

Acknowledgement:

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

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Government of
Saskatchewan

Turbidity

(For Private Water and Health Regulated Public Water Supplies)

What Is Turbidity?

There is some danger and confusion regarding turbidity and the colour of some drinking water. Turbidity is the lack of clarity or brilliance in water. Some waters may have a great deal of color -- it may even be dark brown -- and still be clear and without suspended matter. When water has a large amount of suspended particles, it is seen as unappealing. While it may be safe to drink, it can be aesthetically unpleasing.

How Does Turbidity Get Into Water?

While turbidity may be due to a single foreign substance in water, chances are it is probably due to a mixture of several or many substances. These particles may range in size from fine materials to coarse grains of sand that remain in suspension only as long as the water is agitated. Turbidity may also increase due to the presence of organisms and chemicals.

How Does Turbidity Affect My Health?

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated illnesses.

Other Considerations

It is very important to measure the turbidity of domestic water supplies, as these supplies often undergo some type of water treatment, which can be affected by turbidity. For example, during the rainy season when mud and silt are washed into rivers and streams, high turbidity can quickly block filters and stop them from working effectively. High turbidity may also fill tanks and pipes with mud and silt, and can damage valves and taps. Even quite low turbidity can prevent chlorine from killing organisms in the water efficiently. When the source of turbidity is organic material, some disinfection (chlorination, ozone) may produce harmful byproducts.

How Can I Lower Turbidity In My Drinking Water?

Some treatment systems involving sedimentation, coagulation and gravel filtration are designed to remove turbidity. It is important for operators of both large and small treatment systems to know how well these systems are working and maintain them. Measuring the turbidity of the water before and after each part of the system can assist the operator to show where maintenance or cleaning is needed.

What Is The Standard For Turbidity In Drinking Water?

Current standards are based on treatment techniques. If you have a concern with turbidity in your drinking water, you should also consider testing for bacteria..

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

Most water quality testing laboratories can determine how much parameter 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 turbidity impacts on human health contact your local health region office. For information on how turbidity 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>Government of Saskatchewan Water Information website www.SaskH2O.ca</p>	<p>Water Inquiry Line Questions about water? Call 1-866-SASK H2O (1-866-727-5420) to be referred to proper agency.</p>
<p>Saskatchewan Ministry of Health http://www.health.gov.sk.ca/environmental-health</p> <p>Regional Health Offices 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>Health Canada Website: http://www.hc-sc.gc.ca First Nation and Inuit Health – Saskatchewan Phone: (306) 780-6561//FAX (306) 780-7733</p> <p>First Nations Environmental Health Providers <i>BTC Indian Health Services Inc.</i> Phone: (306) 937-6700 <i>File Hills Qu'Appelle Tribal Council Health Services</i> Phone: (306) 332-8241 <i>Meadow Lake Tribal Council, Health and Social Development</i> Phone: (306) 236-8261 <i>Northern Inter-Tribal Health Authority</i> Phone: (306) 765-2421 <i>Prince Albert Grand Council, Health and Social Development</i> Phone: (306) 953-7248 <i>Saskatoon Tribal Council, Health, and Family Services Inc.</i> Phone: (306) 956-6100</p>
<p>Saskatchewan Ministry of Health Saskatchewan Disease Control Laboratory, Regina General Inquiry 1-866-450-0000 Phone: (306) 798-2125 // Fax (306) 798-0071 Website: http://www.health.gov.sk.ca/lab</p>	<p>Saskatchewan Ministry of Agriculture General Inquiry 1-866-457-2377 Agricultural Operations Regina (306) 787-4680 Irrigation Development Outlook (306) 867-5500 Website: www.agriculture.gov.sk.ca</p>
<p>Saskatchewan Watershed Authority, Head Office, Moose Jaw (306) 694-3900 Website: www.swa.ca <i>Regional Offices:</i> http://www.swa.ca/AboutUs/Contact.asp?type=Offices</p>	<p>Prairie Farm Rehabilitation Administration (PFRA) - Agriculture and Agri-Food Canada Website http://www.agr.gc.ca/pfra/water/intro_e.htm <i>Regional Offices:</i> http://www.agr.gc.ca/pfra/sask_e.htm</p>
<p>Sask Water Corporation Head Office, Moose Jaw Customer Service 1-888-230-1111 Website: http://www.saskwater.com</p>	<p>Saskatchewan Ministry of Environment Toll-Free 1-800-567-4224 or (306) 953-3750 Spill Emergency Toll-Free 1-800-667-7525 Website: http://www.environment.gov.sk.ca</p>