needs.

### **Addressing health needs of refugees, asylum seekers, and internally displaced persons during forced migration**

People who migrate for safety or for political or religious freedom suffer conflict-driven interruption of access to health systems and providers. Medical providers seeing forced migrants in their clinical practices, or while aiding in humanitarian relief efforts, should be aware of common health problems encountered by this group. These conditions include traumatic injuries, gastrointestinal illnesses, as well as chronic medical conditions such as diabetes and hypertension. Female migrants face specific challenges, particularly in maternal, sexual, and reproductive health, and gender-based sexual violence. Additionally, forced migration contributes to an increase in psychosocial disorders. Children less than 5 years old are particularly prone to respiratory, skin, and gastrointestinal illnesses. (6).

### **Economic migrants: long-term or circular migration for economic need**

The largest sub-group of global migrants are economic migrants — those who move from one country to another to improve their standard of living. Some economic migrants may reside in a new location for a long period of time with sufficient healthcare access. However, even those with sufficient healthcare access may have been exposed to infectious diseases in their countries of origin and require screening for health conditions, such as hepatitis B, after arrival to their new country to avoid poor health outcomes. Other economic migrants may participate in more regular circular migration, repeatedly moving between their location of origin and temporary residence. Migrants seeking economic opportunities may move to regions where they are unfamiliar with the local language or culture. Additionally, these migrants may feel uncomfortable accessing local medical care due to government regulations for non-permanent residents, xenophobia, cost, lack of nearby family members to provide daily food and supplies if admitted to a hospital, or discordant beliefs about what medical practices are appropriate. In this context, when migrants become ill, they may postpone seeking treatment until symptoms are severe. Further, rather than seeking care at the nearest facility, they may return to their country of origin, visiting healthcare facilities along the way. When this migration includes cross-border travel, delay in seeking healthcare may result in the international spread of infectious disease. In 2017, Benin health officials identified Lassa fever in a woman who died during a cesarean section in a rural healthcare facility bordering Nigeria. She and her husband were economic migrants from Togo who left

their temporary residence in Nigeria to seek care in Benin, when she became gravely ill. The husband left with the child against medical advice. Through a targeted investigation, guided by contextual information on his likely circular migration pathway, the husband and baby were located in Togo. The infant was diagnosed with Lassa fever; no secondary cases were reported. This example highlights the importance of understanding regional migration patterns and rapid resource deployment to both identify and treat economic migrants with exposure to communicable diseases to stop secondary spread (7).

### **Travelers visiting friends and relatives (VFRs): a form of circular migration**

VFRs, identified as migrants by the IOM definition, are “immigrants, ethnically and racially distinct from the majority population of the country of residence (a higher-income country), who return to [their] home country (lower-income country) to visit friends or relatives” (8). VFR travelers are at increased risk for infectious diseases due to lack of risk awareness, cultural or financial barriers to seeking or filling prescriptions received during pre-travel care, adoption of local behaviors while visiting their home country, or misperceptions that they retained immunity to the disease from earlier exposures. Medical practitioners who care for VFR travelers need to complete an in-depth travel history and maintain awareness of infectious diseases that disproportionately affect this population, including malaria, vaccine-preventable diseases, hepatitis A and B, tuberculosis, and typhoid fever (9,10).

### **Medical migration: seeking affordable or available medical care across international borders**

Medical migration initially involved “south-north” migrants, generally wealthier individuals in a lower- or middle-income country who traveled seeking higher-quality healthcare not available in their home country. As healthcare costs increased in some highly developed countries, medical migration began to shift to “north-south” migration — traveling to obtain affordable healthcare (such as a US citizen traveling to Thailand for plastic surgery). Even more recently, war, famine, political strife, and loss of health infrastructure have caused “south-south” medical migration. For example, in 2013, Somali migrants crossed into Kenya to seek treatment for multi-drug-resistant tuberculosis (MDR-TB) in the Dadaab Refugee Camp and Eastleigh, Nairobi. Medical practitioners notified public health authorities, aiming to both facilitate care in Kenya and initiate dialogue with health counterparts in Somalia to help build better capacity for management of MDR-TB cases within Somalia. This example illustrates the need for medical practitioners to be aware of new “push-pull” pressures on healthcare provision from the influx of medical migrants and to report changes to officials promptly, to help ensure all individuals receive the care that they need. Further, by recognizing and reporting a shift in the number of medical migrants, health practitioners can contribute to more effective cross-border coordination to improve healthcare provision (11).

### **Migrant health resources for travel medicine and healthcare practitioners**

The body of knowledge needed to provide medical care to migrants is complex and must span multiple specialties. Practitioners have tools to help guide their clinical management of migrants. Evidence-based guidelines for refugees have been developed by the US Centers

for Disease Control and Prevention (CDC) in collaboration with partners, and by the Canadian Collaboration for Immigrant and Refugee Health (12, 13). To raise awareness at the earliest opportunity, migration medicine topics should be included in medical school curricula.

Established travelers' health surveillance networks are recognizing the need to adapt their protocols to better address migrants' health concerns. The International Society of Travel Medicine, in collaboration with CDC, performs infectious diseases surveillance and other travel-related conditions among international travelers, including migrants, through GeoSentinel, ([www.istm.org/geosentinel](http://www.istm.org/geosentinel)). Since 2016, GeoSentinel sites have been contributing migrant-specific data on a supplemental data collection form; beginning in late 2018, migrant-specific information will be incorporated into the main data collection form.

To gain awareness of the broad range of health issues among migrants, medical providers can join the International Society of Travel Medicine's Migrant and Refugee Health Interest Group. The Society of Refugee Healthcare Providers is a newly established group whose professional focus is on caring for newly arriving refugees. The International Migration Health Conference in Rome, Italy, ([http://www.istm.org/icmh\\_sciprogram#migrationprogramataglance](http://www.istm.org/icmh_sciprogram#migrationprogramataglance)) sponsored by the International Society of Travel Medicine, is a unique opportunity for health practitioners from multiple disciplines and countries to share their expertise to promote the health of the world's migrants.

While many resources are available to developed migrant-receiving countries, south-south migration is impacting 11 million (17%) of the world's refugees and asylum seekers who are hosted in nine low-resource countries (14). Therefore, more effort could be devoted to developing guidelines and trainings in low-resource countries that focus on travel and tropical medicine, public health, and emergency medicine, so practitioners in these countries can better address the health concerns of their migrant patients.

## Conclusion

It is important to recognize the heterogeneous nature of migrant groups. Even migrant groups with good access to health care may still be at risk for preventable and treatable infectious diseases, and can benefit from infectious disease screening or updated vaccinations. Thus, all health encounters should be taken as an opportunity to promote migrant health. Broadening the view of migration health is a triple win — beneficial for the migrant, for the sending countries, and for the receiving communities and countries. Increasing collaboration across disciplines is key supports achieving high-quality migration health practices that prevent infectious disease transmission across borders and strengthen global health security.

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