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Mercury-tainted fish found widely in U.S. streams

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By Steve Gorman

LOS ANGELES (Reuters) - Scientists have detected mercury contamination in every one of hundreds of fish sampled from 291 freshwater streams, according to a U.S. government study released on Wednesday.

More than a quarter of those fish contained concentrations of mercury exceeding levels set by the Environmental Protection Agency for the protection of people who eat average amounts of fish, the U.S. Geological Survey report said.

More than two-thirds exceeded the EPA-set level of concern for fish-eating mammals.

"This study shows just how widespread mercury pollution has become in our air, watersheds, and many of our fish in freshwater streams," Interior Secretary Ken Salazar said in a statement. The USGS is part of the Interior Department.

The neurotoxin enters the environment chiefly as an air pollutant spewed into the atmosphere by industrial emissions, then falls back to the surface in precipitation and particulate matter carried over long distances.

The main source of atmospheric mercury, according to the EPA, is coal-fired power plants.

Conducted from 1998 through 2005, the USGS study is the first comprehensive survey of mercury contamination in the water, sediments and fish of rivers and creeks throughout the United States.

Most previous studies have focused on lakes, reservoirs and wetlands. Mercury contamination in ocean species such as tuna has also received widespread attention.

"BLACKWATER STREAMS"

Some of the highest levels of mercury in the latest study were found in the coastal "blackwater" streams of North and South Carolina, Georgia, Florida and Louisiana -- relatively undeveloped areas marked by abundant pine forests and wooded wetlands.

USGS hydrologist Barbara Scudder said those characteristics somehow enhance the conversion of mercury from its inorganic form in the atmosphere to a more toxic organic form, methylmercury, which accounts for at least 95 percent of the mercury found in fish.

"Just as there are members of the human population, such as children and developing babies, that are sensitive to the mercury that they get, there are some ecosystems that are also more susceptible to producing methylmercury," she said.

High concentrations also were found in some streams in the West fed by areas where mining had taken place, Scudder said.

As with many pollutants, mercury concentrates as it moves up the food chain, from algae, to insects to small fish and larger predators. The main source of mercury poisoning in humans is from eating fish and shellfish.

Scudder said researchers typically sampled about five fish from each of the 291 streams surveyed. They focused on bigger species such as largemouth bass because they are at the top of the in-stream food chain.

She suggested that people concerned about mercury contamination in stream-caught fish should eat more of the smaller pan species, such as perch, bluegill or crappie.

The EPA said this year that it intends to issue new rules under the Clean Air Act to control air emissions of mercury from coal-fired power plants.

(Editing by Xavier Briand)

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