



PRIVATE WELL WATER

The National Ground Water Association (NGWA) recommends well owners test their water at least annually for bacteria, nitrates, and any contaminants of local concern. More frequent testing should be considered if:

- There is a change in the taste, odor, or appearance of the well water, or if a problem occurs such as a broken well cap, inundation by floodwaters, or a new contamination source
- The well has a history of bacterial contamination
- The septic system has recently malfunctioned
- Family members or house guests have recurrent incidents of gastrointestinal illness
- An infant is living in the home, or
- To monitor the efficiency and performance of home water treatment equipment.

Check with your local health or environmental health department for recommendations regarding the type and frequency of testing specific to your location. For help in interpreting your water test results—and what might be a health risk or an aesthetic issue—ask the lab that conducted the test or your county health department.

Total coliform is the most commonly used indicator of bacterial contamination. The presence of coliform bacteria is an “indicator” of a well’s possible contamination from human or animal wastes. Total coliform are a broad category of bacteria, most of which pose no threat to humans. Some come from fecal matter; others naturally occur in soils, vegetation, insects, etc. The presence of coliform bacteria in well water can be a harbinger of worsening water quality. In some cases, more specific tests for fecal contamination, such as *E.coli*, may be used.

Common sources of nitrate to well water are fertilizers, septic systems, animal manure, and leaking sewer lines. Nitrate also occurs naturally from the breakdown of nitrogen compounds in soil and rocks. High levels of nitrate in well water present a health concern and can also indicate the presence of other contaminants, such as bacteria and pesticides. Drinking large amounts of water with nitrates is particularly threatening to infants (for example, when mixed in formula).

Typical additional tests are those for lead, arsenic, pH, hardness, iron, manganese, sulfides, and other water constituents that cause problems with plumbing, staining, water appearance, and odor. Changes in these constituents also may indicate changes in your well or local groundwater.



PRIVATE WELL WATER (continued)

You may be recommend or require to have testing for certain contaminants specific to your locality. Arsenic, lead and radon are three examples of water-quality concerns in certain areas. Arsenic occurs in water that comes into contact with some types of rocks and soils. Exposure to lead, particularly when ingested or inhaled by young children, can be a serious health hazard. Paint and water piping are the most common sources of lead in homes. Radon is a colorless, odorless, and tasteless gas that comes from the natural radioactive breakdown of uranium in the ground. Exposure to radon can come from two sources: the air in your home, which seeps up through the foundation, and your well water. (Note: Arsenic, lead and radon are used here as examples only, and may or may not be a problem in your area. Check with your state or local health department.)