

# Is Your Private Well Safe to Drink After a Flood?

By: Amy Timmerman – Extension Educator

As the flood waters recede and we are able to get back in to our farms and ranches it is important to think about drinking water safety. It is common for private wells to be immersed with the flood waters. The flood waters commonly contain high levels of bacteria such as fecal coliforms and *E. coli*. These microbes can cause short-term health effects such as diarrhea, cramps, nausea, headaches or other symptoms. Infants and young children, some of the elderly, and people with severely compromised immune systems may be more susceptible.

Until your well water has tested negative for bacteria, it is recommend to boil your water at a vigorous boil for 1 minute prior to use. For more information on boiling water and/or chlorinating personal water please refer to [https://go.unl.edu/drinking\\_water\\_flood](https://go.unl.edu/drinking_water_flood).

## How to test for bacteria contamination

- A sterile bottle must be used to place the water sample in to assure an accurate report.
  - Middle Niobrara NRD – Ainsworth
  - Upper Elkhorn NRD – O’Neill
  - Lower Elkhorn NRD – Norfolk
  - Lewis & Clark NRD - Hartington
  - Holt County Extension – O’Neill
  - Antelope County Extension – Neligh
  - Knox County Extension – Center
  - BKR County Extension – Ainsworth
  - Check with your local NRD or Extension Office
- The bottle may contain a small white pill or powder. If it does, leave the pill or powder in the bottle.
- Choose an inside faucet to collect the water sample and remove the aerator if one is present. Turn the water on cold water and allow it to run for about 5 minutes. This assures that fresh clean water from the well is being collected.
- Avoid touching or contaminating the inside of the bottle or cap. Carefully remove the lid from the sample containers and hold the cap by the outside of the cap. (If you touch the inside of the cap or battle, you could contaminate the sample with bacteria)
- Fill the container with water to the marked line if a line is present. If no line is present fill the bottle  $\frac{3}{4}$ 's full.
- Samples must reach the laboratory within 30 hours if sending it to a commercial lab. Until you can ship the sample, keep the sample cool either in a refrigerator or cooler. If you are bringing your samples to the Upper Elkhorn NRD for testing, samples need to be delivered with 2 hours following the collection.

## Testing

There are a number of different tests available for different contaminations. The minimum recommended to test is for bacteria and nitrates. Please remember that there may be other contaminants present that would make the water unsafe or undesirable for domestic use. Some

commercial labs offer multi-parameter packages that include tests for the most common contaminants of concern.

### **Testing facilities**

The Upper Elkhorn NRD located in O’Neill is able to test for both nitrates and coliform bacteria. If you have questions or need information, contact the Upper Elkhorn NRD at 402-336-3867.

Certified Water Testing Laboratories in Nebraska

- American Agricultural Laboratory – 700 East D Street, McCook, NE 69001 (308-345-3670)
- Central District Health Department – 1137 South Locust Street, Grand Island, NE 68801 (308-385-5157)
- Enviro Services Inc. – 818 S. Beltline Hwy East, Scottsbluff, NE 69361 (308-632-3933)
- Midwest Laboratories, Inc. – 13611 B St., Omaha, NE 68144 (402-334-7770)

### **What to do after receiving test results**

If your test reports come back negative for bacteria, you can go back to normal water usage for the home without boiling or treating the water.

If tests reports are positive for bacteria, it is recommended to shock your private well with chlorine. For full instructions refer to the NebGuide “Drinking Water Treatment: Shock Chlorination” found at [https://go.unl.edu/shocking\\_well](https://go.unl.edu/shocking_well). This publication will help determine the amount of bleach that will need to be poured into the well depending on well diameter, volume of water, total depth of water, etc.