

# Lake Chelan Fish Advisory Fact Sheet

DOH 334-082 June 2010

# Why is there a fish consumption advisory for Lake Chelan?

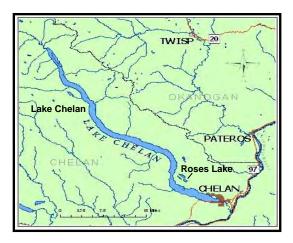
In 2005 the Washington State Department of Ecology (Ecology) completed a water quality study for Lake Chelan and Roses Lake. This study looked at DDT and PCB levels in lake trout (mackinaw), burbot, kokanee, rainbow trout, and black crappie. Results from this study showed high levels of DDT in lake trout. The Washington State Department of Health (DOH) evaluated these results and has issued a fish consumption advisory for lake trout in Lake Chelan.

#### DOH recommends that the general public especially women who are or might become pregnant, nursing mothers, and young children should limit lake trout to one meal per week.

**Statewide Mercury Advisory -** There is an existing statewide fish consumption advisory for certain species of fish due to high levels of mercury for all lakes and rivers in Washington, including Lake Chelan. Women who are pregnant or might become pregnant, nursing mothers, and young children should not eat northern pikeminnow and limit largemouth and smallmouth bass to two meals per month.

## Where is Lake Chelan?

Lake Chelan is located in Chelan-Douglas county in central Washington. Lake Chelan is used by the public for fishing, swimming, and boating.



# Which fish can I eat from Lake Chelan?

You can still catch and eat fish from Lake Chelan where fishing is allowed. Follow these consumption recommendations to reduce your exposure to contaminants:

## Fish With No Limits - Enjoy!

### Burbot, Kokanee, & Rainbow Trout:

These fish are good choices because they are low in contaminants.

## **Fish to Limit**

## Lake Trout (Mackinaw):

One meal per week due to DDT. No other fish meals should be eaten that week.

## **Statewide Mercury Advisory**

Women who are or might become pregnant, nursing mothers, and young children:

## Largemouth & Smallmouth Bass:

Limit bass to 2 meals per month due to mercury.

## Northern Pikeminnow:

Do not eat.

# What is DDT?

DDT use is banned today, but once was widely used as an insecticide to control pests on crops and forest lands, around homes and gardens, and for industrial and commercial purposes. DDT is slow to breakdown and stays in the environment for a long time. DDT was banned in 1972 because it posed unacceptable risks to the environment and potential harm to human health.

# How does DDT get into fish?

In Lake Chelan and other surface water, DDT binds to particles in the water and settles into the sediment at the bottom of lakes and rivers. Fish absorb DDT from contaminated sediment floating in the water and from eating other fish containing this chemical. DDT accumulates in the fatty parts of fish.

## How does mercury get into fish?

Mercury levels found in waterbodies are due to natural, and human activities. Products containing mercury that are improperly disposed of can contaminant sediments, soil, water, and air. Once in water, mercury can be transformed into methylmercury by bacteria. Mercury accumulates in the environment, moving up the food chain from the smallest life forms into predatory fish. It then gets into humans when they eat fish containing mercury.

# How does DDT & mercury exposure affect health?

**DDT** — The most sensitive health effect associated with DDT exposure is liver damage. Additional health effects that have been associated with DDT exposure are impacts to the central nervous system, immune system, and neurodevelopment. Fish consumption limits protect the public from the most sensitive health effect, which assures that the public is protected against additional health impacts.

**Mercury** — The primary concern is the developmental effects on the unborn fetus or young child. Mercury has been linked to adverse effects on the nervous system, which may result in learning deficits or learning difficulties later in life.

# How Can I reduce my exposure to DDT and other contaminants?

**Choose fish low in contaminants** and **prepare fish properly** to reduce your exposure to contaminants, while continuing to gain the health benefits in fish. By preparing fish the following way, you can reduce your exposure to DDT and other contaminants that collect in the fatty parts of fish by up to 50%:

- Remove the fat before cooking.
- Do not eat the fish skin.
- Grill, broil, or bake the fish.
- Let all the fat drip off during cooking.
- Do not use the fat in gravies or sauces.

Mercury is stored in the fillet of the fish and will not be reduced by preparing fish this way.

# Should I keep eating fish?

Yes! Fish is healthy heart and brain food for you and your children. The American Heart Association recommends eating 2 meals with fish per week. For information about fish choices that are low in contaminants visit www.doh.wa.gov/fish.

## Health Benefits Gained From Eating Fish

- Fish is a low fat food and a great source of protein, vitamins, and minerals.
- Fish is an excellent source of omega 3 fatty acids which are not found naturally in our bodies.
- Omegas 3's are essential during pregnancy for the healthy development of your child's brain, retina, and nerve tissue.
- Omega 3's help prevent heart disease by reducing blood pressure, inflammation, and blood clotting, which can prevent stroke.
- A diet that includes fish can help lower your risk for heart disease.

# **More Informations**

## Questions about Lake Trout in Lake Chelan

Chelan-Douglas Health District 509-886-6450

### **Questions about Fish Advisories** Department of Health 1-877-485-7316

www.doh.wa.gov/fish

## Questions about Lake Chelan Water Quality

Department of Ecology 360-407-6000 www.ecy.wa.gov/programs/wq/tmdl

