

CHP investigates one imported co-infection case of Zika virus and dengue fever

The Centre for Health Protection (CHP) of the Department of Health is today (April 12) investigating an imported co-infection case of Zika virus and dengue fever (DF), and urged the public to maintain strict environmental hygiene as well as to adopt strict anti-mosquito measures during travel. Pregnant women should pay close attention to the infection risk if they travel to affected areas.

The case involves a 16-year-old male patient with good past health, who had developed a fever, headache and pain behind the eyes since April 7. He sought medical attention at St Teresa's Hospital on the same day and then at St Paul's Hospital the next day (April 8) where he was admitted for management. His blood specimen tested positive for both Zika virus and dengue virus. He has been in stable condition all along.

The CHP immediately commenced epidemiological investigations, revealing that the patient had stayed in Ko Lanta Island, Thailand from March 28 to April 3, and returned to Hong Kong on April 6. He recalled multiple mosquito bites during the recreational activity held outdoors at Ko Lanta Island. His travel collateral developed similar symptoms and has been arranged for admission at United Christian Hospital. Initial investigation revealed that there was no other participant from Hong Kong joining the activity. The CHP will report the case to the health authority of Thailand. His home contacts have remained asymptomatic so far. The contact tracing and follow-up investigation of the CHP are ongoing.

As regards the situation of Zika virus transmission, according to the World Health Organization (WHO), multiple countries/areas in the Western Pacific and Southeast Asia (including Thailand) have recorded with current or previous Zika virus transmissions. The CHP has informed the Food and Environmental Hygiene Department for vector surveillance and control. Zika Virus Infection is a statutorily notifiable infectious disease in Hong Kong, suspected or confirmed cases must be promptly notified for investigation, control and surveillance.

The patient was also co-infected with DF. As of yesterday (April 11), 13 imported cases of DF had been recorded in 2024 in Hong Kong. In 2023, 62 imported cases of DF were recorded. According to the WHO, the global incidence of DF has markedly increased over the past two decades, posing a substantial public health challenge. In 2023, ongoing transmission, combined with an unexpected spike in DF cases, has resulted in close to a historic high of over 5 million cases and more than 5 000 dengue-related deaths reported in over 80 countries/territories. The latest surveillance data shows that there is an increase in DF cases noted in some places in Asia (such as Malaysia, Singapore and Thailand) compared to the same period last year.

Since the beginning of 2024, the Americas, including Brazil, Argentina and Peru, have recorded over 3 million cases, reaching a record number of cases. Detailed information on the latest DF situation in Hong Kong, as well as neighbouring and overseas countries and areas, has been uploaded to the CHP website

(www.chp.gov.hk/files/pdf/df_imported_cases_and_overseas_figures_eng.pdf).

A spokesman for the CHP said that, Zika Virus Infection and DF are both mosquito-borne diseases. A single mosquito may carry more than one virus, including Zika and dengue viruses. After being bitten by an infected mosquito, humans may get infected by one or more viruses simultaneously. According to medical literature, co-infection of Zika virus and DF is not uncommonly seen in areas where these viruses are both endemic. To reduce the risk of infections spread by mosquitoes, apart from [general measures](#), travellers returning from affected areas should apply insect repellent for 14 days (DF) or at least 21 days (Zika Virus Infection) upon arrival in Hong Kong. If feeling unwell, seek medical advice promptly and provide travel details to the doctor.

The CHP's Port Health Division has been carrying out inspections and health promotions (including reminding travellers to adopt anti-mosquito measures when travelling) at boundary control points (BCPs) to maintain strict environmental hygiene with effective mosquito control, and keeping close contact with relevant stakeholders (e.g. airlines and the travel industry) to provide the latest disease information and health advice at appropriate times. Routine health surveillance on body temperature of inbound travellers at all BCPs is ongoing.

Zika virus and dengue virus are primarily transmitted to humans through the bite of an infected *Aedes* mosquito. *Aedes aegypti*, which is currently not found in Hong Kong, is considered the most important vector for Zika virus and dengue virus. But *Aedes albopictus*, which can also spread DF, is a mosquito commonly found in the locality. Most people infected with Zika virus infection are asymptomatic. For patients with symptoms, they commonly present with rash, fever, conjunctivitis, muscle and joint pain, malaise and headache. Zika Virus Infection during pregnancy is a cause of microcephaly and other congenital malformations in the infant, and it can also cause complications such as fetal loss, stillbirth and preterm birth. Dengue fever is clinically characterised by high fever, severe headache, pain behind the eyes, muscle and joint pain, nausea, vomiting, swollen lymph nodes and rash.

The public should call 1823 in case of mosquito problems and may visit the following pages for more information: the DF page of the [CHP](#) and the [Travel Health Service](#), the Zika pages of the [CHP](#) and the [Travel Health Service](#), the latest [Travel Health News](#), [tips for using insect repellents](#), and the CHP [Facebook Page](#) and [YouTube Channel](#).