

Summary for the General Public

Climate change is harming health and action on climate change is the solution

People across the United States (U.S.) are already experiencing the negative health effects of climate change. Burning fossil fuels drives climate change and produces air pollution which is dangerous for health. Climate change is causing more extreme heatwaves, droughts, wildfires, hurricanes, floods, and increasing sea levels. Everyone needs clean air, safe water, and vibrant communities to thrive. Climate change is damaging the very foundations of our health and well-being.

Three ways climate change harms health:

- **Extreme heat** can cause heat exhaustion, heat stroke, and harm the lungs, kidneys, and heart. Heat exposure has been linked to negative impacts on sleep and mental health and may contribute to higher crime rates. Children, the elderly, outdoor workers, people with chronic health conditions, and low-income communities are especially at risk. Infants and the elderly are experiencing a higher number of days exposed to heatwaves.

plants, and other sources of pollution are disproportionately located in communities of color. Black, Latinx, Alaskan Native or American Indian, Asian American or Pacific Islander, and other people of color are more exposed to unhealthy levels of air pollution and are at increased risk from climate change. Low-income communities face greater challenges in adapting to the rapidly changing climate.

- **Droughts** impact water and air quality, which worsens lung problems and infectious diseases, and harms mental health. Rural communities are especially impacted.

- **Wildfire** season in the Western U.S. is getting longer with more wildfires. Smoke from wildfires contains many harmful pollutants and travels across the country. Exposure to wildfire smoke can cause heart and lung disease, premature birth, poor mental health, and early death. Children are especially impacted.

The health impacts of climate change are unjustly distributed. While everyone's health is affected by climate change, some people and communities bear a greater burden. Policies rooted in systemic racism have created deep and widespread inequities. For example, highways, power

DROUGHT HARMS HEALTH
Drought harms the health of individuals, communities, & our nation through a variety of ways. Drought worsens heatwaves & wildfires, while also creating dry soil leading to more dust in the air. Limited water availability contributes to economic losses for water-reliant businesses (e.g., farming) and reduces river/stream flows with impacts on water levels in wells & aquifers.

HEAT-RELATED
Intensifies risk for heatstroke & complications of heart, lung, & kidney disease

WATER QUALITY
Increases exposure to toxic algae blooms & harmful water pollutants like arsenic, nitrate, & fuels/contaminants

INFECTIOUS DISEASE
Creates more suitable conditions for mosquitoes that spread West Nile Virus
Favors the spread of the fungus that causes Valley Fever

MENTAL HEALTH
Contributes to stress, anxiety, & depression related to damaged lands, economic instability, & water/food insecurity

RESPIRATORY
Causes breathing problems & worsens asthma, & other lung conditions

Climate change is costly for our communities, health systems, and economy. Climate change and air pollution from burning fossil fuels has dangerous health consequences. They also affect safety and productivity at work — resulting in lost wages, increase health care costs, reduce quality of life, and cause early death.

Climate change makes threats worse: COVID-19 pandemic and health systems

Events that are made worse by climate change, such as heatwaves and hurricanes, make it harder to stop the spread of COVID-19. These events put more stress on hospitals and health systems, already strained by the pandemic. Building strong health systems is essential to protect health from these multiple crises and ensure all communities can access high-quality health care.

Heat and health fast facts

- 2020 was the second highest year of heatwave exposure on record for older persons in the U.S.
- During the Pacific Northwest heatwave in June 2021, emergency room visits were 70 times higher than normal, with 600 people dying in Oregon and Washington during just one week from heat-related illness. This heatwave would have been virtually impossible without climate change.
- In 2019, air conditioning prevented 48,000 deaths in older adults in the U.S. Unequal access to safe, energy efficient homes and affordable clean energy puts low-income communities and people of color at higher risk of heat exposure.

Policy decisions can slow climate change and protect our health

Health professionals, scientists, business, the energy industry, and policymakers are increasingly working together with community members to address the climate change crisis, but more must be urgently done to protect our health. The faster we transition away from using fossil fuels, the greater the health benefits. The U.S. should take rapid steps to:

- **Expand renewable energy and increase energy efficiency.** Coal and natural gas harm health and contribute to climate change. These fossil fuels must remain in the ground and not be burned. Renewable solar and wind energy are healthy, affordable energy sources, and must be expanded across the country quickly and equitably.
- **Build a healthy transportation system.** Electric cars and buses, and alternatives to cars like walking, biking, and public transportation, have positive impacts on health and the planet.
- **Invest in community health and resilience.** Communities across the U.S. need support to prevent and respond to the health harms of climate change. We must invest in community preparedness and resilience — especially in communities of color and low-income communities most harmed by climate change.

We have the solutions we need to improve our health and advance equity by tackling climate change. We just need the will to act.

What you can do

Everyone has been or will be affected by climate change. We all have a role to play in addressing climate change to protect our health, the health of our children and families, and our neighbors and communities.

- **Educate** yourself on the ways climate change impacts your health by seeking information from your healthcare provider, local health department, news stories about the latest scientific papers, universities, and governmental agencies like the Centers for Disease Control and Prevention.
- **Talk** with your family, friends, community members, and local officials about how climate change harms health. Let them know how it's impacting you and that acting on climate change can improve health and advance equity. Invite others to share their stories. Ask about their plans to prepare for and respond to climate emergencies.
- **Advocate** for an urgent and equitable transition away from extracting and burning fossil fuels with your elected representatives at the local, state, and national level. You can also advocate for the other solutions listed here that will slow climate change and protect our health.

The **2021 Lancet Countdown Brief** was developed by a diverse group of health experts from over 70 U.S. organizations who recognize that climate change is first and foremost a health crisis.