Alliance of Nurses for Healthy Environments
Bringing Science and Passion to the Environmental Health Movement

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Mercury and Air Toxics Standards (MATS): Protecting Children's Health

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Subcommittee on Environment
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Thank you for the opportunity to provide testimony here today. My name is Katie Huffling and I'm the Executive Director of the Alliance of Nurses for Healthy Environments. I am also a nurse-midwife. The Alliance is the only national nursing organization focusing solely on the intersection of health and the environment. My work in environmental health began early in my midwifery career when I recognized what an important component the environment is to having a healthy pregnancy and healthy babies. I now work with nurses and nursing organizations around the country and globally to address the health impacts caused by environmental exposures. As nurses we strongly oppose any efforts to undermine the Mercury Air Toxics Standards due to the significant health benefits afforded by this rule.

A core part of nursing practice is working to prevent disease. We work every day to help our patients stay healthy. We would be happy to see you just once a year for your annual wellness visit rather than taking care of your child in the emergency room because they are struggling to breathe with an asthma attack.

With the MATS rule there has been an amazing opportunity to prevent disease and even death and it's working! In fact, it's been so successful that it's reduced mercury emissions from coal fired power plants by 81 percent since 2011[i].

Mercury is a potent neurotoxin, causing permanent damage to the brains of babies and developing fetuses, leading to developmental delays, learning disabilities, and birth defects. Since MATS was finalized, the estimated number of children born in the U.S. each year with prenatal exposure to methylmercury levels that exceed the EPA reference dose has decreased by half from 200,000-400,000 to 100,000-200,000 exposed[ii]. This is huge. This means we have half as many children who will have reduced potential for productivity, achievement, and wellbeing for their entire lives because they were spared toxic mercury exposure.

Coal-fired power plants don't just pollute our environment with mercury. Air pollution from these plants contain more than 80 hazardous air pollutants identified by the Clean Air Act for control, including arsenic, chromium, lead, dioxins, and furans as well as particulate matter and sulfur dioxide. Air pollution from coal plants causes respiratory problems like asthma,[iii] stunted lung development,[iv,v] and Sudden Infant Death Syndrome.[vi,vii] Air pollution has also been linked to effects on cognition and behavior in children[viii,ix] and to the risk of childhood autism.[x,xi]

The impacts on families related to these illnesses can be immense. Besides the pain, suffering, and emotional toll caused by poor health, there are significant economic costs with days lost from school, that can impede a child's ability to reach their full potential, and days lost from work, which for a low-income family already struggling to pay their rent can be disastrous.

Air pollution is also linked to poor pregnancy outcomes. Exposure to particulate matter during pregnancy is linked to low birth weight and preterm birth. These birth outcomes can lead to a variety of negative health impacts, greater risk of chronic disease as an adult, and can be incredibly costly – a preterm infants' hospital stay is, on average, 10 times more costly than a normal birth.[xii]

People who have low incomes or are members of racial or ethnic minorities bear a disproportionate burden of the health effects of air pollution. Because they are more likely to live closer to industrial facilities and high traffic areas, low-income and minority populations are at much higher risk of exposure to the most harmful pollutants.[xiii] For example, one study found that 68 percent of African Americans lived within 30 miles of a coal-fired power plant.[xiv]

Despite the proven health benefits of the MATS rule, in 2018 the Environmental Protection Agency (EPA) announced that it would be revising the Supplemental Cost Finding, stating the significant health benefits and lives saved from reduced emissions of fine particulate matter should not be counted. Counting co-benefits is just common sense, because it gives a full picture of the benefits of an EPA action. In fact, both EPA and the White House Office of Management and Budget have long-established guidance that agencies should and do consider co-benefits in their analyses.

The standards not only save lives, they also save up to $90 billion every year in avoided costs associated with these health impacts, preventing thousands of premature deaths, heart attacks, asthma attacks, and emergency room visits for children with asthma every year. Based on EPA estimates, for every dollar spent to reduce this pollution, Americans get $3-9 in benefits.[xv]

These benefits are real to babies, children, and families. Ignoring these significant health benefits makes no sense from a nursing perspective. But that's exactly what EPA's proposal wants to do. As someone who was trained to care for pregnant women and their babies, I know firsthand that preventing exposure to harmful pollutants is one of the most important things we can do to safeguard the wellbeing of babies and children.

Weakening the Mercury Air Toxics Standard threatens the health of all Americans and goes against the mission of the EPA to protect public health and the environment. Undermining the rule in any way is an unconscionable step backwards in the effort to prevent disease -- and one that nurses strongly oppose.

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