Talking Points: Nitrate in SE MN

December 1, 2023

WHAT'S HAPPENING?

Some groundwater in southeast Minnesota has unsafe concentrations of nitrate; state agencies and local partners are working together to address this issue.

- This is not a new issue. There are multiple efforts in place to address nitrate concentrations, but it may be years until the issue is fully resolved. Right now, the main focus is on immediate steps that can reduce the risk for people who get their drinking water from wells with nitrate contamination.

HOW DID THIS PROBLEM DEVELOP?

- The geology and activities on the land surface in southeast Minnesota make it more likely for higher concentrations of nitrate in groundwater.
- Public water systems regularly test and treat for nitrate in drinking water, but there are not the same protections for private well users.
- Nitrate is a particular concern for those who get their drinking water from **private wells** in **eight counties** in SE Minnesota.
    - Those eight counties include: Olmsted, Goodhue, Dodge, Wabasha, Fillmore, Mower, Winona, and Houston.

WHAT'S NEW

- What's new is that the U.S. EPA has used a provision in the Safe Drinking Water Act to direct state agencies to:
    - Provide notice and alternate water to people with affected wells,
    - Develop a plan to ensure safe drinking water for private wells with unsafe levels of nitrate through seven specific components, and
    - Accelerate environmental and conservation activities to reduce nitrate in drinking water aquifers.

WHO'S AT RISK?

People who are on city water and many private wells have safe drinking water.

Public water systems regularly test and treat for nitrate. The only way to know if your private well water is safe is to test the water at an accredited lab. Drinking water with nitrate concentrations above 10 parts per million is unsafe, especially for pregnant people and babies under 6 months old.

- Consuming too much nitrate can affect how blood carries oxygen and can cause methemoglobinemia (also known as blue baby syndrome).
- Babies under 6 months old who are bottle-fed formula made with tap water that has nitrate above 10 parts per million are at the highest risk of getting methemoglobinemia.

- There is more information about nitrate and health on the MDH website at Nitrate in Drinking Water (www.health.state.mn.us/communities/environment/water/contaminants/nitrate.html).

HOW CAN PEOPLE PROTECT THEMSELVES AND THEIR FAMILIES?

Now is a good time to check your water quality.

- Residents on a city water system can be confident their water meets Safe Drinking Water Act standards.
    - You know you are on a city water system if you receive a monthly or quarterly utility bill for water.
    - Your public water system regularly tests for nitrate and ensures levels meet the EPA standard. You can find the level of nitrate detected in the system serving where you live by reading the system's Water Quality Report.
    - Your public water system will let you know if they detect nitrate at a level above the EPA standard.
- Residents who rely on a private well for drinking water should test their well water.
    - You cannot taste, smell, or see most contaminants in groundwater, so testing is the only way to know the nitrate concentration in your drinking water.
    - We recommend using an accredited laboratory to test your well water.
    - There is more information on MDH's website about well testing, understanding your test results and treatment options. See Well Testing, Results, and Options (www.health.state.mn.us/communities/environment/water/wells/waterquality/tips.html).

Why did the state not take the actions in the EPA letter before now?

- MDH has been working on this issue, and most of the work that EPA is asking for in the letter is already underway. What's different now is EPA is asking that we accelerate progress for those activities and also expand in several areas.
- MDH has offered two pilot grants to local partners to offer free testing and income-based financial support for remediation when needed.
- The intent of these grants was to develop ways to support private well owners and users in making sure their drinking water is safe. Lessons learned from those two pilots are being used to offer another set of grants and also formulate the plan that EPA has now asked for.
- In addition to meeting all of our statutory and rule compliance requirements under the Minnesota Well Code, MDH continues to offer robust communications and education supports for private well owners and users:
    - Webpages and translated materials on numerous topics related to private wells.
    - A CEU educational module for realtors on private wells.
    - A Private Well Forum for partners who work with private wells.
- While some modest current funding can be used, significant additional funding will be needed to carry out the public health intervention plan that will be sent to EPA in January 2024.