

Government strengthens planning and co-ordination for pest control work

The inter-departmental Pest Control Steering Committee (PCSC) held a meeting today (December 18) via video conferencing to review the effectiveness of anti-mosquito and anti-rodent work of various departments. With reference to the experience this year, the PCSC discussed further measures in preparation for targeted pest control work in the coming year.

At the meeting, the Food and Environmental Hygiene Department (FEHD) reported the preliminary results of the pilot scheme of applying thermal imaging cameras with artificial intelligence (AI) analytic in rodent control work. Since the first half of this year, the FEHD has conducted field trials of thermal imaging cameras in back alleys in Kowloon City and designated target areas for recording rodent activity and its extent, with a view to testing its application and effectiveness, as well as collecting data for analysis to assist deployment of future work.

The two trials indicated that the new technology is quite effective in detecting the places and time frequented by rodents, and their activity patterns; as well as evaluating and quantifying rodent control operations. Utilising the AI system, the FEHD can identify and trace the entry and exit points, activity, as well as the location and time of foraging by rodent as reflected in the thermal images, thereby facilitating targeted deployment of rodent baits and traps. Rodent proofing devices can also be installed in a targeted manner with reference to the entry and exit points and the activity locations identified, to achieve a better rodent control result. Furthermore, by comparing rodent counts obtained before and after the anti-rodent operations at the same location, objective assessment of the effectiveness of the operations can also be done. Based on preliminary observations from the pilot scheme, the FEHD plans to further deploy thermal imaging cameras during the anti-rodent operations in designated target areas to increase their effectiveness. In the meantime, the FEHD will enhance the existing Rodent Infestation Rate (RIR) in multiple areas, including enhancing data sharing with relevant venue managing departments; increasing the number of survey locations; installing thermal imaging cameras in survey location with persistently high RIR to facilitate effective follow-up; and actively exploring other bait choices to improve the sensitivity of the RIR.

Various departments reviewed their on-going anti-rodent work this year, and proposed a series of concrete measures to strengthen efforts at places with more serious problem of rodent infestation. The FEHD has regularised the quarterly deep cleansing operations at a number of markets, and completed evaluation of the intensive anti-rodent operations at its markets. Having regard to the experience and effectiveness as well as the views of rodent infestation expert, the FEHD has progressively extended the operations to its markets with high patronage rate since October. To enhance the effectiveness of the operations, the FEHD will gauge feedback from tenants of relevant markets, and step up tenancy enforcement against non-compliant tenants with

effect from January 2021. The FEHD has shared its experience of anti-rodent operations with the Housing Authority (HA) and the Link Asset Management Limited (LINK), and proposed concrete rodent control measures during joint operations for application by HA and LINK at their markets.

With regard to public housing developments, the FEHD had conducted site visits to nine public rental housing (PRH) estates managed by the HA, and provided specific recommendations on rodent proofing in PRH estates. As at the end of October 2020, the HA has installed more than 16 900 rat guards at suitable places on external walls of PRH estates, and conducted trial of thermal imaging cameras in two PRH estates. To strengthen inter-departmental collaboration, the FEHD and the Housing Department will form a Working Group to be co-chaired by the Deputy Directors of the two departments, with a view to formulating and implementing more effective anti-rodent measures and rodent proofing devices, as well as concrete action plans for PRH estates. Moreover, the HA will continue to enhance the environmental hygiene of PRH estates, encourage neighbourhood support of rodent control through different channels, and explore suitable surveillance methods to monitor rodent infestation in PRH estates with reference to the experience in applying thermal imaging cameras.

In addition, the FEHD and the Home Affairs Department continue to make referrals to the Highways Department (HyD) on back alleys with poor environmental hygiene, and the HyD has completed 216 improvement work items in back alleys from June 2019 to end November 2020, with a view to eliminating the hiding places of rodents and blocking their dispersal routes. Relevant departments will continue to follow up the situation of back alleys, and conduct appropriate improvement works based on actual need and situation. The FEHD today also initiated operations in Wan Chai, Kwun Tong, Kowloon City, Sham Shui Po and Yuen Long Districts targeting improper dumping of waste by licensed food premises and fresh provision shops at back alleys where rodent infestation is more severe. Enforcement will be stepped up following publicity and education. The FEHD will consider rolling out the operations in more districts if the scheme achieves satisfactory results.

On anti-mosquito work, various departments have been conducting mosquito prevention and control work in accordance with the working targets for the year, with progress made. In 2020, there was only one local dengue fever case recorded in Hong Kong to date. The monthly local gravidtrap index for *Aedes albopictus* during the past rainy season from May to September was at a similar level to that of last year, and the recent indices have even dropped to the lowest level at Level 1. Since April this year, the FEHD has introduced newly designed gravidtraps to replace ovitraps previously used to directly count the number of adult mosquitoes, so as to enumerate the gravidtrap index and the new density index, which reflect the extensiveness of distribution and the density of *Aedes albopictus* respectively. The relevant indices have been launched and widely used.

By conducting a detailed analysis of the data collected from the surveillance indices, the meeting reviewed the situation of mosquito proliferation in Hong Kong this year, especially the areas which have recorded area gravidtrap indices exceeding the alert level of 20 per

cent. Among the areas with indices having exceeded the alert level, the Aedes-positive gravidtraps were mostly found in the vicinity of PRH estates and private residential areas, recreational facilities, schools and public places. At the meeting, relevant departments agreed to pay special attention to environments prone to mosquito breeding under their purview, such as water accumulated in water barrier and canvas sheet, uncovered containers, improper disposal of waste, chokage of surface channel, etc., and take follow-up actions.

Looking forward to the coming year, all relevant departments will target at the mosquito hotspots indicated by the above indices, eliminate potential breeding places for mosquitoes before rainy season, deploy sufficient mosquito trapping devices to kill adult mosquitoes, continue to implement the All-out Anti-mosquito Operations of this year, and conduct fogging simultaneously until the end of the rainy season. Various departments will also closely monitor the situation of mosquito proliferation as reflected by the surveillance indices, and constantly update the list of blackspots of mosquito infestations to facilitate the adjustment and deployment of work in accordance to actual circumstances.

Lastly, various departments recognised that keeping Hong Kong clean is the cornerstone to anti-rodent and anti-mosquito work. Over the past year, the FEHD has enhanced its cleansing services, including street cleansing, waste collection and other cleansing services. In view of the surge in takeaway containers disposed due to restrictions on dine-in services, the FEHD has strengthened the removal of bagged refuse, and selected a number of locations with actual need for pilot, at which the number of waste collection facilities and frequency of removal will be increased, to be complemented by publicity, education and enforcement work. In addition to the efforts and collaboration made by Government departments, public participation is also of crucial importance. The Government will publicise the message of "Keep Hong Kong clean, we can do it" via a dedicated website set up by the FEHD starting January 2021, to share useful information and related work on keeping the environment clean with the public, and proactively appeal for support and participation by members of the public.

Representatives from three bureaux and 21 departments/organisation attended today's meeting.