People across America regularly breathe polluted air that can trigger adverse health impacts.

Trouble in the Air

Millions of Americans Breathed Polluted Air in 2018

Vehicles are a major source of air pollution.

People across America regularly breathe polluted air that increases their risk of premature death, and can trigger asthma attacks and other adverse health impacts. Policymakers can protect public health by strengthening air quality protections, reducing use of polluting fossil fuels, and cutting global warming pollution that will worsen future air quality.

Air pollution threatens health across the U.S.

Millions of Americans live in urban and rural areas that experience frequent ozone and/or particulate pollution.

- In 2018, 108 million Americans lived in areas that experienced more than 100 days of degraded air quality. That is equal to more than three months of the year in which ground-level ozone (the main ingredient in smog) and/or particulate pollution was above the level that the EPA has determined presents "little to no risk."
- Another 157 million Americans resided in 264 large and small urban areas and 61 rural counties that faced 31 to 100 days – a month or more – of elevated ozone and/or particulate pollution. The communities included major urban areas such as the District of Columbia and Miami and smaller communities such as Racine, Wisconsin, and Columbia, Missouri.



Number of days in 2018 when half or more monitoring locations reported elevated ozone and/or PM_{2.5} 0 - 30 days

- 31-70 days
- 71-100 days
- 101-150 days
- 151-259 days
- Areas without air pollution monitors

Urban and rural areas experienced frequent ozone and/or particulate pollution in 2018.



Wildfires can create widespread air pollution problems.

Air pollution damages health

Each year, millions of Americans suffer from adverse health impacts linked to air pollution, and tens of thousands have their lives cut short.

- Fine particulate matter from sources such as vehicles and power plants was responsible for an estimated 107,000 premature deaths in the U.S. in 2011.
- Air pollution is linked to health problems including respiratory illness, heart attack, stroke, cancer and mental health problems.

Policy recommendations

To protect air quality and the health of all Americans, and to reduce emissions that contribute to global warming, policymakers should:

- Reduce pollution from transportation by supporting zero-emission vehicles, creating a strong regional program to reduce transportation emissions under the Transportation and Climate Initiative (TCI) in northeastern and mid-Atlantic states, maintaining strong federal fuel economy and global warming pollution standards for transportation, and supporting policies that can reduce driving and increase walking, biking and the use of transit.
- **Support clean, renewable energy** by setting goals to achieve high levels of renewable energy, improving energy efficiency and reducing energy use, and supporting emerging clean energy technologies such as energy storage and offshore wind power.
- Protect and build upon progress achieved under the Clean Air Act by ensuring that air quality rules are enforced in such a way as to protect public health and by strengthening ozone and particulate matter standards.

Find more information and the full report at: www.pennenvironmentcenter.org

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Global warming has already increased the area burned in wildfires.

Global warming is already harming air quality

Higher temperatures have already resulted in increased ozone, despite lower emissions of the pollutants that create ozone. For example, the central U.S. faced additional days of high ozone pollution in 2012 due to higher temperatures, according to one study. Hotter, drier conditions have increased wildfires, which create widespread pollution.

Global warming will make air pollution worse

The U.S. Global Change Research Program's Fourth National Climate Assessment warns that unless the nation acts to improve air quality, "climate change will worsen existing air pollution levels." Climate change will worsen air pollution in several ways:

- Rising temperatures will speed up the formation of ozone. People in some regions will experience three to nine more days of ozone pollution at or above the level the U.S. EPA considers "unhealthy for sensitive groups" annually by 2050 compared to 2000.
- Hotter, drier weather will increase the frequency and severity of wildfires, which can spread air pollution for hundreds of miles.

