

LCQ18: Efforts on rodent control and epidemic prevention

Following is a question by the Hon Jimmy Ng and a written reply by the Secretary for Food and Health, Professor Sophia Chan, in the Legislative Council today (March 18):

Question:

Since the announcement by the Government in May last year that three cases of human infection of rat Hepatitis E virus had been found, a total of eight such cases have been recorded in Hong Kong, with the death of one infected patient. Some members of the public are concerned about whether there has been a small outbreak of this infectious disease in the community. In addition, it has been reported that pneumonic plague cases have been found in recent months in various districts in the northern part of the Mainland, once triggering panic about human-to-human transmission of the disease. There are comments that as the residents of Hong Kong and the Mainland commute between the two places frequently, the risk of these epidemics being imported from the Mainland to Hong Kong cannot be ruled out, and that there is an immense need for the Government to improve its efforts on rodent control and epidemic prevention. In this connection, will the Government inform this Council:

(1) as it has been reported that while the total number of rodent complaints received each year by the District Council members of various districts was between 300 and 900, the Rodent Infestation Rates (RIRs) compiled by the Food and Environmental Hygiene Department (FEHD) failed to reflect the actual situation as they all along indicated that rodent infestation in various districts was on the low side, and, of the latest progress of the Government's efforts in enhancing the sensitivity of RIRs;

(2) as the FEHD's annual reports have indicated that the number of rodents killed by the FEHD in each of the past 11 years was between 20 000-odd and 40 000-odd, and its annual average expenditure on rodent control was \$150 million (representing an average cost of more than \$4,000 for killing each rodent), of the Government's new measures to enhance the cost effectiveness of the anti-rodent efforts;

(3) as a research report has pointed out that quite a number of "three-nil" buildings (i.e. buildings without owners' corporations, owners' committees or property management companies) are hygiene and rodent blackspots, how the Government will improve this situation;

(4) as there are comments that rodent infestation problems in public places often cannot be eradicated due to the lack of coordination among the various government departments, how the Government will strengthen the cooperation among the government departments concerned in their anti-rodent efforts;

(5) regarding the prevention of the aforesaid infectious diseases, whether the Government conducted last year any researches jointly with local and international academic institutions specialised in infectious diseases and public health; if so, of the details; if not, the reasons for that; and

(6) regarding the prevention of the import of plague from places outside Hong Kong, whether the Government will review its standing practices concerning epidemic prevention at the boundary control points, the Outbound Travel Alerts, etc., as well as introduce new measures for prevention of epidemics; if so, of the details; if not, the reasons for that?

Reply:

President,

The Government has formulated a comprehensive rodent control strategy targeting the three fundamental survival conditions of rodents, namely food, harbourage and passages, i.e. to eliminate their food sources as well as hiding places and block their dispersal routes as fundamental measures, supplemented by direct control measures including poisoning and trapping. The Pest Control Steering Committee (PCSC) led by the Food and Health Bureau is responsible for formulating policies on pest control, promoting inter-departmental co-ordination and regularly reviewing the effectiveness of the measures carried out by bureaux and departments.

With the efforts of the PCSC, the Government launched a territory-wide cleaning campaign in May 2019 with focus on enhanced prevention, co-ordination and surveillance as well as raising public awareness of maintaining environmental hygiene. The Government will continue to intensify its efforts in this aspect.

In consultation with the Security Bureau (SB), my reply to the various parts of the question is as follows:

(1) At present, the Food and Environmental Hygiene Department (FEHD) conducts Rodent Infestation Rate (RIR) surveys by setting baits in selected areas. The percentage of baits bitten will be used to infer the distribution of rodents in public places. There is no internationally adopted RIR. The FEHD devises the RIR with reference to overseas practices and the actual situation of Hong Kong.

The FEHD is studying the use of thermal imaging cameras with artificial intelligence analytical function for monitoring the areas and extent of rodent activities. Initial test results have shown that the data can quantify and assess the effectiveness of anti-rodent work by directly comparing the rodent population density before and after anti-rodent operations. The technology can also be used to identify rodents' entry points, travel routes and areas they frequently visit, so that rodenticides and trapping devices can be placed in a more effective manner and more targeted rodent control measures can be implemented. The FEHD has further conducted field trials in

the Kowloon City district in early 2020 with a view to assessing the feasibility of quantifying rodent surveillance by the technology.

In devising and implementing rodent control work, the government departments concerned will, apart from making reference to the RIR surveys, pay attention to complaint figures and reports, views of the local community and trails left by rodents found during inspections, in order to have a comprehensive assessment of the rodent problem in the district concerned and carry out targeted operations in problematic areas.

(2) The annual average expenditure of the FEHD's rodent control work was about \$150 million in the past 11 years. In addition to trapping and poisoning, rodent control work also includes inspecting rodent black spots, taking enforcement actions, providing technical support for various departments/organisations, conducting joint inspections, carrying out publicity and education work as well as following up on complaints about rodent infestation. The mere dividing of the expenditure on rodent control by the number of rodents trapped and poisoned in public places is therefore a sweeping generalisation that cannot fully and truly reflect the outcome and effectiveness of the FEHD's rodent control work.

(3) and (4) With the efforts of the PCSC, various government departments have strengthened their cleaning and anti-rodent work as well as inter-departmental co-ordination. Among these, the FEHD, the Home Affairs Department and the Highways Department have, through intelligence exchanges, carried out improvement works and enhanced cleaning at back alleys where hygiene is relatively bad. The Hong Kong Housing Authority, with technical support from the FEHD, has installed rodent-proofing structures in public housing estates. The Buildings Department and the Architectural Services Department have also promulgated guidelines on incorporating rodent-proofing design in new buildings for building professionals' reference. These guidelines will also serve as reference for renovation of old buildings. In addition, the FEHD has stepped up enforcement against irregularities of food premises such as food preparation at rear lanes.

These efforts have yielded positive results. In 2019, the numbers of enforcement actions taken against rodent infestation and rodents caught increased, whereas the number of rodent-related complaints recorded a decrease. A comparison of the figures on rodent control work conducted in 2019 and 2018 is at Annex.

Moreover, an inter-departmental platform has been set up to facilitate communication between the front-line staff of the FEHD and other departments on the execution of specific rodent control work. This includes monitoring and eliminating the survival conditions of rodents in venues/sites under the purview of various departments, and disseminating anti-rodent messages to the community through respective networks. The FEHD will continue to provide technical support and professional trainings to various government departments.

The FEHD will conduct anti-rodent operations in designated target areas

on a regular basis. The eight-week anti-rodent operations in designated target areas will be carried out in May and November 2020. The FEHD will identify target areas in each district by taking into account factors including the RIR, the number of complaints received, views of the local community, the number of food premises and "three-nil" buildings. The FEHD will also consider the views of District Councillors and step up its work on environmental hygiene, street cleansing and rodent control in a targeted manner. In addition, the FEHD will collaborate with District Councils and District Offices to organise anti-rodent promotional activities and encourage active participation of the community in anti-rodent work.

(5) and (6) Plague is a notifiable disease under the Prevention and Control of Disease Ordinance (Cap 599). The Centre for Health Protection (CHP) detects plague cases through a communicable disease surveillance system. All suspected or confirmed cases must be notified to the CHP for further investigation. For plague cases that occur in the Mainland, the CHP will contact the National Health Commission under the notification mechanism to obtain the latest information of the cases concerned for risk assessment. Besides, the Port Health Division of the CHP carries out regular inspections at boundary control points (BCPs) to ensure good environmental hygiene. Routine health surveillance at all BCPs using infrared thermal imaging systems to check the body temperature of inbound travellers is ongoing. Suspected cases of serious infection will be referred to public hospitals for isolation treatment immediately.

Furthermore, the CHP closely monitors the global situation of plague and disseminates outbreak news of other places through the website of the Travel Health Service. If necessary, the CHP will timely step up risk communication, for example, by issuing press releases and alerting local doctors and hospitals to the latest situation of plague. The CHP also disseminates relevant health information, including travel advice, to the public and stakeholders through various means. Besides, the CHP has developed contingency plans and regularly conducts exercises and drills with a view to enhancing the overall preparedness and response.

To help the public better understand the possible public health risks, the Government has since 2015 enhanced the Outbound Travel Alert (OTA) to issue travel alert on public health ground. Should there be such reasons, based on the advice from the Food and Health Bureau, the SB will issue an OTA on countries/territories seriously affected by infectious diseases to help the public to better understand the possible health risks. The Department of Health will also disseminate travel health advice to the public under the OTA webpage including providing specific advice corresponding to different health risks, so as to assist the public and the travel industry in getting a clearer grasp of the possible health risks involved and to make corresponding arrangements.

To monitor and assess plague risk in Hong Kong, the FEHD regularly conducts rat-flea surveys at all BCPs and specific areas, such as markets, industrial areas, and rear lanes. Subject to the findings of the surveys, the FEHD will carry out corresponding rodent and flea control work so as to

mitigate plague risk in Hong Kong.