Message from the Medical Officer of Health

I am very pleased to share with you our 2015 summer issue of the Advisory. Living in the north allows us to enjoy and experience four very unique and individual seasons each year. And with each change in the weather as our days go from shorter to longer comes changes in local public health issues specific to our region.

In this issue, we’ll once again revisit the effects of extreme heat exposure. When the mercury rises certain members of our population are at risk. In this issue we’ll discuss who is most vulnerable and what health care partners and local leaders are doing to keep everyone safe.

With spring showers come May flowers, but by June and July – poison ivy and other noxious plants like Giant Hogweed are starting to appear. We’re sharing an article with some tips for patients that extend beyond the traditional saying, "Leaflets three; let it be".

As well, the Health Unit has been working with Laurentian University and Better Beginning, Better Futures on a project that tries to shed some light on the life and perspectives of teen mothers. With that, there is also information regarding preconception I hope you’ll find useful.

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

I wish you all the best and please enjoy a safe and healthy summer.

Sincerely,

Dr. Penny Sutcliffe, Medical Officer of Health
The heat is on

Burgess Hawkins, Environmental Health

Extreme heat events are an increasing concern in Ontario.

As the climate changes, the frequency, intensity, and duration of these events are expected to increase. Since 2010, eight Heat Advisories and one Heat Alert have been issued in the City of Greater Sudbury.

Exposure to extreme heat can lead to illnesses such as heat exhaustion and heat stroke. Individuals at greatest risk for heat-related illness include those with chronic and pre-existing conditions, the elderly, infants and children, those who exercise vigorously or work outdoors, people on certain medications, and those who live in social isolation, are marginally housed, or are homeless. Very frequently, conditions that contribute to vulnerability overlap and place those affected at higher risk for heat-related illness.

Access to cooling is needed to prevent heat-related illness

For some, finding the opportunity to keep cool during an extreme heat event is not difficult. For many others, however, barriers exist related to low-income, age (that is, the elderly), and social isolation. This can be associated with a lack of air conditioning, lack of shelter, fewer options to keep hydrated, and limited access to cooling centres.

The City of Greater Sudbury and the SDHU have collaborated to develop a Hot Weather Response Plan (HWRP). The HWRP is intended to alert those most at risk of heat-related illness when hot weather conditions are either imminent or currently exist and to take precautions to prevent illness. At predetermined thresholds, the HWRP is activated, which in turn triggers community supports and public education related to prevention of heat-related illness.

For more information on how to prevent a heat-related illness, please visit www.sdhu.com or Health Canada at www.hc-sc.gc.ca.

Prepare for the upcoming summer season by completing the web-based program, "Extreme Heat Events" at www.extremeheat.ca.

This program is accredited by The College of Family Physicians of Canada and the Ontario Chapter for up to 2 Mainpro-M1 credits.

The HWRP is triggered based on the following criteria:

1. **HEAT ADVISORY**
   Humidex of 36°C for two days

2. **HEAT ALERT**
   Humidex of 40°C for two days or 36°C with Smog Alert

3. **EXTREME HEAT ALERT**
   Humidex of 45°C for two days or 40°C with Smog Alert
What patients should know about sunscreen and tanning

Mélanie Martin, Health Promotion

Whether exposure is acquired by natural conduction (via the sun) or by artificial means (using tanning equipment), the result is unchanged – ultraviolet radiation (UVR) is considered carcinogenic to humans and everyone regardless of age, race, or gender must exercise caution and protect their skin in order to reduce their risk of developing skin cancer.

When a patient presents to the office, take the opportunity to debunk myths about sunscreen and tanning.

Myth
Tanning creams and sprays protect skin from UVR.

FACT
Artificial bronzers do not protect the skin from UVR as they do not contain sun protection factor (SPF). Individuals still need to exercise sun safety and apply a sunscreen with a SPF of 30 or higher.

Myth
A little sunscreen will go a long way.

FACT
Most people apply only enough sunscreen to get protection equivalent to approximately one third of the labelled SPF, far below the density that is required to provide adequate SPF protection. Using 35 mL of product per body application is required at least every two hours and more often during swimming or heavy perspiration.

Myth
A base tan will protect the skin from burning.

FACT
Any change in skin colour from UVR is a sign of skin damage.

Myth
The sun is the best source of vitamin D . . . the longer the better.

FACT
There are no studies to determine whether UVB-induced synthesis of vitamin D can occur without increased risk of skin cancer. Eating according to Canada’s Food Guide and supplementation, when appropriate, are the healthiest ways to obtain adequate levels of vitamin D.

What Can You Do?

• Encourage patients to cover up, seek shade and wear sunscreen when outdoors, especially when the UV index is greater than 3.
• Discuss the dangers of unprotected sun exposure and the hazards of artificial tanning with patients.
• Inspect skin for suspicious moles and encourage patients to scan their bodies for skin changes according to the ABCDE’s of malignant melanoma on a monthly basis.

Skin Cancer Prevention Act

In May 2014, the Skin Cancer Prevention Act came into effect in Ontario, prohibiting the use of artificial tanning services for individuals under 18 years of age. Under this Act, those younger than 18 years are no longer permitted to access artificial tanning services for UV related treatments, even with the consent/prescription of a primary health care provider.
Improving maternal and infant health outcomes
Nicole Stewart, Clinical and Family Services

New preconception health care tool

Preconception health refers to the health of “all individuals” during their reproductive years, whether they are planning a pregnancy or not. North American data shows that 50% of pregnancies are unplanned (Filner & Zolna, 2011).

By the time a woman discovers she is pregnant, crucial fetal development has already taken place and when she has her first prenatal appointment, most organs have developed. Increasing preconception health knowledge, health behaviours, and health maintenance among all individuals prior to conception would lead to a decrease in the number of preterm births, low birth rates, congenital anomalies, as well as infant and maternal mortalities (World Health Organization, 2013).

About the tool . . .

The Centre for Effective Practice in partnership with the Ontario College of Family Physicians has recently developed a preconception health care tool for primary care providers. This tool is to support primary care providers in integrating preconception health topics into discussions with patients of reproductive age.

• It includes external Canadian resources for both health care providers and patients.
• It can be used in either an electronic or hard copy format.
• Primary health care providers can use the Ontario Health Insurance Plan (OHIP) billing code for individual care counselling (K013) for time spent using the tool with patients.

For more information about this tool, to view a short instructional video, or to download a copy go to www.effectivepractice.org/preconception.

Check out the video for information about the tool, how it was developed, and how primary care providers can use it in their practice.
Exclusion criteria for gastroenteritis cases at child care settings

Jon Groulx, Environmental Health

Gastroenteritis outbreaks in child care settings occur frequently in our community and worldwide. The increased person-to-person contact and the presence of a population (children) without good hygiene practices increase the risk of transmission of infectious diseases in these settings. These outbreaks continue to occur and to control them; childcare settings require the development of effective infection control programs.

The Health Unit aims to reduce the impact of gastroenteritis outbreaks in child care settings and the community at large through assisting these settings before, during, and after an outbreak to minimize illness, and hospitalization and prevent spread in the community.

One important aspect of an effective infection prevention and control program to prevent outbreaks of gastroenteritis is surveillance, early identification, and the strict exclusion of cases (children and staff) until at least 48 hours after symptoms have resolved in order to prevent disease spread when the pathogen is not known.

It is well documented that cases of gastroenteritis can remain infectious and pathogens can persist and shed in feces well after symptoms subside. The period of communicability depends on the specific pathogen causing infection.

Exclusion of symptomatic children and staff for 48 hours after symptoms have resolved has been documented as an effective intervention in outbreaks of E. coli O157:H7, shigellosis, norovirus and for managing diarrhea. Based on this evidence, the Health Unit requires staff and children at child care settings experiencing symptoms of gastroenteritis (two or more episodes of vomiting and/or diarrhea within a 24 hour period) be excluded from participating in child care settings until 48 hours after symptoms resolve. This is best practice for infection prevention and control in Ontario and is the standard exclusion criteria in all child care settings in the province. Further exclusion and testing can be required and is determined by the Medical Officer of Health based on an individual risk assessment of a known pathogen, the case, and the setting.

The Health Unit is asking clinicians to be mindful of the exclusion criteria mentioned above when treating cases of both staff and children excluded from a child care setting when providing recommendations to them or their guardians of when they can resume work or participation in child care settings.

Questions? Ask a public health inspector

Call the Health Unit at 705.522.9200 and ask to speak to a public health inspector.
Those at particular risk from noxious plants are:

- Anyone spending time in areas where the plants are found
- Outdoor workers
- Children

To reduce risk of exposure to noxious plants:

- Individuals should be able to recognize giant hogweed and poison ivy
- Wear long sleeves and pants

"Leaflets three; let it be."
Poison Ivy

Poison ivy is probably responsible for more cases of phytodermatitis in Canada than any other plant. Poison ivy is widespread in Southern Ontario and reaches north as far as Cochrane and Kenora.

“Leaflets three; let it be.”

Poison ivy is characterized by groups of three leaflets, their shape varying greatly in shape and size and edges varying from smooth to toothed.

All parts of the plant contain a poisonous substance, urushiol, which causes irritating inflammation, itching and blistering of the skin. About 50-60% of people exposed to poison ivy are allergic to this substance and will experience a reaction.

The toxin can contaminate clothes, boots, tools, and pets and may be easily transferred to the hands and the face and to other persons who have not been directly exposed at all.

Most reactions to poison ivy can be treated at home. Medical attention should be contacted in the case of the following symptoms:

- Trouble breathing or swallowing
- Swelling involving eyelids
- Rash on face or genitals
- Rash covers most of your body
- Nothing seems to ease the itch

For a list of other toxic plants visit the Ontario Poison Centre factsheet Plant Safety
Preconception Health Care involves identifying potential physical, genetic, psychosocial, environmental, and behavioural risk factors for adverse pregnancy outcomes, and reducing those risks prior to conception through counselling, education, and intervention. Preconception Health Care focuses on health promotion and illness prevention for every reproductive age. It is an important opportunity for primary care providers to improve maternal and infant outcomes, as the critical period for fetal development often occurs before prenatal care begins. Each of the preconception topics below should be addressed with every individual of reproductive age on an on-going basis.

### REPRODUCTIVE LIFE PLAN:
- **Ask all individuals of reproductive age, “Would you like to have a child in the next year?”**
  - **Yes**: LMP:
  - Discuss family planning and conception.
  - If positive pregnancy test, discuss options for prenatal care and refer accordingly.
  - If negative pregnancy test, provide information and support for contraception.
- **No**: Discuss contraception options.
- **Not sure**: Choosing Wisely Tool.

### REPRODUCTIVE HISTORY:
A detailed reproductive history should be obtained for all individuals.

- **Gravida (G):**
- **Abortions (A):**
- **Full-Term (T):**
- **Living Children (L):**
- **Premature (P):**

**Details:**
- Inquire about previous pregnancies:
  - Preterm Birth
  - Stillbirth
  - Miscarriage
  - Caesarean Birth
  - Congenital Anomalies
  - Gestational DM
  - Uterine Anomalies
  - High/Low Birth Weight
  - Other anomalies

### SEXUAL HEALTH:
All individuals should be counselled about safer sexual practice.

- **Screen:**
  - Chlamydia
  - Syphilis
  - Trichomoniasis
  - Gonorrhea
  - HSV (if lesions)

### CHRONIC MEDICAL CONDITIONS:
Optimize management for the following diseases, as suboptimal control or treatments can increase risk for adverse maternal and/or infant outcomes.

- **Medications:**
  - Potentially teratogenic medications should be changed to safer options. Women should be counselled not to stop prescribed medications without consulting with their provider.
  - Recommend folic acid 5mg daily prior to conception and for 12 weeks after conception for women taking folate antagonists (e.g., methotrexate, sulfonamides, and antiepileptics).

- **Screen for teratogenic medication use:**
  - Prescribed Medications
  - Over-the-Counter Medications
  - Complementary and Alternative Therapy (herbal, natural, weight loss, athletic products or supplements, etc.)

- **Screen for family history of mental health issues:**
  - Bipolar Disorder
  - Mood Disorder
  - Schizophrenia
  - Counsel women with mental health diagnoses of risks of pregnancy and relapse. Strategize management.
  - Stabilize/optimise mood and anxiety level; discuss risks and benefits of medications.

- **Provide brief intervention and provide appropriate referrals:**
  - Inform women of available patient resources and Smokers’ Helpline 1-877-513-5333.
  - Consult Canadian Smoking Cessation Guidelines.
  - Counsel women with tobacco addictions of risks of pregnancy. Counsel and relapse. Strategize management.
  - Recommend an extra 35mg of vitamin C daily for smokers.

- **Provide brief intervention and provide appropriate referrals:**
  - Inform women of available patient resources and Drug and Alcohol Helpline 1-800-565-8663.
  - Consult drinking guidelines.

### MEDICATIONS:
- Human teratogenicity risk is unknown for the majority of medications. Use caution when prescribing for women of reproductive age. Consult Motherisk Helpline.
- Asthma: Delay conception until good control is achieved.
- Cancer: All individuals with cancer should be counselled regarding the potential effects of treatment on fertility and informed of options to preserve fertility, if desired, and referred appropriately.
- Diabetes: Increased risk of birth defects can be mitigated with good preconception glycemic control. Encourage contraception for those without good control. Folic acid 5mg daily prior to conception and for 12 weeks after conception. ACE-Is and statins are contraindicated. Estrogen-containing contraception options should be avoided for those with DM >20 years or target end-organ damage.
- HIV: Transmission risk to fetus is ~2% with antiretroviral therapy. Efavirenz is contraindicated. Antiretroviral drugs may interfere with hormonal contraceptive methods. Refer to specialist.
- Hypertension: Increased risk for adverse fetal and maternal outcomes. Assess for target-end organ damage in those with long-standing hypertension. Alternatives to ACE-Is are recommended in women of reproductive age. Avoid estrogen-containing contraception options for women with severe hypertension.
- Inflammatory Bowel Disease: Counsel women to delay conception until disease is in remission. Conception during active episode increases risk of miscarriage, premature delivery, still birth, or low birth weight.
- Phenylketonuria: Encourage maintenance of low phenylalanine level during reproductive years and especially prior to conception.
- Renal Disease: Encourage optimal control prior to conception, including normal BP. Use alternative to ACE-Is. Consult with specialist.
- Seizure Disorder: Discuss potential pregnancy outcomes related to seizures and seizure medications. Take folic acid 4-5mg daily prior to conception and for 12 weeks after conception. Lowest dose of one medication recommended, when possible. Valproic acid, lithium, and topiramate are contraindicated. Many antiepileptic medications may interfere with hormonal contraceptive methods.
- Systemic Lupus Erythematosus, Rheumatoid Arthritis, and other Autoimmune Diseases: Delay conception until good control is achieved. Discuss natural history of disease during/after pregnancy. Cyclophosphamides, Methotrexate, and Leflunomide are contraindicated. Avoid estrogen-containing contraception options in women with SLE and positive/unknown antiphospholipid antibody. Discuss use of aspirin and heparin with rheumatologist for women with SLE and antiphospholipid antibody syndrome.
- Thromboembolic Disease: Counsel women that risk for VTE during pregnancy and postpartum is increased, and many will require anticoagulation treatment. Coumadin is contraindicated. Avoid estrogen-containing contraceptive options.
- Thyroid Disease: Achieve euthyroid state prior to conception. Women with hypothyroidism should increase their dose of levothyroxine by 30% as soon as pregnancy occurs. Radioactive iodine is contraindicated. Screen all women for CBC and TSH, prior to conception.

### TOBACCO USE:
Encourage all individuals to be tobacco free prior to conception.

- **Provide brief intervention and provide appropriate referrals:**
  - Inform women of available patient resources and Smokers’ Helpline.
  - Consult Canadian Smoking Cessation Guidelines.
  - Counsel women with tobacco addictions of risks of pregnancy. Counsel and relapse. Strategize management.
  - Recommend an extra 35mg of vitamin C daily for smokers.

### ALCOHOL AND OTHER SUBSTANCE USE:
Encourage all individuals to be substance free prior to conception.

- **Provide brief intervention and provide appropriate referrals:**
  - Inform women of available patient resources and Drug and Alcohol Helpline.
  - Consult drinking guidelines.
Prevent & Promote

IMMUNIZATIONS: All individuals of reproductive age should have their immunization status reviewed and updated as required.

- Varicella
- HPV
- Tetanus, Diphtheria
- Measles, Mumps
- Hepatitis B

INFECTIONIOUS DISEASES: Prevention and screening of these infectious diseases are important for those of reproductive age.

- HIV
- Hepatitis B
- Tuberculosis
- Parvovirus
- Varicella

FAMILY AND GENETIC HISTORY:

- Obtain 3 generation family history to identify:
  - Congenital malformations, birth defects
  - Developmental delays, learning disabilities
  - Ethnicity
  - Genetic disorders
  - Family history of a genetic condition

Screen:

- Screen for HIV
- Screen if High Risk: Hepatitis C, Tuberculosis

MANAGE

- Provide all immunizations required prior to conception with the exception of the flu vaccine, which can be administered before and/or during pregnancy.

NUTRITION:

- Recommend folate 400-1000µg daily (through folic acid or supplement) and folate rich diet, prior to conception and throughout pregnancy.
- Recommend calcium 1000mg daily through food and/or supplements.
- Recommend essential fatty acid rich diet, including omega 3 and 6.
- Recommend avoiding raw/undercooked meat and fish and unpasteurized milk and cheese.
- Recommend vitamin D 600 IU (15 µg) supplementation daily.
- Recommend folic acid 0.4-1.0mg daily.
- Recommend calcium 1000mg daily through food and/or supplements.
- Recommend folic acid 0.4-1.0mg daily.
- Recommend essential fatty acid rich diet, including omega 3 and 6.

WEIGHT STATUS:

Obesity (BMI >30)

- Underweight (BMI <18.5)
- Overweight (BMI = 25-29.9)
- Obese (BMI >30)

PHYSICAL ACTIVITY:

- Recommend at least 150 minutes of moderate to vigorous aerobic physical activity per week, in episodes of 10 minutes or more.
- Add muscle and bone strengthening activities at least 2 days per week. See the Canadian Physical Activity Guidelines.

PSYCHOSOCIAL STRESSORS:

- Identify stressors and discuss strategies to reduce impact.

ENVIRONMENTAL EXPOSURE:

- Recommend avoiding fish high in mercury. Choose “light” versus “white” tuna and limit consumption to 4 x 2.5oz/week, and avoid barracuda, marlin, pickerel, tilapia, tuna steak and any raw fish or shellfish.
- Convey tips for reducing exposures in the home.

ENVIRONMENTAL EXPOSURE:

- Inquire about exposures to:
  - Solvents (ask about use)
  - Pesticides
  - Pragmatic
  - Metals (lead, mercury)
  - Pollutants
  - Gases
  - Radiation

References and additional resources available at: www.effectivepractice.org/preconception

March 2015 (revised)
Teen mothers’ concerns and potential solutions for any barriers that limit them in their mothering

Suzanne Lemieux, Resources, Research, Evaluation and Development

“So that’s what being a teen mom is to me I guess. Because I was told I was a failure, and I was told I was going nowhere and I was told that I wasn’t responsible enough to be a mom because of my age. But I guess I am proving everyone wrong”. (Julie)

The Health Unit and Laurentian University, in partnership with Better Beginnings Better Futures, recently completed a qualitative study seeking to better understand the experiences of teen mothers living in Sudbury. Research participants provided insights into pregnancy and postpartum experiences, the challenges of motherhood, their strengths and resilience, and the needs of teen mothers.

Challenges identified by the teen mothers relate to things like time management, relationship issues, financial burdens, health problems, difficulties with education, stigma and stereotypes, and difficulty accessing services.

Findings from this study indicate that there is a need to provide adequate and scientific information regarding pregnancy and child rearing to teen mothers. Findings also point to the need to raise awareness and educate the public and health care professionals about the importance of not stigmatizing teen mothers. In fact, the majority of teen mothers stressed that public awareness is necessary to reduce stigma and stereotypes associated with teen mothers in the community. It was noted that public awareness will make it easier to access various services designed for not only teen mothers but all mothers. The participants identified the need for welcoming and non-judgemental services and service providers, and recommended education for professionals to learn how to eliminate unprofessional behavior and language.

One teen mother recommends: “I think they need to keep it professional. I don’t care if you think people shouldn’t have babies young or what not but that is completely your opinion right? I’m coming to you for help and you should be there to help me, not to judge me”. (Laura)

Together we have created a short video titled “We Are Teen Moms”, highlighting the stigma that these young women face from the general public and service provider in our community. Please view the video at the following link https://youtu.be/00uknp09UbU.

For more information, please call the Health Unit 705.522.9200, ext. 400.
Weight bias in health care
Mélanie Martin, Health Promotion

Individuals affected by obesity are vulnerable to weight stigma and discrimination. Numerous studies have documented harmful weight-based stereotypes, that individuals affected by overweight or obesity are viewed as lazy, week-willed, unsuccessful, unintelligent, lack self-discipline, have poor willpower and are non-compliant with treatment\textsuperscript{12}.

These negative stereotypes lead to prejudice and unfair treatment in many areas of everyday life, including healthcare. Some providers may unintentionally communicate subtle forms of weight bias which can negatively impact patients’ care and future utilization of health care services\textsuperscript{13}.

The evidence is clear; stigmatizing those affected by excess weight will not motivate them to adopt healthier behaviours, in fact, it can do just the opposite.

Some consequences of weight bias\textsuperscript{12,14}
- Avoidance of physical activity
- Depression
- Increased stress
- Negative body image and self-esteem
- Social rejection
- Unhealthy weight control practices

Can we discuss your weight?
Use the 5As of Obesity Management below

Research has shown that some physicians seeing clients affected by overweight or obesity\textsuperscript{12,14}
- Spend less time with the patient
- Engage in less discussion
- Are reluctant to perform preventative screening
- Provide interventions, education, and treatment less often

**THE 5 As**

ASK for permission to discuss weight and explore readiness
ASSESS obesity related risks and 'root causes' of obesity
ADVISE on health risks and treatment options
AGREE on health outcomes and behavioural goals
ASSIST in accessing appropriate resources and providers
Evidence also indicates that people who experience weight-based discrimination in health care\textsuperscript{12,14}:

- Are reluctant to seek care
- Cancel or delay appointments
- Put off important preventative health services

Providing care for individuals or families affected by excess weight or obesity can be challenging. It's imperative to find strategies to help ensure sensitive, and compassionate care that is free of weight bias.

Consider improvements in the following areas:

**Workplace environment\textsuperscript{15,16}**

- Display size-friendly, weight neutral artwork, magazines and patient education material in waiting rooms.
- Ensure availability of appropriately sized equipment (e.g., blood pressure cuffs, gowns, examination tables, scales, speculums, step stools, etc.).
- Provide seating that can accommodate people of all sizes (e.g., armless chairs).

**Communication**

- Ask permission to discuss weight.
- Ask permission to weigh clients, weigh clients in a private setting, and record weight without comment.
- Use an effective framework, such as the 5As of Obesity Management (Canadian Obesity Network) to help you address weight with respect and focus discussions on behaviours and behaviour change.
- Use desirable terms when discussing weight or ask client which terminology they prefer.

**Personal attitudes, practices and beliefs\textsuperscript{15,16}**

- Reflect on, acknowledge and address personal weight bias.
- Educate yourself and staff about the issues that affect weight, such as genetic influences and the effects of dieting on physical and mental health.
- Don’t make assumptions about clients affected by obesity.
- Explore all causes of the presenting problem, not just weight.

Recognizing that weight bias exists and implementing strategies to reduce this form of bias can help to prevent negative health care experiences for clients.

Additional information and training related to weight bias is available through the Rudd Center.
References

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