

wellcare® information for you about

# MANGANESE & WELL WATER

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## What is Manganese?

Manganese is an abundant metal on Earth. It can be found in air, consumer products, food, and water. Manganese makes its way into groundwater and surface water from natural sources or from activities like mining and industrial discharges. Manganese is used in many industries, with the majority of manganese used as an alloying element in steel.

In water, manganese can look yellow, brown, or black and is often found together with iron and a low pH. Manganese can cause water to taste unpleasant and stain fixtures and water appliances throughout your home.

## What are the health effects of Manganese?

Manganese is essential for human health. However, studies show too much manganese may cause neurological effects in children. The U.S. EPA has a non-regulatory health advisory for manganese of 0.3 mg/L and established a secondary maximum contaminant level of 0.05 mg/L based upon aesthetic effects. These levels are established for public water systems in the U.S. Canada has set two new guidelines for manganese - maximum acceptable concentration (MAC) for total manganese in drinking water at 0.12 mg/L (120 µg/L) and an aesthetic objective (AO) for total manganese in drinking water at 0.02 mg/L (20 µg/L). Private well owners should use these levels as guidelines to treat their well water.

## How do I test for Manganese?

Well owners are encouraged to test their well water for manganese and monitor levels annually if detected. Contact your state or local health department for a list of state-certified laboratories in your area or use our [interactive map on our website](#). If you need assistance locating a laboratory in your area, contact our wellcare® Hotline at 888-395-1033.

## What are the treatments for Manganese in drinking water?

Water treatment devices that can help reduce manganese in water include cation exchange water softening, distillation, filtration, and reverse osmosis. These technologies may have a wide range of effectiveness. Tests of hardness, iron, pH, and salts (chloride and sodium) may be necessary to determine the best water treatment to use. Look for treatment systems that are certified by NSF or Water Quality Association (WQA). You can find certified products on [WQA](#) or [NSF](#) websites. Contact a certified water treatment professional in your area for guidance. To search for a certified water treatment professional in your area use Water Quality Association's [website](#).

## More Information on Manganese and Well Water

Your local well contractor, health department, cooperative extension service, and state environmental or natural resources department can provide more information about manganese and groundwater in your area. If you need help locating these resources, contact the wellcare® Hotline at 888-395-1033 for assistance.

Environmental Protection Agency. Secondary Drinking Water Standards: Guidance for Nuisance Chemicals.  
<https://www.epa.gov/sdwa/secondary-drinking-water-standards-guidance-nuisance-chemicals>

Government of Canada. Guidelines for Canadian Drinking Water Quality: Guideline Technical Document – Manganese.  
<https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidelines-canadian-drinking-water-quality-guideline-technical-document-manganese.html>

Water Quality Association. Manganese. <https://wqa.org/resources/manganese/>



## 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 an estimated 23 million households nationwide who depend on private wells (according to the U.S. EPA).

This publication is one of more than 100 wellcare® information sheets available FREE at [www.watersystemscouncil.org](http://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](http://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](http://www.wellcarehotline.org) to join!