



## Safe Fish Consumption

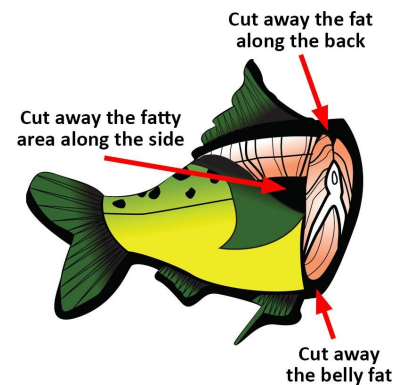
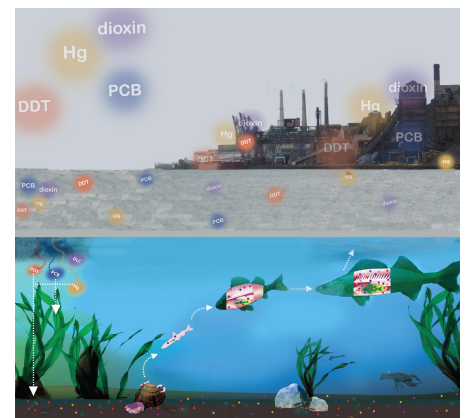
Fish can be part of a healthy diet, providing protein and omega-3 fats. But, it is important to follow fish advisories, which alert us to harmful chemicals found in certain species of fish and in specific waterways. For local fish advisories and more, visit: [www.michigan.gov/eatsafefish](http://www.michigan.gov/eatsafefish).

### Pollution

Past and current pollution in our waterways contaminates some of our fish. Industrial releases, including Per- and Polyfluoroalkyl substances (PFAS), mercury, dioxins, polychlorinated biphenyls (PCBs) and polybrominated diphenyl ethers (PBDEs) are harmful chemicals that can build up in bigger fish. The larger, predatory fish carry the heaviest load of toxic chemicals. Children and young women are most at risk.

### Dioxin, PCBs, PBDEs

Dioxin, PCBs, PBDEs can accumulate in the fat of animals and humans. Dioxins are an industrial by-product and can be created and released during fires. PCBs were banned in the U.S. in 1979. PBDEs are a group of flame-retardant chemicals, now largely removed from the market. All are still found in fish today. Longer-term exposure to these substances can cause harmful effects on the brain and nerves, immune and endocrine systems (thyroid and liver), and can impair reproductive function. They may also cause cancer.



**What you can do:** Trim the fat off fish to reduce dioxins, PCBs, PBDEs. Eat smaller fish, such as yellow perch, bluegill, and rock bass, which usually have less toxics.



**What we do:** Incinerators release dioxin and other toxics into the environment. The Ecology Center was a founding and active member of the successful Breathe Free Detroit campaign to shut down Detroit's municipal incinerator. We also worked to shut down all of Michigan's 157 medical waste incinerators, including 3 in Detroit and Hamtramck.



The Ecology Center persuaded the state of Michigan to expand its distribution of fish advisories in 1998. We continue to work for a safe food supply and reduced pollution in the Great Lakes.



# ECOLOGYCENTER

Healthy People, Healthy Planet

**PFAS & Mercury build up in the muscle of fish and CANNOT be trimmed off.**

## PFAS

PFAS binds to proteins in our blood, allowing the chemicals to build up in internal organs and muscle. PFAS can cross the placenta and affect unborn children. PFAS can harm the thyroid, liver, sex hormones, cholesterol levels, the immune system, and fertility. They are linked to kidney and testicular cancer. They are found in the Huron River, Au Sable River (downstream of Foote Dam), Allen Lake, Clark's Marsh, Flint River, and other Michigan waterways.



Bluegill

**What we do:** The Ecology Center advocates for city, state, and federal policies to ban the use of PFAS fire-fighting foam. We advocate to protect public health with low Maximum Contaminant Levels of PFAS in drinking water. We test consumer products for PFAS and work with companies to make PFAS-free products.



Yellow perch

## Mercury

Coal-fired power plants that produce electricity are the main source of mercury emissions into the air, water, and soil. Mercury pollution is common in Michigan's waterways. Mercury exposure can result in damage to the brain, central nervous system and organs. Mercury builds up in the muscle of the fish—the part that we eat—and cannot be trimmed off.

**What we do:** The Ecology Center works as part of the Michigan Energy Michigan Jobs and Michigan Air Michigan Health coalitions to stop the construction and expansion of coal-fired power plants in Michigan.



Rock bass

**What you can do:** Limit the amount of fish you eat. Follow fish advisories. [www.michigan.gov/eatsafefish](http://www.michigan.gov/eatsafefish). Eat plant-based sources of protein like nuts and beans (legumes) and omega-3 fats, like walnuts, soy/ tofu, spirulina, flax, hemp, and chia seeds.



**What else can you do?** Join the effort to keep the Great Lakes and our fish healthy!

Please contact us to learn how to get involved. 734-369-9278 ~ [rebecca@ecocenter.org](mailto:rebecca@ecocenter.org)