Drinking water and your health

Public Health issues health information advisories to reaffirm safety of municipal drinking water systems, raise awareness of special health considerations

NEWS

Oxford County Public Health & Emergency Services issued the first of a new series of health information advisories today to reaffirm the safety of municipal drinking water systems while raising awareness of health considerations for some residents.

Under Ontario’s Safe Drinking Water Act, Public Health already notifies health professionals and the community whenever water testing results require public education. In deciding to re-issue these advisories on an annual basis, even for tests that are carried out once every five years, Public Health is responding to feedback that Oxford County residents want to receive important information about their drinking water more often.

Public Health’s first health information advisory released today on fluoride reminds the public that testing has shown municipal drinking water in Brownsville, Ingersoll, Lakeside and Springford has fluoride levels above the province’s Maximum Acceptable Concentration of 1.5 mg/L. Fluoride in Oxford County drinking water is naturally present and is not added to the municipal water system.

Residents in these communities should know that fluoride levels above the Maximum Acceptable Concentration may cause staining or pitting in the teeth of children less than six years of age. The health information advisory on fluoride offers suggestions for reducing other exposure to fluoride in children in these areas and advises parents to use sterilized bottled water to mix baby formula. For more information visit www.oxfordcounty.ca/fluoride.

Public Health’s information advisory on sodium alerts people on sodium-restricted diets that drinking up to two litres of water per day at the levels found in some parts of Oxford County could contribute 47.2-175.6 milligrams of sodium to a person’s diet. Anyone with kidney disease, heart disease, high blood pressure or liver disease who needs to restrict their salt intake because of these illnesses should ask their physician or health care professional how sodium in the water may affect their health.

Communities with municipal drinking water that has tested above the recommended sodium range of 20 mg/L include Bright, Brownsville, Ingersoll, Mount Elgin, Otterville-Springford, Thamesford, and some parts of Tillsonburg and Woodstock.

For more information or to view the fluoride and sodium health information advisories visit www.oxfordcounty.ca/health. Annual water reports for the County’s 19 water systems with full testing results can be found in the Public Works section of the website at www.oxfordcounty.ca/drinkingwater.
QUOTE

“People living in Oxford County can be confident that the municipal drinking water supply is a safe water supply that is rigorously tested and monitored. We also know people want to continue to receive timely and accurate information that helps them make decisions that are in the best interests of their health, and it is the fundamental role of public health to provide this information and education.”

- Dr. Douglas Neal, Acting Medical Officer of Health, Oxford County Public Health

“Public Health supports safe drinking water in Oxford County in a number of ways, such as supporting private well water testing, monitoring small drinking water systems, educating the public about water safety, and responding to issues or emergencies that impact drinking water. The water health information advisories are a tool to further educate people about the level of testing that takes place in the municipal water system.”

- Peter Heywood, Program Supervisor, Health Protection, Oxford County Public Health

MEDIA CONTACT

Tommasina Conte | Communications Coordinator
519.539.9800, ext. 3503 | Mobile: 519.608.3003 | tconte@oxfordcounty.ca

OXFORD COUNTY PUBLIC HEALTH & EMERGENCY SERVICES works to keep people in our community healthy and safe through programs in prevention, protection and emergency response. Services include family health, immunization, dental health, infectious disease prevention, sexual health, public health inspection, environmental health, healthy lifestyles, emergency services, emergency planning, and other programs that support healthy people living in a healthy environment. Public Health & Emergency Services is part of the County of Oxford. For more information, visit www.oxfordcounty.ca/health or follow us on Facebook at www.facebook.com/oxfordcountypublichealth.
Health Information Advisory

Environmental Health Update for Residents, Health Care Professionals & Community Partners

January 25, 2013

FLUORIDE IN DRINKING WATER IN OXFORD COUNTY

This Health Information Advisory is to advise residents, health care professionals and other users of the municipal drinking water system that fluoride levels in the following communities in Oxford County have tested above the Maximum Acceptable Concentration (MAC) of 1.5 mg/L:

<table>
<thead>
<tr>
<th>Community</th>
<th>Fluoride levels*</th>
<th>Maximum Acceptable Concentration (MAC)</th>
<th>Fluoride range at which water is still acceptable to drink**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brownsville</td>
<td>1.74 to 1.77 mg/L</td>
<td>1.5 mg/L</td>
<td>1.5 – 2.4 mg/L</td>
</tr>
<tr>
<td>Ingersoll</td>
<td>1.0 to 1.98 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lakeside</td>
<td>1.55 to 1.56 mg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Springford</td>
<td>1.66 mg/L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The County of Oxford is required to test for fluoride samples in municipal drinking water every five years.

**If children 6 years of age or younger are in the household, it is recommended other sources of fluoride are reduced, e.g., by using non-fluoride toothpaste, using bottled water for baby formula (after it has been boiled and cooled). See page 2 for more information.

Understanding fluoride levels

The County of Oxford does not add fluoride to drinking water. Fluoride is naturally present at varying levels in the water in Oxford County.

Water supplies that contain naturally occurring fluoride between 1.5 and 2.4mg/L are considered acceptable to drink by the Ontario Ministry of the Environment. The bacteriological safety of municipal drinking water is not affected by fluoride levels, meaning that the water is safe to drink.

When fluoride levels are in the 1.5 - 2.4 mg/L range, the Ontario Ministry of Health and Long Term Care recommends heightened public awareness to educate people on how to control too much exposure from other sources of fluoride, such as food and toothpaste. This is to protect against dental fluorosis in young children.
Health consideration: Dental fluorosis in young children

Fluorosis is a dental condition caused by exposure to fluoride while teeth are forming in the gums (usually ages 0-6 years). Fluorosis can cause small white flecks on teeth or larger white areas or, at higher fluoride levels, pitting or brown areas. Fluorosis is a cosmetic condition, not a health condition.

Drinking water below the maximum acceptable concentration of 1.5mg/L will protect against moderate dental fluorosis in children while helping to protect against cavities. However, it is difficult to predict if fluorosis will occur and what it will look like. The following recommendations are intended to minimize the effects of fluoride in the water system if fluoride levels are above 1.5mg/L:

1. **Water treatment.** Use a home treatment system to remove or reduce the fluoride content if there are young children in the home. Only reverse osmosis and distillation processes remove fluoride. Charcoal filters do not remove fluoride.

2. **Use other sources of water.** If it is not possible to use a home treatment system, consider using water from another source with a lower fluoride level (e.g., non-fluoridated, bottled water) for drinking, cooking, mixing juices or making baby formula, especially when there are young children in the home. Bottled water, like tap water, must be sterilized when it is used to make baby formula.

3. **Non-fluoride toothpaste.** Consider using non-fluoride toothpaste for children up to and including 6 years of age, or no toothpaste for children up to 3 years of age, especially for children who may swallow toothpaste. Parents should only use a small amount of toothpaste (pea-size or a smear) regardless of fluoride levels in the water, and should always supervise the amount of toothpaste being used.

4. **Don't use fluoride supplements.** Fluoride supplements should not be used in areas with naturally occurring fluoride.

5. **Consult with your dentist.** A fluoride treatment at the dentist is not likely to contribute to fluorosis; however, parents should discuss the use of any dental products with their dentist.

Fluoride levels in non-municipal drinking water (private wells)

Some private wells in Oxford County may also contain naturally-occurring fluoride levels above the recommended level of 1.5 mg/L. Public Health recommends regular testing of well water: three times a year for bacteria and once a year for fluoride and nitrates. Visit www.oxfordcounty.ca/health to learn more.

More information

If you have questions about fluoride in your drinking water, please consult your health care professional, or call Public Health & Emergency Services at 519-539-9800, ext. 3410, toll-free 1-800-755-0394. More information is available online at www.oxfordcounty.ca/fluoride.

Issued by:

Dr. Douglas A. Neal  Dr. Wayne McKay
Acting Medical Officer of Health Dental Consultant
Oxford County Public Health Oxford County Public Health
Health Information Advisory
Environmental Health Update for Residents, Health Care Professionals & Community Partners

January 25, 2013

SODIUM IN DRINKING WATER IN OXFORD COUNTY

This Health Information Advisory is to advise residents, health care professionals and others that samples taken from Oxford County’s municipal drinking water supply over the last several years indicate that sodium levels in the following communities are above the recommended range of 20 mg/L.

<table>
<thead>
<tr>
<th>COMMUNITIES WITH SODIUM LEVELS ABOVE 20 mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bright (48.4 mg/L)</td>
</tr>
<tr>
<td>Brownsville (78.2 mg/L)</td>
</tr>
<tr>
<td>Ingersoll (40.1 – 87.8 mg/L)</td>
</tr>
<tr>
<td>Mt. Elgin (23.6 mg/L)</td>
</tr>
<tr>
<td>Otterville-Springford (28 mg/L &amp; 44.3 mg/L)</td>
</tr>
<tr>
<td>Thamesford (32.7 mg/L)</td>
</tr>
</tbody>
</table>

**Tillsonburg:** Sodium levels above 20 mg/L in some parts of the municipal drinking water supply only. Varies depending on the wells in use. The majority of the wells are below the standard.

**Woodstock:** Sodium levels above 20 mg/L in some parts of the municipal drinking water supply only. While sodium concentrations for the majority of properties are not a concern, elevated sodium concentrations may be occasionally present in the immediate vicinity of Sutherland Park.

**Testing:** Testing for sodium is carried out in each community once every five years. Oxford County’s Public Works department, as the municipal water system operator, will provide information directly to residents who may be affected by high sodium levels. For more information visit www.oxfordcounty.ca/ServicesforYou/WaterWastewater/Drinkingwater/Annualreports

Understanding sodium levels

The recommended range for sodium in drinking water is 20 mg/L or less. Whenever sodium levels are higher than 20 mg/L, the Medical Officer of Health is required to inform health professionals in order to help people on sodium-restricted diets control their sodium intake.

The safety of municipal drinking water is not affected by sodium levels.
Health consideration: Added sodium for people on sodium-restricted diets

Your body needs sodium in order to maintain blood pressure, control fluid levels, and for normal nerve and muscle function. Food, not water, is the major source of sodium in our diets. Sodium is also found in drugs such as antacids, laxatives, aspirin and cough medicines, as well as table salt. One teaspoon of table salt or sea salt contains 2,300 mg of sodium.

For people on sodium restricted diets, the amount of sodium in the water may be significant. For instance, drinking up to two litres of water per day at the levels found in some parts of Oxford County could add 47.2 to 175.6 milligrams of sodium to a person's diet.

Who is at risk? For a healthy adult, the level of sodium in the water supply does not pose a risk to health. However, if you or members of your family have kidney disease, heart disease, high blood pressure or liver disease, and need to restrict your salt intake because of these illnesses, please ask your physician or health care professional how sodium in the water may affect your health.

The following chart compares the maximum daily intake for different sodium-restricted diets to the range of sodium present in some areas of Oxford County.

<table>
<thead>
<tr>
<th>ADULTS</th>
<th>Maximum intake of sodium allowed per day</th>
<th>Amount of sodium in 2L of drinking water in communities with high sodium levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Strict Diet</td>
<td>500 mg/day</td>
<td>47.2 to 175.6 mg/day</td>
</tr>
<tr>
<td>Strict Diet</td>
<td>1,000 mg/day</td>
<td></td>
</tr>
<tr>
<td>Moderate Diet</td>
<td>2,000 mg/day</td>
<td></td>
</tr>
<tr>
<td>Mild Diet</td>
<td>2,300 mg/day</td>
<td></td>
</tr>
</tbody>
</table>

The recommended sodium level for children between the ages of 1 and 14 years ranges from 1,500 - 2,300 mg/day. For more information see the Health Canada guidelines at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca).

Water softeners. Water softeners can add significant amounts of sodium to your drinking water. If you have a water softener, consider using a separate unsoftened water supply for cooking and drinking, or use a separate water line for drinking that bypasses the water softener. Water from a water softener should not be given to infants and should not be used to prepare infant beverages including formula and juice.

Issued by:
Dr. Douglas A. Neal  
Acting Medical Officer of Health  
Oxford County Public Health

More information
Public Health & Emergency Services  
519-539-9800, ext. 3410 | 1-800-755-0394  
[www.oxfordcounty.ca/health](http://www.oxfordcounty.ca/health)