

CDC Policy on Climate Change and Public Health

SCIENTIFIC FRAMEWORK

- There is widespread scientific consensus that the world’s climate is changing. Some of the effects of climate change are likely to include more variable weather, heat waves, heavy precipitation events, flooding, droughts, more intense storms such as hurricanes, sea level rise, and air pollution. Each of these changes has the potential to negatively affect health. While climate change is recognized as a global issue, the effects of climate change will vary across geographic regions and populations.
- Although scientific understanding of the effects of climate change is still emerging, there is a pressing need to prepare for potential health risks. This public health preparedness approach is applied to other threats in the absence of complete data, such as terrorism and pandemic influenza. A wide variety of organizations (federal, state, local, multilateral, private and nongovernmental) is working to address the implications of global climate change. Despite this breadth of activity, the public health effects of climate change remain largely unaddressed.
- Climate change has the potential to impact health in many ways. While some of these are unpredictable, others (shown in the table) are supported by considerable evidence.

Weather Event	Health Effects	Populations Most Affected
Heat waves	Heat stress	Extremes of age, athletes, people with respiratory disease
Extreme weather events, (rain, hurricane, tornado, flooding)	Injuries, drowning	Coastal, low-lying land dwellers, low SES
Droughts, floods, increased mean temperature	Vector-, food- and water-borne diseases	Multiple populations at risk
Sea-level rise	Injuries, drowning, water and soil salinization, ecosystem and economic disruption	Coastal, low SES
Drought, ecosystem migration	Food and water shortages, malnutrition	Low SES, elderly, children
Extreme weather events, drought	Mass population movement, international conflict	General population
Increases in ground-level ozone, airborne allergens, and other pollutants	Respiratory disease exacerbations (COPD, asthma, allergic rhinitis, bronchitis)	Elderly, children, those with respiratory disease
Climate change generally; extreme events	Mental health	Young, displaced, agricultural sector, low SES

PUBLIC HEALTH APPROACH

Building on existing programs and the Essential Public Health Services, CDC has identified the following priority health actions for climate change:

1. Serve as a credible source of information on the health consequences of climate change for the U.S. population and globally.
2. Track data on environmental conditions, disease risks, and disease occurrence related to climate change.
3. Expand capacity for modeling and forecasting health effects that may be climate-related.
4. Enhance the science base to better understand the relationship between climate change and health outcomes.
5. Identify locations and population groups at greatest risk for specific health threats, such as heat waves.
6. Communicate the health-related aspects of climate change, including risks and ways to reduce them, to the public, decision makers, and healthcare providers.
7. Develop partnerships with other government agencies, the private sector, nongovernmental organizations, universities, and international organizations to more effectively address U.S. and global health aspects of climate change.
8. Provide leadership to state and local governments, community leaders, healthcare professionals, nongovernmental organizations, the faith-based communities, the private sector and the public, domestically and internationally, regarding health protection from climate change effects.
9. Develop and implement preparedness and response plans for health threats such as heat waves, severe weather events, and infectious diseases.
10. Provide technical advice and support to state and local health departments, the private sector, and others in implementing national and global preparedness measures related to the health effects of climate change.
11. Promote workforce development by helping to ensure the training of a new generation of competent, experienced public health staff to respond to the health threats posed by climate change.