

# KNOW THE FACTS!

## PRIVATE WATER SYSTEM TESTING

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New private water systems (PWS) are required to be tested during the last phase of new construction. Prior to occupancy, water testing must be completed on all new residences. PWS owners can also request a water sample by sending a written request to the Health District, along with a \$25 fee and a daytime phone number to set up an appointment. Testing is done for: Coliform Bacteria/*Escherichia coli* (E. Coli) and Nitrates.

### What is coliform bacteria?

Coliform bacteria is a group of bacteria found in decaying plants and soils, and in intestines of warmblooded animals, including humans. Although coliform bacteria are not disease causing, they can indicate the presence of potentially disease-causing organisms.

### What is a nitrate?

Nitrates are chemicals that occur naturally in the environment. They are created when animal waste decomposes in the soil or water. When microbes in soil or water decompose animal waste, ammonia is produced. This ammonia is changed to nitrite and nitrate. Certain nitrate levels in the water can cause oxygen deprivation (otherwise known as blue baby disease) in infants.

### What if my test results show a positive total coliform bacteria?

Don't panic. Many private water systems show positive test results for total coliform bacteria. Shock chlorinate the private water system and call the Health District for another sample to be collected.

### What if the E. coli test shows positive?

A positive E. coli result indicates fecal contamination of the water. Disinfect your private water system. After disinfection, have PWS re-sampled. A negative E. coli test indicates the source of the contamination is most likely natural (plant matter) and not from fecal matter.



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## KNOW THE FACTS!

### PRIVATE WATER SYSTEMS (cont.)

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#### What if my test results show positive nitrate levels?

If nitrate pre-screens done in the field show that nitrates are greater than 5 mg/L, a sample must be collected and lab analysis performed. If lab analysis shows that nitrate levels exceed the maximum contaminant level of 10 mg/L, the Health District will provide information to the PWS owner on the health risks of nitrates and options for treatment of the PWS to reduce nitrates to acceptable levels.

#### Water Testing Recommendations

The Health District recommends that all private water systems (wells and cisterns) be tested every six months. For more information, visit [www.hamiltoncountyhealth.org](http://www.hamiltoncountyhealth.org) or call 946-7966.

*For more information, contact the  
Water Quality Division at  
513.946.7966, or visit  
[www.hamiltoncountyhealth.org](http://www.hamiltoncountyhealth.org).*



**HAMILTON COUNTY  
PUBLIC HEALTH**

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