



May 2018
DOH 331-056
Revised

Fact Sheet

Radionuclides in drinking water

The Department of Health regulates radioactive material in drinking water. Most of the material occurs naturally, and comes from the soil, but sometimes we see manmade radionuclides in drinking water. We require public water systems serving at least 15 homes or 25 full-time residents to test and meet drinking water standards for radionuclides. If your public water system serves fewer homes, you may still want to test for radionuclides. In this case, ask your water supplier or homeowners association about getting the water supply tested.

Radionuclide contamination above the drinking water standard is rare in Washington.

If you own your own well, you are responsible for testing your own drinking water. Contaminants in drinking water could put your family’s health at risk. We recommend homeowners supplied by their own well sample their well for coliform and nitrate at least once per year, and for arsenic once during the winter and once during the summer. If your well exceeds a drinking water standard, contact your local health department. For private well sampling guidance, read *Private wells: Information for owners (331-349)* online (see Web address on page 2).

If you own a private well in northeastern Washington

There is a potential for elevated levels of uranium in groundwater in Spokane, Pend Oreille, Stevens, Ferry, and Okanogan counties because of naturally occurring uranium in the rock and soil. If you own a private well in one of these counties, we also recommend you have your drinking water tested for uranium once. You may consider retesting if an earthquake or major excavations such as nearby mining or highway construction work occur.

Uranium is a radioactive mineral sometimes found in rocks and soil

- **The drinking water standard for uranium is no more than 30 micrograms per liter (30 µg/l).**
- **Exposure to elevated levels of uranium in drinking water may affect your health.** Some people who drink water with uranium in excess of 30 µg/l over many years may have an increased risk of kidney damage or getting cancer.
- **If you choose to test your drinking water.** If the uranium level exceeds 30 µg/l, we recommend that you consider installing a reverse osmosis (RO) water treatment system. RO systems use membrane filters with pores too small to allow contaminants like radionuclide molecules to pass through. Another option is to use an alternative source of drinking water, such as bottled water.
- **If you choose to install a reverse osmosis system.** Get a list of systems certified to treat drinking water from NSF International online at <http://nsf.org/consumer/> In the A-to-Z List at left, click “Search for NSF-Certified Products.” Use the drop-down arrow below “Select a product” to select “Drinking Water/Reverse Osmosis” and then click “Search.” If you have questions, call NSF International at 800-673-8010.



HELPING TO ENSURE SAFE AND RELIABLE DRINKING WATER

Radon

When uranium in rocks and soil decays, it breaks down into other radioactive elements, such as radon. Radon is a gas that can seep through the soil into homes and other buildings through cracks or holes in the foundation. Breathing air that contains an elevated level of radon can lead to lung cancer.

Radon gas also dissolves into groundwater. If your well taps into groundwater containing radon, water uses such as showering and washing allow radon gas to escape from the water and enter the air inside the home.

- **Testing is the only way to know if your home has elevated levels of radon.**
- **Radon entering the home through the soil is usually a much larger risk than radon entering through the water supply.**
- **Radon is most hazardous when inhaled.** You can get inexpensive air test kits at most hardware stores. You can also get one online by searching for “radon test kit.”
- **If your indoor air levels exceed 4 picocuries per liter (4 pCi/l),** we recommend that you take steps to reduce radon. For information, call the U.S. Environmental Protection Agency’s Radon Hotline at 800-SOS-RADON.
- **You can lower the health risk to your family** by installing a vent system in the soil beneath the house to capture radon and vent it to the outside before it seeps through the foundation. If your drinking water comes from a well, you may want to test your water for radon to understand its relative contribution to indoor air levels of radon. Unlike uranium, there is no established standard for radon in drinking water. Homeowners can purchase various water treatment systems to remove radon.

For more information

For laboratories accredited to perform **uranium** and **radon** testing for drinking water, visit Department of Ecology online at <https://fortress.wa.gov/ecy/laboratorysearch/>. Click on “analyte” and search for “Uranium” or “Radon” for a list of accredited labs.

For more information on **radon**, call the U.S. Environmental Protection Agency at 800-SOS-RADON or visit the website at <http://www.epa.gov/radon/healthrisks.html>.

For more information about managing **radon** in private homes, call the [Office of Radiation Protection](#) at 360-236-3250.

Our publications are online at <http://doh.wa.gov/odwpubs/>.

If you need assistance, call our regional office at:

Eastern Region: Spokane Valley 509-329-2100

Northwest Region: Kent 253-395-6750

Southwest Region: Tumwater 360-236-3030

