

Human Health Hazards

Health Effects of PCBs

State of Wisconsin

What are PCBs?

Polychlorinated biphenyls (PCBs) are a group of 209 synthetic chemical compounds which are colorless and odorless. From 1929 to 1977 PCBs were manufactured in the United States and widely used in electrical equipment and other industrial uses. Due to the harm PCBs cause to humans and wildlife, their manufacture was banned in 1977.

How are people exposed to PCBs?

PCBs are found primarily in lake and river bottom sediments and fatty tissues in fish. Eating contaminated fish remains the major route of exposure to PCBs. Other sources of exposure remain very small.

How do PCBs affect human health?

PCBs are stored in the fat of animals and humans. PCBs and other contaminants can accumulate in the body over time. It may take months or years of regularly eating contaminated fish to build up amounts that are a health concern. However, PCBs may eventually affect your health or that of your children.

Pregnant women and young children: Mothers who eat highly contaminated fish before birth may have children who have slower mental development and difficulty learning. A pregnant woman can pass these chemicals to her unborn child and to the new baby through breast milk. However, the significant benefits of breastfeeding far outweigh the associated risks. Young children may also experience developmental health effects.

Adults: Adults should also remain concerned about PCBs because they may cause liver and immune system problems, including cancer.

How can I reduce my health risks to PCBs?

Most exposure to PCBs comes from eating contaminated fish. The best way to reduce the health risks is to eat only the safest fish. Some examples include:

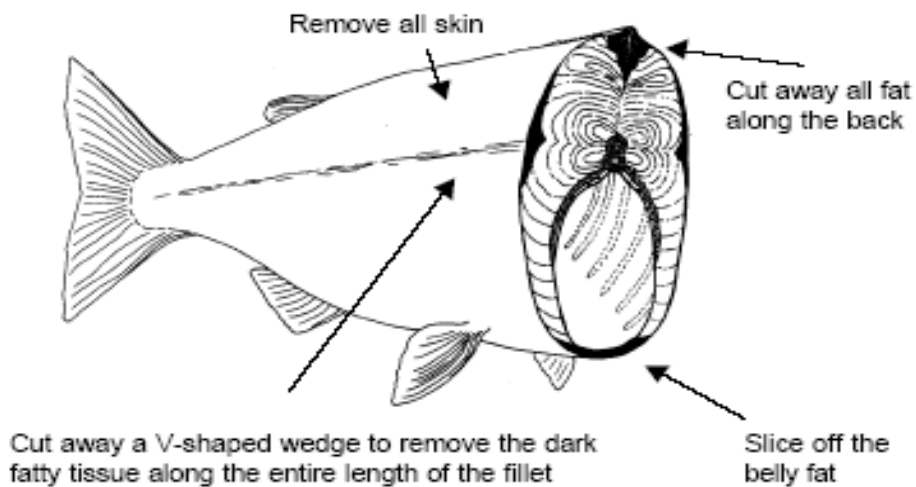
- Choose smaller and younger fish. Generally, panfish and fish just over the legal size will have fewer PCBs.
- Choose lean fish. Panfish, brook trout and brown trout that live in streams and rivers tend to be low in fat. Small walleye, northern pike and bass, especially those that are just legal size, also tend to have fewer chemicals.
- Release predator fish that are very large, like walleye, northern pike, muskie, and lake trout. These fish tend to have more PCBs. Bass have different advisories. Carp and catfish also tend to accumulate more chemicals. Any size of carp caught in the Lower Fox River should not be eaten
- Advise women of childbearing age, pregnant women, nursing mothers and young children to select their catch or meals carefully (follow the Wisconsin Fish Consumption Advisory, Internet links can be found below)
- Trim the skin and fatty areas off the fish where contaminants accumulate (see filleting recommendations below).

How can a fish be safely filleted?

Properly trimming fish can reduce the concentration of PCBs and other chemicals. However other chemicals such as methyl mercury, are stored throughout the fish and cannot be filleted. Trim the fatty areas of the fish before cooking. Cook the fish in ways that allow fat (and the unwanted chemicals) to drip

away. About half of the PCBs can be removed by trimming away the fatty parts of the fish. Filleting and PCBs: Fillet along the belly, the top of the back, and the dark meat along the skin side of the fish. Remove the skin before cooking. This allows fats to drain off.

Cook so fat drips away. Bake, broil or grill on a rack, or poach and do not use the liquid for sauces or gravy.



For more information:

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