NEW YORK STATE | Department of Health

Salt and Drinking Water

When salt (also known as table salt or rock salt) dissolves in water, it forms sodium and chloride. Sodium and chloride occur naturally in groundwater, but levels can increase from road salt, water softeners, natural salt deposits, sewage and fertilizers. High sodium in well water can be a concern for people on low sodium diets. High chloride levels can cause plumbing corrosion problems, which could shorten the life of plumbing, hot water heaters and appliances, and increase the metal content of the water.

What are elevated levels of sodium and chloride in drinking water?
While there is no drinking water standard for sodium, state and federal agencies recommend sodium levels in water not exceed 20 milligrams per liter (mg/L) for people on very low sodium diets and 270 mg/L for people on moderately restricted sodium diets. Most of the salt we consume comes from food. In fact, according to the US Department of Health and Human Services, most people get about 3,400 milligrams per day from the food they eat.

Sodium in drinking water is a more serious concern if you have a medical condition such as high blood pressure, or certain heart, kidney or liver diseases. You should talk to your health care provider if you are concerned about sodium levels in your drinking water and how they can affect your health.

The drinking water standard for chloride is a maximum level of 250 mg/L. This standard is based on taste considerations, rather than health concerns.

How do I know if there is too much sodium in my drinking water?
Whether you can taste sodium in your drinking water varies among people. Other factors, such as water temperature, can also affect taste. Testing your water is the only way to know the levels for sure.

If you are on *public water*, your water supplier tests regularly for sodium, chloride and many other chemicals. The information is available in the annual drinking water quality report that you receive from your water supplier.

If you have a *private well,* the NYS Department of Health recommends that you test your water at the tap at least once a year for bacteria and every 3-5 years for sodium, lead, nitrate/nitrite, arsenic, iron/manganese, turbidity, pH, hardness and alkalinity. https://www.health.ny.gov/environmental/water/drinking/regulations/fact_sheets/fs3_water_quality.htm. The cost of a sodium test is about $20. Choose a laboratory certified by the NYS Department of Health Environmental Laboratory Approval Program (ELAP) https://www.wadsworth.org/regulatory/elap/certified-labs.

(OVER)

What might make it more likely to get sodium or other contaminants in my well?
Driven wells, dug wells, springs and shore wells are more susceptible to contamination. These shallow wells are more likely to be influenced by surface waters. Drilled wells are best, but they need to be properly located, constructed and maintained. A properly maintained well includes a cap with an airtight seal, a cover securely attached and free of holes and cracks, and a casing at least 12 inches above the land surface and free of holes and cracks. The ground next to the casing should slope away from the well and the area surrounding the well should be free of pooled water, debris, and waste. A Department of Environmental Conservation registered well driller may be able to assist in the assessment of your well.

What are the treatment options?
Treatment methods for sodium and chloride include filters and reverse osmosis. If sodium levels are moderately high (about 100 mg/L) a small treatment unit at the kitchen tap called a "point of use filter" may be enough for drinking and cooking.

What is a reverse osmosis system?
Reverse osmosis (RO) uses pressure to force water molecules through a membrane that removes particles, including salt, from the water. RO systems are very effective at removing water contaminants. However, there are also disadvantages to using RO systems:

- They use a lot of water. A system that delivers five gallons of treated water per day may discharge many more gallons in waste water, adding to the load on a septic system.
- RO removes not only harmful contaminants, but also desirable minerals. For this reason, RO systems should also add minerals back into the drinking water, both to avoid corrosion and gain the health benefit.

How do I know what is the best option for my home?
Contact the local health department or NYS Department of Health district office in your county to discuss test results, treatment, alternate water sources, and health concerns. They may recommend that you work with a company that specializes in water treatment to learn more about your water chemistry, treatment options and cost.
www.health.ny.gov/EnvironmentalContacts

For more information about drinking water, call your local health department or State district office or visit NYS Department of Health at www.health.ny.gov/DrinkingWater

April 2018