

GLOBAL CLIMATE CHANGE AND HUMAN HEALTH

Editors

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Preface

Climate change, long treated primarily within the domains of the atmosphere, oceans, and ecosystems, has now become one of the most critical global health determinants directly affecting human well-being. Rising temperatures, disrupted precipitation regimes, the increasing frequency and intensity of extreme weather events, sea-level rise, and biodiversity loss are reshaping the epidemiology of communicable and non-communicable diseases, straining health-care delivery, and exacerbating social vulnerabilities. Accordingly, climate change should not be viewed merely as an environmental issue but as a public-health challenge that generates a “climate-sensitive disease burden,” amplifies inequities, and compels the transformation of health systems.

This book examines the impacts of climate change on human health through a holistic and systematic lens. It analyzes the association between heat waves and excess mortality; the burden of air pollution on respiratory and cardiovascular systems; the repercussions of water and food insecurity for gastrointestinal diseases; and the geographic expansion of vector-borne infections. It also addresses mental health and neurological outcomes, alongside the specific needs of vulnerable groups—including children, older adults, pregnant individuals, people with chronic conditions, outdoor workers, and migrants. Our central claim is that climate-related health effects are not isolated phenomena, but interconnected manifestations of the same causal network across clinical and societal domains.

Prof. Dr. Nezahat AKPOLAT

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