

# Toxic mercury contaminating more species, report shows

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Mercury pollution from power plants and other industrial sources has accumulated in birds, mammals and reptiles across the country, and only cuts in emissions can curtail the contamination, says a report released Tuesday by a national environmental group.

The report is the first major compilation of studies investigating mercury buildup in such wildlife as California clapper rails, Maine's bald eagles, Canadian loons and Florida panthers. In all, scientists working with the National Wildlife Federation found 65 studies showing troublesome mercury levels in 40 species.

"From songbirds to alligators, turtles to bats, eagles to polar bears, mercury is accumulating in nearly every link of the food chain," said Catherine Bowes, an author of the report who manages the federation's mercury program in the northeastern states.

High mercury levels in popular fish such as swordfish and canned albacore tuna prompted government health warnings in 2004 aimed at pregnant women and children. Mercury is a neurotoxin that can damage fetuses and cause mental retardation, learning disabilities, cerebral palsy, blindness and deafness.

The contamination also can kill or harm wildlife. According to the study:

-- Common loons stopping at Walker Lake in Nevada on their way to Saskatchewan have been contaminated with mercury lingering from past gold mining operations.

-- At least one endangered Florida panther has died from mercury poisoning, probably from consuming raccoons with high mercury levels.

-- Western and Clarke's grebes in Clearlake (Lake County) have shown altered hormone levels because of mercury poisoning.

-- River otters in New York, Maine, Vermont, Massachusetts and Nova Scotia have elevated levels of mercury and in some places are showing such

neurological effects as difficulty in walking. One otter died from mercury poisoning.

Airborne mercury, which eventually falls to the land and water, comes mostly from coal-fired power plants or medical and trash incinerators. Sewage treatment plants, chlorine-manufacturing plants and runoff from abandoned gold and mercury mines can flow directly into water and wetlands.

The main source of mercury in humans comes from consuming big predator fish such as swordfish, shark, king mackerel, tilefish and albacore tuna, according to the U.S. Environmental Protection Agency.

Birds and other wildlife also eat mercury-contaminated fish as well as insects, crayfish and other small organisms. The mercury accumulates at higher levels up the food chain to raccoons, mink, river otters, panthers and polar bears, the study found.

David Evers, a leading avian ecologist who specializes in contaminants at the nonprofit BioDiversity Research Institute in Gorham, Maine, said mercury-contaminated insects contribute to the high levels of the element in birds, bats and some other wildlife species.

"Traditional, conventional thinking was that the fish food web was the only pathway of concern. But our studies have found that there are other food webs of concern, including insects," Evers said.

The report from the National Wildlife Federation is consistent with what California researchers from the U.S. Fish and Wildlife Service, U.S. Geological Survey and San Francisco Estuary Institute in Oakland have found in California clapper rails, Caspian and Forster's terns and other shorebirds feeding in the southern end of San Francisco Bay.

Guadalupe Creek, which flows through San Jose, carries inorganic mercury from a now-closed mercury mine. The mercury converts to the toxic form, methylmercury, in the former Cargill salt ponds being restored in the South Bay.

Letitia Grenier, a conservation biologist at the San Francisco Estuary Institute, has researched mercury in songbirds in the wetlands. She praised the work of Evers and other East Coast researchers.

"It's important for us to open our minds. We should question where there are other habitats where we could have mercury accumulations. It's great that we're finally looking at mercury in animals," Grenier said.

The National Wildlife Federation issued the study as part of a lobbying effort for regulations to control mercury emissions at coal-fired power plants and other sources.

The Electric Reliability Coordinating Council, a trade group for power generating companies, criticized the study Tuesday as redundant, given past studies. In a statement, spokesman Scott Segal said emissions of mercury have been reduced by 40 percent since 1990.

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