

Climate change makes children vulnerable to infectious diseases: Study

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Study provides evidence for future burden of diseases associated with childhood malady



The Centre of Excellence in Climate Change Research, Banaras Hindu University (BHU) has explored the association between climate parameters and infectious diseases in a three-year follow-up prospective cohort of 461 children under 16-years-of-age in Varanasi city.

Accounting for extensive socioeconomic household data and child anthropometric measurements, the researchers established that climate parameters like temperature, humidity, rainfall, solar radiation, and wind speed were significantly associated with the infectious diseases such as gastrointestinal diseases, respiratory diseases, vector-borne diseases, and skin diseases, in children in Varanasi.

Maximum temperature and humidity (absolute/relative) are important climate drivers. This study further added that climate parameters accounted for 9-18% of the total infectious disease cases, while non-climate parameters account for the rest.

Upper respiratory tract infection (mostly cold and flu) and gastrointestinal infections (mainly diarrhea) constitute 78% of the disease burden.

Findings from this study draw the attention of government and policymakers to prioritize effective measures for child health as the present association may increase disease burden in the future under climate-change scenarios in already malnourished pediatric population through multiple pathways.