For information

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 2013, and the major initiatives in 2014.

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. Baits are set in selected localities every six months 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. When the RIR of a particular district reaches 10% or above, FEHD will strengthen rodent disinfestation operations there. If it further 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.
- 4. While an internationally adopted RIR does not at present exist, FEHD has, when devising the RIR, made reference to overseas practices and the actual situation of Hong Kong. The Department has, over time, tried

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

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 Organisation ("WHO") and major cities around the world.

Findings of Rodent Surveillance Programme

5. The overall RIR for 2013 was 3.1% which compared favourably with the average RIR (of around 3.6%) in the past five years. In terms of individual district, Yuen Long District yielded the highest RIR of 8.3%, whereas Sai Kung District registered an RIR of 0%. The number of rodent complaints received in 2013 was 6 813, about 6.8% higher than that recorded in 2012 (6 378 complaints). The table at **Annex 1** shows the annual RIRs recorded in various districts in 2013. 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 2013.
- 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 and publicity activities at the district level in order to strengthen liaison with other government departments and local organisations (including District

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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.

Councils, Area Committees and Owners' Committees) on rodent prevention and control. In 2013, a total of 188 talks were organised and 720 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.

8. FEHD has been organising anti-rodent campaigns on an annual basis to remind the public of the importance of rodent prevention and control. In 2013, the anti-rodent campaign was conducted in two phases in the 18 districts of Hong Kong, bearing the theme of "Eliminate Rodent Nuisance -Target areas mainly included markets / Take Preventive Measures". 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. campaigns, apart from stepping up anti-rodent operations in collaboration with relevant Government departments, FEHD distributes promotional leaflets, displays posters and organises talks 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.

Exchanges with Overseas Rodent Control Experts

- 9. 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.
- 10. In the past two years, FEHD has attended the pest prevention and control meeting in Guangdong Province and the international forum on vector prevention and control in Hainan Province, and met with the vector biology and control personnel from Jiangmen and the rodent control experts from the Guangdong Field Epidemiology Training Programme for the purpose of sharing with each other best practices in rodent prevention and control. FEHD staff have also attended international conferences held in the Phoenix City, Arizona of the United States and Seoul of Korea, for

sharing experience with overseas experts and keeping ourselves abreast of latest advances in rodent disinfestation methodology.

Work Plan for 2014

- 11. In 2014, FEHD will continue to roll out the annual anti-rodent campaign to remind members of the public of the importance of rodent prevention and control. The first phase of the 2014 Anti-rodent Campaign was conducted from 2 January 2014 to 7 March 2014. During the campaign period, FEHD carried out a total of 11 407 inspections in target areas, including markets / municipal services buildings, hawker bazaars, typhoon shelters, rear lanes close to licensed food premises and other problematic spots, with 2 898 dead rodents and 1 599 live rodents collected, 1 028 rat holes destroyed, and 504 warnings issued. In order to sustain the effect of the first phase, FEHD will conduct the nine-week second phase of the Anti-rodent Campaign from 7 July to 5 September this year in the above-mentioned target areas. Apart from disinfestation and publicity work that are carried out during the campaign period, FEHD will continue to monitor the situation of rodent infestation in the districts and implement appropriate control measures.
- 12. 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 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

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

Food and Health Bureau Food and Environmental Hygiene Department June 2014

Annex 1

Rodent Infestation Rates for Various Districts (2013)

District	1 st half of 2013	2 nd half of 2013	Overall of 2013
Central / Western	2.2 %	4.9%	3.6%
Eastern	4.6 %	7.1%	5.9%
Southern	1.1 %	1.1%	1.1%
Wan Chai	3.6 %	1.8%	2.7%
Islands	0.0 %	0.9%	0.5%
Kowloon City	4.6 %	3.7%	4.2%
Kwun Tong	3.1 %	1.0%	2.0%
Mong Kok	0.8 %	3.3%	2.1%
Sham Shui Po	7.0 %	6.2%	6.6%
Wong Tai Sin	7.7 %	3.8%	5.8%
Yau Tsim	0.0 %	1.8%	0.9%
North	1.2 %	1.9%	1.6%
Sai Kung	0.0 %	0.0%	0.0%
Sha Tin	0.9 %	1.7%	1.3%
Tai Po	2.7 %	2.7%	2.7%
Tsuen Wan	4.1 %	5.1%	4.6%
Tuen Mun	0.0 %	0.8%	0.4%
Yuen Long	10.5 %	6.1%	8.3%
Kwai Tsing	3.1 %	2.1%	2.6%
Overall	3.0 %	3.2%	3.1%

Overall Rodent Infestation Rates (2001 - 2013)

Annex 2

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%		

Annex 3

Number of Rodents Collected, Rat Holes Destroyed and Warnings Issued in 2013

No. of dead rodents collected	No. of	No. of	No. of
	live rodents	rat holes	warnings
	collected	destroyed	issued
19 427	10 305	5 888	5 496
