

Climate and Extreme Weather Events Health Policy Statement

POSITION

ASTHO supports building and sustaining healthy communities that are climate-resilient and prepared for extreme weather events. Public health programs that increase capacity to prevent, protect, and respond to the impacts of climate and extreme weather are critical to the overall readiness and resilience of a community.

BACKGROUND

Climate and weather have an appreciable impact on public health, safety, and quality of life. According to the 2018 U.S. Global Change Research Program Climate Science Special Report, not only have 2016, 2017, and 2018 been the warmest years globally, they have also seen record-breaking, climate-related weather extremes.¹

The anticipated health effects related to weather and climate include death and illness from heat waves; injuries and mental health impacts from catastrophic events such as hurricanes, tornadoes, and floods; increased air pollution with concurrent rises in respiratory and cardiovascular diseases²; detrimental impacts on water quality and quantity; and an increased incidence of vector-borne, foodborne, and waterborne diseases.³ Additionally, since 1980, extreme events have cost the United States \$1.1 trillion.⁴ Recent climate and weather-related challenges, from extreme weather events to changing patterns of communicable disease, have already demonstrated the critical need to improve public health capacity and capability to identify, prevent, and respond to these threats.

In November 2018, Volume II of the Fourth National Climate Assessment was released by the [U.S. Global Change Research Program](#). This report is a product of 13 federal agencies and contains supporting evidence on climate change impacts, risks, and adaptations occurring in the U.S. The report states that human health and safety, our quality of life, and the rate of economic growth in communities across the U.S. are increasingly vulnerable to the impacts of climate change. The report also notes that climate change threatens the health and well-being of the American people by causing increasing extreme weather, changes to air quality, the spread of new diseases by insects and pests, and changes to the availability of food and water.

RECOMMENDATIONS

ASTHO recommends the following policy considerations for environmental public health programs to increase capacity to prevent, protect, and respond to the impacts of climate and extreme weather:

Summary of Recommendations

- Ensure sufficient and sustained federal funding, technical assistance, and training.
- Support efforts to conduct climate adaptation and vulnerability assessments and planning activities.
- Expand state and territorial health agency monitoring and surveillance capacity.
- Incorporate assessment and evaluation strategies.
- Build public awareness, messaging, and education—including effective risk communication—to increase the public’s will and support for climate and health programs.
- Promote environmental stewardship.
- Strengthen cross-sector partnerships.

- **Ensure that sufficient federal funding, technical assistance, and training are provided to state, territorial, and local health agencies to sustain and expand key health security programs that increase capacity to prevent, protect, and respond to the human health impacts of climate and extreme weather.** This would include CDC’s Climate-Ready States and Cities Initiative, the CDC Public Health Emergency Preparedness cooperative agreement, the CDC Epidemiology and Laboratory Capacity cooperative agreement, and HHS Office of the Assistant Secretary for Preparedness and Response’s Hospital Preparedness Program. CDC’s Climate and Health Program must continue to serve as the scientific leader and provide resource support and technical assistance to state and territorial health agencies in order to identify, prevent, and respond to climate-related health impacts in their communities.
- **Support state and territorial health agency efforts to conduct climate adaptation and vulnerability assessments and planning activities.** Climate and weather-related impacts will not affect every population, state, territory, or region in exactly the same way. State and territorial health agencies should prepare and plan for climate effects likely to, or already impacting, their unique geography and communities, recognizing the interconnected nature of our natural, built, and social systems. Vulnerable populations, including children; elderly people; persons with disabilities, chronic disease, and existing mental illness; and those impacted by poverty, racism, violence, and other forms of social isolation; are likely to be disproportionately impacted. It is also important to consider geographic vulnerability, including coastal areas, island nations, and locations predisposed to wildfires, floods, droughts, and extreme temperatures. With the necessary support of relevant federal agencies, state and territorial health agencies can take steps to assess their distinct vulnerabilities, both locally and regionally, and develop a framework for adapting to experienced and expected climate and extreme weather health impacts.
- **Expand state and territorial health agency monitoring and surveillance capacity.** Developing strategic climate monitoring, surveillance, and response systems to prevent and respond to climate-related impacts may include creating decision support systems that enable agencies to predict, anticipate, and model events and early warning systems that enable rapid response. The capacity to systematically collect, manage, analyze, and interpret climate and extreme weather data and the impact on human health is critical to making informed climate policy and developing effective responses to climate and weather events. CDC’s Environmental Public Health Tracking program, which collects, integrates, and analyzes non-infectious disease and environmental data from a nationwide network of partners, should be expanded to all jurisdictions and enhanced. This form of environmental health surveillance is critical to guiding and evaluating public health actions that can prevent or mitigate environmental hazards’ impact on health and elucidate trends that may increase our understanding of the relationship between environmental hazards and health. Additionally, continued investments in syndromic surveillance will enable early detection of climate and extreme weather-related outbreaks, or other novel incidents, and promote rapid response. Through such programs as CDC’s National Syndromic Surveillance Program, state and territorial health officials can detect unusual levels of illness, improving their common awareness of health threats over time and across regional boundaries.
- **Incorporate assessment and evaluation strategies.** Rigorously evaluating all state and territorial health agency climate and weather interventions will help ensure that they are cost-effective, impactful, and advance the principles of health equity. State and territorial health agencies can employ tools such as CDC’s Building Resilience Against Climate Effects framework to assess climate readiness and health impact assessments to determine the health implications of existing and future

policy decisions.

- **Build public awareness, messaging, and education—including effective risk communication—to increase public will and support for environmental public health programs that increase capacity to prevent, protect, and respond to the health impacts of climate and extreme weather.** State and territorial health agencies are uniquely positioned to inform communities, policymakers, other government agencies, and industry about the public health impacts of climate and extreme weather. Raising public awareness and improving effective risk communication about the health-related impacts of climate and weather events can build a broader constituency that supports public health programs and helps ensure their sustainability.
- **Promote environmental stewardship.** State and territorial health agencies are poised to advance policies that protect public health and maintain a healthy environment in which to live, work, and play. Public health professionals must educate stakeholders about the potential health implications of individual and social behavior, consumption of goods and services, and decision making that may contribute to the negative impacts of climate change. Responsibly using and protecting the natural environment that ensures food and water security and clean air can also mitigate the potential and evidence-based catalysts of climate change and extreme weather.
- **Strengthen cross-sector partnerships.** An interdisciplinary approach to address the health effects of climate and weather variations can protect lives, reduce costs, improve effectiveness, and build valuable relationships with a variety of partners. State and territorial health agencies must integrate climate readiness into and across public health programs such as infectious disease, safe water, food safety, and vector control programs and foster horizontal collaboration and coordination with partners representing the transportation, energy, housing, environmental protection, and commerce sectors. It is also imperative to engage and align diverse external partners at the federal and international levels to leverage their research and expertise. As boundary spanning leaders, public health officials at all levels of government should redouble their efforts to raise awareness and advocate for a “Health in All Policies” approach to climate and weather preparedness and resilience. This will promote healthier and more sustainable communities through improved land use planning; facility siting; critical infrastructure maintenance; and housing, transportation, energy, agriculture, and water supply management and quality.

APPROVAL DATES:

Drafting Committee Approval: September 23, 2019

Board of Directors Approval: December 11, 2019

Policy Expires: December 31, 2022

ASTHO membership supported the development of this policy statement, which was subsequently approved by the ASTHO Board of Directors. Be advised that these statements are approved as a general framework on the issue at a specific point in time. Any state or territorial health official must interpret the issue within the current context of his or her jurisdiction, and therefore may not adhere to all aspects of this policy statement.

¹ Intergovernmental Panel on Climate Change. “Highlights of the Findings of the U.S. Global Change Research Program Climate Science Special Report: Executive Summary.” Available at <https://science2017.globalchange.gov/chapter/executive-summary/>. Accessed October 29, 2019.

² National Institute of Environmental Health Sciences. “Cardiovascular Disease and Stroke: Climate and Human Health.” Available at https://www.niehs.nih.gov/research/programs/geh/climatechange/health_impacts/cardiovascular_diseases/index.cfm. Accessed October 29, 2019.

³ National Climate Assessment. “Fourth National Climate Assessment. Volume II: Impacts, Risks, and Adaptation in the United States. Summary Findings 6: Health.” Available at <https://nca2018.globalchange.gov>. Accessed October 29, 2019.

⁴ Intergovernmental Panel on Climate Change. “Highlights of the Findings of the U.S. Global Change Research Program Climate Science Special Report: Executive Summary.” Available at <https://science2017.globalchange.gov/chapter/executive-summary>. Accessed October 29, 2019.