



Illinois Methylmercury Advisories

A statewide methylmercury advisory is in place for all Illinois lakes, ponds, rivers, and streams. The one meal per week advisory applies to predatory fish and is in place to protect children. Water bodies with greater contamination are given site-specific advisories which are more restrictive and include protections for adults. Site-specific advisories can be found on the Illinois Department of Public Health's current fish advisory map.

WHY HAS ILLINOIS ISSUED A STATEWIDE METHYLMERCURY ADVISORY?

The advisory has been issued because high levels of methylmercury are found in predatory fish throughout Illinois. The advisory includes all water bodies, including those not tested by the state.

TO WHOM DOES THE STATEWIDE METHYLMERCURY ADVISORY APPLY?

Predatory fish contain methylmercury at levels that may harm the development of embryos, fetuses, and children. These levels may not be harmful to adults, but those who are pregnant may pass methylmercury to their child during pregnancy or when nursing. Thus, the statewide advisory applies to those who are nursing, pregnant, or may become pregnant, and children less than 15 years of age.

WHY IS THE STATEWIDE METHYLMERCURY ADVISORY ONLY FOR PREDATORY FISH?

Low levels of methylmercury accumulate into small fish from their diet. Predatory fish that consume these smaller fish can accumulate much higher methylmercury levels over time. This is especially true for older and larger predatory fish. Predatory fish for Illinois include largemouth bass, smallmouth bass, spotted bass, striped bass, white bass, walleye, sauger, flathead catfish, gar, muskellunge, northern pike, all trout and salmon, and associated hybrids.

HOW DOES METHYLMERCURY GET INTO BODIES OF WATER IN ILLINOIS?

Mercury occurs naturally in rocks and soils but is primarily released into the environment through air pollution from mining, coal combustion, and the production of metals and cement. Mercury can travel thousands of miles in the air before settling into water bodies. Aquatic bacteria transform mercury into methylmercury, a form that accumulates in fish and is easily absorbed by humans when ingested.

WHY ARE SITE-SPECIFIC METHYLMERCURY ADVISORIES ISSUED?

Site-specific advisories are issued when methylmercury levels in fish are known to exceed the statewide advisory level. Higher methylmercury levels require more restrictive advisories to protect children and adults. Site-specific advisories often include advisories for non-predatory fish such as bluegill and crappie.

WHY DO SOME ILLINOIS WATER BODIES HAVE FISH WITH HIGHER METHYLMERCURY LEVELS?

The amount of methylmercury in fish depends on the amount of mercury in a water body and the chemical and physical attributes of the water body that promote methylmercury production. Some regions of Illinois tend to have fish with greater methylmercury contamination, though it is unclear why.

WHAT ARE THE POTENTIAL HEALTH EFFECTS FOR PEOPLE WHO EAT FISH CONTAMINATED WITH METHYLMERCURY?

Methylmercury can damage the developing nervous systems of fetuses and children, resulting in lower IQ, slowed motor function, and incoordination. At higher exposures methylmercury can affect adults, resulting in memory loss, slurred speech, and poor muscle control. The potential for health effects is dependent on the methylmercury content in fish, how often the fish are eaten, and over what period of time.

IS METHYLMERCURY STORED IN THE HUMAN BODY FOR LONG PERIODS OF TIME?

Once ingested, methylmercury is absorbed into the bloodstream where it is rapidly carried to other parts of the body. It takes about 50 days for half of the mercury that has entered the body to be removed. The remaining mercury is slowly removed from the body over several months, mainly in feces.

HOW CAN I REDUCE MY EXPOSURE TO METHYLMERCURY IN FISH?

Methylmercury builds up in the muscle of fish and cannot be reduced by trimming, skinning, or cooking your meal. You can reduce your mercury intake by avoiding large fish, choosing non-predatory fish, and following the statewide and site-specific methylmercury advisories.

DO FISH SOLD FROM GROCERY STORES CONTAIN METHYLMERCURY?

Yes. The U.S. Food and Drug Administration advises those who are nursing, pregnant, or may become pregnant and children less than 12 years of age not eat shark, swordfish, king mackerel, tilefish (Gulf of Mexico), orange roughy, marlin, and bigeye tuna due to high methylmercury levels. Other purchased fish, such as catfish, salmon, tilapia, and canned light tuna, contain lower levels of methylmercury.

SHOULD I BE CONCERNED ABOUT SWIMMING IN BODIES OF WATER DUE TO MERCURY CONTAMINATION?

No. Swimming poses a low risk of methylmercury exposure. Advisories are issued due to high levels of methylmercury in fish, not water. Methylmercury levels in water can be hundreds or thousands of times lower than the levels in fish tissue.

WHERE CAN I GET MORE INFORMATION?

Illinois Department of Public Health
Division of Environmental Health
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217-782-5830

TTY (hearing impaired use only) 800-547-0466

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