

Well Water Nitrate Testing Clinic – May 6 at Denmark Town Hall

Do you have a well? How long has it been since you had your well water tested for nitrates? You might not think that you are at risk, but nitrates, which are found in fertilizers and also formed during the decay of sewage and animal wastes, are the most common contaminants in Minnesota's groundwater. Though most private wells in Washington County are safe, previous studies have found several with elevated levels of nitrates in the Cottage Grove and Denmark Twp. area where limestone bedrock makes it easier for pollutants to leach into groundwater supplies. In other parts of the county, shallow, poorly constructed, or improperly located wells are also susceptible to nitrates and other pollutants.

On May 6, Washington County and the Washington Conservation District will be offering a free well water testing clinic from 2-6:30pm at Denmark Town Hall. During the clinic, staff will analyze water samples for nitrate levels and give people their results within about five minutes.

The biggest risk associated with elevated levels of nitrates in drinking water (at or above 10 mg/L) is a disorder called "blue-baby" syndrome, or methemoglobinemia. It affects infants younger than six months old that drink formula mixed with the water and can pose a risk for pregnant women as well. Blue-baby syndrome reduces the oxygen carrying capacity of blood and babies suffering from the illness might turn bluish in color, develop long-term digestive or respiratory problems, or even die. Counter intuitively, solutions to other common water pollution problems - boiling, softening and filtration – do nothing to reduce nitrate levels and, in fact, boiling can actually increase nitrate concentrations.

Blue-baby syndrome is most common in rural areas where nitrates from fertilizers and barnyard runoff leach into the groundwater. Unlike other contaminants, nitrates are not diluted and filtered out as water travels through soil, so it is critical that wells are sited at least 100 ft. away from septic systems, feedlots and agricultural drainage areas.

Even if you don't have a baby and aren't planning to get pregnant, Washington County's Department of Public Health and the Environment recommends that you have your well water tested annually for total coliform bacteria and nitrates. Though nitrates don't pose a risk for adults, finding elevated levels in your drinking water might be a sign that other contaminants such as disease-causing organisms or pesticides are in the water as well.

To participate in the free testing clinic on May 6, bring at least ½ cup of water in a clean plastic or glass container. To get a good sample, allow the tap to run five to ten minutes before filling the container. If you have a distillation unit, reverse osmosis or other nitrate removal system, take two water samples – one before and one after the treatment process - to determine if your system is working properly. If you only have a water softener, you only need to take one sample.

Samples should be taken no more than 24 hours before the testing clinic and must be kept refrigerated prior to testing. To ensure accurate results, mark the container with your name, phone number and a well identification number if more than one well is sampled. It is not necessary to provide information about the well or well location.

Washington County also offers other well water tests for residents throughout the year for a fee. The basic test for drinking water quality, which includes coliform bacteria and nitrates, is \$44. Tests are also available for hardness and other common minerals. Water samples can be dropped off at the Cottage Grove County South Service Center on Tuesdays from 8-10:30am. To order a test kit, call 651-430-6655. Learn more at www.co.washington.mn.us/index.aspx?nid=637.

For questions about the free nitrates water testing clinic on May 6 or how to take a sample, contact Wendy Griffin at 651-275-1136 x.24.