

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

Globally, Zika virus infection (ZVI) has been emerging and outbreaks have been recorded in Africa, the Americas, Asia and the Pacific. Ongoing transmission of Zika virus has expanded rapidly in the Americas since 2015. 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 26 February 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 the *Aedes albopictus* mosquito, which could potentially transmit the virus to humans, is widely present locally, there is a risk of secondary spread in Hong Kong arising from detected and undetected imported cases.
- Apart from transmission by infected *Aedes* mosquitoes, Zika virus can potentially be transmitted through blood transfusion. Zika virus has also been found in human semen and reports of transmission from one person to another through sexual contact have been confirmed. It is also found in saliva but whether it can be transmitted through kissing is unclear.
- Increases in incidences of microcephaly/central nervous system malformations in newborn babies and/or Guillain-Barré syndrome (GBS) in conjunction with outbreaks of ZVI in Latin America and Polynesia are of



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concern. Although evidence that neurological disorders, including microcephaly and GBS, are linked to ZVI remains circumstantial, the causal relationship is strongly suspected with a growing body of clinical and epidemiological data pointing towards a causal role for Zika virus.

- 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 statutorily 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. Pregnant women and women preparing for pregnancy should consider postponing travel to areas of active ZVI transmission until after pregnancy.
- v. Any male traveller returning from affected areas should:
 - abstain from sex with his pregnant partner, or else use condoms throughout pregnancy; and
 - use condom during sex for at least six months if his female partner may get pregnant.
- vi. To prevent transmission through blood transfusion, blood donors returning from affected areas should be deferred for blood donation.
- vii. 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 etc.





- viii. 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.
 - ix. In view of the Olympic and Paralympic Games in Brazil in August and September 2016 respectively, 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.
 - x. 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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