

F a c t s

SODIUM IN DRINKING WATER

What is Sodium?

Sodium can be present as sodium chloride (salt in groundwater due to natural salt deposits, industrial processes, sewage effluent, water softener backwash, and from winter road salt.

Effects of Sodium Concentrations

A maximum acceptable concentration of sodium in drinking water has not been established since sodium is not considered to be toxic. The Ontario Drinking Water Standards (2000) states that the Aesthetic Objective for sodium is less than 200 milligrams per litre. There is a possibility of a health hazard if a concentration is above an aesthetic objective. Persons suffering from hypertension or congestive heart failure may require a sodium-restricted diet in which case the intake of sodium from drinking water may be significant. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L, so that this information may be passed on to local physicians. Susceptible individuals should therefore know the sodium concentration in their drinking water.

The average intake of sodium from water is only a small fraction of that consumed in a normal diet. The major source of sodium in our diet comes from table salt and processed foods. Most domestic water softeners add sodium to the water as part of the water softening process. The greater the hardness the more sodium is added.

Alternatives for Safer Drinking Water

The source of high sodium levels should be determined where possible. Backwashing a water softener too close to a well can contribute to elevated levels of sodium. There are natural sodium deposits in certain areas of Grey and Bruce counties. Sodium can be removed from drinking water by reverse osmosis or distillation. Another way of treating the problem is to drill your well into a different aquifer. The Ministry of Environment can advise your well driller.

Investigation and Testing

If a resident has a concern regarding health problems, individuals can contact their area public health inspector for further information on testing sodium in drinking water.