



Washington State's Fish Advisories and the Healthy Fish Guide

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WA Department of Health

Office of Environmental Health, Safety, and Toxicology

Fish Consumption Advisories Program

November 2, 2009



Overview

- Recreational and Commercial Fish Consumption Advisories Program.
- Research efforts which support the development of the Healthy Fish Guide.
- Healthy Fish Choices Grocery Store Pilot Project and Survey.



Fish Advisories Program

WADOH recommends that all Washingtonians eat fish two times per week as part of a healthy diet.

Eat Fish, Be Smart, Choose Wisely

We determine if fish from the waters of Washington state are safe to consume, and if the fish you buy are safe to eat.

Meal Limits

- How much fish you can safely eat per week or month.
- Recreational & commercial fish.

Checklist on how to Reduce Your Exposure to Contaminants

- Eat a variety of fish and eat smaller fish.
- Cleaning and cooking techniques to reduce toxins.

Health Benefits Statement

Why are we concerned?

- Eating fish is the main way that people in WA State are exposed to methylmercury and PCBs.
- Washington State data show that 5% of women still get too much methylmercury in their diet from eating fish.
- The 2004 Federal Mercury in Fish and Shellfish Advisory was shown to confuse people.

Recreational Fish Advisories

Sport- caught

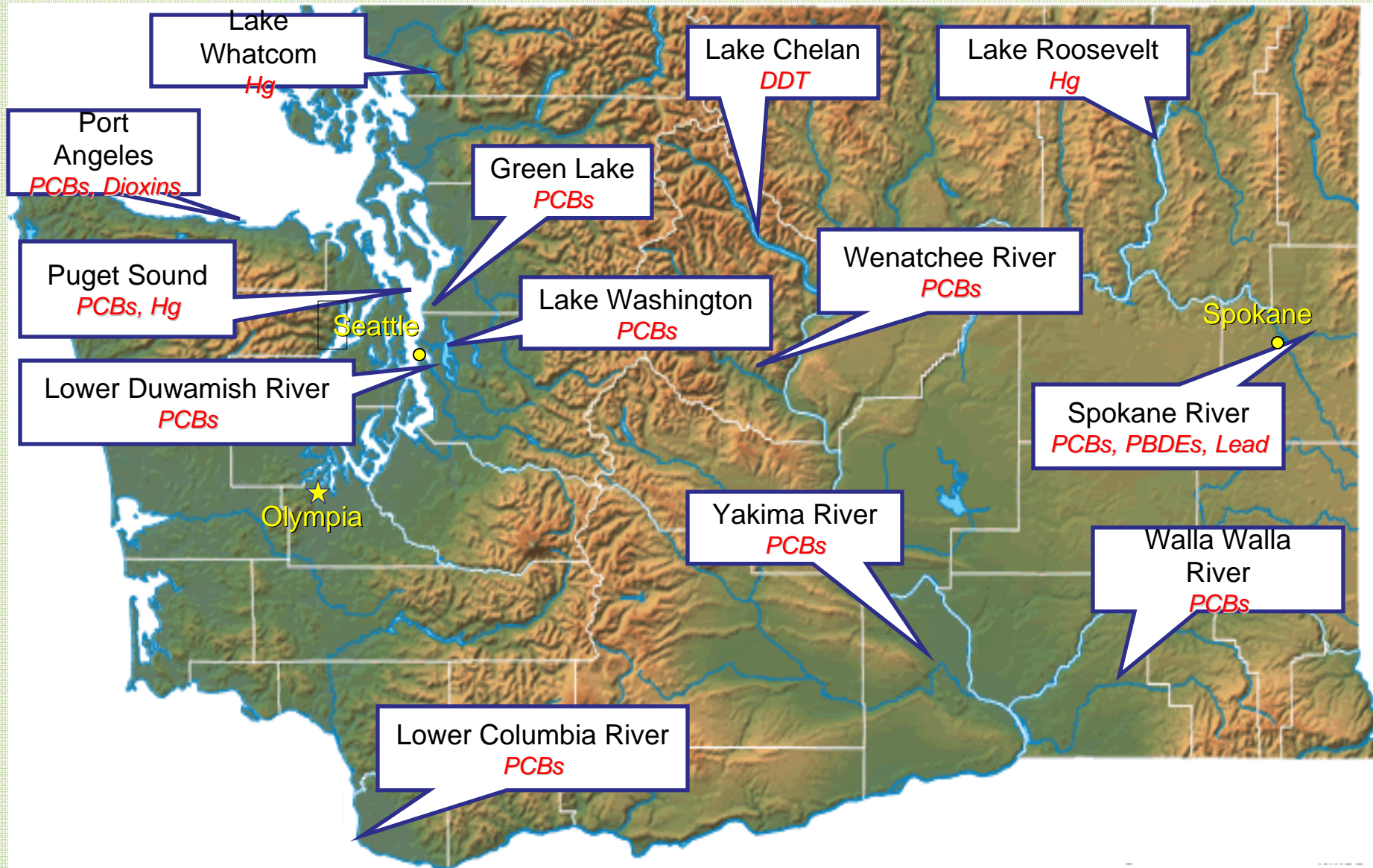
13 Advisories (includes Puget Sound)

- Waterbody specific
- Species specific

Statewide Fish Consumption Advisory for Mercury

- Recreational Species:
Northern pikeminnow – Do not eat (2009)
Smallmouth & largemouth bass- 2 meals per month (6/03)

Target population: women who are or may become pregnant, nursing mothers, and young children.



Statewide Mercury Advisory:
Northern Pikeminnow: DO NOT EAT
Largemouth and Smallmouth bass: 2 meals per month

Website

www.doh.wa.gov/fish



Fish Facts for Healthy Nutrition

You are here: [DOH Home](#) » [EH](#) » [OEHA](#) » Fish Facts for Healthy Nutrition

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Site Directory:

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Got a Minute?



Fish Facts Home

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Fish Facts for Healthy Nutrition



Eat Fish, Be Smart, Choose Wisely

Fish is brain and heart food - but trying to balance its health - boosting benefits with concerns about contaminant level can leave you floundering! Sad and true, contaminants are in most foods, but don't give up on fish, because fish are still an excellent health choice.

The American Heart Association recommends eating fish twice a week. **Why?** Because fish are a great source of protein, vitamins, and nutrients. Fish are loaded with omega-3 fatty acids, which provide protection from heart disease and are great brain food for you, your children and if you are pregnant, for your unborn child. It is important to continue to eat fish to gain the healthy heart and brain benefits. The key is to make smart choices and choose fish that are low in mercury, Polychlorinated Biphenyls (PCBs), and other contaminants.



[Advice for Women and Children Who Eat Fish](#)



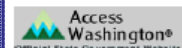
[Going Fishing? Local Fish Consumption Advisories](#)



[Health Benefits of Fish](#)



[Going Shellfishing? Shellfish Beach Closures](#)



[What is Washington Doing to Reduce Contaminants?](#)

[What You Can Do to Reduce Contaminants](#)

Get involved if you want to protect your health
Eat Fish, Be Smart, Choose Wisely

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Environmental Health Assessments
PO Box 47846

Signage

GREEN LAKE

ADVISORY

DO NOT EAT Carp more than once a month due to pollution.

В связи с загрязнением воды НЕЛЬЗЯ употреблять рыбу карпа чаще одного раза в месяц. ...
Неможливо їсти рибу од карпа віше ніж один раз на місяць. ...
중요한것은 물이 오염되어 있기 때문에 물고기인 잉어를 한 달에 한 번만 먹어야 합니다. ...
Dùng ăn cá chép quá một lần trong một tháng vì bị ô nhiễm. ...
由於河污染原因，每個月吃鯉魚不要超過一次。 ...
No coma carpas más de una vez por mes debido a contaminación. ...
汚染のため、コイは月に一回までしかたべない。 ...

EAT Rainbow Trout – It's good.

Наскільки гарне, байдуже чи радужної форелі – це смачно і полезно. ...
Jedite kalifornijsku pastirku - Ona je dobra. ...
გემოვნად რადუჟა (Rainbow Trout) - ზღაპრულია ...
우리가 좋아하는 먹이도 편입입니다. ...
An cá Rainbow Trout - Cá này tốt. ...
雨虹(Rainbow Trout) - 味は鲜美 ...
Como Trucha Arcoiris - es buena para la salud. ...
ニジマス (レインボウトラウト) を食べましょう。 - おいしいですよ！ ...

For more information, contact the Department of Health:
1-877-485-7316
[www.doh.wa.gov/fish](#)

Fact sheets

Healthy Fish Eating Guide for the Yakima River

Fish to limit from the City of Prosser to the mouth of the Yakima River:
Common Carp: 1 meal per week

No other fish should be eaten that week.
Don't eat fish to reduce exposure to contaminants.
* Health Concern: unclean fish

Fish that are safe and healthy to eat from the Yakima River:
2-3 meals per week
• Cutthroat trout
• Chinook
• Bitterling
• Longnose sucker

How to clean and cook fish to reduce your exposure to contaminants
Prepare fish the following way to reduce PCBs, DDT, and other contaminants that collect in the fatty parts of fish by up to 90 percent:

- Consume younger, smaller fish when legal limits.
- When cleaning fish remove the skin, fat, and internal organs before cooking. Do not eat for several days.
- Get, bake, or broil fish as hot as the fat drips off while cooking.

Minors to stored in the muscle fillet of fish and cannot be removed by cleaning fish.

Contact Information:
Yakima River Fish Consumption Advisory
Local Health Department

Yakima River Water Quality
Washington State Department of Ecology
Water Quality & Environmental Assessment Programs
Mark Peterschmidt
Ph: (509) 454-7841 email: mapet@ecy.wa.gov
www.ecy.wa.gov

Fish Advisories in Washington State
Washington State Department of Health
Fish Consumption Advisory Program
Toll Free: 1-877-485-7316
[www.doh.wa.gov/fish](#)

Statewide Mercury Advisory
Advice for women who are or might become pregnant, nursing mothers, or if you are feeding young children:
DO NOT EAT

Largemouth and Smallmouth Bass:
2 meals per month

Health Benefits of Fish
Eat fish to gain the health benefits, but choose fish wisely to protect you and your family from contaminants in fish.
• Fish is a vital part of a healthy diet. Fish is high in protein, low in fat, and full of nutrients.
• Fish is an excellent source of omega-3 fatty acids, which are not found naturally in our bodies.
• Fish is good for your heart. By eating fish you can prevent heart disease and stroke by reducing blood pressure, inflammation, and blood clotting.
• Omega-3 fatty acids are essential during pregnancy for the healthy development of a child's brain, retina, and nerve tissue.
The American Heart Association recommends eating fish at least 2 times per week.

This document is available in other formats for persons with disabilities.
TDD/VOIC: 1-800-551-4380
DOH Publication # 204-200

Yakima River Fact Sheet [www.doh.wa.gov/fish](#) Page 2

Publications

SPORT FISHING RULES 2008/2009 pamphlet edition

FISHING IN WASHINGTON

Effective from May 1, 2008, to April 30, 2009, both dates inclusive.

Paid Advertisement

Newborn Intensive Care

What Every Parent Needs to Know

by Tisham

Jeanette Zickler, RN, MN, NNP-BC
(Editor in Chief)

American Academy of Pediatrics

Commercial Fish Advisories

Strategy: Broaden Federal advice on store-bought fish.
Result the Healthy Fish Guide.

What we know:

- The public is confused about which fish are safe to eat.
- Fish are high in health benefits.

What we didn't know:

- How much fish and which fish species the public was eating.
- Where were they consuming fish from.
- What level of contaminants are in these fish.

Our goal: To encourage the public to eat at least two fish meals per week as part of the American Heart Association's recommendations.

DOH studies that supported our goal:

- Behavioral Risk Factors Surveillance System (BRFSS).
- Analysis of Chemical Contaminant Levels in Store-Bought Fish.
- Human Health Evaluation of Contaminants in Puget Sound Fish

Washington State

BRFSS Results (2002, 2004, 2005)

- Ongoing telephone survey (CDC).
- Collects information about health behaviors, attitudes, and knowledge.
- Added questions on fish consumption and advisory awareness.

Consumption	% who ate fish in past 30 days (all participants) (95% CI)		Mean times per month (consumers) (95% CI)
Any fish	88%		6.46
Store-bought fish Restaurant meals inc. N=6347	Types of fresh fish eaten from stores in past 30 days		4.56
Sport-caught fish N=6409		Salmon 44% Halibut 20% Cod 13% Tuna (fresh) 6% Sole 4% Catfish 3% Tilapia 3% Snapper 2%	2.88
Canned tuna			3.27
All 3 fish types			10.08

Analysis of Chemical Contaminant Levels in Store-Bought Fish from Washington State

Dave McBride, MS Jim VanDerslice, PhD

Denise Laflamme, MS, MPH

Asnake Hailu, Dr PH Liz Carr, MS

Objective: To characterize levels of mercury and PCBs in canned tuna and fresh fish sold in grocery stores.

- Species chosen based on frequency of consumption and expected contaminant levels.
- Fish Tested: Catfish, cod, flounder, halibut, red snapper, pollack, salmon, tuna (canned light/white).
- Expanded analysis to PBDEs.

Conclusions

- Mercury was most frequently detected
 - 7 out of 9 species had det. freq. > 90%
 - Canned white tuna had highest mean (357 ppb)
 - Hg levels resulted in more restrictive meal recommendations in 6 out of 9 species
- PCBs – only halibut, red snapper, & salmon had det. freq. >10%
 - Salmon had highest mean (32 ppb)
 - PCB levels more restrictive in catfish and salmon
- Levels of PBDEs measured in fish sold in Washington State grocery stores are similar to levels previously reported
 - BDE-47 most frequently detected in fish

Where to from here?

DOH research determined fish preferences, consumption frequency, contaminant levels in WA fish, and where people are getting their fish.

Outcome:

Point of Purchase Strategy

- Healthy Fish Guide
- Healthy Fish Choices Grocery Store Pilot Project
- Survey of the Pilot Project

Healthy Fish Choices Grocery Store Pilot

- Partnered with Thurston County Health.
Displayed in 3 stores and 2 co-ops.
- Social Marketing approach- worked with store managers.
- Identified the benefits and barriers.
- Unexpected outcomes:
 - Stores wanted to provide this info.
 - They were aware of California Prop 65 and wanted this to be a voluntary effort.
 - Stores wanted sustainable fish choices included:
(Seafood Watch, Environmental Defense, and NOAA Fish Watch).

Eat Fish.

Be Smart. Choose Wisely.

Seafood is good for your heart and brain. It is low in fat, high in protein, and rich in nutrients and omega-3s. This guide will help you gain these health benefits while protecting you from contaminants found in fish.



Look for this symbol.

FOLD HERE

Do you fish in Washington State? There is a statewide advisory due to mercury. Do not eat northern pikeminnow. Limit largemouth and smallmouth bass to two meals per month. Check for local fish advisories at: www.doh.wa.gov/fish



For more information visit: www.doh.wa.gov/fish

or call TOLL FREE: 1-877-485-7316
TDD LINE: 1-800-833-6388

Fish not listed? Call DOH: 1-877-485-7316

Concerned about toxics in the environment? Visit: www.ecy.wa.gov/toxics

FOLD HERE

Fishing for the safest seafood?



Look for this symbol.

Are you pregnant, planning to become pregnant, nursing or feeding young children, or concerned about toxics in fish? Use this guide to help you make

SAFE TO EAT
2-3 MEALS
PER WEEK



OR

SAFE TO EAT
1 MEAL
PER WEEK



Follow this advice to reduce your exposure to mercury, PCBs, and other toxics:

♥ Anchovies

Butterfish

Catfish

Clams

Cod (Pacific) (Atlantic)

Crab (Blue, King, Snow)
(US, CAN) (imported King)

Crab – Imitation

Crayfish (imported farmed)

Flounder/Sole
(Pacific) (Atlantic)

♥ Herring

♥ Mackerel (canned)

♥ Oysters

Pollock/Fish sticks

♥ Salmon (fresh, canned)

♥ Chinook (King)
(coastal, AK)

♥ Chum (Keta)

♥ Coho (Silver)

♥ Farmed *

♥ Pink (Humpy)

♥ Sockeye (Red)

♥ Sardines

Scallops

Shrimp/Prawns
(US, CAN) (imported)

Squid/Calamari

Tilapia (US, Central/South
America) (China, Taiwan)

♥ Trout

Tuna (canned light)

♥ Black sea bass

Chilean sea bass

♥ Chinook salmon
(Puget Sound)

Croaker (white, Pacific)

Halibut (Pacific) (Atlantic)

Lobster (US, CAN)
(imported Spiny Caribbean)

Mahi mahi

(imported longline)

Monkfish

Rockfish/Red snapper
(trawl-caught)

♥ Sablefish/Black cod

♥ Tuna, Albacore
(fresh, canned white)
(WA, OR, CA troll/pole)
(longline – except Hawaii)



A seafood serving or "meal" is about the size and thickness of your hand, or 1 oz. for every 20 lbs. of body weight.

160 lb. Adult = 8 oz. / 80 lb. Child = 4 oz.

AVOID
DUE TO MERCURY



Women who are or may become **PREGNANT, NURSING MOTHERS, and CHILDREN** should **NOT** eat:

Mackerel (King)

Marlin (imported)

Shark

Swordfish (imported)

Tilefish (Gulf of Mexico,
South Atlantic)

Tuna Steak

Bluefin

Bigeye

(imported longline)

Yellowfin

(imported longline)

♥ Highest in healthy omega-3 fatty acids

ORANGE TEXT: Overfished, farmed, or caught using methods harmful to marine life and/or environment

* For environmental and health information, visit www.doh.wa.gov/fish/farmedsalmon

Healthy Fish Choices Grocery Store Project

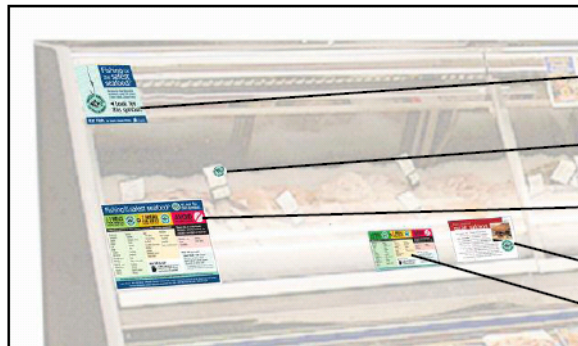
Eat Fish.
Be Smart. Choose Wisely.



Point of Purchase Packages

Package A

- 1 **Healthy Choice Symbol:** 2-sided hanging (12" or 7") or 1-sided wall-mount (12" or 7")
NOTE: This item can be added to any P.O.P. package
- 2 **Countertop Display:** acrylic easel (8.5" w x 11" h) with pocket and wallet-sized Healthy Fish Guides (6" w x 3.5" h)
- 3 **Symbol Alert:** Fishing for the Safest Seafood self-cling decal for display case (6 x 6") and/or wall mount sign (6 x 6")
- 4 **Healthy Choice Labels:** Labels can be put on packaged seafood or on price tags (1.25" round)
- 5 **Recipe Cards** (6" w x 4" h): in suction-cup mounted acrylic holder



Package B

- 1 **Symbol Alert:** Fishing for the Safest Seafood self-cling decal for display case (6 x 6") and/or wall mount sign (6 x 6")
- 2 **Healthy Choice Labels:** Labels can be put on packaged seafood or on price tags (1.25" round)
- 3 **Healthy Fish Choices List** self-cling decal for display case (8.5 x 11") and/or wall mount sign on gatorboard (8.5 x 11")
- 4 **Recipe Cards** (6" w x 4" h): in suction-cup mounted acrylic holder
- 5 **Healthy Fish Guides** (6" w x 4" h): in suction-cup mounted acrylic holder

The “Before” and “After” Picture



Full Service Seafood Counters



The image shows a well-stocked seafood section in a grocery store. The top shelf is dedicated to fresh shrimp, with multiple trays of large shrimp. Each tray features a circular 'HEALTHY CHOICE' logo and a white price tag. The tags indicate the shrimp are 'FRESH' and provide pricing information such as 'NET WT 1.50 LB' and 'PRICE PER LB \$2.99'. The bottom shelf displays frozen salmon fillets. These trays also have the 'HEALTHY CHOICE' logo and price tags, with labels like 'FROZEN' and 'NET WT 1.50 LB' and 'PRICE PER LB \$3.59'. The salmon fillets are a vibrant orange-red color. The overall presentation is clean and organized, typical of a modern grocery store's seafood department.



Grocery Store

Point-of-Purchase Survey

Purpose: To find out whether shoppers who bought fish noticed the Healthy Choice materials, what they noticed, and what influenced their fish purchase.

- Pilot survey
 - Wanted to track fish sales data, but they were not available.
- In-store survey of shoppers who bought fish.
- Conducted at 3 grocery stores (total of 75 customers).
 - 2 were full service seafood counters
 - 1 packaged seafood area
- Administered by health department staff.
- Participants given a \$5 gift card.
- Survey included 10 questions about materials.
- Demographic information also collected.

Results – POP Materials

	Noticed Materials	Top 3 Notice		Full Service	Packaged
All N=75 49 women 26 men	57% (43)	Stickers Package	22%	66% (33)	40% (10)
	2 or more 46 % (20)	Healthy Fish Guide	23%		
		Fish List Decal	18%		
Women	55% (27)	Stickers	25%	Guides 40%	Stickers 100%
		Healthy Fish Guide	18%	Fish List 40%	Guide 17%
		Fish List Decal	100%	Stickers 30%	FSS Decal 17%
Men	65% (17)	<div> Seafood purchased Top 3: Salmon, shrimp, cod <ul style="list-style-type: none"> Liked it Price Wild, not farmed </div>		46%	Stickers 100%
				38%	Guide 50%
				38%	FL Decal 25%
					(4)

Conclusions: Survey and Pilot

Survey Summary

- > half people surveyed noticed at least one item.
- Most noticed: Healthy Fish Guide, Healthy Fish List Guide Decal, and Healthy Choice stickers.
- Message most remembered “Fish is a Healthy Choice”.
- 26% said the materials helped them with their choice.
- Survey informed us which materials work best.

Survey Limits

- Surveyed after one month displayed.
- Only surveyed 3 stores, all in predominantly white areas.
- Stores not randomized.
- Not able to survey people who did not purchase fish that may have been discouraged.

Recommendations

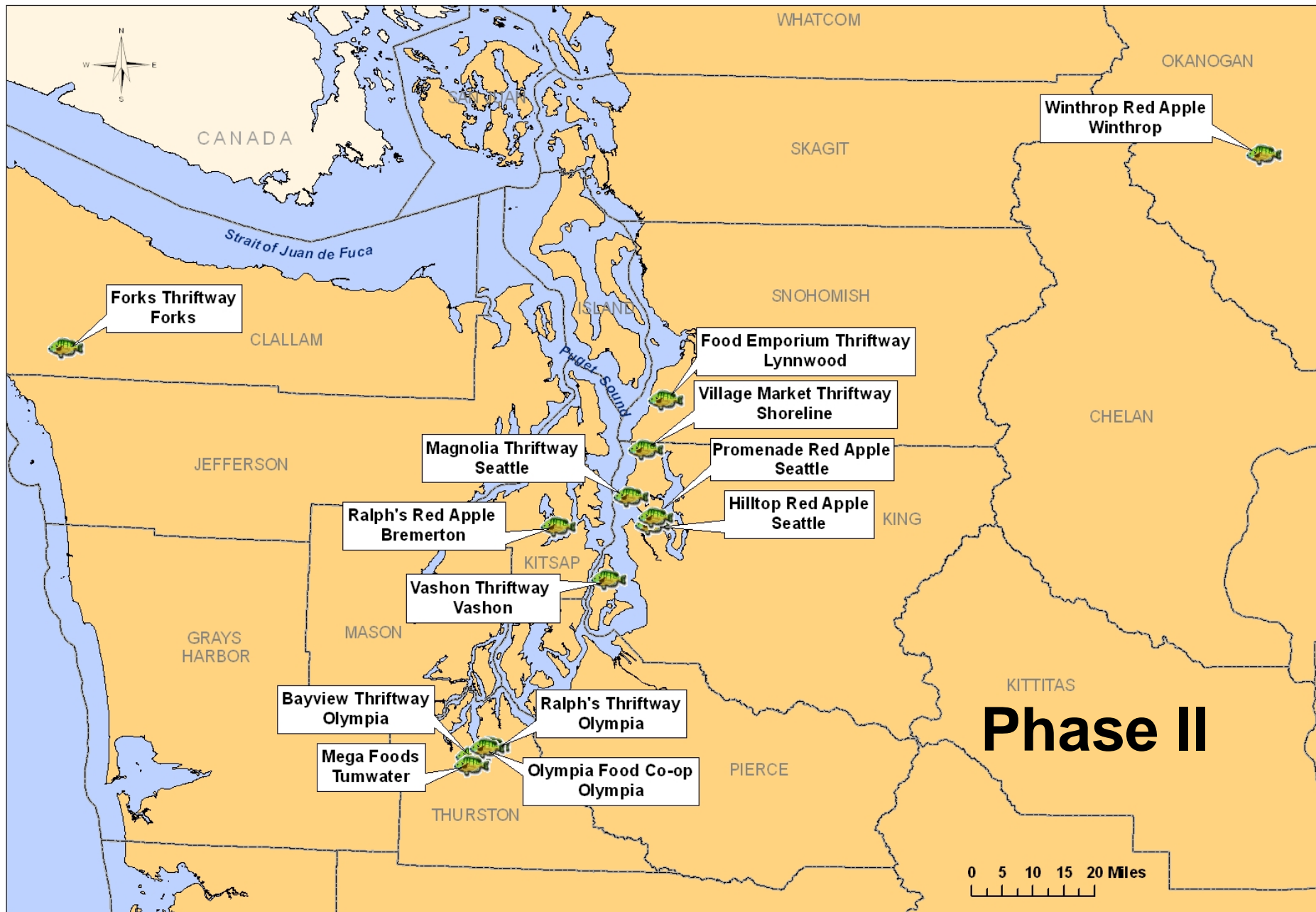
- Translate into other languages and test (different population meal sizes, types of fish etc).
- Partner and share resources with other states to develop consistent messaging (OR has adopted/modified the guide).
- Live document; needs updating via additional fish testing and sustainability research.

PILOT PROJECT – Other Observations

- Store managers and staff were receptive to the information.
- Approach did not turn people away from fish (of those surveyed).
- Anecdotal positive, thankful responses; liked graphics.

Now in 13 stores mainly around Puget Sound.

Grocery Stores Participating in the Healthy Fish Choices Grocery Store Pilot Project



Comments from Stores

This program provides great information to customers in a format that is easy to understand. I believe it is something that we have, and need to continue, to make part of our every day operation.

Kevin Stormans, Stormans Inc.

This information not only educates the customer- but also the store employees. **In today's health conscious society it is important for the retailer to provide the customer with accurate easy to understand information about the food they are purchasing.**

Rich Stites, Northwest Meat & Seafood Consultants
(In retail grocery business for 38 years)

We here feel very strongly that **this pilot helps train our customer base in the value and health importance of eating more seafood.**

Ken Grasser, Director of Fresh Foods, Fuller Market Basket Inc.

Oregon

Oregon

Sport-caught Fish

Follow these cooking and cleaning tips to reduce your exposure to PCBs*:

- Throw away the skin, fat & organs. PCBs collect in the fat of fish.
- Bake or broil the fish so fat can drain off.

Cut away the fat along the back. Remove skin. Cut away fatty area along side of fish. Trim off belly fat.

*Mercury cannot be removed through cooking and cleaning.

Eat Fish.

Be Smart. Choose Wisely.

S

Seafood and fish are good for your heart and brain. Both are low in fat, high in protein, rich in nutrients and omega-3s.

This guide will help you gain these health benefits while protecting you from contaminants found in fish.

DHS
Oregon Department of Human Services

For more information visit:
www.healthoregon.org/fishadv
or call TOLL FREE: 1-877-290-6767
TDD LINE: 877-673-0372

For other health information on mercury or PCBs:
Agency for Toxic Substances and Disease Registry:
www.atsdr.cdc.gov/hotdog.html
Environmental Protection Agency (EPA):
www.epa.gov/mercury
www.epa.gov/pcb

Developed by Washington State Department of Health, Modified for Oregon by the Oregon Public Health Division.

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FOLD HERE

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OREGON DHS: PUBLIC HEALTH DIVISION

SEAFOOD GUIDE

Fishing for the safest seafood?

Are you pregnant, planning to become pregnant, nursing or feeding young children, or concerned about toxins in fish?

Use this guide to help you make healthy choices for you and your family.

DHS | Independent. Healthy. Safe.

SAFE TO EAT 2-3 MEALS PER WEEK 	OR	SAFE TO EAT 1 MEAL PER WEEK 	AVOID OR EAT RARELY DUE TO MERCURY 		
<p>Follow this advice for health benefits and reduced exposure to mercury, PCBs and other toxics:</p> <ul style="list-style-type: none"> ♥ Anchovies ♥ Butterfish ♥ Catfish ♥ Clams ♥ Cod (Pacific) <i>(Alaska)</i> ♥ Crab (Blue, King, Snow) (US, CAN) <i>(imported King)</i> ♥ Crab-Imitation ♥ Crayfish (imported farmed) ♥ Flounder/Sole (Pacific) <i>(Alaska)</i> ♥ Haddock ♥ Herring ♥ Mackerel (canned) ♥ Ocean Perch ♥ Oysters ♥ Pollack/Fish sticks ♥ Salmon (fresh, canned) ♥ Chinook (King) (coastal, AK) ♥ Chum (King) ♥ Coho (Silver) ♥ Farmed* ♥ Pink ♥ Rockfish ♥ Sardines ♥ Scallop ♥ Shrimp/Prawns (US, CAN) <i>(imported)</i> ♥ Squid/Calamari ♥ Tilapia ♥ Trout 		<ul style="list-style-type: none"> ♥ Black sea bass ♥ Chilean sea bass ♥ Chinook salmon (Puget Sound) ♥ Croaker (White) ♥ Halibut (Pacific) <i>(Alaska)</i> ♥ Lobster (US, CAN) <i>(imported Spiny Crabs/lobster)</i> ♥ Mahi mahi <i>(imported longline)</i> ♥ Monkfish ♥ Rockfish/Red snapper <i>(coast-caught)</i> ♥ Sablefish/Black Cod ♥ Tuna, Albacore (fresh, canned white) (MA, OR, CA/Alaska) <i>(longline except Hawaii)</i> 	<p>Especially women who are or may become PREGNANT, NURSING moms and CHILDREN should NOT eat:</p> <table style="width: 100%; border: none;"> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ♥ Mackerel (King) ♥ Marlin <i>(imported)</i> ♥ Shark ♥ Swordfish <i>(imported)</i> ♥ Tilefish (Gulf of Mexico, South Atlantic) </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ♥ Tuna Steaks ♥ Bluefin ♥ Bigeye <i>(imported longline)</i> ♥ Yellowfin <i>(imported longline)</i> </td> </tr> </table> <p>♥ Highest in healthy omega-3 fatty acids</p> <p>ORANGE TEXT: Overfished, farmed or caught using methods harmful to marine life and/or environment.</p> <p>* For environmental and health information visit www.doh.wa.gov/fish/farmedsalmon</p>	<ul style="list-style-type: none"> ♥ Mackerel (King) ♥ Marlin <i>(imported)</i> ♥ Shark ♥ Swordfish <i>(imported)</i> ♥ Tilefish (Gulf of Mexico, South Atlantic) 	<ul style="list-style-type: none"> ♥ Tuna Steaks ♥ Bluefin ♥ Bigeye <i>(imported longline)</i> ♥ Yellowfin <i>(imported longline)</i>
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<p>Do you fish in Oregon? </p> <p>There are fish advisories throughout Oregon due to mercury and PCBs. Before going fishing, check for updated advisories and follow the cooking and cleaning tips on the back of this card.</p> <p>Mercury and PCBs are long lasting contaminants that accumulate in fish. In general, younger, smaller fish have less contamination.</p> <p>Check for local fish advisories at: www.healthoregon.org/fishadv or call: 1-877-290-6767 or see the Oregon Seafood Buying Guide.</p>					

Grocery Store Pilot Project

Web page at: www.doh.wa.gov/fish



Fish Facts for Healthy Nutrition

You are here: [DOH Home](#) » [EH](#) » [EHST](#) » [Fish Facts](#) » Healthy Fish Choices Grocery Store Pilot Site Directory

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Healthy Fish Choices Grocery Store Pilot Project

The goal of this pilot project is to provide grocery stores with educational materials that guide the public, especially women who are or want to become pregnant, nursing mothers, and parents of young children, to healthy fish choices at seafood counters and cases (point of purchase). Healthy fish choices are:

- Low in toxics (mercury, PCBs, and other contaminants)
- High in health benefits

The pilot has been met with approval by store managers, seafood department staff, and customers. The centerpiece of the project is the Healthy Fish Guide, a wallet-size card for shoppers to take home that lists fish low in contaminants and fish that should be avoided due to high mercury levels. In addition, the card shows which fish are highest in healthy omega-3 fatty acids and which fish are caught in ways harmful to the species or the environment.

The educational products are available for stores to display at their seafood counters and packaged seafood cases. Please [contact us](#) for more information.

- [Product packages for grocery store seafood counter and cases](#) (PDF 374KB)
- [Examples of materials currently displayed in stores](#) (PDF 221KB)
- [Grocery stores participating in the project](#) (PDF 120KB)
- [Healthy Fish Guide](#)



- [Office of Environmental Health, Safety, and Toxicology](#)
- [Other Environmental Health Programs and Services](#)



Project News

- The Healthy Fish Choice Project was highlighted in *Perspectives*, an award winning periodical of Health Research for Action UC Berkeley [Fish Contamination: Environment and Health at Risk](#) (Vol. 3, No. 1, August 2008)

What Should I Know As a Consumer and a Shopper?

- Fish is good for you and your family. Eat fish at least two times a week.
- Fish is high in protein and low in saturated fat.
- Fish is rich in omega-3 fatty acids which promotes heart health and protects against inflammatory diseases.
- Omega-3 fatty acids promote healthy brain and nervous system development in children.



UC Berkeley Health Research for Action Perspectives August 2008

Fish Contamination: Environment and Health at Risk



Key Actions to Address Fish Contamination in California

- Set statewide standards for data collection to facilitate sharing of data.
- Create formal partnerships to foster collaboration, overcome turf issues, and ensure stakeholder involvement.
- Increase funding to monitor for contaminants and assess health risks.
- Develop a variety of consumer advisory outreach methods.
- Establish consistent policies regarding the interpretation of scientific information.
- Make better use of data to drive improved policies.
- Increase transparency in government actions.

• Policies and funds are inadequate to address fish contamination. A variety of federal, state, county, local, and tribal authorities monitor contamination, regulate sources, and educate the public. However, each entity can focus on only part of the problem because of restrictions in legal jurisdiction. Even when mandates exist, lack of funding makes it difficult to do effective monitoring or outreach. Scarcity leads to piecemeal efforts and rivalries, hindering interagency strategic planning. In addition, funds are often site-specific, short-term, and nonrenewable—forcing agencies to focus narrowly on the most immediate and pressing obligations.

• The prevalence of fish contamination is unknown. Cal/EPA's Office of Environmental Health Hazard Assessment has issued more than 2 dozen advisories for inland waterbodies, but many watersheds and fish populations remain untested. Washington has 650 bodies of water in 39 counties, and advisories exist



One of Washington's eating guides, which can be folded to fit in a wallet.

People Want and Support Action

State and national surveys have repeatedly shown that most people are concerned about the relationship between their health and the environment. For example, a public opinion survey conducted by the Washington Department of Ecology revealed that 97% of Puget Sound residents believe a healthy Puget Sound is a legacy that we must leave to our children and grandchildren. In a Pew Charitable Trusts survey of California voters, 9 in 10 said that federal, state, and local governments

What is WA doing to reduce contaminants?

Washington's Persistent Bioaccumulative Toxins (PBT) Rule (Chapter 173-333 WAC)

- A unique program among states
- Goal is to reduce and phase-out PBTs
- Rule contains an initial list of 74 PBTs and 2 metals of concern and a schedule for revising the list
- Directs Ecology, in consultation with Dept. of Health, to develop Chemical Action Plans (CAPs) for PBTs that:
 - Identify, characterize, and evaluate the uses of PBTs, and
 - Recommend actions to protect human health and the environment
- PBTs evaluated to date:
 - Mercury (2003)
 - Polybrominated diphenyl ethers (PBDE) flame retardants (2006)
 - Lead (2008)
 - Polycyclic aromatic hydrocarbons (PAHs) – 2009-2010
 - Perfluorooctane sulfonates (PFOS) - > 2010



PUBLIC HEALTH

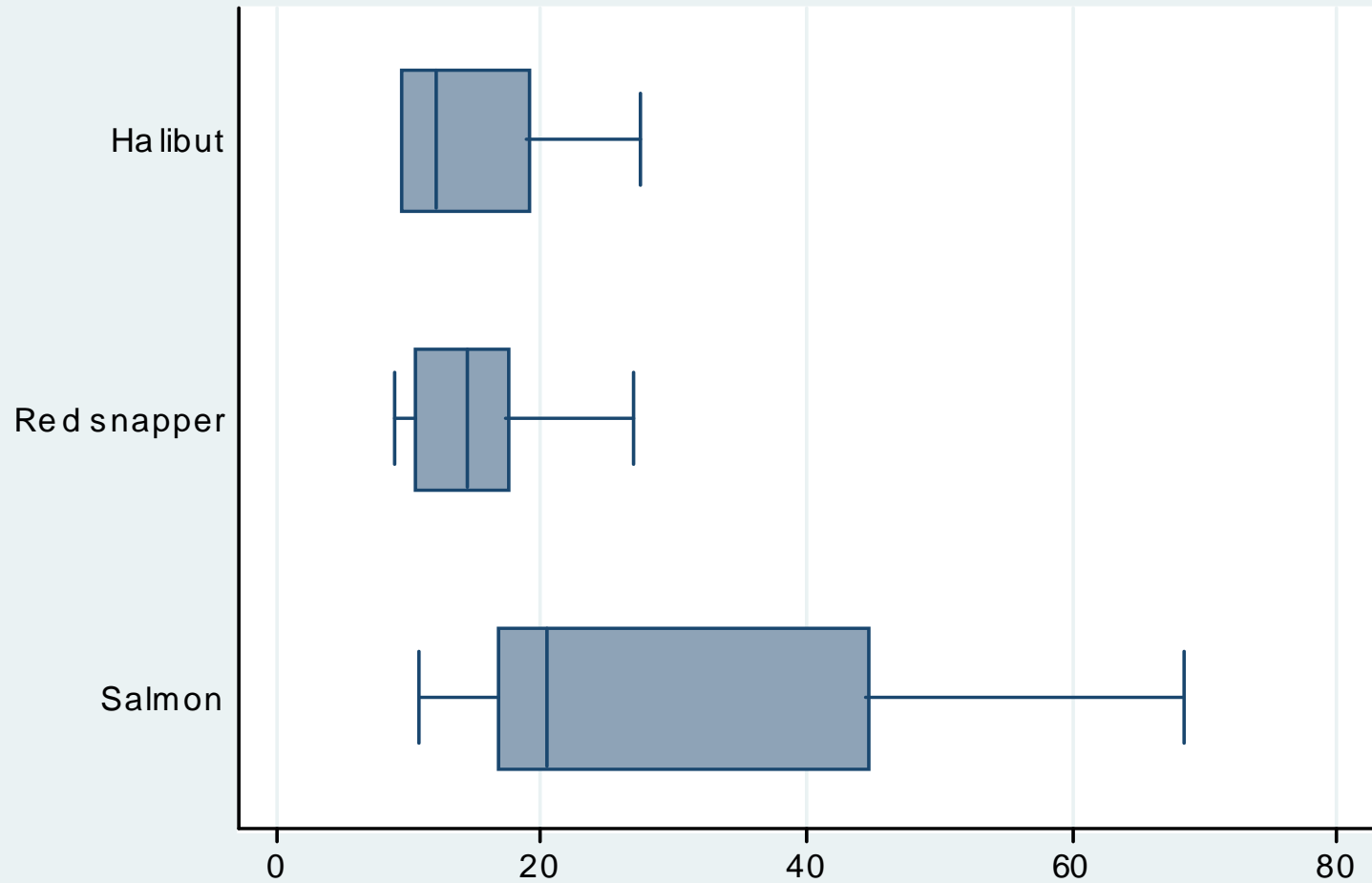
**ALWAYS WORKING FOR A SAFER AND
HEALTHIER WASHINGTON**



PUBLIC HEALTH

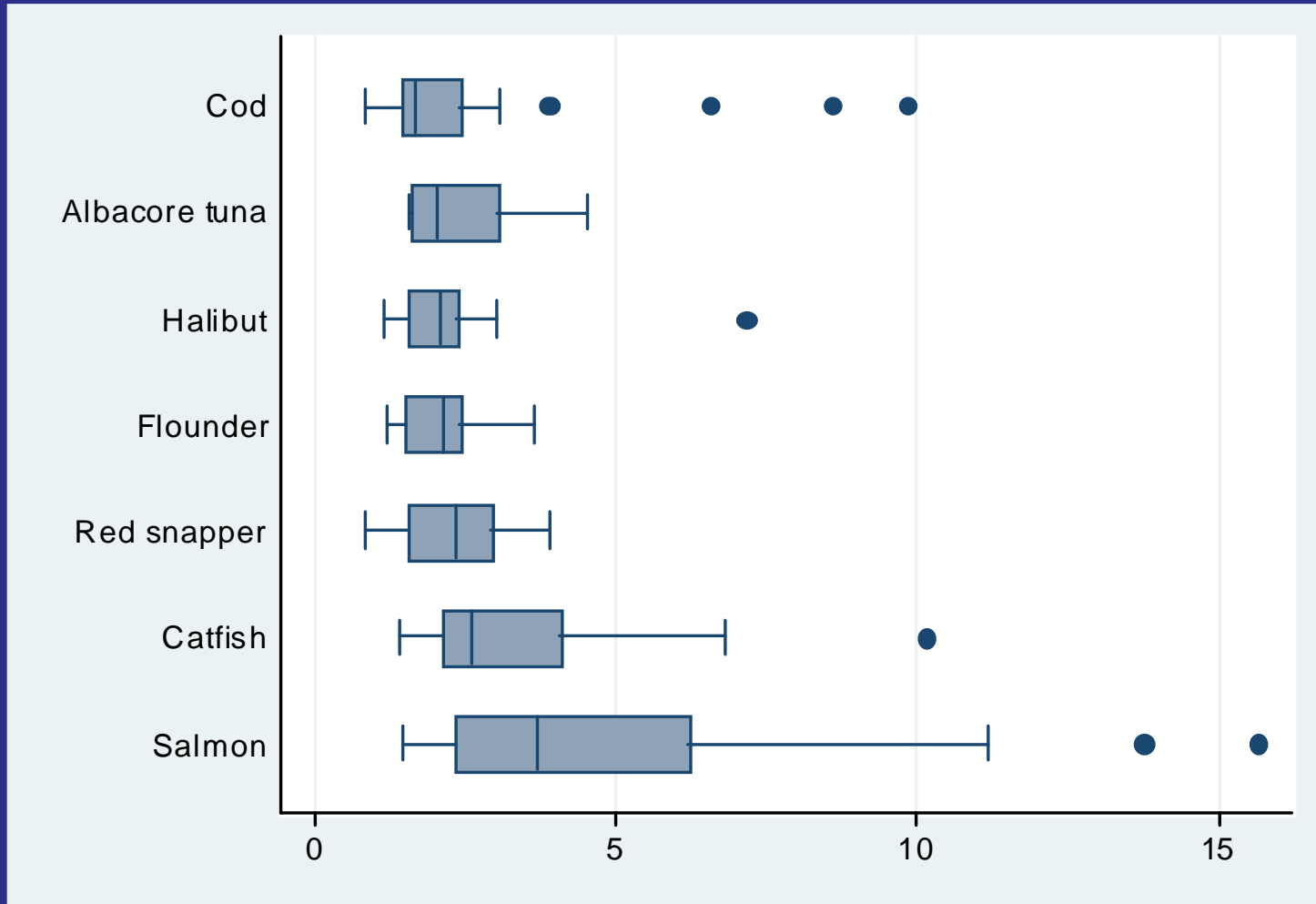
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PCB Concentrations



Total PCBs (ppb)

PBDE Concentrations



Total PBDEs (ppb)

Cut-offs values for the green, yellow, and red columns

For mercury:

Recommendation	Hg Concentration (ppb)	Category
Do not eat	> 1000	Red
One meal per month	646 – 1000	Red
2 meals per month	316 – 645	Yellow
1 meal per week	156 - 315	Yellow
2 meals per week	76 – 155	Green
Unlimited	< 75	Green

For PCBs:

Recommendation	PCB Concentration (ppb)	Category
Do not eat	> 340	Red
One meal per month	126 – 340	Red
2 meals per month	61 – 125	Yellow
1 meal per week	31 – 60	Yellow
2 meals per week	16 – 30	Green
Unlimited (< 15	Green

Update

PBDEs:

PBDE Cap (2006) Resulted in a law (RCW70.76) passed in 2007 banning products containing penta and octa.

Deca in electronics and residential furniture is banned in Washington State beginning in 2011 based on the agencies identifying safer alternatives per the law.

Ecology and DOH report (January 2009)

Alternatives to Deca-BDE in Televisions and Computers and Residential Upholstered Furniture

<http://www.ecy.wa.gov/biblio/0907041.html> .

Lead :

Lead wheel weights are banned starting in 2011. Ecology plans to propose legislation in 2011 to require assessments for lead-based paint in pre-1960 rental homes and apartments.

Who are we trying to protect?

- Women who are or may become pregnant, nursing mothers, and young children
- High-end consumers
 - Native American tribes
 - Asian and Pacific Islander communities
 - Recreational anglers
 - Communities that utilize a specific fishing area.
- General population – people who are concerned about toxins in fish.