Zinc in Drinking Water

Some zinc is essential for our health, but too much zinc in drinking water can cause health problems.

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

How zinc gets into drinking water

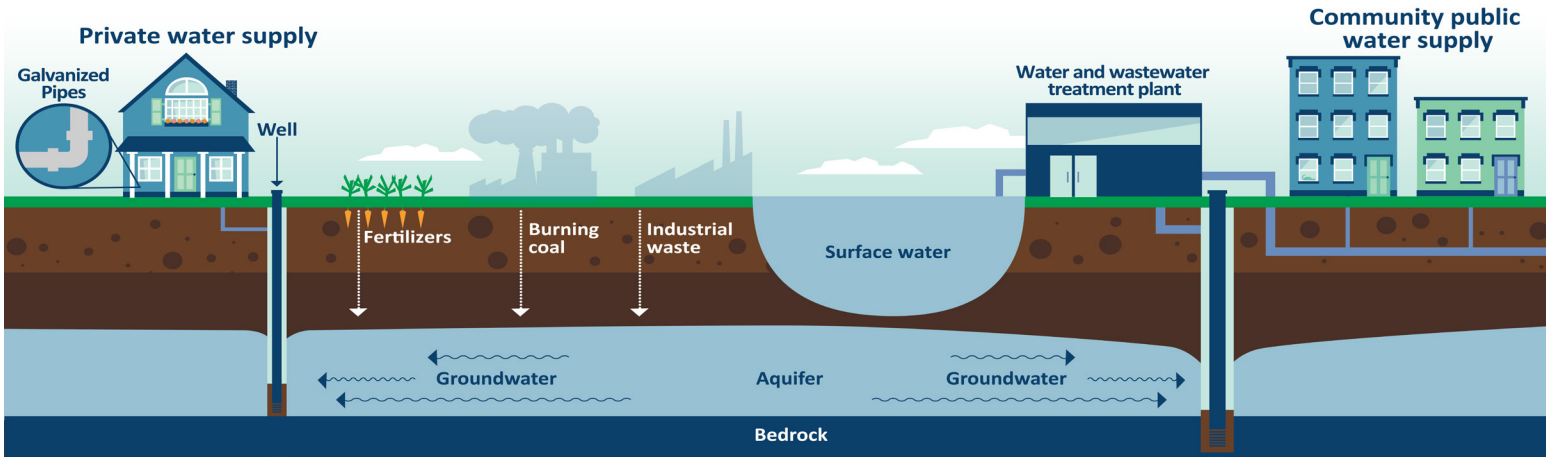
- Mining, steel production and the burning of coal release zinc into the air, which can settle into water that can be used for drinking.
- Waste from metal manufacturing or the chemical industry can get into the groundwater.
- Zinc in fertilizer can runoff into waterways used as a source of drinking water.
- Hazardous waste runoff can cause levels of zinc to increase in groundwater.
- Galvanized pipes can release zinc into the drinking water that reaches your tap.

Problems with zinc in drinking water

Drinking water with too much zinc could increase your risk of health problems. Drinking water with **greater than 2 mg/L of zinc** over your lifetime could increase your risk for:

- Anemia.
- Damage to your pancreas.
- Lower levels of HDL, or good cholesterol.

At these levels, you cannot taste zinc in the drinking water, but drinking water with **more than 5 milligrams per liter (mg/L) could make the water taste metallic.**



How to find out if zinc 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.

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

- If you are on a **public water supply**, the water coming into your home may already be regularly tested for certain contaminants. Those on public water supply should check for results with their local water supply.
    - If you live in a home with galvanized plumbing, you should consider testing your water for zinc. A water sample will tell you if zinc is currently in your water. It will not give you past or future results.
- 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 and click "Test your water" to learn more about your options.
- **Have a water softener or water treatment system?** Test the water before and after the water enters them. A test before tells you how much zinc is in the water entering the household. A test after tells you how much zinc is in the water you drink.

Step 3: Understand a test result for zinc.

- To understand the quality of your water, compare your test results to the established drinking water values from the EPA.
    - **Drinking water with greater than 2 mg/L of zinc** over your entire lifetime could increase your risk of health problems. At these levels, you cannot taste zinc in the drinking water, but drinking water with **more than 5 milligrams per liter (mg/L) could make the water taste metallic.**

Things you can do to reduce zinc in your drinking water

Use a water filter. A water pitcher with an activated carbon filter certified to **NSF/ANSI 42 or 53** with a claim to reduce metals like lead and arsenic may reduce zinc levels in drinking water.

Install a reverse osmosis (RO) system. A reverse osmosis treatment system certified to **NSF/ANSI 58** with a claim to reduce metals like lead and arsenic may reduce the amount of zinc in your water.

While not certified to reduce zinc, some water filters and treatment systems that are certified to remove other metals have been shown to also remove zinc.

Be sure to follow the system's manufacturing instructions. If the system is not installed, operated or maintained correctly, it could let zinc pass through the filter.

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

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

For More Information

Michigan Department of Health and Human Services
800-648-6942
Michigan.gov/CareforMiDrinkingWater

List of local health departments
bit.ly/MiHealthDepartment

Michigan Department of Environment, Great Lakes, and Energy
Michigan.gov/DrinkingWater
Michigan.gov/WaterWellConstruction

Laboratory Services
Michigan.gov/EGLElab and choose "Certifications"

MDHHS
Michigan Department of Health & Human Services

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