



## Chemicals in Private Drinking Water Wells Fact Sheet

Florida Department of Health, Division of Environmental Health

*This fact sheet discusses possible health risk from exposure to low levels of sodium typically found in private drinking water wells.*

## Sodium

### What is Sodium?

Sodium is a naturally occurring metal commonly found in drinking water. Common table salt consists of sodium and chloride. Every water supply contains some level of sodium.

Sodium is an essential nutrient. Most of the sodium we take in is from food. The National Research Council recommends that healthy adults consume between 500 and 2,400 milligrams of sodium per day.

Drinking water contributes only a small fraction to a person's overall sodium intake. Limiting the amount of sodium in drinking water, however, helps people who are on a sodium (salt) restricted diet.

### How might I be exposed to Sodium in my drinking water?

- Sodium occurs naturally in ground water, especially near coastal areas.
- May also be due to man-made contamination. These include: use of road de-icing salts, discharges from water softeners, human or animal waste disposal, and leachate from landfills.

### What is the standard for Sodium in drinking water?

The Florida Department of Environmental Protection's (DEP) drinking water standard for sodium is 160 milligrams per liter (160 mg/L). This level protects individuals on low sodium (salt) diets. There is no required sampling of private drinking water wells.

When considering the health importance of sodium, the U.S. Environmental Protection Agency (EPA) assumes that water users consume two liters of water per day. EPA recognizes that, on average, 20 percent of a person's daily sodium intake is from drinking water. The rest of an average person's sodium intake is usually from food. Persons on a sodium-restricted diet should evaluate all possible sources of sodium when they are trying to reduce overall intake. It is easier and cheaper to make dietary changes than change the amount of sodium in drinking water.

Very high sodium levels gives water a salty taste and makes it undrinkable.

### How can Sodium affect my health?

Drinking water standards are set at very low levels. Drinking water every day at or below the drinking water standard for your entire lifetime is unlikely to cause illness.

To set drinking water standards, scientists study reports of people exposed to chemicals at work. They also study reports of experiments with animals. From these reports, they determine a "no-effect level" or level that doesn't cause illness. Then, to be on the safe side, scientists set drinking water standards hundreds or thousands of times less than the "no-effect level." Therefore, drinking water with levels slightly above the

standard for a short time period does not significantly increase the risk of illness. The risk of illness, however, increases as the level of chemical increases and the length of time you drink the water increases.

The type and severity of health effects associated with exposure to a particular chemical depends on a number of factors:

- How much of the chemical was someone exposed to each time?
- How long did the exposure last?
- How often did the exposure occur?
- What was the route of exposure? (Did someone eat, drink or breathe the chemical into their body?)

Health effects are also determined by a number of personal factors. From person to person, how someone is affected by a chemical exposure ranges widely. The drinking water standard is set to protect the most sensitive individuals. A number of personal factors also determine health effects. These include:

- How old are they?
- What gender are they?
- Is the person generally healthy or do they already have other health problems?
- What are their health habits? (For instance, do they drink alcohol or smoke tobacco?)
- How likely are they to be affected by exposure to a chemical, in general?

Excess sodium in drinking water is a health risk for those individuals on a sodium-restricted diet. If you are on a sodium-restricted diet, consult a physician or registered dietitian.

#### **How likely is Sodium to cause cancer?**

Sodium does not cause cancer.

#### **Is there a medical test to see if I have been exposed to Sodium?**

Sodium is an important electrolyte that is required for normal body functions. The body has many means of controlling the balance of sodium. Sodium can be measured in either the blood or urine to monitor the levels in the body.

#### **Should I continue to use my drinking water if Sodium is found?**

Levels of sodium less than the drinking water standard are not likely to cause illness. For those individuals on a sodium-restricted diet, drinking water with levels slightly above the drinking water standard for a short time period does not significantly increase the risk of illness. Because the risk of illness does, however, increase as the level of chemical increases and the length of time you drink the water increases, individuals on a sodium-restricted diet should seek drinking water that meets the drinking water standard.

**For additional health information:** Please call the Florida Department of Health toll-free help line 877-798-2772 weekdays from 10:00 a.m. to 7:00 pm. Outside of Florida, please call 850-245-4299 between 8:00 a.m. and 5:00 p.m. Or visit us online at: [www.myfloridaeh.com](http://www.myfloridaeh.com)

For more information about the health effects from exposure to this chemical in different situations and at higher levels than those usually found in drinking water wells, please see the EPA fact sheet on sodium in groundwater at: [www.epa.gov/safewater/ccl/sodium.html](http://www.epa.gov/safewater/ccl/sodium.html)