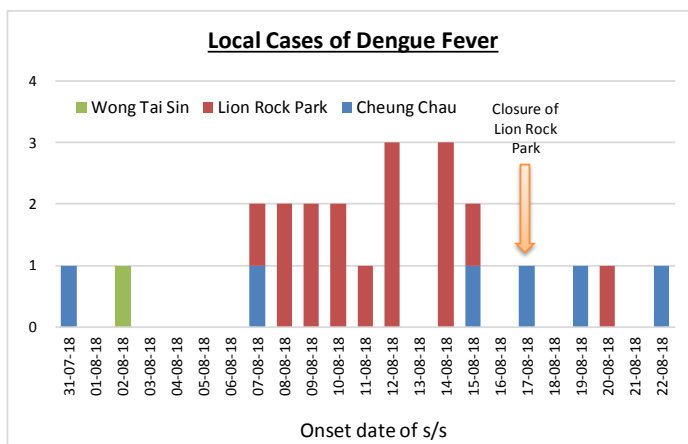


Current Topic - Local Dengue Fever Case Tally 23 (as of 23 August 2018)

The Centre for Health Protection (CHP) has reported a total of 23 locally acquired dengue fever (DF) cases since 14 August 2018. The local cases involved 14 males and 9 females, with ages ranging from 17 to 84 years. The common symptoms included fever with myalgia, followed by headache, arthralgia, skin rash. Their dates of symptom onset ranged between 31 July and 22 August. Eighteen of them required admission to HA hospitals and all of them were in stable condition. Among the 23 cases, 16 had been to the Lion Rock Park or its vicinity during the incubation period in which 4 of them worked in or near the park. One patient had visited the vicinity of Wong Tai Sin MTR Station. Six patients live in or had visited Cheung Chau.

All the tested cases belonged to serotype 1 according to laboratory finding. Epidemiological investigation indicated that Lion Rock Park and Cheung Chau are the possible sources of infection. Intensive anti-mosquito control measures have been stepped up to wipe out mosquito breeding sites and prevent DF from further spread including the closure of Lion Rock Park for 30 days.

References: CHP - Communicable Diseases Watch, vol. 15, issue no. 15 and Letter to doctors: Update on local dengue fever cases in 2018



The HA has closely collaborated with CHP to monitor the situation and got prepared for the contingency response to DF. A number of enhanced measures have already been in place to manage the potential risk of spreading of DF including:

- Activation of the “e-Dengue” enhanced surveillance system: to allow prompt monitoring and review of suspected cases for early public health investigation, clinicians are reminded to notify CHP via e-Dengue when a laboratory test request for DF is made.
- Enhanced laboratory services under the seven hospital clusters: to provide rapid test (photo 1) for DF on a seven-day-a-week basis to facilitate clinical diagnosis.
- Enhanced mosquito control measures in public hospitals: to minimize mosquito breeding, the measures include weekly fogging of insecticides at outdoor areas, application of larvicide oil and sand at water drainage (photo 2), and daily inspection of hospital areas to clear stagnate water. For those hospitals with admission of confirmed DF patients, the hospital will enhance the frequency of fogging insecticides to every other day continuously for one month.
- Enhanced internal communication: to enable staff to get familiarized with the enhanced measures of the contingency plan on prevention of DF outbreak. Apart from the HASLink express (photo 3), hospital infection control teams would conduct staff forums to update the situation and arrangements of the contingency measures.



Photo 3: HASLink express



Photo 2: Larvicides are being distributed within hospital premises

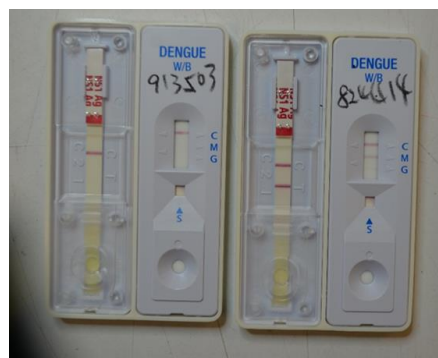
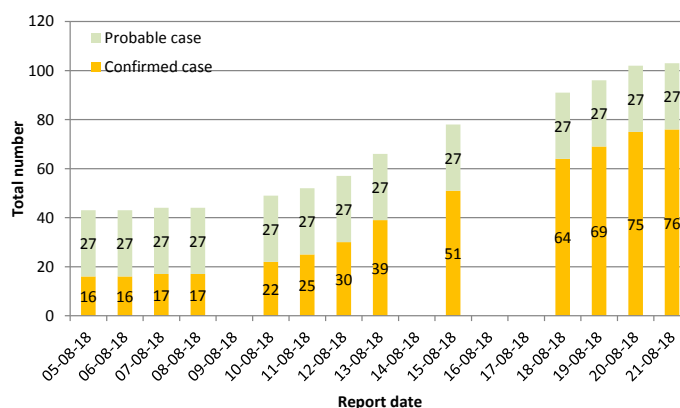


Photo 1: Rapid test is provided in HA laboratories, one step assay to detect both dengue virus NS1 antigen and differential IgG / IgM antibodies to dengue virus.

Latest Situation of Ebola Virus Disease in Democratic Republic of the Congo

As of 21 August 2018, 103 Ebola virus diseases (EVD) cases (76 confirmed and 27 probable), including 61 deaths, have been reported in five health zones in North Kivu and one health zone in Ituri of the Democratic Republic of the Congo (DRC). A total of 13 cases have been reported among health workers, of which, 12 are confirmed and one has died. These health care workers were likely exposed in clinics, many of which may have been infected before the declaration of the outbreak on 1 August. According to the WHO, this outbreak is affecting north eastern provinces of the DRC, which border Uganda and Rwanda. The public health risk is currently maintained high at the national and regional levels and low globally.

Cumulative number of EVD cases in DRC



Current Topic – Mosquito-borne Infection “Dengue Fever”

Dengue fever (DF) is a mosquito-borne tropical disease caused by any of four serotypes (DEN-1 to DEN-4). Infection with one of the serotypes does not provide protection to other serotypes. It is transmitted to humans through bites of infective female *Aedes* mosquitoes in which *Aedes albopictus* is widely distributed in Hong Kong. The symptoms of first infection with one serotype are usually mild but subsequent infections with other serotypes of dengue virus are more likely to result in dengue haemorrhagic fever (DHF).

Incubation period: 3 – 14 days (commonly 4 – 7 days)

Clinical presentations: fever, headache, retro-orbital pain, musculoskeletal pain, skin rash, bleeding tendency (petechiae, gum bleeding, epistaxis etc.)

Treatment: Symptomatic treatment for DH and supportive management for DHF

Dengue vaccine: Use of the Vaccine is Not indicated in Hong Kong according to WHO criteria

Oviposition Trap (Ovitrap)

Ovitrap is a device made of a black plastic container of 200 ml with a brownish oviposition paddle placed diagonally. It is used as a dengue vector surveillance to monitor the distribution of *Aedes* mosquitoes in the 57 surveyed locations by the Food and Environmental Hygiene Department (FEHD). The ovitrap index reflects only the extensiveness of the distribution of *Aedes albopictus* but not its density or quantity; or activities of other species of mosquitos. The Ovitrap Index (O.I.) can be classified into 4 levels. Specific prevention and control measures will be initiated based on the level of classification. Please click [here](#) for the monthly O.I. in the 57 locations.

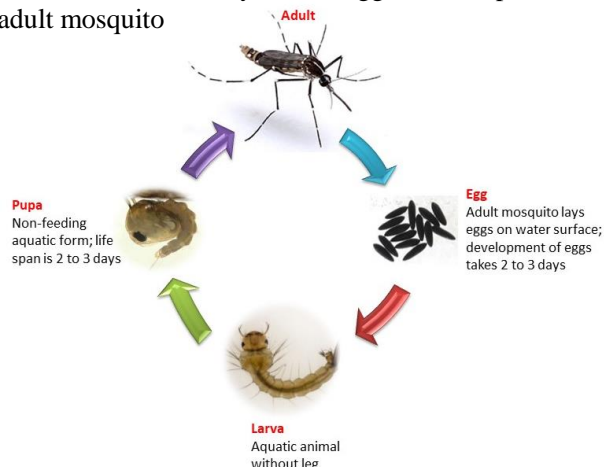
Ovitrap Index for Aedes albopictus = No. of Aedes-positive ovitraps / No. of ovitraps collected from the specific area x 100%



Photo 4: Ovitrap

Mosquito Life Cycle

- Complete metamorphosis with 4 stages
- It takes about 7-10 days for an egg to develop into an adult mosquito



Characteristics of *Aedes albopictus*

- Eggs can withstand drought very well
- Adult has a white stripe on the dorsal surface of thorax and bands on legs
- Breed in small containers holding small amount of water
- Adults rest in shrubby area, may enter into houses
- Day biter
- Weak flier (about 100 m)

Classification	Ovitrap Index (O.I.)	Indication of the infestation of the mosquito in the areas surveyed
I	O.I. < 5%	Not extensive
II	5% ≤ O.I. < 20%	Slightly more extensive
III	20% ≤ O.I. < 40%	Exceeds one-fifth of the area surveyed
IV	O.I. ≥ 40%	Almost half of the surveyed area is infested with the mosquito

Reference:

Food and Environmental Hygiene Department. Dengue Fever. Vector borne diseases. https://www.fehd.gov.hk/english/pestcontrol/dengue_fever/index.html

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