OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY



DEQ Fish Consumption Guidance for Mercury

Fish are an important part of a healthy diet. They provide high-quality protein, essential nutrients, and healthy fats that are essential to the development of healthy babies. Many people enjoy eating fish that are caught in Oklahoma lakes and streams; however, not all fish should be consumed in unlimited amounts by everyone. The Department of Environmental Quality (DEQ) is responsible for issuing fish consumption advisories in Oklahoma when contaminants, such as mercury, are high enough in the fish to cause health threats if the fish are consumed.

Mercury is found in the environment because of natural conditions and human activities. This is a concern because mercury can harm the developing nervous system of an unborn baby or young child. When exposed to the environment, mercury goes through a series of complex changes. When these changes occur in lake and river sediments, some of the mercury can be converted to an organic form called methylmercury. Methylmercury enters the food chain and accumulates most readily in predator species of fish. It can then be passed to people who eat these fish.

Predator species of fish in Oklahoma include all species of black bass (largemouth, smallmouth, and spotted), striped bass, white bass, hybrid striped bass, walleye, saugeye, and flathead catfish. Fish commonly caught in Oklahoma that are likely to have lower levels of mercury are channel catfish and all species of sunfish.

Fish consumption advisories do not mean all fish are unsafe to eat. They provide guidelines for the public to make informed choices about their health and diet. EPA and the federal Food and Drug Administration encourage women of childbearing age, pregnant and breastfeeding women, and children under the age of 10 to eat 2-3 servings (8 ounces) of a variety of lower mercury fish per week: https://go.usa.gov/xQgFH.

DEQ has tested 94 public lakes in Oklahoma and has issued a series of lake and species-specific advisories for those lakes where mercury levels in fish are too high to eat the fish in unlimited amounts. You may find a list of lakes and advisories in DEQ's Mercury in Fish booklet at https://tinyurl.com/yc3xmd3v.

For those lakes, private ponds, and streams DEQ has not tested, pregnant or nursing women, women of childbearing age, and children younger than 15 years of age are advised to eat no more than one meal per week of predator fish. Since women beyond childbearing age and males older than 15 years of age are less at risk from the effects of mercury, these groups are recommended to eat a variety of fish, including predators, as part of a healthy diet. DEQ's recommendation is based on the evaluation of data concerning mercury in fish and applies it to fish caught in waters statewide.

For more information, contact the DEQ State Environmental Laboratory at (405) 702-1000 or by email at selsd@deq.ok.gov.

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