

Collaborating Organizations and Government Agencies include:

Families in Good Health
 Korean Resource Center
 Multi-cultural Area Health Education Center
 Chinatown Service Center
 VNCOC Asian Health Center
 Filipino American Service Group, Inc.
 People's CORE
 Guam Communications Network
 Cabrillo Marine Aquarium
 Heal the Bay
 California Environmental Protection Agency
 Office of Environmental Health Hazard Assessment
 California Department of Fish and Game
 Montrose Settlements Restoration Program
 The US Environmental Protection Agency
 The California Department of Health Services
 Santa Monica Bay Restoration Commission
 The National Oceanic and Atmospheric Administration
 The City of Long Beach Department of Health and Human Services
 Los Angeles County Health Department
 Orange County Health Care Agency

Fish Contamination Education Collaborative



The Fish Contamination Education Collaborative (FCEC) is a participatory outreach and education project under the United States Environmental Protection Agency (US EPA). The project is part of the US EPA's overall program to address human health risks posed by the fish contamination related to the Palos Verdes Shelf (PVS) Superfund Site. FCEC's goals are to:

- Reduce exposures of populations to site-related chemicals in fish caught off the coast of Los Angeles and Orange Counties
- Conduct education with the most affected populations so they can make informed decisions about fish contamination issues.

The cornerstone of the FCEC is the partnership between federal and state government agencies, local health departments, community based organizations, and other local institutions.

Background

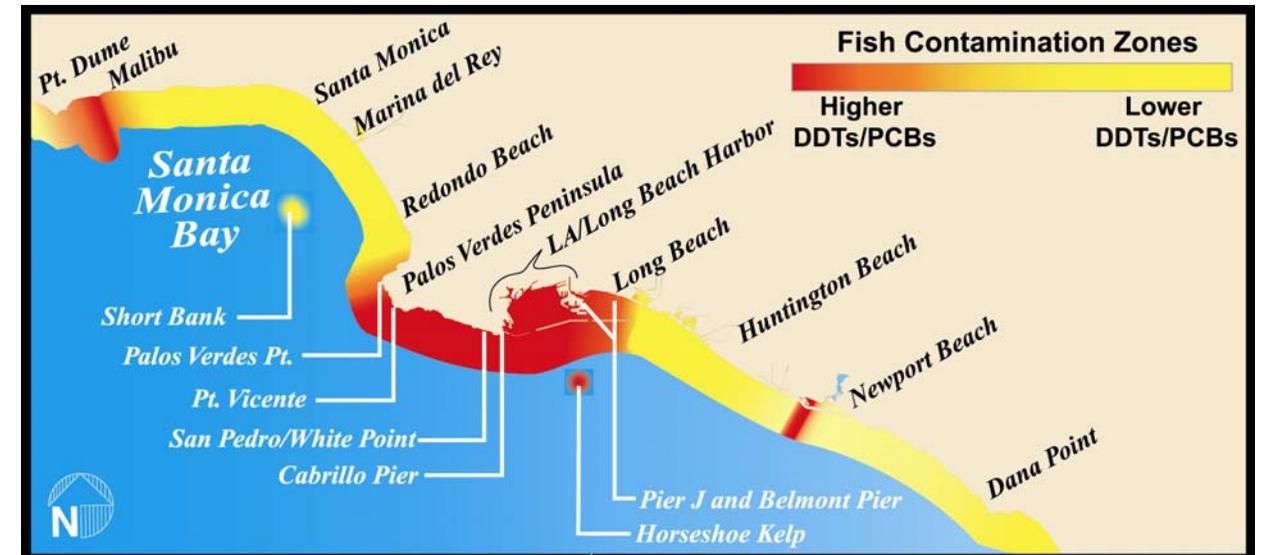
From the 1940's to the 1970's, the Montrose Chemical Company, located near the city of Torrance, released the pesticide DDT into the sewer system, which eventually emptied into the ocean around the Palos Verdes Peninsula. Polychlorinated biphenyls (PCBs), another group of chemicals, were also released by local industries. Although these chemicals are no longer in use, they remain in the ocean sediment. In addition, a type of metal called methylmercury, can be found in the environment. These chemicals have gotten into the fish off the coast of Los Angeles and Orange Counties. People are exposed to the chemicals when they catch and eat these fish. Communities that eat these fish on a regular basis are at greater risk for exposure to these chemicals.

Fish of Concern

Fish are an important part of a healthy diet, but some fish you catch off the coast of Los Angeles and Orange Counties can pose a risk to your health if they are eaten regularly. High levels of DDTs and PCBs have been found in white croaker (also called kingfish or tomcod) partly because they feed off the bottom of the ocean floor where the chemicals are located. White croaker is also a fatty fish and DDTs and PCBs tend to build up in fatty tissues. **To protect your health, do not eat white croaker caught in the red zone**, as indicated on the map below. Other fish you catch from this area may contain DDTs and PCBs, but not at levels as high as the white croaker. **Fish caught in the yellow zone are generally safer to eat.**

Area of Concern

Along the coast of Los Angeles and Orange Counties, fish caught in the red zone, indicated on the map below, are likely to have higher levels of DDTs and PCBs than fish caught in the yellow zone. Some fishing points in the red zone include Cabrillo Pier, White Point, Pier J, Belmont Pier and Point Vicente. Some fishing areas in the yellow zone include the piers in Santa Monica, Redondo Beach, and Huntington Beach. The Fish Contamination Education Collaborative recommends that people fish in the yellow zone.



For more information about the FCEC, to request a speaker from the Speakers' Bureau, or to receive a copy of project material; contact Gina Margillo, Project Manager, Impact Assessment; at (213) 620-2586

For more information on the US EPA's activities for the PVS site, please contact Sharon Lin, Remedial Project Manager, US EPA at (415) 972-3446 or Jackie Lane, Community Involvement Coordinator, USEPA at (800) 231-3075

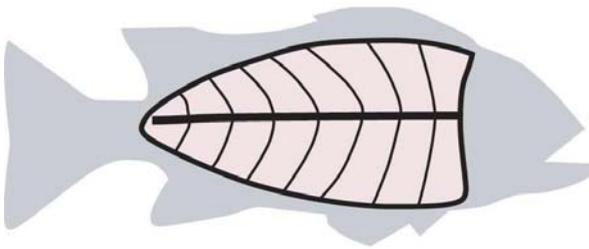
Health Effects

Eating fish with chemicals does not make people sick right away. The more contaminated fish you eat, the greater the amount of chemicals that build up in your body over time. Health problems associated with increased exposure to DDTs and PCBs include cancer, liver disease and effects on the immune and endocrine systems. Mercury can affect the nervous system. During pregnancy and lactation, mothers can pass DDTs, PCBs, and methylmercury on to their infants. Because chemicals affect development, children through adolescence and women of childbearing age are more sensitive to the harmful chemicals and should be especially careful.

Reducing Your Exposures

DDTs and PCBs build up in the fatty parts of fish. To lower the amount of these chemicals in the fish you eat, remove these fatty parts and follow these recommendations:

- Eat only the fillet. Use only the fillet when making soup.
- Remove and throw away the head, guts, kidneys, liver, and fatty parts such as the skin and belly flap before cooking.
- Bake, broil, steam or grill fish, letting fatty juices drip away



Methylmercury is different than DDTs and PCBs because it is in all parts of the fish, including the muscle tissue/fillet. Eating less fish suspected to have high levels of mercury is the only way to reduce your exposure.

About the Project

In order to protect the health of populations most at risk for exposures to chemicals in fish caught off the coasts of Los Angeles and Orange Counties, outreach on piers, in markets, through workshops with target populations, and through use of the media, is being conducted to:

- Increase the knowledge of pier and boat anglers regarding fish contamination issues
- Raise awareness of the broader population, with an emphasis on pregnant and nursing women, regarding chemicals in fish
- Prevent the sale of contaminated white croaker in local markets in Los Angeles and Orange Counties

Outreach is conducted in Cantonese, Cebuano, Chamorro, English, Ilocano, Khmer, Korean, Mandarin, Marshallese, Samoan, Spanish, Tagalog, Tongan and Vietnamese.



Pier and Marina Outreach

Multilingual educators are conducting outreach directly with anglers on piers and shores along the coast of Los Angeles County. An informational brochure entitled *Protect Your Health*, that indicates fish species and contaminated coastal zones, is being widely distributed.



Media Outreach

Multi-lingual media campaigns will utilize print, radio and local television spots to provide information about how to reduce exposures to chemicals in fish. Visit our website at www.PVfish.org for project resources and materials, links to affiliated agencies, and practical information.

Market Outreach

Contaminated white croaker may be getting into markets when market owners buy white croaker from unapproved sources. These sources include unlicensed anglers who fish in the contaminated areas and who sell their catch illegally to stores and to people on piers. The project includes a community driven campaign to promote responsible fish purchasing from approved sources such as licensed wholesalers, brokers or commercial fishermen. A poster and a brochure entitled *Fish is Good When Fish is Safe to Eat*, helps both market owners and consumers understand how to avoid the sale/purchase of contaminated white croaker.

General Community Outreach

With the goal of building community capacity to prevent exposures long after the project is over, a range of outreach efforts will be conducted:

- A cadre of community health educators has been trained, using a popular education curriculum. These educators are conducting culturally appropriate workshops in their communities.
- An interactive exhibit that explains the contamination issue, will be housed at the Cabrillo Marine Aquarium in San Pedro and will be presented at regional cultural and health fairs.
- Through our Speaker's Bureau, multi-lingual presenters are outreaching to local organizations, churches, schools, and other institutions.

Additional USEPA Activities

In addition to these educational efforts, the US EPA is also monitoring chemical levels in fish caught off the coast of Los Angeles and Orange Counties to evaluate the adequacy of the current commercial catch ban area for white croakers. In addition, the US EPA plans to sample white croakers from local markets to assess whether contaminated white croakers are reaching the retail market. The information from these EPA activities will guide the future education and outreach efforts.

As part of ongoing evaluation of cleanup options, US EPA conducted a pilot capping project at the site in the summer of 2000. The US EPA is also completing the ecological risk assessment and using the results of the pilot to update the evaluation of capping alternatives (as well as the no action alternative). This information will be summarized in a remedial investigation/feasibility study (RI/FS) report that will serve as the basis for evaluating remedial alternatives and selecting a remedy.