

Private Well Water Testing

Protecting your private water supply from contamination will reduce your risk of developing water-borne diseases and illnesses. This booklet answers the most common questions people ask after having their well water tested at the Springfield-Greene County Health Department.

For additional information, call (417) 864-1673.

What do my results mean?

Bacterial Results

For Drinking Water:

- Satisfactory (<1 Coliform/100ml)
- Unsatisfactory (Coliform Bacteria Found, >1 Coliform/100ml) See Enclosed Material (What to do with the results)
- E. coli* Present - See Enclosed Material (What to do with results)

“Satisfactory” means your water is free from coliform and *E.coli* and is safe to drink.

“Unsatisfactory” or “*E. coli* Present” means the water is contaminated and is not safe to drink.

- Use bottled water for drinking, cooking, or brushing your teeth

OR

- Disinfect your water to make it safe to drink by following the instructions in this booklet.

The health department recommends that your well water system be sanitized to kill bacteria living there. You will need to have your water retested at least once a year, and may need to sanitize it again.

What could be in my water?

Coliform Bacteria

- Coliform bacteria occur naturally in soil, on plants, in lakes and streams and in the intestines of humans and animals.
- Most coliform bacteria do not cause disease.
- When coliform are found in drinking water, though, it means the water supply is contaminated and other disease causing bacteria may be there as well.

E. coli

- *E. coli* is a member of the coliform group of bacteria and is found only in the intestines of warm-blooded animals, including humans.
- *E. coli* found in drinking water means the water has been recently contaminated with human or animal waste.

Other contaminants could be in your well water as well.

Contaminant	Can Cause	Safe Limit
Bacteria	Diarrhea and vomiting	0
Nitrate nitrogen	Infant oxygen starvation	10 mg/L or less
Sulfate	Diarrhea and dehydration	250 mg/L or less
Iron		0.3 mg/L or less
Chlorine	Eye/nose irritation, stomach discomfort, anemia	With chlorinator- 4 mg/L or less
	Infants/children-nervous system effects	With no chlorinator- 0 mg/L

How did it get there?

Bacteria can enter your well from a leaking septic system, surface water leaching into the well, or runoff from farms. It can get in during periods of pressure loss or when a system is disturbed due to plumbing work.

It may gain access through—

- Improperly sealed breather pipe
- Improperly sealed wiring entrance
- Missing or faulty gasket on well cap
- Leaky sanitary well seal
- A below ground level well head that is improperly sealed
- Floodwater that covers the well head or casing

How can I get rid of contaminants in my well?

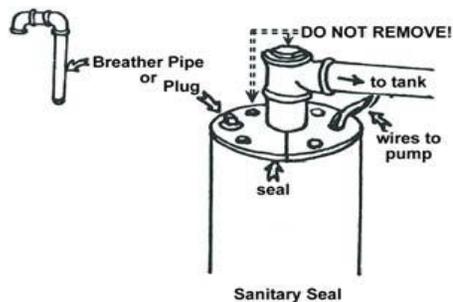
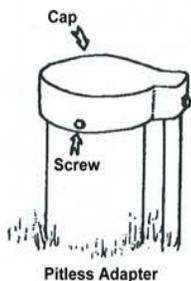
Contact your well or pump installer for help. To sanitize the well yourself, follow the instructions below if your well is less than 250 feet deep.

1. Mix two gallons of unscented bleach with one gallon of water and pour it into the well. If possible, wash down the sides of the casing and the pipe from the pump.

- a. If the unit is a pitless adapter, remove the cap to add bleach mixture.
- b. If the well has a sanitary seal, remove the plug or breather pipe to add the bleach mixture.

NOTE: If your well is more than 250 feet deep, more bleach may be needed (1 gallon of bleach per 100 feet of well depth).

2. Wait 15 to 30 minutes, then go to the outside faucet nearest the well, and begin running water until you smell bleach. This can take an hour or more. Turn the faucet off.



3. Run each cold water tap inside the house until you smell bleach.
4. Do not use the water for at least 4 hours, preferably overnight.
5. After a minimum of 4 hours, run an outside faucet until the smell of bleach is gone, and then do the same with all indoor faucets.
6. When the bleach smell and taste disappear, contact the health department and have your water retested.
7. Please allow for 5-7 days following treatment to resubmit sample.

What should I use for drinking water in the meantime?

You can treat contaminated water to make it safe to drink.

In a clean pot, bring water to a full bubbling boil for 3 minutes. Allow it to cool. Shake it or pour it from pot to glass to remove the flat taste.

OR

Mix 1/8 teaspoon unscented liquid laundry bleach in 1 gallon of water, and let it stand for at least 30 minutes before drinking.

NOTE: If your tap water is muddy, pour one gallon into a container and allow it to settle. Then pour the water into a clean container with ¼ teaspoon liquid laundry bleach. Let it sit one hour before using it for drinking, cooking or brushing teeth.

How often should I test my well water?

Remember to test your water:

- Each year for bacteria.
- Every 2-3 years for harmful chemicals.
- When there is a change in color, smell or taste.
- If someone in the household becomes pregnant.
- After any work is done on the well.
- If someone in the household has an unexplained stomach illness.
- If your well runs dry and comes back.
- When you experience problems near your well (such as flooding, land disturbances, nearby waste disposal sites).

This document follows guidance from the American Public Health Association's Standard Methods for the Examination of Water and Wastewater, the U.S. Environmental Protection Agency and the Missouri Department of Health and Senior Services.

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