

CLIMATE, HEALTH, AND EQUITY: A POLICY ACTION AGENDA

Fact Sheet

Four recent major national and international health expert reports document significant current climate impacts on health, forecast worsening health impacts with each additional degree of warming, and identify major health benefits associated with climate solutions. These reports include the [U.S. Fourth National Climate Assessment](#), [The 2018 report of the Lancet Countdown on health and climate change](#), the IPCC's [Special Report on Global Warming of 1.5 °C](#), and the World Health Organization's [COP24 Special report: Health & Climate Change](#).

Climate change is a health emergency.

- **Excessive heat** is the [leading weather-related killer](#) in the United States.
 - Emergency room visits for heat illnesses [increased](#) by 133 percent between 1997 and 2006. Almost half of these patients were children and adolescents.
 - [Across 10 metropolitan areas](#), assuming no population growth, mortality will average 10,300 heat-related deaths a year by 2050 compared to about 2,300 in 1997.
 - The cost of hospitalizations, emergency department encounters, and outpatient visits related to just one heatwave event was [estimated at \\$179 million](#).
- **Climate-sensitive vector-borne illnesses** transmitted by mosquitoes, ticks, and fleas, including Lyme disease and West Nile virus, [tripled between 2004-2016](#).
 - The tick that carries Lyme Disease is [reported in 45.7% of U.S. counties](#), up from 30% in 1998
- **Climate disasters** are increasing. Since 1980, there has been a [steady rise](#) in billion-dollar weather and climate disasters in the U.S. These damages significantly undermine people's physical and mental health, particularly for those who are not insured.
- **A decrease in crop yields** has resulted from extreme heat, drought, and precipitation. Increased atmospheric CO2 [reduces the protein and micronutrient content](#) of key crops.
- **Wildfire risk** rises dramatically with drought.
 - Smoke from wildfires ruins air quality and spreads particulate matter for hundreds of miles causing [increases in emergency room visits](#) and hospitalizations for heart and lung conditions.
 - The November 2018 Camp Fire was the deadliest wildfire our nation has seen in 100 years. It claimed 85 lives, destroyed nearly 150,000 acres, and [cost over \\$16 billion in damages](#).

- **Air quality.** Hotter weather raises the ozone concentration of the air across entire regions of the country. Ozone is a direct irritant to the lungs and is associated with increased ER visits for lung conditions like asthma and chronic lung disease.
 - More than 4 in 10 Americans are exposed to unhealthy air.
 - The American Lung Association's 20th annual air quality "report card" found that 141.1 million people lived in counties with unhealthful levels of either ozone or particle pollution
 - Pollen season has increased by a month in many areas of the country. Allergic plants are causing greater symptoms in more areas of the country for more months of the year.
- **Health equity.** Climate change disproportionately harms the health of certain populations in the United States.
 - African Americans are more likely to live in neighborhoods with fewer trees and more heat-trapping pavement. The rate of heat-related deaths in African Americans is 150–200% greater than that for non-Hispanic Whites.
 - Coal power plants are disproportionately located in low-income communities and communities of color; nearly six million African Americans live within three miles of a coal-fired power plant.
 - Traditional Native American and Alaska Native diets and subsistence hunting and fishing are at risk due to climate change.

Actions to reduce the impacts of climate change can rapidly and dramatically improve human health and help to ensure that everyone has a fair opportunity to be healthy

- The Lancet Commission on Health and Climate Change stated that “tackling climate change could be the greatest global health opportunity of this century.”
- The Commission further characterize many mitigation and adaptation responses to climate change as “no-regret” options, which “lead to direct reductions in the burden of ill-health, enhance community resilience and alleviate poverty.”

Reducing carbon emissions from **energy sources** means an improvement in health because...

- Transitioning to clean, renewable energy reduces air pollution, a major cause of heart and lung disease. We now know that air pollution also contributes to cognitive decline and adverse reproductive outcomes.
- There is ample evidence that we can make a difference. Simply closing coal and oil burning plants in areas in California reduced the incidence of pre-term births by 20-25 percent.

- According to a recent analysis, an oil or gas pipeline catches fire every 4 days and results in an explosion every 11 days, an injury every 5 days, and a fatality every 26 days.

Reducing carbon emissions from **transportation** means improved health because...

- Exposure to traffic-related air pollutants increases the risk for heart disease, asthma, and other respiratory disease, cancer, premature death, adverse birth outcomes, diabetes, and affects lung and brain development in children.
- Reducing carbon emissions by reducing vehicle miles traveled would yield very significant health improvements from increases in physical activity and associated reductions in many chronic illnesses.

Making our communities and **agricultural systems** more resilient and means improved health because...

- The use of available sustainable agricultural practices could reduce agricultural greenhouse gas emissions by 5–14%, while increasing soil productivity and reducing soil erosion and water contamination.
- Sustainable local food systems can reduce the use of fossil fuels in food transport, processing, packaging, and storage, increase access to healthy fruits and vegetables; build social capital, and improve mental health.
- Urban greening and green infrastructure reduce heat illness, clean the air, reduce flood risk, and provide green spaces for healthy physical activity and social gatherings.

The health sector is taking action to promote and protect health in the era of climate change, but we cannot do it alone.

- The U.S. health sector is responsible for approximately 10% of U.S. greenhouse gas emissions by most recent estimates.
- Eight large health systems across the U.S. that serve over 22 million patients per year have committed to 100% renewable electricity, which will offset 1.4 million tons of greenhouse gas emissions annually, equivalent to taking 300,000 cars off the road.
- In 2018, 100 Practice Greenhealth hospitals reported projects reducing emissions by 291,894 metric tons CO₂e, equivalent to taking 60,000 cars off the road.
- 675 nurses from 46 states have educated nearly 10,000 health professionals on climate change and health and actions they can take in their workplaces and homes to address climate change as part of the Nurses Climate Challenge.