

Climate Change and Emerging Infectious Diseases: A Growing Global Health Threat

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Dear Editor,

Climate change is increasingly recognized as a driver of infectious disease outbreaks. Rising temperature and humidity create optimal conditions for pathogenic microorganisms and their vectors, shifting disease patterns worldwide.^{1,2} In developing countries like India, this phenomenon is increasingly frequent in the monsoon season, worsening the seasonal outbreaks of infectious diseases such as leptospirosis, dengue, malaria, and chikungunya.^{3,4}

Tropical regions of industrialized countries are also not being spared. The northern area of Queensland, Australia, recently experienced exceptionally severe flooding. As of March 2025, 25 deaths from melioidosis were reported.⁵ The causative organism, *Burkholderia pseudomallei*, thrives in soil and contaminates flood waters, and spreads via inhalation, ingestion, or direct contact with contaminated water and soil. It can cause pneumonia, sepsis, and skin ulcers.⁶

Clearly, climate change is no longer just an environmental concern—it is a public health crisis, especially in the tropics. A multidisciplinary approach is required, involving healthcare professionals, environmental scientists, epidemiologists, and policy

makers. The focus should be on environmental surveillance, such as strengthening early warning systems and robust public health infrastructure. Equally important are public awareness campaigns to help people build adaptability against emerging infectious diseases.

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