

My name is Maren Cooke, and I live at 6745 Forest Glen Road in Pittsburgh. I'm here as a scientist and a science educator, as a volunteer for several grassroots environmental groups (I should note that I'm on the board of the GASP, the Group Against Smog & Pollution, but speak as an individual), and as a mother: Kielan, here, is one of my two daughters. I'd like to thank you for coming to Pittsburgh today, and urge you to support Governor Rendell's proposed regulation in order to massively reduce toxic mercury emissions from power plants now, not years down the line.

Mercury from power-plant smokestacks comes down all over the lands and waters of our region. It is highly concentrated in the body tissues of fish, simply because they are so far up the food chain. We've all heard in recent years about limits on eating fish, especially for women who are pregnant or may become pregnant, or who are nursing -- realistically, that means pretty much all women of childbearing age, who constitute nearly a quarter of the population. Mercury is also strongly linked to the rising rate of male infertility, so there's another difficulty with producing healthy children -- and another quarter of the population who shouldn't eat much fish.

But the assault doesn't stop at birth. We need to add children to the list of those who must avoid fish, an otherwise healthy source of protein, minerals, and essential fatty acids. Mercury is a dangerous neurotoxin that affects the development of the brain and nervous system well into the teenage years. Infants and children exposed to mercury face learning disabilities, intelligence and attention deficits, and possibly autism. And, in case you were beginning to feel safe because you've already had your kids, or don't plan to have any, other grownups are also at risk: mercury exposure can damage adult cardiovascular and immune systems as well as the brain and kidneys.

Why are we all here? Now that we know all this, now is the time to speak up, right? Here's an environmental science textbook from 2003, detailing the risks of mercury exposure. However, step back in time eighty years to 1923, when this little volume was written: **The Health of the Runabout Child**. It says "...that the *injurious prenatal influences* are those communicated through the blood, such as ill-health; malnutrition; severe shock, grief or worry; diseases such as tuberculosis; [and] poisons in the blood, such as lead, mercury, and alcohol..."

Going back even farther, we all know the term "mad as a hatter," made famous by Lewis Carroll's Alice in Wonderland in 1865, and coined at least three decades before that time. Mercurous nitrate was used to cure felt; in the process acid decomposed the mercurous nitrate to elemental mercury, and steam and heat exposed hatters and other workers to the mercury vapor. Nitrate of mercury was banned from the hat industry by the United States Public Health Service in 1941, though by that time the hazards had been known for a century. Isn't it high time that we step up to the plate and use technologies that are already within reach to control emissions and protect people?

I've been inside a coal-fired power plant, and I've spoken with plant managers about emission-reduction technologies. One thing that became clear to me is that while these folks are generally intelligent, well-spoken, and well-meaning individuals, it is not in their best interests, as corporate representatives, to mitigate further than the law requires. The only way to provide a level playing field in this competitive industry, while providing safe conditions for the people who live downwind and downstream, is to mandate the reductions necessary to guarantee that safety.

I am lucky; I have two bright, healthy, amazing children. I am lucky, but I have also been careful. Fish is rarely on the table at our house, and we eat almost exclusively organic food. Our girls' preschool has a strict policy forbidding pesticide use, and their new playground equipment is made of wood treated without arsenic.

What's more, these kids are growing up to understand what's going on around them, as well as the importance of people making their voices heard. ~~Kielan made these signs when she was five years old, and had different ideas about spelling -- but her voice is clear.~~

The Clean Air Act requires that the best pollution controls possible be mandated. Let's meet the Clean Air standard, which means constant improvement -- no amount of mercury is safe. Thanks for your help!