

Special Issue

Vector-Borne Diseases in a Changing Climate: Transmission Dynamics and Epidemiological Shifts

Message from the Guest Editors

Understanding climate change and its effects on seasonality, phenology, and ecological interactions, as well as on landscape and ecosystem processes, is probably the main challenge of the 21st century. Vector-borne disease dynamics are fundamentally defined by the degree of niche overlap among hosts, vectors, reservoirs and parasites, and since seasonal climate patterns are changing, so are the interactions among these actors and the landscapes that harbor them, causing changes in vector-borne diseases' geographical ranges, dynamics and epidemiological patterns. Our knowledge on the effects of climate change on vector-borne diseases and the associated transmission patterns has increased significantly over the past decades; however, as climate change is a continuous process, so is the demand for novel research that may help to unveil the current and future scenarios of such diseases. The aim of this Special Issue is to gather investigative studies on the effects of climate change on the distribution ranges, behavior, and ecological interactions of vectors, as well as on shifts in the seasonal and distributional patterns of vector-borne diseases.

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Deadline for manuscript submissions

30 September 2026



Tropical Medicine and Infectious Disease

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/249153

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