Protect Our Kids From Mercury



How does mercury get into our environment?

While mercury is a naturally occurring toxic metal, levels of mercury in the environment have increased three fold since preindustrial times due to man-made activities. [UNEP] Mercury has been used in many products and industrial processes, but its
uses are increasingly being phased out in many applications. This is because when mercury is emitted into the air, primarily by
power plants, industrial processes and waste disposal, it becomes a serious public health threat. Once released into the air,
mercury settles in oceans and waterways. Bacteria in the water then convert the mercury to a form called methylmercury, which
when ingested is particularly dangerous to humans. Fish absorb methylmercury from water as it passes over their gills and
when they eat other aquatic organisms. As larger fish eat smaller ones, concentrations of mercury bioaccumulate in the larger
fish. Because mercury keeps accumulating in the fish, larger and older fish have higher levels of mercury. Americans are
primarily exposed to unsafe levels of mercury by eating contaminated fish.[NAS]

What are the health effects of mercury pollution?

Even at low doses, methylmercury is a powerful, dangerous toxin. Once in the human body, mercury interferes with brain development and can lead to neurological diseases and developmental problems, including delayed language development, impaired memory and vision, learning disabilities, attention deficit disorders and mental retardation. [PSR]

Mercury poses the greatest risk to the fetus and children's developing brains. Ingested methylmercury is absorbed into the bloodstream and can be passed by a mother to her developing fetus, interfering with the development of the brain and the nervous system. Recent EPA estimates indicate that one in six women of childbearing age have blood mercury levels that exceed what is considered safe for a fetus. Approximately 630,000 newborns are threatened every year by being exposed to unsafe levels of mercury in the womb. [Mahaffey] Additionally, infants are exposed to mercury through their mothers' breast milk, and children can ingest mercury from eating fish such as canned tuna.

Is the government doing what is necessary to protect us from mercury?

The federal government has recently taken actions that fail to protect the public adequately from exposure to mercury. The Environmental Protection Agency (EPA) is proposing to weaken efforts to control mercury emissions from coal-fired power plants, the largest unregulated source of mercury. The EPA originally classified mercury as a hazardous pollutant and determined that it was feasible using current technology to reduce emissions by 90% (from about 50 to 5 tons yearly) in three years. [EPA] However, the EPA's current plan treats mercury as an ordinary air pollutant instead of a hazardous one, and power plants would only be required to reduce emissions by 30% over 15 years. [NRDC1] Moreover, some plants would be able to avoid or delay reducing mercury emissions by buying pollution "credits" from cleaner plants.

In 2004, the Food and Drug Administration (FDA) released a new advisory warning the public about eating mercury-contaminated fish. The advisory states that people should not eat shark, swordfish, king mackerel, or tilefish. It also states that people should only eat up to 12 ounces a week of a variety of other fish, although only six ounces of albacore (white) tuna should be eaten per week. But this advice is less protective than what EPA recommends, a health-based standard supported by the National Academy of Sciences. Eating 12 ounces of certain higher mercury fish in a given week could result in mercury exposure well over what EPA recommends. Also, even a 6 ounce serving of Albacore is too much for many individuals. For instance, a 130-pound woman who eats 6 ounces of albacore tuna would get one and one half times the level of mercury exposure that the EPA says is safe. And a 22 pound child eating only 2 ounces of albacore canned tuna would exceed by three fold what EPA says is safe. With regard to children, the advisory simply states that parents should follow the same recommendations but serve smaller portions. This is not adequate. The advisory should provide separate, specific advice defining safe fish eating habits for children of various ages, whose smaller bodies mean they can eat fewer and smaller portions of mercury-contaminated seafood.

BE SAFE: Take Preventive Action To Prevent Mercury Contamination

BE SAFE's FOUR PRINCIPLES

1. HEED EARLY WARNING SIGNS

We must heed early warnings signaling that mercury contamination is a growing problem posing serious health risks. The percentage of U.S. waters dangerously polluted with mercury is rapidly increasing. The EPA and 44 states have now issued advisories warning people, especially women and children, to avoid or limit eating local fish because they are highly contaminated with mercury. In 1993 only 27 states had issued such advisories, and in 1997 only 39 states had done so. To see if your state has posted an advisory, visit www.epa.gov/water-science/fish.

Scientists agree that mercury can cause severe damage to the brain and nervous system. We must act to warn people of the current risks of eating certain fish, and we must work to ensure that the level of mercury in fish decreases, so that we can all continue to enjoy this nutritious food.

2. PUT SAFETY FIRST

The nation's 1,100 coal-fired power plants emit about 40 tons of mercury into the air each year and are the largest unregulated source of mercury. Other industries like municipal and medical waste incinerators have been subject to strict regulation and have reduced their mercury emissions by nearly 90%. EPA data confirms that power plants could similarly reduce their emissions by around 90%. This is the standard that the EPA should hold these plants to. Also, the FDA should give consumers the best possible advice about which fish to avoid eating, and how much fish children and women of child bearing age can safely eat. For instance, the State of Rhode Island Department of Health recommends that pregnant women and children should avoid consumption of albacore "white" canned tuna.

3. EXERCISE DEMOCRACY

We must work together to ensure that the EPA and FDA heed early warnings and prevent mercury exposure in children. The EPA is currently accepting comments on its proposed rule. It is crucial that people concerned with children's health submit comments urging the EPA to require power plants to reduce mercury emissions by 90%. EPA's original approach would have treated all communities equally. But under the rule EPA is now proposing, dirty power plants could avoid having to reduce emissions by buying emissions "credits" from cleaner plants. Already "hot spots"—areas of extremely high mercury contamination—exist near some of these dirty plants. Evidence suggests that the mercury in these hot spots comes from the local plants, and so the proposed emissions trading plan will do little to decrease pollution in these problem areas. [ED] We must tell the EPA that no community should be polluted in this way.

EPA is also holding public hearings on the proposed rule. Individuals and groups should write to the EPA and request a hearing be held in their town. And when a hearing is happening nearby, it is important for children's health advocates to attend and raise their concerns about the weak proposed rule.

We must also write the FDA to express our concerns over the current fish advisory. We must demand that the FDA publish a new advisory clearly indicating which fish are high in mercury, designating how much of high-mercury fish individuals can eat and remain under the mercury exposure level recommended by EPA, and noting exactly how much of these fish women and children can safely eat.

BE SAFE is coordinated by the Center for Health, Environment & Justice. Contact us at CHEJ, P.O. Box 6806, Falls Church, VA 22040, 703-237-2249, or 518-732-4538, or visit **www.besafenet.com**

4. CHOOSE THE SAFEST SOLUTIONS

Tell the EPA to protect us from mercury pollution.

Urge the agency to treat mercury as a hazardous substance and require all power plants to reduce mercury emissions by 90%. Submit a comment by going to this website: http://www.moveon.org/mercury/.

■ Tell the FDA to issue adequate mercury warnings.

The FDA's advisory concerning mercury-contaminated fish is not specific or stringent enough to help consumers make healthy choices. Tell the FDA to give Americans the information we need to protect ourselves and our families. Send a letter to the FDA from this website: http://www.nrdcaction.org/action

Protect yourself and your family.

Children, as well as women who are pregnant or planning to become pregnant, are the most vulnerable to mercury's harmful effects. They should restrict or eliminate certain fish from their diet, including albacore canned and fresh tuna, tilefish, swordfish, shark, king mackerel, sea bass, marlin and grouper. A woman who is pregnant or is likely to get pregnant should eat no more than one can of light tuna per month, and no fresh tuna or white albacore canned tuna, if she wants to be sure to stay below the EPA's level of concern for mercury. (Albacore or chunk or solid white tuna has much higher mercury concentrations than chunk light tuna.) Parents should limit their children's consumption of light tuna to less than one ounce of canned light tuna for every 12 pounds of body weight per week. That means that a child who weighs 36 pounds should not eat more than 3 ounces (half a standard-sized can of chunk light tuna) per week. Children should avoid albacore or white tuna because of its higher mercury levels.[NRDC2] To find out more, visit www.nrdc.org.

BE SAFE.

Take precautionary action to protect our children from mercury pollution. Sign on to the BE SAFE Platform on the next page. Be counted when we deliver this national Platform to the White House in 2005. Endorse the BE SAFE Platform today at www.besafenet.com.

Your vote counts.

The next election will set the country's course on mercury pollution and other environmental health policies. For information on state and federal environmental voting records, visit http://whistler.sierraclub.org/votewatch/. To register to vote, contact www.earthday.net.

States Take the Lead in Reducing Mercury Emissions

Although controlling mercury as a hazardous pollutant at the federal level has been difficult so far, grassroots environmental coalitions have been successful in pressuring state governments to pass strong mercury regulations.

- In New England, broad coalitions composed of a variety of organizations and individuals concerned about mercury pollution and health effects helped force the adoption of a Regional "virtual elimination" goal for man-made mercury releases and a Mercury Action Plan in 1998.[ZMC] Thus far, mercury laws have passed in all 6 New England states and have served as model legislation that has been introduced or passed in over 20 additional states
- In response to strong citizen concern and effective advocacy applied by local environmental organizations, Washington State finalized a plan in December 2000 to eliminate all major persistent, bioacculmulative toxic chemicals, including mercury.[NWF]
- In 2004, legislators from five states in the Midwest and Great Lakes introduced very strong state legislation aimed at reducing mercury pollution from power plants.

Now it is time for us to assert this pressure at the federal level. As of April 30, 2004, over 500,000 people submitted comments to EPA demanding that it do more to curb mercury emissions from power plants. Let's make sure that EPA receives 1 million public comments by June 29th!

References: Physicians for Social Responsibility, www.mercuryaction.org [PSR]; United Nations Environmental Program, Global Mercury Assessment (2002) available at http://www.chem.uncep.ch/mercury [UNEP]; National Academies of Science, Toxicological Effects of Methylmercury (2000) [NAS]; Kathryn Mahaffey, Methyl Mercury Epidemiology Update (2004), available at http://www.epa.gov/waterscience/fish/forum/2004/presentations/Monday/mahaffey.pdf [Mahaffey]; U.S. EPA, 1998. Utility Air Toxics Study Report to Congress, available at: http://www.nrdc.org/media/pressreleases/o40227.asp [PA]; Environmental Working Group, New Government Fish Tests Raise Mercury Concerns, available at: <a href="http://www.environmental.http://www.environmental.http://www.environmental.http://www.environmental.http://www.environmental.http://www.environmental.http://www.environmental.http://www.nrdc.org/health/effects/mercury/protect.asp [NRDC2]. Natural Resources Defense Council, Mercury Contamination in Fish, available at: http://www.nrwf.org/mercury/goog/nercury/goog/nercury/goog/nercury/goog/nercury/protect.asp [NRDC2]. New England Zero Mercury Campaign, http://www.nrwf.org/mercury/goog/nerc

Primary Contributor: Mercury Policy Project, www.mercurypolicy.org; Public Citizen, www.citizen.org.

BE SAFE Platform

In the 21st century, we envision a world in which our food, water and air are clean, and our children grow up healthy and thrive. Everyone needs a protected, safe community and workplace, and natural environment to enjoy. We can make this world vision a reality. The tools we bring to this work are prevention, safety, responsibility and democracy.

Our goal is to prevent pollution and environmental destruction before it happens. We support this precautionary approach because it is preventive medicine for our environment and health. It makes sense to:

- Prevent pollution and make polluters, not taxpayers, pay and assume responsibility for the damage they cause;
- Protect our children from chemical and radioactive exposures to avoid illness and suffering;
- Promote use of safe, renewable, non-toxic technologies;
- Provide a natural environment we can all enjoy with clean air, swimmable, fishable water and stewardship for our national forests.

We choose a "better safe than sorry" approach motivated by caution and prevention. We endorse the common-sense approach outlined in BE SAFE's four principles listed below.

Platform Principles

HEED EARLY WARNINGS

Government and industry have a duty to prevent harm, when there is credible evidence that harm is occurring or is likely to occur—even when the exact nature and full magnitude of harm is not yet proven.

PUT SAFETY FIRST

Industry and government have a responsibility to thoroughly study the potential for harm from a new chemical or technology before it is used—rather than assume it is harmless until proven otherwise. We need to ensure it is safe now, or we will be sorry later. Research on impacts to workers and the public needs to be confirmed by independent third parties.

EXERCISE DEMOCRACY

Precautionary decisions place the highest priority on protecting health and the environment, and help develop cleaner technologies and industries with effective safeguards and enforcement. Government and industry decisions should be based on meaningful citizen input and mutual respect (the golden rule), with the highest regard for those whose health may be affected and for our irreplaceable natural resources—not for those with financial interests. Uncompromised science should inform public policy.

CHOOSE THE SAFEST SOLUTION

Decision-making by government, industry and individuals must include an evaluation of alternatives, and the choice of the safest, technically feasible solutions. We support innovation and promotion of technologies and solutions that create a healthy environment and economy, and protect our natural resources.

Take precautionary action to protect our children from mercury poisoning. Sign onto the BE SAFE Platform.

Be counted when we deliver this national platform to the White House in 2005. Endorse the platform today at **www.besafenet.com**

BE SAFE is coordinated by the Center for Health, Environment & Justice. To sign the platform or for more information, contact us at Environmental Health Alliance, c/o CHEJ, P.O. Box 6806, Falls Church, VA 22040, 703-237-2249, or 518-732-4538, or visit the Website at



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