

wellcare™ information for you about **Bacteria**

What are BACTERIA?

We are in contact with millions of bacteria every day and nearly all of them are harmless. Yet some of these small organisms are responsible for waterborne illnesses. Total coliforms are one group of mostly harmless bacteria that live in soil and water, as well as the intestines of animals. The presence of total coliforms in drinking water can indicate that more dangerous germs, particularly fecal coliforms, have contaminated the water.

The most common source of bacteria is the soil surrounding the well. Fecal bacteria in drinking water is usually the result of contamination by a nearby sewer, septic tank, feedlot or animal yard. Bacterial contaminants also may be introduced into a well during construction or repair.

Most bacterial problems happen right at the well or as water travels through the distribution system. Therefore, it is common to have contaminated and uncontaminated wells very close by.

A sanitary survey can help determine if your well might be threatened by bacterial contamination. Vulnerable wells are located too close to potential sources of bacteria, such as a septic field, may be poorly constructed or very old, or have poor flow and distribution systems. A well professional can help you conduct a sanitary survey on your well.

What are the health effects of Bacteria?

Disease-causing bacteria, such as E. coli and giardia, can trigger gastrointestinal illnesses, diarrhea and vomiting. E. coli can be life-threatening for infants, children, the elderly and those with compromised immune systems.

How do I test for Bacteria?

You should test for bacteria yearly, usually in the spring, or if there is any change in the taste, color or odor of your water.

You should also test if:

- Anyone in the household suffers recurring bouts of gastrointestinal illness
- An infant is living in the house
- You are buying a home and wish to assess the quality of the drinking water
- You wish to monitor the performance of home water treatment devices
- New well equipment has been installed

Your local health department offers a free or inexpensive test for the presence of bacteria or will refer you to a qualified laboratory. Tests measure total coliforms in the water first. If the sample is positive, it is analyzed further for fecal coliforms, including E. coli. Such contamination requires immediate action.

What are the treatments for Bacteria in drinking water?

You must disinfect your well to eliminate bacteria. Chlorine, ultra-violet light or ozone treatments will kill or inactivate E. coli and other harmful germs in drinking water. Treatment systems must be properly maintained to ensure water quality. Test systems and the treated water regularly.

For more information on your ground water

Your local well contractor, health department, cooperative extension service and state environmental or natural resources department can provide more information about ground water in your area. Check the telephone directory or search the web under "water wells" or "government agencies."

For more information about wells and other wellcare™ publications

wellcare™ is a program of the **Water Systems Council (WSC)**. WSC is a national nonprofit organization dedicated to promote the wider use of wells as modern and affordable safe drinking water systems and to protect ground water resources nationwide.



Contact us at 888-395-1033 or visit www.watersystemscouncil.org

Other wellcare™ publications:

A Consumer's Guide to Water Wells

A Consumer's Guide to Well Testing & Disinfection

wellcare™ Info Sheet: Home Drinking Water Treatment Devices

wellcare™ Info Sheet: Water Quality – arsenic, bacteria, chromium, iron, MTBE (methyl tertiary butyl ether), nitrate, radon, radium, sulfur and TCE (trichloroethylene)

Other organizations you may want to contact:

Water Quality Association	630-505-0160	www.wqa.org
The Ground Water Foundation	800-858-4844	www.groundwater.org
American Ground Water Trust	603-228-5444	www.agwt.org
National Ground Water Association	800-551-7379	www.ngwa.org



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