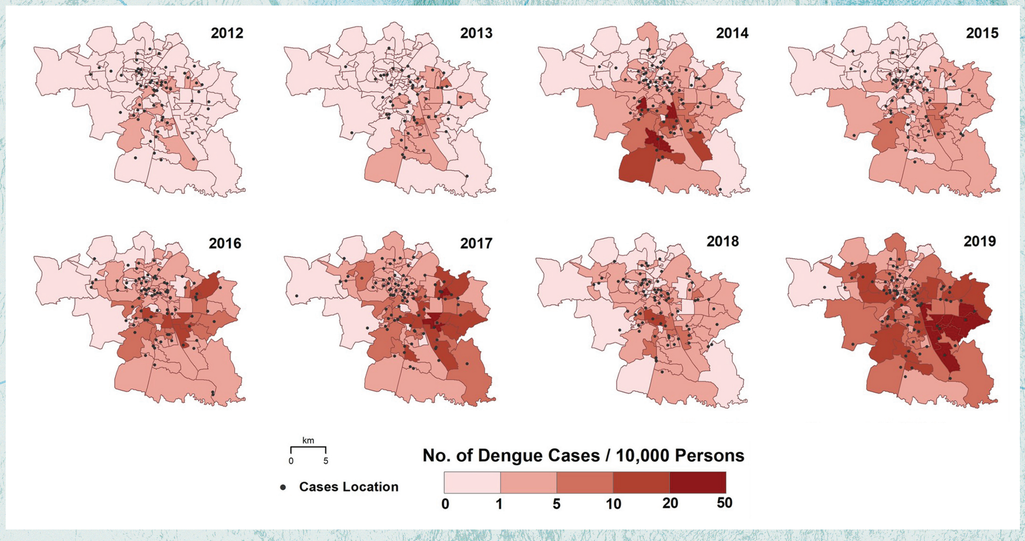
CLIMATE CHANGE IN INDIA: WHAT DO WE KNOW AND HOW?

CLIMATE AND HEALTH FORM A COMPLEX INTERCONNECTED SYSTEM

By 2100, India's average temperatures will rise by 2–4 degrees Celsius compared to pre-industrial (1850–1900) levels. We can expect more intense rain events, more droughts, stronger tropical cyclones and less snowfall in the Himalaya. This will impact human health and well-being.

Increased heat affects the human body: Lower work productivity, strain on the heart and circulatory system, diminished mental capacity, chronic kidney problems and an increased risk of accidents are all consequences.

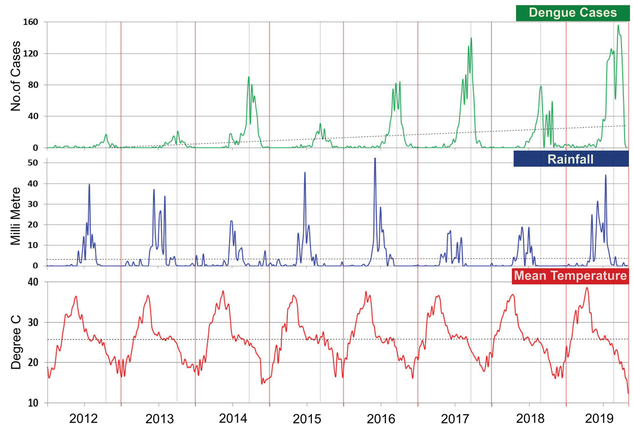


Increasing dengue cases in Bhopal

As the climate changes, early data shows that, for example, diseases carried by mosquitoes will increase and expand to new regions. In Bhopal, dengue incidence increased from 6 cases in 2012 to 90 cases in 2019 per 1 lakh inhabitants. This study also shows that dengue cases have increased with increasing temperature, rainfall and humidity. Built-up regions with sparse vegetation are also associated with higher incidences of dengue.

Climate change-induced migration will lead to larger and more densely populated cities, making it easier for diseases to spread. Extreme climate events leading to natural disasters, can cause increased food and water insecurity with long-term consequences for nutrition especially in developing nations like India.

Understanding the impact of climate change for health is urgent. India will face significant challenges in the future from climate change. We should be prepared.



Higher incidence of dengue are correlated with higher rainfall and temperature.

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