

Mercury Exposure from Consumer Products

Sources, Health Effects, & Prevention

What is Mercury (Hg)?

A naturally occurring element in the earth's crust that can be hazardous to human health. Elemental or metallic mercury, inorganic mercury salts, and organic mercury compounds (methylmercury) are the common forms people are exposed too.

Elemental or Metallic Mercury

What is it?

Silver liquid at room temperature. Can also evaporate into air as a gas.

Where is it found?

- Older items/products made outside the United States, like appliances, thermometers, automotive parts, mercury barometers, batteries, electronics, jewelry, and lightbulbs.
- Products used for traditional medicinal or religious purposes like Santería (Afro-Hispanic), PaloMayombé (Caribbean), Candomblé (Afro-Brazilian), Voodoo (Afro-Haitian), Espiritismo (Puerto Rican), Yoruba Orisha (Afro-Hispanic), and Parad (Hindu).

What are the health effects?

- When products with liquid mercury are broken or spilled, or used in religious practices, it can become a vapor. Repeated exposure to <u>breathing mercury vapor</u> can affect the brain, spinal cord, eyes, and kidneys.
- May cause mood changes; inability to concentrate; memory loss; shaking, tingling, or loss of feeling of the hand, tongue, or eyelid; discoloration of the cornea and lens of the eye; disturbances of vision; and kidney disease.

Inorganic Mercury Compounds/Salts

What is it?

Formed when mercury combines with other elements like sulfur or oxygen.

Where is it found?

- Certain dietary supplements
- <u>Skin-lightening creams, and soaps</u>

What are the health effects?

- Irritation to skin (rash) and eyes.
- Swallowing mercury compounds can cause nausea, vomiting, and diarrhea.
- Damage to the nervous system and kidneys.
- Memory problems.





If liquid mercury is spilled in your home, **DO NOT VACUUM!** Improper clean up can make things worse. Follow <u>these NJDOH guidelines</u> for safe clean up.

CDC/ATSDR has information for addressing mercury spills in schools.



Organic Mercury Compounds (methylmercury)

What is it?

Results when mercury combines with carbon.

Where is it found?

Fish and shellfish can be part of healthy eating habits, but exposure to elevated concentrations of mercury in fish can be harmful.

What are the health effects?

- May cause problems with vision, hearing, speech; difficulty coordinating movement and walking; muscle weakness; and "pins and needles" feelings in hands, feet, and mouth.
- If a pregnant woman is exposed to mercury, her child may develop damage to vision, hearing, taste, smell, memory, and mental ability. Infants and children are also at high risk from methylmercury-contaminated fish and possibly breast milk.

Make smart choices to reduce your exposure.

Make informed choices about the types and amount of fish you eat to help minimize exposure risks, while maximizing the health benefits of fish consumption.

· Choose fish with the lowest mercury content.

Best Fish Choices (low mercury)

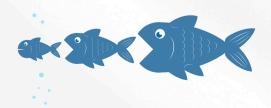
Anchovy Herring Atlantic croaker Lobster (American & spiny) Atlantic Mullet mackerel Oyster Black sea bass Pacific chub mackerel Perch (freshwater & ocean) Butterfish Catfish **Pickerel** Clam Plaice Pollock Crab Crawfish Salmon Flounder Sardine Haddock Scallop Hake

Shad Shrimp Skate Smelt Sole Squid Tilapia Trout (freshwater) Tuna (canned light, includes skipjack) Whitefish Whiting

Fish to Avoid (high mercury)

King mackerel Marlin Orange roughy Shark Swordfish Tilefish (Gulf of Mexico) Tuna (bigeye)

Bigger fish have more mercury! Consume smaller species of fish more often than larger species of fish to minimize your exposure.







New Jersey Department of Health Division of Epidemiology, Environmental & Occupational Health Consumer, Environmental & Occupational Health Service <u>nj.gov/health/ceohs/</u>_____