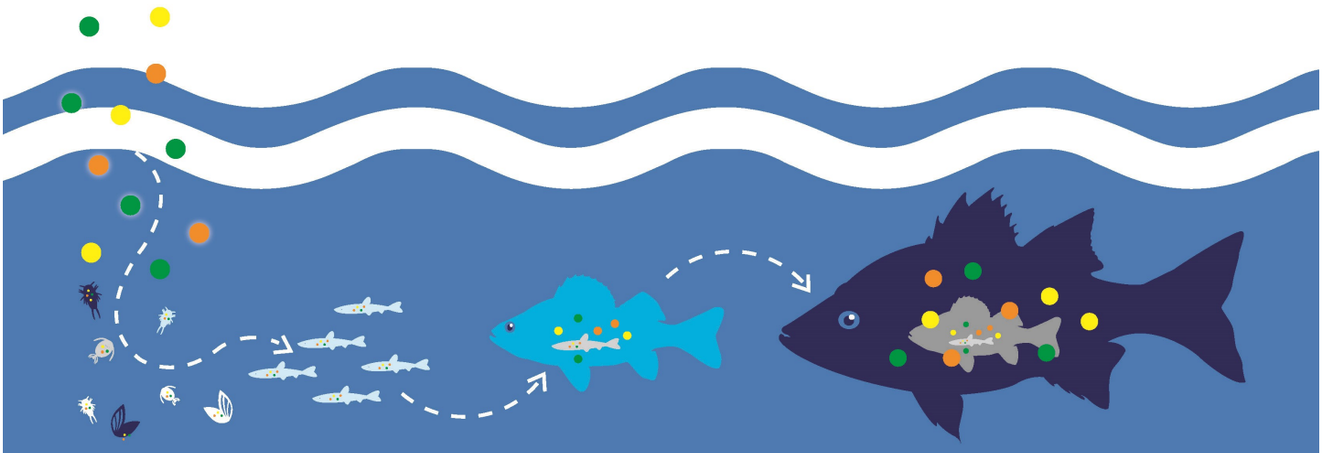
Eat Safe Fish



Why are chemicals in the Detroit River?

Prior to the 1970's, persistent chemicals were emitted by factories, sprayed as pesticides, dumped directly in the river or ended up there through accidental spills and runoff.

How do chemicals end up in fish?

While PCBs and dioxins are now banned, these chemicals are bio-accumulative and persistent in the environment and do not break down for long periods. If you eat fish from the Detroit River that have these chemicals, they can build up and stay in your body too.

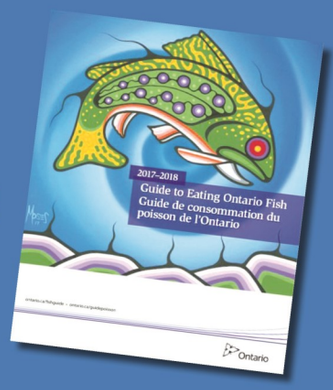
How will these chemicals affect me?

Contaminant in Fish	Possible health problems associated with contaminants
Mercury Mercury occurs naturally in the environment and also comes from smokestacks of coal-fired power plants and other industries.	• Brain development in children • Heart function • Immune system
Dioxins Dioxins are created when chlorine chemicals are made or used, and when things that have chlorine in them (paper/plastics) are burned.	• Linked to development of cancer and diabetes • Fertility can be harmed • Thyroid can be harmed
PCBs/Dioxin like PCBs PCBs were used in many industrial products such as electrical equipment and hydraulic oils. PCBs were banned in Canada in 1977.	• Brain development in children • Linked to development of cancer and diabetes • Immune system can be harmed

Eat Safe Fish

Choosing Safer Fish To Eat

Consult the **Guide to Eating Ontario Fish** to determine what kind of fish, the size of fish and the number of servings that are safe to eat.



Detroit River Consumption Advisories

A consumption advisory is a recommendation to limit or even avoid eating certain fish. There is an advisory for the Detroit River due to elevated PCB and mercury levels in certain fish species.

Highest Quality Fish
(8 meals/month SSP)

Species	Length (cm)	Length (Inches)
Upper Detroit River		
Common Carp	Under 40 cm	16”
Walleye	Under 35 cm	14”
Largemouth Bass	Under 35 cm	14”
Yellow Perch	Under 25 cm	10”
Rock Bass	Under 25 cm	10”
Freshwater Drum	Under 50 cm	20”
Lower Detroit River		
Common Carp	Under 50 cm	20”
Walleye	Under 35 cm	14”
Largemouth Bass	Under 30 cm	12”
Yellow Perch	Under 30 cm	12”
Rock Bass	Under 30 cm	12”

Avoid Eating
(0 meals/month SSP)

Species	Length (cm)	Length (Inches)
Upper Detroit River		
Walleye	Over 55 cm	22”
Largemouth Bass	Over 40 cm	16”
White Perch	Over 20 cm	8”
White Bass	Over 20 cm	8”
Rock Bass	Over 20 cm	8”
Carp	Over 45 cm	18”
Channel Catfish	Over 25 cm	10”
Freshwater Drum	Over 45 cm	18”
Lower Detroit River		
Walleye	Over 55 cm	22”
Yellow Perch	Over 30 cm	12”
White Perch	Over 20 cm	8”
Freshwater Drum	Over 35 cm	14”
Carp	Over 60 cm	24”

*1 meal = 227 g (8 oz) skinless dorsal muscle
**SSP = Sensitive Sub-Population (Children under 15 and women of childbearing age)
Note: these charts were prepared for information purposes by the Detroit River Canadian Cleanup and has not been endorsed by the Ontario Government or its staff. The information is synthesized from the Guide to Eating Ontario Sport Fish (2017/18) for the Detroit River.

Reducing the risk from contaminants in fish

Toxins such as polychlorinated biphenyls, pesticides and dioxins concentrate to the highest levels in fish with fatty flesh such as Salmon, Trout, Carp and Catfish. Toxins such as mercury and perfluorooctane sulfonic acid, are evenly distributed in fish flesh so there is nothing you can do to reduce or remove them.

Three tips for eating less contaminated fish

1. **Eat Smaller Fish.** Smaller fish tend to be less contaminated than larger fish of the same species.

2. **Eat Leaner Fish.** In the Great Lakes, species such as Bass, Pike, Walleye, Perch and panfish tend to have lower contaminants than fatty species like Salmon and Trout.

3. **Eat panfish or whitefish from inland locations.** At inland locations, top-predatory fish such as Pike and Walleye generally have greater contaminants than panfish or whitefish.

Clean and cook fish to reduce contaminants

Before cooking, remove the skin, trim off the fatty areas and discard the flesh around the belly area. You can further reduce contaminants by allowing fat to drip away during cooking (e.g., grilling, broiling or baking). If you deep fry fish, do not re-use the oil.

How to trim and cook fish to reduce contaminants

1. Remove fillet.

2. Remove skin and fat along the side and belly.

3. Cook on a rack or grill to let fat drip away.

Detroit River Fish Recipes

Fish on a rack over coals in the oven

Ingredients

1/2 cup flour
6 tablespoons margarine/ butter
2 teaspoons lemon juice
Salt and pepper to taste
1 medium onion, thinly sliced and separated into rings
4-6 fish fillets, any kind
Barbeque sauce

Cooking Instructions

Preheat oven to 450°F

Melt margarine/butter and stir in lemon juice
Line baking sheet with aluminum foil and coat it with half of the margarine/butter and lemon mixture

Rinse and gently dry the fillets. Lightly coat them with flour and place on the foil. Pour a strip of barbeque sauce down the centre of each one. place onions on top and drizzle with lemon mixture. Add salt and pepper to taste. Place foil over top and crimp all around.

Place on rack and cook until fish flakes and onions are done,

Foil fish bake

Ingredients

4 fish fillets, any kind
1/4 cup Miracle Whip
1/4 cup grated Romano cheese
2 medium zucchini, sliced
1/4 red bell pepper, cut into small pieces
1/3 cup white sweet onions, chopped
4 12x18 sheets of aluminum foil

Cooking Instructions

Preheat oven to 450°F

Spray one square of foil with non-stick cooking spray. Place one fish fillet on the centre of the foil. Spread with 1/4 of the Miracle Whip and 1/4 of the Romano cheese. Salt and pepper to taste and top with 1/4 of the vegetables.

Bring up sides of the foil together and double fold. Then double fold the two open ends of the foil to create a sealed packet. Leave room for air to circulate. Repeat for the other three fillets.

Place on cookie sheet and bake for 18-22 minutes. Be careful when opening!

Fried fish tacos

Ingredients

4 perch fillets
1 egg lightly beaten
1/2 cup cornmeal
1/2 cup flour
1/4 cup canola oil
6 tortillas
Taco toppings such as shredded lettuce, lime slices, chopped tomato, diced onion, chopped avocado, shredded cheese etc.

Cooking Instructions

Cut the perch into 1 inch strips and pat dry.

Heat oil in a large skillet, over medium-high heat.

Place the egg in a shallow bowl.

Combine cornmeal and flour in a separate bowl.

Dip perch in egg and then coat with cornmeal mixture.

Fry perch in skillet for 2-3 minutes each side or until fish flakes easily with a fork.

Serve with taco fillings on fresh tortillas.