



FAQ's Associated with the Ellison Creek Reservoir Fish Consumption Advisory

*Prepared by the Seafood and Aquatic Life Group
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Q: What recommendation has the Texas Department of State Health Services (DSHS) made to protect human health?

A: DSHS recommends no consumption of any species of fish from Ellison Creek Reservoir. This pertains to adults, women of childbearing age, pregnant women, young children, the elderly, and the infirm.

Q: What are the chemical contaminants of concern in Ellison Creek Reservoir?

A: Polychlorinated Biphenyls (PCBs).

Q: What are polychlorinated biphenyls (PCBs)?

A: PCBs are synthetic (man-made) mixtures of up to 209 individual chlorinated compounds (known as congeners). Many commercial PCB mixtures in the U.S. are known by the trade name Aroclor. PCBs are oily liquids or solids that are colorless to yellow. PCBs may also exist as a vapor in air. PCBs were once used commercially as coolants and lubricants in electrical transformers and capacitors, heavy-duty electrical equipment in power plants, industries, and large buildings across the country and other electrical equipment, carbonless copy papers, sealing and caulking compounds, paint additives, cutting oils, ballasts of fluorescent light fixtures, and hydraulic fluids. PCBs were valued for chemical stability and fire resistance.

Q: How do PCBs enter the environment?

A: In 1979, The United States Environmental Protection Agency (USEPA) banned the manufacture of PCBs in the United States. However, the USEPA did not require removal of PCB-containing materials still in service at the time of the ban. Therefore, some materials remain in use today. The major source of environmental PCBs in the United States today is from ongoing use, storage, and disposal of products in landfills or improper disposal of products that contain PCBs. PCBs also may be released from sediments disturbed by flooding, dredging, and other activities.

Q: How do PCBs accumulate in fish?

A: PCBs have been found in soil, ground and surface water, air, sediment, plants, and animals in all regions of the world. PCBs break down very slowly in the environment and accumulate in fatty tissue, skin, and internal organs of fish and other animals. Levels of PCBs in fish may be 2,000 to 1,000,000 times greater than levels in the surrounding water. The amount of PCBs found in fish varies with species, age, size, fat content, diet, and surface water concentrations. Larger, older fish will generally contain higher levels of PCBs than smaller, younger fish; fatty fish such as carp, buffalo, gar, and catfish may contain higher levels of PCBs than lean fish such as largemouth bass, walleye, and crappie.

Q: How can PCBs affect my health?

A: Eating fish that contain PCBs may cause infants of women who have eaten many contaminated fish to have lower birth weights, delayed physical development, and learning difficulties. PCBs may affect the immune system, reproductive organs, skin, stomach, thyroid, kidney, and liver and may increase the risk of cancer.

Q: What is the source of PCBs in Ellison Creek Reservoir?

A: The source is unknown at this time.

Q: I have been eating these fish all my life. Will I have adverse health effects?

A: The consumption limits recommended by the Texas Department of State Health Services (DSHS) have allowed a margin of safety below those levels that could result in adverse health effects; however, eating more than the recommended amount of fish from Ellison Creek Reservoir does not necessarily mean that a person will have observable adverse health effects.

Q: Should I stop eating fish?

A: No. Fish are an important source of protein in the diet. The Texas Department of State Health Services (DSHS) recommends that you follow general consumption guidelines and/or fish consumption advisories or bans issued for specific water bodies provided in the *DSHS Fish Consumption Advisories and Bans* booklet (copies of this booklet may be obtained by calling the DSHS Seafood and Aquatic Life Group (512)-834-6757 or via the internet <http://www.dshs.state.tx.us/seafood/survey.shtm#advisory>). Fish consumption advisory information is also published in the *Texas Parks and Wildlife Outdoor Annual Hunting and Fishing Regulations* booklet. This booklet is provided to all licensed anglers in Texas.

Q: Will cooking or cleaning fish a certain way reduce the polychlorinated biphenyl (PCB), dioxin, and organochlorine pesticide level?

A: Yes. These chemical contaminants readily accumulate in the fatty tissues of fish. To reduce exposure to these chemicals, the skin, dark (reddish-color) muscle tissue, and fatty portions (i.e. belly fat, side fat, and fat along the top of the back) of the fish should be removed before cooking. The Texas Department of State Health Services (DSHS) recommends baking or broiling skinned, trimmed fish on a rack or grill to allow fat to drip away from the fillet. If fish are fried, the frying oil should not be reused. These cooking methods will reduce exposure to many of the most common organic chemical contaminants in fish.

Q: Should I stop fishing?

A: No. Recreational fishing does not need to stop. Catching and releasing fish or consuming fish in amounts below those recommended by the Texas Department of State Health Services (DSHS) poses no significant health risk.

Q: Will the Texas Department of State Health Services (DSHS) conduct additional monitoring?

A: A cooperative effort between DSHS and TPWD for conducting collection of crappie from Ellison Creek Reservoir took place in November 2006. Results from this event will be analyzed by DSHS contracted laboratory and a risk characterization will be conducted to further evaluate this species. As additional funding becomes available DSHS along with other state agencies will prioritize any further studies conducted on Ellison Creek Reservoir.

Q: Should I be concerned about PCBs while conducting contact recreation activities like boating or swimming?

A: There is not a concern for PCBs while swimming or other contact recreational activities. Levels in the water are low. The concern is for consumption of fish that concentrate the PCBs in their tissue.

Q: Is our drinking water safe?

A: PCBs in fish do not indicate a concern in drinking water. Drinking water sampling and determinations of quality of drinking water are made by the Texas Commission on Environmental Quality. Further information on the safety of particular bodies of water can be addressed to that agency.