



INFORMATION ABOUT EATING FISH FROM ELKHORN SLOUGH

Office of Environmental Health Hazard Assessment (OEHHA)
California Environmental Protection Agency
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Why did OEHHA develop an advisory for eating fish from Elkhorn Slough?

OEHHA developed an advisory for Elkhorn Slough because of mercury and PCBs found in the fish caught from this water body. Elkhorn Slough is located in Monterey County, between Monterey and Santa Cruz. This advisory is part of an ongoing effort by OEHHA to provide safe-eating advice for fish in different California water bodies.

Why should I eat fish?

- Low-contaminant fish are an important part of a healthy, well-balanced diet. The American Heart Association recommends eating at least two servings of fish each week.
- Fish are a good source of protein, vitamins, and are a primary dietary source of heart-healthy omega-3 fatty acids. Eating low-contaminant fish while pregnant may help the baby's brain develop.

Which chemicals are of concern for people eating fish from Elkhorn Slough?

- Mercury
 - Mercury is a metal that comes from natural sources, mining, and air fallout from burning coal and other fuels.
 - Too much methylmercury, the form of mercury found in fish, can harm the brain, especially in fetuses, babies, and children. Mothers can pass methylmercury to their babies during pregnancy.
 - Because fetuses, babies, and children are especially sensitive to mercury, OEHHA has one set of advice for the amount of mercury-containing fish that women age 18-45 and children should eat, and another set of advice for women 46 years and older and men 18 years and older.
- Polychlorinated Biphenyls (PCBs)
 - PCBs are man-made industrial chemicals. While banned in the 1970s, they are still found in the air and water from spills, leaks, and improper disposal.
 - High levels of PCBs can cause health problems. Some forms of PCBs caused cancer in animal studies.

- PCBs can build up to very high levels in the skin, fat, and some internal organs of fish. That is why OEHHA recommends eating only skinless fillet (meat) of fish.

How did OEHHA determine the consumption guidelines for fish from Elkhorn Slough?

- OEHHA compared chemical levels in fish caught from Elkhorn Slough to levels that are considered safe for human consumption.
- OEHHA’s consumption guidelines balance the risks and benefits of fish consumption.

How much mercury was found in fish from Elkhorn Slough?

- Leopard Shark had high levels of mercury.
- Bat Ray under 24 inches wide had medium levels of mercury.
 - Data were not available to estimate the mercury concentration in larger (24 inches wide or more) Bat Rays from Elkhorn Slough, but larger Bat Rays from other California bays had high levels of mercury.
- Asian Clams, Speckled Sanddabs and surfperches had low levels of mercury.

How much PCB contamination was found in fish from Elkhorn Slough?

- All species had low levels of PCBs.

What does OEHHA recommend for people who want to eat fish from Elkhorn Slough?

- OEHHA recommends the amount and type of fish that can be eaten each week as “servings”. A serving is 8 ounces prior to cooking (about the size and thickness of your hand for fish fillets). Give children smaller servings.
- Women 18-45 years and children 1-17 years
 - Should not eat Bat Ray 24 inches wide or more, or Leopard Shark
 - Can eat:
 - 1 serving per week of Bat Ray under 24 inches wide, or
 - 3 servings per week of surfperch, or
 - 7 servings per week of Asian Clams (8 ounce serving of clam meat prior to cooking), or Speckled Sanddab
- Women over 45 years and men age 18 years and older
 - Can eat:
 - 1 serving per week of Bat Ray 24 inches wide or more, or Leopard Shark, or
 - 4 servings per week of Bat Ray under 24 inches wide, or surfperch, or

- 7 servings per week of Asian Clams (8 ounce of clam meat prior to cooking), or Speckled Sanddab

What else can I do to protect my health and my family's?



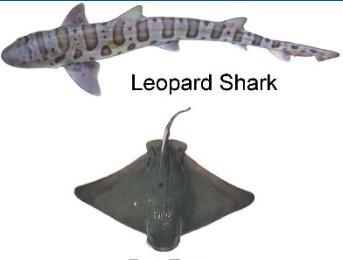
- Eat a variety of fish.
- Eat smaller (younger) fish of legal size.
- Eat only the skinless fillet or meat portion of fish and shellfish.
- Thoroughly cook the fish, allow the juice to drain away.
- Learn about OEHHA's guidelines for eating sport fish in California:
 - Visit www.oehha.ca.gov (click on "FISH", then "Fish Advisories"), or call OEHHA at (916) 323-7319 or (510) 622-3170
 - Check the Freshwater or Ocean Sport Fishing Regulations booklets from the California Department of Fish and Wildlife, or visit <https://www.wildlife.ca.gov/Regulations>

A Guide to Eating Fish from Elkhorn Slough

Women 18 - 45 years and Children 1 - 17 years

 <p>Asian Clam (Corbicula)</p> <p>Speckled Sanddab</p> <p>Surfperches</p>	 <p>Bat Ray under 24 inches wide</p>	 <p>Leopard Shark</p> <p>Bat Ray 24 inches wide or more</p>
<p>7 total servings a week or 3 total servings a week of Surfperches</p>	<p>OR</p> <p>1 serving a week</p>	<p>Do not eat</p>

Women 46 years and older and Men 18 years and older

 <p>Asian Clam (Corbicula)</p> <p>Speckled Sanddab</p>	 <p>Bat Ray under 24 inches wide</p> <p>Surfperches</p>	 <p>Leopard Shark</p> <p>Bat Ray 24 inches wide or more</p>
<p>7 total servings a week</p>	<p>OR</p> <p>4 total servings a week</p>	<p>OR</p> <p>1 serving a week</p>

What is a serving?



For Adults For Children

A serving is 8 ounces prior to cooking (the size and thickness of your hand for fish fillets). Give children smaller servings.

Why eat fish?

Eating fish is good for your health. Fish have omega-3s that can reduce your risk for heart disease and improve how the brain develops in unborn babies and children.

What is the concern?

Some fish have high levels of mercury and PCBs. Mercury can harm the brain, especially in unborn babies and children. PCBs can cause cancer.