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Message from the Medical Officer of Health

Dear Colleagues,

It is my pleasure to share with you the latest edition of *The Advisory*, which covers a wide array of public health topics to help inform your practice.

In this issue, we're highlighting the Health Quality Ontario Standards for opioid prescriptions, along with details about opioid use in our community. We're also sharing Canada's Lower-Risk Cannabis Use Guidelines to help you inform your patients about its impact on their health and well-being.

We know that from infants to older adults, healthy food choices mean healthy Canadians. Read on to learn about the changes made to Canada's Food Guide 2019, tips and strategies to help introduce infants to solid foods, and information about the impact tongue-tie may have on breastfeeding mothers.

With warmer weather brings new considerations in diagnosing and treating your patients. Some highlights from environmental health in this issue provide details on noxious plants, foodborne illness, rabies, and blue-green algae.

At Public Health, we are committed to providing information to our health care partners to help promote and protect health and prevent disease for everyone. See inside for an update on measles in Canada and access to important information and other clinical resources available to your practice.

Please read-on and share these public health updates with colleagues, fellow health care professionals, and your patients and enjoy a safe and healthy summer.

Dr. Penny Sutcliffe, Medical Officer of Health



Opioids and your patients

→ Brenda Stankiewicz, Health Promotion

The statistics in the infographic *Opioids in Sudbury: The Time to Act is Now* are startling. As a community, we all have a role to play in helping to prevent opioid deaths, reducing harm, and decreasing stigma for people who use drugs.

Health Quality Ontario provides quality standards for opioid prescribing for acute- and chronic-pain as well as how to treat opioid use disorder.

1. Opioid Prescribing for Acute Pain: <https://www.hqontario.ca/evidence-to-improve-care/quality-standards/view-all-quality-standards/opioid-prescribing-for-acute-pain>.
2. Opioid Prescribing for Chronic Pain: <https://www.hqontario.ca/evidence-to-improve-care/quality-standards/view-all-quality-standards/opioid-prescribing-for-chronic-pain>.
3. Opioid Use Disorder: <https://www.hqontario.ca/evidence-to-improve-care/quality-standards/view-all-quality-standards/opioid-use-disorder>.

While opioid misuse is responsible for a growing number of deaths and illnesses in our community, you have the tools to help your patients begin the journey of recovery.

For more Health Quality Ontario Standards and patient guides to help with discussion for the best quality of care see: www.hqOntario.ca.



References for Opioids in Sudbury infographic

- 1 → Public Health Ontario. (2017). Opioid-related morbidity and mortality in Ontario. Retrieved from <https://www.publichealthontario.ca/en/dataandanalytics/pages/opioid.aspx#/maps>
- 2 → Public Health Sudbury & Districts. (2018). Naloxone Training Manual Community Agencies. Pp. 1-14.
- 3 → Government of Canada. (2018). Stigma around substance use, Retrieved from <https://www.canada.ca/en/health-canada/services/substance-use/problematic-prescription-drug-use/opioids/stigma.html>
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- 5 → Government of Ontario. (2018). Recognize and temporarily reverse an opioid overdose. Retrieved from <https://www.ontario.ca/page/get-naloxone-kits-free?ga=2.201547672.8619208.1500560885-767671177.1484578347>

OPIOIDS IN SUDBURY: THE TIME TO ACT IS NOW

In 2017,
the City
of Greater
Sudbury saw

86

Emergency
Department
Visits



34
PEOPLE

died as a
result of
opioid
overdose

Simple truths about overdose



It can happen to anyone. Anyone using prescription or street opioids can overdose: first time users, long-time users, older adults, young people etc.



Drug of choice, potency, frequency of use, route of administration and tolerance may increase risks of overdose.



Every person's use of opioids is unique. There is no formula for determining how much of a substance, or combination of substances will lead to an overdose.



A person's physical characteristics may play a role. These may include weight, health and tolerance/experience with substances.



Naloxone saves lives. Naloxone can reverse an opioid overdose.

Language matters



- *Speak* to the person first, before we talk about their substance use
- use language that expresses *care* and *concern*, rather than judgement
- convey *empathy* by using neutral body language
- use *person-focused language*, separating the behavior or illness from the person

For more information about opioids in our community, please visit: www.phsd.ca/cds.

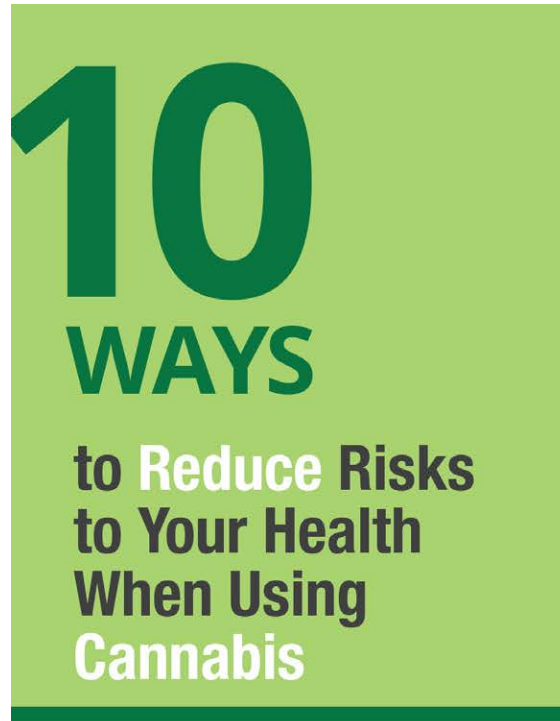
Canada's Lower-Risk Cannabis Use Guidelines

✦ Karrie-Ann Jones and Veronica Charette, Health Promotion

Cannabis is one of the most commonly used psychoactive substances in Ontario.¹

The health impacts from cannabis use include addiction, respiratory and circulatory disease, cognitive impairment, and may harm mental health.² Cannabis use may not be suitable for high risk populations including individuals with current, past, or family history of mental illness and psychosis, women who are pregnant, breastfeeding, or planning to become pregnant, and children and youth under 25 as it poses a risk of harmful effects to the developing brain.³

In 2017, 51% of adults in Northeastern Ontario reported cannabis use in their lifetime – a rate higher than the provincial average of 47%.⁴ Cannabis use is a personal choice. With the legalization of cannabis, patients may have questions about the risks associated with recreational cannabis use. Health care practitioners now have an evidence-based harm reduction tool to discuss recreational cannabis use with their patients: Canada's Lower-Risk Cannabis Use Guidelines.



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CANADIAN RESEARCH
INITIATIVE IN
SUBSTANCE MISUSE

INITIATIVE CANADIENNE
DE RECHERCHE
EN ABUS DE SUBSTANCE

Canada's Lower-Risk Cannabis Use Guidelines are available in the form of a brochure, poster, and as a summary brief for health care practitioners. These resources are available to download or print at no cost at: <http://crismontario.ca/research-projects/lower-risk-cannabis-use-guidelines>.

Canada's Lower-Risk Cannabis Use Guidelines are also available for purchase at: <https://store-camh.myshopify.com/collections/featured-items-en-vedette/products/p6512-p6513>. The first 25 brochures are complimentary when ordered through publications@camh.ca.

To learn more about cannabis, visit Public Health Sudbury & Districts' website at www.phsd.ca/cannabis.

The guidelines highlight ten ways to reduce cannabis-related harms and include:⁵

1. **Abstain from cannabis to avoid health risks.**
2. **Delay taking up cannabis use until later in life.**
3. **Identify and choose lower-risk cannabis products.**
4. **Don't use synthetic cannabinoids.**
5. **Avoid smoking cannabis—choose safer ways of using.**
6. **If you smoke cannabis, avoid harmful smoking practices like deep inhalation and breath-holding.**
7. **Limit and reduce how often you use cannabis.**
8. **Don't use cannabis and drive or operate other machinery.**
9. **Avoid cannabis use altogether if you are at risk for mental illness or are pregnant or are planning to become pregnant.**
10. **Avoid combining the above risks.**

References

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2 ↗ Ontario Medical Association. (2018). Talking to Patients about Recreational Cannabis. Retrieved from <https://www.oma.org/wp-content/uploads/Cannabis-Conversation-Guide.pdf>

3 ↗ Ontario Medical Association. (2019). Cannabis and Special

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Measles update and clinical resources

✦ Stephanie Vendetti-Hastie, Clinical Services

Measles in Canada

While endemic measles has been eliminated in Canada, outbreaks of measles infection continue to occur in countries where Canadians travel, particularly among those who are unvaccinated or under-vaccinated. This results in imported cases circulating among susceptible Canadians. Currently, there is measles activity in Ontario as well as in several other provinces in Canada. There are also several large outbreaks of measles occurring in other parts of North America.

To assist clinicians in their efforts to prevent and control measles infection, Public Health Ontario has developed two key resources summarized below.

- ✦ Webpage: provides an epidemiologic summary of measles activity in the province and highlights measles pre-travel vaccination recommendations. It is available at: <https://www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/vaccine-preventable-diseases/measles/important-measles-information>
- ✦ Factsheet for clinicians: includes information on immunization, serological laboratory testing of immunity, measles case investigations, and advice on infection prevention and control for clinical office settings. It is available at: <https://www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/vaccine-preventable-diseases/measles/important-measles-information>

Immunization is the best way to protect against measles. Please take every opportunity to provide the measles vaccine to travelers and other eligible persons. **If an individual's immunization records are unavailable, immunization with measles-containing vaccine is preferable to ordering serology to determine immune status.** This avoids the potential for false positive results, reduces the risk of missed opportunities for immunization, and is consistent with advice from the *Canadian Immunization Guide*.

References

- ✦ Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Measles information for clinicians*. Toronto, ON: Queen's Printer for Ontario; 2019.



How changes to OHIP+ may affect access to contraceptives

✦ Jodi Maki, Clinical Services

As of April 1, 2019, children and young adults with private drug plans are no longer eligible to receive free prescriptions through OHIP+¹. This change may leave some teenagers and young adults without access to affordable birth control.

Concerns about confidentiality have been identified as a barrier to contraceptive use for youth and young adults covered by their parents' health insurance². As such, some of your patients who are not eligible for OHIP+ may be reluctant to obtain birth control using their parents' drug plans, and unable to afford the alternative.

We can help! Public Health Sudbury & Districts offers a low-cost birth control program, including prescriptions for oral contraceptives and emergency contraception. If you encounter any patients in your practice in need of affordable birth control options, please have them call 705.522.9200 to schedule an appointment.



References

- 1 ✦ Government of Ontario. (2019). Learn about OHIP+. Retrieved at <https://www.ontario.ca/page/learn-about-ohip-plus>.
- 2 ✦ Fuentes, L., Ingerick, M., Jones, R., & Lindberg, L. (2018). Adolescents' and Young Adults' Reports of Barriers to Confidential Health Care and Receipt of Contraceptive Services. *J Adolesc Health*, 62(1): 36-43

It's time to test and treat latent TB infection

→ Stephanie Vendetti-Hastie, Clinical Services

Did you know? Approximately 10% of persons infected with TB will go on to develop active TB disease: 5% within 2 years of infection and 5% for the remainder of life.

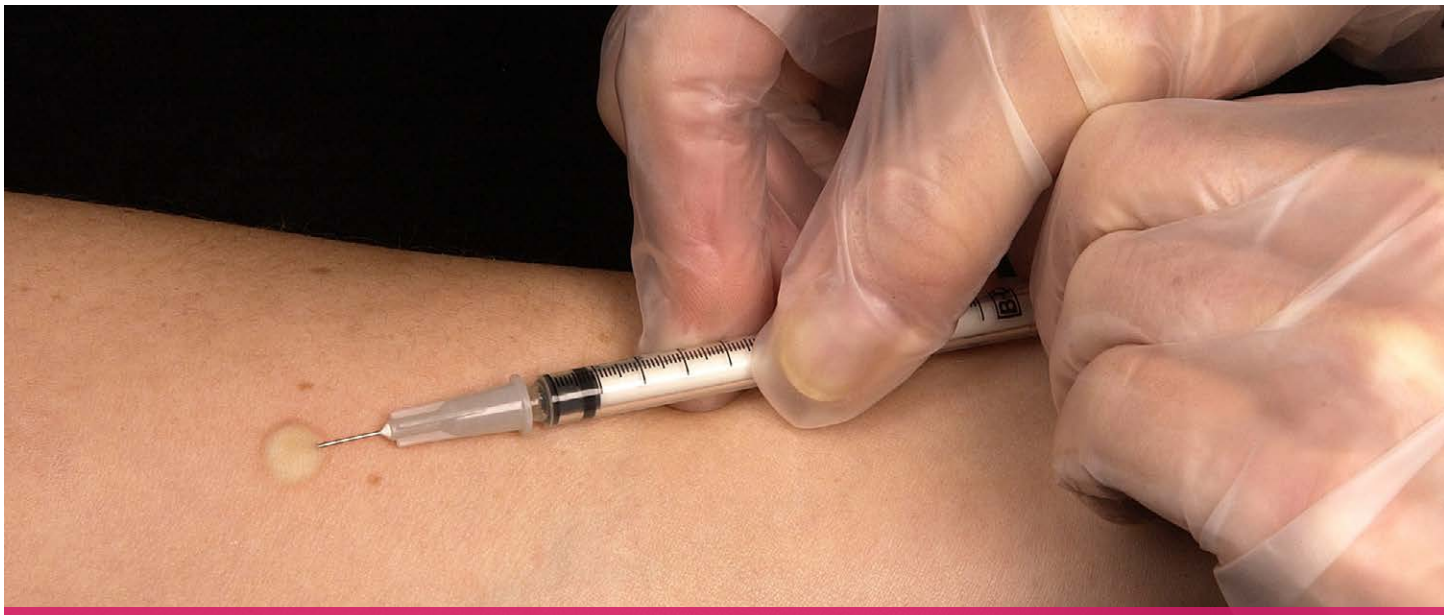
Treatment of LTBI reduces an individual's risk of developing active TB¹.

Various treatment options for latent tuberculosis infection (LTBI) are available and are well described in the Canadian TB Standards. <https://www.canada.ca/en/public-health/services/infectious-diseases/canadian-tuberculosis-standards-7th-edition.html>

While rifampin has been a recommended alternative regimen since 2000³, a large-scale international study by Menzies et al. (2018) in the New England Journal of Medicine further highlights the role of a four-month, daily, self-administered Rifampin 4RMP regimen as an alternative treatment for LTBI⁴. Key findings and pertinent information from the Canadian TB Standards are summarized in the table on page 9. The full article is available at: <https://www.nejm.org/doi/full/10.1056/NEJMoa1714283>

Key findings from the study

Four months of daily, self-administered rifampin is not inferior, not superior to a nine-month regimen of INH for treatment of LTBI in adults. The treatment completion was higher with a significantly lower incidence of adverse events of grades 3 to 5, particularly hepatotoxic adverse events⁴.



Remember!

Tuberculosis is a reportable disease. All positive tuberculin skin tests (TST) must be reported to public health. Report all suspect and confirmed cases to public health immediately.

Regimen	Interval and Duration ⁴	Oral Dosage ⁴	TB Standards Criteria for Completion ³	TB Standards Considerations ³
Rifampin (4RMP)	Daily for 4 months	Adult: 10 mg/kg/day to a maximum of 600 mg/day → Total 120 doses	A minimum of 120 doses completed within 6 months can be considered adequate treatment ³ .	Use this regimen in consultation with a specialist. *Consider collecting sputum and pending for culture results prior to initiation to avoid inducing drug resistance. Alternate regimen for persons: → who cannot tolerate isoniazid (INH) → who are contacts of INH-resistant TB Higher risk of side effects if not taken consistently.

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- Long R, Schwartzman K. Pathogenesis and Transmission of Tuberculosis. In: Long R, Schwartzman K, ed. Canadian tuberculosis standards. 7th ed. Ottawa: Public Health Agency of Canada, Canadian Thoracic Society, 2014:25-42.
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- Menzies D, Adjobimey M, Ruslami R, et al. Four months of rifampin or nine months of isoniazid for latent tuberculosis in adults. N Engl J Med 2018;379:440-453.

Reprocessing in community settings

→ Stephanie Vendetti-Hastie, Clinical Services

Safe reprocessing of medical equipment and devices prevents the transmission of microorganisms to staff and clients and minimizes damage from foreign material (e.g., blood, body fluids, saline and medications) or inappropriate handling. Health care providers who use medical devices in their practices are required to establish, document, and maintain policies and procedures for the reprocessing of these items. The information below outlines some of the key considerations for reprocessing in community settings. Check out the resources section for additional information.

Policies and procedures

- Have written policies and procedures.
- Use single-use disposable

medical equipment and devices whenever possible.

- Ensure that equipment used to clean, disinfect, or sterilize medical equipment and devices meets Health Canada and Public Health Agency of Canada and CSA standards .
- Have written policies and procedures for loaned, shared or leased medical equipment and devices (if utilized) and ensure that these are tracked, logged, reprocessed (disassembled, cleaned and reprocessed prior to any use) and documented prior to each and use on clients*.
- Have written policies and procedures for sterilization failure.

Education and training for reprocessing staff

- Educate and provide ongoing reprocessing training.
- Provide written medical equipment and device-specific reprocessing instructions.
- Ensure staff have training and wear appropriate personal protective equipment (PPE) for all reprocessing activities.

Physical reprocessing space

- Designate a reprocessing space that is physically separate from direct care areas and from where clean items are handled and stored.



- Ensure the space has a dedicated hand washing sink and/or ABHR for hand hygiene, eye washing station, point-of-use sharps container and clean, dry storage for PPE that is accessible to staff.
- Have a one-way work flow from dirty to clean to prevent cross-contamination.

Reprocessing steps

1. Pre-clean

- Remove visible soil at point of use.
- Transport to the reprocessing area in a cleanable, closed, puncture-resistant container.
- Disassemble, sort and soak
- Disassemble instruments as required.
- Sort instruments in sets.
- Soak/pre-treat with enzymatic cleaner.

2. Clean

- Manually clean with a detergent/enzymatic solution. Clean lumens with a brush, flush and rinse.
- Follow-up with mechanical cleaning in ultrasonic washer/automated washer-disinfector (if available).
- Inspect, clean, disinfect, dry and store all cleaning equipment (e.g. brushes, sponges) used for reprocessing activities after each use.
- Discard detergent or enzymatic cleaning solution after each use.

3. Rinse and dry

- Rinse equipment and devices after cleaning, and dry with a lint free towel.
- Dry lumens with compressed, filtered air.

4. High-level disinfect (HLD) OR sterilize

- Determine the method of reprocessing in accordance with the classification of the instrument (critical, semi-critical and non-critical) - sterilization is always the preferred method of reprocessing semi-critical equipment for items that can tolerate the process.
 - *HLD (semi-critical instruments)*
 - Monitor solution efficacy.
 - Soak as per manufacturer's directions.
 - Rinse thoroughly with sterile, filtered or tap water, depending on intended use.
 - Dry after disinfection and store in a clean, dry, covered container.
 - Monitor and record (log) disinfection activities such as test strip monitoring, concentration and exposure time, and disinfectant temperature.

→ *Sterilization (critical instruments)*

- Inspect, lubricate and reassemble instruments as required.
- Package using sterilization approved materials and include an appropriate internal and external chemical indicator*.
- Label each package with the date processed, sterilizer used, cycle or load number, contents, and staff's initials.
- Load the sterilizer according to manufacturer's instructions.
- Include a process challenge device or appropriate chemical indicator if not quarantining the load pending the biological indicator test result.
- Perform a biological indicator (BI) test each day the sterilizer is used and for each cycle.
- Document the sterilization parameters for each load (time, temperature and pressure).
- Keep a sterilization log of all results for all sterilizers/autoclaves.
- Do not use medical devices/equipment if the chemical indicator and/or BI fail.

5. Storage of disinfected and sterile medical equipment and devices

- Store sterile items in their sterile packaging until time of use.
- Store sterile items in a clean, dry, dust-free area (e.g., closed shelves or containers), elevated off the floor, away from debris, drains, moisture, sinks and vermin to prevent contamination and maintain disinfection/sterility until time of use.
- Ensure the sterility of the packaging has not been compromised prior to use.

*This also applies to HCP who use devices from their offices in other settings such as hospitals or community clinics

**A Class 4 or 5 will be utilized depending on the procedures in place for quarantine of items pending BI results and the availability of a print-out to review and initial the physical sterilization parameters

References

- 1 → Ontario Agency for Health Protection and Promotion (Public Health Ontario). Provincial Infectious Diseases Advisory Committee. Best practices for cleaning, disinfection and sterilization of medical equipment/devices. 3rd ed. Toronto, ON: Queen's Printer for Ontario; May 2013. <https://www.publichealthontario.ca/en/health-topics/infection-prevention-control/reprocessing>

Canada's Food Guide 2019

→ Claire Bilik, Health Promotion

What is the purpose of Canada's Food Guide?

The new Canada's Food Guide provides Canadians with guidance on how to make healthy food choices and is one component of Canada's Healthy Eating Strategy¹. Following Canada's Food Guide can support your patients in meeting their nutrient needs, reducing their chronic disease risk, and promoting overall health and well-being².

What's new with the revised Canada's Food Guide?

- no longer focuses on specific nutrients or serving sizes
- considers that healthy eating is more than the foods we eat; and highlights the importance of what, where, when, why, and how we eat
- acknowledges that culture and food traditions can be a part of healthy eating

To support your practice, visit [Canada.ca](https://www.canada.ca)³ for downloadable resources, dietary guidelines, and supporting evidence.

Discover your food guide at

[Canada.ca/FoodGuide](https://www.canada.ca/FoodGuide)

Key recommendations to highlight with patients

- Eat a variety of healthy foods each day;
- Have plenty of vegetables and fruit; aim to fill half your plate with veggies and fruit;
- Choose protein foods that come from plants most often;
- Include a variety of whole grain foods;
- Make water your drink of choice;
- Eat meals with others;
- Be mindful of your eating habits;
- Take time to enjoy your food;
- Cook more often;
- Use food labels;
- Try to limit highly processed foods, which are high in added salt, sugar, and/or saturated fat;
- Consider how food and beverage marketing influences your choices.

References

- Health Canada (2019). Health Canada's healthy eating strategy. Retrieved from <https://www.canada.ca/en/services/health/campaigns/vision-healthy-canada/healthy-eating.html>
- Health Canada (2019). Backgrounder: The science behind the new Food Guide. Retrieved from <https://www.canada.ca/en/health-canada/news/2019/01/backgrounder-the-science-behind-the-new-food-guide-----.html>
- Health Canada (2019). Canada's Food Guide. Retrieved from <https://food-guide.canada.ca/en/>

Early connections matter

→ Josée Castonguay, Health Promotion

The *Relationships matter: How clinicians can support positive parenting in the early years* position statement was released on April 11 by the Canadian Paediatric Society and asks primary care providers to take a role in supporting positive parenting with their patients, particularly in a child's early years.¹ Recent media headlines have challenged longstanding “time out” and punitive parenting practices and have child care experts re-examining existing child behavior management strategies.² Evidence confirms that “parenting practices are the strongest modifiable determinants of behavioral and emotional health in children.”¹ In addition, positive parent-child interactions drive attachment, a key factor in early brain development.³ Despite this knowledge, across Canada, parents identify being unprepared for the parenting role and seek emotional and practical support with parenting.⁴

Further to this, a growing body of research on Adverse Childhood Experiences (ACEs) links the relationship of exposure to childhood emotional, physical or sexual abuse, and household dysfunction to the occurrence of chronic diseases in adulthood.⁵ By identifying protective parenting factors with patients, you may mitigate the occurrence of ACEs for their children.

Where to start

- Ask questions. Use the Rourke Baby Record⁶ to consider possible social determinants of health impacting the family as well as their current coping strategies.
- Provide counselling and help them identify positive problem-solving strategies.
- Connect them to local supportive resources.

Where to send parents for additional resources

- 1. Best Start Nexus: Healthy Baby Healthy Brain. <https://www.healthybabyhealthybrain.ca/>
- 2. Play & Learn: Activities and resources to help child learn, grow and thrive. <https://playandlearn.healthhq.ca/en>
- 3. Caring for Kids – CPS: When your child misbehaves: Tips for positive discipline. https://www.caringforkids.cps.ca/handouts/tips_for_positive_discipline
- 4. Mindspace: Mental health services without an appointment for children & youth including parenting support. <https://cfcnorth.ca/youth/mindspace/>
- 5. EarlyON child and family centres: You can learn and play with your child, meet people and get advice from early childhood professionals. <https://www.ontario.ca/page/find-earlyon-child-and-family-centre>





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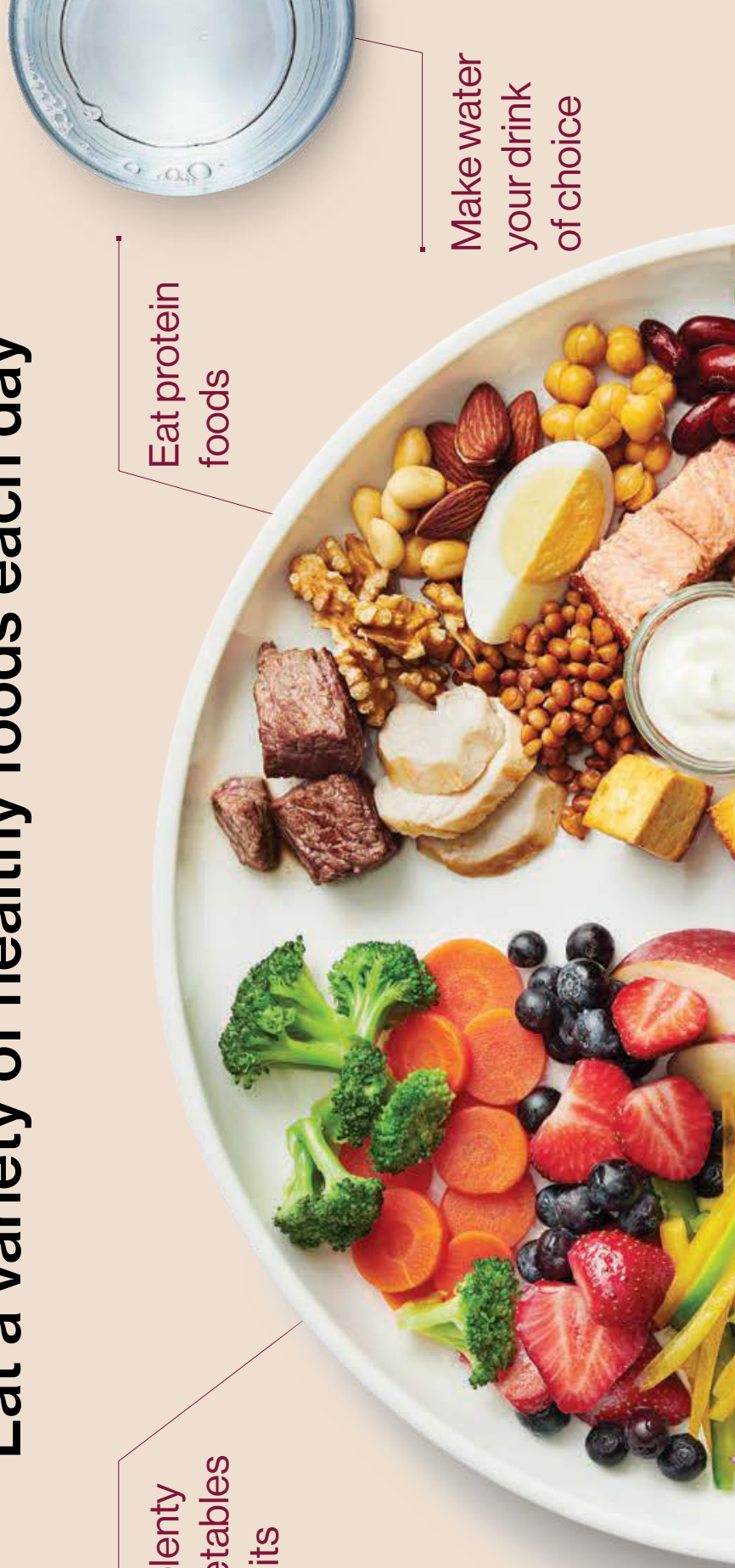
Eat well. Live well.

Eat a variety of healthy foods each day

Have plenty
of vegetables
and fruits

Eat protein
foods

Make water
your drink
of choice





Choose
whole grain
foods

Discover your food guide at

Canada.ca/FoodGuide

Canada



Health
Canada

Santé
Canada

Tongue-tie and impact on breastfeeding

→ Lorraine Jones, Clinical Services

Ankyloglossia

Ankyloglossia, or tongue-tie, is a congenital birth defect of the lingual frenulum that may restrict tongue movement as a result of decreased length, lack of elasticity, or placement. There is increasing evidence that the presence of a tongue-tie in infants interferes with breastfeeding. This may lead to short and long-term consequences such as issues with feeding, speech difficulties, and orthodontic and mandibular abnormalities. Ankyloglossia may be familial and is more prevalent in males.^{1,2,3}

Health impacts of tongue-tie

Infant complications stemming from tongue-tie include failure to latch or sustain a latch during breastfeeding, being unable to transfer milk effectively, choking, GERD-like symptoms^{4,5}, falling asleep at breast, prolonged feedings, gumming or chewing at the breast, unsatisfied baby, poor weight gain, or failure to thrive.^{6,7} As a consequence, many parents who plan to breastfeed are often compelled to wean their baby to bottle-feeding much earlier than expected.

Maternal complications stemming from tongue-tie include breast pain and nipple trauma due to improper latch, compromised breastfeeding efficiency, and maternal discomfort. Pain and nipple trauma are often causes for seeking breastfeeding support. Other maternal complications include incomplete breast drainage leading to plugged ducts, breast infections, and decreased milk production.^{8,9,10,11,12}

Assessing tongue-tie

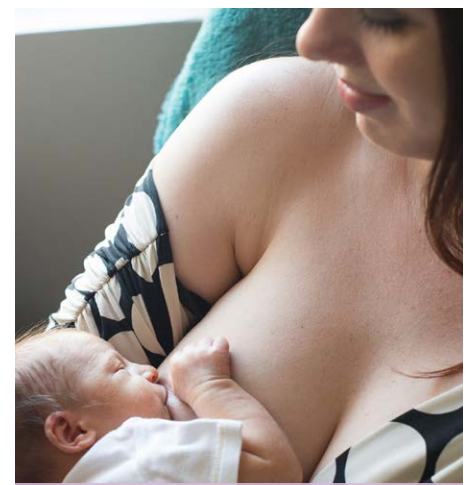
It is important to assess how the tongue functions rather than how the tongue looks. No tongue-ties are alike, adding to the difficulty of identifying ankyloglossia. Classification protocols to describe the presence and degree of tongue-tie are not yet consistent, but are able to provide guidance when considering tongue function and degree of impairment. Differential diagnosis should proceed using a standardized, valid, and reliable screening tool. At this time there are two tools that qualify:

- 1. [Hazelbaker Assessment Tool for Lingual Frenulum Function \(HATLFF\)](#)
- 2. [Lingual Frenulum Protocol With Scores For Infants](#)¹³

Managing tongue-tie

Until bottle feeding became the norm in Western culture, frenotomy was routinely performed.^{14,15} An enhanced focus on breastfeeding initiation may be responsible for the increased identification of ankyloglossia.¹⁴ There is growing research among breastfeeding medicine specialists to indicate releasing the lingual frenum of the infant with ankyloglossia when necessary to facilitate breastfeeding and to protect the breastfeeding experience.

Public Health Sudbury & Districts offers breastfeeding clinics that support women through common breastfeeding challenges. Primary care providers can refer patients or recommend that they make an appointment by contacting our Health Information Line at 705.522.9200, ext. 342.



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Introduction of solid food

✦ Alyssa Rumford, Health Promotion

When should solid foods be introduced?

Introduce solid foods at six months. At this age, infants will show signs of readiness such as good head control and the ability to sit up in a high chair.^{1,2} Before six months, infants should only be fed breastmilk or formula.

What are the risks of early or late introduction of solid foods?

Early introduction of any solid food, including infant cereals, “offers no benefits to infants and may increase the risk for under-nutrition and diarrheal diseases”.² Late introduction is associated with “growth faltering, micronutrient deficiencies, and diminished motor skills”.²

What foods should be introduced first?

Introduce iron-rich foods first to reduce the risk of iron deficiency. Examples include meat, poultry, beans, eggs, tofu, and iron-fortified infant cereals. Offer iron-rich foods two or more times per day.^{1,2,3}

What about other foods and beverages?

- ✦ Once iron-rich foods are being eaten regularly, parents can begin to offer other foods.³
- ✦ Delay the introduction of cow’s milk until 9 to 12 months of age to reduce the risk of iron deficiency. Encourage parents to continue breastfeeding up to two years and beyond. If not breastfeeding, pasteurized whole cow’s milk (3.25%) can replace formula at nine months of age.³
- ✦ Skim, 1%, 2%, and plant-based milks (regardless of fortification), are not recommended for children under two years of age.³
- ✦ Honey should not be given to children under one year of age to reduce the risk of infant botulism.³
- ✦ Common food allergens can be introduced at six months of age. They should be introduced one at a time, with a two day period in between.^{3,4}

What food textures should be offered?

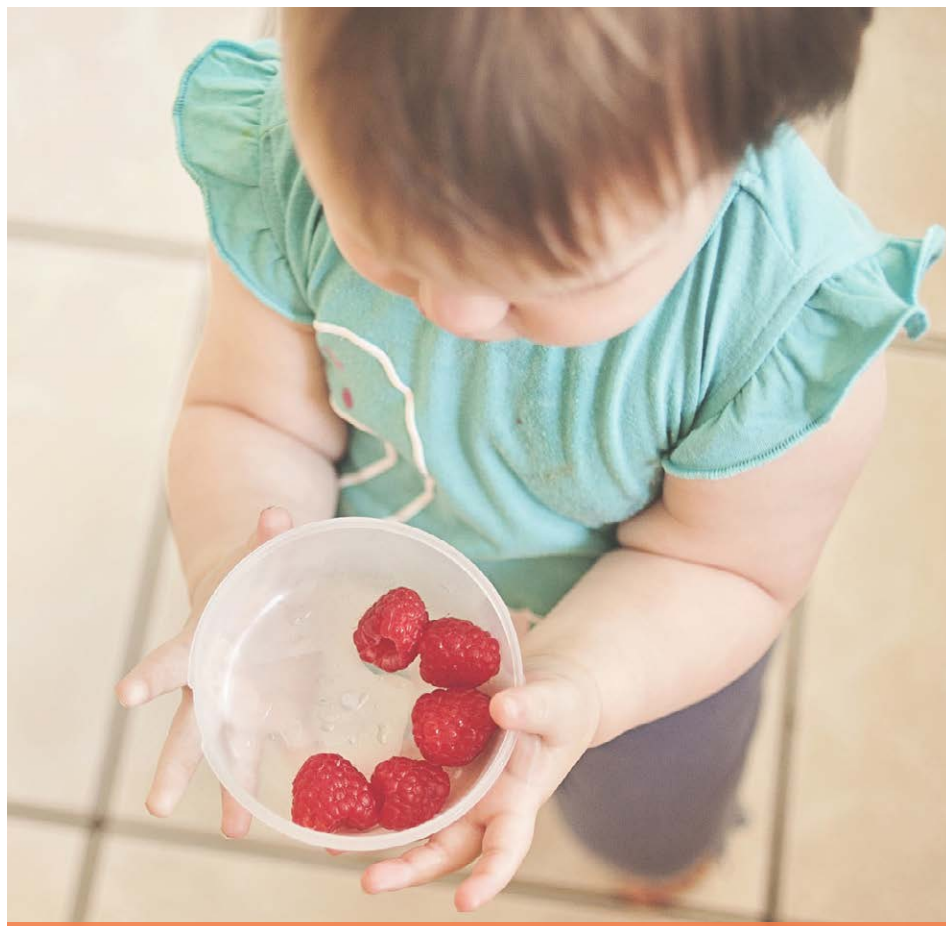
Infants have the oral motor skills to eat a variety of textures, including pureed, mashed, minced, lumpy, and soft finger foods. Small, hard, round, and sticky foods should be avoided to prevent choking and aspiration.^{1,2,3}



How often should solid food be offered?

Feeding should be responsive to the hunger and satiety cues of the infant. Start by offering one or two teaspoons of a few foods two times per day. Progress slowly and work towards offering solid foods three to five times per day. By 12 months of age, a regular feeding schedule can be established.^{1, 2, 3}

To learn more about the introduction of solid food, see the *Nutrition for Healthy Term Infants: Recommendations from Six to 24 months* or contact Public Health Sudbury & Districts at 705.522.9200, ext. 342.



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Texture of complementary foods

✦ Alyssa Rumford, Health Promotion

It is a common misconception that infants need to start with pureed foods and progress gradually to other textures. At six months of age, infants have the oral motor skills to eat a variety of textures including pureed, minced, mashed, ground, lumpy, and soft finger foods.^{1,2,3} Offering a variety of textures helps infants develop important chewing and swallowing skills.¹ By one year of age, infants can eat a variety of mashed, ground, and chopped family foods.³

Infants will show signs of readiness for solid food around six months of age. The critical period for introducing solid foods is between six and nine months of age. Early introduction of any solid food “offers no benefits to infants and may increase the risk for under-nutrition and diarrheal diseases”.³ Late introduction is associated with growth faltering, micronutrient deficiencies, and diminished motor skills.^{1,2} Delaying the introduction of lumpy textures beyond nine months of age has also been linked with feeding difficulties and lower intakes of nutritious foods.¹

Examples of safe finger foods¹:

- ✦ small pieces of soft-cooked vegetables and fruits
- ✦ soft, ripe fruit such as bananas
- ✦ minced, ground, or mashed meat, deboned fish, and poultry
- ✦ grated cheese
- ✦ bread crusts or toast

When infants are learning to eat solid foods, gagging may occur. This is a normal and natural reflex to prevent choking.^{1,2} Some parents may feel anxious or nervous until they can tell the difference between gagging and choking.¹ Reassure parents that if their child is attentive, sitting upright, and free from distractions, the risk of choking is similar to that of an adult.¹

Foods that are hard, small, round, or sticky increase the risk of choking and are not safe for children less than four years of age.

Examples include hard candies, cough drops, popcorn, hotdogs, dried fruit, marshmallows, nuts, seeds, fish with bones, whole grapes, and hard vegetables.^{1,3}

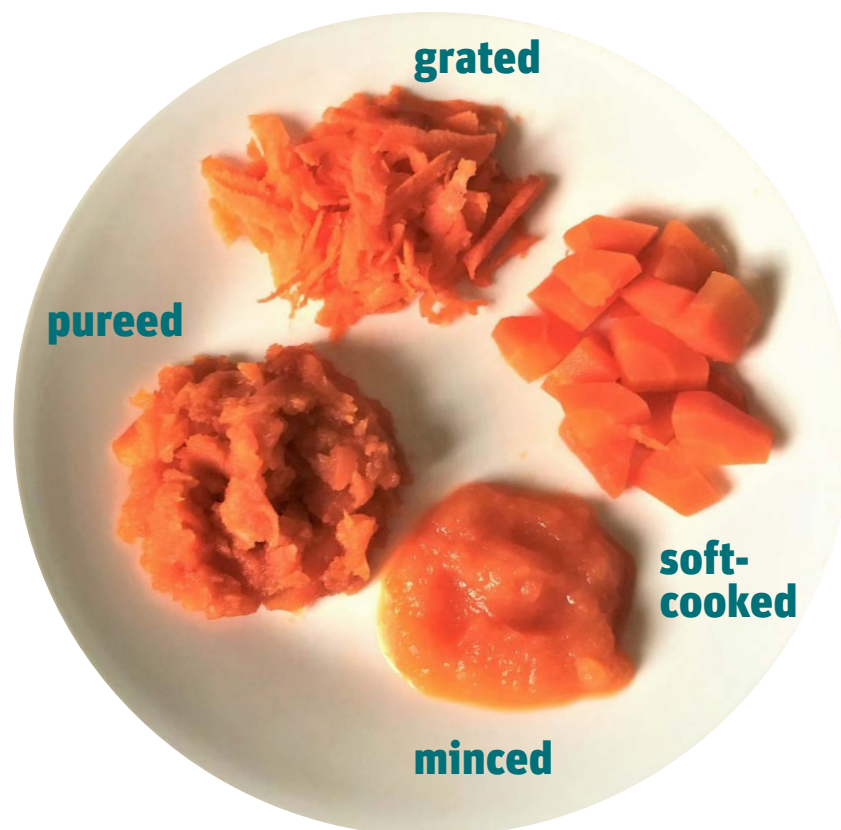
To reduce the risk of choking, advise parents and caregivers to:

- ✦ always supervise their child when eating¹
- ✦ offer foods in appropriate textures and sizes⁴
- ✦ feed their infant slowly⁴ or let their infant feed themselves
- ✦ avoid foods that increase the risk of choking⁴
- ✦ sit their infant up straight (not slouched) in a high chair⁴
- ✦ avoid distractions when eating (for example, TV, toys, tablets, phones)⁴
- ✦ get trained in first aid and CPR in case choking occurs¹
- ✦ not give food to their child in a moving vehicle¹



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Noxious plants

→ Moriah Thorpe, Environmental Health

What you need to know

With summer comes increased risk of exposure to noxious plants. Many of these invasive plant species pose a threat to human health, as noxious plants can contain toxic compounds in their stems, leaves, and flowers. People can be exposed through inhalation, skin contact, eye contact, or ingestion.¹ Health care practitioners are encouraged to consider exposure to noxious plants in their assessment for diagnosis and treatment and recognize that signs and symptoms often mimic other health conditions.²

Signs and symptoms of exposure

In combination with exposure to sunlight, the sap of giant hogweed and wild parsnip can cause severe burns and blistering on the skin (phytophotodermatitis).^{3,4} Phytophotodermatitis may present similarly to other skin conditions such as cellulitis and allergic contact dermatitis.² In cases of dermal contact, wash the exposed skin with soap and cold water as soon as possible.¹ If eyes come in contact with sap, they should be rinsed thoroughly with clean water for 10 minutes and covered with dark sunglasses to avoid exposure to sunlight.⁵ If sap gets into the

eyes, it may cause temporary or permanent blindness.³ Individuals should seek medical attention as soon as possible. Should burns occur, health care practitioners can treat the areas with topical steroids and nonsteroidal anti-inflammatory drugs for analgesia.² Blisters should be treated like a chemical burn.²

Poison ivy produces oil in its roots, stem, flowers, and leaves that may cause mild to severe itchy skin rashes (allergic contact dermatitis).^{3,6} Tearing or bruising the plant can also expose the skin to the oil.³ It can stick to clothing items and tools or may transfer from one individual to another by touching or rubbing.³ In cases of dermal contact, rinse gently with cold water and mild soap as soon as possible. To relieve pruritus, health care practitioners can prescribe oral antihistamines and suggest cool compresses, calamine lotion, and tepid baths with baking soda or colloidal oatmeal.⁷ Other treatments include the use of anti-inflammatory agents, such as corticosteroids.⁷

The pollen of common ragweed is an allergen that causes hay fever and dermatitis.⁵ Ragweed pollen is largely distributed via plant disturbance and wind, which is known to carry the pollen hundreds of kilometres.⁵



Treatment for affected individuals include local or oral antihistamines, intranasal corticosteroids, and decongestants.⁸

The stalks of rhubarb are a common food source for many people and are widely used in preserves and baking, or consumed raw. Rhubarb leaves, on the other hand, contain oxalates which are toxic to humans. Ingesting large quantities of raw or cooked leaves has been reported to cause poisoning.⁹ Symptoms may include abdominal pains, nausea, vomiting, drowsiness, and death.⁹

If an individual swallows a rhubarb leaf, they should seek medical attention and call the Ontario Poison Centre immediately: 1.800.268.9017.

A full list of noxious plants in Ontario can be found at the [Ministry of Agriculture, Food and Rural Affairs](#) web page.



Prevention

Health care practitioners may consider discussing preventative measures with those most at risk of being exposed to noxious plants. Although anyone may come into contact with a noxious plant, people at greater risk include children, those who spend long periods of time outdoors for either recreational purposes or work including hikers, gardeners, agricultural or forestry workers, and firefighters. In general, individuals should learn how to identify noxious plants and take necessary precautions, including wearing long sleeves and covering exposed skin. Moreover, parents should be encouraged to teach their children to stay away from plants and avoid eating anything that isn't a food item.¹⁰

If you have a question or concern regarding noxious plants, you can call Public Health Sudbury & Districts at 705.522.9200, ext. 464 (toll-free 1.866.522.9200).

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Prosecuting produce

✦ Adam Ranger, Environmental Health

Foodborne illness: not just bad hamburgers

If a patient presents with symptoms of foodborne illness such as vomiting and diarrhea, don't rule out produce.

Despite being overlooked, fresh fruits and vegetables have occasionally been linked to outbreaks of foodborne illnesses.¹ Produce is typically considered to be a "ready-to-eat food", therefore, contaminated produce is not subjected to further processing or kill steps such as cooking.²

Three common pathogenic bacteria found in produce are *Escherichia coli* O157:H7, *Salmonella*, and *Listeria*. Table 1. outlines the symptoms and treatment for these infections.

What to do if you suspect foodborne illness:

✦ Ask your patient what they had eaten three days before symptoms appeared. Any food consumption in public facilities such as restaurants should be reported to Public Health Sudbury & Districts for investigative follow-up.

- ✦ Obtain a stool sample. Identifying the causative organism early can help public health inspectors with their investigation, assist in preventing further illnesses, and informs health care provider treatment decisions.
- ✦ Ask your patient if they wash their produce before eating it. Washing produce may reduce, but not eliminate, pathogens that may be present.⁷

Table 1.

Pathogen	Symptoms	Incubation period	Preferred antibiotic
<i>Escherichia coli</i> O157:H7	Severe abdominal pain, diarrhea (sometimes bloody), nausea and vomiting, fever, chills, headache, myalgia, hematuria ⁴	2 to 10 days ⁴	Antibiotics are not recommended ⁴
<i>Salmonella</i>	Abdominal pain, diarrhea, chills, fever, nausea and vomiting ⁴	Usually 12 to 36 hours, but could be 6 to 72 hours ⁴	Fluoroquinolones such as ciprofloxacin or levofloxacin as first-line ⁵
<i>Listeria monocytogenes</i>	Nausea and vomiting, abdominal cramps, diarrhea or constipation, headache, fever ⁴	2 to 3 weeks, up to 70 days ⁴	Penicillin or ampicillin as first-line ⁶

What is being done to address foodborne illness?

Work is ongoing to prevent pathogens in produce. Recently, Health Canada hosted a working group that reviewed the microbiological research needs for fresh produce in Canada such as surveillance work.³

Food safety is a priority amongst many levels of government. Health Canada establishes regulations and standards for the quality of foods sold in Canada. Enforcement of these standards is completed through inspections conducted by the Canadian Food Inspection Agency and locally by public health inspectors with Public Health Sudbury & Districts.

To learn more about food safety, visit our website at <https://www.phsd.ca/health-topics-programs/food-safety>

Possible sources of contamination in produce:

- ⇨ soil
- ⇨ animals
- ⇨ water
- ⇨ improperly composted manure
- ⇨ handling during storage, transportation, display
- ⇨ counters and cutting boards at home in the kitchen

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Blue-green algae blooms: Harms and health concerns

→ Rachel O'Donnell, Environmental Health

What are blue-green algae?

Blue-green algae, also known as Cyanobacteria, are bacteria that are naturally found in all waterbodies. Though usually present in low numbers and therefore not normally visible in the water, blue-green algae can rapidly increase in numbers to form a bloom in any lake or river, when conditions are right; typically, when the water is warm, slow-moving, and full of nutrients³. Though blooms are most common in the summer and fall, a bloom can occur at any time of the year¹. Blue-green algae get their name from the common colour of the bloom – a blue-green cast that looks like a paint slick on the surface of the water. The colour of the blooms can vary, however, from blue-green to red to olive-brown. As the bloom dies off, it produces an odour similar to rotting garbage.

Why are blue-green algae harmful?

Some species of blue-green algae can produce toxins which are concentrated when a bloom is present or as the bloom dies off. There is no way to know if the blue-green algae bloom is toxic by looking at it. Once a harmful algal bloom is suspected, samples are submitted to laboratories for identification and testing for microcystin, including microcystin-LR which are the common toxins produced by blue-green algae².

Exposure and symptoms

Exposure	Signs and Symptoms
Swallowing water contaminated with high levels of blue-green algae or their toxins	<ul style="list-style-type: none">→ nausea, vomiting, diarrhea→ bad taste in mouth→ acute hepatitis or jaundice→ malaise, lethargy→ headache→ fever→ loss of appetite
Skin contact with water that is contaminated with high levels of blue-green algae or their toxins	<ul style="list-style-type: none">→ contact dermatitis including rash, itching and blisters→ swelling of lips→ sore, red eyes
Inhaling aerosols contaminated with high levels of blue-green algae or their toxins	<ul style="list-style-type: none">→ upper respiratory irritation including wheezing, coughing, tightness of chest, shortness of breath

Treatment and prevention

There are no known antidotes to these toxins. Medical care is supportive³.

Members of the public should exercise caution with respect to eating fish caught in water where blue-green algae blooms occur. The liver, kidneys, and other organs of fish should not be eaten. Advise your patients to follow the Guide to Eating Ontario Fish (Ontario Ministry of the Environment, Conservation and Parks).

In addition, patients who are not connected to a municipal water supply system are recommended to take additional precautions such

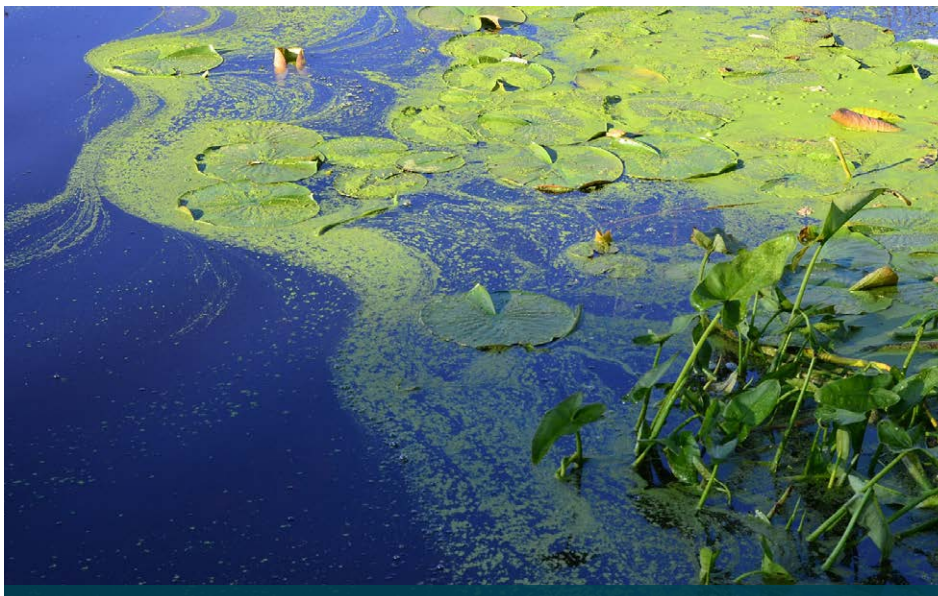
as using an alternate source of drinking water, for example bottled water, if an algal bloom is near their water intake line. Boiling or treating the water will not remove the toxin and may in fact increase toxin levels. On lakes and rivers where blue-green algal blooms are confirmed, patients who use the surface water for their private drinking water supply may wish to consider an alternate, protected source of water.

Public health's role

Ontario has a comprehensive plan in place for responding to harmful algal blooms. Response includes collaboration between local public health units and the Ministry of Environment, Conservation

and Parks to effectively manage algal incidents². Members of the public are encouraged to report suspect blue-green algae blooms to their local public health unit or the Ministry of the Environment, Conservation and Parks.

For more information visit <https://www.phsd.ca/health-topics-programs/water/blue-green-algae-cyanobacteria>.



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- 4 ⇨ <https://myhealth.alberta.ca/alberta/pages/blue-green-algae.aspx>

Rabies: be informed

→ Holly Browne, Environmental Health

Members of the public often seek medical attention following contact with animals such as bats, where rabies may have been transmitted. Rabies is transmitted only when the virus is introduced into a bite wound, open cuts in skin, or onto mucous membranes such as the mouth or eyes.

Can my patients get rabies in the Sudbury and Manitoulin districts?

Though the risk is relatively low at this time, it is possible for individuals to be exposed to the rabies virus locally. There have been no reports of rabies in terrestrial animals in the Sudbury and Manitoulin districts since 2003. There is, however, a raccoon rabies outbreak in the Hamilton area. This has been contained but it only takes one or two rabies-positive animals hitchhiking to our

area to change our current status. Bats have tested positive in the Sudbury and Manitoulin districts as recently as 2012.

What do I do when a patient reports an exposure?

Ontario law states that a physician, registered nurse in the extended class, veterinarian, police officer, or any other person who has information concerning any animal bite or other animal contact that could result in rabies in persons shall as soon as possible notify the Medical Officer of Health and provide the Medical Officer of Health with the information.

Public Health Sudbury & Districts encourages physician offices, walk-in clinics, and emergency departments to report all animal bites and other animal contacts as

soon as possible in the interest of preventing rabies transmission to humans.

How do I report an exposure?

Notifications can be made 24 hours a day, 7 days a week, by calling Public Health Sudbury & Districts at 705.522.9200, ext. 464 during business hours or by calling the on-call public health inspector at 705.688.4366 outside of regular business hours. In addition to calling, a Rabies Control Investigation Report (copy available at <https://www.phsd.ca/professionals/health-professionals/reporting>) can also be faxed to 705.677.9607. To ensure that all reports of animal to human incidents are investigated within 24 hours of notification, it is essential that reports be reported by phone to the on-call public health inspector after-hours, including weekends.





Is rabies post-exposure prophylaxis needed immediately?

Each exposure is assessed individually to determine the need for rPEP. This risk assessment can be completed during a telephone call with the health care provider or provided to the victim and includes:

- The species of animal, including the prevalence of rabies in that species and the prevalence of rabies in other species in the area.
 - If domesticated animal exposure: vaccination status, history of potential exposure to other animals of unknown rabies vaccination status, travel history, and the behaviour of the particular domestic animal implicated.
 - If non-domesticated animal exposure (e.g. racoon or skunk): rPEP would be recommended and delivered to the physician immediately, if requested.
- The type of exposure: bite, non-bite (e.g. salivary contact with open skin or mucous membrane, transplant of infected organs), or direct contact with a bat. Unless one of these three potential modes of exposure has occurred, transmission of rabies is highly unlikely.
 - Bite exposures: Transmission of rabies occurs most commonly through bites. A bite is defined as any penetration of the skin by teeth.
 - Non-bite exposures: This category includes contamination of scratches, abrasions or cuts of the skin or mucous membranes by saliva or other potentially infectious material, such as the brain tissue of a rabid animal.
 - Bat exposures: Post-exposure rabies prophylaxis following bat contact is recommended when both the following conditions apply:
 1. There has been direct contact with a bat; AND
 2. A bite, scratch, or saliva exposure into a wound or mucous membrane cannot be ruled out.
- The circumstances of the exposure: provoked or unprovoked.
- The vaccination status and behaviour of a domestic animal.
- The age of the exposed person.
- The location and severity of the bite (e.g., the size and number of bites).

A recently published document from the Ministry of Health provides guidance for health care providers in the management of patients with suspected rabies exposure.

If the animal is available and an observation can be completed, the animal is placed under a minimum 10-day observation period from the date of the exposure to confirm that rabies was not transmitted during the exposure.

Where can I get more information on the management of suspected rabies exposures?

More information can be found in the Management of Potential Rabies Exposure Guideline, Management of Patients with Suspected Rabies Exposure or by contacting Public Health Sudbury & Districts.



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