MPART Citizens Advisory Workgroup

July 8, 2025

Roll Call and local updates/events/ sharing from communities





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Agenda

- Roll Call Community Updates
- PFAS Week Discussion
- MDHHS
 - Community Engagement
 - Eat Safe Fish update and notification
- Subcommittees Updates
- MPART Updates



MPART

PFAS Awareness Week

Rick Rediske



MPART



PFAS Community Education, Engagement and Outreach

Environmental Health Bureau



Nice to Meet You!



Harry Castle Program Community Engagement Coordinator Castleh@michigan.gov (517) 582-1901





- Community education, engagement and outreach structure and regional community model.
- Community education overview.
- Community engagement overview.
- Community **outreach** overview.



Response Participation Structure



Environmental Health Bureau Sections

Community Education and Outreach Chris Finch

Health Education Maria George	Community Engagement Kristin Ward	Community Outreach Lakecia Powell-Denson
	Regional Community Engagement Shelly O'Henley	

Chemical Planning and Response

• Jerry Tiernan

Toxicology and Assessment

• Marcus Wasilevich

Environmental Health Surveillance

• Tom Largo

Biomonitoring, Epidemiology and Response

• Melissa Millerick-May

Environmental Epidemiology and Analytics

• Anthony Oliveri

Lead Services

• Chad Rhodes - Acting

Lead Certification and Compliance Assurance

• Jennifer Shutts

Community Education and Outreach

• Chris Finch

Regions

- Geographic regions are based on existing Michigan Emergency Preparedness regions.
- Includes regional community engagement coordinators and regional outreach technicians.
- Team members live in, work in or have a personal connection with the regions they serve.



Regional Community Model



Purpose

• To be proactive in raising awareness and educating Michiganders about potential health hazards in the places where we live, work and play.

Benefits

- EHB is committed to identifying potential health hazards, investigating health effects and intervening with education and action.
- Regional community engagement and outreach teams build networks of relationships to grow trust within communities.
- Earning the trust of community members is key to reducing racial and ethnic health disparities.
- Trust prompts feedback that helps us equitably direct resources toward reducing health disparities.

The Role of Health Education (HE)



- Assist in the development of communication protocols, strategic educational campaigns and project enrollment efforts.
- Experts on health and risk communication best practices.
- Tailor communication.
- Compile and summarize highly complex scientific information.
- Create educational materials for public consumption.

Collaborative Nature of Health Education



Health education work is extremely collaborative.

- Within the EHB, health educators collaborate with:
 - Toxicologists.
 - Epidemiologists.
 - Community engagement.
 - Community outreach.
- Collaboration with other state entities:
 - Michigan Department of Agriculture and Rural Development (MDARD).
 - Michigan Department of Environment, Great Lakes and Energy (EGLE).
 - Michigan Department of Natural Resources (DNR).
 - Local health departments.
- Collaboration with others:
 - Federal agencies.
 - Advertising agencies.
 - Community partners and leaders.
 - Community members.

Community Engagement (CE)



To facilitate communication, involvement and information sharing between the Environmental Health Bureau, communities and organizations to build trust, empower Michiganders and improve public health outcomes.



CE Objectives



Objective 1: Ongoing communication to residents about public health concerns

- Community meetings (townhalls, open houses, availability sessions, briefings, informational booths, resource fair, etc.).
- Phone calls.
- Direct mailings.

Objective 2: Increase community awareness of PFAS

- Coordinating outreach events.
- Distributing educational materials.
- Networking with trusted community partners.

Objective 3: Other site-specific objectives

• Activities are determined based on site-specific needs.

CE Plan Development Process





CE plan is drafted by CE Site Coordinator.



Shared with MDHHS site team.



Shared with MPART site team + local health department.

CE Plan Implementation



- Implemented with collaboration of local partners, local health department and site team, e.g.
 - Toxicologist, CE and Outreach attending a tabling event.
 - Planning an "open house" event for the community.
 - MPART planning townhall event, CE planning publicization to residents.
 - CE creating a network of community organizations to share PFAS educational materials.
- Engagement is planned to be **ongoing**, extending past the end of initial investigation.
- Our goal is to be present for the community long-term.

Tribal Nation Engagement



- Michigan federally recognized Tribal Nations.
- Coordination with MDHHS Tribal Liaison.
- Regular communication with MDHHS Tribal Liaison and Tribal Nations.

Community Outreach



- Present in the community.
- Meet residents *where they are*.







Questions?



Michigan Fish Consumption Advisory Program Eat Safe Fish Guides 2025 Update

Marcus Wasilevich, PhD Toxicology and Assessment Section Manager



Our Mission





serte Model

Some fish contain chemicals that can harm your healt MDHHS tests filets of fish taken from Michigan's lakes and rivers to learn which fish are safer to eat. The *Eat Safe Fish Guide* lists the fish that have been tested and how much is safe to eat.

Michigan's Fish Consumption Advisory Program...

uses a science-based approach to educate and inform recreators that choose to catch and eat fish from Michigan waterbodies.





- April 15, 1970, first fish consumption advisory in Michigan
- Driven by Mercury



Fish Eating Advisory

Fishing For The Best?



Win a handsome arm patch by entering your catch! For details and official entry forms, write to: DNR, Fisheries Division, Box 30028, S. T. Mason Bldg, Lansing 4809, Phone 517-573-1280.

FISH EATING ADVISORY

Certain fish of the Great Lakes and connecting waters have accumulated environmental contaminants. Such fish from the waters listed below may contain levels of PCB (polychlorinated biphenyl), DDT or mercury exceeding U. S. Food and Drug Administration (FDA) guidelines for safe eating. To minimize the potential adverse health impact, the Michigan Department of Public Health recom-

mends: (1) YOU EAT NO MORE THAN ONE MEAL (% LB.) PER WEEK OF FISH LISTED BELOW.

(2) FEMALE PERSONS OF CHILD BEAR-ING AGE SHOULD NOT EAT FISH CONTAINING ELEVATED LEVELS OF FCB.

Smaller fish of the species listed generally do not contain contaminants exceeding FDA guidelines. Levels of DDT and PCB can be reduced by removing the skin and all fatty portions of the fish along the back, side and helly. Barbecung, healing or any other cooking method which removes additional oils and fats should be utilized.

Species Salman Salman Lake Trout Lake Trout Stealhead Carp, Catlish (over 37")	Centecting Waters Michigan, fruoro (and fulbs.) Michigan (and tribs.) Michigan, Superior Superior Michigan (and tribs.) Sagnaw Bay, SL Clair R., LK, SS. Clair, Debrait R, and LK. Erio	Contaminants PCB Mensury PCB, DDT Mensury PCB PCB
Sheepshead, White Bass (over 10"), Walleye, Muskellunge	St. Clau R., Lk. St. Clair, Detroit R. and Lk. Ene	Mercary
Large- and Smell- mouth Bass	Lk. St. Clev	Mercury



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To minimize the potential adverse health impact, the Michigan Department of Public Health recommends:

- YOU EAT NO MORE THAN ONE MEAL (¹/₂ LB.) PER WEEK OF FISH LISTED BELOW.
- (2) FEMALE PERSONS OF CHILD BEAR-ING AGE SHOULD NOT EAT FISH CONTAINING ELEVATED LEVELS OF PCB.

Species	Great Lakes and Connecting Waters	Contaminants
Salmon Salmon Lake Trout Lake Trout Steelhead Carp, Catfish (over 17")	Michigan, Huron (and tribs.) Michigan (and tribs.) Michigan, Superior Superior Michigan (and tribs.) Saginaw Bay, St. Clair R., Lk. St. Clair, Detroit R. and Lk. Erie	PCB Mercury PCB, DDT Mercury PCB PCB

Great Lakes fish advisories in Michigan

Statewide Advisory

- Statewide fish consumption advisory driven by mercury
- Began in 1989

Statewide Safe Fish Guidelines

Type of Fish	Chemical 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
Largemouth		Under 18"	2
Bass	Mercury	Over 18"	1
Muskellunge	Mercury	Any Size	1
	Mercury	Under 30"	2
Northern Pike		Over 30"	1
Rock Bass	Mercury	Any Size	4
Smallmouth	Mercury	Under 18"	2
Bass		Over 18"	1
Suckers	Mercury	Any Size	8
Sunfish	Mercury	Any Size	8
Mallava	Moreury	Under 20"	2
vvalleye	Wercury	Over 20"	1
White Crappie	Mercury	Any Size	4
Yellow Perch	Mercury	Any Size	4

How We Get the Data



- Partnership with Michigan's Fish Contaminant Monitoring Program, run by Michigan's Department of Environment, Great Lakes, and Energy (EGLE)
- Fish may be evaluated for

 - DDT
 Mercury
 Dioxin-like Chemicals
 PCBs

- Selenium
 Toxaphene
- PFAS (including PFOS)

Fish Contaminant Monitoring Program







Some fish contain chemicals that can harm your health. MDHHS tests filets of fish taken from Michigan's lakes and rivers to learn which fish are safer to eat. The *Eat Safe Fish Guide* lists the fish that have been tested and how much is safe to eat.

2025 Update



- Eat Safe Fish Guides are updated regularly.
- Updates incorporate new data from fish analyses.
- Updates include changes made due to emerging science.



Some fish contain chemicals that can harm your health. MDHHS tests filets of fish taken from Michigan's lakes and rivers to learn which fish are safer to eat. The *Eat Safe Fish Guide* lists the fish that have been

tested and how much is safe to eat





- New or updated guidelines 988.
- New fish tissue datasets 330.
- Waterbodies that had fish sampled for the first time 68.
 - Guides now include more than 600 waterbodies.
- Waterbodies that have a Do-Not-Eat for at least one type of fish due to Perfluorooctanesulfonic Acid (PFOS) – 98 (65 new this year).

Emerging Science



- 2025 fish consumption guidelines being updated due to:
 - Continued increase in understanding of PFOS toxicity.
 - Continued increase in understanding of PFOS blood levels in general human population.
- Guidelines will continue to be updated in future years as needed.



Update #1: Toxicity Value



- Michigan Fish Consumption Advisory Program (MFCAP) has updated its Fish Consumption Screening Values using an updated PFOS toxicity value.
- Previous value = 14 ng/kg-day.
 - Adopted in 2014.
- New value = 2.89 ng/kg-day.
 - Adopted by the Michigan Science Advisory Workgroup in 2019.

Update #1: Toxicity Value



- In 2024, the U.S. Environmental Protection Agency identified hepatic, immune, cardiovascular and developmental effects as the most strongly supported noncancer health outcomes associated with PFOS exposure.
- MFCAP has chosen a toxicity value based on an immune health endpoint as immune endpoints have been identified as one of the most sensitive indicators and this value will be protective for other health endpoints.

Update #1: Toxicity Value



- The study from which the toxicity value was derived employs a highly controlled animal model, which permits conclusions about causality and uses precisely measured exposures.
- The toxicity value is **consistent** (approximately within an order of magnitude) with those selected for use by other relevant agencies and in other media.

Update #2: Relative Source Contribution



Exposure to PFOS may come from sources other than fish consumption.





- Previously, MFCAP used a relative source contribution of 100%, which does not account for other possible sources of PFOS exposure.
- MFCAP is now applying a relative source contribution of 80% for PFOS.
 - Calculated from NHANES 2017-2018 (ages 12 and older) geometric mean of 4.25 ng/mL PFOS in human serum concentration.
 - This allows for 20% of a person's PFOS exposure from other sources.

Updated Fish Consumption Screening Values



MEAL CATEGORY	2023 PFOS FCSV RANGE (NG/G OR PPB)	2025 PFOS FCSV RANGE (NG/G OR PPB)
16 meals/month	≤9	≤1.5
12 meals/month	>9-13	>1.5-2.1
8 meals/month	>13-19	>2.1-3.1
4 meals/month	>19-38	>3.1-6.2
2 meals/month	>38-75	>6.2-12.4
1 meal/month	>75-150	>12.4-24.8
6 meals/year	>150-300	>24.8-49.6
Do Not Eat	>300	>49.6

Other States/Provinces



State/Province	One Meal per Month Guideline (ng/g) All (general/sensitive) Populations	Do Not Eat Guideline (ng/g) All (general/sensitive) Populations	
2025 Michigan	12 (previously 75)	50 (previously 300)	
Alabama	NA	800	
Connecticut	8	31	
Illinois	50	200	
Indiana	50	200	
Maine	15	60	
Massachusetts	NA	(183/81)	
Maryland	136	408	
Minnesota	(50/20)	(200/50)	
New Jersey	17	(204/17)	
New York	(50)	(200/50)	
Ontario, Canada	(100)	(200/50)	
Washington	9.5	28.2	
Wisconsin	50	200	

Guidelines By Contaminant



Contaminant	Approximant Number of Guidelines
Mercury	1,923 (57%)
PFOS	782 (23%)
PCBs	526 (16%)
Dioxins	82
DDT	33
Toxaphene	7
Selenium	6

Thank you!

Marcus Wasilevich WasilevichM@michigan.gov

Karly Brown (Eat Safe Fish Program Coordinator) BrownK80@Michigan.gov

Environmental Health Toxicology Hotline 800-648-6942

Michigan.gov/eatsafefish



Great Lakes Smelt Updates



Waterbody	Previous Smelt Guideline	Current Smelt Guideline	Notes
Lake Huron	6 servings per year	2 servings per month	2023 based on four composites which showed bile acid interference. 2025 guides based on three composite samples (two of which were re-run from previous tissue used in 2023) and 11 individual smelt that were run with the new method.
Lake Michigan	1 serving per month	1 serving per month	2023 guides based on one composite sample, which had bile acid interference. 2025 guides based on five new composite samples run with updated method.
Lake Superior	1 serving per month	8 servings per month	2023, six composites and 10 individual smelt all had bile acid interference and were excluded from 2025 guides. Five composites and 10 individual smelt were run with the new method and used in the 2025 guides.

Inland Lakes Smelt Updates



Waterbody	Previous Smelt Guideline	Current Smelt Guideline	Notes
Gull Lake	2 servings per month	2 servings per month (PFOS)	2023 guides used 3 composite samples affected by bile acid interference. 6 individual smelt were analyzed using the new method for the 2025 guide recs.
Higgins Lake	4 servings per month	4 servings per month (PFOS)	2023 guides used 3 composites that were likely impacted by bile acid interference. It was not possible to re-run fish tissue under the new method. 2025 guides are holding the same consumption guidelines while we await analysis of new fish collected this past season.
Portage Lake (including Keweenaw Waterway and Portage River)	1 serving per month	8 servings per month (PFOS)	2023 guides used 1 composite sample that was likely impacted by bile acid interference. In 2025, this data was excluded, continued to match Lake Superior value of 8/mo. It was not possible to re- run fish tissue under the new method.
Big Twin Lake	none	2 servings per month (PFOS)	This data was not affected by the bile acid interference as the fish tissues were analyzed using the updated method only.
Cedar Lake (Leelanau County)	none	8 servings per month (Mercury, PFOS)	This data was not affected by the bile acid interference as the fish tissues were analyzed using the updated method only.
Green Lake	none	8 servings per month (Mercury)	This data was not affected by the bile acid interference as the fish tissues were analyzed using the updated method only.

How PFOS Guidelines are Set



Non-Cancer FCSVs are calculated using the following equation:

$$FCSV = \frac{RfD \times RSC \times BW \times AT}{IR \times EF \times ED}$$

Paw Paw Lake

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Bluegill	PFOS	Any	4
Largomouth Pace	Mercury	Under 17"	2
Largemouth Bass	Mercury	Over 17"	1
Smallmouth Bass	Mercury	Under 17"	2
Smailmouth Bass	Mercury	Over 17"	1
Sunfish	PFOS	Any	4

FCSV = Fish Consumption Screening Value.

CAWG Subcommittee's





WEBSITE REVIEW SUBCOMMITTEE

PREVENTATIVE MEASURES SUBCOMMITTEE





ENGAGING THE PUBLIC SUBCOMMITTEE MEMBERSHIP SUBCOMMITTEE

New MPART Sites / Areas of Interest

- 34136 Myrtle Street and 3850 Howe Road Wayne, Wayne County
- 4724 West River Drive Comstock Park, Kent County
- Romulus Distribution Center Romulus, Wayne County

MICHIGAN PFAS ACTION RESPONSE TEAM

 Consolidated Packaging Monroe, Monroe County

MPART

Michigan PFAS Sites and Areas of Interest ENVIRONMENT, GREAT LAKES, AN

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July 8, 2025

Legend

PFAS Sites (315) exceed Part 201 Criteria

PFAS Areas of Interest (36)

For more information visit <u>PFAS Sites and</u> Areas of Interest

MPART Updates

- Cadillac comparability study
- EPA Emerging Contaminants Small or Disadvantaged Community Grant
 - Completed proactive drinking water sampling in Blair Township and in the city of Jackson
 - Will seek approval from EPA to use remaining funds for proactive sampling around plating facilities



Next Meeting September 9, 2025





MICHIGAN PFAS ACTION RESPONSE TEAM (MPART)

www.Michigan.gov/PfasResponse



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY











