

## Mercury in the Environment

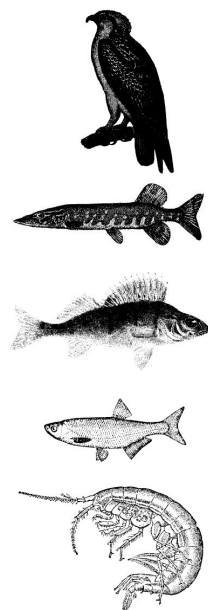


Mercury is a naturally occurring element in the environment (volcanoes, etc.) and is also released into the air through industrial pollution from coal-fired power plants.

Mercury that is deposited from the atmosphere accumulates in bodies of water such as streams, rivers, and lakes. Bacteria in the water cause chemical changes that transform mercury into methylmercury. Fish absorb the methylmercury as they feed in these waters. The amount of methylmercury in fish depends on what the fish eat, how long they live, and how high up the food chain they are.

Fish and shellfish are the main sources of methylmercury exposure to humans. General advisories have been issued by the Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA) for consumption of fish and shellfish, with particular focus on children less than 15 and pregnant women.

Like many environmental contaminants, mercury can bioaccumulate. Bioaccumulation is the process where contaminants build up slowly over time because the body cannot easily or quickly remove them. A small fish, for example, may ingest mercury from the water. If the small fish is eaten by a larger fish, the mercury is now in the body of the larger fish. If the larger fish is eaten by a hawk, the mercury is now in the body of the hawk.



Mercury collects in the muscle tissue of fish. Unlike some contaminants that collect in the skin and fat, mercury cannot be cooked out of consumable fish before eaten. High levels of mercury in the bloodstream of unborn babies and young children may affect their neurological system.