

# The Urgency of Addressing Climate Change

All threats to population health are not created equal. Only one of the current threats imperils every human being on Earth: climate change. Our planet is at a dangerous tipping point. Based on current knowledge and energy use, this omnibus plague will only worsen inexorably for decades and with progressively greater effects throughout the world. Plans to increase resilience to and mitigate extreme heat events are important priorities. But too many individuals, governments, and organizations do not treat climate change today as the overriding pandemic that it is.

We bemoan the fact that we cannot directly attack climate change, but we also do not fully recognize its secondary health effects. Among these effects are increasing ocean levels that flood low-lying land masses, extending the habitat for many vectors of communicable disease; increasing the intensity and duration of killer storms and other extreme weather events, causing crop failure that exacerbates food insecurity, including starvation; and displacing large populations via forced migration. Water scarcity in many parts of the globe is another immediate result of climate change. Droughts are becoming more common and lasting longer, contributing to mass displacements and food insecurity. The climate-related effects touch virtually every human organ. A growing body of evidence not only summarizes the net effect of these factors but underscores that they disproportionately fall on marginalized and low-income populations, magnifying inequities.

One major accelerator of climate change is underappreciated because naming it is politically sensitive or even politically incorrect: population growth. The world population is currently 8 billion, with projections to grow to 9.7 billion by 2050 and 10.4 billion by the end of the twenty-first century. Population growth requires more energy, primarily from the burning of fossil fuels. And with an estimated 800 million people already starving, how will we grow enough food to feed an added 1.7 billion hungry mouths?

Public health, in particular governmental public health, plays a central role in addressing climate change. Among the essential activities for public health practitioners and researchers are developing heat action plans; educating elected officials; tracking direct and secondary adverse effects on human health; developing sustainable health systems (e.g., reducing health care-related emissions); and increasing resiliency and the ability to adapt to climatic challenges, particularly for the most vulnerable elders,

children, and those at higher risk due to underlying conditions. Many of these themes are covered in this volume of the *Annual Review of Public Health*.

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