Lithium in drinking water

Lithium is one of Earth's naturally occurring metals. It is found throughout the environment. Lithium occurs naturally in some ground and surface water used for drinking. Lithium in our diet comes mostly from the foods we eat, such as grains and vegetables. Manufacturers use lithium in batteries, renewable energy systems, medicine, and more.



Lithium and health

 Some people take lithium to treat mental health conditions, such as bipolar illness or major depression.



- → These patients typically have their blood levels checked routinely, and doctors assess potential risks and benefits on an individual basis.
- We know there are health risks from side effects for people who take lithium at levels found in medication.
 - → We don't have enough research to evaluate how lower levels of lithium typically found in drinking water might impact health.
- Symptoms of too much lithium include nausea, diarrhea, dizziness, muscle weakness, fatigue, and neurological effects. Over longer time periods it can cause thyroid or kidney problems.
 - → If you have symptoms of too much lithium, talk to a health care provider.
 - If you take lithium as medication, do not stop taking it without talking to your provider.



Drinking water rules and guidelines

- The EPA has not established a health advisory or regulatory standard for lithium in drinking water. The agency uses a screening level of 10 parts per billion to help water systems understand lithium monitoring results. The EPA has not evaluated data on human health effects at the screening level. The screening level is 1,000 times lower than the level at which health effects have been observed from lithium medication.
- From 2023 to 2025, public water systems must monitor for lithium under the EPA's Unregulated Contaminant Monitoring Rule.



- → EPA uses the UCMR to collect data on contaminants in drinking water that do not have health-based standards. These data help EPA determine whether future health research and/or regulation is needed.
- UCMR test results are available on EPA's website (bit.ly/ucmr-data). Water systems also must share information with customers about contaminants they detect.

Actions you can take

- Test your water to find out how much lithium is in it. Visit our water testing page (bit.ly/home-water-test) to find out more.
- If you are concerned about the level of lithium in your water, you may want to consider a treatment system. Reverse osmosis and ion exchange are effective at removing lithium from drinking water.



