

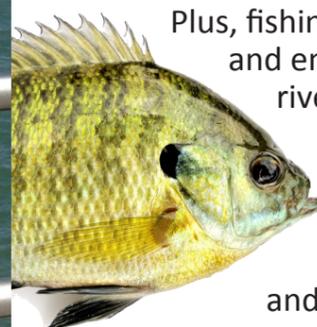
What are 'safe' fish?

Safe fish are fish that are low in chemicals. If you use the MDCH **Eat Safe Fish Guide** for your region 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 heart-healthy omega-3s.



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

If you **follow the 3Cs** and go after fish that have **fewer chemicals** in them, 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 MDCH at 1-800-648-6942

or visit us online at www.michigan.gov/eatsafefish.



Here's your map & the local Eat Safe Fish guidelines, too!



This flyer lists all the lakes and rivers in St Clair County that have had filets of fish tested for chemicals.

To get the *Eat Safe Fish Guides* for other areas, please call MDCH at 1-800-648-6942 or visit www.michigan.gov/eatsafefish.

Areas of Concern (AOCs)

In the 1980s, the United States and Canadian governments identified 43 places in the Great Lakes region that had severe, long-term environmental problems. These places are called *Areas of Concern* or *AOCs*. Michigan originally had 14 AOCs located in both the upper and lower peninsulas.

People in federal, state, and provincial governments are working to address the problems in these areas. Local groups, known as Public Advisory Councils (PAC), also work on these environmental problems.

Beneficial Use Impairments (BUIs)

These environmental problems are called *beneficial use impairments* or *BUIs*. There were 14 categories of BUIs named in the U.S.-Canadian Great Lakes Water Quality Agreement. However, a place did not have to have all 14 problems to be called an AOC.

Each BUI has goals that need to be met in order to be removed from the AOC's list of problems. Once all BUIs are removed from the list, the AOC is considered to be no longer impaired and can be *delisted*, or removed from the list of AOCs.

The Goal: Delisting & a Healthy Environment

Once all of the assigned BUIs have been removed from an AOC, the PAC and Michigan Department of Environmental Quality submit a petition to the U.S. Environmental Protection Agency requesting to be removed from the list of AOCs. This is called "delisting." Two of Michigan's 14 original AOCs were delisted in 2014. Others are closer to delisting thanks to the dedication of the local, state, and federal stakeholders working to improve our environment, along with funding from the U.S. Environmental Protection Agency and the Great Lakes Restoration Initiative.

You can get involved!

Would you like to volunteer with the St. Clair River AOC Public Advisory Council? Contact the Michigan Department of Environmental Quality's Office of the Great Lakes for more information at 1-517-284-5035.

The 14 BUIs that an AOC can have are:

- Restrictions on Fish and Wildlife Consumption
- Tainting of Fish and Wildlife Flavor
- Fish Tumors or Other Deformities
- Degraded Fish and Wildlife Populations
- Loss of Fish and Wildlife Habitat
- Bird or Animal Deformities or Reproductive Problems
- Degradation of Phytoplankton and Zooplankton Populations
- Degradation of Benthos
- Degradation of Aesthetics
- Eutrophication or Undesirable Algae
- Beach Closings
- Added Costs to Agriculture or Industry
- Restrictions on Dredging Activities
- Restrictions on Drinking Water Consumption or Taste and Odor Problems



Free map to local fishing areas & the MDCH safe fish guidelines!

eat safe fish

in St. Clair County



www.michigan.gov/eatsafefish

Get to know the 3Cs

Choose, Clean, Cook

By choosing the right fish and then cleaning and cooking it the right way, you can reduce some of the chemicals in the fish by nearly half!

1 Choose

Some fish contain chemicals that can harm your health. MDCH tests filets of fish taken from Michigan's lakes and rivers to learn which fish are safer to eat. The **Eat Safe Fish Guides** make it easy to find out which fish have been tested and easy to choose fish that are safe to eat.

The Eat Safe Fish Guide:

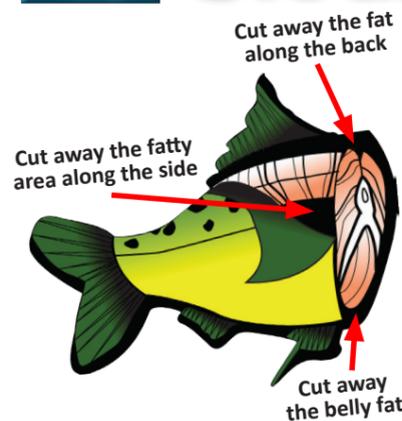
- lists fish species that have had filets tested for chemicals by MDCH.
- protects people who eat Michigan fish often.
- protects anyone who has health problems, is young, is pregnant, or is planning on having children in the future.



Many lakes and rivers have been tested in St. Clair County. You can find these guidelines on the flyer in the back of this brochure. To get the guidelines for other areas, visit www.michigan.gov/eatsafefish or call 1-800-648-6942.

2 Clean

Some chemicals, like PCBs and dioxins, collect in the fat of the fish.



- When cleaning the fish, trim away any of the fat you can see.
- Remove and throw away the organs, too.

Careful cleaning and cooking can get rid of up to half of these chemicals from the fish.

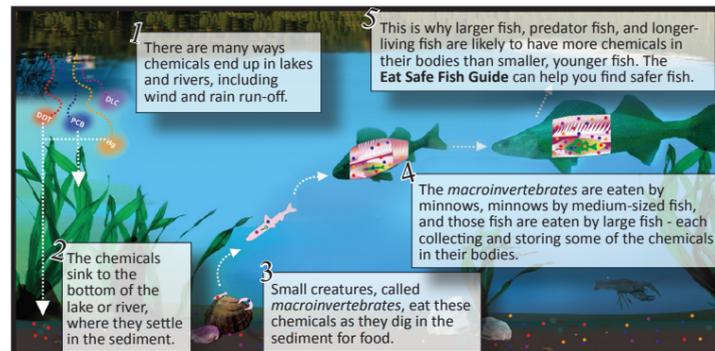
3 Cook



- Poke holes in the skin or remove it completely so that more fat can drip away from the fish filet as it cooks.
- Cook your fish on a grill or on a broiler pan in the oven. More of the fat and chemicals left behind can now drip away from the fish through the grates.
- If you choose to fry your fish, it's best to pan fry and throw away the oil. Please note that frying does not get rid of any of the chemicals that may be in the fish.

You can't remove mercury or PFOS from fish by cleaning and cooking. Always choose your fish wisely!

Why are there chemicals in some fish?



- PCBs, dioxins, and mercury are the most common chemicals found in filets of Michigan fish.
- These chemicals are *persistent* and *bioaccumulative*. This means the chemicals not only stay in the environment, they also build up in living things.
- Because of this, they have become part of the food chain for fish, as you can see in the picture above.
- Some chemicals, like PCBs and dioxins, build up in the fat of the fish. Mercury and PFOS build up in the muscle, or filet, of the fish.
- If you choose fish lower in mercury and PFOS and follow the 3Cs, you can keep these chemicals from building up in your body, too.
- You can't see or taste these chemicals. They do not change how clear or dirty the water looks. The only way to know if these chemicals are in the fish is by testing for them in a laboratory.



St. Clair Co. Eat Safe Fish Guidelines

These guidelines are from the 2015 *Southeast Michigan Eat Safe Fish Guide*. To get the most up-to-date guidelines for lakes and rivers in St. Clair County or other areas of Michigan, please visit www.michigan.gov/eatsafefish to download the *Eat Safe Fish Guides* to your smartphone or call 1-800-648-6942 to get a print copy!

St. Clair River

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Carp	PCBs	Any	Limited [▲]
Freshwater Drum	PCBs & Mercury	Any	2
Largemouth Bass	Mercury	Under 18"	2
		Over 18"	1
Rock Bass	Mercury	Any	4
Smallmouth Bass	Mercury	Under 18"	2
		Over 18"	1
Sturgeon	PCBs	Any	Limited [▲]
Walleye	PCBs & Dioxins	Any	6 Per Year ^{2x}
White (Silver) Bass	PCBs	Any	Limited [▲]
Yellow Perch	Mercury	Any	8

When fishing the river near Lake Huron or Lake St. Clair, please check the lake guidelines, too.

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 ^{2x}
Carp	PCBs & Dioxins	Any	Limited [▲]
Catfish	Dioxins	Any	Limited [▲]
Chinook Salmon	PCBs	Any	6 Per Year ^{2x}
Coho Salmon	PCBs	Any	6 Per Year ^{2x}
Freshwater Drum	Mercury	Any	1
Lake Trout	PCBs & Dioxins	Under 20"	1 ^{2x}
		20" to 24"	6 Per Year ^{2x}
		Over 24"	Limited [▲]
Lake Whitefish	Dioxins	Any	6 Per Year ^{2x}
Northern Pike	PCBs	Any	1 ^{2x}
Rainbow Trout	PCBs	Any	6 Per Year ^{2x}
Smelt	PCBs	Any	4 ^{2x}
Steelhead	PCBs	Any	6 Per Year ^{2x}
Suckers	PCBs	Any	2 ^{2x}
Walleye	Dioxins	Any	6 Per Year ^{2x}
White (Silver) Bass	PCBs & Dioxins	Any	Limited [▲]
White Perch	PCBs	Any	6 Per Year ^{2x}
Yellow Perch	Dioxins	Any	2 ^{2x}

For Saginaw Bay and Les Cheneaux Island guidelines, please request a print copy of the full *Southeast Michigan Eat Safe Fish Guide* from MDHHS or download it to your smartphone at www.michigan.gov/eatsafefish.

Lake St. Clair

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Black Crappie	Mercury	Under 9"	8
		Over 9"	4
Bluegill	PCBs	Any	8 ^{2x}
Carp	PCBs	Any	Limited [▲]
Catfish	Dioxins	Any	Limited [▲]
Freshwater Drum	PCBs & Mercury	Any	2
Largemouth Bass	PCBs & Mercury	Under 20"	1 ^{2x}
		Over 20"	1
Muskellunge	Mercury	Any	Do Not Eat [▲]
Northern Pike	Mercury	Any	2
Rock Bass	PCBs	Any	1 ^{2x}
Smallmouth Bass	PCBs & Mercury	Under 20"	1 ^{2x}
		Over 20"	1
Sturgeon	PCBs	Any	Limited [▲]
Sunfish	PCBs	Any	8 ^{2x}
Walleye	PCBs & Dioxins	Any	6 Per Year ^{2x}
White (Silver) Bass	PCBs	Any	Limited [▲]
White Crappie	Mercury	Under 9"	8
		Over 9"	4
Yellow Perch	Mercury	Any	4

(If you're fishing within 2 miles of the outlet of the Lange-Revere Canals in Macomb Co., please request the full *Eat Safe Fish Guide* for special guidelines. The area covered by the special guidelines is between Lake Front Park and Veteran's Memorial Park in St. Clair Shores & out into open water.)

Pine River

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Carp	PCBs	Any	1 ^{2x}



For all other lakes and rivers in St. Clair County, please use the Statewide Safe Fish Guidelines found on the other side of this brochure.



To get the full *Eat Safe Fish Guides* with guidelines for other counties and regions in Michigan, please visit www.michigan.gov/eatsafefish or call MDHHS at 1-800-648-6942.

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.

FREE LOCAL FISHING MAP & Eat Safe Fish Guidelines

eat safe fish in St. Clair County



www.michigan.gov/eatsafefish

Restoring the St. Clair River

The St. Clair River Binational Public Advisory Council has been working with the US Environmental Protection Agency (EPA) and Michigan Department of Environmental Quality (MDEQ) to complete projects along the entire length of the St. Clair River that help to improve the local environment for people, animals, and fish!

To learn more about the work that was done or learn about volunteer opportunities, visit the Friends of the St. Clair River at www.scriver.org.

Marysville Living Shoreline

(Parking available at Marysville Golf Course)
Just across the street from the Marysville Golf Course, you'll find a beautiful stretch of newly restored riverfront access. Located at the mouth of Cuttle Creek, this area will soon attract fish heading up the creek to spawn, as well as smaller fish seeking refuge from predators among the rocks and tree roots placed along the shoreline.

Blue Water River Walk

(Starts near the Maritime Center; many access points)
The Blue Water River Walk is a great place for a bike ride, stroll, or to launch your kayak. There are also numerous locations where you can sit down, toss in your fishing line, and watch the majestic freighters passing by as you reel in walleye and other fish that are taking advantage of the newly created shoreline fish habitats.

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.



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 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 pounds - 20 pounds = 70 pounds - 1 ounce = a MI Serving size of 3 ounces

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

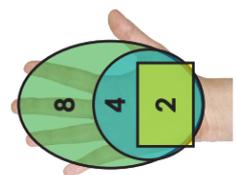
You might eat more than one MI Serving in a meal. That's OK, just keep track so you don't have too much.

Are you pregnant?

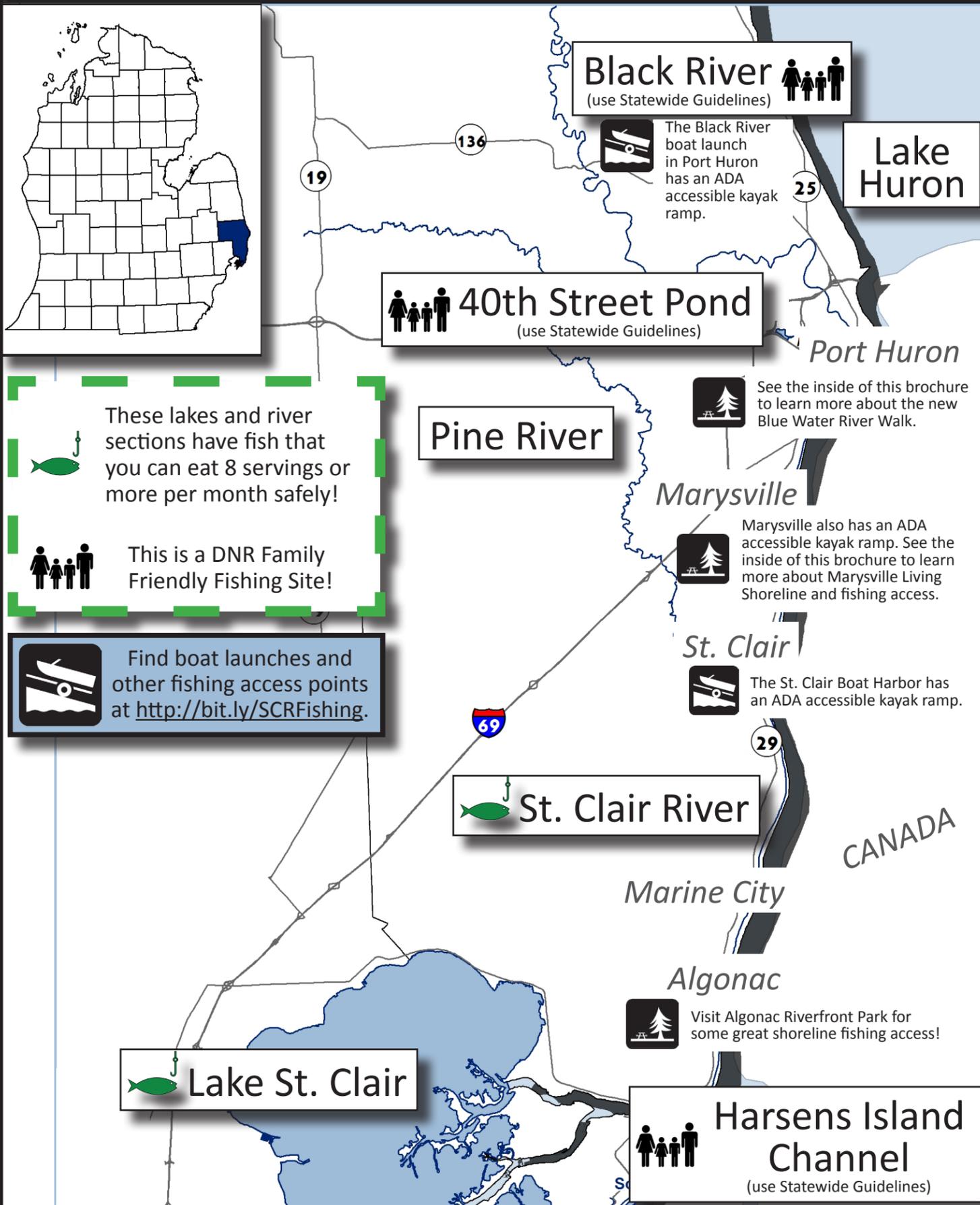
Fish is good for you and your baby! Use your pre-pregnancy weight to find your MI Serving size. It's also best to avoid eating fish labeled as "Limited" when you're pregnant or breastfeeding.

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)



Map of St. Clair County, Michigan



Statewide Guidelines & MI Servings

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



- the St. Clair 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.

Statewide Safe Fish Guidelines

Type of Fish	Chemical of Concern	Size of Fish (length in inches)	MI Servings per Month*	Type of Fish	Chemical of Concern	Size of Fish (length in inches)	MI Servings per Month*
Black Crappie	Mercury	Any Size	4	Rock Bass	Mercury	Any Size	4
Bluegill	Mercury	Any Size	8	Smallmouth Bass	Mercury	Under 18"	2
Carp	PCBs	Any Size	2	Over 18"			1
Catfish	PCBs & Mercury	Any Size	4	Suckers	Mercury	Any Size	8
Largemouth Bass	Mercury	Under 18"	2	Sunfish	Mercury	Any Size	8
Over 18"			1	Walleye	Mercury	Under 20"	2
Muskellunge	Mercury	Any Size	1	Over 20"			1
Northern Pike	Mercury	Under 30"	2	White Crappie	Mercury	Any Size	4
Over 30"			1	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 www.michigan.gov/eatsafefish to get the *Eat Safe Fish Guide* for that region.

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 that you can see 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 mark 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,
- 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" **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.