Zika Virus:

Summary of Public Health Agency of Canada rapid risk assessment (April 20, 2016)

• An epidemic of mosquito-borne Zika virus (ZIKV) is occurring in many parts of the Americas and several other tropical/subtropical areas. The virus causes no or relatively mild illness in most adults. However, it is now known that Zika virus is a cause of more severe outcomes such as congenital abnormalities in the fetus and Guillain Barré Syndrome (GBS) in infected people.

• The mosquito implicated as the primary vector (Aedes aegypti) of ZIKV does not occur in Canada. Other implicated vectors (e.g., Aedes albopictus) are not known to be established in Canada. There also are substantial barriers to long-term maintenance of ZIKV in Canada. Hence, the risk of establishment of ZIKV in Canada is considered negligible. Local epidemic or endemic transmission is assessed as very unlikely (Very Low likelihood, with high confidence).

• Travel-related ZIKV infections have been reported among Canadian travellers. For the individual, it is estimated that travel to an affected area is associated with a medium chance of infection with ZIKV (Medium likelihood, with high confidence).

• Sexual transmission, from symptomatic male travellers to a sexual partner (female or male) who has not travelled, has been reported. Because the likelihood of infection with ZIKV is considered low, so, too, is the likelihood of transmission via this route (Low likelihood, medium confidence). However, if a man becomes infected with ZIKV, the likelihood of transmission to his sexual partner is assessed as Medium (low confidence).

• For most infected travellers, ZIKV will have little or no health impact (Low impact, with medium confidence).
Sexual health history taking: an important component of clinical care

Discussing the sensitive issue of sexual health with patients can seem awkward, irrelevant, time-consuming or challenging, but it is an essential component of comprehensive patient-centred care.

There are several reasons to be proactive and routine in taking a sexual health history: [1]

- It is common for a person’s sexual behaviours and partners to change over time.
- There is a significant association between sexual health and overall emotional/psychological and physical health.
- Morbidity and mortality associated with sexually transmitted and blood borne infections (STBBIs) is significant, including HPV and related sequelae such as cervical cancer.
- Sexual dysfunction is very common and can be an indicator of organic or psychiatric disease as well as a side effect of medication.
- Sexual history may explain health problems such as depression or hepatitis B infection.
- An opportunity for primary prevention through immunization, contraception and patient education.

How to begin: [2]

Put the patient at ease – by integrating regular sexual history taking into your practice, you can let the patient know that you ask such questions of all patients as part of their routine care. You can also reassure them of the confidential nature of your discussion. If asked why you need to ask these questions, emphasize the importance of sexual health to emotional, psychological and physical health. These questions can help guide a conversation about ways to protect themselves from unexpected or undesirable outcomes.

Ask screening questions, keeping in mind that there is no single question that is always correct or suitable to ask. Some examples of screening questions include: Have you been sexually active in the last year? Do you have sex with men only, women only, or both? How many people have you had sex with in the past six months?

Althof et al. point out that “while the primary goal of sexual history taking is to obtain as much information as possible to assess the relevant factors contributing to the sexual problem, establishment and maintenance of the therapeutic alliance is upper most. Empathy and rapport should never be sacrificed in the service of obtaining data.” [3]
Determine if the patient needs a more detailed risk assessment – while report of multiple sex partners and male patients who have sex with men should generally lead to more detailed questions, keep in mind that even monogamous partners may need counselling and/or testing if it is possible that their partner is not monogamous. All patients, regardless of their sexual history, should be asked if they have any concerns about keeping themselves sexually safe and healthy.

**Keys to success when taking a sexual history:** [2]

- Avoid asking questions in a way that implies there is a right or wrong answer or that are judgemental (for example, “you don’t sleep around, do you?”). Instead, be specific about how behaviours can influence health.
- Do not let your beliefs interfere with providing the best care. Even if you disagree with the behaviours of your patients, you can still offer them options.
- Be cognizant of your body language and facial expressions. You may be sending unintended messages through your reactions.
- Be aware of the wide range of behaviours, activities and expressions. Although they may surprise you, try to remain open and neutral.
- Avoid making assumptions based on age, appearance, gender, sexual orientation, relationship status etc. Our assumptions are often wrong.
- How a person identifies his or her sexuality (gay, lesbian, straight) does not always tell you with whom they have sex and to whom they are attracted.
- Remember that sexual preferences and behaviours often change over time.
- Seek out opportunities to learn strategies that improve your comfort in discussing sexual health with all your patients.

**References:**


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**Caring for Syrian children**

New Brunswick has welcomed 1,138 government-assisted Syrian refugees since the federal government announced last fall that Canada would welcome more than 25,000 Syrian refugees. [1]

Syrian refugees became permanent residents when they arrived in Canada and were immediately eligible for provincial health coverage. [2] In addition to provincial coverage through Medicare, they are covered for one year under the Interim Federal Health Program. For refugees and their families, this program covers supplemental services such as dental care, vision care and prescription medications. [3]

Syrian refugees have lived through a humanitarian crisis and are now adjusting to life in Canada and New Brunswick. The trauma they have experienced in their homeland affects their health; so, too, does the process of integrating into a new culture. [4]

Culture can be defined as a pattern of ideas, customs and behaviours shared by a people or society. Culture affects health as it influences perceptions of health and illness, beliefs about the cause of disease, approaches to health promotion and how people seek help. [4] It is important to remember that health professionals are also influenced by their culture and that they bring their cultural perspectives to encounters with newcomers. [4]

Children can also struggle with adapting and integrating into Canadian culture. Of the refugees who have arrived in New Brunswick 673 (59 per cent) are children 17 and younger. [1] When working with newcomer children, adolescents and their families,
health-care professionals should explore the child’s or family’s beliefs and values and ask questions that assess socio-cultural dimensions, views of health, acculturation, identity and religion. [4]

While culture influences health and health behaviours, we should not assume that children and youth from a particular ethnic or cultural group are culturally homogeneous; there is significant heterogeneity within almost any group. [4]

*Caring for Kids New to Canada* is a resource for those who work with immigrant and refugee children, youth and families. It was developed by the Canadian Paediatric Society and has evidence-based information and resources on various aspects of child development with a particular focus on newcomer children. [5] This website has a comprehensive section on culture and health including tools and resources that can be used with newcomers.

- Caring for Kids New to Canada: [http://www.kidsnewtocanada.ca/](http://www.kidsnewtocanada.ca/)

### References:

1. Department of Post-Secondary Education Training and Labour

### Extreme heat events and health risks

Climate change poses risks to the health of Canadians and New Brunswickers. [1-2]

As global warming increases, so do the health risks to the population. Extreme heat events (EHEs) present a major threat. EHEs resulted in the death of:

- 70,000 people in Europe [3], 15,000 in France alone, in 2003; [4]
- 55,000 people in Russia in August 2010; [5]
- 1,100 people in India in 2015; and
- 2,000 people in Pakistan during the same year.

EHEs are also a concern in Canada.

In British Columbia, an EHE in 2009 resulted in 156 excess deaths as temperatures reached 34.4°C [6]. In Montreal, an EHE in 2010 caused almost 110 excess deaths in a short period. [7]

New Brunswickers have also been affected. Between 1996 and 2005, rising temperatures in Fredericton (and in other Canadian cities) have increased the relative daily mortality rate (Figure 1).

**Figure 1: Relative mortality in Canadian cities with increasing temperature**

![Figure 1: Relative mortality in Canadian cities with increasing temperature](http://www.kidsnewtocanada.ca)

Due to climate change, the number of days with a maximum temperature exceeding 30°C is projected to triple in most cities in Canada by the end of the century (Figure 2). [1]
El Niño

El Niño is a natural two-year meteorological phenomenon that happens without regularity, but its impact has been observed on the weather around the world. The occurrence of EHEs during the second year of this phenomenon has been noted around the world. 2016 happens to be the second year of the second largest El Niño on record. Therefore, there are concerns that EHEs might be more numerous and intense during the summer of 2016.

Heat Alert Response System (HARS)

The consequences of morbidity and mortality of EHEs on individuals depends on the preparedness of the community to respond. Actions taken by Public Health to manage the risks, and the protective measures taken by various organizations and those who are vulnerable, can reduce the impact of EHEs.

A Heat Alert Response System (HARS) has been successfully tested and implemented in Fredericton for a number of years. The purpose of HARS is to reduce risks by directing the community response during EHEs. HARS alerts the public and participating agencies. It also provides individuals with information and other resources that help them take protective actions before and during an EHE. Due to the threat of climate change, and drawing from the experience and the success in Fredericton, the Office of the Chief Medical Officer of Health is working to expand HARS to other cities in New Brunswick.

Risk factors

There are a number of well-known risk factors associated with mortality during EHEs (Table 1).

Population groups most vulnerable and at risk:

- young children and older adults;
- those who are chronically ill;
- socially isolated; and
- those taking certain types of medications.

Table 1: Risk factors for heat related mortality [1]

<table>
<thead>
<tr>
<th>Physiological factors:</th>
<th>Social factors:</th>
</tr>
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<tbody>
<tr>
<td>Cardiovascular conditions</td>
<td>Age</td>
</tr>
<tr>
<td>Pulmonary conditions</td>
<td>Hypertension</td>
</tr>
<tr>
<td>Renal illness or failure</td>
<td>Diabetes</td>
</tr>
<tr>
<td>Neurological disease</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Social isolation</th>
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<tr>
<td>Lower socio-economic status</td>
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Taking some types of medications such as:

- Antidepressants
- Selective serotonin reuptake inhibitors
- Lithium
- Anti-Alzheimer’s agents
- Anti-Parkinson’s agents

Advice for practitioners

Practitioners can help by identifying patients who are vulnerable to extreme heat and discussing the health effects with them. It would be beneficial to include family members in the discussion, as they would play a key role in caring for the patients during times of extreme heat. To help practitioners, a list of medications that increase the health risk to heat, as well as a list of simple actions to take to minimize the effect of heat, is available online at:

http://www2.gnb.ca/content/dam/gnb/Departments/h-s/pdf/en/HealthyEnvironments/Medicationsandtheheat%20.pdf
Prescription opioid use, nonmedical opioid use and public health in New Brunswick

Opioid therapy can be effective in managing severe and chronic pain when used as directed and in appropriate doses, but there are also non-negligible risks of opioid addiction, diversion and overdose.

Concerns about the increasing number of reported opioid-implicated deaths, notably a spike in deaths involving fentanyl or other synthetic opioids in Ontario and western Canada, have led to identified gaps and opportunities for opioid surveillance and monitoring, enriched prescriber education and enhanced public awareness.

The World Health Organization (WHO) estimates 69,000 people die each year worldwide from opioid overdose, with the number increasing over time in part due to the growing use of opioids in the management of chronic non-cancer pain. [1]
The problem of opioid-related mortality is most acute in North America but with considerable population and regional variations. [2] It has been suggested that a “culture of consumerism” in medicine may be one of the factors behind the growing use of prescription opioids in Canada and the United States. The number of opioid prescriptions by physicians has increased since the 1990s concurrently with the approval and marketing of several new opioid formulations. [3]

Findings from surveillance of prescription opioids: global overview

Much has been written about prescription opioid misuse, but the evidence base is fragmented and complex. Existing data are typically limited to descriptive prevalence statistics, and more literature has been generated on harms of opioid therapy than on the need for prescription opioids at the population level or on the effects of long-term use of opioids in treating chronic non-cancer pain. [4,5] Public drug plan data indicate significant increases in prescription opioid claims in Canada and New Brunswick in recent years. However, these increases were largely in line with the growth rate for all prescription drugs. [6,7]

Scientific assessment characterizing the risk of prescription opioid misuse or abuse is sparse. [5] While no general population studies have examined the motives for misuse of opioids, studies among specific subgroups have pointed to pain relief among the most commonly reported reasons. Getting high, experimentation, relieving tension and helping to sleep were also frequently mentioned. [3] Data from the “New Brunswick Student Drug Use Survey 2012” revealed past-year misuse of prescription pain relievers by 11 per cent of students in middle and high schools, with the rates similar by sex and across the seven health regions. [8] While factors such as product availability, prescription practices and individual predispositions influence substance use, media reporting may enhance the popularity of psychoactive substances, including prescription opioids. [2,9]

There is little systematic evidence about the sources of misused opioids across Canada. Anecdotal and ad-hoc references list physicians, other healthcare workers, family, friends, “double doctoring”, alteration of both prescription and over-the-counter formulations, street drug markets, Internet purchases, theft and prescription forgery as the typical ways by which people who abuse these drugs obtain them. Some clustering of family physicians who prescribe opioids frequently has been observed in some provinces. [10] A study of regular illicit opioid users surveyed through community-supported outreach indicated prescription opioids came more often from the medical system, either directly or indirectly, than from illicit production and distribution. [11]

Relative burden of prescription opioid use/misuse in New Brunswick

Different population health indicators, each with their strengths and limitations, generate insights into the epidemiology and impacts of prescription opioid use—for example, indicators of the levels and costs of opioid use, drug overdoses, mental health and behavioural disorders due to opioid misuse, or other risks to health and society such as injury and other harms as a result of uncontrolled compulsive use of opioids.

For one, fentanyl-implicated deaths in New Brunswick represented 0.8 per cent of all fentanyl-implicated deaths reported nationally between 2009 and 2014; this was considerably less than the province’s 2.6-per-cent share of deaths from all causes recorded nationally during the same period. [7,12] Generally speaking, other available data (albeit limited) suggest the relative burden of prescription opioid use/misuse may be less acute in New Brunswick than elsewhere in Canada (Figure 1). [7]

Primary care practitioners are reminded to review the latest evidence and practice guidelines for safe and effective use of opioids for chronic non-cancer pain:

http://nationalpaincentre.mcmaster.ca/opioid and http://www.cdc.gov/drugoverdose/prescribing/resources.html
Policy and practice implications

While opioid-related harm is widely cited as an important public health issue, there is no universal solution and more research is needed. [13]

There have been no systematic evaluations to date on recent policy measures implemented at the federal and provincial levels, such as electronic prescription monitoring programs and delisting of oxycodone formulations from provincial drug benefit formularies. [14] The administration and scope of prescription monitoring programs vary considerably across Canada and the United States, and there is limited supporting research evidence of their overall value in significantly reducing harm, misuse and addiction. [15]

Despite a 10-fold increase in provincial drug plan spending on methadone to treat opioid dependence in New Brunswick during the last decade [7], evaluations of established methadone treatment programs to improve functional outcomes (e.g., return to work) or to reduce harms (e.g., public safety) at the population level remain wanting. [16,17]

Collaborative approaches and knowledge exchange are needed to enhance surveillance and population health research to inform prevention of opioid misuse and associated harms. In parallel with the increased attention in North America on prescription opioid abuse, WHO estimates that about 80 per cent of the world’s population lacks access to opioid analgesics for therapeutic use, and it advocates for a balance between medical and regulatory requirements for controlled substances. [18]

Family physicians and other primary care practitioners are reminded not to routinely prescribe opioids, and they are advised to conduct comprehensive assessments of their patients when considering long-term opioid therapy:

- thoroughly understand the pain problem and the patient’s circumstances (e.g., taking benzodiazepines) to make an informed decision about opioid use and dosage as a reasonable treatment choice after optimizing non-opioid therapies;
- consider screening tools to help identify patients at risk of opioid misuse or addiction;
- manage expectations by setting function-improvement and pain-reduction goals with the patient;
• discuss with the patient and monitor for risks, benefits, adverse effects and medical complications;
• assess opioid effectiveness, cognition/psychomotor ability or aberrant behaviours – and adjust, taper or discontinue opioid treatment as required;
• select and implement the best treatment option for patients addicted to opioids; and
• take precautions when issuing opioid prescriptions, working collaboratively with pharmacists to reduce prescription fraud. [19,20]

To ensure opioids are used safely, drug prescribers and dispensers, researchers, patients, families and other health system and community stakeholders all have an important role to play.

References

7. New Brunswick Department of Health, “Prescription opioids and population health.” New Brunswick Health Indicators [forthcoming].
A shot of prevention

Harm reduction is a public health strategy that reduces the harmful consequences and health risks associated with certain high-risk behaviours, including casual sex and drug use. When applied to substance abuse, harm reduction accepts that a continuing level of drug use (both licit and illicit) in society is inevitable and focuses on reducing adverse consequences such as infections and incarceration. It emphasizes the measurement of health, social and economic outcomes as opposed to the measurement of drug consumption.

Needle distribution services (NDS) are an example of a harm reduction strategy. They consist of a non-judgmental approach that focuses on providing people involved in injection drug use with the skills, knowledge, resources and support they need to reduce the risk of harm to themselves and others. These services provide resources to prevent the spread of HIV, hepatitis C, bacterial infections and other blood-borne pathogens. This harm reduction activity is recognized by public health experts as an effective way to reduce blood borne-infections by reducing needle sharing among injection drug users. NDS also enhance public safety by ensuring the proper disposal of used needles and syringes.

In New Brunswick, NDS are managed and delivered by the three community-based AIDS organizations: AIDS Saint John Inc.; SIDA/AIDS Moncton Inc.; and AIDS-New Brunswick Inc. (Fredericton, Miramichi sites). Since 1999, the Department of Health has been a partner, supporting the community-based NDS.

In addition to providing harm reduction supplies (syringes, alcohol, swabs, condoms and drug paraphernalia), NDS provide education, support and linkages with primary health care and social services by providing referrals and advocacy for this vulnerable population. There is no limit to the amount of supplies a client can obtain; clients can also pick up supplies for others. There is no fee for the supplies or services offered. Personal information is not obtained from service users; however, a code name with their year of birth is necessary for the collection data on distribution of resources.

Profile: SIDA/AIDS Moncton Inc.

Roxanne R.
Needle Distribution Coordinator

SIDA/AIDS Moncton’s NDS serves a variety of people dealing with addictions and recreational use of drugs. While many of our clients grew up with addiction and poverty, others start using after being prescribed opiates for pain, come from well-off families, are “functional addicts” holding down jobs, are body builders grabbing supplies for steroid use or are diabetics unable to afford to buy their supplies. In addition to the needles, pipes and other harm reduction supplies handed out, we collect and distribute toiletry items for those in need.

We do a great deal of on-the-spot education about the proper use of resources, vein care and infectious diseases and their treatments, using educational resources created and distributed by professional agencies. If requested, we are able to provide referral services and support to individuals. Only 30 per cent of our clients are female, but women stop in more frequently than men to access supplies or support. We do not have a “typical day”; some days are quiet and others are very busy. Many people pop in and out in less than one minute while some stay to vent or talk about issues that are bothering them. Our vulnerable clients trust us and have a relationship...
with us – they will come to us for things unrelated to our work plans at times, but we work with them and our community partners the best we can to meet more than just their basic needs. The work we do is not always warm and fuzzy, and acquiring donations can sometimes be challenging, but it is fulfilling.

What difference does a 15-cent needle make? It represents prevention of virus and bacterial infections; builds trusting relationships; improves access to community services; or places a roof over someone’s head. We are in the business of creating an inclusive, healthy community for those who seek our help.

References:

Communicable diseases statistics at a glance:

The New Brunswick Communicable Disease 2014 Annual Report

Do you want to know the latest incidence rates for sexually transmitted and blood borne infections in New Brunswick (NB)?

Have you ever wondered about the most common serotypes for invasive meningococcal disease and other vaccine preventable diseases or how enteric, food and waterborne infections are distributed among the different health zones in NB?

The Communicable Disease Control Branch in the Office of the Chief Medical Officer of Health has recently published the 2014 NB Communicable Disease Annual Report. The report highlights the major trends and epidemiology of confirmed cases of reportable communicable diseases in NB in the period from 2009 to 2014. This report is used to inform public health policy, program planning and evaluation i.e. “Epi for action”.

In 2014, a higher than expected number of acute hepatitis B cases (9 cases) was reported, with an incidence rate of 1.2 per 100,000 population, while the 5-year average count was 5 cases with an incidence rate of 0.6 per 100,000 population.

Seven out of the 9 cases were reported in the Moncton area (Zone 1). Amongst these cases, the median age was 36 years old; 6 were males, 1 was female and all the cases reported having unprotected sex. Amongst the male cases, 4 identified themselves as men having sex with men (MSM). As a result of this cluster, the eligibility criteria for receiving publicly funded hepatitis B vaccine were extended in 2015 to include the MSM population.

Ann R. Harling (1930-2016)

Ann Harling was synonymous with Public Health in New Brunswick. She spent most of her nursing career in the Department of Health, Public Health Division. She volunteered for various public health organizations. She was a great mentor and friend to many.

Ann was born in Campbellton on October 3, 1930, the daughter of Charles and Leila Tyler. After graduating from high school in Campbellton, Ann (née Tyler) studied nursing at the Montreal General Hospital and graduated in 1952.

She travelled to Pakistan, where she worked as a field nurse.

Upon her return to New Brunswick, she began her public health career and specialized in maternal and child health. She worked to establish general and specialized pediatric clinics in several communities so that children who required specialized medical care could receive it close to home. Pediatricians from New Brunswick and Halifax travelled on a monthly or quarterly basis to see children at the clinics. Ann retired in 1996.

Ann was very active in national and international public health activities. She participated in international public health study tours to Indonesia, China and Israel. She especially enjoyed the tour to China, led by the then-federal health minister Monique Bégin.

Ann received many awards for her work. In 1995, at the Canadian Public Health Association (CPHA) national conference in Charlottetown, P.E.I., she was presented with the highest award for the organization, the R.D. Defries Award. It is given annually to a CPHA member for outstanding contribution to public health and individuals who substantially supported the objectives of CPHA. This award carries with it an automatic honorary life membership in CPHA.

Ann had previously been given an honorary life membership in the New Brunswick-Prince Edward Island Branch of the CPHA for her outstanding work. When she retired from the NB-PEI board of directors in 2012, Ann had been a board member for 40 years, most of them as secretary-treasurer.

The New Brunswick public health community was so enriched for having known, worked with and had fun with this wonderful knowledgeable woman. Her presence will be missed, but her public health spirit will live on in us.

Ann R. Harling passed away on January 18, 2016. She was 85 years old.