

# Health Information Regarding Zika Virus Disease



## FREQUENTLY ASKED QUESTIONS ON ZIKA VIRUS DISEASE Last updated 31 Aug 2016

#### 1 What is Zika?

Zika virus disease is caused by the Zika virus (first identified in 1947), which is spread to people primarily through the bite of an infected mosquito (*Aedes aegypti* and *Aedes albopictus*). The infected person may usually show mild symptoms lasting up to a week, and many people (up to 80% of infected individuals) do not have symptoms. However, Zika virus infection during pregnancy can cause a serious birth defect called microcephaly and other severe brain defects.

#### 2 How do people get infected with Zika?

Zika virus is primarily transmitted to people through the bite of an infected *Aedes* mosquito, which also transmits chikungunya, dengue and yellow fever. A pregnant woman infected with zika can pass the virus to her fetus during pregnancy or around the time of birth. Also, an infected person can pass the virus to his or her partners through sexual contact.

#### 3 What are the symptoms of zika virus disease?

Zika virus usually causes mild illness. Symptoms most commonly include a mild fever or rash, appearing a few days after a person is bitten by an infected mosquito. Although many will not develop any symptoms at all, others may also suffer from conjunctivitis (red eye), muscle and joint pain, headache and feel tired. The symptoms usually last from 2 to 7 days. There is no known difference in the symptoms of infected pregnant and non-pregnant women.

#### 4 What serious health problems can result from getting Zika?

Many people infected with Zika will have no symptoms or mild symptoms that last several days to a week. However, Zika infection during pregnancy can cause a serious birth defect called microcephaly and other severe fetal brain defects. Current research suggests that Guillain-Barre

syndrome (GBS), an uncommon sickness of the nervous system, is strongly associated with Zika; however, only a small proportion of people with recent Zika virus infection get GBS.

#### 5 How can people prevent Zika?

The best way to prevent Zika is to protect yourself and your family from mosquito bites as it is primary mode of transmission. Women who are pregnant or planning to become pregnant and their sexual partners should take extra care to protect themselves from the bite of mosquitoes that transmit Zika.

- Wear long-sleeved shirts and long pants
- Sleep under a mosquito bed net if air conditioned or screened rooms are not available or if sleeping outdoors.
- Use registered repellents according to label instruction.
- Environmental cleanliness is important by taking preventive measures against mosquito
  breeding sites such as identifying and eliminating potential mosquito breeding sites, by
  emptying, cleaning or covering containers that can hold even small amounts of water, such as
  plastic containers, buckets, flower pots and tyres.
- Construction sites are known hotspots for mosquito breeding therefore extra care should be taken by construction workers and construction sites.

#### 6 How is Zika diagnosed?

It is recommended to consult with your doctor to diagnose Zika if you are symptomatic and having recent travel to one of the affected countries. Your doctor will ask you about recent travel and symptoms you may have, and collect blood or urine to test for Zika or similar viruses, if appropriate.

#### 7 How can Zika virus disease be treated?

Currently, there is no specific treatment or vaccine for Zika virus. The symptoms of Zika virus disease can be treated with supportive treatment such as common pain and fever medicines, rest and plenty of water. If symptoms worsen, people should seek medical advice.

#### 8 What should I do if I am travelling to Zika-affected area?

Travelers should stay informed about updated list of countries affected by Zika virus, and consult their local health or travel authorities if they are concerned.

During your trip, follow personal protective measures to prevent mosquito bites such as wearing long covered clothing, applying insect-repellent, and sleeping under mosquito nets or in rooms with air conditioning or screens. They should seek medical attention promptly if they become unwell.

Even if you do not feel sick, you should also protect yourself from mosquito bites till 3 weeks after returning from the trip in order to prevent infecting mosquitoes that could spread the virus to other people.

If you feel sick after your return from your trip, please consult with your doctor or health centre to find out if you need to be tested for the Zika virus.

You should adopt safer sexual practices, e.g. consistent and correct use of condoms during sex, or consider abstinence for at least eight weeks after your return. However, if you are a male partner of a pregnant woman you should practice safer sex practices throughout her pregnancy.

Pregnant women are advised to speak to their doctor prior to travel to areas of ongoing Zika virus transmission; pregnant women whose sexual partners live in or travel to areas with Zika virus transmission should ensure safer sexual practices or abstain from sex for 6 months after his return from an affected country.

#### 9 Which countries are currently affected?

As of 25 August 2016, 70 countries and territories have reported evidence of mosquito-borne Zika virus transmission since 2007. 53 of these countries and territories have reported evidence of mosquito-borne Zika virus transmission since 2015. Brazil has reported the largest number of cases, estimated at over 1 million infections in 2015.

Sporadic cases of local Zika virus infection have been detected in several countries in Southeast Asia, including Cambodia, Indonesia, Philippines, Malaysia, Vietnam, Lao People's Democratic Republic and Thailand previously.

As of 31 August 2016, Singapore reported 86 locally transmitted cases of Zika virus. Please check the WHO website (<a href="http://www.who.int/emergencies/zika-virus/situation-report/18-august-2016/en/">http://www.who.int/emergencies/zika-virus/situation-report/18-august-2016/en/</a> for the updated list of affected areas.

### What should pregnant women who have to travel or have recently traveled to an area with Zika do?

If travel to an area with Zika during pregnancy is essential, it is important to prevent mosquito bites, and follow recommended precautions against getting Zika through sex.

If they must travel to affected areas, they should seek advice from their doctor and undertake strict precautions against mosquito bites. If they are unwell, they should seek medical attention immediately. They should consult their doctor after return to Brunei for advice.

Pregnant women who have recently traveled to an area with Zika should talk to their doctor about their travel, even if they do not feel sick. Pregnant women should see a doctor if they have any Zika symptoms during their trip or within 2 weeks after traveling.

#### 11 Can mothers with Zika infection breastfeed their baby?

Zika virus has been detected in breast milk but there is currently no evidence that the virus is transmitted to babies through breastfeeding. WHO recommends exclusive breastfeeding for the first 6 months of life.

#### 12 How is the Ministry of Health preparing for the possible occurrence of Zika in Brunei?

The Ministry of Health continues to strengthen our capacity to prevent, detect and control Zika virus infections in Brunei Darussalam.

#### Prevention of Zika Virus infection

- The Vector Control Unit conducts routine surveillance, environmental inspection and environmental management at known mosquito hotspots; controlling, eradicating mosquito breeding sites through the Integrated Vector Management process complementary to environmental sanitation by members of the public.
- Risk communication & community engagement such as available public information on MOH
  website (www.moh.gov.bn), MOH Facebook and other social media sites, Talian Darussalam 123;
  and have issued press statements and press conferences highlighting the key role of community
  engagement.

#### Detection of Zika Virus infection

- All clinicians are reminded to assess suspected patients with travel history within the last 12 days to to the affected countries according to case definitions.
- Laboratory testing algorithm for Zika virus infection was developed to confirm the diagnosis.

#### Control of Zika Virus infection

- Readiness for public health management of Zika virus infection such as epidemiology investigation;
   surveillance and contact tracing of travel companions and household contacts; and outbreak control standard procedures if there is importation of the disease in the country.
- Since the infection can be acquired through mosquitos which are naturally present in the community, the Ministry urges the public to practice cleanliness of environment; elimination of mosquito breeding grounds and personal protection measures to prevent mosquito bites.

[The information above is an adaptation from the World Health Organisation (WHO)]



### HEALTH ADVICE FOR BRUNEI RESIDENTS TRAVELLING TO ZIKA-AFFECTED COUNTRIES Last updated 31 Aug 2016

- 1. The World Health Organisation (WHO) has not issued any specific trade and travel restrictions with respect to travelling to countries affected by Zika virus disease (see Annex 1 for list of countries affected by Zika). People continue to travel between the affected countries and territories for a variety of reasons. The best way to reduce risk of disease is to follow public health travel advice.
- 2. Based on ongoing risk assessment, Brunei residents travelling to countries affected by Zika are advised to take the following precautions with respect to the disease:
  - Appropriate measures should be taken to reduce the risk of becoming infected, including by preventing mosquito bites.
  - Travellers can protect themselves from mosquito bites by wearing long-sleeved shirts and trousers, applying insect-repellent, and sleeping under mosquito nets or in rooms with wiremesh screen to keep out mosquitoes.
  - Zika virus can also be sexually transmitted. Therefore, travellers to practice safe sex or abstain from sex during their stay in areas with ongoing Zika virus transmission, and for at least eight weeks after their return. If men experience symptoms of Zika virus disease, they should adopt safer sex practices or abstain from sex for at least six months
  - Travellers returning from areas with ongoing Zika virus transmission, should not donate blood for at least four weeks after departure from the area.
  - Pregnant women are advised to avoid unnecessary travel to areas of ongoing Zika virus outbreaks. If travel is deemed necessary, they should speak to their clinician to consider the risk to themselves and the unborn child.

- Women who inadvertently become pregnant or discover they are pregnant in or shortly after returning from areas with ongoing Zika virus transmission should contact their health care providers or visit their nearest health centre immediately upon return.
- Travellers are advised to be aware of the symptoms of Zika Virus infection which are mild fever, conjunctivitis, skin rash and muscle aches. If any travellers develop any symptoms of Zika Virus infection, they are advised to seek medical attention immediately.
- Travellers who have recently returned from Zika-affected countries are advised to monitor their
  own health and to look out for any symptoms of Zika for at least 14 days. They should seek
  medical attention if they develop any of the symptoms listed above.

#### 3. With respect to vaccination:

- There is no specific vaccine against Zika virus disease.
- Travellers are advised to be up to date with their routine immunisations. This includes their yearly influenza vaccine.
- Additional vaccination against Hepatitis A, typhoid and yellow fever is also advised.
- Travellers are advised to be vaccinated at least 4 weeks before their date of travel
- Vaccinations can be obtained from the Vaccination Centre, Bandar Seri Begawan Health Centre
   in Ong Sum Ping or the District Health offices during office hours.

Annex 1: List of countries affected by Zika virus disease (as of 18 Aug 2016)

Classification	WHO Regional Office	Country / territory / area	Total
Category 1: Countries with a first reported outbreak from 2015 onwards	AFRO	Cabo Verde; Guinea-Bissau	2
	AMRO/PAHO	Anguilla; Antigua and Barbuda; Argentina; Aruba; Bahamas; Barbados; Belize; Bolivia (Plurinational State of), Bonaire, Sint Eustatius and Saba – Netherlands*; Brazil; Cayman Islands; Colombia; Costa Rica; Cuba; Curaçao; Dominica; Dominican Republic; Ecuador; El Salvador; French Guiana; Grenada; Guadeloupe; Guatemala; Guyana; Haiti; Honduras; Jamaica; Martinique; Mexico; Nicaragua; Panama; Paraguay; Peru; Puerto Rico; Saint Barthélemy; Saint Lucia; Saint Martin; Saint Vincent and the Grenadines; Sint Maarten; Suriname; Trinidad and Tobago; Turks and Caicos; United States of America; United States Virgin Islands; Venezuela (Bolivarian Republic of)	45
	WPRO	American Samoa; Fiji; Marshall Islands; Micronesia (Federated States of); Samoa; Tonga	6
Subtotal			53
Category 2: Countries with possible endemic transmission or evidence of local mosquito-borne Zika infections in 2016	SEARO	Indonesia; Thailand	2
	WPRO	Philippines; Viet Nam	2
Subtotal			4
2015, but without documentation of cases in	AFRO	Gabon	1
	PAHO/AMRO	ISLA DE PASCUA — Chile**	1
	SEARO	Bangladesh; Maldives	2
	WPRO	Cambodia; Cook Islands**; French Polynesia**; Lao People's Democratic Republic; Malaysia; New Caledonia; Papua New Guinea; Solomon Islands; Vanuatu	9
Subtotal Total			13 70

**Note:** MOH Singapore reported its first locally transmitted case of Zika virus infection on 27 Aug 2016. Further cases have been identified since.

# Supporting Documents



# ZIKA VIRUS

#### How is Zika infection prevented?

To prevent mosquito bites that transmit Zika:



Cover skin and wear long sleeve especially during peak feeding times of the mosquito which are during the early morning and late afteroon/evening hours



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.





#zika #FightAedes #ZikaVirus www.paho.org/zikavirus



# ZIKA VIRUS

#### 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



Wear clothing that covers arms and legs



Take medicine to relieve fever and pain



Use mosquito nets when napping



Drink plenty of liquids





If symptoms worsen or complications develop, see a doctor immediately





#zika #FightAedes #ZikaVirus www.paho.org/zikavirus





#### **JOINT PRESS STATEMENT**

## MINISTRY OF HEALTH AND MINISTRY OF DEVELOPMENT

#### ON

#### **MOSQUITO-BORNE DISEASE: ZIKA VIRUS**

- 1. The Ministry of Health and the Ministry of Development of Brunei Darussalam wish to inform the public regarding the prevention of mosquito-borne diseases including the Zika virus infection.
- 2. Latin America and the Caribbean are the main regions that are affected by Zika, however, there are neighboring countries who are also affected by this disease. Alhamdulillah, thus far, there have been no reported cases of Zika Virus infections in Brunei Darussalam.
- 3. Zika Virus infection is caused by a virus carried by the *Aedes* mosquito. The Aedes mosquito is routinely identified in tropical countries including Brunei Darussalam. This species of mosquito often breed in containers that hold stagnant water including empty tins, drip-trays for flower pots, old tyres and rubbish left strewn about. Mosquito breeding increases many-fold after a rainy period. Typically, these mosquitoes are most active in the early morning and late afternoon.
- 4. The Ministry of Health and the Ministry of Development will continue to cooperate in implementing preventive and control measures against the *Aedes* mosquito. These measures include ensuring environmental sanitation, waste management and the use of insecticides (where appropriate) to control the adult mosquito population.
- 5. The aforementioned measures are useful but the most effective measure is for the public to eliminate all mosquito breeding sites. Members of the public should take the following measures:
- Pour out water from the base of flower pots and replace the water inside the pots at least once
  a week. The insides of the flower pots should also be brushed to eliminate any mosquito larvae
  that stick to the walls of the pots.
- Clean out clogged drains to ensure there is no stagnant water.
- All containers that contain water such as bottles, cans, plastic containers and coconut shells must be planted or safely disposed in a covered trash bin.
- Turn over or seal tightly all water storage that are no longer used such as buckets, barrels, etc.
- Boats that are no longer used should be reversed so that water does not stagnate.
- Do not leave old tyres abandoned and exposed to rain water. Puncture out the tyres to prevent water stagnation. A better measure is to remove the old tyres that are no longer used and send to landfills.

- 6. The support and cooperation of all stakeholders is vital. Members of the public must engage fully and share responsibility in taking preventive measures against mosquito breeding.
- 7. The Ministry of Health and the Ministry of Development will continue to work together to implement any necessary measures. For any questions about the Zika virus infection or any mosquito-borne disease, the public can visit the Ministry of Health website at www.moh.gov.bn or call *Talian Darussalam 123*.

- END-

Reference : KK/PR/3

Date : 26 Zulkaedah 1437H / 30 August 2016

#### MOSQUITO-BORNE DISEASE: ZIKA VIRUS

- 1. The Ministry of Health Brunei Darussalam wish to update the public with regards to the recent mass media reports by the Republic of Singapore regarding 41 locally-transmitted cases of Zika virus, as confirmed by the Ministry of Health Republic of Singapore. The Ministry of Health Republic of Singapore also reported that 34 of these cases have fully recovered (information obtained from joint press release by the Ministry of Health Singapore and National Environment Agency Singapore, 28 August 2016).
- 2. Other affected countries with reported widespread transmission of Zika virus come mainly from Latin America and the Caribbean.
- 3. Alhamdullilah, thus far, there have been no reported cases of Zika Virus infections in Brunei Darussalam.
- 4. Zika Virus infection is caused by a virus carried by the mosquito *Aedes Aegypti*, similar to dengue fever and chikungunya. The Aedes mosquito is routinely identified in tropical countries including Brunei Darussalam.
- 5. Most cases of Zika Virus infections do not show any signs or symptoms. However, a small percentage of patients may experience symptoms such as fever, muscle pain, joint pain, headache, conjunctivitis (red eye) and rash. The infection may also be associated with neurological symptoms and microcephaly in newborns.
- 6. There is no specific treatment or vaccine for Zika Virus infection. Treatment is focused on supportive care for the alleviation of symptoms when deemed necessary.
- 7. The Zika Virus belongs to the Flavivirus genus in the Flaviviridae family. It is transmitted from infected to healthy individuals through the bite of the *Aedes* mosquito. Additionally, there is a small risk of transmission through sexual contact.
- 8. Entomological (insect) surveillance has indicated the presence of a native population of *Aedes* mosquito in Brunei Darussalam. This species of mosquito often breed in containers that can hold water such as empty tins, drip-trays for flower pots, old tyres and rubbish left strewn about. It has been found that the breeding of these mosquitoes will increase many-fold after a rainy season. Typically, they are most active in the early morning and late afternoon.
- 9. The Ministry of Health continues to implement measures for monitoring, prevention and control, including conducting entomological surveillance and vector control. Given the ongoing situation in Singapore and the extensive travel between Singapore and Brunei Darussalam, there is a small risk of importation of the virus through an infected individual into the country. Brunei Darussalam's preparedness to manage imported cases of Zika virus is

based on strengthening our capacity to prevent cases, detect cases early and control transmission to prevent an outbreak. This is aligned with the core principles of the International Health Regulations (IHR 2005). Ongoing risk assessment of the emerging situation continues and clear guidelines are in place to ensure that we are prepared to handle introduction of the virus.

- 10. The support and cooperation of all stakeholders is vital. Members of the public must engage fully and share responsibility in preventing outbreaks of Zika virus in Brunei Darussalam by taking preventative measures against mosquito breeding such as:
  - Destroying places where mosquitoes breed and to spend about 10-30 minutes, at least once a week, checking your residence or building, to ensure that the surroundings are free from places where mosquitoes can breed.
  - Ensure that all drains are clean, functioning properly and not blocked.
  - Ensure that all rubbish are disposed of properly and there are none left over that can collect and hold water.
  - Wear long-sleeved clothing and long trousers and avoid wearing dark coloured clothing as dark colours will attract mosquitoes.
  - Use insecticide sprays, mosquito coils or electronic mosquito repellant.
  - Use insect repellant especially for outdoor activities as needed.
- 11. In addition, travellers to affected countries, especially pregnant women, are advised to take all precautionary measures such as described above.
- 12. At this time, the World Health Organisation (WHO) do not advice any travel or trade restrictions with the affected countries, or any screening or isolation of travelers at points of entry. It is however, important that individuals who have visited affected countries or are travelling from the affected countries, who subsequently develop symptoms, are advised to get assessed at the nearest health facility.
- 13. The Ministry of Health will continue to monitor evolving events in collaboration with the World Health Organization (WHO) and will implement any necessary measures, including informing the public of any further developments. For further information questions on the Zika virus and mosquito-borne diseases, the public can visit the Ministry of Health website at www.moh.gov.bn or call *Talian Darussalam 123*.

-END-

Reference: KK/PR/3

Date : 25 Zulkaedah 1437H / 29 August 2016