

IRON IN WELL WATER



Iron is the **4th** most abundant mineral in the earth's crust. It is an essential metal in the body and small amounts are required each day for good health. A person's average intake of iron is approximately 15 milligrams per day, which comes mostly from food.

Iron is commonly present in well water. Almost **27 percent** of wells tested in North Carolina, had iron **levels exceeding the standard** established by the U.S. Environmental Protection Agency of 0.3 milligrams/liter (mg/L). The highest concentrations of detected iron are in **eastern North Carolina**.

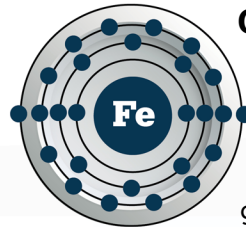
How does iron get into drinking water?

Rain or melting snow can seep through soil or rock that contains iron. This dissolves the iron, causing it to enter the groundwater. Iron can also enter groundwater from the corrosion of some pipes. Acidic (with low pH) can make iron compounds more soluble.



What should I do if I suspect iron is in my water?

1. **Contact the Environmental Health section of your local health department.**
2. **Have your water tested.** They will identify the form of iron in the water. The form of iron will determine the treatment method.



Can iron in my water affect my health?

The amount of iron in drinking water is usually of no health concern to most people. There is a genetic condition known as **hemochromatosis**

that is associated with an abnormal increase in iron absorption that can negatively affect organs such as the heart, liver and pancreas.

Drinking bottled water may be better for you if you have hemochromatosis.



Iron levels in well water are usually less than 10 milligrams/liter. The EPA level of 0.3 mg/L was established for aesthetic effects such as taste, color and staining. North Carolina has set a health-protective level for susceptible individuals at 2.5 mg/L.

What water treatments are available?

The treatment of the water depends on the form of iron present, the water chemistry and the type of well and water systems. The Environmental Health section of your local health department can provide guidance based on the results of a water test. Treatments can include water softeners, filtration, chlorination and oxidation.

What are signs of high iron levels in my water?

- Yellow, red or brown stains on laundry, dishes and plumbing fixtures such as sinks
- A metallic taste to drinking water
- An inky black appearance with a harsh taste in beverages made with the water, like tea and coffee
- Vegetables cooked in the water are dark and look unappealing
- A reddish-brown, yellow or white slime that can clog pipes and cause an offensive odor, often described as smelling like rotten eggs (water tanks, toilet tanks and plumbing may have the slime present)
- Water comes out of the faucet clear, but turns red or brown after standing or rust-colored particles settle to the bottom of a glass.
- Water is red or yellow when first drawn. After standing, particles settle to bottom of glass

