

## WHAT IS COLIFORM?

A safe water must not contain any organisms that would indicate the presence of disease bacteria.

Several diseases may be transmitted by unsafe water: typhoid, paratyphoid, bacillary dysentery, amoebic dysentery, hepatitis, gastroenteritis, and cholera. All of these are intestinal disorders—the microorganisms that cause them live and grow in the intestines of infected people or warm blooded animals who have the disease or who carry the disease. When fecal matter from one of these people or animals gets into the water supply, the pathogens can be transmitted to a well person who may then get the disease. Carelessness in personal sanitary habits may contribute to the spread of the disease.

Bacteria are the most plentiful of all living organisms. Many bacteria are helpful and even necessary for everyday living, while only a few cause disease. Both disease-causing and helpful bacteria live in the intestines of humans and animals. Disease bacteria are difficult to detect because there are so few of them compared to the helpful ones.

Therefore, testing of water samples is done by using indicator organisms. One of these is the coliform group of bacteria. Coliforms live in the intestinal tracts of animals and humans. Although these bacteria usually do not cause disease, they do indicate the presence of fecal matter in the water. Whenever fecal matter is present, disease-causing organisms can also be present. Total coliform originates from insects and warm blooded animals. E. Coli originates only from warm blooded animals. So when E. Coli are detected, they indicate that feces from warm blooded animals may have contaminated the water and the possibility that disease causing organisms may be present.