

04-08

STATEMENT OF POLICY

Ambient Air Quality

Policy

The National Association of County and City Health Officials (NACCHO) advocates for national, state, and local policies, regulations, research, and resources that will enhance local health departments' abilities to improve ambient air quality and protect public health. NACCHO supports the following policies and actions:

- Federal, state, and local governments should support building capacity for local health departments to monitor the health effects of air pollution and to respond to the health impacts caused by poor ambient air quality and the emission of greenhouse gases.
- The Environmental Protection Agency (EPA) should use the best-available science to establish and support National Ambient Air Quality Standards (NAAQS) that are sufficiently protective of the public's health, including sensitive sub-groups (e.g., people with cardio-pulmonary diseases, children, and elderly).
- Federal, tribal, state, and local governments should develop policies and programs to promote environmental justice¹ in addressing exposure to poor air quality.
- Federal, tribal, state, and local governments should develop and adopt air quality standards that reduce greenhouse gas emissions per the 2015 Paris Agreement. These standards should support the U.S. 2021 Nationally Determined Contribution of a 50% reduction in greenhouse gas emissions by the year 2030.²
- Federal, tribal, state, and local governments should support local health departments' involvement in land use and transportation planning and community design and development activities, as they relate to ambient air quality, to promote and protect the health of communities (e.g., integrating health and environmental justice concepts into the built environment, directing federally funded infrastructure projects to involve state and/or local health officials).
- Federal, tribal, state, and local governments should support research on emerging health effects and racial inequities linked to air pollution.
- Federal, state, and local governments should develop policies to minimize the public's exposure to and production of air pollutants, including the production of greenhouse gases.
- Local health departments should connect and collaborate with state and local air agencies to broaden the public health preventive outreach and education to improve health outcomes.
- The federal government should increase funding to directly support local ambient air quality monitoring programs.



Justification

Poor ambient air quality is a threat to public health. Air pollution can harm lung tissues in ways similar to second-hand tobacco smoke and trigger heart attacks and strokes. Furthermore, air pollution causes diseases like chronic bronchitis and lung cancer and contributes to asthma attacks and other respiratory illness in otherwise healthy people. Children, seniors, and those with existing lung diseases are especially vulnerable to health risks from air pollution. The health effects of air pollution contribute to health inequities, posing a disproportionate risk to populations in low-income areas where transportation, zoning, commercial, and industrial policies create increased exposure burdens.

The Clean Air Act (CAA) requires the EPA to set NAAQS for the six criteria air pollutants: carbon monoxide, lead, nitrogen oxides, particulate matter (PM₁₀ and PM_{2.5}), ground-level ozone, and sulfur oxides. The CAA also limits air pollution by requiring the EPA to establish National Emission Standards for Hazardous Air Pollutants (NESHAPs). Hazardous air pollutants (HAPs), or toxic air pollutants, are air pollutants that are not subject to NAAQS but that cause or may cause cancer or other serious health or environmental effects. NESHAPs regulate emissions of HAPs from industrial sources that emit at least one HAP in significant quantities.

However, in 2021 more than 135 million Americans (approximately 41% of the total population) lived in areas with particulate matter and ozone levels above NAAQS.³ Also in 2021, approximately 21 million Americans lived in a county that had a failing grade for levels of ozone, short-term particulate matter pollution, and year-round particle pollution. More than two-thirds of these Americans were people of color, despite people of color being 42% of the total U.S. population.^{3,4}

As of 2022, the EPA has identified and continues to regulate 188 toxic air pollutants which are known/suspected to cause serious adverse health effects.⁵ Additionally, in 2009, the EPA found that greenhouse gases that contribute to climate change endanger the public's health and welfare.⁶ Some of the effects of climate change include increased likelihood of more frequent and intense heat waves, increased wildfires, degraded air quality, increased flooding, increased drought, more intense storms, and harm to water resources and agriculture. These events might in turn lead to climate sensitive conditions and diseases, including heat stress and stroke; asthma and respiratory disease; heart and lung disease; vector-borne disease; malnutrition, starvation, and dehydration; and mental illness.⁷

In 2012, NACCHO published the second Are We Ready? Report gauging local health department director's perceptions of the risk of a changing climate to local public health. Of those surveyed, over 67% believe that severe instances of air quality issues as a result of pollution will become more common. Additionally, around 5% of respondents said their jurisdiction is increasing efforts to mitigate instances of poor air quality.⁸

Implemented in 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) is the latest iteration of the Congestion Mitigation and Air Quality Improvement (CMAQ) Program from the U.S. Department of Transportation. This program provides around 2.2 billion annually to mostly State departments of transportation to fund nonattainment or maintenance efforts for ozone, carbon monoxide, and/or particulate matter. In addition, those jurisdictions that have no

nonattainment or maintenance areas still receive a minimum apportionment of CMAQ funding for either air quality projects or other elements of flexible spending. However, there is no specification to allocate funds directly to local ambient air quality programs.

In 2013, a study conducted by the Massachusetts Institute of Technology found that ground level greenhouse gas emissions account for 200,000 premature deaths annually in the United States. The study defined premature death as an individual dying ten years prior to when they otherwise would have been deceased.⁹ A follow-up study in 2018 estimated that outdoor air pollution is responsible for up to 10% of annual premature deaths and found that on average, 41%-53% of premature death due to air pollution can be attributed to emissions that occur outside of the deceased's home state.¹⁰

In addition to their responsibility to respond to the population-based health impacts of air pollution, local health departments play an important role in efforts to improve air quality and in communicating the resulting public health benefits.

References

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Record of Action

Proposed by NACCHO Environmental Health Committee

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Updated July 2010

Updated January 2016

Updated June 2022