

## Are fish good for you to eat?

Yes! Fish have a lot of great health benefits.

- ☑ Fish can be a great low-fat source of protein.
- ☑ Fish are brain food.
- ☑ Some fish have heart-healthy omega-3s.

## Who is at greatest risk from the chemicals in some fish?

Those most at risk are:

- fetuses and children under the age of 15,
- people planning on having children within several years, and
- people with serious health problems such as heart, thyroid, or immune system issues.



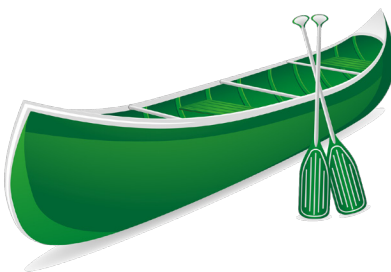
Fish are good to eat, but it is especially important that people in these groups *eat safe fish*.



The MDHHS Safe Fish Guidelines in this brochure are from the MDHHS **2016 Eat Safe Fish Guide**. For updates, visit [www.michigan.gov/eatsafefish](http://www.michigan.gov/eatsafefish) or call 1-800-648-6942 and ask for a free **Guide**.

## What are 'safe' fish?

*Safe fish* are fish that are low in chemicals. If you use the **Eat Safe Fish** guidelines when you choose fish to catch and eat, you will protect yourself and your family from chemicals that could someday make you sick.



Fishing, boating, and swimming are fun ways enjoy Iosco County's lakes, rivers, and streams. Have fun while eating safe fish!

### Catching fish • Buying fish • Eating fish

For more information on safe fish, call MDHHS at 1-800-648-6942 or visit us online at [www.michigan.gov/eatsafefish](http://www.michigan.gov/eatsafefish).



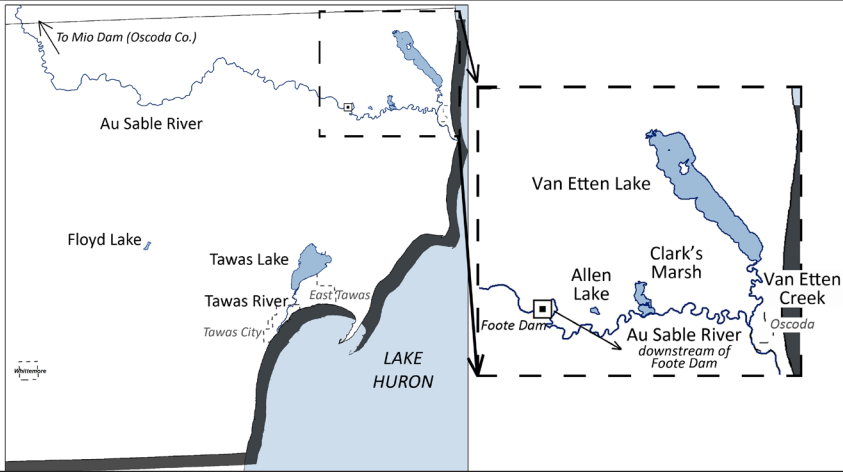
# eat safe fish in Iosco County



[www.michigan.gov/eatsafefish](http://www.michigan.gov/eatsafefish)

Photo Credit: Paul Rekowski

# Iosco County Guidelines



## Why aren't some fish safe to eat?

The fish from Clark's Marsh have high amounts of PFOS in them and shouldn't be eaten at all.

Some fish from the lower Au Sable River, Lake Huron and Van Etten Lake have PFOS, PCBs, dioxins, and mercury. The guidelines in this brochure describe how often it's safe to eat them.



## Allen Lake

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Bluegill	Mercury	Any Size	8
Largemouth Bass	Mercury	Any Size	6 Per Year
Smallmouth Bass	Mercury	Any Size	6 Per Year
Sunfish	Mercury	Any Size	8

## Clark's Marsh

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
All Species	PFOS	Any Size	Do Not Eat

## Au Sable River

(between Mio Dam in Oscoda Co. and Foote Dam)

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Northern Pike	Mercury	Under 30"	1
		Over 30"	6 per Year
Walleye	Mercury	Any Size	1

## Floyd Lake

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Largemouth Bass	Mercury	Under 18"	1
		Over 18"	6 Per Year
Smallmouth Bass	Mercury	Under 18"	1
		Over 18"	6 Per Year

## Au Sable River

(downstream of Foote Dam; includes Van Etten Creek)

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Bluegill	PFOS	Any Size	Do Not Eat
Brown Trout	PCBs	Any Size	6 Per Year <sup>2x</sup>
Carp	PFOS	Any Size	Do Not Eat
Chinook Salmon	PCBs	Any Size	6 Per Year <sup>2x</sup>
Coho Salmon	PCBs	Any Size	6 Per Year <sup>2x</sup>
Largemouth Bass	PFOS	Any Size	Do Not Eat
Rainbow Trout	PCBs	Any Size	6 Per Year <sup>2x</sup>
Rock Bass	Mercury & PFOS	Any Size	4
Smallmouth Bass	PFOS	Any Size	Do Not Eat
Steelhead	PCBs	Any Size	6 Per Year <sup>2x</sup>
Suckers	PFOS	Any Size	Do Not Eat
Sunfish	PFOS	Any Size	Do Not Eat
Walleye	Dioxins	Any Size	6 Per Year <sup>2x</sup>
All Other Species	PFOS	Any Size	Do Not Eat

## Tawas Lake

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Black Crappie	Mercury	Any Size	2
White Crappie	Mercury	Any Size	2

## Tawas River

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Suckers	Mercury	Any Size	2

## Van Etten Lake

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Catfish	PCBs	Any Size	Limited
Suckers	Mercury	Under 14"	8
		14 to 20"	4
		Over 20"	2
Walleye	Mercury	Any Size	1

For other counties in Michigan, please visit [www.michigan.gov/eatsafefish](http://www.michigan.gov/eatsafefish) to get the *Eat Safe Fish Guide* for that region.

# Lake Huron Guidelines

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Brown Trout	PCBs	Any Size	6 Per Year <sup>2x</sup>
Carp	PCBs & Dioxins	Any Size	Do Not Eat
Catfish	Dioxins	Any Size	Limited
Chinook Salmon	PCBs	Any Size	6 Per Year <sup>2x</sup>
Coho Salmon	PCBs	Any Size	6 Per Year <sup>2x</sup>
Freshwater Drum	Mercury	Any Size	6 Per Year
Lake Trout	PCBs & Dioxins	Under 20"	1 <sup>2x</sup>
		20" to 24"	6 Per Year <sup>2x</sup>
	PCBs	Over 24"	Limited
Lake Whitefish	Dioxins	Any Size	6 Per Year <sup>2x</sup>


Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Northern Pike	PCBs	Any Size	1 <sup>2x</sup>
Rainbow Trout	PCBs	Any Size	6 Per Year <sup>2x</sup>
Smelt	PCBs	Any Size	4 <sup>2x</sup>
Steelhead	PCBs	Any Size	6 Per Year <sup>2x</sup>
Suckers	PCBs	Any Size	2 <sup>2x</sup>
Walleye	Dioxins	Any Size	6 Per Year <sup>2x</sup>
White (Silver) Bass	PCBs & Dioxins	Any Size	Limited
White Perch	PCBs	Any Size	6 Per Year <sup>2x</sup>
Yellow Perch	Dioxins	Any Size	2 <sup>2x</sup>



## Statewide Guidelines

Don't see a certain Iosco County lake or river listed in this brochure? The Statewide Guidelines can help you find safer fish to eat. But only use the Statewide Guidelines if...



- the Iosco County lake or river you are fishing in is not listed in this brochure, OR
- your lake or river is listed in this brochure, but the fish species is not listed.

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Black Crappie	Mercury	Any Size	4
Bluegill	Mercury	Any Size	8 
Carp	PCBs	Any Size	2
Catfish	PCBs & Mercury	Any Size	4
Largemouth Bass	Mercury	Under 18"	2
		Over 18"	1
Muskellunge	Mercury	Any Size	1
Northern Pike	Mercury	Under 30"	2
		Over 30"	1

Type of Fish	Chemical of Concern	Size of Fish	MI Servings per Month
Rock Bass	Mercury	Any Size	4
Smallmouth Bass	Mercury	Under 18"	2
		Over 18"	1
Suckers	Mercury	Any Size	8 
Sunfish	Mercury	Any Size	8 
Walleye	Mercury	Under 20"	2
		Over 20"	1
White Crappie	Mercury	Any Size	4
Yellow Perch	Mercury	Any Size	4

The Statewide Guidelines are based on the typical amount of chemicals found in fish filets tested from around the state. Some fish may be higher or lower. If any of these fish are listed in the guidelines for the lake or river you are fishing in, use **those** guidelines instead of the Statewide Guidelines. The *MI Servings* recommendation will be more exact for that lake or river because those filets have been tested.

# My Michigan, MI Serving Size


Special MI Serving Categories

**2x**

**Remove the fat; double the MI Servings!**

PCBs and dioxins are in the fat of the fish. You can double the number of *MI Servings* if you:

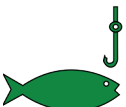
- trim away the fat from the filet,
- cook the fish on a grill or broiling pan so more fat can drip away



**Best Choice**

**Do you eat fish at least twice a week?**


When using the MDHHS *Eat Safe Fish Guide*, watch for this MDHHS “Best Choice” symbol. The hook and fish symbol marks species that you and your family can safely eat 8 *MI Servings* or more each month!



**Limited**

If you:

- are under the age of 15,  
-or-
- are planning on having children in the next several years, are currently pregnant, or are breastfeeding,  
-or-
- have health problems, like cancer or diabetes,




MDHHS suggests you **avoid eating all fish listed as “Limited”** because of higher levels of chemicals.

If **NONE** of the above apply to you, it is usually OK to eat fish listed as “Limited” **1 or 2 times each year.**

**Do Not Eat**

**No one should eat fish listed as Do Not Eat, regardless of age or health.**

When these fish were tested, MDHHS found **very high** levels of chemicals. Eating even one meal of these fish could possibly lead to health problems in the future, regardless of age or health.

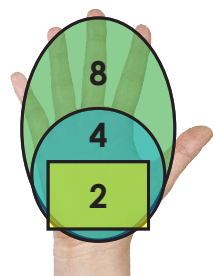


## How much is a MI Serving?

Weight of Person	MI Serving Size
180 pounds	8 ounces
90 pounds	4 ounces
45 pounds	2 ounces

**Weigh Less?** For every 20 pounds **less** than the weight listed in the table, **subtract 1 ounce of fish.**  
For example, a 70-pound child’s *MI Serving* size is 3 ounces of fish.  
 $90 \text{ pounds} - 20 \text{ pounds} = 70 \text{ pounds} / 4 \text{ ounces} - 1 \text{ ounce} =$   
*a MI Serving* size of 3 ounces


**Weigh More?** For every 20 pounds **more** than the weight listed in the table, **add 1 ounce of fish.**  
For example, a 110-pound person’s *MI Serving* size is 5 ounces of fish.  
 $90 \text{ pounds} + 20 \text{ pounds} = 110 \text{ pounds} / 4 \text{ ounces} + 1 \text{ ounce} =$   
*a MI Serving* size of 5 ounces



- 8 ounces of fish = about the size of an adult’s hand (large oval)
- 4 ounces of fish = about the size of the palm of an adult’s hand (small circle)
- 2 ounces of fish = about the size of half the palm of an adult’s hand (rectangle)

You might eat more than one *MI Serving* in a meal. That’s OK, just keep track so you don’t have too much.

**Are you pregnant?**



Fish are good for you and your baby! Use your pre-pregnancy weight to find your *MI Serving* size. It’s best to avoid eating fish labeled as “Limited” when you’re pregnant or breastfeeding.

## The 3Cs to Safer Fish

- Choose** fish that are lower in chemicals. The *Eat Safe Fish Guide* can help you do this.
- Clean** away the fat, skin, and organs. PCBs and dioxins are stored in the fat and organs. PFOS and mercury are in the meat and can't be cleaned away.
- Cook** fish on a grill or rack so fat can drip away. Don’t re-use oil used for frying fish.

