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## HOW OFTEN TO TEST?

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Since **radioactivity** and **fluoride** occur naturally, their concentrations don't change greatly over time. Therefore, it is not normally necessary to test for these parameters more than once.

Levels of **nitrate** and **bacteria**, however, may vary considerably and we recommend that these contaminants be tested annually. Testing for nitrate, fluoride, and bacteria may be done at the Colorado Department of Public Health and Environment or private water laboratories. Please visit:  
[http://www.cdphe.state.co.us/lr/lr\\_cont.htm](http://www.cdphe.state.co.us/lr/lr_cont.htm)

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## QUALITY VS. QUANTITY

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Although not directly related to water quality, quantity is an important consideration in judging the suitability of individual wells. The amount of water obtained from a well is related to how much the well produces and how much storage is available. For example, even a low-producing well may prove acceptable if there is sufficient storage of water to meet the peak demand. The actual gallonage requirements are based upon the individual needs of you or your family.

On average, a typical family uses 50 gallons of water per person per day. This figure does not include outside activities such as lawn watering. Many well permits however, do not allow for irrigation, individual permits must be referenced regarding this type of use.

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## SO WHAT DOES IT ALL MEAN?

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As mentioned before, most well water in Jefferson County is good. In the unlikely event that your water contains elevated contaminant levels, treatment methods are currently available for household use.

*Contact Environmental Health Services for assistance in determining whether treatment is desirable and, if so, what methods are available.*

**Jefferson County Public Health**  
**1801 19<sup>th</sup> Street**  
**Golden, CO 80401**  
**303-271-5700**

[www.jeffco.us/health](http://www.jeffco.us/health)

Revised May 2011



**It's YOUR Water!**



In some areas of Jefferson County, most residents get their water from private wells. Although most well water is of good quality there are several contaminants, both naturally occurring and otherwise, which may affect the suitability of the water supply. Jefferson County Public Health recommends that well water be routinely tested for certain contaminants. This brochure contains information on some of the more common contaminants which may be found in well water.



## YOU'RE THE INSPECTOR!

Unlike public water supplies that are continuously monitored, each homeowner is responsible for assuring a safe supply of water from their own well.

In Colorado, no regulatory standards govern the quality of private well water. The maximum contaminant levels (MCL) mentioned in this brochure apply to regulated public water supplies and are included for informational purposes only. These levels are set by the State and Federal governments and are based upon reasonable health impacts. Individual wells cannot be condemned by any governmental agency due to poor water quality.



## RADIATION

Due to depots of uranium and other minerals, radiation is a natural component of many groundwater supplies in Jefferson County. From a health standpoint, both uranium and radium-226 are the most important contaminants.

Long-term consumption of water with elevated radiation levels may result in significant health effects such as cancer and, if uranium is involved, possible kidney damage.

The Environmental Protection Agency sets the standards for certain radiological elements. The three most common are total uranium, uranium 226, radium 226. There is no current standard for radon.



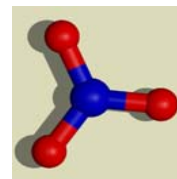
## FLUORIDE

**Fluoride** is a naturally-occurring element that may be present in well water. In concentrations of approximately 1.0 mg/l (milligrams per liter) fluoride can help prevent tooth decay and it is often added to many public water supplies. However, levels exceeding 2.0 mg/l may result in pitting and mottling (brown staining) of the teeth, especially in young children. Consult your dentist or pediatrician for recommendations concerning the levels of fluoride in your well water.



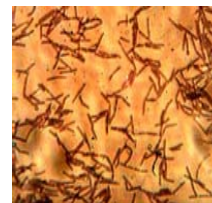
## GIARDIA

**Giardia** organisms can be a significant problem in surface water supplies (creeks, lakes, etc) but rarely in individual wells. Therefore, giardia testing is seldom recommended for well water.



## NITRATE

**Nitrate** is typically associated with human or animal waste and may result from septic systems, horse enclosures or other such sources. Nitrogen fertilizer may also impact water quality. Small amounts of nitrates are present in virtually all individual water supplies in the County. Consumption of water containing high levels of nitrate can interfere with the ability of the blood to carry oxygen and may present a health risk to infants. Levels above 10 mg/l (expressed as Nitrogen) may be significant and should be reported to your doctor or pediatrician for evaluation.



## BACTERIA

Common soil **bacteria** called coliforms may be present in well water. Although they do not cause disease themselves, their presence may indicate that other bacteria or viruses are also present, sometimes due to poor well construction. Bacteria test results are usually reported as “present” or “absent” rather than a specific number. To protect your health, well water should have NO bacteria in it!