Info-MADO

Newsletter of the Nunavik Department of Public Health on Notifiable diseases

VOL. 2, NO. 1
AUGSUT 2014

Call for vigilance — Travelers infected by Chikungunya Virus (CHIK)

Written by Mario Brisson,
Medical Advisor for Infectious Disease file and Environmental Health
Nunavik Department of Public Health

CALL FOR VIGILANCE

This call for vigilance is intended for the physicians and nurses working on the front line in the Nunavik health network as well as the people in charge of the regional Health Centre laboratories.

There is currently an unprecedented outbreak of the Chikungunya virus (CHIK) in the Caribbean and in a few Latin American countries. Visitors returning from Haiti and the French West Indies were recently found to be infected with the virus.

RECOMMENDATIONS

1. **Arrive at a diagnosis of infection by the CHIK virus in patients who**

   - travelled to an endemic area or region touched by an epidemic (see the list of countries in the Americas at http://ais.paho.org/phip/viz/cha_cd_vectorborndiseases.asp) in the two weeks prior to the appearance of symptoms;

     AND

   - have clinical signs of an acute fever (≥ 38.5 °C) AND arthralgia not associated with any other medical problem.

2. **Obtain two serums (acute and convalescence phases) for analysis**

   A first serum (acute phase) must be taken as soon as possible following the onset of symptoms and sent to the LSPQ (Laboratoire de santé publique du Québec). (Do not wait until the second sample is drawn):

   - On the request, specify "Chikungunya virus test", along with the symptoms and the date of their onset;
   - You can add "Dengue virus test", seeing as it can be impossible to distinguish the two illnesses in a clinical setting;
   - A second serum sample (convalescence serum) must be taken 14 to 21 days after the first one .

   Laboratory analyses are carried out at the National Microbiology Laboratory (NML). Conditions for sending in samples are provided on the LSPQ Website: www.inspq.qc.ca/lspq/repertoire-des-analyses (French only).

   Even if the Chikungunya virus infection is not included on the list of notifiable diseases, please report any possible cases requiring lab testing to the public health physician on call. A list of these professionals can be obtained from the Nunavik Department of Public Health.

BACKGROUND

On July 25th, 2014, the LSPQ apprised us of 18 confirmed cases of the Chikungunya virus among Québec residents. In addition, around 30 analyses are actually being carried out at the National Microbiology Laboratory in Winnipeg. These cases were confirmed by IgM and PRNT, and originate from the following sociosanitary regions of Quebec: 2, 3, 6, 13, 14, 15 and 16.

P.O. Box 900
Kuujjuaq, Québec J0M 1C0
Phone: (819) 964-2222 / 1-844-964-2244
Confidential fax: 1-866-867-8026 / (819) 964-2814

NUNAVIK REGIONAL BOARD OF HEALTH AND SOCIAL SERVICES
REGIE REGIONALE DE LA SANTÉ ET DES SERVICES SOCIAUX NUNAVIK

Chikungunya is a viral disease transmitted by bites from infected female mosquitoes. The insects involved are generally *Aedes aegypti* and *Aedes albopictus*, two mosquitoes that can also transmit other viruses, particularly dengue. According to entomological surveillance data, the two vectors identified as being primarily responsible for the disease's transmission in humans (*Aedes albopictus* and *Aedes aegypti*) are not currently found in Québec. As such, the risk that Québecers could develop the illness is associated with travel to regions where the Chikungunya virus is present. There is currently no specific treatment for this infectious disease.

Signs and symptoms

Chikungunya is characterized by a sudden onset of fever, often accompanied by arthralgia. Other common signs and symptoms include myalgia, headaches, nausea, fatigue and a skin rash or flareups. The arthralgia is often debilitating, but goes away after a few days or weeks. The majority of afflicted persons fully recover, but in some cases, arthralgia can persist for numerous months and even years.

Transmission

The primary means of transmission of the disease is through a bite from an infected mosquito. The risk of a person transmitting the virus through a blood, organ or tissue donation is greater in the first week of the infection, as this is when viremia is at its apex. Unlike the West Nile virus, humans can be a reservoir for the Chikungunya virus and as such, a source of infection of mosquitoes that could in turn contaminate other humans. A few rare cases of intra-uterine and intra-partum transmission have been documented.

Incubation

The disease generally manifests itself between 3 and 7 days after a bite from an infected mosquito, but the incubation period can last anywhere from 2 to 12 days.

Websites for obtaining more information

- http://travel.gc.ca/travelling/health-safety/diseases/chikungunya
- http://www.inspq.ca.ca/pdf/bulletins/santevoyage/ActualitesSanteVoyage-Vol15No1.pdf (French only)
- http://www.phac-aspc.gc.ca/tmp-pmv/notices-avis/notices-avis-eng.php?id=120
- http://wwwnc.cdc.gov/travel/notices/watch/chikungunya-saint-martin

STATUS REPORT (AS OF JULY 25TH, 2014)

The Chikungunya virus has been identified in around 40 countries across Asia, Africa and Europe. In December 2013, the WHO reported the first locally transmitted case of the Chikungunya virus in the Americas, in St-Martin to be more precise. There is currently a major outbreak of the disease in the Caribbean.

Central America: 9 confirmed cases and 1,775 possible cases (some of which could be dengue).

Caribbean: 4,926 confirmed cases and 434,811 possible cases (some of which could be dengue).

United States: All of the identified cases of Chikungunya virus in the United States between 2006 and 2013 were contracted outside of the country. As of July 22nd of this year, however, 197 cases of locally acquired Chikungunya were reported in Florida (N = 2), Puerto Rico (N =193) and the United States Virgin Islands (N = 2).

SOURCES

- Call for Vigilance: "Voyageurs infectés par le virus chijungunya", Agence de la santé et des services sociaux de Montréal, July 31, 2014.
- E-mail distributed to the health network, MSSS, July 29, 2014