

Lead

In 1991, the Environmental Protection Agency (EPA) lowered the allowable lead levels in drinking water from 50 ppb (parts per billion) to 15 ppb, emphasizing the need for ongoing water testing.

Homes built before 1930 may have lead pipes and service lines. In addition, lead solder was used in the installation and repair of plumbing fixtures until it was banned in 1986. Brass in old fixtures also contains lead. When lead is released into drinking water it poses a risk, particularly for infants and young children. You can reduce exposure to lead by running the tap for a few minutes to flush out any lead that may have settled in the pipes. When making infant formula, **do not use hot tap water or boil the water for more than a minute** so that lead or other metals or contaminants do not become more concentrated in the water.

Microbes (Germs)

Drinking water that is contaminated by bacteria, viruses, and protozoa can cause intestinal illness ranging from mild to serious.

While most public water utilities in Dane County disinfect drinking water, this is not usually done with private well water.



WATER ISN'T THE ONLY PLACE WHERE LEAD IS FOUND

Children between six months and six years of age are at the highest risk for lead poisoning, especially when living or spending time in a home built before 1976 when lead based paints were commonly used. Chipping paint and dust from the paint are risks for small children who play on the floor where lead paint chips and dust may have fallen. Paints or plastics on toys may contain traces of lead and other metals. Since small children put fingers and toys into their mouths, chew on painted railings and windowsills, and can eat dirt and paint chips, it is strongly recommended that you talk to your doctor about having your child tested at ages 1 and 2 years old if they are at risk of lead poisoning.

Public Water Utility Users

The U.S. EPA and the WI DNR regulate municipal water quality under the Safe Drinking Water Act which means that **municipal tap water is under much stricter purity standards than bottled water.** Rigorous and frequent testing is required. Municipal water is much cheaper, too.

Dane County has 33 public water utilities. Normal cleaning and maintenance of these utilities includes routine flushing of water mains. This can result in temporarily cloudy or discolored water which should clear up after a few minutes of running the water and does not necessarily mean that you need your water tested. However, service lines and plumbing in your home can still produce contaminants such as lead.



Bottled Water

The FDA regulates bottled water but has no requirements or resources to monitor the quality of bottled water. The industry does have a *"Bottled Water Self-Regulation"* Program. The water from a single brand may come from multiple locations—about 40 percent comes from municipal tap water. **Up to 33 percent of bottled water contains significant contaminants.**

Other Public Health Resources

Childhood Lead Poisoning: (608) 266-4821

Works to educate the general public about the hazards of lead and strategies to eliminate exposure, to help families to keep their homes lead safe, to provide access to lead testing and introduce programs to reduce childhood lead exposure.

Families using private well water with a pregnant woman or a child in the home **AND** experiencing financial hardship are eligible for water testing without cost.

PHMDC Lab Testing

Recommended Annual Private Well Testing

- Nitrate/Nitrite, Coliform, *E. Coli* & Plate count

Other testing options are available for private well water or municipal tap water.

- Bacteria - Coliform, *E. Coli* & Plate count
- Non-Metals
 - » Chloride
 - » Fluoride
 - » Nitrate & Nitrite (one test)
 - » Sulfate
- Pesticide Screening (Atrazine)
- Metals - *common metals include:*
 - » Arsenic
 - » Copper
 - » Hardness (Calcium and Magnesium)
 - » Iron
 - » Lead
 - » Manganese
 - » Sodium
 - » Zinc

PHMDC Lab also provides testing for:

- Lead in Paint

Contact us for pricing and additional information. Visit our website:

www.publichealthmdc.com/environmental/laboratory

210 Martin Luther King Jr. Blvd., Rm. 516B
Madison, WI 53703
Lab Phone (608) 243-0357
www.publichealthmdc.com/environmental/laboratory
Monday-Friday, 8:00 a.m. - 4:00 p.m.

04/14/2016-DrinkingWaterConsumer.indd

Drinking Water

A Consumer Guide



210 Martin Luther King, Jr. Blvd., Rm. 507
Madison, WI 53703
Phone (608) 266-4821
www.publichealthmdc.com

Drinking Water Safety

We expect our tap water to be clean and safe—and in Dane County it almost always is. But there are occasional problems. Private wells are sometimes contaminated. On rare occasions, public water utilities may experience such problems as breakdowns with plumbing and delivery systems. Bottled water presents a different variety of potential problems.

This brochure is designed to provide an overview of what defines safe drinking water, including information on things we want and don't want in our water as well as information on bottled water and water testing.

The Public Health lab is available to those who would like professional help and advice on appropriate types of testing, explanations of what the testing results mean, and guidance on how to respond to problems that come up.

Private Well Users

Many private wells are relatively shallow and can be contaminated by fertilizers and other agricultural or industrial chemicals. Nitrates from fertilizers are particularly harmful to infants and pregnant women. Wells can also be at risk for contamination from animal waste run off and in-ground septic systems. This kind of bacterial contamination can cause diarrhea, cramping and vomiting. Private wells should be tested every year, particularly in households with pregnant women, infants or young children or those with compromised immune systems.

Fluoride

A small amount of fluoride helps keep teeth healthy. Many public water utilities in Dane County add very small and tightly controlled levels of fluoride to their drinking water. Private well water often has very little fluoride, so **based on water test results, fluoride supplements may be recommended for children drinking private well water because using them can significantly reduce the number of cavities kids get.**

Nitrate

Nitrates from fertilizers, manure, and septic systems can contaminate drinking water. High nitrate levels are particularly dangerous to pregnant or breastfeeding mothers and infants because nitrates decrease the ability of blood to carry oxygen. In infants this can cause “blue baby syndrome,” a condition that requires immediate medical attention. All private wells should be tested for nitrates every year. People using water from wells that contain high levels of nitrate (greater than 10 ppm) should contact Public Health for advice.

Copper

Copper is commonly used in plumbing components including piping and in brass fixtures. Copper may dissolve in water and has been known to cause health problems at elevated concentrations.

