



衛生防護中心
Centre for Health Protection

Scientific Committee on Vector-borne Diseases
Consensus Statement on Prevention and
Control of Zika Virus Infection

(October 2016)

Zika virus infection (ZVI) continues to emerge and outbreaks have been recorded in Africa, the Americas, Asia and the Pacific. Transmission of Zika virus was first reported in the Americas in 2015 and since then has expanded rapidly and currently over 50 countries or territories are affected globally. The Director-General of the World Health Organization (WHO) convened an Emergency Committee on 1 February 2016 and advised that the recent cluster of microcephaly cases and other neurological disorders reported in Brazil, following a similar cluster in French Polynesia in 2014 constitutes a Public Health Emergency of International Concern.

The Scientific Committee on Vector-borne Diseases (the Committee) met on 16 August 2016 to discuss the latest scientific findings and epidemiological situation of ZVI, the recommendations by the WHO and the current local prevention and control measures. The Committee particularly noted that:

- The geographical distribution of Zika virus is steadily expanding due to global warming, urbanisation and globalisation. Major epidemics of ZVI may potentially occur globally wherever there are suitable environments where mosquitoes can live and breed.
- Due to extensive international travel, Hong Kong has a high risk of importation of cases of ZVI. As asymptomatic infection is very common and mosquito species that could potentially transmit the virus to humans are widely present locally, there is a risk of secondary spread in Hong Kong arising from detected and undetected imported cases.



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- Apart from transmission by infected mosquitoes, Zika virus can be transmitted sexually. It is found in semen, cervical mucus and vaginal fluid and there are now many reports of sexual transmission. It is also found in saliva but whether it can be transmitted through saliva during kissing is unclear. Zika virus can also potentially be transmitted through blood transfusion and possibly through breast feeding.
- Zika virus may also be transmitted from the mother to the fetus causing microcephaly/central nervous system malformations as well as ocular problems, hearing loss and arthrogryposis. The risk is present if infection occurs in any trimester but the peak risk is thought to be at 14-17 weeks. Infection in the third trimester may not be apparent in the baby until months after birth. The Zika congenital syndrome is reported in infants whose mothers had asymptomatic infection.
- There is now scientific consensus that Zika virus can cause Guillain-Barré syndrome (GBS). The incidence of post-ZVI GBS is estimated at 0.24/1,000 infections which is less than the incidence after *Campylobacter jejuni* infection.
- In the absence of a vaccine, mosquito control and the prevention of mosquito bites in at-risk individuals, especially in pregnant women, are the two main strategies to prevent and control ZVI and its complications.
- The Department of Health (DH) has put in place a series of preventive measures to guard against ZVI, which are in line with those recommended by the WHO. In addition, ZVI has been listed as a notifiable infectious disease in Hong Kong under the Prevention and Control of Disease Ordinance (Cap. 599) with effect from 5 February 2016.

The Committee recommends that:

- i. There should be year-round anti-mosquito actions in Hong Kong with cross-sectoral and community participation. Attention should be paid to high risk spots such as boundary control points, cargo terminals, construction sites, illegal dumping grounds, refuse collection points for recycling, etc. The Government should keep abreast of the latest development and explore novel methods/measures of mosquito control if applicable.
- ii. Enhanced vector surveillance should also be maintained.
- iii. Publicity to raise community awareness on prevention and control strategies/measures against mosquito proliferation, such as elimination of mosquito breeding sites should be enhanced.
- iv. Health education on use of appropriate personal protective measures to prevent mosquito bites and risk communication for outgoing and returning travellers to affected areas, especially persons with severe chronic illnesses, immune disorders, pregnant women and women preparing for pregnancy, should be strengthened.

v. For Travel advice:

- Pregnant women and women preparing for pregnancy should not travel to areas of active ZVI transmission.
- Those returning from active areas of ZVI should take precautions against being bitten by mosquitoes for at least 3 weeks after returning.

vi. For prevention of sexual transmission

- Travellers should consider not having sex during travel to affected areas, or else condoms should be used.
- Travellers returning from affected areas should consider abstinence from sex for at least 6 months upon return, or else condoms should be used.
- Pregnant women with sex partners who live in, or who have traveled to, an area of active Zika transmission should use condoms or abstain from sex throughout pregnancy.

- vii. Pregnant women with travel history or possible Zika virus exposure should be evaluated for testing as appropriate at antenatal visit. Possible Zika virus exposure includes travel (within four weeks before conception) to or residence in an area with active Zika virus transmission, or sexual contact (vaginal, oral, anal or sex toys) without a barrier contraception with a partner who has travelled (within prior 6 months) to, or lives in an area with active Zika virus transmission. The testing depends on the gestational age, dates of potential exposure or symptom onset, and the date of specimen collection.
- viii. To prevent transmission through blood transfusion, blood donors returning from areas of ongoing Zika virus transmission should be deferred for blood donation.
- ix. The DH should maintain a high level of alertness, preparedness and response for ZVI, and collaborate with relevant government bureaux/departments to deal with the possible consequences of widespread ZVI in Hong Kong, such as microcephaly, GBS, etc.
- x. Early diagnosis and notification of ZVI are crucial for prompt implementation of public health actions. Hence, healthcare professionals should maintain vigilance and be aware of the possibility that their patients may have ZVI if they have a recent travel history to affected areas. In particular, laboratory testing for ZVI should be considered for patients with compatible symptoms and signs when there is no alternative diagnosis.
- xi. The DH should maintain regular communications with the tourism sector and other stakeholders, especially travel agents organising tours to the affected areas and their tour leaders and tour guides, and provide them with up-to-date disease information and health advice.

- xii. The DH is advised to maintain close liaison with the WHO and international health authorities to monitor the latest scientific updates and situation as well as the progress of development of Zika virus vaccine.

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