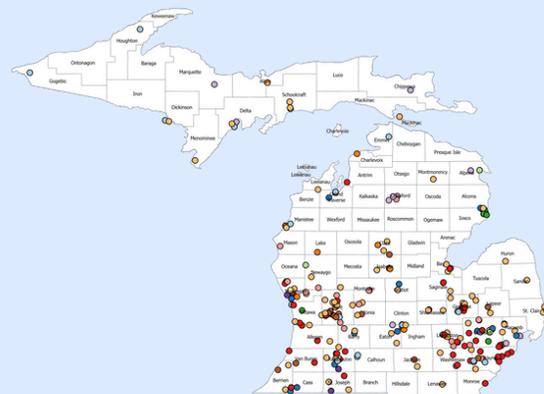


# Per- and polyfluoroalkyl substances (PFAS)

# Health Effects



## What is PFAS?

PFAS are chemicals that break down very slowly over time. Many PFAS are found in the blood of people and animals and at low levels in a variety of food products and in the environment. Exposure may be linked to harmful health effects in humans and animals.

## What health effects are related to exposure to PFAS in pregnant adults?

Pregnant people, unborn fetuses, and infants are more likely to be harmed by high levels of PFAS. Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), two common forms of long-chain PFAS, have been associated with the following:



- Low birth weight
- Early birth
- High blood pressure or a condition called preeclampsia caused by pregnancy



- Delayed puberty
- Immune Response Suppression
- Attention deficit/hyperactivity disorder (ADHD)

## What health effects are related to exposure to PFAS in non-pregnant adults?



Difficulty becoming pregnant



Chronic kidney disease



Diabetes



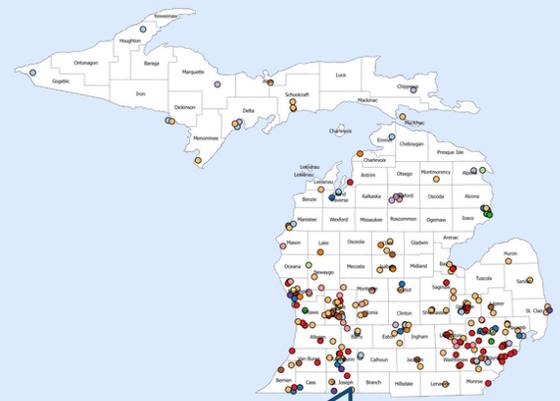
Altered liver function



Heart disease

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As of 2022, the Michigan PFAS Action Response Team (MPART) has identified 228 sites where PFAS in groundwater is higher than Michigan's limit.

## Cancer



- PFOA has been classified as carcinogenic (cancer-causing) by the World Health Organization [International Agency for Research on Cancer, 2023]
- PFAS exposure may increase the risk of kidney or testicular disease [ASTDR, 2022]



## Where can I learn more?

### Michigan PFAS Action Response Team (MPART)

- <https://www.michigan.gov/pfasresponse>

### Per- and Polyfluoroalkyl Substances (PFAS) - US EPA

- <https://www.epa.gov/pfas/pfas-explained>

### Per- and Polyfluoroalkyl Substances (PFAS) - ATSDR

- <https://www.atsdr.cdc.gov/pfas/index.html>
- <https://www.atsdr.cdc.gov/pfas/resources/pfas-faqs.html>

Please see [http://mleead.umich.edu/Coec\\_Fact\\_Sheets.php](http://mleead.umich.edu/Coec_Fact_Sheets.php) for the citations included in this factsheet. The University of Michigan Lifestage Environmental Exposures and Disease Center (M-LEEaD) Community Engagement Core (CEC) promotes collaboration among UM environmental health researchers and communities to advance knowledge of environmental health issues that affect community members in Detroit and Southeast Michigan.

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