

# NITRATES

## IN WELL WATER

Nitrate is a naturally occurring form of nitrogen and oxygen. It is also found in many human-made sources. When there is too much nitrate in your water, it can cause health problems. Because you cannot see, taste, or smell nitrate in water, you should test your well water for nitrate every year.



Nitrate in groundwater (the water in the soil and rock deep underground, which your well pumps to the surface) can occur naturally, but high nitrate levels usually come from human activities, like animal manure, human sewage waste, and commercial fertilizers.

The United States Environmental Protection Agency (EPA) has set a maximum contaminant level, or the maximum amount considered safe to drink, for nitrate, because high nitrate levels in water can harm you. If your water has nitrate levels at or above 10 mg/L (or 10 ppm, or parts per million), you should take action.

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### HOW DO I PROTECT MY WELL?

- Inspect and maintain your well and your septic system (if you have one) regularly
- Reduce fertilizer use within 100 ft of the well
- Move livestock or manure piles away from the well area



For sources and more information about nitrates, visit:

[tillamookchc.org/wells](http://tillamookchc.org/wells)

### HEALTH EFFECTS

- Nitrate affects how the blood carries oxygen, which may cause a condition known as methoglobinemia or blue baby syndrome. This is especially dangerous to infants.
- Nitrate may also cause an increased risk of:
  - Respiratory infection
  - Birth defects
  - Thyroid disease
  - Certain types of cancer

### WHO'S MOST AT RISK?

Anyone can have high nitrate in their well, but where you live and who is in your home could put you at higher risk for high nitrate levels or negative health effects from drinking contaminated water. Homes that have any of the following should be extra sure to test their water regularly:

- Infants, children under 3, or pregnant women living in the home
- Wells near agricultural sites or in sand aquifers
- Shallow wells, and wells with casings that are not watertight, especially if damaged or leaking

### WHAT DO I DO IF I HAVE HIGH NITRATES IN MY WATER?

- Switch to a safe drinking water source, such as bottled water. Do not try to boil nitrate out of the water (this will make it more concentrated)
- Talk to your health care provider about possible health effects
- Remove possible sources of contamination
- Contact the [Oregon Domestic Well Safety Program](#) for more information and advice. Consider talking to a well or drinking water professional for tips on how to improve water quality.