

Sulfate in Drinking Water



Sulfate occurs naturally in drinking water. However, when water with high levels of sulfate are consumed, it could cause short-term diarrhea.

Tap into the facts about sulfate to learn if you should consider testing your drinking water to protect your health.

How sulfate gets into drinking water

- Industrial activities release sulfate into air, water and soil.
- Sulfate is also naturally occurring in the environment and can be in lakes, rivers or groundwater that become your drinking water.

Problems with sulfate in drinking water

People may experience short-term diarrhea when they drink water that contains higher sulfate levels than what they are used to. Some groups may be more sensitive than others. These groups include:

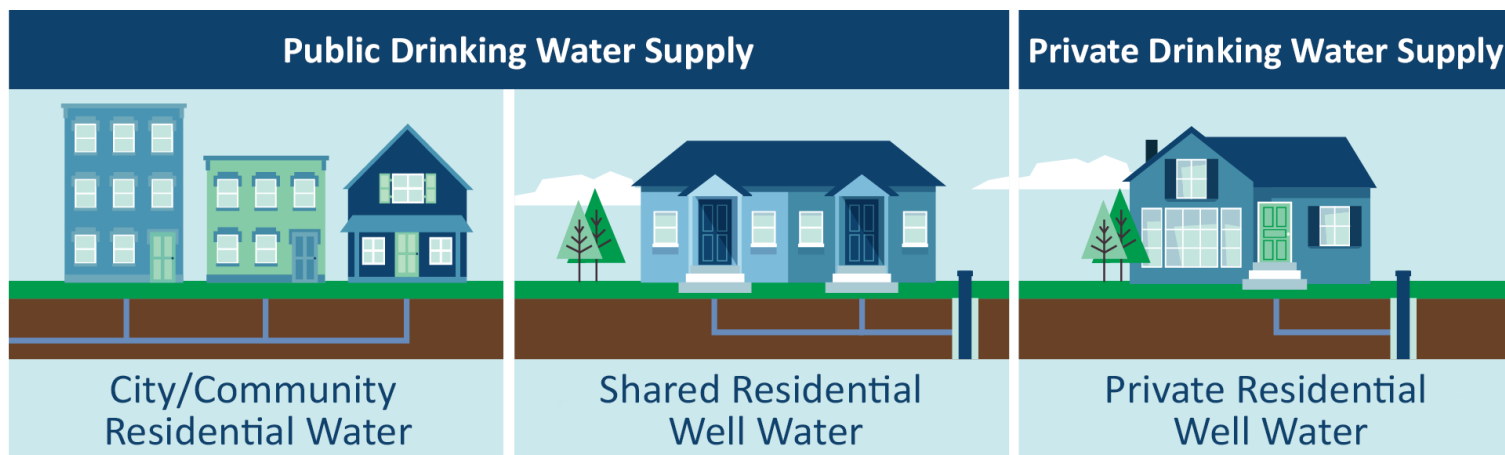
- Formula fed infants.
- Travelers or visitors when levels of sulfate in drinking water are higher than what they are used to.



How to find out if sulfate is in your drinking water

Step 1: Know where your water comes from.

- Learn about the different water supply types to determine where your water comes from at Michigan.gov/CareforMiDrinkingWater.



How to find out if sulfate is in your drinking water, continued

Step 2: Call your local health department or certified drinking water lab to test your drinking water.

- If you are on a **public water supply**, the water coming into your home may be regularly tested for certain contaminants. Those on public water supply should check for results with their local water supply.
- If you have a **private residential well**, water testing is your responsibility. Your local health department may offer drinking water testing, or you can contact a certified private drinking water analysis laboratory directly. The cost for a test may vary between labs and the contaminants you choose to test for. Visit [Eh.Michigan.gov/DW5tips](https://www.eh.michigan.gov/DW5tips) and click “Test your water” to learn more about your options.
- **Ask for a water test that includes sulfate.** This test might be called “partial chemistry” or “complete minerals.”

Step 3: Understand a test result for sulfate.

To understand the quality of your water, compare your test results to the established drinking water values from the U.S. Environmental Protection Agency (EPA).

- **A Health-Based Advisory** provides an assessment on potential health risks. Federal, state and local officials use this for guidance. When sulfate is below this value, it is unlikely to cause health problems. A level above this value may increase the possibility for short-term diarrhea. **The health-based advisory for sulfate is 500 mg/L.**
- **A secondary drinking water standard** provides guidance on managing water taste, color and smell. A level above this value may cause an unpleasant taste. **The secondary drinking water standard for sulfate is 250 mg/L.**

Things you can do to reduce sulfate in your drinking water



Consider a water treatment system. A reverse osmosis water treatment system has been shown to reduce sulfate in drinking water. Make sure the reverse osmosis system is certified to **NSF/ANSI 58**. Follow all manufacturing instructions to make sure it is reducing sulfate as expected.

Things you should not do to reduce sulfate in your drinking water



Do not try to remove sulfate by boiling the water. Boiling does not remove sulfate. Water evaporates during boiling, decreasing the amount of water. The same amount of sulfate remains but in less water.

For More Information

Michigan Department of Health and Human Services
800-648-6942
[Michigan.gov/CareforMiDrinkingWater](https://www.michigan.gov/CareforMiDrinkingWater)

List of Local Health Departments
bit.ly/MiHealthDepartment

Michigan Department of Environment, Great Lakes, and Energy
[Michigan.gov/DrinkingWater](https://www.michigan.gov/DrinkingWater)
[Michigan.gov/WaterWellConstruction](https://www.michigan.gov/WaterWellConstruction)

Laboratory Services
[Michigan.gov/EGLElab](https://www.michigan.gov/EGLElab) and choose
“Certifications”

