



Suburban Property Inspections

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COLIFORM BACTERIA FACT SHEET

Brief Overview:

Category:	Microbiology
Acceptable Level:	0 or Absent MCL, Primary Drinking Water Standard
Source:	Fecal matter, surface and runoff water
Effect:	Intestinal disorders, cholera, typhoid fever
Follow up:	Total coliform and E. coli enumeration, Enterococci; well inspection
Treatment:	UV purifier, chlorinator, (boil water temporarily)

Details:

Source:

Coliform bacteria occurs throughout the environment. They are found in human and animal fecal matter, surface water (lakes, streams, etc.) and water that contacts soil. Coliform bacteria enters a water supply from the direct disposal of waste into streams and lakes or runoff from wooded areas, pastures, feedlots, septic tanks and sewage plants into streams or groundwater. Some ways that coliform can enter an individual house are backflow of water from a contaminated source, contaminated filtration equipment, a broken or missing well cap that allows dirt and dead organisms to fall into the water, breaks in underground pipes or well casing, malfunctioning septic systems or broken sewer lines and poor well construction or inadequate grouting of the well.

Effect:

Coliform bacteria analysis is used to determine the sanitary condition of a well or spring. Coliform bacteria are often referred to as "indicator organisms" because they indicate the potential of disease-causing bacteria to be present in water. The presence of coliform bacteria in water does not guarantee that drinking the water will cause an illness. Rather, their presence indicates that a contamination pathway exists between a source of bacteria (surface water, septic system, animal waste, etc.) and the water supply. Disease-causing bacteria may use this pathway to enter the water supply.

Coliforms are not a single type of bacteria, but a grouping of bacteria that includes many strains. They are ubiquitous in nature, and many types are harmless. Therefore, it is not definitive that coliform bacteria will cause sickness. Many variables such as the specific type of bacteria present, and your own immune system's effectiveness will determine if you will become ill.

It is not recommended to consume any water that contains any colonies of coliform bacteria. The only way to determine if a water supply contains bacteria is to have the water tested, bacterial contamination cannot be detected by sight, smell or taste.

Follow up:

When total coliform is found within a water system it is recommended to perform a follow-up test for total coliform and E. coli enumeration and Enterococci (another indicator of fecal matter) to determine if the contamination is from a surface water source (run-off, stream, etc.) or from a fecal source (septic system, sewer line, barnyard, etc.).

Also, it is recommended that a well inspection be performed in an attempt to identify and eliminate the source of contamination. A well inspection will reveal any physical defects that may be present (i.e. defective casing and/or well cap, leaking pitless well adaptor, insect or animal entry, etc.).

Treatment:

When bacteria is found in the drinking water, we recommend contacting a water treatment professional. Boiling water for one minute at a rolling boil can be used as a temporary measure. The most commonly installed treatment equipment is an Ultraviolet (UV) purifier or a chlorinator. Well (or shock) chlorination is a temporary measure that is NOT recommended when you are selling your home unless you are absolutely certain that the source of contamination has been eliminated.

For further technical assistance, call Suburban Property Inspections at 1-866-866-6700, or call the U. S. Environmental Protection Agency Safe Drinking Water Hotline at 1-800-426-4791.



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