

**For discussion
on 14 March 2017**

LegCo Panel on Food Safety and Environmental Hygiene

Rodent Prevention and Control Measures

Purpose

This paper briefs Members on the rodent prevention and control measures implemented by the Food and Environmental Hygiene Department (“FEHD”) in 2016, and the major initiatives in 2017.

Background

2. Since 2000, FEHD has been making use of the rodent infestation rate¹ (“RIR”) and its trend to gauge the general situation of rodent infestation in individual districts and as the basis for devising anti-rodent measures and assessing the overall efficacy of rodent prevention and disinfestation work. FEHD conducts RIR surveys in rodent-infested areas or places likely to have rodent problems, in particular areas bustling with human activities. The survey is conducted every six months. Baits are set in selected localities to gather statistics on the ratio of baits bitten by rodents for the purpose of making meaningful comparison of RIRs using the same standard. Changes to the RIR readings in individual districts over time facilitate our assessment of progress made in containing rodent infestation and the overall efficacy of our work, as well as provide an informed basis for allocation of resources.

3. The RIR of a district is calculated with reference to the ratio of baits bitten at that district. The results of various districts, when aggregated, will form the overall RIR. FEHD will strengthen rodent disinfestation operations in certain districts having regard to the results of the survey. If the rate reaches 20% or higher, FEHD will set up a task force to liaise and coordinate anti-rodent work among relevant departments and local organisations. Cleansing work, publicity and public education in the community will also be stepped up comprehensively.

¹ Rodent Infestation Rate = $\frac{\text{Number of baits bitten by rodent}}{\text{Total number of baits collected from the selected areas}} \times 100\%$

4. FEHD has, when devising the RIR, made reference to practices adopted by various cities around the world and the actual situation of Hong Kong. The Department has, over time, tried out different methods. Having regard to a number of factors including our local climate, environmental conditions and the habits of domestic rodents, the Department has come to the conclusion that adopting the ratio of baits gnawed by rodents as the infestation rate is the most suitable method for Hong Kong. Having said that, the Administration will continue to keep in view rodent prevention and control (including rodent infestation assessment) methods adopted by the World Health Organization (“WHO”) and major cities around the world.

Findings of Rodent Surveillance Programme

5. The overall RIR for 2016 was 4.0% which was higher than the overall RIR (of around 3.0%) for 2015. In terms of individual district, Sham Shui Po District yielded the highest overall RIR of 8.9%, whereas Sai Kung District registered the lowest RIR of 0.9%. The number of rodent complaints received in 2016 was 9 038, about 8.5% higher than that recorded in 2015 (8 327 complaints). The table at **Annex 1** shows the annual RIRs recorded in various districts in 2016. The annual overall RIRs recorded over the past decade or so were kept below 10% (details at **Annex 2**), indicating that the rodent problem in public areas of Hong Kong has been largely under control.

Rodent Prevention and Control Measures

6. FEHD has been adopting a comprehensive approach in its rodent prevention and control work. Targeting districts with relatively high RIRs, FEHD will take a variety of rodent control measures, including poisoning and trapping of rodents and destroying rat holes in related rear lanes, strengthening street cleansing, encouraging active participation of the public in anti-rodent work, and strengthening publicity and education programmes in rodent prevention and control. The table at **Annex 3** gives the number of rodents collected, rat holes destroyed and warnings² issued in 2016.

7. Given the high adaptability and reproductive rate of rodents, active participation on the part of the community is indispensable if anti-rodent work is to achieve optimal results. Since April 2009, FEHD has deployed an additional Health Inspector to each district to promote and coordinate district pest control operations and to conduct public education

² Written and verbal warnings are issued to the occupiers or owners of premises to urge them to improve the environmental hygiene for better prevention of rodent infestation.

and publicity activities at the district level in order to strengthen liaison with other government departments and local organisations (including District Councils, Area Committees and Owners' Committees) on rodent prevention and control. In 2016, a total of 286 talks were organised and 724 visits were conducted to private and public housing estates, shopping malls, markets, cemeteries, construction site offices, hotels, hospitals, schools, restaurants, centres for the elderly, non-government organisations, offices of District Council members and other government departments etc. These activities have drawn positive feedback from the community. Moreover, FEHD has deployed "Ah Tak" as Keep Clean Ambassador in 2016, and opened a facebook page for "Ah Tak" to disseminate rodent prevention and control messages.

8. FEHD has been taking the lead in organising territory-wide interdepartmental anti-rodent campaigns on an annual basis to strengthen rodent prevention and control and remind the public of the importance of rodent prevention and control. In 2016, the anti-rodent campaign was conducted in two phases from 4 January to 11 March and from 4 July to 9 September in the 18 districts of Hong Kong, bearing the theme of "Eliminate Rodent Nuisance - Take Preventive Measures". Target areas mainly included markets / municipal services buildings, hawker bazaars, typhoon shelters and rear lanes adjacent to food premises, and other rodent-infested locations and their vicinity. Apart from combating rodent infestation in individual districts, the anti-rodent campaigns also aim at enhancing public knowledge and awareness of ways of prevention and control of rodents. During the campaigns, apart from stepping up anti-rodent operations in collaboration with relevant Government departments, FEHD distributes promotional leaflets, displays posters, organises talks and disseminates messages through the facebook page "Ah Tak" to promote anti-rodent knowledge and awareness, with a view to fortifying public education in this respect. When planning anti-rodent campaigns, FEHD makes appropriate adjustments to the overall strategy in the light of the actual state of rodent infestation across the territory and in different districts, as well as the effectiveness of previous anti-rodent campaigns. During the two campaign periods, FEHD carried out a total of 27 826 inspections with 7 229 dead rodents and 4 121 live rodents collected, 2 399 rat holes destroyed, and 1 545 warnings issued.

Specific Anti-rodent Work

9. In districts recorded with relatively high RIRs in 2016, for example, Sham Shui Po, Mong Kok and Central and Western Districts, apart from strengthening rodent prevention and control measures by FEHD, inspections were made by staff of the Pest Control Advisory Section of

FEHD to review the work and measures in place. Advice on improving the set-up of baiting points and selection of trapping locations, etc. was given to frontline district staff. For example, FEHD mounted Hawker Street Cleansing Day programme at Yee Kuk Street and Po On Road in Sham Shui Po District. Miscellaneous articles and waste found atop and underneath stall structures were cleared to eliminate food source and harborage for rodents. In addition to the delivery of publicity pamphlets, rodent prevention and control work was demonstrated to residents of “three-nil” buildings. In Mong Kok District, repair of hollows and cracks on floor surfaces was arranged with a view to eliminating harborage for rodents. Furthermore, together with Central and Western District Council members, areas of concern including Queen’s Road Central and Third Street were inspected. Views from DC members and the local representatives were gathered and taken into consideration for formulating an effective plan in identifying suitable locations for baiting and trapping work.

10. On publicity and education fronts, FEHD mounted a series of publicity activities with the respective District Councils. For example, FEHD worked with a number of government departments such as Sham Shui Po District Office, Housing Department, Highways Department, and Leisure and Cultural Services Department, etc., to launch publicity activities through channels including a broadcasting van, demonstrations, seminars and carnivals. Promotion of rodent prevention and control specifically at elderly homes, hawker stalls and licensed food premises, etc. was carried out jointly with Mong Kok District Council. Apart from conducting joint inspections with Central and Western District Council members, publicity pamphlets together with rodent prevention and control work were delivered and demonstrated respectively to property management companies of private buildings, owners incorporations and management personnel of commercial buildings as well as citizens. Joint inspections were also conducted with representatives of property management companies to identify and eliminate places of potential rodent infestation.

11. Moreover, in Yau Tsim District where numerous food premises were located, FEHD enhanced clearance operations to eliminate food remnants in articulated lanes in the vicinity of Mau Lam Street in order to reduce food source and harborage for rodents. In the developing areas of Yuen Long District, FEHD staff conducted inspections in nighttime to assess the scale of rodent infestation in order to adjust the baiting and trapping strategies. In Wong Tai Sin District where a multitude of public housing estates was situated, FEHD conducted joint inspections with Housing Department to public areas within estates and offer technical advice with a view to assisting the Department in rodent prevention and control.

12. In addition to about 700 departmental staff deployed on pest control (including rodent control), FEHD engages private contractors to provide pest control services across the territory through roving teams. During the winter season from November 2016 to March 2017, FEHD has increased the number of roving teams by 56 in order to maintain the same number of teams as in summer. Together with the additional roving teams under the District-led Actions Scheme, the number of roving teams this winter will be largely maintained at about 280 (with a private contractor workforce of about 1 680) to strengthen rodent control in the season.

Exchanges with Overseas Rodent Control Experts

13. To further enhance the methods and techniques for rodent prevention and control, FEHD shares experience with relevant organisations of other countries / cities from time to time. These exchanges have helped us to ensure that the methodologies and technique currently adopted by FEHD are in line with those promoted in the international arena.

14. In the past two years, FEHD has attended the pest prevention and control meeting in Chongqing City for the purpose of sharing with each other practices in rodent prevention and control. FEHD staff have also attended international conferences held in Malaysia, Gold Coast of Australia, Seattle and Nashville of the United States of America for sharing experience with overseas experts and keeping ourselves abreast of latest development in rodent disinfection methodology.

Work Plan for 2017

15. In order to sustain the effect of the Anti-rodent Campaign 2016, FEHD will continue to roll out the anti-rodent campaign in 2017 to remind members of the public of the importance of rodent prevention and control. The first phase of the Anti-rodent Campaign 2017 has been conducted between 2 January and 10 March this year. The second phase of the campaign will be held between 3 July and 8 September. Apart from disinfection and publicity work to be carried out in target areas including markets / municipal services buildings, hawker bazaars, typhoon shelters, rear lanes close to licensed food premises and other problematic spots during the campaign periods, FEHD will continue to monitor the situation of rodent infestation in the districts and implement appropriate control measures.

16. Given the high adaptability and reproductive rate of rodents, the state of rodent infestation in individual districts often vary with changes in the environmental hygiene conditions and the level of public participation

in rodent prevention and control work. Apart from organising anti-rodent campaigns, FEHD will continue to undertake more intense rodent prevention and control measures and actions in districts jointly with relevant stakeholder(s) with relatively higher RIRs. In addition, FEHD will review the effectiveness of its rodent control methods and techniques from time to time by making reference to the recommendations made by the WHO and the experience of other countries / cities.

Advice Sought

17. Members are invited to note the content of this paper.

Food and Health Bureau
Food and Environmental Hygiene Department
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Rodent Infestation Rates for Various Districts (2016)

District	1 st half of 2016	2 nd half of 2016	Overall of 2016
Central and Western	7.1 %	6.1%	6.6%
Eastern	3.4 %	4.1%	3.8%
Southern	4.4 %	3.3%	3.8%
Wan Chai	3.6 %	3.6%	3.6%
Islands	0.0 %	3.8%	1.9%
Kowloon City	4.6 %	2.8%	3.7%
Kwun Tong	4.1 %	4.3%	4.2%
Mong Kok	9.3 %	7.5%	8.4%
Sham Shui Po	7.7 %	10.0%	8.9%
Wong Tai Sin	2.9 %	3.8%	3.4%
Yau Tsim	3.7 %	2.8%	3.2%
North	4.4 %	0.6%	2.5%
Sai Kung	0.9 %	0.9%	0.9%
Sha Tin	0.9 %	5.1%	3.0%
Tai Po	0.9 %	1.8%	1.4%
Tsuen Wan	6.2%	2.0%	4.1%
Tuen Mun	1.7 %	1.7%	1.7%
Yuen Long	4.4 %	0.9%	2.7%
Kwai Tsing	5.3 %	3.1%	4.1%
Overall	4.2 %	3.8%	4.0%

Overall Rodent Infestation Rates (2001 – 2016)

Year	Overall RIR
2001	8.8%
2002	9.0%
2003	5.6%
2004	4.1%
2005	4.4%
2006	2.9%
2007	4.8%
2008	6.3%
2009	6.1%
2010	1.5%
2011	1.7%
2012	2.4%
2013	3.1%
2014	3.2%
2015	3.0%
2016	4.0%

**Number of Rodents Collected, Rat Holes Destroyed
and Warnings Issued in 2016**

No. of dead rodents collected	No. of live rodents collected	No. of rat holes destroyed	No. of warnings issued
23 977	13 192	8 413	4 754
