



By Carolyn Raffensperger

Why Won't Feds Regulate Mercury?

The link between mercury poisoning, eating fish, and brain damage came to the attention of many in the west through W. Eugene Smith's elegiac photos of Japanese children lying twisted, gnarled, and blind in their mothers' arms. Japan's Minamata Bay had been terribly contaminated with mercury from an acetaldehyde plant. Mothers ate mercury-laden fish and passed on the toxic metal to their vulnerable babies. Victims numbered in the thousands. But the authorities did not recognize that pollution caused the terrible damage until 1968, years after the tragedy started, largely because the company hid the research of courageous scientists.

Like most enormous toxic tragedies — Bhopal, asbestosis, or Love Canal — Minamata took a long time to wend its way through the courts. There have been many suits against Chisso, the company, but last year the Japanese Supreme Court also held the state responsible for the spread of Minamata disease after January 1960.

The ruling was unique in establishing government responsibility for some of the damage. Presiding Justice Hiroharu Kitagawa said government failed to exercise its authority under water quality laws, and as a result exacerbated the extent of the poisoning to people who ate fish caught in the contaminated waters. Kitagawa said it was irrational and illegal for the central government and Kumamoto Prefecture to not restrict mercury in wastewater.

The Japanese government's response would seem strange to many

Americans who, if they have been following the news in the United States, know that, although mercury is a major pollutant addressed in a patchwork of law, the U.S. government has used scientific uncertainty as an excuse to not exercise its regulatory authority and serve as trustee of the commonwealth and commonwealth.

In Japan, however, Chief Cabinet Secretary Hiroyuki Hosoda said the government will "seriously take to heart" the ruling and vowed to prevent the recurrence of such a tragic case of environmental pollution.

"Mercury cycles in the environment as a result of natural and human (anthropogenic) activities," according to U.S. EPA. "The amount of mercury mobilized and released into the biosphere has increased since the beginning of the industrial age." Metallic mercury released into the environment is converted to an organic form that can be taken up by animals by bacteria that normally reside in wetlands, sediments, of waterbodies. EPA goes on to say that, "Mercury accumulates most efficiently in the aquatic food web. Predatory organisms at the top of the food web generally have higher mercury concentrations."

Current mercury disputes run from what warnings FDA should attach to consumption of such top-predators such as tuna, to whether mercury added to childhood vaccines causes autism, to the rules EPA should apply to coal burning power plants that are a leading source of mercury releases. These issues are related.

Forty percent of mercury emissions in the United States comes from coal-fired power plants. When pregnant women eat contaminated fish, babies in utero are affected. According to the U.S. Geological Survey, "Mercury is responsible for over three quarters of all contaminant-related advisories for threats to human health. Between 1993 and 1999, the number of mercury-related fish-consumption advisories more than doubled. Today 42 states have advisories."

EPA has calculated that babies in the womb are at risk when mercury blood levels in the fetus rise above 5.8 parts per billion. Based on the Centers for Disease Control's survey of blood in

women of child bearing age, 5.7 percent of U.S. infants, or 228,000 a year, could be at risk of mercury damage before they are born. EPA estimates that this number could be as high as 620,000 infants based on the observation that cord blood levels are higher than maternal blood levels, demonstrating facilitated transfer of methylmercury across the placenta.

It wasn't until last year that EPA and FDA issued an advisory recommending limits on how much tuna children and women should eat. The advisory said that nursing mothers and women who are pregnant or seeking to become pregnant should limit intake to 12 ounces of chunk light tuna a week or six ounces of solid white albacore. But EPA's assessment is based on 1 microgram a day for each 22 pounds of body weight, so a 130-pound woman would exceed the "safe" level by 40 percent if she ate the allowed 6 ounces of albacore.

The government has bent over backward to protect the fishing industry rather than the children who could be damaged by too much mercury in tuna. They have bent even lower to protect the coal, power, and vaccine industries.

Controversy has raged over whether thimerosal, mercury added to vaccines as a preservative, "causes" autism. The science doesn't support a definitive cause-and-effect link. But a precautionary approach would say, "No level of mercury is good for children. There are safer alternatives." Only Iowa has banned thimerosal in vaccines

Similarly, in March of this year EPA issued new power plant regulations to satisfy a suit brought by the environmental group NRDC. EPA claims that its rule will cut mercury pollution from the utilities in half by 2020. This rule has provoked heated debate because it uses a cap-and-trade scheme instead of Maximum Achievable Control Technology. In so doing, NRDC and others say that the rule will not meet the Clean Air Act standards.

Where is Justice Kitagawa when you need him?

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