

#### Using the Eat Safe Fish Guidelines

MDHHS tests only the filets of the fish for chemicals to set these guidelines. *MI Servings* are set to be safe for everyone. This includes children, pregnant or breastfeeding women, and people who have health problems like cancer or diabetes.

#### How much is MI Serving?

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



For every 20 pounds <u>less</u> 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 pounds - 20 pounds = 70 pounds & 4 ounces - 1 ounce = a *MI Serving* size of 3 ounces

eigh 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 pounds + 20 pounds = 110 pounds / 4 ounces plus 1 ounce = a MI Serving size of 5 ounces

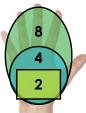
You might eat more than one *MI Serving* in a meal. That's OK, just keep track so you don't have too much.



#### Are you pregnant?

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

#### My Michigan, MI Serving Size



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

#### What are 'safe' fish?

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

## If there are chemicals in the fish, why should I still eat it?

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 hearthealthy omega-3s.

Plus, fishing is a fun way to get outside and enjoy Michigan's 11,000 lakes, rivers, and streams!

If you go after fish that have fewer chemicals in them, trim away the fat, and grill or broil the fish that you eat, you can get a lot of health benefits and have very little risk.

#### 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.









The MDHHS Safe Fish Guidelines in this brochure are from the MDHHS **2018** Eat Safe Fish Guide. For updates, visit <a href="https://www.michigan.gov/eatsafefish">www.michigan.gov/eatsafefish</a> or call 1-800-648-6942 and ask for a free Guide.

### Lake Huron

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Brown Trout	PCBs	Any	6 Per Year <sup>2x</sup>
Carp	PCBs & Dioxins	Any	Do Not Eat▲
Catfish	Dioxins	Any	Limited▲
Chinook Salmon	PCBs	Any	6 Per Year <sup>2x</sup>
Coho Salmon	PCBs	Any	6 Per Year <sup>2x</sup>
Freshwater Drum	Mercury	Any	1
	PCBs & Dioxins	Under 20"	1 <sup>2x</sup>
Lake Trout		20" to 24"	6 Per Year <sup>2x</sup>
	PCBs	Over 24"	Limited▲

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Lake Whitefish	Dioxins	Any	6 Per Year <sup>2x</sup>
Northern Pike	PCBs	Any	1 <sup>2x</sup>
Rainbow Trout	PCBs	Any	6 Per Year <sup>2x</sup>
Smelt	PCBs	Any	4 <sup>2x</sup>
Steelhead	PCBs	Any	6 Per Year <sup>2x</sup>
Suckers	PCBs	Any	2 <sup>2x</sup>
Walleye	Dioxins	Any	6 Per Year <sup>2x</sup>
White (Silver) Bass	PCBs & Dioxins	Any	Limited▲
White Perch	PCBs	Any	6 Per Year <sup>2x</sup>
Yellow Perch	Dioxins	Any	2 <sup>2x</sup>

## **Statewide Guidelines & More**

Don't see a certain Bay, Midland, or Saginaw County lake or river listed in this brochure? Then the Statewide Safe Fish Guidelines can help you find safer fish to eat.

#### Only use the Statewide Guidelines if...



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

## Statewide Safe Fish Guidelines

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Black Crappie	Mercury	Any Size	4
Bluegill	Mercury	Any Size	8
Brown Trout	Mercury	Any Size	4
Bullhead	Mercury	Any Size	4
Carp	PCBs	Any Size	2
Catfish	PCBs & Mercury	Any Size	4
Largomouth Bass	Mercury	Under 18"	2
Largemouth Bass		Over 18"	1
Muskellunge	Mercury	Any Size	1
Northorn Dike	Morousy	Under 30"	2
Northern Pike	Mercury	Over 30"	1

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Rock Bass	Mercury	Any Size	4
Smallmouth Bass	Morousy	Under 18"	2
Silialifficutii Bass	Mercury	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

These 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. For other counties in Michigan, please visit <a href="https://www.michigan.gov/eatsafefish">www.michigan.gov/eatsafefish</a> to get the *Eat Safe Fish Guide* for that region.

## 2x, Best Choice, Limited, and Do Not Eat

Remove the fat; double the MI Servings!

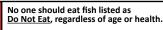
PCBs and dioxins are in the fat of the fish. You can double the number of *MI Servings* if you:

- trim away the fat that you can see from the filet,
- cook the fish on a grill or broiling pan so more fat can drip away
- Note, you can't remove mercury, selenium, or PFOS from the fish. Do not double the MI Servings for fish with those chemicals listed as a Chemical of Concern.

est 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 mark species that you and your family can safely eat 8 MI Servings or more each month!



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



#### If you

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

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

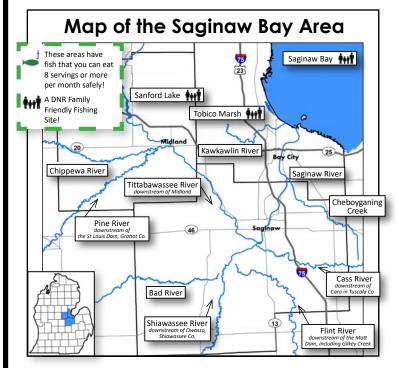
If **NONE** of the above apply to you, it is usually OK to eat fish listed as "Limited" <u>1 or 2 times each year</u>



# Eat Safe Fish Guidelines

These guidelines are from the 2018 Southeast Eat Safe Fish Guide.

To get the most up-to-date guidelines for lakes and rivers in Bay, Midland, and Saginaw Counties or other areas of Michigan, please visit <a href="www.michigan.gov/eatsafefish">www.michigan.gov/eatsafefish</a> to download a copy of the Eat Safe Fish Guide to your smartphone or call 1-800-648-6942 to get a print copy!



#### **Bad River**

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Carp	PCBs	Any	Limited▲
Catfish	DCD.	Under 18"	1 <sup>2x</sup>
Catristi	PCBs	Over 18"	6 Per Year <sup>2x</sup>
Northern Pike	PCBs & Mercury	Any	2

#### **Cass River**

(downstream of Caro in Tuscola Co.)

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Carp	PCBs & Dioxins	Any	6 Per Year <sup>2x</sup>
Catfish	PCBs & Dioxins	Any	6 Per Year <sup>2x</sup>
Rock Bass	Mercury	Any	2

#### **Cheboyganing Creek**

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Carp	PCBs	Any	Limited▲
Northern Pike	PCBs	Under 26"	1 <sup>2x</sup>
		Over 26"	6 Per Year <sup>2x</sup>

#### **Chippewa River**

(downstream of Lake Isabella Dam, Isabella Co.)

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Carp	PCBs & Dioxins	Any	Limited▲
Rock Bass	Mercury	Under 8" Over 8"	$rac{4}{2}$
Suckers	Mercury & PCBs	Any	2

When fishing in the Chippewa River near the Pine River, please use the Pine River guidelines below.

#### Flint River

(downstream of Mott Dam, including Gilkey Creek)

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Carp	PCBs	Any	Limited▲
Largemouth Bass	PFOS	Any	6 Per Year
Rock Bass	PFOS	Any	1
Smallmouth Bass	PFOS	Any	6 Per Year

PFOS can't be reduced by trimming and cooking. Do not double MI Servings.

#### Haithco Lake

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Black Crappie	Mercury	Any	4
White Crappie	Mercury	Any	4
Yellow Perch	Mercury	Any	4

#### Kawkawlin River

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Carp	PCBs	Any	Limited▲
Northern Pike	PCBs	Any	Limited <b>≜</b>

When fishing the river near Saginaw Bay, use the Saginaw Bay guidelines below.  $\label{eq:Bayes}$ 

#### Pine River

(downstream of St. Louis Dam in Gratiot Co. to the Chippewa River)

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Carp	DDT	Any	Do Not Eat▲
Catfish	DDT	Any	Do Not Eat▲
Largemouth Bass	DDT	Any	Do Not Eat▲
Smallmouth Bass	DDT	Any	Do Not Eat▲
Suckers	DDT	Any	Do Not Eat▲
All Other Species	DDT	Any	Do Not Eat▲

2X

See the **2x** box on the back of this page to learn how you can eat more of these fish safely.



See the **Limited** and **Do Not Eat** boxes on the back of this page for more information.



To get the guidelines for other regions in Michigan and nearby states, please visit <a href="https://www.michigan.gov/eatsafefish">www.michigan.gov/eatsafefish</a> or call MDHHS at 1-800-648-6942.

# 2018 Eat Safe Fish Guidelines for the Saginaw Bay Area (continued)

#### Saginaw Bay

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Carp	PCBs & Dioxins	Any	Do Not Eat▲
Catfish	Dioxins	Any	Limited▲
Freshwater Drum	Mercury	Any	1
Lake Trout	PCBs & Dioxins	Under 20"	1 <sup>2x</sup>
	PCBs	20" to 24"	6 Per Year <sup>2x</sup>
		Over 24"	Limited▲
Walleye	Dioxins	Any	6 Per Year <sup>2x</sup>
White (Silver) Bass	PCBs & Dioxins	Any	Do Not Eat▲
Yellow Perch	Dioxins	Any	2 <sup>2x</sup>
All Other Species	PCBs & Dioxins	Any	6 Per Year <sup>2x</sup>

#### Saginaw River

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Bluegill	PFOS	Any	4
Carp	PCBs & Dioxins	Any	Do Not Eat▲
Catfish	Dioxins	Any	Do Not Eat▲
Largemouth Bass	PFOS, PCBs, & Mercury	Under 18"	2
	Mercury	Over 18"	1
Smallmouth Bass	PFOS, PCBs, & Mercury	Under 18"	2
	Mercury	Over 18"	1
Sunfish	PFOS	Any	4
Walleye	Dioxins	Any	6 Per Year <sup>2x</sup>
White (Silver) Bass	PCBs & Dioxins	Any	Do Not Eat▲
Yellow Perch	Dioxins	Any	2 <sup>2x</sup>
All Other Species	PCBs & Dioxins	Any	6 Per Year <sup>2x</sup>

PFOS can't be reduced by trimming and cooking. Do not double MI Servings.

#### Sanford Lake

	Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
	Catfish	Mercury & Dioxins	Any	2
_ <del>j</del>	Black Crappie	Mercury	Under 9"	8
	ыаск старріе		Over 9"	4
	Northern Pike	Mercury	Under 30"	2
	Northern Pike		Over 30"	1
	Rock Bass	Mercury	Any	4
	Walleye	Mercury	Under 20"	2
			Over 20"	1
j	White Crappie	Mercury	Under 9"	8
			Over 9"	4

#### Shiawassee River

(downstream of Owosso, Shiawassee Co.)

	Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
	Carp	PCBs	Any	6 Per Year <sup>2x</sup>
Γ	Largemouth Bass Me	Morouni	Under 18"	2
L		Mercury	Over 18"	1
L	Rock Bass	Mercury	Any	8
Г	Smallmouth Bass	Mercury	Under 18"	2
L			Over 18"	1

#### Tittabawassee River

(downstream of Midland)

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Carp	PCBs & Dioxins	Any	Do Not Eat▲
Catfish	Dioxins	Any	Do Not Eat▲
Laurana esta Dana	DCDa 8 Dianiaa	Under 18"	6 Per Year <sup>2x</sup>
Largemouth Bass	PCBs & Dioxins	Over 18"	Limited▲
Consultant and Base	DCDa 8 Diavisa	Under 18"	6 Per Year <sup>2x</sup>
Smallmouth Bass	PCBs & Dioxins	Over 18"	Limited▲
Suckers	PCBs	Any	6 Per Year <sup>2x</sup>
Walleye	Dioxins	Any	6 Per Year <sup>2x</sup>
White (Silver) Bass	PCBs & Dioxins	Any	Do Not Eat▲
Yellow Perch	Dioxins	Any	2 <sup>2x</sup>
All Other Species	PCBs & Dioxins	Any	6 Per Year <sup>2x</sup>

#### **Tobico Marsh**

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings Per Month*
Carp	PCBs	Any	6 Per Year <sup>2x</sup>
Largamauth Dass	Mercury	Under 18"	2
Largemouth Bass		Over 18"	1
Cmallmanth Dass	Mercury	Under 18"	2
Smallmouth Bass		Over 18"	1
No who a war Dilea	Mercury	Under 30"	4
Northern Pike		Over 30"	2

## Do you also hunt in the area?

If you eat wild game from the Saginaw River and Tittabawassee River area:

- Call 1-800-648-6942 to request the MDHHS Eat Safe Wild Game brochure.
- Always trim away any fat you can see from the game meat.
- Always cook the meat on a rack or grill so any extra fat can drip away.
- Never eat the organs including the liver, heart, brains, or gizzards.

