# Protect Against the Unknown: Test Your Drinking Water from Your Well

Contaminants in drinking water can harm everyone's health. Some can cause short-term health problems while others can cause long-term health problems.

As a well owner, you can protect your family's health by testing your water regularly.

## Why is it important to test your drinking water?

Testing will keep you informed about your water quality and help identify problems. Testing the water used for drinking, cooking food, or mixing powdered infant formula is especially important.

Pregnant women, infants, and young children's health can be more at risk. It's important to talk with your doctor if you have health concerns.

- Some contaminants can pass from the mother to the fetus. This puts the fetus at risk of harm to their health and development.
- Babies drink more for their size than children and adults. This can result in higher exposure to babies than adults, which could increase risk of harm to their health.



## When should you test your drinking water, and for what?

Wells are required to be tested for coliform bacteria when installed or repaired in Michigan. Based on where you live, you may be required to test your water at other times, such as during real estate transactions.

Call your local health department to learn more about when you need to test your water. They may also recommend additional testing based on water conditions in your area.

The Michigan Department of Health and Human Services (MDHHS) recommends the following routine well testing schedule.

Every Year	Every 3 to 5 Years
Coliform Bacteria and E. coli	Arsenic
Nitrate	Copper
Nitrite	Lead

Other times to consider testing your water:

- A household member becomes pregnant
- An infant or young child is living in the home
- Flooding has happened near the well

- Repairs were made to the well
- The water's taste, color, or smell changes

### Why test for these contaminants?

Coliform Bacteria and <i>E. coli</i>	Most coliform bacteria are not harmful, but some can make you sick. Symptoms may include an upset stomach, vomiting, fever, or diarrhea. Children and the elderly are more at risk. <i>E. coli</i> bacteria in drinking water can make you sick or even cause death.
Nitrate and Nitrite	Swallowing water with high amounts of nitrate can cause a condition called methemoglobinemia, also known as "blue baby syndrome." This causes the skin around the eyes and mouth to turn a bluish color and can cause death if not addressed. The body can change nitrate into nitrite, limiting the ability of blood to carry oxygen. Infants younger than six months of age and pregnant women are more at risk of developing this condition.
Arsenic	Arsenic is known to cause cancer so any amount may be harmful. Drinking water with arsenic over time can increase the chances of developing cancer. Arsenic in drinking water can also cause lesions on the skin, hard patches on palms of hands and soles of feet, and changes in skin color.
Copper	Copper is found in many foods and is important to human health. However, too much copper over a short time may cause stomach upset. Too much over a long time may cause liver or kidney damage. People with Wilson's disease should be aware of the level of copper in their drinking water.
Lead	Any amount of lead may be harmful. Lead in a child's body can slow growth and development, damage hearing and speech, and make paying attention harder. Lead can be passed from the mother to the fetus.

## **Get testing!**

Call your local health department or a certified drinking water laboratory and let them know what you are interested in testing your water for. They can help you get the sampling bottles needed and provide instructions. It is important to carefully follow instructions provided.

It may be cost effective to get a water test called "partial chemistry." This test includes nitrate and nitrite, which are recommended to be tested for every year. It also includes testing for fluoride, chloride, hardness, sulfate, sodium, and iron. These contaminants may change the taste, color, or smell of the water.

#### For More Information

Michigan Department of Health and Human Services

Drinking Water Hotline 844-934-1315

Michigan Local Health Departments Malph.org/Resources/Directory

Michigan Department of Environment, Great Lakes, and Energy

Well Construction
Michigan.gov/WaterWellConstruction

Laboratory Services Michigan.gov/EGLElab

517-335-8184

