Make it a Healthy Day!

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

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THE Advisory

What's Inside

Message from the Medical Officer of Health

This issue of the Advisory, like many others before it, highlights new directions, opportunities, and areas of important interest in health care, and in particular, public health.

We cover several important topics including concussion assessment, dieting and death, as well as our new Academic Detailing program. We also profile our new long-term community engagement campaign titled, "You Can Create Change", which seeks to encourage greater community involvement to achieve health equity.

This past summer, as part of the Changing Workplaces Review[1] conducted by the Ontario Ministry of Labour, I had the opportunity to present a public health perspective[2] about the importance of Ontario workers having paid sick days. Currently, millions of workers across Canada don't have paid sick days and can't afford to take a day off to take care of themselves or their families when they are ill and are faced with the choice of going to work sick, sending a sick child to school or daycare, or losing pay and potentially getting fired.

I would like to draw your attention to current advocacy efforts and encourage you to join me, and many of your colleagues, to sign the online petition[3] calling for paid sick days.

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

Wishing you all the best this upcoming holiday season. Enjoy a safe and healthy New Year.

Sincerely,

Dr. Penny Sutcliffe, Medical Officer of Health

Bringing accredited CME to your clinic

Amanda Hey and Jodi Maki, Clinical and Family Services

Coming in 2016: Academic detailing

The Health Unit is proud to announce the introduction of an Academic Detailing Program (ADP). We want to work with you to create a healthier community. This program meets the accreditation criteria of the College of Family Physicians of Canada and has been accredited for up to one Mainpro-C credits.

The program was developed to help primary care providers close the gap on public health topics, between what they know and how to apply it effectively in the context of our community.

This ADP works as follows:

- Topics are identified that lie at the intersect of individual health interventions in primary care and population health and policy in public health. The first topic is *Alcohol Screening, Brief Intervention and Referral*. We will be seeking your input for future topics.
- The Health Unit leverages or develops evidence-based clinical tools and aligns recommendations to local public health or community resources. We want to bridge the gap of "So what services are there?".
- An Academic Detailer (AD) meets with you in your practice setting at a time convenient for you for 15 to 20 minutes, and provides you with evidence-based and pragmatic tools, addresses your queries, and provides knowledge of community resources.
- The AD becomes your 'go-to person' for closing the knowledge gap of public health topics as well as what the Health Unit specifically has to offer across its many programs for your patient population, with an emphasis on resources for vulnerable populations.

Sign up! If you wish to join the program, please complete and return the enclosed *Expression of Interest* in SDHU Academic Detailing Program form.

This program meets the accreditation criteria of the College of Family Physicians of Canada and has been accredited for up to one Mainpro-C credits.

Due to current capacity, the program is only available to primary health care providers in Greater Sudbury. Expanding the program beyond Greater Sudbury will be assessed at the end of 2016.

We acknowledge the sentinel role that primary care providers play in the health of our communities. We want to make sure that the valuable resources we have are available for you in the frontline of care for you and your patients.

For more information on this initiative, please call Vi Vo at 705.522.9200, ext. 466 or email vov@sdhu.com.

Suspected concussions

Christina Ashawasegai, Health Promotion

The College of Family Physicians of Canada has endorsed the SCAT3[4] and Child-SCAT3[5] (for children 5 to 12 years) as concussion tools to best support your practice. A copy of the SCAT3 is included in this edition of The Advisory to provide nurse practitioners and family physicians with concussion clinical tools that will support them in providing the best care for patients.

School policy requirements

School boards within the Health Unit's service area and across Ontario are now required to maintain a policy on concussions (PPM 158)[6] . Though each board has developed and implemented its own policy, as a minimum standard, policies adhere to the OPHEA Concussion Guidelines[7].

Two key concussion policy requirements:

1. Require that all students with a suspected concussion seek medical treatment.
2. Require the nurse practitioner or physician to complete the necessary documentation to indicate if the student has been diagnosed with a concussion.

The policies also outline a procedure to guide parents, students, teachers, and health care providers on "return to play" and "return to learn".

The importance of clinical assessment

A nurse practitioner or a family physician is often the first medical professional to see a student with a suspected concussion, thus being the first point of contact for proper management, advice, education and awareness regarding the student's recovery. Your assessment and completion of the school board specific concussion documentation will ensure students with concussions return to playing and learning safely.

Two key concussion policy requirements:

1 **REQUIRE** that all students with a suspected concussion seek medical treatment.

2 **REQUIRE** the nurse practitioner or physician to complete the necessary documentation to indicate if the student has been diagnosed with a concussion.

Fentanyl Patch4Patch arrives in Sudbury

Brenda Stankiewicz, Health Promotion

While it is an effective pain management therapy, fentanyl is also a potent drug of abuse. Improperly disposed fentanyl patches could be reapplied by people seeking to get high or abusers may inject or inhale patch contents.

Between 2012 and 2013, the Office of the Chief Coroner reported 36 deaths in the Greater Sudbury due to drug toxicity—14 of which were related to fentanyl toxicity.

To decrease the potential for the diversion of improperly disposed fentanyl patches, the Community Drug Strategy for the City of Greater Sudbury launched Sudbury's Patch4Patch program in June 2015. A similar program was also introduced in Espanola and on Manitoulin Island earlier in 2015.

The Patch4Patch program is not meant to complicate pain management. It serves to guarantee the responsible provision, use, and disposal of fentanyl patches. The program also helps avoid potential harm to others by ensuring the proper disposal of patches.

Used clinically for the management of chronic pain, **fentanyl is a synthetic opioid analgesic.** It is available for oral transmucosal administration, as an injectable solution of fentanyl citrate, or in a transdermal delivery system (e.g. Duragesic).

Responsibilities of prescribing physicians:

- Caution patients and family members to store the patches in a secure place.
- Advise patients to follow the procedure to keep track of the number of patches they have.
- Advise the patient about ways to decrease the risk of accidental misuse by others.
- Ensure that patients and family members understand the steps to follow when returning used fentanyl patches to the pharmacy.
- Ensure that patients understand that they cannot alter their patches in any way, or sell or provide their patches to anyone without consequences.

Patient education is an important first step when prescribing fentanyl. It is imperative to advise patients that if the steps above are not followed, their prescription will not be refilled until you can be notified and approve.

Fentanyl is a potent opioid analgesic with high desirability as a drug of abuse. Working together with patients, families and pharmacists, you can enhance the health and safety in the Sudbury and Manitoulin districts.

Patches removed upon admission to hospital

If your patient is admitted to a hospital and their fentanyl patch is removed by hospital staff, advise the patient to obtain documentation upon discharge from the facility that their patch was removed on admission (dated and signed by the attending physician) so they have verification when they arrive to have their prescription refilled.

Prescription quantities and pickups

You are cautioned not to prescribe large numbers of fentanyl patches for the pharmacist to dispense. It is recommended that no more than 10 fentanyl patches be dispensed at one time, which is equal to a one-month supply (i.e. 10 patches allows the patient to use one patch every 72 hours for 30 days of pain management).

Talk to your patients about which pharmacy and location they will use to get their patches. You must write the dispensing pharmacy's name and location on the prescription. Whenever possible, the prescription should be be faxed to that pharmacy by the physician's office.

The pharmacist will also be responsible for patient education, counselling and following refill procedures. Patients will be required to sign their "*Pharmacy Fentanyl Patch4Patch Return Disposal Sheet*" stating that they are aware that if any of their attached patches are found to be counterfeit, they could face criminal charges. If the pharmacy determines that any patches are counterfeit, the family physician and police will be notified immediately, by phone or fax.

Dieting and death: 2,4-dinitrophenol (DNP)

Shannon Dowdall-Smith, Clinical and Family Services

The World Health Organization issued a warning this past summer due to a death in the United Kingdom following the use of a dieting supplement containing 2,4-dinitrophenol (DNP). A recent study of national poison calls in the UK revealed a substantial increase in calls related to DNP: 6 calls in 2011 as compared with 331 calls in 2013[8].

Although rare, health care providers should be aware of possible DNP toxicity with unexplained clinical presentations of fever, tachycardia, sweating, skin discolouration, nausea, vomiting, abdominal pain, and breathing difficulties in a patient who may have a history of bodybuilding or extreme dieting. DNP is an industrial chemical, which is not intended for human consumption; however, it is easily purchased online as a quick weight loss aid.

DNP is sold under different names including Dinosan, Dnoc, Solfo Black, Nitrophen, Aldifen, Nitro Cleenup, Fenoxyl Carbon and Chemox. It is typically in a yellow powder form, with a sweet, musty odour and is water soluble[9]. It can be purchased in bulk or in pre-packaged capsules.

Clinical presentation

DNP causes an uncoupling of oxidative phosphorylation, stimulation of glycolysis, and accumulation of potassium and phosphate. The profound metabolic changes can lead to:

- rash
- hyperthermia
- tachycardia
- yellowing of the skin
- sclera and urine
- arrhythmia
- agranulocytosis
- neutropenia
- cataracts
- deafness
- confusion
- diaphoresis
- tachypnea
- eventual death

DNP is typically in a yellow powder form, with a sweet, musty odour and is water soluble.

Treatment

There is no known antidote for DNP overdose and medical treatment with activated charcoal may only be effective within an hour of ingestion. Aggressive attempts to cool and hydrate the body are sometimes effective, but with recorded temperatures as high as 43°C, these efforts are often unsuccessful. Profound muscle rigidity contributes to challenging resuscitation and mechanical ventilation efforts[10].

Deaths have occurred in humans who have ingested 3 to 46 mg/kg/day for short periods of time and as little as 1 to 4 mg/kg/day over long periods[11]. However, the dosing regimen of 3 to 5mg/kg/day is currently recommended by bodybuilding websites for weight loss (see http://authenticsteroids.com/buyDNP24-Dinitrophenol100mgCapsules.html).

Rabies management primary care toolkit

Holly Browne, Environmental Health

Ontario law requires that health care providers report to the Medical Officer of Health—as soon as possible—any animal bite or other animal contact, such as scratches, that could result in rabies in a person.

The Health Unit has developed the *Rabies Management in Primary Care Toolkit* to help HCPs manage animal-to-human contact reports. It contains two quick reference guides and a revised *Animal Incident Reporting Form*. The quick reference guides provide information about reporting incidents and rabies post-exposure prophylaxis vaccine administration, which is based on the Canadian Immunization Guide.

The revised reporting form makes it easier to submit the necessary information for the Health Unit to conduct its investigation (available to download from www.sdhu.com).

In addition, as part of the investigation, a public health inspector will provide you with a completed *Rabies Risk Assessment Form* specific to the incident. This assessment form can help you determine the need for rabies post-exposure prophylaxis (rPEP) based on Ministry of Health and Long-Term Care Guidelines for the management of suspected rabies exposures.

Toolkit distribution and pickup

The toolkit will be available for pickup with vaccine orders. For HCPs who do not pick up vaccine at the Health Unit, the packages will be sent to you.

To report an animal-to-human exposure or a suspected or confirmed case of human rabies:

- **During normal business hours (8:30 a.m. to 4:30 p.m.), call the Health Unit at 705.522.9200;**
- **Outside of regular business hours, call 705.688.4366 and request to have the on-call public health inspector contact you and;**
- **Fax the mandatory reporting form for animal bites/exposures to 705.677.9607.**

You Can Create Change campaign launched

Suzanne Lemieux, Resources, Research, Evaluation and Development

You may have noticed these headlines around our community: "*Your neighbour may be living in poverty*", "*Many people have to choose between food and their prescription meds*", and "*Good education builds a strong future*".

As part of our comprehensive health equity communications plan, we launched a health equity media campaign entitled, You Can Create Change, in September to raise awareness and inspire action among the general public on the social determinants of health and their impact on health. This campaign aims to shift the conversation about health equity in our communities.

Quality health care and lifestyle choices were perceived as the most important factors that influence physical and mental health, while money and education were considered among the least important.

Quality health care and lifestyle choices were perceived as the most important factors that influence physical and mental health, while money and education were considered among the least important (source Rapid Risk Factor Surveillance System (RRFSS), 2013, representing the Health Unit's service area and 11 other Ontario public health units).

These finding demonstrate there is a significant gap in awareness and knowledge about the social determinants of health and their impact on health in our community. We need to shift this perception, because we know that what determines health outcomes goes well beyond individual behaviours and the health care system.

The campaign portrays a message that change to achieve health equity is possible. People should feel empowered to take action through, for example, decision-making, voting, civic engagement, community involvement, volunteering, and charitable activities.

The campaign includes several promotions that will be rolled out over the course of the next year (billboards, Facebook posts, Tweets, decals and bus ads). Key health equity messages in the campaign relate to income and social status, social support networks, education and literacy, healthy child development, employment and working conditions, social and physical environments, housing, food security, gender and sexual identities, and culture.

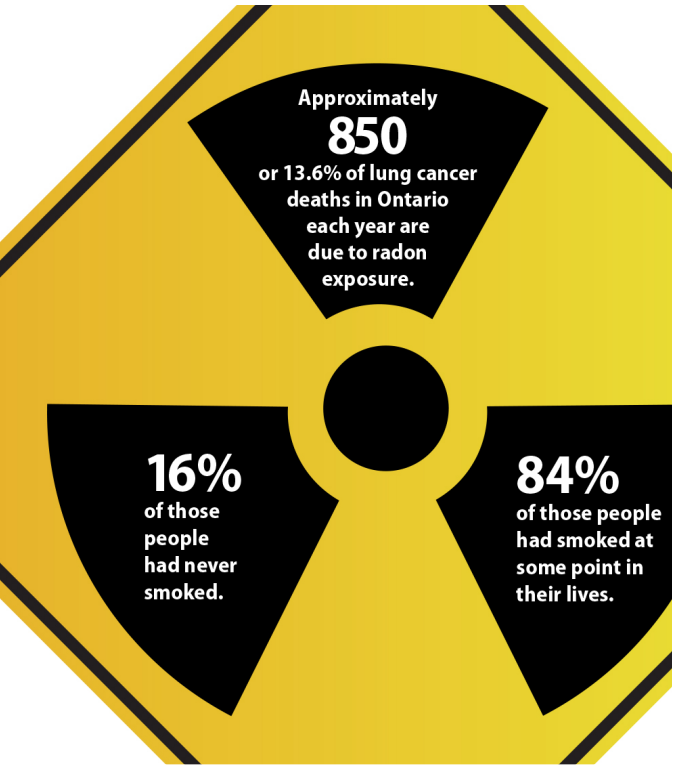
A dedicated section on the Health Unit's website (www.sdhu.com/change) includes additional information for all community members about how to take health equity action and get involved. The site also offers health care providers information about resources and agencies who address issues of poverty and the social determinants of health.

We hope that our campaign will compel, inspire and incite health care providers to become involved in addressing local inequities in health in their practice and, that together, we can continue to have a positive impact on our communities.

UR NEIGHBOUR
Y BE LIVING

Putting radon on the radar

Jane Bulloch, Environmental Health



Radon is the most important cause of lung cancer after smoking[12], yet only about 50% of people in Ontario have ever heard of it. Radon is the primary cause of lung cancer among non-smokers.[13]

McMaster University, the Ontario College of Family Physicians and the Clean Air Partnership, have designed a free, accredited program, Radon: Is it in your patients' home, to provide physicians with reliable, evidence-based information (http://machealth.ca/programs/radon/).

Radon is a naturally occurring, clear, colourless, odourless radioactive gas formed by the breakdown of uranium, present in rocks and soil. It can enter homes through dirt floors, cracks in concrete, sump holes, joints, basement drains, etc.[14] As a person breathes, the radioactive particles are deposited on the cells lining the airways where they can damage DNA and cause cancer.[15]

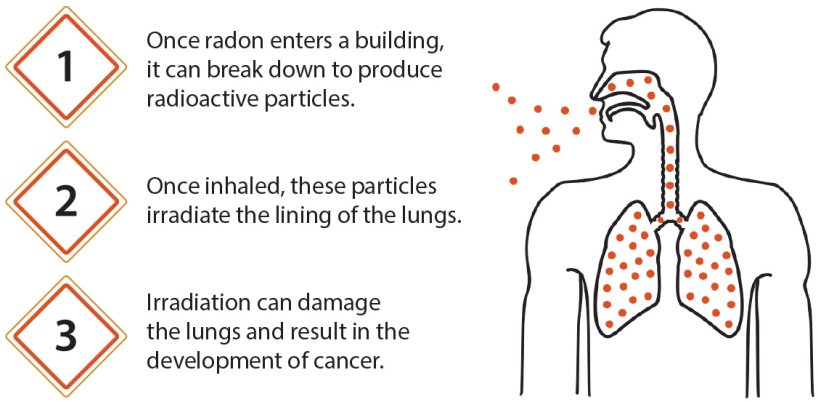
In the open air, radon gas is diluted and does not pose a health risk. In enclosed spaces, such as homes, radon can become concentrated to levels harmful to human health.[14] About 14% of lung cancer deaths in Ontario, 850 people annually, are attributed to long-term exposure to radon.[13] Radon is much more likely to cause lung cancer in people who have smoked at some point in their lives. Children may experience higher dose exposure than adults due to smaller lung size and faster breathing rates; however, more research is required in this area. Radon exposure in humans is not detectable through any existing medical testing.[16]

All homes have some level of radon. Radon levels are generally higher in basements and tend to accumulate in cooler months when windows are closed, particularly September through April.[17]

How can you prevent cancer due to radon?

The only way to know if you are at risk is to test radon levels in your home. Test kits are available from hardware stores to measure residential radon levels. Health Canada recommends that remedial action be taken in cases where levels are found to be above 200 Becquerels per metre cubed (Bq/m^3). There are steps that homeowners can take to reduce radon entry; further, detailed publications for professional contractors in radon reduction are available from Health Canada.[18] As always, quitting smoking and maintaining a smoke-free home is a key preventative action against lung cancer.

For additional information on radon and radon reduction in homes, please visit the SDHU (https://www.sdhu.com/health-topics-programs/environment/air-quality/radon) or Health Canada (http://www.hc-sc.gc.ca/ewh-semt/radiation/radon/index-eng.php) websites.



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Message from the Medical Officer of Health (page 1)

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2 Public health perspective: https://www.sdhu.com/changing-workplaces-review-speakers-notes-for-dr-penny-sutcliffe

3 Sign the online petition: http://15andfairness.org

Suspected concussions (page 3)

4 SCAT3: http://bjsm.bmj.com/content/47/5/259.full.pdf

5 Child-SCAT3: http://bjsm.bmj.com/content/47/5/263.full.pdf

6 PPM 158: http://www.edu.gov.on.ca/extra/eng/ppm/158.pdf

7 OPHEA Concussion Guidelines: http://safety.ophea.net/concussion-protocols

Dieting and death: 2, 4-dinitrophenol (DNP) (page 6)

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Putting radon on the radar (page 10)

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705.522.9200
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