

US EPA ARCHIVE DOCUMENT

EPA's CLEAN POWER PLAN, CLIMATE CHANGE AND PUBLIC HEALTH

Carbon pollution threatens the health of Americans and our environment. We are already seeing an increase in temperatures, extreme weather events, drought, flooding, and sea level rise in areas across the United States, and these impacts are expected to get worse as carbon pollution in our atmosphere increases. On August 3, 2015, the U.S. Environmental Protection Agency (EPA), as part of President Obama's Climate Action Plan, finalized a historic plan to cut carbon pollution from power plants—the largest source of carbon pollution in the United States. EPA's Clean Power Plan will maintain an affordable, reliable energy system, while cutting pollution and protecting public health and the environment now and for future generations.

IMPACTS OF CLIMATE CHANGE ON PUBLIC HEALTH

Climate change threatens human health and well-being in many ways, including impacts from decreased air quality, increased heat, drought and extreme weather events, and illnesses transmitted by food, water, and insects.

Climate change is expected to worsen air pollution, with significant public health impacts: Rising temperatures are projected to increase ozone formation in many densely-populated areas, and increases in the frequency and intensity of wildfires can contribute to particle pollution. This air pollution is associated with diminished lung function, increased hospital admissions, increased hospital room visits for asthma, and increases in premature deaths. In 2013, approximately 75 million people, lived in counties with air pollution levels higher than the health-based standards set by EPA. [EPA, National Air Trends Data, 2013; US Census Bureau, 2010 Census, [Climate Change in the United States: Benefits of Global Action](#), 2015]

Extreme heat events, and related health impacts, are expected to rise. Exposure to extreme heat can result in heat exhaustion and heat stroke, and can exacerbate existing medical problems such as heart and lung disease. Overall, more than 9,000 Americans suffered heat-related deaths since 1979. Without significant action on climate change, a recent EPA analysis found that the number of extremely hot days in the U.S. is projected to more than triple by the end of the century, increasing extreme temperature mortality and other health impacts. [EPA, [Climate Change Indicators Report](#), 2014; EPA, Climate Change in the United States: Benefits of Global Action, 2015; U.S. Global Change Research Program, National Climate Assessment, [2014](#)]

Certain diseases may become more widespread. Climate change can influence the distribution of diseases borne by fleas, ticks and mosquitos by expanding favorable habitat, lengthening the transmission season (due to shorter winters), and increasing the insect population (due to milder winters). Changes in precipitation patterns, extreme rainfall events, and air and water temperatures could also affect the transmission of food- and waterborne diseases. [U.S. Global Change Research Program, National Climate Assessment, [2014](#)]

Children, the elderly, the sick, the poor, and some minority communities are especially vulnerable. Children will disproportionately suffer from the effects of heat waves, air pollution, infectious illness, and trauma from extreme weather events. Older people are at much higher risk than the general population of dying during extreme heat events, and pre-existing conditions can make them more susceptible to the cardiac and respiratory impacts of air pollution. [U.S. Global Change Research Program, National Climate Assessment, [2014](#)]

THE CLEAN POWER PLAN: SIGNIFICANT CLIMATE AND PUBLIC HEALTH BENEFITS

The Clean Power Plan achieves significant reductions in carbon pollution from power plants while advancing clean energy innovation, development and deployment. It follows on and will help advance current trends in the power sector towards increased use of low- and no-carbon electricity generation and greater use of energy efficiency, in ways that will preserve affordability for consumers and continues U.S. leadership in addressing climate change. States and businesses have already charted a course toward cleaner, more efficient power, and the Clean Power Plan builds on their progress.

The transition to clean energy is happening faster than anticipated. This means carbon and air pollution are already decreasing, improving public health each and every year. The Clean Power Plan accelerates this momentum, putting us on pace to cut this dangerous pollution to historically low levels in the future. When the Clean Power Plan is fully in place in 2030, carbon pollution from the power sector will be 32 percent below 2005 levels, securing progress and making sure it continues.

The transition to cleaner sources of energy will better protect Americans from other harmful air pollution, too. By 2030, emissions of SO₂ from power plants will be 90 percent lower compared to 2005 levels, and emissions of NO_x will be 72 percent lower. Because these pollutants can create dangerous soot and smog, the historically low levels mean we will avoid thousands of premature deaths and have thousands fewer asthma attacks and hospitalizations in 2030 and every year beyond.

Within this larger context, the CPP itself is projected to contribute significant pollution reductions, resulting in important benefits.

The Clean Power Plan will:

- Cut hundreds of millions of tons of carbon pollution and hundreds of thousands of tons of harmful soot- and smog-forming particle pollution that makes people sick. Together these reductions will result in significant near-term public health benefits, especially for the most vulnerable citizens.
 - From the soot and smog reductions alone, for every dollar invested through the Clean Power Plan—American families will see up to \$4 in health benefits in 2030.
 - The Clean Power Plan will significantly improve health by avoiding each year:
 - 3,600 premature deaths
 - 1,700 heart attacks
 - 90,000 asthma attacks
 - 300,000 missed workdays and schooldays

- Put our nation on track to cut carbon pollution from the power sector by 32 percent by 2030 while maintaining electric system reliability and affordable electricity.
 - In addition to helping make our electric system cleaner, the Clean Power Plan will make electricity more affordable in the long run. EPA's analysis of impacts on electricity bills shows that Americans are expected to save over \$80 annually on their utility bills by 2030.
- Reduce CO₂ emissions from power plants—an essential step towards reducing the impacts of climate change and providing a more certain future for our environment, our health and future generations.
 - By acting on climate now, we are fulfilling a moral obligation to our children and grandchildren to leave them with a healthier, more stable planet.
- Change the international dynamic and leverage international action. Climate change is a global challenge and requires global action. When the U.S. leads, other nations follow.

GET INVOLVED

Public engagement was essential throughout the development of the Clean Power Plan, and EPA will continue to engage with communities and the public during the rule's implementation. The EPA will also be conducting a robust outreach effort for communities throughout the comment period for the proposed federal plan.

To ensure opportunities for communities to continue to participate in decision making, EPA will be providing training and resources throughout the implementation process. EPA is also requiring that states demonstrate how they are actively engaging with communities in the formulation of state plans developed for the Clean Power Plan. To learn more, please visit www2.epa.gov/cleanpowerplan/clean-power-plan-community-page.

LEARN MORE

For more information on the Clean Power Plan, visit www2.epa.gov/cleanpowerplan.

For more information about climate change and public health visit <http://nca2014.globalchange.gov/report/sectors/human-health>.

For tips on how you can reduce your carbon footprint, visit www.epa.gov/climatechange/wycd/.

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