# Why is there a fish advisory for the Spokane River?

The Spokane Regional Health District issued notices in 1994 and 1995 advising people who fish that polychlorinated biphenyls (PCBs) concentrations in Spokane River fish were of concern. Since that time, additional water quality studies have been conducted.

In 2005 the Washington State Department of Ecology completed a water quality study for the Spokane River that looked at PCBs, polybrominated diphenyl ethers (PBDEs), and selected metals in Spokane River fish (rainbow trout, mountain whitefish, brown trout, smallmouth bass, large scale sucker, and bridgelip sucker).

Results showed high levels of PCBs and PBDEs in fish tissue from Nine Mile Dam to Upriver Dam. Because of the results from this most recent evaluation, the Washington State Department of Health updated the existing fish advisory.

#### Who is affected by this advisory?

The general public is affected by this advisory, especially women who are or might become pregnant, nursing mothers, and young children. Women of child-bearing age accumulate PCBs and PBDEs in their diet and can pass it on to their unborn child.

Infants and young children are most sensitive to PCB and PBDE exposure while their brains are still developing. Children can be exposed by eating foods contaminated with PCBs and PBDEs. While breast milk can contain contaminants, the benefits of breastfeeding outweigh the risks, the Department of Health recommends that breastfeeding continues.

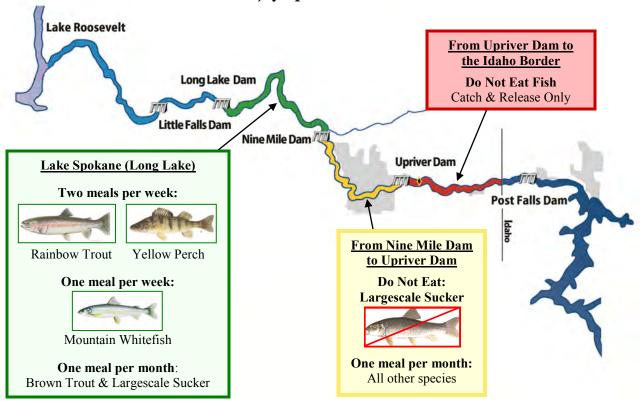
#### Which fish can I eat & how much?



Follow the advice provided in the **Safe Fish Eating Guide.** Choose fish low in contaminants and prepare fish properly to reduce your exposure to contaminants.

### Safe Fish Eating Guide

Follow These Guidelines to Enjoy Spokane River Fish & Protect Your Health



#### Health Benefits of Fish

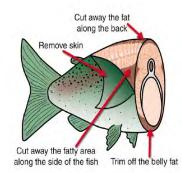
Continue to eat fish to gain the health benefits, but choose fish wisely to protect yourself and your family from contaminants in fish.

- Fish is healthy heart and brain food.
- Fish is high in protein, nutritious, and low in fat.
- Fish is full of omega-3 fatty acids which are important during pregnancy for the healthy development of your child's brain, retina, and nerve tissue.

To learn about making smart fish choices at the grocery store, contact the Department of Health to receive a Healthy Fish Guide. Call 1-877-485-7316 or visit www.doh.wa.gov/fish

# How to Clean & Cook Fish to Reduce Contaminants

Prepare fish the following way to reduce PCBs and other contaminants that collect in the fatty parts of fish:



- ✓ Remove the skin, fat, and internal organs.
- ✓ Cook fish on a rack so that the fat drips off while cooking.
- ✓ Do not eat the juices, bones, organs, fat, skin, head, or guts.
- ✓ Eat younger, smaller fish.

#### What are PCBs & PBDEs?

**PCBs-** Banned since 1977, PCBs had numerous applications including use in electrical transformers, plasticizers, paint additives, adhesives, inks and carbonless paper, lubricants, and as heat transfer and hydraulic fluids. PCBs are persistent and studies have shown they can harm human health and the environment.

**PBDEs-** PBDEs are flame retardant chemicals added to products with plastics and fabrics (such as computers and household furniture) so they won't catch on fire or burn easily. PBDEs are similar to PCBs in their chemical structure and may have the ability to harm human health and the environment.

### How do PCBs & PBDEs get into fish?

The possible sources of PCBs and PBDEs in the Spokane River are from municipal, storm water, and industrial discharges. Over time they collect in sediments and move into the aquatic food chain from the smallest life forms into predatory fish. These contaminants can then accumulate in humans who eat fish and other foods that contain PCBs and PBDEs.

#### How do PCBs & PBDEs affect health?

**PCBs**- Children exposed to PCBs in the womb may have learning and behavioral problems later in life. PCBs can also impact the immune system. The U.S. Environmental Protection Agency has classified PCBs as probable human carcinogens.

**PBDEs-** In animal studies, PBDE exposure before and after birth caused problems with brain development which may cause problems with learning, memory, and behavior. Exposure may also decrease thyroid hormone levels and affect reproduction.

#### **Washington State Mercury Advisory**

Women who are or might become pregnant, nursing mothers, and young children should limit these fish species due to high mercury levels.

#### Recreational Fish:

- Northern Pikeminnow Do Not Eat
- Largemouth and Smallmouth Bass **Two** meals per month

#### Store-Bought Fish:

- **Do Not Eat** Shark, swordfish, tilefish, king mackerel, or tuna steaks
- Good choices that are low in mercury: Cod, flounder, salmon, trout, and light canned tuna. Light canned tuna has 3 times less mercury than canned white (albacore) tuna.

Health Effects From Exposure to Mercury Mercury can cause problems with the nervous system that can lead to learning difficulties in children. Other effects include tingling in the hands and feet, lack of coordination, and brain and kidney damage.

#### For More Information:

#### **Spokane River Fish Advisory**

Spokane Regional Health District Mike LaScuola Ph: 1-509-324-1574 www.srhd.org

### Fish Advisories in Washington State

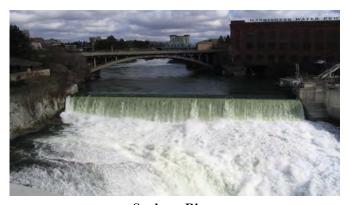
Washington State Department of Health Toll-Free 1-877-485-7316 www.doh.wa.gov/fish

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This document is available in other formats for persons with disabilities, please call 1-800-525-0127 (TDD/TTY call 711).

## Spokane River Safe Fish Eating Guide

Eat Fish, Be Smart, Choose Wisely



**Spokane River** 



Largescale sucker





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