



## Iowa Department of Public Health Bureau of Environmental Health Services

### Nitrate in Private Drinking Water

**Overview:** Private well water may contain unsafe levels of **nitrogen (as nitrate or nitrite)**. To make sure that your water is safe to drink, have your well water tested each year. If your well tests high for nitrogen, talk to your county sanitarian to help you find a solution to the problem.

#### Why should I be concerned?

**Both the nitrate and nitrite forms of nitrogen in drinking water are health concerns.** High nitrogen levels can cause infants to develop a life-threatening condition called "blue-baby" syndrome or methemoglobinemia. This is a condition which decreases the ability of blood to get oxygen from the lungs to all parts of the body. A case of infant methemoglobinemia has not occurred in Iowa for over 30 years.

#### When should I test my water for nitrogen?

You should test your well water each year. You also should test your well if someone in your household is:

- Pregnant
- Nursing
- An infant 6 months of age or younger

#### What if my water test results are high?

- A high level is Nitrate (as N) of 10 mg/L
- Do not give the water to infants less than 6 months of age. Do not use the water to prepare formula.
- Do not boil the water.

- Avoid drinking the water on a daily basis during pregnancy.
- Limit how much of the water you drink from your private well if you have chronic health problems.

#### How does nitrate and nitrite get into my drinking water?

It is often difficult to pinpoint where the nitrate or nitrite in drinking water comes from. The source of nitrogen may come from runoff or seepage from fertilized soil, municipal or industrial wastewater, landfills, animal feed lots, septic systems, urban drainage, or decaying plant material.

#### Is there anything I can do if my water tests high for nitrogen?

- Reduce fertilizer use around your well
- Improve manure handling methods
- Pump your septic tank
- Upgrade your well
- Contact your county sanitarian for advice

**Who should I contact if I want more information?**

- Poison Control Center: 800-222-1222
- Your local public health agency
- Iowa Department of Public Health



<http://idph.iowa.gov/>

- Iowa Department of Natural Resources



<http://www.iowadnr.gov/>