IJTMGH
International Journal of Travel Medicine and Global Health

Int J Travel Med Glob Health. 2026 Jun;14(2):87-88
http://ijtmgh.com

doi 10.30491/ijtmgh.2025.513009.1469

Letter to Editor Open Access

Public Health Strategies for Travelers in Infectious Disease Outbreaks Post-Disasters

Ameneh Marzban [1]*

[1] Department of Health in Disasters and Emergencies, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran.

***Corresponding Author:** Ameneh Marzban, Department of Health in Disasters and Emergencies, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran. Email: amenemarzban@yahoo.com, Phone: +989172458896.

Received 2025-03-17; **Accepted** 2025-05-08; **Online Published** 2026-06-01

Citation: Marzban A. Public Health Strategies for Travelers in Infectious Disease Outbreaks Post-Disasters. Int J Travel Med Glob Health, 2026;14(2):87-88. Doi: 10.30491/ijtmgh.2025.513009.1469

Dear Editor

In recent years, the increasing frequency and intensity of natural disasters have highlighted the urgent need for comprehensive public health strategies to protect travelers in affected areas [1]. Post-disaster environments often lead to outbreaks of infectious diseases due to compromised infrastructure, contamination of water supplies, and overcrowded conditions in shelters [2]. Travelers, who may lack familiarity with local healthcare systems or disease risks, are especially vulnerable in these situations [3]. This letter aims to address the critical importance of tailored public health measures to safeguard the health of travelers amidst post-disaster outbreaks and propose strategies for effective management.

Impact of Infectious Disease Outbreaks on Travelers

Travelers who visit disaster-stricken regions are at a heightened risk of contracting infectious diseases such as cholera, malaria, and respiratory infections [4]. Factors such as limited access to healthcare, exposure to contaminated water and food, and a lack of prior immunizations can exacerbate their vulnerability. For instance, the outbreak of cholera in Haiti following the 2010 earthquake significantly impacted both local populations and international travelers, underlining the need for proactive measures [5].

Moreover, travelers may unknowingly become vectors for the spread of diseases when returning to their home countries, posing secondary risks to global public health. These risks emphasize the necessity of robust prevention and control strategies to address disease transmission in post-disaster scenarios [6].

Proposed Public Health Strategies

1. Pre-Travel Preparedness and Education

Establishing pre-travel awareness campaigns is essential to inform travelers about potential health risks and preventive measures [7]. These campaigns should emphasize the importance of vaccinations, the use of personal protective measures, and awareness of local disease dynamics. Travel advisory systems could be enhanced to provide real-time updates on infectious disease outbreaks in disaster-affected areas [5].

2. Strengthening Access to Preventive Measures

Implementing mobile vaccination clinics at entry points or disaster zones can help immunize travelers and local communities against prevalent diseases [2]. Distribution of essential preventive supplies such as mosquito repellents, hand sanitizers, and clean water kits should be prioritized to minimize disease exposure [4].

3. Collaboration with Local and Global Health Authorities

A coordinated effort between international health organizations, local governments, and non-governmental organizations is vital to ensuring rapid disease surveillance and response [8]. Establishing quarantine protocols and isolation facilities specifically for travelers presenting symptoms can prevent the spread of infections both locally and internationally [1].

4. Utilizing Digital Health Technologies

Mobile apps and wearable health devices could assist in monitoring travelers' health and providing timely alerts about symptoms indicative of infectious diseases [7]. Online platforms could enable travelers to access telemedicine services and immediate medical consultations, reducing the burden on local healthcare infrastructure [4].

5. Training and Deployment of Health Professionals

Special training programs for healthcare workers focusing on travel-related disease risks and cultural sensitivity should be developed [5]. Deployment of multilingual medical personnel in disaster-stricken areas would ensure better communication and care for international travelers[1].

Challenges and Opportunities

While implementing these strategies, several challenges must be addressed, including limited resources in disaster zones, linguistic and cultural barriers, and the logistical complexities of rapid response systems [8].

However, with the growing advancements in technology and increased global attention to disaster preparedness, there are ample opportunities to develop innovative solutions that cater to the unique health needs of travelers[2].

Conclusion

Protecting the health of travelers in the wake of infectious disease outbreaks post-disasters is an integral part of global public health. By focusing on education, prevention, collaboration, and technology-driven solutions, we can significantly mitigate the health risks faced by travelers and prevent secondary outbreaks. Investment in these strategies not only enhances the resilience of individuals during disasters but also strengthens the global capacity to respond to public health emergencies.

Highlights

What Is Already Known?

Disasters disrupt infrastructure, triggering infectious disease outbreaks. Travelers are vulnerable in these regions and may unintentionally spread diseases globally.

What Does This Study Add?

Proposes an integrated response framework combining pre-travel education with real-time digital health tools. Advocates for mobile clinics, telemedicine, and multilingual support to mitigate health risks and protect global public health.

Authors' Contributions

None

Acknowledgements

The Author would like to thank the Vice - Chancellor of Research and Technology in Iran University of Medical Sciences for providing access to scientific databases.

Conflicts of Interest Disclosures

The author declare that there are no conflicts of interest related to this manuscript.

Consent for Publication

Consent for publication is not applicable as there are no identifiable individuals involved in the study.

Ethics approval

Ethics approval is not applicable as the research did not involve human or animal subjects.

Funding/Support

The author declare that there was no funding or support received for this study.

The extent of AI use

The author confirms that no artificial intelligence or AI-assisted technologies were used in the writing or preparation of this manuscript.

References

1. Mavrouli M, Mavroulis S, Lekkas E, Tsakris A. The impact of earthquakes on public health: A narrative review of infectious diseases in the post-disaster period aiming to disaster risk reduction. Microorganisms. 2023;11(2):419. Doi:10.3390/microorganisms11020419

2. Findlater A, Bogoch II. Human mobility and the global spread of infectious diseases: a focus on air travel. Trends in parasitology. 2018;34(9):772-83. Doi:10.1016/j.pt.2018.07.004

3. Baker BA. Tourism and the Health Effects of Infectious Diseases:: Are There Potential Risks for Tourists? IJSSTH. 2015(12):3.

4. Vaidya R, Herten-Crabb A, Spencer J, Moon S, Lillywhite L. Travel restrictions and infectious disease outbreaks. Journal of travel medicine. 2020;27(3):taaa050. Doi:10.1093/jtm/taaa050

5. Rosselló J, Santana-Gallego M, Awan W. Infectious disease risk and international tourism demand. Health policy and planning. 2017;32(4):538-48. Doi:10.1093/heapol/czw177

6. Angelo KM, Kozarsky PE, Ryan ET, Chen LH, Sotir MJ. What proportion of international travellers acquire a travel-related illness? A review of the literature. Journal of travel medicine. 2017;24(5):tax046. Doi:10.1093/jtm/tax046

7. Grobusch MP, Weld L, Goorhuis A, Hamer DH, Schunk M, Jordan S, et al. Travel-related infections presenting in Europe: a 20-year analysis of EuroTravNet surveillance data. The Lancet Regional Health–Europe. 2021;1. Doi:10.1016/j.lanepe.2020.100001

8. Greenaway C, Castelli F. Infectious diseases at different stages of migration: an expert review. Journal of travel medicine. 2019;26(2):taz007. Doi:10.1093/jtm/taz007.