



Perspective

The Dismantling of Environmental Protections — A Grave Threat to America's Health

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On June 22, 1969, Cleveland's Cuyahoga River caught fire, sparking national attention to environmental degradation. In his State of the Union address 7 months later, President Richard

Nixon lamented that Americans were being “suffocated by smog, poisoned by water” and proclaimed that clean air and water should “be the birthright of every American.” At Nixon's urging, Congress established the Environmental Protection Agency (EPA) and passed the Clean Air Act (CAA) with bipartisan support. Air-quality upgrades mandated by that act and enforced by the EPA are among the most effective health interventions of the past half-century, having reduced air pollution by 75% in the United States and saved at least 200,000 lives per year.¹

Yet during the first adminis-

tration of President Donald Trump, nearly 100 environmental and occupational protections, including air-quality safeguards, were rescinded.² Although many of those rescissions were delayed by litigation or reversed by President Joe Biden, they inflicted considerable harm on Americans' health.³ The second Trump administration's actions have been even more aggressive, portending greater harm.

On March 12, 2025, the EPA announced 31 regulatory rollbacks. Those initiatives and other administration actions are set to reverse progress on pollution, make workplaces more dangerous, and (in EPA Administrator Lee

Zeldin's words) drive “a dagger straight into the heart of the climate change religion.” But it is science, not religion, that indicates that these actions will accelerate climate change, pollute America's air and water, and cause disease and premature death. The table presents some examples of these actions and their likely health effects. Additional details are provided in the Supplementary Appendix, available at NEJM.org.

Many administration proposals would weaken air-pollution protections (Table S1 in the Supplementary Appendix). The CAA requires the EPA to set, periodically reevaluate, and enforce National Ambient Air Quality Standards for six pollutants, including fine airborne particulate matter (particles with an aerodynamic diameter of $\leq 2.5 \mu\text{m}$ [$\text{PM}_{2.5}$]). The Biden administration reduced the $\text{PM}_{2.5}$

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Selected Health Effects of Trump Administration Environmental Policy Actions and Proposals.*		
Category	Proposals or Actions	Examples of Health Effects
Air-pollution regulation	- Loosen standards for PM_{2.5} pollution - Loosen emissions standards for oil and gas producers - End a “Good Neighbor Plan” rule that mitigates cross-state pollution	- Increased cardiovascular morbidity (e.g., strokes, myocardial infarctions, cardiac arrests, cardiac hospitalizations) - Increased respiratory morbidity (e.g., lung cancer, asthma, exacerbations of chronic respiratory disease)
Power-plant regulation	- Repeal rules restricting greenhouse-gas emissions and hazardous air pollutants (e.g., mercury) from power plants - End subsidies for clean-energy production under the One Big Beautiful Bill Act	- Cardiopulmonary effects from PM_{2.5} emissions (see above) - Carcinogenic, reproductive, and neurotoxic effects from increased exposure to hazardous air pollutants (e.g., mercury, lead, and arsenic) - Adverse health effects from climate change (see below)
Climate change	- Withdrew from the 2015 Paris Agreement - Revisit the 2009 “Endangerment Finding” that determined that greenhouse gases (including CO₂) were pollutants - Abandon 2024 rule requiring closer monitoring of emissions of methane, a potent greenhouse gas	Climate change is linked to a range of adverse health effects, including increased cardiopulmonary morbidity and mortality; respiratory disease exacerbations; acute heat-related illness in the workplace; and infectious disease risks due to expanded geographic range of disease vectors such as mosquitoes.
Motor-vehicle pollution	- Lower fuel-economy (corporate average fuel economy) standards - Weaken standards for tailpipe emissions for cars and trucks - End subsidies for electric-vehicle purchases (One Big Beautiful Bill Act)	Increased automotive emissions of nitrogen oxides, sulfur oxides, and particulate pollution can increase cardiopulmonary morbidity and mortality (see “Air-pollution regulation” above) and contribute to climate change.
Water pollution	- Exclude some wetlands from Clean Water Act protection - Allow greater wastewater discharges from oil and gas production	Mercury emissions into groundwater could lead to a higher incidence of bladder cancer.
Occupational health	- Deep cuts to National Institute for Occupational Safety and Health programs and staffing, including training programs - Delay implementation of stricter silica rules for miners	- Increased incidence of silicosis and pneumoconiosis among coal workers - Increased heat-related illness in the workplace - Increased burden of other occupational diseases
EPA staffing and science	- Implement “reduction in force” firings at the EPA, likely to reduce staffing to 1980s levels - Eliminate Office of Research and Development, the EPA’s research agency; dismiss external scientific committees	Failure to advance science, technology, and guidelines to adapt to newly identified and evolving threats to environmental health can have long-term adverse consequences for human health.

* The projections of potential health effects of rollbacks draw from the Environmental Protection Agency (EPA) Regulatory Impact Analyses (RIAs) that undergird the regulations being reconsidered or rescinded, in cases where RIAs are available. References and additional details are provided in the Supplementary Appendix, available at NEJM.org. PM_{2.5} denotes particulate matter with an aerodynamic diameter of 2.5 μ m or less.

standard from 12 to 9 μ g per cubic meter, given the growing scientific consensus that health harms occur at relatively low concentrations. The current administration has requested that a U.S. federal court vacate the stricter standard. Higher PM_{2.5} levels would lead to increased rates of pediatric asthma, myocardial infarctions, strokes, chronic respiratory disease, and death.

Other proposed initiatives would loosen regulations on air pollution from oil and gas extraction and weaken regulations on releases of neurotoxic and carcinogenic air pollutants, or “air toxics,” such as benzene and arsenic. The EPA would also terminate its “Good Neighbor Plan” rule (a rule currently stayed by court order), intended to protect downwind states from nitrogen oxide

pollution crossing state lines. Nitrogen oxides combine with volatile organic compounds in the presence of sunlight, producing ozone that increases respiratory disease exacerbations and mortality.

Other administration policies target power production (see Table S2), encouraging fossil-fuel (particularly coal) combustion and discouraging clean-energy pro-

duction. The EPA is rewriting the Biden-era rule regulating greenhouse-gas emissions from power plants, the single largest stationary source of these “climate forcing” pollutants, claiming falsely that power plants are insignificant contributors. In addition to accelerating climate change, deregulating these carbon emissions will boost PM_{2.5} and ozone-generating emissions, increasing cardiopulmonary morbidity and mortality as well as stillbirths and premature deliveries.

These actions, along with reconsideration of Biden-era rules regulating mercury and arsenic emissions from coal-fired power plants, will especially harm vulnerable communities near these facilities. Airborne mercury from coal combustion enters the food chain as methylmercury, is consumed by pregnant women, crosses the placenta, and causes brain damage and decreased cognitive function in their infants. Airborne arsenic increases lung-cancer deaths. These effects will be exacerbated by the One Big Beautiful Bill Act (OBBBA), which ends federal subsidies for solar- and wind-power generation — an action that will most likely further increase fossil-fuel combustion, harming planetary and human health in the longer term and compromising cardiovascular and pulmonary health today.

Additional climate policies are on the chopping block (see Table S3). The United States has again withdrawn from the Paris Agreement, and the EPA proposes to abandon its 2009 “Endangerment Finding,” which determined that greenhouse gases are pollutants. That finding allows the EPA to regulate greenhouse gases under the CAA; its abandonment would

terminate federal administrations’ authority to regulate climate-forcing pollution. The EPA also plans to weaken rules requiring greenhouse-gas monitoring from major polluting facilities. All these climate-change-denying actions will increase the frequency of wildfires, heat waves, and floods, which already kill and sicken many Americans. Failure to meet Paris Agreement goals could cause millions of preventable deaths globally.⁴

Administration proposals to relax automotive emission standards — including corporate average fuel economy (CAFE) standards overseen by the National Highway Traffic Safety Administration (NHTSA) — further threaten health (see Table S4). CAFE standards, first set in 1975, have substantially boosted fuel efficiency. Biden’s NHTSA tightened these standards, a change that Trump, on December 4, 2025, announced he would reverse. This backward step will increase tailpipe emissions, worsen particulate pollution, harm lung and heart health, and accelerate global warming. The EPA has also proposed eliminating Biden-era car and truck greenhouse-gas rules, which would further magnify these harmful health effects.

In a further assault on air quality, congressional Republicans overturned the CAA waivers (a change being challenged in court by 11 states) that since 1967 have allowed California (and states following its lead) to set tailpipe-emission standards stricter than those of the federal government, including a mandate that all new cars be zero-emission by 2035. Meanwhile, the OBBBA ends subsidies for electric-vehicle purchases and penalties for non-

compliance with CAFE standards. These actions will further worsen pollution, accelerate global warming, and increase cardiopulmonary morbidity and mortality.

Several proposed policies would weaken water-quality standards, reducing drinking-water safety for millions of people (see Table S5). For example, the EPA seeks to weaken regulations governing effluent discharges from coal-fired power plants. The resulting increase in waterborne lead, mercury, and arsenic will increase the incidence of bladder cancers and adversely affect children’s cognitive function.

Workplace protections are also endangered (see Table S6). In April, the administration fired most staff of the National Institute for Occupational Safety and Health (NIOSH), which produces evidence to inform workplace health policy. Although a lawsuit, political pressure, and congressional action forced the rehiring of NIOSH staff and ultimately a restoration of funding, science-based policymaking was disrupted. Simultaneously, the Mine Safety and Health Administration delayed implementing tougher silica-dust standards, increasing miners’ silicosis risk. Some Republican lawmakers are now calling for abandoning the silica standard. Ironically, resulting increases in lung disease will occur almost entirely in Republican-leaning states. Nationally, weakening NIOSH undermines efforts to implement workplace heat protections proposed under Biden, increasing workers’ risk of heat-related illnesses.

Undermining science and reducing staffing at the EPA and other agencies will probably cause longer-term health harms (see Ta-

ble S7). For example, the administration plans to eliminate the EPA's in-house research institute, the Office of Research and Development, whose scientists have produced the evidence and technological innovations enabling environmental advances estimated to have saved hundreds of thousands of lives.⁵

On April 22, 2025 — Earth Day — the White House proclaimed that “We Finally Have a President Who Follows Science,” stating that the United States is “maintaining the standards that have afforded Americans the cleanest air and water in the world for generations.” The reality is that this administration's actions will undo the work of generations. Its policies will result in dirtier skies, befouled waters, rising temperatures, more dangerous workplaces, and diminished quality of life for millions of Americans. These harms will fall most heavily on low-income and other vulnerable groups. We will continue to track these health effects and quantify, wherever possible, the re-

sulting toll of disease and death.

Yet statistics and documentation are not enough. Unless health professionals speak up, and unless we put a human face on the tragic consequences of these environmental rollbacks, the connection between these seemingly abstract policy changes and the real health harms they cause may remain invisible. Just as lead from paint and gasoline silently poisoned Americans and invisibly impaired the cognitive function of millions of children in the 1960s and 1970s, until heroic physicians such as Herbert Needleman exposed those harms, the effect of ongoing environmental rollbacks could be immense and long-lasting — extending over years and even generations.

We health professionals must call urgent attention to this silent but deadly assault on Americans' health, work with broad coalitions to halt it, and ultimately rebuild the agencies, protections, and shared sense of trust and responsibility that have given us clean air and water and enabled

us and our children to live longer, healthier lives.

Disclosure forms provided by the authors are available at NEJM.org.

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