

# Healthy News – Nitrates in Drinking Water

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**PROMOTE** South Heartland District Health Department (SHDHD) serves four rural counties, all of which have historically experienced elevated nitrate levels in their groundwater. Nitrates can enter groundwater for various reasons, including naturally occurring processes, fertilizer use in agriculture and turf, livestock operations, and septic system runoff. Of note: 100% of South Heartland residents rely on groundwater as their primary source of drinking water, either through their own private wells or from the public community wells in Adams, Clay, Nuckolls and Webster Counties. Nitrate exposure can pose health risks for people of all ages.



**PREVENT** Nitrates are especially harmful to infants under one year old and can cause a serious condition known as methemoglobinemia, or “blue baby syndrome,” which reduces the blood’s ability to carry oxygen. Emerging research also links long-term nitrate exposure to chronic health conditions, such as certain types of cancer, thyroid disease, and birth defects. The World Health Organization classifies nitrates as “probably carcinogenic to humans.”

To reduce your risk:

- **Use bottled water or a certified water treatment system** for drinking, cooking, and mixing infant formula if your nitrate levels exceed the actionable level of 10 milligrams per liter.
- **Install a point-of-use, certified water treatment system** like reverse osmosis, ion exchange, or distillation, which are effective at removing nitrates.
- **Avoid boiling water** – this will not remove nitrates and can actually increase the nitrate concentration.
- **Talk with your health care provider** about additional health risks and other potential action steps to protect and improve your family’s health, especially if nitrate levels are high in your drinking water.

**PROTECT** Nitrates are invisible, colorless, odorless, and tasteless so contamination is not something you can detect without proper testing. The best way to protect yourself and your family is by testing your private well water for nitrates at least once a year. Local labs and agencies that offer nitrate testing include:

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| • <a href="#">South Heartland District Health Department</a> | • <a href="#">Culligan</a>        | • <a href="#">Central District Health Department</a> |
| • <a href="#">Servitech</a>                                  | • <a href="#">Nebraska DHHS</a>   | • <a href="#">Upper Big Blue NRD</a>                 |
|  | • <a href="#">Little Blue NRD</a> |  |

Questions: Contact SHDHD, 606 N Minnesota Ave, Hastings, NE 402-462-6211

Sources:

University of Nebraska-Lincoln: <https://water.unl.edu/category/nitrate>

NDEE: Nitrate in Drinking Water Fact Sheet <https://dee.nebraska.gov>

