Make it a Healthy Day!

Sudbury & District Health Unit
Service de santé publique de Sudbury et du district

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THE Advisory

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Message from the Medical Officer of Health

Colleagues, it is my pleasure to share with you the Spring 2016 issue of *The Advisory*.

In this issue, we explore how exercise can be viewed as medicine and how modelling, mentioning and motivating patients can help support behaviour change. We also look at the benefits of skin-to-skin contact with babies, as well as discuss the importance of providing clear messaging in relation to child passenger safety. In addition, we revisit the importance of considering blastomycosis in the differential diagnosis of certain patients, as well as the need to consider food-borne illness for patients presenting with vomiting and diarrhea. We highlight how food insecurity and poverty, and substance misuse in the community remain pivotal issues that require a concerted community-wide effort to address.

Information about interim guidelines for the treatment of syphilis during the benzathine penicillin G (Bicillin L-A) shortage is also included for your reference.

Please read and share these articles with your colleagues, clients, and fellow health care professionals.

With spring finally here, I hope that you have an opportunity to explore and experience—safely—the many outdoor adventures that our community has to offer.

Sincerely,

Dr. Penny Sutcliffe, Medical Officer of Health

Exercise is Medicine®

Natalie Philippe, Health Promotion

Increasing physical activity has proven effective in the treatment, management and prevention of chronic diseases; however, an estimated 78% of Canadian adults are not meeting the Canadian Physical Activity Guidelines[1].

Physical inactivity remains a public health concern and when combined with sedentary behaviours, poses an even greater risk to the health of individuals[2]. Clinicians can play a pivotal role in supporting and motivating their patients toward positive health behaviour change.

The first step is to engage patients in interactive, rather than didactic, conversations about physical activity. Clinicians can help motivate patients to improve their health using the "Three M's" of effective exercise counselling: Modelling, Mentioning, and Motivating[3].

MODELLING

Model the behaviour by exercising regularly. This will provide practical experience and firsthand knowledge for counselling patients to overcome barriers to being active. Refer to the Canadian Physical Activity Guidelines (Canadian Society Exercise Physiology) for further information.

MENTIONING

Mention the advisability of physical activity and ask them if they would like to learn more about how you might be able to help them become more active. As there are currently no sedentary behaviour guidelines for Canadian adults, ask how they might be able to move more and sit less in their activities of daily living.

MOTIVATING

Motivate patients by eliciting their own motivations for exercise. Ask open-ended questions to try to identify their values for regular physical activity and their level of readiness for change. Emphasize the personal benefits of regular exercise such as feeling better about oneself.

Clients who demonstrate motivation and readiness for physical activity may be interested in establishing an action plan. For patients aged 18 years and up, the Exercise Prescription and Referral Tool includes a prescription pad format on its front and, on the back, key messages and definitions to discuss with patients. This is available for free download or you can order, for a fee, through Exercise is Medicine® Canada (EIMC). See insert for sample copy.

Exercise is Medicine® Canada invites regulated health care professionals to join the new Exercise is Medicine® Professional Network.

For further information about EIMC or to join the EIMC Professional Network, visit www.exerciseismedicine.ca.

Skin-to-skin: birth and beyond

Nicole Stewart, Clinical and Family Services

Early, uninterrupted skin-to-skin care begins ideally at birth for at least the first hour, until the completion of the first feed, or for as long the mother desires[4]. It involves placing the naked baby prone on the mother's bare chest, head covered with hat and a blanket across the back[4,5,6].

Moms (and partners) are encouraged to continue holding baby skin-to-skin often and for extended periods as baby grows[5]. There is no age limit at which skin-to-skin is no longer recommended[7]. Premature babies also benefit from this, which is known as Kangaroo Mother Care[5].

Benefits

Skin-to-skin contact benefits all babies and even parents, no matter the feeding choice[4].

Baby

- Is the foundation for exclusive breastfeeding.
- Increases mother's milk production.
- Helps mothers produce gestation-specific milk.
- Faster weight gain.
- Stabilizes heart rate, breathing & blood sugar.
- Keeps baby warm.
- Protects baby from infection (gut colonization).
- Promotes bonding.
- Better sleep.
- Calms and soothes.
- Decreases pain from painful procedures (e.g. injections).
- Promotes better brain development.
- Promotes better emotional development.

Parents

- Develops better bonding and interaction with child.
- Are calmer.
- Feel more empowered and confident.
- Learn baby's cues for hunger.
- Get more sleep.
- Are less depressed.
- Have less guilt and cope better in NICU[4, 8]

How can you support families in your practice with skin-to-skin?

- Provide skin-to-skin care information and encourage discussion both prenatally and postnatally with families[4].
- Invite all mothers to hold their baby skin-to-skin and breastfeed if painful procedures are necessary. This should begin before the vaccine injection or other minor procedures and continue during and afterwards [4, 9, 10]. Skin-to-skin contact also gives the mother a role during the procedure that can decrease infant stress, thereby increasing maternal confidence in the parenting of her infant[10].
- Display one or both of the sample posters in your office (see inserts) to promote skin-to-skin with families.
- Simply contact the Family Health Team at the Sudbury & District Health Unit to get additional free posters, 705.522.9200, ext. 427 or familyhealth@sdhu.com.

The great masquerader: blastomycosis

Holly Browne, Environmental Health

This article is being republished due to two recent reported human deaths from blastomycosis in our area.

Blastomycosis is a pulmonary infection that presents with generalized symptoms that can be mistaken for other illnesses such as the "flu" or pneumonia.

In addition to the non-specific symptoms, diagnosis is difficult due to the range in incubation periods. Blastomycosis is a rare infection that can cause serious morbidity and mortality if not detected and appropriately treated in the early stages of disease.

Blastomycosis is found in Canada. There have been human cases of blastomycosis diagnosed in the SDHU area and other parts of Ontario.

Consider blastomycosis in the differential diagnosis of febrile patients presenting with respiratory or "flu like" symptoms and risk behaviours for exposure.

Activities that expose an individual to moist soil with decomposing organic matter, such as camping, forestry work, farming, and hunting, can expose individuals to the fungus.

Blastomycosis

INCUBATION PERIOD: 3 TO 15 WEEKS

General signs and symptoms include sudden onset of fever, cough, pulmonary infiltrate, and cutaneous lesions.

Blastomycosis

The fungus, *Blastomyces dermatitidis*, found in moist soil is associated with decomposing organic matter such as wood and leaves. Transmission is through inhalation of airborne microscopic spores that can cause a pulmonary infection. Anyone is susceptible and symptoms may appear between three and 15 weeks after initial exposure.

In Ontario, exposure to the fungus most often occurs in the summer and fall months as the activities that would expose an individual usually occur during this time of year. Clinical presentation can be at any time of the year but is more likely to occur in the fall and early winter due to the incubation period.

CLINICAL MANIFESTATIONS involve pulmonary, cutaneous, and disseminated disease (involving skin, bones, joints, and the genitourinary tract). Untreated disseminated or chronic pulmonary blastomycosis can be fatal.

Pulmonary blastomycosis may present with acute or chronic symptoms of fever, cough and constitutional symptoms; however, patients can present asymptomatically in up to 50% of cases[11]. Chest X-ray can reveal a single or multiple patchy infiltrates, which can cavitate. Resolution occurs spontaneously in one to three weeks[12]; however, extrapulmonary manifestations may be present in the absence of respiratory symptoms.

Cutaneous involvement is common and presents with verrucous, erythematous papules that may be crusted or ulcerated and affect the face and distal extremities.

DIAGNOSIS is made by culture, DNA probe, or microscopy of samples from sputum, tracheal aspirates, cerebrospinal fluid, urine, or cutaneous lesions.

TREATMENT with oral itraconazole or fluconazole is recommended for cases with mild or moderate blastomycosis infections. Amphotericin B is indicated in severe or disseminated infection. The suggested course of therapy is six months to one year, followed by a course of oral itraconazole.

Key messages for health care practitioners

Area health care practitioners are reminded that the incidence of this disease fluctuates and that diagnostic vigilance is recommended.
Given that delays in diagnosis can contribute to illness and death, clinicians should consider blastomycosis in their differential diagnoses of lung, skin and bone diseases, particularly if the patient does not respond to conventional antimicrobial drug therapy.

Key messages for patients

- Know the symptoms of blastomycosis and areas where it is found.
- If you feel ill see a doctor.
- Be aware of your potential exposure from high-risk activities.
- Wear protective gear when you feel you are at increased risk of exposure including:
  - » work gloves
  - » long-sleeve shirts and long pants
  - » des chaussures appropriées
  - » disposable NIOSH N100 approved HEPA filter dust mask
- Wearing protective gear will reduce but not eliminate the risk.

Food insecurity: a serious health problem

Bridget King, Health Promotion

Food insecurity is inadequate or insecure access to food because of financial constraints. In Ontario in 2013, one in eight households experienced food insecurity[13].

Food insecurity has serious health implications for both children and adults.

Adults from food insecure households experience:

- poorer self-rated health
- poorer mental and physical health
- poorer oral health
- greater stress
- chronic conditions, such as diabetes, high blood pressure, and anxiety, more frequently

Children and teenagers from food insecure households:

- are at greater risk of mental health problems, including an increased risk of depression, social anxiety, and suicide
- may experience delays in socioemotional, cognitive, and motor development, and an increased risk of obesity[14]

Food insecurity is costly

Evidence shows that individuals experiencing food insecurity are at a greater risk of becoming 'high-cost users' of the health care system[15]. A recent study demonstrated that in households experiencing severe food insecurity, annual health care costs were 76% higher compared with total annual health care costs in food-secure households[16]. Food insecurity makes it difficult to manage chronic diseases and conditions.

Poverty is the root cause of food insecurity

An income response is required to address food insecurity. However, an income response, such as basic income guarantee, will be costly. Even conservative estimates of the indirect costs of poverty (e.g. health care, remedial education, crime, and social assistance programs) are far higher than the cost of lifting people out of poverty[15].

The clinician's role

1. SCREEN

Consider using "Poverty: A Clinical Tool for Primary Care Providers". This tool assists primary care providers in screening all patients for poverty. The tool has three primary steps: 1. Screen everyone, 2. Educate, and 3. Intervene and connect.

2. PROVIDE

Provide Supporting Materials: "Poverty: A Clinical Tool for Primary Care Providers" provides information to primary care providers on guiding their patients on filling in their tax forms. This advice may help to ensure patients are receiving all the benefits to which they are entitled. Information about community food programs, such as Meals on Wheels and the Good Food Box program, may also be helpful.

3. ADVOCATE

A basic income guarantee would ensure income at an adequate level to meet basic needs and allow everyone to live with dignity, regardless of work status. A basic income guarantee has the potential to eliminate poverty[15]. Join others, including the Canadian Medical Association, in calling for a basic income guarantee.

Becoming familiar with "Poverty: A Clinical Tool for Primary Care Providers" will allow clinician's to identify and better support their patients who may be experiencing food insecurity.

Higher expenditures

High-cost Users (HCU) – Evidence demonstrates that health service spending occurs disproportionately among a very small portion of the population. In Ontario, the top 5% of health care users accounted for two thirds of total health care expenditures, in contrast, 1% was spent on the bottom 50% of health care users[13].

Examples of advocacy – Medical associations

The College of Physicians of Canada (CFPC) has called on the federal government to end child poverty by 2020 as well as to explore strategies to support consumption of healthful foods: http://patientsmedicalhome.ca/files/uploads/BA_SocialD_ENG_WEB.pdf.

NOTICE

The Public Health Agency of Canada (PHAC) has been made aware of a national benzathine penicillin G (Bicillin L-A) shortage that is expected to last until July 2016.

The PHAC is working closely with Health Canada to develop options to mitigate the shortage, which include conserving available stock of Bicillin L-A and using alternative treatments wherever feasible or possible. Interim treatment recommendations have been developed to guide efforts to conserve Bicillin L-A during this shortage: they are in effect immediately and until further notice.

The interim guidelines are available on the PHAC website at: http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-ldcits/section-5-10-itg-ldi-eng.php.

Food-borne illness

Ashley DeRocchis, Environmental Health

With every bite we take, we are potentially exposed to illness from bacteria, viruses and parasites. Health Canada estimates that 4 million Canadians suffer from food-borne illness every year.

Symptoms of food-borne illness (also known as food-related illness or food poisoning) are typically mild and self-limiting; however, they can also be debilitating and life-threatening. Health Canada estimates that nearly 11 600 hospitalizations occur due to food-borne illness every year resulting in a significant strain on our hospital system. Health Canada also estimates that 238 deaths occur yearly as a result of food-borne illness.

Symptoms of food-borne illness include stomach cramps, nausea, vomiting, diarrhea and fever. Individuals experiencing symptoms can easily spread the infection to family members and the general public through food preparation and common touch surfaces.

Individuals presenting with symptoms of vomiting and diarrhea are often quickly diagnosed as being ill with Norovirus. Although this may often be the case, it is important for clinicians to consider whether or not the illness may be related to other food-borne illnesses. It is recommended that part of the clinical diagnosis includes questioning around food or untreated water consumption. Stool sample(s) to detect bacteria, ova and parasites and viruses should also be taken, provided the patient remains symptomatic with diarrhea.

Clinicians and the general public can contact the Health Unit to consult a public health inspector about food or stool sample submissions, methods of preventing food-borne illness and secondary spread, or to file a report for further investigation of a food premises suspected of causing the patient's illness. The inspector will seek to obtain a detailed three-day food history prior to the onset of symptoms. This assists in determining if the patient's illness was caused by the consumption of unfit food or if the illness was community-acquired, as is often the case with Norovirus. If a report is filed with the Health Unit, all food premises suspected of causing the illness will be inspected within 24 hours of the SDHU receiving the report. Where appropriate, food samples may be collected and submitted to the Public Health Ontario laboratory for analysis.

A public health inspector can be contacted during normal business hours (8:30 a.m. to 4:30 p.m.) at 705.522.9200, ext. 464.

For after-hours assistance, please call 705.688.4366 and request to have the on-call inspector contact you. Be prepared to provide the on-call inspector with the patient's name and contact information.

Common causes of food-borne illness:

- Botulism
- Campylobacter
- Cronobacter
- Cyclospora
- E. coli
- Hepatitis A & E
- Listeria and Listeriosis
- Norovirus
- Salmonella
- Shigella
- Vibrio

Source: http://www.hc-sc.gc.ca/fn-an/securit/ill-intox/index-eng.php

Clear messages in child passenger safety

Tina Skjonsby-McKinnon, Health Promotion

Road fatality rates have declined in recent decades due in part to significant advances in road and transport safety legislation and child passenger safety. Despite these advances, motor vehicle traffic collisions remain a leading cause of unintentional injury and death for Canadian children, youth and young adults.

Child safety seats are highly effective in reducing the risk of death during severe traffic collisions. Research indicates, however, that only one in five car seats is properly installed, thus diminishing their ability to protect an infant or child in the case of a motor vehicle incident.

There are many things to consider when using a child car seat system, and research indicates that most caregivers are unaware that they are misusing them. For a car seat to be used properly, three main requirements must be met:

1. The seat must be properly installed in the vehicle according to manufacturer's instructions.
2. The seat must be in the correct position for the child`s development, including height and weight.
3. The child must be properly harnessed or restrained according to the manufacturer's instructions.

If any of these requirements are not met, the car seat might not perform as intended in a crash. Currently, literature identifies **misuse** as a priority. One of the main issues surrounding misuse of car seats, in general, is early graduation from a booster seat into a seatbelt. Too often, children are placed into booster seats or use seatbelts alone before they are ready from a physical or developmental standpoint. If the child does not have the ability stay seated in the seatbelt or the seatbelt does not fit them properly, they are at risk for injury during a crash.

The following key messages are recommended to ensure parents, caregivers and drivers safely install car seats:

- Use the correct seat for your child's height and weight, and install it according to the information provided in both the vehicle and car seat manuals.
- Harness your child in the seat properly according to the car seat manual.
- Keep your child in each car seat stage (e.g. rear facing, forward facing, or booster) for as long as possible.

Included in this edition of *The Advisory* is a sample car seat safety poster for your use. For more information or resources, visit www.sdhu.com.

In a community near you

Brenda Stankiewicz, Health Promotion

Mary-Jane, Molly, and Tango & Cash are at a party. Mary-Jane is mellow, Molly is ready to go, and Tango & Cash are happy.

Would you recognize them if they came to your office?

These are not people but street names for cannabis, ecstasy (MDMA) and Fentanyl respectively. The use of illegal drugs and the misuse of prescription drugs and alcohol are a growing concern for families and communities. Law enforcement, health practitioners, people from social services and concerned citizens around our service area have been working together to develop plans to free our communities from the harms associated with substance misuse.

These plans, known as drug strategies, are built on local knowledge to create local solutions. Health promotion, enforcement, services (treatment and harm reduction) and relationships form the cornerstones of work for these strategies. As these plans are being implemented, education and awareness events have increased community awareness of substance use issues.

The Patch4Patch program, featured in The Advisory Fall/Winter 2015 edition, has now been strengthened by Ontario's passing of Bill 33 on December 10, 2015 (An Act to reduce the abuse of fentanyl patches and other controlled substance patches). In addition, Drug Drop-Off Days also assist in taking old, unused drugs out of our communities, further decreasing the risks for drug diversion.

The following communities have developed or are developing drug strategies:

1. The Community Drug Strategy for the City of Greater Sudbury was endorsed by the City of Greater Sudbury Council in October 2015.
2. The LaCloche Foothills Drug Strategy was endorsed by Espanola, Baldwin, Nairn & Hyman, and Sauble-Spanish town councils in 2014 and 2015.
3. The Manitoulin Island Drug Strategy is in its final stages of development.
4. The Sudbury East Drug Strategy is in its initial stages of development.

Together, we will make a difference. To learn about how you can get involved, call 705.522.9200, ext. 267.

Information sessions for the Rapid Access Addiction Medicine (RAAM) Clinic

May 16 at noon / May 30 at noon / June 6 at noon
Location: 336 Pine Street, Community Room, Sudbury

Light lunch to be served. Session seating is limited. First-come, first-served basis for reservations. To RSVP, email the clinic date of choice and number of staff attending to liarmstrong@hsnsudbury.ca.

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Exercise is Medicine® (page 2)

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