# Addressing public health challenges posed by climate change in India



In Chennai, India, a recent discussion convened by the US Consulate General and the Press Institute of India highlighted the pressing public health challenges posed by climate change. Experts at the event outlined the immediate need for a multidisciplinary approach to address these escalating threats, which include rising temperatures, extreme weather events, and shifting disease patterns.

Jay Lemery, a professor of emergency medicine at the University of Colorado School of Medicine, emphasised the significant health risks linked to climate change, including increased incidences of heat stress, strokes, and food insecurity. “It is a disease of vulnerability, disasters, ineffective communication, and system failure,” he stated, pointing out that while countries like the United States have established early warning systems for extreme heat and provide cooling centres along with emergency aid, many developing nations continue to lag behind in preparedness. This disparity underscores a critical gap in global climate resilience.

The unpredictable nature of changing weather patterns has led to rising heat-related illnesses and the proliferation of diseases in warmer climates. A study detailed in The Lancet Planetary Health reported a 53% increase in global heat-related mortality rates from 2000 to 2019, with the most significant effects felt in regions with underdeveloped healthcare systems. Vulnerable populations, particularly the urban poor without access to proper cooling systems and residing in areas susceptible to power outages, are facing heightened risks. The ramifications of climate change also extend to exacerbating antibiotic resistance and the emergence of new pathogens. Experts contend that immediate government intervention is necessary to formulate stronger “One Health” policies to combat these issues.

From a civic perspective, the failure to implement robust climate adaptation strategies has left millions exposed to health risks. In Indian cities, especially within Tamil Nadu, Maharashtra, and Delhi, record-breaking temperatures have been recorded. In 2023 alone, India witnessed over 3,000 heatwave-related fatalities according to the National Disaster Management Authority. The inadequacy of cooling infrastructure and emergency response measures has been highlighted, as many Indian municipalities have yet to adopt comprehensive heat action plans. This lack of preparedness poses threats not only to human health but also to already stretched urban healthcare systems grappling with the burden of climate-induced ailments.

Sustainability plays a pivotal role in mitigating these health threats. Experts call for sustainable urban planning, the development of green infrastructure, and the implementation of climate-adaptive policies to lessen the adverse impacts of extreme weather on public health. They advocate for nature-based solutions such as increased tree cover, improved water management, and the integration of renewable energy sources as effective measures against rising temperatures. A 2022 UN Habitat report suggested that cities with more substantial tree coverage can experience temperatures up to 5°C cooler compared to those that are more urbanised. Investing in climate-resilient housing, better ventilated buildings, and renewable energy solutions is essential to protect vulnerable communities from the worst effects of climate change. However, financing these initiatives remains a challenge, as both governments and private stakeholders struggle to balance long-term sustainability with immediate economic preferences.

The discussion brought to light that addressing climate change and its implications for global health necessitates a coordinated effort from policymakers, businesses, and civil society. There is an urgent need to strengthen climate policies, enhance healthcare infrastructure, and prioritise urban resilience as essential steps in mitigating long-term health consequences associated with climate change. While awareness is growing, ensuring adequate funding and political commitment to implement effective solutions remains a significant hurdle as the global crisis continues to evolve.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.deccanchronicle.com/southern-states/tamil-nadu/tn-sets-up-one-health-and-climate-hub-to-address-health-challenges-of-climate-change-1840412> - This URL supports the establishment of a 'One Health and Climate Hub' in Tamil Nadu to address health challenges posed by climate change, emphasizing the need for integrated strategies and policies to mitigate health risks.
* <https://www.dtnext.in/news/chennai/2025-wishlist-from-healthcare-to-art-what-changes-do-chennaiites-envision-for-the-future-817508> - This article highlights Chennai's challenges with climate change, including rising temperatures and humidity, and the need for technological advancements in healthcare to address these issues.
* <https://www.reactgroup.org/news-and-views/news-and-opinions/year-2025/one-health-and-climate-change-hub-a-bold-step-towards-integrating-amr-into-the-public-health-agenda/> - This URL discusses the One Health and Climate Change Hub's role in addressing antimicrobial resistance and integrating strategies across health, agriculture, and environment sectors.
* <https://www.un.org/en/climatechange/what-is-climate-change> - This URL provides general information on climate change, which supports the broader context of climate-related health challenges discussed in the article.
* <https://www.who.int/news-room/q-and-a/detail/q-a-on-climate-change-and-human-health> - This World Health Organization Q&A page explains the impacts of climate change on human health, including increased heat stress and disease spread, aligning with the article's themes.