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То:	General Practices, Pharmacists, After-Hours Centres and Emergency Departments in the greater Wellington and Wairarapa regions
From:	Dr Jill McKenzie
Date:	20/01/2016
Title:	Public Health Alert: National Health Advisory - Zika Virus Information Update

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# National Health Advisory Zika Virus Information Update

#### **ADVISORY SUMMARY:**

Please find below the wording of an update to the Ministry of Health zika virus webpage of this travel related disease, particularly addressing the risks of infection in pregnant individuals. A similarly phrased travel advisory will be posted on the TravelSafe website in the near future.

The following information on Zika virus infection is provided as it is an emerging disease internationally. As such no particular guidance has previously been available in New Zealand. Please note that Zika is a notifiable disease in New Zealand. Before testing for Zika other more serious diseases need to be excluded including measles, rubella, and dengue.

#### Zika virus

Zika virus infection is a mild febrile viral illness transmitted by mosquitoes. The mosquitoes that are able to transmit Zika virus are not normally found in New Zealand, therefore Zika should only be considered in people who have recently travelled overseas.

#### **ADVISORY CONTENT:**

- About Zika virus
- Symptoms of Zika virus infection
- Zika virus and pregnancy
- Further information
- Laboratory testing

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#### **About Zika virus**

Zika virus is a flavivirus, closely related to dengue. Outbreaks of zika virus have previously been reported in tropical Africa, Southeast Asia and more recently in the Pacific Islands. Beginning in 2014 zika virus outbreaks have occurred throughout the tropical and sub-tropical areas of the western hemisphere, as far north as Mexico and Puerto Rico.

Countries where zika virus has been found can be seen here: http://www.cdc.gov/zika/geo/index.html.

Because zika, dengue and chikungunya viruses are transmitted by mosquitoes mostly active during daytime, it's important that all travelers visiting affected areas continue to take protective measures to prevent mosquito bites throughout the day.

Zika virus infection is symptomatic in only about one out of every five cases. When symptomatic, zika infection usually presents as an influenza-like syndrome, often mistaken for other arboviral infections like dengue or chikungunya.

New Zealand currently has 15 mosquito species. The mosquito species (*Aedes* sp.) that are able to spread Zika virus are not normally found in New Zealand however they are found in many other countries around the world.

A national mosquito surveillance programme has been operating for some years at New Zealand's international points of entry (ports and airports). The ports and airports are monitored regularly throughout the year to ensure the early detection of any exotic mosquitoes.

You can find more information about mosquitoes on the Ministry of Health website <a href="http://www.health.govt.nz/your-health/healthy-living/travelling/avoiding-bug-bites-while-travelling">http://www.health.govt.nz/your-health/healthy-living/travelling/avoiding-bug-bites-while-travelling</a> and also tips on how to avoid mosquito bites while travelling. <a href="http://www.health.govt.nz/your-health/healthy-living/environmental-health/pests-and-insects/exotic-mosquitoes">http://www.health.govt.nz/your-health/healthy-living/environmental-health/pests-and-insects/exotic-mosquitoes</a>

Zika virus infection is notifiable in New Zealand as an arboviral disease.

#### Symptoms of Zika virus infection

- low-grade fever (between 37.8°C and 38.5°C)
- arthralgia, notably of small joints of hands and feet, with possible swollen joints
- myalgia
- headache, retro-ocular headaches
- conjunctivitis
- cutaneous maculopapular rash
- post-infection asthenia which seems to be frequent.

More rarely observed symptoms include digestive problems (abdominal pain, diarrhoea, constipation), mucous membrane ulcerations (aphthae), and pruritus.

Zika virus infection causes a mild disease (with the possible exception in pregnant women, as discussed below) and, other than notification, no particular action is required. However, as Zika infection may cause a rash that could be confused with more serious diseases such as measles or dengue, these more serious diseases do need to be ruled out.

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Diagnosis of Zika will first and foremost be by exclusion, based on symptoms, travel history and exclusion of more serious diseases including measles, rubella and dengue.

The incubation period is typically 3–12 days. There is no specific therapy for zika virus infection and acute symptoms typically resolve within 4-7 days.

In French Polynesia, after a local zika virus outbreak in 2013 and 2014 an increase in autoimmune and neurological diseases has been observed (73 cases, 42 of them being Guillain-Barré Syndrome, in a population of about 270,000). There is no proven link at this stage other than this temporal sequence. The simultaneous circulation of dengue serotype 1 and 3 viruses may also play a role.

#### Zika virus and pregnancy

There are concerns that pregnant women who become infected with zika virus can transmit the disease to their unborn babies, with potentially serious consequences. Reports from several countries, most notably Brazil, demonstrate an increase in severe foetal birth defects and poor pregnancy outcomes in babies whose mothers were infected with zika virus while pregnant.

Additional international research is necessary and ongoing to determine the link between zika virus and foetal damage.

Until more is known, the Ministry of Health recommends that women who are pregnant or plan to become pregnant in the near term consider delaying travel to areas with zika virus present. If travelling in zika infected areas, women who are pregnant or plan to become pregnant should consult with their healthcare provider and take all precautions to avoid mosquito bites, including:

- Wear long-sleeved shirts and long pants
- Use insect repellents containing DEET, picaridin, oil of lemon eucalyptus (OLE), or IR3535. Always use as directed.
- Insect repellents containing DEET, picaridin, and IR3535 are safe for pregnant and nursing women and children older than 2 months when used according to the product label. Oil of lemon eucalyptus products should not be used on children under 3 years of age.
- If you use both sunscreen and insect repellent, apply the sunscreen first and then the repellent.
- Use <u>permethrin-treated</u> clothing and gear (such as boots, pants, socks, and tents).
- Use bed nets as necessary
- Stay and sleep in screened-in or air-conditioned rooms.

If you are pregnant and develop a rash, red eyes, fever, or joint pain within 14 days of travel to a zika virus infected country, please consult your health care provider and let them know your travel history.

This information will be updated as more research becomes available.

#### **Further information:**

Further information on Zika virus infection is available at:

<u>Zika virus infection complicated by Guillain-Barré syndrome – case report, French Polynesia, December</u> 2013 - Eurosurveillance (www.eurosurveillance.org)

Zika Virus Outside Africa - Centers for Disease Control and Prevention (www.cdc.gov)

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<u>Factsheet for health professionals - European Centre for Disease Prevention and Control</u> (www.ecdc.europa.eu)

### **Laboratory testing:**

Diagnosis of Zika will first and foremost be by exclusion, based on symptoms, travel history and exclusion of more serious diseases including measles, rubella and dengue.

If laboratory testing is required, the following instructions should be followed:

- 1. Order test from local laboratory:
- o IgM, IgG and PCR for Zika virus
- o acute serum (taken within 5 days of symptom onset) and convalescent serum (2–3 weeks later) should be taken. The two samples are important to rule out false positive tests due to cross reactivity with similar viruses such as Dengue
- 2. Provide overseas travel details and clinical history including the onset day and patient's DHB. Onset date is extremely important to ensure that the most appropriate test is performed
- 3. The local laboratory will forward samples to ESR who will arrange testing at an Australian Arbovirus Reference Laboratory (no labs in NZ currently test for Zika virus).

Note: there is currently no particular action expected following Zika virus confirmation, there may be a longer turnaround time for these tests.