Public urged to keep up anti-mosquito efforts

Starting from last month, the Food and Environmental Hygiene Department (FEHD) has put in place newly designed gravidtraps as a replacement for the ovitraps previously used to directly count the number of adult mosquitoes to enumerate the gravidtrap index and the new density index. The FEHD today (May 25) announced that the monthly gravidtrap index for Aedes albopictus (MGI) for April was 4.7 per cent, indicating that the infestation of Aedes albopictus in the areas surveyed was not extensive, while the monthly density index for Aedes albopictus (MDI) for April was 1.2, which represented that an average of 1.2 Aedes albopictus adults was found in the Aedes-positive gravidtraps, indicating that the number of adult mosquitoes was not high. The FEHD reminded the public to carry out effective prevention and control measures against mosquitoes as the summer weather will help mosquitoes breed quickly.

Among the 57 areas surveyed last month, positive gravidtrap indices, ranging from 0.8 per cent to 25.6 per cent, were recorded in 52 areas. Cheung Chau (25.6 per cent) was the only area with the area gravidtrap index (AGI) exceeding the alert level of 20 per cent, and its area density index (ADI) was 1.4. As for the port areas, the Monthly Port Gravidtrap Index for April was 0.4 per cent, while the Monthly Port Density Index was 1.1.

The function of the new gravidtrap index is similar to that of the ovitrap index previously used in reflecting the extensiveness of distribution of Aedes albopictus in the surveyed area. Given the differences in design and operation between the previous ovitrap surveillance tool and the new gravidtraps, direct comparison of the gravidtrap index with the previous ovitrap index is not relevant. The new gravidtrap index indicates the average number of adult Aedes albopictus collected in each Aedes-positive gravidtrap in the surveyed area in order to better quantify the activity level of Aedes albopictus.

The AGI and the ADI indicate the extensiveness of distribution and the density of Aedine mosquitoes respectively in that particular surveyed area, while the MGI and the MDI are enumerated by pooling together all AGIs and ADIs of the same month, which reflects the general situation of Aedes albopictus in all surveyed areas.

The Gravidtrap Index for Aedes albopictus is divided into four levels, reflecting the infestation level of Aedes albopictus. Level 1 (less than 5 per cent) indicates that infestation of the mosquito is not extensive in the area surveyed. Level 2 (5 per cent to less than 20 per cent) indicates that infestation of the mosquito is slightly more extensive in the area surveyed. Level 3 (20 per cent to less than 40 per cent) indicates that infestation of the mosquito exceeds one-fifth of the area surveyed. Level 4 (40 per cent or above) indicates that almost half of the surveyed area is infested with the

mosquito. Specific preventive and control measures will be initiated accordingly.

The FEHD will collect the data of the density index this year to evaluate the effectiveness of mosquito control work. After sufficient data has been collected, the FEHD will establish a reference level for the corresponding prevention and control measures for the density index.

A spokesman for the FEHD said, "Aedes albopictus is a kind of mosquito that can transmit dengue fever (DF) as well as Zika virus infection. DF is commonly found in tropical and subtropical regions of the world, and has become endemic in many countries in Southeast Asia. The World Health Organization also issued warnings that the number of DF cases recorded in Asia last year was higher than before. As Hong Kong has recorded this year's first local DF case last month and the dengue activity in neighbouring areas has remained high, and Hong Kong's hot and rainy summer is conducive to the proliferation of mosquitoes, the community must stay vigilant and work with the Government to carry out effective mosquito control measures."

The FEHD has conducted anti-mosquito operations at locations where a positive index was recorded. Additionally, an inter-departmental anti-mosquito response mechanism has been activated in Cheung Chau, where the AGI reached the alert level for co-ordinating relevant departments and stakeholders to carry out effective mosquito prevention and control measures. Relevant departments have also individually notified the groups that had voluntarily subscribed to the gravidtrap rapid alert system when the AGI reached the alert level of 20 per cent. Subscribers have been invited to post specially designed alert notices in the common parts of their premises to remind occupants and staff to carry out anti-mosquito measures promptly.

The spokesman said that relevant government departments have enhanced co-operation and last month commenced the All-out Anti-mosquito Operations, which will run until the end of the rainy season, to start fogging operations specifically at high-risk areas to eradicate adult mosquitoes.

The spokesman said, "The major anti-mosquito measures of the All-out Anti-mosquito Operations include carrying out fogging in the scrubby areas within a 100-metre radius around residences weekly to kill adult mosquitoes; carrying out inspections, removing stagnant water, applying insecticide and disposing of abandoned water containers weekly to prevent mosquito breeding; and trimming of grass to discourage resting of adult mosquitoes on the site. The FEHD and relevant government departments will continue the above mosquito prevention and control work in areas under their purview, and will strengthen publicity and education campaigns in the coming months. In addition, the FEHD collaborates with relevant government departments every year to conduct the three-phase Anti-mosquito Campaign. The second phase of the Anti-mosquito Campaign started on April 20 and will last until June 19. During the period, the district offices of the FEHD have targeted areas which have drawn particular concern, such as locations in close proximity to human residences, schools, construction sites, public housing estates, hospitals, illegal cultivation sites, waterfront public and private cargo handling areas, cross-

boundary checkpoints, typhoon shelters and cross-boundary ferry terminals, to remove accumulated water and carry out mosquito prevention and control work. The FEHD will, after the second phase of the campaign, conduct territory-wide thematic mosquito prevention and control special operations so as to enhance the effectiveness of the campaign."

The spokesman added that as Aedes albopictus breeds in small water bodies, members of the public should carry out effective mosquito prevention and control measures including inspecting their homes and surroundings to remove potential breeding grounds, changing the water in vases and scrubbing the inner surfaces, removing the water in saucers under potted plants at least once a week, properly disposing of containers such as soft drink cans and lunch boxes, and drilling large holes in unused tyres. He also advised public and estate management bodies to keep drains free of blockage and level all defective ground surfaces to prevent accumulation of water. They should also scrub all drains and surface sewers with an alkaline detergent at least once a week to remove any mosquito eggs.

In addition, rural areas and the vicinity of shrubby areas are natural habitats for mosquitoes, other insects and animals. Members of the public living in rural areas may install mosquito screens on windows and doors if necessary. Those staying in the natural environment should take appropriate personal protective measures against mosquitoes, such as avoiding staying in the vicinity of shrubby areas for a long time, wearing light-coloured long-sleeved clothes and trousers and applying DEET-containing insect repellent. Members of the public are reminded to make reports to relevant government departments via 1823 if mosquito problems are detected.

The spokesman reiterated that effective mosquito control requires the sustained effort of all parties concerned. The community must work together with the Government to carry out effective mosquito control measures.

The gravidtrap and density indices for Aedes albopictus in different areas and information on mosquito prevention and control measures are available on the department's website at www.fehd.gov.hk.