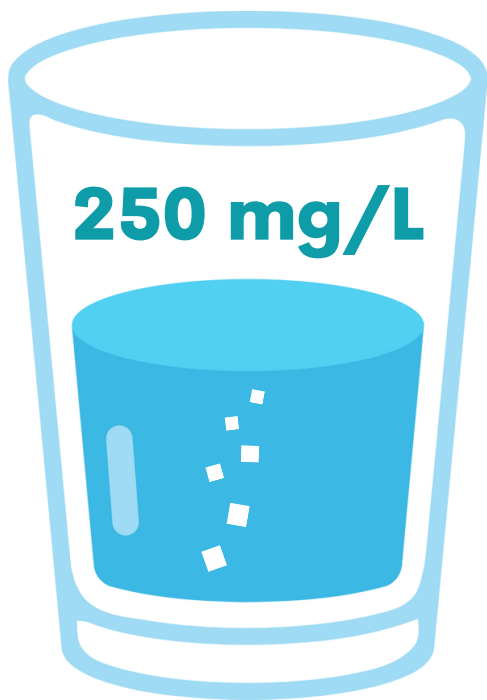


Chloride in Drinking Water

Road salt pollution is the leading cause of chloride pollution in waterways throughout the United States. Chloride pollution also comes from other sources including water softener discharge and sewage discharge. The impact of chloride on human health is an area of ongoing research, but there are several health risks that are known to be linked to increased chloride in drinking water.



DRINKING WATER STANDARD

The drinking water standard for chloride is 250 mg/L, as established by the US Environmental Protection Agency (EPA) in 1988. At this level, water starts to taste "salty." There is no health-based guidance for chloride in drinking water, but there are health implications for consuming sodium. Sodium and chloride concentrations in water are often related since sodium chloride (NaCl) is the most common type of road salt being applied in the winter. The EPA recommends sodium in drinking water be less than 20 mg/L for individuals on severely restricted sodium diets.

TREATING AND TESTING DRINKING WATER

Most water treatment plants are not equipped to remove chloride from water, yet are required to do so by the EPA once chloride levels exceed 250 mg/L. This will likely put the cost of constructing and running new treatment plants on the taxpayers. Additionally, approximately 43 million Americans get their water from private wells, which are not regulated by the EPA. Well users are responsible for testing their own water. Most states recommend testing at least once every other year.

HEALTH CONCERNS

Chloride is known to mobilize heavy metals and is incredibly corrosive, both in the environment and to our infrastructure. The higher the chloride concentration in water, the increased amount of corrosion. Homes and businesses with lead and copper pipes have an increased risk of lead corroding into tap water when elevated levels of chloride are present.

WHAT TO DO

Want to find out how much chloride is in local waterways? Visit saltwatch.org to learn more about smart road salting practices and to request your free Salt Watch Kit!