## Napa County Drinking Water Fact Sheet: Total and Fecal Coliform



What is fecal coliform and how does it end up in groundwater? Fecal coliforms are bacteria that are associated with human or animal wastes. They usually live in human or animal intestinal tracts, and their presence in drinking water is a strong indication of recent sewage or animal waste contamination. *Escherichia coli* or *E. coli* is a type of fecal coliform and although most strains of *E. coli* are harmless, the *E. coli* 0157:H7 strain produces a powerful toxin and can cause severe illness.

During rainfalls, snow melts or other types of precipitation, coliform from animal or human waste may be washed into creeks, rivers, streams, lakes, or groundwater. Inadequately sealed wells or wells of unknown construction are especially vulnerable. Your well is also vulnerable if it has been inadequately disinfected after construction, repair work or other work that allows surface contamination to enter the well. When this water is used as a source of drinking water, *E. coli* may end up in drinking water.

When water is tested, it is initially screened for total coliform. Total coliforms are generally harmless; however, they are not usually found in water that is free of surface water or fecal contaminants. If total coliforms are found in the water, pathogens could also be present. If the presence of coliform is detected, the water is then tested to see whether or not fecal coliform is present.

What are the health effects of *E. coli* 0157:H7? Infection often causes severe bloody diarrhea and abdominal cramps. Often, no fever is present. It should be noted that these symptoms are common to a variety of diseases, and may be caused by sources other than contaminated drinking water. In some people, particularly children under 9, the elderly, and those with compromised immune systems an infection can also cause a life-threatening complication called hemolytic uremic syndrome, in which the red blood cells are destroyed and the kidneys fail.

What should you do? Don't panic. If your water is provided by a public agency, the water is already tested and is required to meet safe limits. However, if your drinking water comes from a well and the well has not been tested or if you suspect that your well is vulnerable to coliform contamination, do not drink the water.

Napa County currently does not provide coliform testing; however, State Certified Laboratories in the area do provide this service. If you choose to test your well, call the lab directly for instructions on how to collect a sample and submit it for testing. Failing to follow the instructions provided by the lab can lead to inaccurate results.

Once the water is tested, the Division of Environmental Health can help interpret the results, and if necessary, water treatment companies can review treatment options with you.