

EPA proposal would change soot pollution standards for first time in 10 years: What we know

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Fine particulate matter, or soot pollution, is in the air we breathe and has been linked to asthma, heart disease and early death, disproportionately

affecting urban communities of color.

Earlier this month, the Environmental Protection Agency proposed bringing the limits down from 12 micrograms per cubic meter to between 9 and 10. The Clean Air Act requires the EPA to review air quality standards every five years—but this proposed revision is the first in a decade to address soot levels.

Some groups say the new limit is not enough, particularly for urban communities of color overburdened by pollution, outdoor workers and others who are vulnerable.

"Inadequate standards leave too many communities behind. Strong particulate matter standards are needed to protect public health and further [environmental justice](#)," said Harold Wimmer, president and CEO of the American Lung Association.

Here's what we know.

What is the EPA proposing?

As part of the Clean Air Act, the EPA is required to set health-based limits for particulate matter concentrations in the air measured by air monitoring systems.

While the agency is proposing bringing the limit from 12 to as low as 9 micrograms per cubic meter, the Clean Air Scientific Advisory Committee, which is independent of the FDA, recommended levels as low as 8 micrograms per cubic meter. The EPA is taking public comment on the limits for up to 60 days following the proposal in the Federal Register.

Along with daily averages over the course of a year, the agency is also

required to set one-day limits. The EPA is proposing to retain its current one-day limit of 35 micrograms per cubic meter.

The American Lung Association called that level "outdated" and said not revising it is "a missed opportunity for public health."

What is particulate matter 2.5 and how does it affect health?

PM 2.5, or fine particle pollution sometimes called soot, is a mixture of microscopic, inhalable compounds from pollutants. It's been linked to [early death](#) and numerous health issues, including heart and [lung problems](#) as well as fetal health. It also exacerbates conditions such as asthma and [heart disease](#).

Particulate matter caused 32,000 deaths across the U.S. in 2020, according to data from the medical journal *The Lancet's* most recent global climate and health review. Of those deaths, more than a third of those were "directly related to fossil fuels," the authors wrote, noting those could be underestimates.

Long-term exposure to particulate matter has also been linked to asthma in children, according to the American Thoracic Society as well as a recent National Institutes of Health study published in *The Lancet Planetary Health*.

Why some say the EPA's standards are 'inadequate'

In a statement, the American Lung Association said the EPA's proposed revision "misses the mark."

"We are deeply disappointed that EPA's proposal ... did not include a

standard of 8 micrograms per cubic meter in the proposed range of options for the annual standard," said Wimmer.

"EPA did not follow these expert recommendations," he said, noting that the national Clean Air Scientific Advisory Committee recommended levels as low as 8 micrograms per cubic meter.

Advocacy group Clean Air Now said the EPA's move is a "a good step" but called on the agency to enforce stricter standards and ensure violations are detected and that air pollution monitors are strategically placed.

The lung association, the Union of Concerned Scientists and other groups emphasized lower standards would better protect vulnerable communities disproportionately exposed.

Why air pollution disproportionately affects lower income communities

Communities of color and [low-income communities](#) are disproportionately home to fossil fuel infrastructure and highways. Outdoor workers, children, seniors and those with heart and lung diseases are also vulnerable.

"This impact is seen most clearly in lower income communities, many of them Black and brown communities," said biogeochemist Gabriel Filippelli, executive director of Indiana University's Environmental Resilience Institute, which researches climate change and its impact on [public health](#) and infrastructure.

These "tend to have more nearby industries and roadways, and suffer from many other environmental burdens that exacerbate the impacts of

bad air," he said.

Even low levels of particulate matter can cause health problems, he said.

The standards must focus on protecting those most vulnerable, said Frederica Perera, an environmental health scientist at the Columbia Mailman School of Public Health. Communities located near industry have a "lack of buffers" for protection, Perera said.

"We need to go lower," she said.

In the Lancet's analysis, researchers wrote that Black, Asian, Latino and low-income communities disproportionately have higher levels of [particulate matter](#) than white and richer communities—and that the disparities in these concentrations "may be worse than previously estimated."

How is the Clean Air Act enforced?

States are required to develop plans to maintain the set limit and bring the concentration down in areas that exceed it. States should develop the implementation plan with public input and submit to the EPA for approval. The agency stipulates specific timelines for the process.

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