Fish Consumption Rates

Since toxic chemicals are found in fish and shellfish, our state is continuing to work on this problem by developing a more accurate view of how much fish and shellfish Washington residents eat.

How are fish consumption rates used?

Washington uses fish consumption rates as a basis for environmental cleanup and pollution control. Currently two rates – 6.5 grams per day (in water quality standards) and 54 grams per day (in the Model Toxics Control Act regulation) – provide default values used in setting regulatory standards. These rates date from the 1980s and 1990s and do not reflect what we now know about how much fish people in Washington eat.

Ecology is reviewing these default rates. Currently the risks associated with eating contaminated fish and shellfish are based on outdated information about the general population and recreational anglers.

Recent dietary intake surveys indicate that Washington residents likely consume fish and shellfish at rates higher than the rates currently used in these two regulations.

Why is Ecology revising default fish consumption rates?

Eating contaminated food is a primary exposure pathway to toxics in the environment. New scientific and regulatory developments over the past 20 years mean updates are needed.

Ecology evaluated survey information about Pacific Northwest fish and shellfish consumption. The goal of this work is to update the default fish consumption rates to better reflect the habits and patterns of Washington fish consumers.

What exactly is Ecology doing?

Ecology is reviewing two rules affected by fish consumption rates.

- The Toxics Cleanup Program is updating the Sediment Management Standards to address bioaccumulative chemicals that are a risk to human health.
- The Water Quality Program will look at the Surface Water Quality Standards in two phases: addressing implementation tools first and updating human health criteria at a later date.

Updates are being developed to better reflect what we know about fish and shellfish consumption in Washington.

WHY IT MATTERS

Ecology is addressing toxic pollution by focusing on five areas:

- Cleanup and restoration of toxic waste sites
- Preventing toxic chemicals from getting into the environment
- Monitoring and understanding toxic loading in waters of the state
- Urging reform of the national toxics policy by updating the Toxic Substances Control Act
- Updating the state's default fish consumption rates used in our Sediment Management Standards and Water Quality Standards.

www.ecy.wa.gov/toxics

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For more about fish consumption rates please visit our web site
www.ecy.wa.gov/toxics/fish.html

Please send comments on fish consumption rates to:
fishconsumption@ecy.wa.gov

Special accommodations

If you need this document in a format for the visually impaired, please call the Toxics Cleanup Program at (360) 407-7170. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

How is Ecology going about developing updated default fish consumption rates?

In a preliminary analysis Ecology reviewed and considered:

- Recent data on fish and shellfish consumption rates for different population groups.
- Approaches used by Oregon, EPA, and other Washington state agencies.
- Uncertainty and variability in fish and shellfish consumption rates for different population groups and individuals within those groups.
- Current and potential future exposures resulting from fish and shellfish consumption.
- State laws and policies, including MTCA and the Water Pollution Control Act.
- Widespread tribal and recreational fishing in virtually all of Washington waters.

This analysis is available in an Ecology publication titled *Fish Consumption Rates Technical Support Document, A Review of Data and Information about Fish Consumption in Washington, Version 1.0.*

Has Ecology reached any conclusions?

Not yet. The preliminary analysis shows that data about fish consumption in the Pacific Northwest supports the use of default fish consumption rates between approximately 150 and 275 grams per day.

Establishing this range as appropriate for setting regulatory default fish consumption rates is a risk management decision. In developing this range Ecology considered both state and federal guidelines, policies, and procedures. The range reflects the 80th to 95th percentiles of a combined exposure distribution based on:

1. *A Fish Consumption Survey of the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin* (Columbia River Inter-Tribal Fish Commission, 1994).
2. *A Fish Consumption Survey of the Tulalip and Squaxin Island Tribes of the Puget Sound Region* (Toy et al., 1996).
3. *Fish Consumption Survey of the Suquamish Indian Tribe of the Port Madison Indian Reservations, Puget Sound Region* (Suquamish Tribe, 2000).
4. *Asian and Pacific Islander Seafood Consumption Study* (Sechena et al., 1999).

In addition, Ecology reviewed national data on fish consumption in the general population. Ecology believes that a default fish consumption rate (or rates) should be protective of all people in Washington who eat fish, including those who eat a lot of fish, such as Native Americans, Asian and Pacific Islanders, and recreational fishers.

What about fish that spend much of their lives outside of Washington waters?

There are a number of questions that Ecology continues to struggle with, especially:

- How should the default rates take into account the consumption of fish species like salmon that spend much of their life outside of Washington waters?
- How should the complex life cycle and biology of the different salmon species be considered when making regulatory decisions?

What is the focus of the technical support document?

Ecology evaluated information about Pacific Northwest fish and shellfish resources and consumers. The *Fish Consumption Rates Technical Support Document* includes information on:

- Resources and fish-consuming populations in Washington
- Methods used in assessing fish consumption rate information and survey data applicable to Washington fish consumers
- The regulatory context for using fish consumption rates
- Salmon life cycles and survival strategies
- Information about developing site-specific fish consumption rates
- Statistical evaluations used to derive the proposed fish consumption rate range

This publication and other information is available at www.ecy.wa.gov/toxics/fish.html

How can I get involved?

Ecology considers this conversation as one contribution to the public and tribal dialogue on toxics reduction. We are accepting comments on the *Fish Consumption Rates Technical Support Document* until December 30, 2011. Send comments to fishconsumption@ecy.wa.gov