WHAT RESIDENTS NEED TO KNOW

As the first step in the SWIGG study, 301 wells in the three Counties were tested for total coliform bacteria, nitrates, and *E. coli* bacteria.

- 58% of wells tested met health standards
- 42% of wells exceeded the health standard for one or more contaminant
- 19% of wells had an immediate health concern of high nitrates or *E. coli*

These results were consistent with 30 years of past well data, suggesting the problem isn’t new, but hasn’t gotten better.

The study concludes in 2020 and will investigate sources and risk factors of well contamination.

TOTAL COLIFORM

- Generally does not cause illness
- Health standard is no detection
- Is used to indicate that other contaminants may be present
- Can come from soil or insects that enter from the surface, as well as fecal material
- Was found in 34% of wells
- Was the only contaminant in 23% of wells

NITRATES

- High levels are dangerous for babies and pregnant women
- Health standard is 10 parts per million (ppm)
- High levels have been linked to chronic health issues in adults
- Levels above 2 ppm are considered human-caused
- 16% of wells exceeded the 10 ppm standard

E. COLI

- Is an immediate, potentially serious health issue
- Health standard is no detection
- Comes from either human or animal fecal material
- Was found in 4% of wells
WHAT YOU CAN DO NOW

- Test your well annually OR if your water’s color, taste, or odor changes
- County Health Departments may have testing kits or provide free tests for pregnant women and new mothers
- Some Extension offices provide testing kits
- Contact the UW-Stevens Point lab, State Laboratory of Hygiene, a private lab, or a plumber for well testing information
- If bacteria is found, take a second test to confirm contamination
- Follow Department of Natural Resources and Department of Health Services recommendations for treating contaminated wells

NEXT STEPS OF THE STUDY

Another round of well samples will be tested in April 2019. Wells are randomly selected. Unfortunately, we can’t take volunteers; if you receive an invitation please participate!

Researchers will sample a random subset of contaminated wells for viruses and bacteria, and analyze if they come from humans, cows, or pigs.

Researchers will also investigate how closely well contamination is related to factors like well depth, well age, casing depth, depth to bedrock, and locations of septic systems.

We expect to release a final report by the end of 2020.

FOR MORE INFORMATION

Contact your County Land Conservation Department:
Iowa - (608) 930-9891  |  Grant - (608) 723-6377 Ext. 4  |  Lafayette - (608) 776-3836

Visit the SWIGG website:
https://iowa.extension.wisc.edu/community-development/swigg/

Visit DNR’s private wells page:
https://dnr.wi.gov/topic/wells/homeowners.html

SOUTHWEST WISCONSIN GROUNDWATER AND GEOLOGY STUDY (SWIGG)