

Clean Drinking Water Project

About Nitrate in Your Water

➤ **What is nitrate?**

Nitrate is a colorless, odorless, nitrogen-oxygen chemical unit. Once consumed by a person, it converts to nitrite in the body. Nitrate may be present in drinking water supplies, especially in rural settings associated with confined animal feeding operations and fertilizer use.

➤ **Why should I be concerned about nitrate in my water?**

Exposure to elevated levels of nitrate poses a number of health risks. Once nitrate converts to nitrite, it can interfere with the body's ability to transport oxygen, resulting in a condition called methemoglobinemia. Methemoglobinemia, or "blue baby syndrome," can cause shortness of breath and a bluish coloring of the skin due to lack of oxygen, and if untreated, may lead to serious complications or even death. Ingestion of nitrate has also been linked to other health effects, including recurrent diarrhea, cardiovascular problems, and birth defects.

➤ **Who is at most risk to the adverse health effects of nitrate-contaminated drinking water?**

Infants, young children under the age of five, women who are or may become pregnant, and adults over the age of 65 or who have compromised immune systems.

➤ **What can I do to make sure I am drinking clean water?**

By testing your water regularly for elevated levels of nitrate, you can determine whether you should take additional steps to protect yourself. If your drinking water tests at or above 10 parts per million (ppm)(sometimes also referred to as 10 mg/L) nitrate, you should consume only bottled water or install a reverse osmosis system. The federal government has set 10 ppm as a safety limit for consuming water. Boiling water DOES NOT remove nitrate from water, and in fact, can actually increase the concentration. Consider using bottled or treated water for other daily tasks like cooking and rinsing food, brushing teeth, and preparing infant formula. To help ensure you have access to clean water, you should determine whether you are eligible to participate in the Clean Drinking Water Project and receive a free reverse osmosis system or free bottled water. If your drinking water tests at or above 5 ppm (5 mg/L) nitrate but less than 10 ppm (10 mg/L), you may want to re-sample periodically.

➤ **What is the Clean Drinking Water Project?**

The Clean Drinking Water Project is part of a court-approved settlement between the Community Association for Restoration of the Environment, Center Food Safety and some local dairies that resulted from CARE's lawsuit about groundwater contamination in the lower Yakima Valley. Under this Project, people who live in a designated area and who have a valid water quality test showing a nitrate level of 10 ppm or higher are eligible to receive free installation and maintenance of a reverse osmosis machine or bottled water. People whose water tests show a nitrate level of 60 ppm or higher and who already have a reverse osmosis machine installed are eligible for free bottled water delivery. Some scientific studies indicate that reverse osmosis machines may not reduce nitrate levels below 10 ppm when nitrates are present above 70 ppm. If you have a valid water test from within the past five years, please let us know. If not, you may be eligible for a free water test.