



AMERICAN LUNG ASSOCIATION®

Fighting for Air

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The Honorable Sheldon Whitehouse
Co-Chair, Bicameral Task Force on Climate Change
Chairman, Subcommittee on Oversight
Committee on Environment and Public Works

Albert A. Rizzo, M.D.
Past-Chair

U.S. Senate
Washington, DC 20510

John F. Emanuel
Secretary/Treasurer

The Honorable Henry A. Waxman
Co-Chair, Bicameral Task Force on Climate Change
Ranking Member

Marcia D. Williams, Ed.D.
Speaker
Nationwide Assembly

Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Audrene Lojovich
Speaker-Elect
Nationwide Assembly

Dear Senator Whitehouse and Representative Waxman:

Geri Reinardy, M.P.A.
Past-Speaker
Nationwide Assembly

On behalf of the American Lung Association, I commend your leadership in the establishment of the Bicameral Task Force on Climate Change and thank you for the opportunity to share our views regarding one of the most serious public health threats facing our nation today. The American Lung Association works to defend healthy air for all people. We are especially concerned about the disproportionate burdens of air pollution on vulnerable populations, including people with lung diseases such as asthma, lung cancer and chronic obstructive pulmonary disease (COPD), the elderly and children. With your leadership, and leadership from President Obama, much can be done to further reduce dangerous air pollution and improve community preparedness in the face of climate change, making our nation stronger, healthier, and more resilient in the process.

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Key Threats to Human Health

Air pollutants that contribute most to rising global temperatures can also harm human health. Reductions in these pollutants can immediately benefit those most at risk, while also helping to avert the worst impacts of climate change. Climate-disrupting air pollutants of greatest concern to the American Lung Association include carbon dioxide, ozone, black carbon, and methane. We also wish to highlight the often overlooked respiratory health impacts of extreme weather events, including wildfires, droughts, extreme rain and flooding events.

In 2009, the U.S. Environmental Protection Agency (EPA) made the landmark finding that concentrations of greenhouse gases, including carbon pollution, are currently endangering public health and will continue to in the future. According to the EPA,

power plants are the largest stationary source of greenhouse gases in the United States. Energy production accounts for 86 percent of total 2009 greenhouse gas emissions, and the electric sector represents 39 percent of all energy-related carbon (CO₂) emissions. Based on the finding these pollutants are a significant threat to public health, the Clean Air Act requires EPA to take action to reduce greenhouse gas pollution, including carbon pollution, from major sources like new and existing power plants and refineries.

The buildup of carbon pollution will likely lead to increased temperature and increased risk of unhealthy ozone levels. Ozone is a pervasive air pollutant that forms in the atmosphere when hydrocarbon vapors react with oxides of nitrogen in the presence of sunlight and heat. Ozone is linked to increased risk of asthma attacks and premature death, as well as higher risk of low birth weight in newborns. Current estimates predict warmer temperatures will lead to significantly higher ozone levels in some regions of the country than would otherwise be the case by 2050—a “climate penalty” that EPA, states, tribes and local governments will need to incorporate in their planning to meet the ozone standards. Protecting public health from ozone also demands strong federal policies to reduce precursors to ozone, and to decrease the transport of pollution across state lines. Ozone is also a potent climate pollutant itself; working to reduce ozone will have direct climate stabilization benefits in addition to reducing an immediate threat to public health.

Black carbon is one form of particulate matter (PM 2.5 and PM 10) that recent in-depth review now finds as the second most important climate pollutant, after carbon dioxide (Bond et al, 2013). Particulate matter causes premature death, heart attacks and asthma attacks and has been linked to lung cancer. (EPA ISA 2009). Diesel emissions remain the major source of black carbon. Old diesel engines need replacement or retrofitting, especially ocean-going vessels, many of which use the dirtiest diesel fuels. Residential wood burning devices, like outdoor wood boilers and stoves, are the largest residential source of particle pollution, including black carbon. The EPA needs to update standards for these devices to reflect new technology and reduce impacts on public health.

Methane is a highly potent climate pollutant, with warming effects almost 25 times that of carbon pollution. Although the health effects of methane have been more commonly addressed as a result of methane’s role as a precursor to ozone or as a greenhouse gas, methane itself also poses a serious health risk. Methane is an odorless volatile organic compound that can burn or explode at low concentrations. Reducing methane emissions from oil and gas drilling operations and infrastructure, landfills, agricultural operations and coal mines would reduce a potent pollutant, and improve public health.

Respiratory Impacts of Extreme Weather Events

As our nation strives to reduce these pollutants, we wish to underscore the importance of investing in further research, education and infrastructure to protect Americans from respiratory health threats related to increased extreme weather events, including wildfires, drought, and extreme rain and flooding events.

One estimate (Spracklen et al, 2009) predicts that, by 2050, roughly 50 percent more acreage in the western U.S. will be lost to fires on average because of the impact of climate change. Emissions from burning wood in forest fires include many known pollutants that contribute to sickness and premature death including particulate matter, carbon monoxide, nitrogen oxides, volatile organic compounds, hazardous air pollutants and carcinogens.

Less attention has been paid to the respiratory health dangers posed by increased extreme rain and flooding events. When floodwaters inundate buildings, polluted runoff soaks into carpeting, drywall, clothing and furnishings creating the perfect environment for mold, bacteria, viruses, and other biological contaminants to spread widely. Dampness can damage building materials, with the potential for off-gassing harmful chemicals.

Cleanup of flood damaged housing can create hazards. Both for families trying to salvage their homes and for professionals who face occupational work hazards, the risks include exposure to these toxic substances, debris dust and moisture, and cleaning agents.

Finally, the removal and disposal of debris after emergency events that climate scientists expect to occur more frequently, also poses significant threats to lung health. Diesel tractors, front-end loaders, trucks, locomotives and barges to collect and haul away the debris can add to the local burden of air pollution, especially if these often older equipment and vehicles lack newer pollution control technology. The frequent decision to burn all the debris produces high levels of particulate matter and other toxic emissions, with too few protections against respiratory harm for residents of impacted communities and emergency personnel assisting with clean-up.

Action Steps Recommended: the Healthy Air Agenda

The American Lung Association supports and uses all means, including public education and outreach, research, advocacy in support of legislation or regulation and, when necessary, litigation, to protect public health from the dangers of climate change and to raise awareness and plan for the future.

The American Lung Association specifically supports continued research regarding the health impacts of climate disruption. We support health-protective emission limits for the sources of greatest concern, including power plants, refineries and other industrial sources, as well as mobile sources. We support the rigorous enforcement of air pollution regulations and the strengthening of air quality standards. We also support expanding energy conservation efforts and increasing our nation's use of clean, non-combustion renewable energy sources. Finally, the American Lung Association supports efforts to assist communities and people to adapt, especially those who face higher risk from the impacts of climate change.

In December 2012, the American Lung Association published the "Healthy Air Agenda," outlining critical next steps the Obama Administration and 113th Congress must take to implement the Clean Air Act and defend the EPA's authority to ensure all Americans can have air that is safe and healthy to breathe. Relevant components of the "Healthy Air Agenda" are summarized below, and a copy is attached to this letter for your review.

- ***Smokestacks – Clean up coal-fired power plants (both existing and new)***
Coal-fired power plants are a major source of hazardous pollutants, and are also the biggest source of carbon pollution. In 2013, the EPA must adopt the first-ever standards for carbon pollution from new power plants (a step they proposed in April 2012). EPA must also set carbon pollution standards for existing power plants. The EPA needs to put forward enforceable safeguards to reduce interstate air pollution, resolving the issue of "second hand smog" once and for all. Failure to do so exposes those downwind to unhealthy levels of ozone and misses an opportunity to further reduce this climate forcing pollutant.
- ***Tailpipes – Clean up gasoline and vehicles***
The EPA needs to update standards to control ozone- and particle-forming pollution from passenger vehicles by reducing the amount of sulfur in gasoline and setting tighter tailpipe pollution limits on new vehicles. The new standards will clean up cars, trucks and SUVs by reducing the sulfur in gasoline from today's level of 30 parts per million down to 10 parts per million, and setting stronger tailpipe pollution limits for new cars and light trucks. Adopting cleaner gasoline and vehicle standards in 2013 will help automakers effectively integrate emissions control technologies with changes being made to meet landmark 2017-2025 fuel efficiency standards. We also support increased funding to clean up the existing fleet of diesel engines through the Diesel Emissions Reduction Act (DERA), a key tool to help reduce black carbon emissions.

- **Strengthen the outdated ozone standards** - Ozone is one of the most dangerous and widespread pollutants in the nation. Strengthening these standards to levels that the Clean Air Act requires will not only drive the reduction of this powerful greenhouse gas, it will help prevent thousands of premature deaths in the United States each year.
- **Clean up oil and gas production** - Methane is a highly potent climate pollutant, with warming effects almost 25 times that of carbon dioxide. The EPA must take steps to clean up the methane leaks and venting from all oil and gas sources. Cleaning up natural gas (which is mostly methane) venting, and leaking components of this industry can have almost immediate positive effects on public health and the climate.
- **Fully fund Clean Air Act implementation, monitoring, research & enforcement**
Preventing additional cuts to the EPA budget for research, implementation, monitoring and enforcement under the Clean Air Act will enable the agency to continue to build the knowledge base regarding these threats, effectively monitor and implement critical air quality programs, and ultimately set and meet national clean air goals to protect public health. According to the Office of Management and Budget, if the "sequester" of the Budget Control Act of 2011 proceeds, close to \$700 million could be cut from the FY2013 budget levels at the EPA. Congress should not let this happen.
- **Implement the Clean Air Act without weakening or delays**
To truly improve the health of millions of people across the nation and save thousands of lives every year, Congress must support and provide funding for full implementation of all Clean Air Act updates, rules, and standards defending against big polluters and their allies who wish to stop progress toward healthy air. Without full implementation of the Clean Air Act, millions would be put at risk of more asthma attacks, reduced lung function, complications for those with lung disease, and even premature death.

In addition, the Department of Health and Human Services has a critical role to help prepare the nation for the public health impacts of climate change. We strongly support the development and implementation of a strategic action plan to respond to the emerging health threats posed by climate change.

These are some of the most vital steps Congress and the Administration can take to promote healthy air and address climate change. Anything less shortchanges our children and public health. Thank you for the opportunity to share our perspective with you.

Sincerely,



Harold P. Wimmer
President and CEO
American Lung Association

References cited

Bond TC, Doherty SJ, Fahey TW, Forster PM et al. Bounding the role of black carbon in the climate system: A scientific assessment. *J. Geophys. Res.* In press, published January 15, 2013. doi: 10.1002/jgrd.50171.

U.S. Environmental Protection Agency. *Integrated Science Assessment for Particulate Matter (Final Report)*. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-08/139F, 2009.

Spracklen DV, Mickley LJ, Logan JA, et al. Impacts of climate change from 2000 to 20150 on wildfire activity and carbonaceous aerosol concentrations in the western United States. *J. Geophys. Res.* 2009; 114: D20301.