TAILPIPE POLLUTION AND OUR HEALTH
HOW EXHAUST, CLIMATE CHANGE, AND HEALTH HARMs ARE LINKED

Cars and trucks play an essential role in our lives and economy, but the pollution they generate is toxic. Vehicle exhaust is a major contributor to climate warming and has been linked to numerous health harms. The transportation sector generates nearly a third of US greenhouse gas emissions, making it our largest source of climate pollution. It’s also one of the biggest sources of other air pollutants and is responsible for approximately 45% of the country’s total nitrogen oxide (NOx) emissions. The EPA is tasked with mitigating pollution from vehicles like cars and trucks to protect public health, but issues remain.

How does tailpipe pollution affect our health?

Air pollution

Breathing tailpipe pollution can damage our lungs, hearts, and brains. Vehicle exhaust contains dangerous air pollutants like NOx, volatile organic compounds (VOCs), and particle pollution, or soot. NOx and VOCs react with heat and sunlight to form ozone pollution, aka smog, a potent lung irritant. Soot pollution consists of tiny droplets or particles of chemicals, smoke, dust, and allergens in the air that can be easily inhaled. These particles can become embedded in the lungs or pass directly into the bloodstream.

NOx, VOCs, and soot pollution have been linked to a wide variety of health impacts, including exacerbated asthma and respiratory disease; increased hospital and emergency room visits for respiratory illness; worsened outcome for lung cancer patients; cardiovascular harm; adverse birth outcomes, like premature birth and low birth weight; heightened risk of premature death; and mental health impacts.

Climate change

As a major source of climate-warming greenhouse gas emissions, vehicle pollution contributes to climate change—and the myriad ways a warming climate impacts our health. Climate change supercharges weather systems, resulting in extreme heat that amplifies the impacts of tailpipe pollution. It’s all connected.

Climate change has been linked to increased respiratory and cardiovascular illness, injuries and premature deaths related to extreme weather, changes in food security, unfavorable birth outcomes, and enhanced risk of some infectious diseases. Climate change also threatens our mental health.

Reducing greenhouse gas emissions is crucial in our effort to lessen the outcomes of climate change, including heat waves, drought, stronger storms, and wildfires.

Some populations—including children, people with chronic health conditions like asthma, the elderly, low-income communities, and communities of color—are especially vulnerable to tailpipe pollutants and climate change.

The mission of Moms Clean Air Force is to protect children from air pollution and climate change. We envision a safe, stable, and equitable future where all children breathe clean air. We fight for Justice in Every Breath, recognizing the importance of equitable solutions in addressing air pollution and climate change. www.momscleanairforce.org
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Tailpipe pollution and environmental justice

Air pollution from vehicles is a critical public health issue—and, specifically, an issue of environmental justice.

According to EPA, more than 45 million people in the US live within 300 feet of a major roadway or transportation facility, and 72 million people live within 220 yards of a truck freight route.

Because of housing discrimination and other unjust policies, communities of color and low-income communities are more likely to live near truck routes and are disproportionately harmed by traffic pollution. In some instances, the communities most affected by toxic truck exhaust have been nicknamed “asthma alleys” and “diesel death zones” because of the serious health effects suffered by residents.

Benefits of stronger tailpipe pollution standards

Strong pollution standards for cars and trucks, including heavy-duty big rigs, buses, school buses, and garbage trucks are critical to reducing NOx, greenhouse gas emissions, and other forms of harmful air pollution.

Equally critical is accelerating the transition to zero-emissions vehicles. Ramping up US production and sale of cleaner electric vehicles is an opportunity to create jobs, address climate change, and reduce pollution. Moving toward a zero-emissions vehicle fleet would deliver significant health and economic benefits for our communities. EPA works on national air quality standards as well as ways to support increased electric vehicle production, such as programs to fund electric school buses. The transition from diesel school buses to all-electric fleets will have powerful climate, health, and cost-saving impacts nationwide.

By 2055, EPA projects that clean transportation standards proposed for cars and trucks would:

• Cut climate pollution, avoiding nearly 10 billion tons of CO2 emissions—equivalent to more than twice the total US CO2 emissions in 2022

• Improve public health, reducing other harmful air pollution and leading to fewer premature deaths and serious health effects (like hospital admissions due to respiratory and cardiovascular illnesses)

• Save money, with projected benefits of the proposed standards exceeding costs by at least $1 trillion

Take action

Parents across the country interested in a rapid transition to zero-emissions vehicles can join Moms Clean Air Force to advocate for strong tailpipe pollution protections and cleaner air for our children and our communities.

Visit www.momscleanairforce.org to learn more.

For sources, please visit: www.momscleanairforce.org/sources-tailpipe-pollution

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