Why are there chemicals in some seafood?

Chemicals enter water bodies from many sources, including being blown in by wind and from rain run-off. Many chemicals do not dissolve in water and may settle in the sediment (mud). Small creatures called macroinvertebrates eat the chemicals as they dig in the sediment for food. These macroinvertebrates are then eaten by minnows. The minnows then get eaten by medium-sized fish, crabs and crawfish, which in turn are eaten by even larger ones. At each stage of the food chain, more of the chemicals build up in fish and shellfish. This is why larger and longer-living species are likely to have more chemicals in their bodies than smaller, younger ones. This process is called bioaccumulation. People are at the top of this food chain. If you eat a lot of seafood from contaminated areas, chemicals like PCBs, dioxins, pesticides and mercury can build up in your body too. There is no way to know which fish are affected just by looking at them. Always follow the advisories to protect yourself and your family.



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Where can I find more information?

Louisiana Fish and Seafood Advisories : www. seet.dhh.louisiana.gov (888) 293-7020

Mercury and Its Health Effects:

Environmental Protection Agency http://www.epa.gov/mercury/effects.htm

PCBs, Dioxins and Their Health Effects

Agency for Toxic Substances and Disease Registry

http://www.atsdr.cdc.gov/toxprofiles/ tp.asp?id=142&tid=26

http://www.atsdr.cdc.gov/ToxProfiles/ TP.asp?id=366&tid=63

The National Fisheries Institute

www.aboutseafood.com

National Fish Advisories

Environmental Protection Agency

http://water.epa.gov/scitech/swguidance/ fishshellfish/fishadvisories/index.cfm

There are even more ways to get up-to-date health information, news and emergency updates from DHH.



www.facebook.com/LaHealthDept

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Eating Recreationally Caught Seafood in Louisiana:

How to Choose, Clean and Cook Your Catch





For more information visit www.seet.dhh.la.gov or call (888) 293-7020

Make the Best Choice

Seafood, including fish, crab and crawfish, serves as a great source of protein and essential nutrients. However, some seafood caught recreationally from contaminated areas may contain chemicals that could lead to health risks. Organo-chlorinated chemicals like polychlorinated biphenyls (PCBs), dioxins and pesticides may build up in the fat contained in seafood, other contaminants, such as mercury, may build up in the muscle or filet. Reduce your exposure to contaminants by taking the precautions below.

- Check for Louisiana fish advisories online at www.seet.dhh.louisiana.gov or by calling the Section of Environmental Epidemiology and Toxicology at (888) 293-7020. These advisories are designed to protect those who have health problems, children, pregnant women or those planning to become pregnant.
- Choose smaller fish, as older or bigger fish tend to build up contaminants in their bodies.
- Eat seafood from a variety of water bodies to reduce the risk of possible exposure to any one contaminant or group of contaminants.
- Eat a mix of different kinds of seafood.





Cleaning Your Catch

Some contaminants concentrate in the fatty tissues of fish, crab and crawfish. Proper cleaning techniques can significantly reduce levels of PCBs, dioxins and other organic chemicals.

When cleaning fish, remove fatty tissues like the skin, guts and belly. Trim as much of the fat as you can, including along the back and length of the fillet.

Do not eat or use heads, skin, organs or trimmed fatty portions in soups, stews, boils, broths or stocks. Throw them away!

When cleaning crabs and crawfish, remove the hepatopancreas (yellow fat) and both the green and digestive glands before cooking.

After cooking, throw away the cooking water. Do not use it to prepare any juices, sauces, bisques or soups.

Cooking Your Catch

Even after trimming visible fat, some fat may remain inside fish fillets. You can reduce the levels of

contaminants in fish and seafood by following the recommendations below.

- Avoid batter or breading, as they hold in liquid that may contain contaminants.
- Poke holes in fillets so the fat can drip away from fish as it cooks.
- Cook your fish on a grill or on a broiler pan in the oven so that fat can drip away. Do not fry fish in a pan.
- After cooking, discard all liquids. Do not reuse them for soups or sauces.

Care in preparing and cooking your fish will get rid of even more of the chemicals that might be in the fillet.



Remember, you can't remove mercury through cleaning or cooking. Carefully follow advisories, and do not eat seafood from restricted areas!