



Climate Effects and Environmental Health

Climate change is a health equity issue

Climate change effects in the U.S. disproportionately impact people of color, people with disabilities or health conditions, low-income communities, tribal communities, immigrants, the elderly, children, and people who are not fluent in English among others. These populations face greater challenges in adapting to or recovering from climate change impacts.

- 40% of federally recognized tribes in the U.S. live in Alaska Native communities where the rapid pace of rising temperatures, melting sea ice and glaciers, and thawing permafrost is having a significant negative impact on critical infrastructure and traditional livelihoods.
- People who have disabilities often face barriers in accessibility to health care services and emergency information and have historically high rates of illness, injuries or death from climate change events.
- Those who work outdoors are often the first to be exposed to climate change, specifically through increases in temperature, poor air quality, extreme weather events, diseases transmitted by ticks and mosquitoes, industrial exposures, and change to infrastructure.
- African American and Latinx communities have greater vulnerability to climate impacts, including heat, poor air quality, and extreme weather, due to overall lower income and poorer health status as a result of historical and present day discriminatory practices.

Communities in the United States are already experiencing climate change impacts on their health, well-being, and quality of life. Fortunately, opportunities exist at all levels of government to help communities plan for and adapt to these impacts and safeguard their health.



Air Quality

Climate change contributes to **increased production of pollen and lengthened pollen seasons**, which can worsen allergies and asthma. **Particulate matter in the smoke from wildfires** — which are expected to be more frequent and severe — increases sudden onset respiratory illness, respiratory and cardiovascular hospitalizations, and medical visits for lung illnesses, and the risk of premature death.



In 2016–2018, nearly **one in five (150 million)** Americans were living in areas with unhealthy ozone or particle pollution.

Extreme Heat

Heat stroke is the most serious heat-related disorder, caused by the body overheating. The condition can cause death or permanent disability without timely emergency treatment. Hospitalization due to heat disorders are increasing and experts predict that extreme heat events will occur more frequently, last longer, and be more severe in the future.



More than **600 people** in the U.S. are killed by extreme heat every year.

Extreme Weather

Flooding, hurricanes, tornadoes and droughts are just some of the extreme weather events predicted to occur more frequently or to be more severe as a result of climate change.



2019 was the **fifth consecutive year** in which 10 or more billion-dollar weather and climate disasters impacted the U.S.

Vectors

The development and survival of **ticks, their animal hosts** (e.g., deer), and **the bacterium that causes Lyme disease** are all strongly influenced by climatic factors, especially temperature, precipitation and humidity.



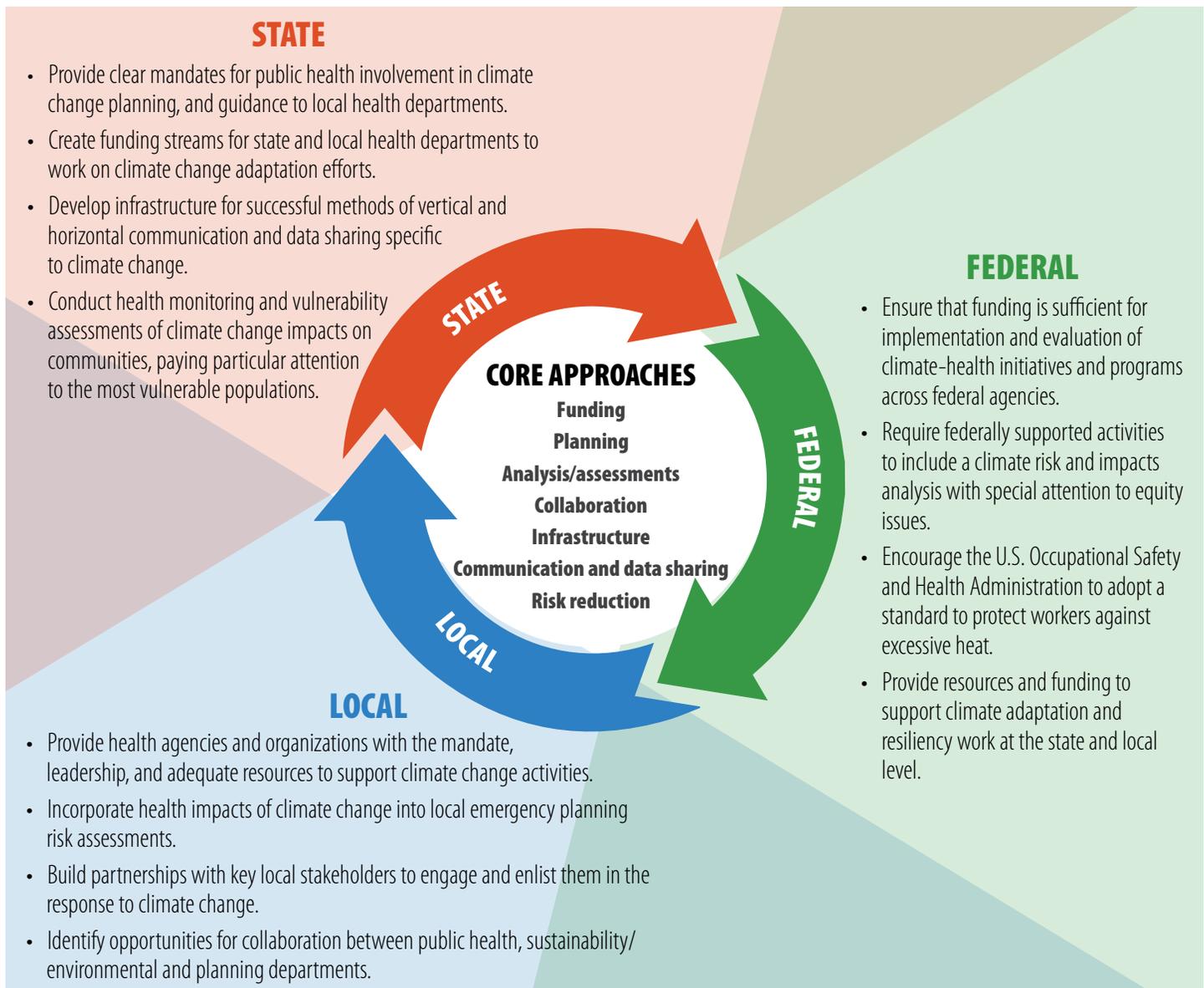
During 2004–2016, **an additional nine vectorborne human diseases** were reported for the first time in the U.S.

Opportunities For Action

Opportunities exist at all levels of government to help communities plan for and adapt to the impacts of climate change.

Many states and localities have begun this planning but will need resources to continue this work and to coordinate with neighboring jurisdictions. Efforts should focus on preparedness and building community resilience in the face of climate events. Dedicated funding and resources will be especially critical to support efforts in communities that are historically disadvantaged and disproportionately affected by climate change. Given this disproportionate impact, operating with an equity lens is necessary for any successful climate program or project.

The following are important strategies and approaches to guide this work across all levels of government.



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