



# Chromium Facts



## **What is chromium?**

Chromium is a metal and is naturally present in small amounts in rocks and soils. It is used in many metal processing industries and manufacturing.

## **Are there different kinds of chromium?**

Chromium occurs in the environment primarily in two forms: Chromium-3 and Chromium-6. The Region monitors Total Chromium in drinking water, which is the sum of both forms of chromium. The provincial drinking water standard assumes that all of the chromium is in the chromium-6 form.

## **Is the Region's water safe to drink, bathe and do laundry?**

The Region's drinking water is safe for drinking, bathing, and doing laundry. Our water is of high quality, regularly tested and consistently meets all Ontario's health-based standards.

## **What does the Region do to monitor chromium in my drinking water?**

The Region tests our drinking water regularly (annually from a surface water source and every 3 years from a ground water source). Results are compared to the Ontario Drinking Water Standards, which are set by the province to protect health. Our water consistently meets these standards.

## **How does the Region test for chromium?**

Chromium in the Region's drinking water is measured using specialized equipment and methods by a laboratory accredited by the province to perform drinking water analysis. Specialized sampling procedures are also required in order for results to be considered valid.

## **What is the drinking water standard for chromium?**

Ontario sets a health-based limit of 0.05 mg/L for chromium in drinking water. The typical chromium concentration at Regional supply wells is under 0.01 mg/L

### **What is a milligram per litre (mg/L)? What is 0.05 mg/L?**

A “milligram per litre” is a way to express the amount of a substance, for example chromium, in drinking water. For reference, a mosquito weighs a few milligrams, and a bag of milk is a little more than a litre. The drinking water standard for chromium is 0.05 mg/L. This is about 1/20<sup>th</sup> of a milligram in a litre of drinking water.

### **Could chromium cause odours or damage my plumbing?**

No. Chromium will not cause any odours. The levels measured in the Region’s water will not damage plumbing.

### **What happens to chromium in the environment and is it safe to eat fish?**

Once in a river or creek, some chromium will be dissolved and some will attach to particles. Chromium can be taken up by organisms in the water, and can change between chromium-6 and chromium-3, depending on local conditions. Chromium is not a concern for eating fish from the Grand River.

### **Why are we concerned about chromium?**

Chromium in the chromium-6 form may be a health concern. More information on the health concerns are available through the Health Canada “Guidelines for Canadian Drinking Water Quality for Chromium.”



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