



FACT SHEET

Disease Prevention

for Parents and Childcare Providers

Drinking Water

Children and Drinking Water

Children drink more water per pound of body weight than adults. Children are growing quickly and have developing organs. Growth processes may be disrupted by exposure to pollutants in water. Children generally eliminate toxins more slowly than adults do, and absorb them at a higher rate. Children are at the beginning of life, with many years ahead of them to be negatively affected by exposure to pollutants.

Pollutants in Drinking Water

Drinking water may contain such pollutants as bacteria, viruses, nitrates, radon, or volatile organic compounds (VOC's) and carcinogens from petroleum or manufacturing by-products, such as PCBs and metals like lead, mercury, and arsenic.

Public Water Systems

Public water systems (the kind found in cities and some subdivisions) are required to do a lot of water testing. These systems are also required to keep contaminants below maximum levels established by the U.S. Environmental Protection Agency (EPA). For information on test results or to find out if your water supply is a public system, see www.deq.state.mt.us or call (406) 444-4400 for the public water supply section at Montana Department of Environmental Quality.

Wells and Water Testing

Individual wells should be tested at least once a year, more often if possible, for coliform bacteria. A positive coliform test may indicate some type of contamination of the well and can alert you to the need for further investigation.

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Wells should always be tested for bacteria if floodwater, runoff, melted snow, or other water have recently covered the well.

Individual wells should also be tested for nitrates since high levels of nitrates can be a serious health risk for young children, especially babies. High nitrate levels in drinking water have been linked with a condition called “blue baby syndrome”, a potentially deadly situation where the child is deprived of oxygen. Nitrate levels in drinking water should be monitored yearly, more often if they measure half of the maximum contaminant level (MCL) established by the EPA, or 5 mg/L (milligrams per liter). The current maximum safe level for nitrates is 10 mg/L. When filling out a form to do this test, choose the test called Nitrate + Nitrite.

You may also wish to test your well for metals, particularly if you live near former mining areas, the smelter, or the canal. This might include testing for lead, arsenic, or mercury. Some labs offer a metals screening test that will test for all or most of these metals in one water sample. A full well screening for other contaminants is also available at most water labs.

In summary, consider these tests for your child’s water supply:

- Coliform bacteria
- Nitrates
- Metals

How and Where to Test

There are two state-accredited water laboratories in Helena: the Montana Environmental Lab, 1400 Broadway, (406) 444-2642 and Energy Labs, 3161 E Lyndale, (406) 442-0711. For water bottles, prices for testing, business hours, and the forms to be submitted with the water sample, call or visit the lab. Both labs will send out bottles in the mail. Bottles and forms can also be picked up at the County Health Department, 1930 9th Ave., Helena.

What to Do if There are Problems

If testing indicates that there is a problem with drinking water, there are several options available, including well disinfection and/or affordable in-home water treatment. The best treatment option depends on what contaminant is in the water. For more information, contact the Lewis and Clark City-County Health Department at (406)447-8351 or (406)447-8352, or EPA’s Safe Drinking Water Hotline at 1-800-426-4791.