

# Portland Harbor Superfund Site

## Health Assessment findings

This fact sheet contains information about:

- The Portland Harbor health assessment findings
- Health risk of eating Portland Harbor fish
- Selecting less contaminated fish from Portland Harbor
- Recommendations for sensitive populations
- How to reduce PCBs in fish
- SHINE's action plan at Portland Harbor

### Health Assessment completed

SHINE has finished a second public health assessment to determine the risk of eating fish from the Portland Harbor. SHINE worked with agencies and the Lower Willamette Group to collect fish tissue samples to determine which contaminants were present and at what levels. Based on the results of these tests, SHINE has concluded that frequent consumption of resident fish, such as carp, bass, and bullhead, from the Portland Harbor could result in health problems. This fact sheet explains the results of the public health assessment in further detail.



### Site background

The Portland Harbor Superfund site is a six-mile stretch of the Willamette River (see map on p. 4) starting from the southern tip of Sauvie

Island [river mile 3.5] to Swan Island [river mile 9.2]. The site is heavily industrialized and considerable amounts of chemicals have been released into the river over many years.

### Contaminants of concern

The primary contaminants of concern in Portland Harbor fish are polychlorinated biphenyls (PCBs). PCBs are known to cause developmental problems in infants and children. Other contaminants found in Portland Harbor fish include dioxins and furans, persistent pesticides like DDT, arsenic, and methylmercury.

### Community concerns

SHINE gathered information about health concerns from community members at public events and meetings. Frequent concerns expressed were:

- Safety of eating fish from the river.
- Current and future health effects of fish consumption.
- Safety of recreational use or other uses of the site.
- Need for signs warning the community which areas and activities are unsafe.
- How to obtain correct health information.

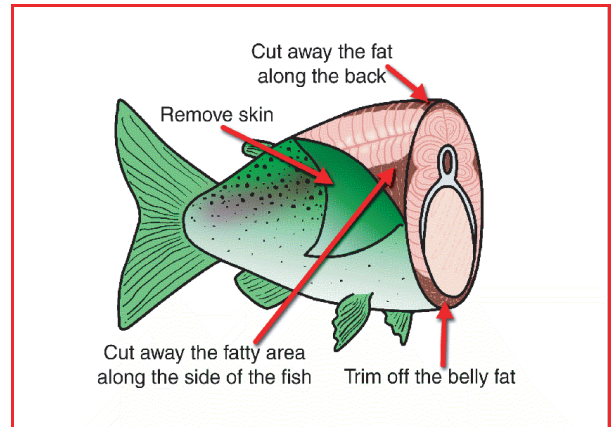
### Conclusions

- People are advised to avoid eating resident fish caught in Portland Harbor, such as carp, bass, and bullhead catfish, because it could lead to health problems.
- The primary pollutants of concern are polychlorinated biphenyls (PCBs), which are most harmful to the developing fetus and infants.
- Eating migratory fish, such as salmon, from Portland Harbor is not likely to result in adverse effects.

# Portland Harbor Fish Advisory

Based on the conclusions of the health assessment, **SHINE** recommends that people limit their consumption of resident fish from the Portland Harbor.

1. Avoid eating resident fish (see below) from the Portland Harbor if you are:
  - Pregnant, thinking of getting pregnant,
  - Nursing an infant,
  - A woman of childbearing age,
  - A child,
  - A person with a weak immune system, thyroid or liver problems.
2. Healthy adult men and women beyond childbearing age may consume one 8-ounce meal of resident fish per month. (An 8-ounce serving is about the size of two decks of cards).
3. Fish collected from Portland Harbor should be properly prepared and cooked to reduce your exposure to pollutants.
  - Remove and discard the skin, fat, head, eyes, eggs and organs.
  - Cook fish by methods that allow the fats to drip off, such as grilling, baking or smoking.



**Resident fish in Portland Harbor are more contaminated than other fish.**

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**Carp**



**Bass**



**Catfish**

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**No limits have been placed on eating migratory fish like salmon or steelhead. Research has shown that eating fish has numerous health benefits. It is recommended that people eat a balanced diet including seafood.**



**Salmon**



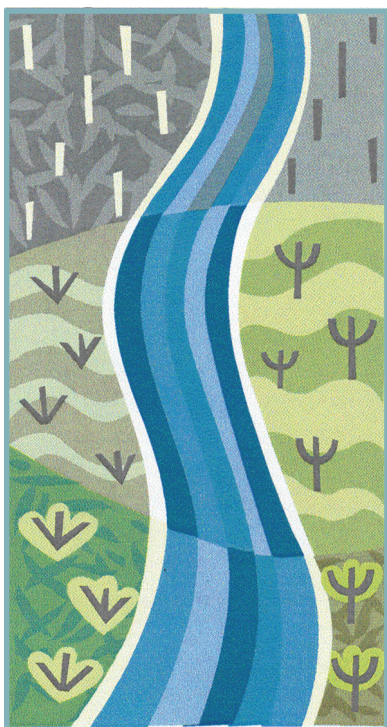
**Steelhead**

# SHINE's Action Plan for Portland Harbor

In addition to conducting public health assessments, SHINE creates a *Public Health Action Plan* to ensure that the public health assessment not only identifies public health hazards but also provides a plan of action to reduce and prevent health problems caused by exposure to hazardous substances.

## **SHINE's past actions:**

- Initiated an exposure investigation to look at the level of contaminants in three kinds of resident fish.
- Released a fish advisory based on results of the fish sampling.
- Carried out a needs assessment and created a public health education action plan to meet those needs.
- Developed community-based mini-grant opportunities for community organizations that serve hard-to-reach communities that catch and consume fish from Portland Harbor. SHINE worked with tribal, Chinese, Vietnamese, Pacific Islander and transient communities to develop their own materials and outreach activities.
- Worked with agencies, community members and other stakeholders to develop and post fish advisory signs for Portland Harbor.
- Developed and presented information about public health, fish and Portland Harbor to community organizations, tribes, agencies and other groups.



## **SHINE's current and future actions:**

- SHINE has awarded a mini-grant to IRCO, a community organization that provides services to the immigrant and refugee population, to conduct fish consumption education and outreach activities pertaining to Portland Harbor.
- SHINE will continue to work with other agencies and organizations to identify communities that catch and consume fish from the Portland Harbor, and to create and distribute targeted health education and materials.
- SHINE will conduct extensive outreach to communicate our health assessment findings and recommendations.
- SHINE will update the health education action plan on a regular basis to incorporate changes and identify new activities to accomplish outreach and education goals.

# Public Health's Involvement — at the Portland Harbor —

Oregon's SHINE Program, or Superfund Health Investigation and Education, within the Oregon Department of Human Services (DHS), was established in 2001 through a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR), a national public health service agency. The DHS SHINE Program works to assess and prevent human exposure to contamination at Oregon sites listed on the National Priority List (or Superfund sites) and at other hazardous waste sites that impact communities at the request of concerned individuals and organizations.

SHINE is involved in determining the adverse human health effects of exposure to contaminants in both in-water and upland portions of the Portland Harbor Superfund site and educating the community on how to reduce or prevent exposures to these contaminants.



Web site: [www.oregonhealth.org/superfund](http://www.oregonhealth.org/superfund)  
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