Northwest Territories Health and Social Services

January 28, 2016

To: Health Centres; Public Health Units; Medical Clinics

RE: Emergence of Zika virus infections

Zika virus has recently been introduced to the Americas after spreading to the French Polynesia and other Pacific islands since 2013, outside of its previous usual geographical range in Africa and south-east Asia. All persons not previously exposed are at risk of becoming infected.

Outbreaks have been reported in many countries in the Americas and it is likely that outbreaks will occur in countries that have not yet reported confirmed cases. This is a rapidly evolving situation and particularly relevant to Canadians travelling south during our winter season. The European Centre for Disease Prevention and Control has a list of countries around the world that have reported local transmission of confirmed Zika virus infections in the past nine months. See http://ecdc.europa.eu/en/healthtopics/zika_virus_infection/zika-outbreak/Pages/Zika-information-travellers.aspx.

Dengue, chikungunya and Zika virus infections are transmitted by day-biting *Aedes* mosquitoes that are present throughout tropical and sub-tropical areas of the Americas and elsewhere. The *Aedes* mosquitoes that carry these diseases are ***not*** present in Canada, or continental Chile. Transmission of Zika virus, as well as dengue and chikungunya, is not expected to occur in the NWT or elsewhere in Canada due to absence of competent mosquito vectors.

Dengue, chikungunya and Zika virus infections present with similar symptoms, but certain symptoms suggest one disease or another:

- Dengue usually presents with higher fever and more severe muscle pain. There can be complications when the fever breaks: attention should be paid to warning signs such as bleeding.
- Chikungunya presents with higher fever and more intense joint pain, affecting the hands, feet, knees, and back. It can disable

people, bending them over so that they cannot walk or perform simple actions such as opening a water bottle.

- Zika does not have clear characteristic features, but most affected patients have skin rashes and some have conjunctivitis. Please see attached info-graphic for more information about Zika virus infection; this info-graphic and others on prevention and treatment are available in poster format at http://www.paho.org/hq/index.php?option=com_content&view=article&id=11554&Itemid=41673&lang=en

All travellers should be reminded to practice mosquito avoidance day and night.

While a new association between Zika virus infection and microcephaly in infants born to infected women has yet to be proven causal, it is strong enough that health care providers should inform pregnant women planning on travelling to tropical and sub-tropical areas in the Americas about this risk. The Public Health Agency of Canada (PHAC) is advising pregnant women and women considering becoming pregnant to defer travel. See Public Health Notice – Zika Virus at http://www.phac-aspc.gc.ca/phn-asp/index-eng.php

An increase in Guillain-Barré syndrome (GBS) has been observed in areas with Zika virus outbreaks. However, a direct causal relationship has not been established between Zika virus infection and GBS.

The most important thing is to avoid mosquito bites to prevent infection with Zika, dengue or chikungunya. There is neither treatment nor vaccines available. Pregnant women and women of reproductive age should follow the same recommendations as all travelers:

- Wear light-coloured, long-sleeved, loose fitting, tucked-in shirts, long pants, shoes or boots (not sandals), and a hat; in tick infested areas, you can also tape the cuffs of your pants or tuck them inside your socks, shoes or boots.
- Use insect repellents containing DEET or Icaridin as directed by the manufacturer on exposed skin
- If you need to apply both sunscreen and repellent with DEET, apply the sunscreen first and let it soak into the skin for about 15 minutes, then apply the repellent.
- Stay in a well-screened or completely enclosed air-conditioned room.
- Sleep under a bed net, preferably treated with insecticide
- Apply a permethrin insecticide to clothing and other travel gear for greater protection

See http://travel.gc.ca/travelling/health-safety/insect-bite for more details on preventing mosquito bites.

Pregnant women who travel to areas where Zika virus is circulating should mention this during their prenatal check-ups. Healthcare professionals should also ask their pregnant patients about their travel history.

Management of returning travellers suspected of having a diagnosis of Zika virus infection is supportive. Though there are no specific antivirals for use, maintenance of good hydration reduces the risks of complications. Laboratory diagnosis of symptomatic travellers requires serum and urine samples. PCR tests are useful in the first 3-5 days after the onset of symptoms and serological tests detect the presence of antibodies but are useful only after five days. Requisition must include date of onset of symptoms, date sample taken and travel history.

For further information about Zika virus, see:
Pan American Health Organization
http://www.paho.org/hq/index.php?option=com_topics&view=article&id=427&Itemid=41484&lang=en

Public Health Agency of Canada
http://www.phac-aspc.gc.ca/phn-asp/2016/zika-eng.php

Sincerely,

Dr. André Corriveau,
Chief Public Health Officer


ZIKA
VIRUS
What is Zika?
Zika is a virus transmitted by the Aedes mosquito, which also transmits dengue and chikungunya
Zika can cause:
Mild fever
Conjunctivitis
Headache and joint pain
Skin rash
2
7
Onset is usually 2-7 days after the mosquito bite
1 in 4 people with Zika infection develops symptoms
A very small number of people can develop complications after becoming ill with the virus
How is Zika infection prevented?
To prevent mosquito bites that transmit Zika:
Cover skin with long-sleeve clothing, trousers and hats
Use insect repellent as recommended by health authorities
Sleep protected by mosquito nets
At least once a week, empty, clean, turn over, cover and/or dispose of containers that can hold water, such as tires, buckets and flower pots, both inside and outside of dwellings to eliminate mosquito breeding sites
Use screens or mosquito nets in windows and doors to reduce contact with mosquitoes
Controlling the breeding sites of Aedes mosquitoes reduces the likelihood of transmission of Zika, chikungunya, and dengue
Is there a treatment?
There is no vaccine or specific drug against this virus.
Only pain and fever can be treated
Patients with symptoms of Zika infection should:
Get plenty of bed rest
Drink plenty of liquids
Take medicine to relieve fever and pain
Use mosquito nets when napping
Wear clothing that covers arms and legs
If symptoms worsen or complications develop, see a doctor immediately
Pan American Health Organization
World Health Organization
Americas
#zika
#FightAedes
#ZikaVirus
www.paho.org/zikovirus