



Alberta Health Services

May 16, 2014

Dear Resident:

Re: Elevated Fluoride in the Town of Millet Water Supply

The drinking water provided to your home in the Town of Millet contains naturally occurring fluoride at levels greater than the maximum acceptable concentration set by Health Canada: 1.5 mg/L (milligrams per litre) or ppm (parts per million). The most recent measurements show it to be at or near 1.84 mg/L.

Fluoride occurs naturally in the earth's surface, so all well water, ground water and lakes have some level of fluoride. Small amounts of fluoride, up to 0.7 mg/L, are added to some community water supplies with low levels of naturally occurring fluoride to help to prevent tooth decay and maintain good dental health. However, levels above 1.5 mg/L may cause dental fluorosis.

Children under 8 years of age who consume greater amounts of fluoride – such as drinking water with more than 1.5 mg/L of fluoride, have a higher risk of developing dental fluorosis. Mild dental fluorosis looks like white flecks on the teeth and may be difficult to notice. However, teeth with moderate or severe fluorosis have large white patches and may have rough enamel or stains. These changes only happen while the teeth are developing under the gum. It means you won't see the problem until adult teeth erupt into the mouth, up to 5 or 6 years after consuming the water with high fluoride level. Once teeth have finished forming and have erupted into the mouth, there is no more risk of dental fluorosis, so older children, and adults need not be concerned.

Recommendations:

If you have children under 8 years of age in your home, these steps reduce their risk of developing dental fluorosis:

1. Use water with no more than 1.5 mg/L fluoride:
 - a. To mix baby formula or other children's drinks.
 - b. For drinking and cooking. It is safe for breastfeeding mothers to drink the water since only small amounts of fluoride are transferred in breast milk.

If you choose bottled water, check the label to make sure it contains no more than 1.5 mg/L fluoride.

Another option is to mix Millet tap water with bottled water containing no fluoride, in equal parts to reduce the concentration by 50%.

2. Supervise toothpaste use for children:

- a. For children less than 3 years old and at risk of tooth decay, use only a grain-of-rice size amount of fluoride toothpaste and brush their teeth for them. To determine if your child is at risk of tooth decay, check with a dental professional. The Canadian Dental Association outlines risk factors in their "Position Statement on the Use of Fluorides in Caries Prevention" (pages 2 & 3):
http://www.cda-adc.ca/files/position_statements/fluoride.pdf.
- b. Children from age 3 years to 6 years, use up to a pea-size amount of fluoride toothpaste; assist with brushing.
- c. Teach your children to spit out all the toothpaste and never to eat it.

3. Avoid giving fluoride mouth rinse to children younger than 6 years old (risk of swallowing). Most children over 6 years of age can be instructed not to swallow, but parental supervision is still recommended.

Persons of all ages:

- a. There is no evidence that fluoride is absorbed through the skin, so handwashing, dishwashing and bathing are not concerns.
- b. Alberta Environment & Sustainable Resource Development (AESRD) requires fluoride removal treatment for public supplies with levels exceeding 2.4 mg/L. Given that your supply is presently below the 2.4 mg/L, the Town of Millet is not required to remove fluoride. The Town of Millet will continue to monitor the fluoride levels annually and report to Alberta Health Services (AHS) and AESRD.

If you want to reduce the level of fluoride in your water, reverse-osmosis, distillation or activated alumina are methods of home-treatment. Consider both installation and maintenance costs. Consult the documentation included with any treatment device to confirm that fluoride is removed and to determine maintenance procedures. Test following installation. NSF certified products are recommended. Pour-through or pitcher-type filters do not remove fluoride.

- c. Inform your dentist and dental hygienist of your drinking water fluoride content.
- d. Maintain regular dental check-ups and preventive fluoride therapies as advised by your dental office or by the oral health program AHS. Fluoride therapies used properly (gels, foams, and varnishes) do not contribute to the risk of dental fluorosis.



For more information:

Health Canada: Fluoride and Human Health
<http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/environ/fluor-eng.php>

Alberta Health Services: Water Fluoridation
<http://www.albertahealthservices.ca/3473.asp>

You may also contact your local Public Health Inspector, Gord Watt ph: 780-361-4364.

Sincerely,

A handwritten signature in black ink that reads "Digby Horne".

Dr. Digby Horne, MD
Medical Officer of Health
Alberta Health Services, Central Zone