

FACT SHEET

Coliforms

What are coliforms?

A group of microbiological organisms, called bacteria, found in soils, surface water, and some groundwater.

Where do coliforms come from?

Coliform bacteria are found nearly everywhere in the environment. Most are not harmful, but some, like E. Coli, can cause illness. Disease-causing coliforms usually originate from human and animal fecal waste.

Are coliforms found in my drinking water?

Water leaving the treatment plant never contains viable coliform bacteria, but the rivers used for our source water can harbor large populations of coliforms that originate from urban and rural environments.

How does Des Moines Water Works test for coliforms?

Two different ways. Growth media and indicator are added to water samples. If the water sample turns yellow within 24 hours, this is an indication that coliform bacteria are present. The other procedure involves filtering a water sample through a special membrane that captures any bacteria that may be present. This membrane is then bathed in a liquid growing media or a gel-like agar. The bacteria multiply into piles of billions. Then the colonies are counted, telling us how much bacteria was in the water sample. DMWW tests 150 samples from faucets in the distribution system each month. We also test all our treatment steps, sources, and finished water each day.

How does Des Moines Water Works treat for coliforms?

Most coliform bacteria are killed by our lime softening procedures. This process raises the pH of the water to a level that is harmful to the bacteria. The remainder are killed by the chlorine added to our treated water in the disinfection process.

What are the health effects of coliforms if they were to occur in our drinking water?

The presence of coliforms indicates a possible contamination of the water. If coliforms are found to be present in the water, further tests are conducted to verify or eliminate the possible presence of disease-causing microorganisms that originate from feces. Certain types of coliforms in high numbers can cause intestinal disease, resulting in flu-like symptoms. For more information, please contact your health care provider.