



Radium Information for Private Well Owners

There was a recent Public Notice from the City of Inver Grove Heights (IGH) regarding the presence of radium in the drinking water. On January 30, 2023, the City was informed by the Minnesota Department of Health that the most recent test samples showed that the level of combined radium—types 226 and 228—at the IGH Water Treatment Plant exceeded the drinking water standard. Small amounts of radium occur naturally in air, water, and soil, and radium levels in groundwater fluctuate over time. Additional information on the Public Notice, radium resources, and the most recent Community Meeting, can be found on the City of IGH Water Notice web page: <https://www.ighmn.gov/1463/Water-Notice>.

In September 2020, Dakota County published the countywide Ambient Groundwater Study, which did include radium testing in private wells. Below is a summary of the radium results, the full study can be found on the Dakota County Website, www.dakotacounty.us, search *Ambient Groundwater Quality study*.

- In 2019, 61 private wells were tested for radium type 226 and 228; none exceeded the maximum contaminant level 5 pCi/L (picocuries per liter). There were 4 wells that were close to the standard.
- In IGH, there were 7 wells tested for radium; none of these were close to the standard.
- The study found a correlation between well depth and radium; deeper wells had higher levels of radium.

The IGH wells that are currently being used are all Jordan Aquifer wells and have an average casing depth of 350 ft and an average total depth of about 450 ft (meaning water is entering the wells between 350 and 450 ft). If your well is much shallower than that, or in a different aquifer, there may be less radium entering your well.

Water softening and reverse osmosis are evidence-based treatments for radium. Most water treatment professionals will suggest plumbing softened water to your reverse osmosis. Doing so provides the best possible treatment for radium by combining two effective treatments. This also has the added benefit of removing additional unknown contaminants from your drinking water. If you are considering water treatment, please refer to the Home Water Treatment Factsheet:

<https://www.health.state.mn.us/communities/environment/water/docs/factsheet/hometreatment.pdf>.

You can find a licensed and registered water conditioning professional using the MDH License Lookup:

<https://secure.doli.state.mn.us/lookup/AdvancedSearch.aspx>

The Wisconsin State Laboratory facilitates testing for radium with homeowners and will send a test kit with instructions which costs \$278 (postage NOT included). This test requires a gallon of water to be mailed to the lab, and because there is a 5-day holding time, it is the responsibility of the homeowner to ensure that the sample reaches the lab in under 5 days (expedited shipping will likely be needed).

The 2023 free water testing opportunity does not include radium testing since this is not a common contaminant in private wells. If you are interested in testing your private well for radium, please call the Wisconsin State Lab at 608-224-6203, or go to

<https://www.slh.wisc.edu/environmental/radiochemistry/collection-kits/>.