Clean and Cook Fish Properly to Reduce Exposure

Contaminants such as PCBs, pesticides (i.e. DDT, chlordane, toxaphene, and dieldrin), and dioxins readily accumulate in the fatty tissues of fish. To reduce exposure to these contaminants, the skin, dark (reddish-color) muscle tissue, and fatty portions (i.e. belly fat, side fat, and fat along the top of the back) of the fish should be removed before cooking (diagram). The DSHS recommends baking or broiling skinned, trimmed fish on a rack or grill to allow fat to drip away from the fillet. If fish are fried, the frying oil should not be reused. These cooking methods will reduce exposure to many of the most common organic contaminants in fish.

Mercury accumulates primarily in the muscle tissue (fillet) of the fish. While most all fish contain some level of mercury, long-lived, predatory fish (fish that eat other fish) such as freshwater fish largemouth bass, freshwater drum, gar, pike, and walleye and saltwater fish such as king mackerel, shark, and swordfish contain more mercury than small fish. Trimming skin and fat and cooking method do not reduce mercury exposure. The only way to reduce mercury exposure is to reduce consumption of contaminated fish. Thus, the DSHS recommends eating smaller, younger fish that have had less time to accumulate mercury in their tissues.

No studies are available to determine whether removing skin, trimming fat, and cooking reduce volatile organic compounds in fish tissue. The Texas Department of State Health Services recommends that fish containing these contaminants not be eaten.