

## Acknowledgement:

This Fact Sheet is one of a series developed by an Interagency Committee with representatives from Saskatchewan Health, Regional Health Authorities, Saskatchewan Watershed Authority, Saskatchewan Agriculture and Food, Agriculture and Agri-Food Canada – PFRA and Saskatchewan Environment.

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Government of  
Saskatchewan

# Fluoride

(For Private Water and Health Regulated Public Water Supplies)

## What Is Fluoride?

Fluoride is the ionic form of the element fluorine. Fluoride occurs naturally in soils as mineral salts in combination with other elements such as sodium and calcium. Fluorine in the form of fluoride is the thirteenth most abundant element found in the earth's crust.

Fluoride compounds are used in some fertilizers and pesticides and extensively in the steel and glass manufacturing industries. Fluorides are found commercially in toothpastes and other dental products in addition to trace quantities that are present in many foods.

## How Does Fluoride Get Into Water?

Fluorides can leach from soil and rocks and dissolve into ground water, in addition to run off from areas close to industrial sources of fluorides. Fluoride is also artificially added to drinking water through a process known as fluoridation as fluoride has been found to strengthen tooth enamel and protect against the acids that cause tooth decay.

## How Does Fluoride Affect My Health?

Excessive intake of fluoride can damage the enamel of teeth (particularly in children) resulting in a mottled, non-uniform colouration of the enamel in a condition known as fluorosis. In a mild form fluorosis is marked by white specks on the enamel or in a severe condition by yellow/brown stains.

Prolonged exposure to high fluoride levels can also result in a bone and joint disease known as skeletal fluorosis that in the early stages has symptoms similar to arthritis.

## How Can I Remove Fluoride From My Drinking Water?

Fluoride can be removed from water by reverse osmosis (RO) treatment, distillation, and activated alumina. Specialized charcoal filters will partially remove fluorides while boiling water only serves to concentrate the fluorides.

## What Is The Standard For Fluoride In Drinking Water?

Saskatchewan's Drinking Water Quality Standards and Objectives and Health Canada's Guidelines for Canadian Drinking Water Quality both establish a maximum acceptable concentration (MAC) of 1.5 mg/L of fluoride in drinking water.

## How Can I Find Out If There Is Fluoride In My Water?

Most water quality testing laboratories can determine how much fluoride is present in a water supply. For information on sampling instructions and containers, you should contact an accredited laboratory. If using the Saskatchewan Disease Control Laboratory, sample containers are available from the laboratory, local Health Regions or rural municipalities.

## Need More Information?

### Health Regulated Public Water Supply

For more information on this fact sheet and/or other water quality issues relating to health regulated public water supplies contact your local health region public health inspector.

### Private Water Supply

For more information on how fluoride impacts on human health contact your local health region office. For information on how fluoride impacts agricultural

operations contact Saskatchewan Ministry of Agriculture through your Agricultural Business Centre or the Agricultural Knowledge Centre at 1-866-457-2377 or on the internet (<http://www.agriculture.gov.sk.ca/AKC>).

<p><b>Government of Saskatchewan</b> Water Information website <a href="http://www.SaskH2O.ca">www.SaskH2O.ca</a></p>	<p><b>Water Inquiry Line</b> Questions about water? Call 1-866-SASK H2O (1-866-727-5420) to be referred to proper agency.</p>
<p><b>Saskatchewan Ministry of Health</b> <a href="http://www.health.gov.sk.ca/environmental-health">http://www.health.gov.sk.ca/environmental-health</a> <b>Regional Health Offices</b> Saskatoon: Saskatoon (306) 655-4605 Sunrise: Yorkton (306) 786-0600 Kelsey Trail: Melfort (306) 752-6310 Five Hills: Moose Jaw (306) 691-1500 Sun Country: Weyburn (306) 842-8618 Heartland: Rosetown (306) 882-6413 Prairie North: North Battleford (306) 446-6400 Prince Albert Parkland: Prince Albert (306) 765-6600 Cypress: Swift Current (306) 778-5280 Regina Qu'Appelle: Regina (306) 766-7755 Mamawetan Churchill River: La Ronge (306) 425-8512 Keewatin Yatthe: Buffalo Narrows (306) 235-5811</p>	<p><b>Saskatchewan Watershed Authority,</b> Head Office, Moose Jaw (306) 694-3900 Website: <a href="http://www.swa.ca">www.swa.ca</a> <i>Regional Offices:</i> <a href="http://www.swa.ca/AboutUs/Contact.asp?type=Offices">http://www.swa.ca/AboutUs/Contact.asp?type=Offices</a></p> <p><b>Sask Water Corporation</b> Head Office, Moose Jaw Customer Service 1-888-230-1111 Website: <a href="http://www.saskwater.com">http://www.saskwater.com</a></p> <p><b>Prairie Farm Rehabilitation Administration (PFRA)</b> - Agriculture and Agri-Food Canada Website <a href="http://www.agr.gc.ca/pfra/water/intro_e.htm">http://www.agr.gc.ca/pfra/water/intro_e.htm</a> <i>Regional Offices:</i> <a href="http://www.agr.gc.ca/pfra/sask_e.htm">http://www.agr.gc.ca/pfra/sask_e.htm</a></p>
<p><b>Saskatchewan Ministry of Health</b> <b>Saskatchewan Disease Control Laboratory, Regina</b> General Inquiry 1-866-450-0000 Phone: (306) 798-2125 // Fax (306) 798-0071 Website: <a href="http://www.health.gov.sk.ca/lab">http://www.health.gov.sk.ca/lab</a></p>	<p><b>Saskatchewan Ministry of Agriculture</b> General Inquiry 1-866-457-2377 Agricultural Operations Regina (306) 787-4680 Irrigation Development Outlook (306) 867-5500 Website: <a href="http://www.agriculture.gov.sk.ca">www.agriculture.gov.sk.ca</a></p>
<p><b>Health Canada</b> First Nation and Inuit Health Branch, Regina (306) 780-5434 Website: <a href="http://www.hc-sc.gc.ca">http://www.hc-sc.gc.ca</a></p>	<p><b>Saskatchewan Ministry of Environment</b> Toll-Free 1-800-567-4224 Spill Emergency Toll-Free 1-800-667-7525 Website: <a href="http://www.environment.gov.sk.ca">http://www.environment.gov.sk.ca</a></p>