What is Radon?

Radon is a naturally occurring radioactive gas that has no color, odor, or taste. It comes from the breakdown of radioactive elements like uranium and radium in the ground. Soil under your home releases radon which can make its way through cracks or openings in your home and sometimes through well water. High levels of radon are commonly found in certain kinds of bedrock such as granite and dark shale.

What are the health effects of Radon?

Radon can be inhaled when it is released from water while showering, washing dishes, or cooking. It can also be ingested directly through drinking water. Research shows inhaled radon is the greatest concern as it increases the risk of lung cancer. Drinking water contaminated by radon may raise the risk of stomach cancer.

According to the U.S. Environmental Protection Agency (EPA), only 1-2 percent of radon in indoor air comes from drinking water. In general, for every 10,000 picocuries per liter (pCi/L) of radon in drinking water, 1 pCi/L is transferred to the indoor air.

How do I test for Radon?

Testing is the only way to know if radon in present in your water. Contact your state or local health department or use our interactive map for a list of state-certified laboratories in your area.

The EPA and the U.S. Surgeon General recommend that homes first be tested for radon in indoor air. If the test on the air results in a reading of 4 pCi/L or higher, radon should be reduced in the air and drinking water should also be tested. The EPA proposed a maximum contaminant level (MCL) for radon in drinking water of 300 pCi/L and an alternative maximum contaminant level (AMCL) of 4,000 pCi/L. Many states also recommend drinking water standards for radon in water ranging from 300 to 10,000 pCi/L. Well owners should use their state’s recommendations for guidelines on when water levels should be reduced. If your state does not have a recommended level, use the recommended levels from EPA.
What are the treatments for Radon in well water?

Treatments to reduce radon include aeration and granular activated carbon (GAC) filtration. These technologies may have a wide range of effectiveness based on the amount of radon in the water supply and other contaminants that may be present in the water. Look for treatment systems that are certified by NSF or Water Quality Association (WQA). Certified water treatment professionals can help you select the right treatment. To locate a certified water treatment professional in your area, visit WQA’s website.

It is imperative to maintain treatment devices and change filters as specified by the manufacturer or your water treatment professional. You should also retest your water after treatment is installed and after maintenance to confirm the effectiveness of the device.

**NOTE**: Radioactivity collects on the GAC filter, which may cause a handling hazard and require special disposal methods.
For More Information on Radon & Well Water

Contact your licensed well contractor, state radon office (https://sosradon.org/state-radon-contact-map), or the wellcare® Hotline for more information on radon and additional measures you can take to protect your well and well water.

Information to help maintain and protect your water well system:

wellcare® is a program of the Water Systems Council (WSC). WSC is the only national organization solely focused on protecting the health and water supply of more than 13 million households nationwide who depend on private wells.

This publication is one of more than 100 wellcare® information sheets available FREE at www.watersystemscouncil.org.

Well owners and others with questions about wells and well water can contact the wellcare® Hotline at 1-888-395-1033 or visit www.wellcarehotline.org to fill out a contact form or chat with us live!

JOIN THE WELLCARE® WELL OWNERS NETWORK!

By joining the FREE wellcare® Well Owners Network, you will receive regular information on how to maintain your well and protect your well water.

Contact us at 1-888-395-1033 or visit www.wellcarehotline.org to join!