



**American Lung Association
of the Northeast**

**LungNE.org
1-800-LUNG USA**

OFFICES:

Connecticut

45 Ash Street
E. Hartford, CT 06108

Maine

122 State Street
Augusta, ME 04330

Massachusetts

460 Totten Pond Road
Suite 400
Waltham, MA 02451

393 Maple Street
Springfield, MA 01105

New Hampshire

1800 Elm Street
Manchester, NH 03104

New York

155 Washington Ave., Suite 210
Albany, New York 12210

21 West 38th Street, 3rd Floor
New York, New York 10018

237 Mamaroneck Ave., Suite 205
White Plains, New York 10605

700 Veterans Memorial Highway
Hauppauge, New York 11788

1595 Elmwood Avenue
Rochester, New York 14620

Rhode Island

260 West Exchange Street
Suite 102B
Providence, RI 02903

Vermont

372 Hurricane Lane
Suite 101
Williston, VT 05495

**Comments of
Jeffrey Seyler, Chief Executive Officer of
the American Lung Association of the Northeast**

**On the Proposed Updates to Air Emissions Requirements for
New Residential Wood Heaters**

Docket No. EPA-HQ-OAR-2009-0734

February 26, 2014

Boston, Massachusetts

Welcome to Boston. Thank you for taking the time for this hearing today. I am Jeffrey Seyler, CEO of the American Lung Association of the Northeast. My comments today are on behalf of the national American Lung Association, and we will provide our complete comments in writing later.

The American Lung Association celebrates our 110th anniversary this year. For half of our history we have fought for healthy air. Healthy air is central to our mission, which is to save lives by improving lung health and preventing lung disease. We know that polluted air can shorten lives, and worsen lung diseases like asthma and chronic obstructive pulmonary disease and can even cause lung cancer. That's why the American Lung Association supports EPA's proposed updates to the air emissions requirements for new residential wood heaters, but urges strengthening improvements to them.

The updated standards are long overdue. As you know, EPA last set standards for wood-burning devices in 1988. Under the Clean Air Act, EPA should have updated the standards many times by now. In the past 25 years, the technology of wood-burning devices has changed, but even more importantly, our understanding of the harm from the emissions from those devices has grown. So we are pleased that EPA has finally proposed new standards.

In 1988, we were 7 years away from the first of the landmark studies that demonstrated that particles like those that make up wood smoke can be deadly. Burning wood produces emissions that are now widely recognized as harmful to human health. Emissions from wood smoke include particulate matter, carbon monoxide, nitrogen oxides, volatile organic compounds, hazardous air pollutants and carcinogens. Many of these emissions can occur in both indoor and outdoor environments. Wood smoke is also a significant source of many of these pollutants, especially primary particulate matter.

The EPA recognized wood smoke as a major source of particulate matter emissions in the 2009 *Integrated Science Assessment for Particulate Matter* (PM ISA).¹ Wood smoke directly produces fine particulate matter, and contributes to local unhealthy air days, such as we are seeing in Salt Lake City, Utah now. Because of their size, wood smoke particles can be transported hundreds of miles from the source.²

The EPA concluded in the PM ISA that fine particulate matter causes premature death and cardiovascular disease and likely causes respiratory harm. The EPA recognized studies that specifically linked wood smoke with an increased risk of cardiovascular mortality, as well as increased emergency department visits from respiratory diseases and cardiovascular disease.³

Unfortunately, particulate matter is just one of the harmful air pollutants emitted in the smoke from burning wood. These long out-of-date standards mean that homeowners install thousands of new wood-burning boilers, furnaces and stoves each year that produce far more dangerous air pollution than modern, state of the art, cleaner units would.

Given the demonstrated harm, the Lung Association urges EPA to reduce the phase-in time for the stronger requirements. Five years is two years longer than other industries have had to meet public health-protective standards. The technology to meet stronger standards has been widely in use in Europe for years.⁴ Each year EPA allows the industry to delay implementing the stronger standards is another year that more people will purchase and install devices that will emit too much pollution for decades to come.

The Lung Association also urges the EPA to include emission limits on fireplaces in the final standards. The proposed standards apply to all residential wood-burning devices except new indoor fireplaces, a significant omission. Fireplaces are installed in new and remodeled homes throughout the nation. Once installed, they will emit unlimited pollutants in every location for the lifetime of the house, which can be for generations in the future.

The EPA should also consider the impact on indoor air quality in the decision on fireplaces. The Yale Childhood Asthma Study of indoor air quality in homes in Connecticut and Virginia found that homes with fireplaces had average nitrogen oxides concentrations that were higher than are considered safe. Each hour of fireplace use increased cough and sore throat in these nonsmoking mothers.⁵

Such pollution can harm anyone, even healthy adults, but for many, pollution can threaten their lives and leave them with long-term consequences. Children and teens; older adults; people who have chronic lung diseases, such as asthma; those who have cardiovascular disease and diabetes; and those with low incomes—all are more vulnerable. We need every step we can take to provide cleaner, healthier air for all of them.

The American Lung Association calls on the EPA to move swiftly to adopt rigorous, health-protective standards for all classes of residential wood heaters using the best emission reduction systems. Until that happens, these devices will continue to be built and installed, compounding the outdoor problem and causing people to mistakenly bring harmful sources of pollution directly into their homes. That reality will make it ever harder to protect the health of the public.

Now is the time for the EPA to act. Thank you.

¹ U.S. Environmental Protection Agency, Integrated Science Assessment for Particulate Matter. 2009. Figure 3-3.

² Naeher LP, Brauer M, Lipsett M, Zelikoff JT, Simpson CD, Koenig JQ, Smith KR. 2007. Woodsmoke Health Effects: A Review. *Inhalation Toxicology*. 19:67-106.

³ Mar TF, Norris GA, Koenig JQ, Larson TV. 2000. Association between Air Pollution and Mortality in Phoenix, 1995-1997. *Environmental Health Perspectives*. 108(4): 347-353; Sarnet JA, Marmur A, Klein M, Kim E, Russell AG, Sarnet SE, Mulholland JA, Hopke PK, Tolbert PE. 2008. Fine particle sources and cardiorespiratory morbidity: An application of chemical mass balance and factor analytical source-apportionment methods. *Environmental Health Perspectives*. 116: 459-466; Schreuder AB, Larson TV, Sheppard L, Claiborn CS. 2006. Ambient woodsmoke and associated respiratory emergency department visits in Spokane, Washington. *International Journal of Occupational and Environmental Health*. 12(2):147-53.

⁴ Musil-Schläffer, Birgit (et al). *European Wood-Heating Technology Survey: An overview of Combustion Principles and the Energy and Emissions Performance Characteristics of Commercially Available Systems in Austria, Germany, Denmark, Norway and Sweden*, NYSERDA, April 2010. Available at: <http://www.nyserda.ny.gov/Publications/Research-and-Development-Technical-Reports/Other-Technical-Reports/European-Wood-Heating-Technology-Survey.aspx>

⁵ Triche EW, BelangerK, Bracken MB, et al. 2005. Indoor heating sources and respiratory symptoms in nonsmoking women. *Epidemiology*. 16(3): 377-384