



May 10, 2011

The Honorable Joe Barton
Chairman Emeritus
U.S. House of Representatives
Washington, DC 20515

Dear Representative Barton:

As doctors and on behalf of the organizations we represent, we write today to provide you with information regarding the wealth of peer-reviewed research that establishes a clear link between air pollution and a range of serious adverse human health effects.

During the Energy and Power subcommittee hearing on April 15th you expressed a “hypothesis” that air pollution, in particular mercury and particulate matter, does not cause health impacts. Further, you stated that there was no science to back up the health benefits that the U.S. Environmental Protection Agency (EPA) expects to achieve as air toxics from power plants are reduced and that the EPA “appears to have pulled the numbers out of thin air.” As professionals that treat patients who are impacted by lung, cardiovascular and neurological impairments, we were shocked at such statements.

We are doctors and we see in the patients we treat what that the scientific literature lets us know to expect: that air pollution makes people sick and cuts lives short.

The health impacts of short-term exposure (over hours to days) of particulate matter were found to include: death from respiratory and cardiovascular causes, including strokes; increased risk of cardiovascular harm, including acute myocardial infarction (heart attacks) and congestive heart failure, especially among the elderly and in people with cardiovascular disease; inflammation of lung tissue in young, healthy adults; increased hospitalization for cardiovascular disease, including strokes; hospitalization for asthma among children; and aggravated asthma attacks in children.

Exposure to year-round particle pollution has also been found to cause premature death and cardiovascular harm, especially greater risk of death from cardiovascular disease. Particulate matter is considered likely to increase the risk of hospitalization for asthma attacks in children; stunt lung function growth in children and teenagers; damage the small airways of the lungs; increase the risk of heart attacks and strokes in older women; increased risk of dying from lung cancer; and. Evidence links long-term exposures to adverse reproductive and developmental outcomes such as low birth weight and infant mortality.

During the hearing, you also stipulated that mercury is a poison and pollutant, a statement with which we concur. Given this, we fail to understand your subsequent statement that mercury does not pose a health threat. Mercury and other air toxics have serious health effects that compel EPA to act. Some toxic air pollutants, such as lead, mercury, and dioxins degrade slowly or not at all. These pollutants bioaccumulate in humans and other animals at the top of the food chain. Children can be exposed to toxic air pollutants through contaminated air, water, soil, and food.

Mercury is one example of a persistent pollutant emitted into ambient air that leads to exposure through another route: organisms metabolized mercury into methylmercury, a developmental neurotoxicant that poses a significant hazard for children. The developing fetus and young children are thought to be disproportionately affected by methylmercury exposure, because many aspects of development, particularly brain maturation, can be disturbed by the presence of methylmercury. Minimizing mercury exposure is, therefore, essential to optimal child health.

Industrial emissions, especially from coal-fired power plants, are the leading source of environmental mercury. Although the levels of ambient mercury may not be hazardous, mercury deposits into soil and surface waters and ultimately accumulates in fish. Because fish may contain large amounts of mercury, children and pregnant women can have significant exposure if they consume excessive amounts of fish. During hearing, in response to your question about mercury poisoning, industry representatives stated that no employees have suffered from mercury poison at coal-fired power plants. While the workers may or may not be at risk, those most at risk are children and expectant parents at home eating mercury in their dinner.

Appended to this letter is a short list of published studies that support these statements about mercury and particulate matter. We strongly urge you and your staff to read through the volumes of work that have been published over the decades on this topic. Once you do, we trust that you will agree that the EPA is on strong footing when it assesses and states the health benefits of measures to reduce air pollution.

Some of us treat patients, including children, with pulmonary, cardiovascular, and other chronic diseases, and some of us treat children who have neurological impairment. We work each day to improve the lives of patients and their caregivers and to protect the public from known environmental hazards. We ask that you protect the Clean Air Act and support efforts to reduce the health threats posed by air pollution. Doing so will improve public health and lower health care costs for all.

Sincerely,



O. Marion Burton, MD, FAAP
President
American Academy of Pediatrics



Albert A. Rizzo, MD
Chair-elect
American Lung Association



Georges C. Benjamin, MD, FACP, FACEP (E)
Executive Director
American Public Health Association



Dean E. Schraufnagel, MD
President
American Thoracic Society



Bill McLin, M Ed.
President and CEO
Asthma and Allergy Foundation of America



Peter Wilk, MD
Executive Director
Physicians for Social Responsibility

HEALTH EFFECTS RESEARCH ON AIR POLLUTION

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