# For discussion on 6 July 2010

# 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 the past year, and the major initiatives in the coming year.

## **Rodent Surveillance Programme**

- 2. To effectively monitor the situation of rodent infestation and flexibly deploy resources, the FEHD has been conducting territory-wide rodent infestation rate (RIR)<sup>(Note)</sup> surveys in public areas annually since 2000 by setting baits in selected localities to gather statistics on the ratio of baits bitten by rodent. The localities in the surveys cover all districts in the territory covering rodent infested spots or areas likely to have rodent problems. Twice a year, the FEHD will place around 100 baits in each locality and each bait is placed at least 50 metres apart to ensure a sufficiently large area is covered. The RIR of a locality is calculated with reference to the ratio of baits bitten at that locality. The results of various localities, when aggregated, will give the territory-wide overall RIR.
- 3. There is no internationally adopted RIR. The FEHD has made reference to the practices adopted by different countries / cities and tried out different methods when devising its RIR. It has been concluded that the aforementioned method is the most suitable method for Hong Kong with respect to the local situation and environment. In fact, as mentioned in paragraph 2 above, RIR is mainly used for reference purpose. Apart from the RIR, frontline staff of the FEHD also take into account the trails left by rodents, complaint figures and the views of the local community and the public in targeting problematic locations for rodent prevention and control actions.

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

4. In overall terms, the RIRs recorded between 2001 and 2009 were lower than 10% (details of which are at **Annex 1**), indicating that the rodent problem in public areas of Hong Kong has been largely under control. The annual overall RIR for 2009 was 6.1%. Kwun Tong yielded the highest RIR of 12.4%, while the RIRs for all other districts were below 10%. The lowest RIR of 1.6% was recorded in Wan Chai (the annual RIRs for 2009 are at **Annex 2**).

#### **Rodent Prevention and Control Measures**

- 5. The FEHD has been adopting a comprehensive and targeted approach in its rodent prevention and control work. In districts with relatively high RIRs, the FEHD has taken a number of enhanced rodent control measures, including poisoning and trapping of rodents and filling rat holes in related rear lanes, strengthening street cleansing, encouraging active participation of the public in anti-rodent work and conducting publicity and education programmes in rodent prevention and control. A summary of the number of rodents collected, rat holes filled and warnings issued in 2009 is at **Annex 3**.
- 6. Specifically, the FEHD implemented the following initiatives to step up anti-rodent efforts in 2009:
  - (a) targeted anti-rodent measures were implemented in selected areas likely to be rodent-infested or likely to have rodent problems from October 2009 for six consecutive months. Blitz operations were also carried out between September and December, which include using additional cage traps to enhance the effectiveness of rodent control; and
  - (b) a series of targeted cleansing work were launched to improve the environmental hygiene of public markets, aqua privies and public toilets, streets, rear lanes, environmental hygiene black spots and private buildings.
- 7. Given the high adaptability and reproductive rate of rodents, active participation of the community is a must to achieve the best results in rodent control. In this connection, an additional health inspector has been deployed to each district since 1 April 2009 to promote and coordinate district pest control operations and to conduct public education and publicity activities at district

level to enhance public awareness of pest control. The FEHD has also strengthened liaison with other government departments and local organisations (including District Councils, Area Committees and Owners' Committees). 2009, a total of 157 talks were organised and 895 visits were conducted in private housing estates, shopping malls, markets, cemeteries, construction site offices, hotels, housing estates, hospitals, schools, restaurants, centres for the elderly, non-government organisations, District Councillors' offices and other government departments etc. to disseminate the message on rodent prevention and control. Positive feedback was received from the community during these The overall RIR for the second half of 2009 was 3.6%, representing activities. a significant decline as compared with 8.5% for the first half of 2009. also lower than the half-yearly RIRs in 2008. In addition, the number of rodent complaints received in 2009 was 7 063, which was 6.5% lower than the 7 554 complaints in 2008.

## **Enhancing Exchanges with Rodent Control Experts from Different Places**

8. Rodent infestation is a common problem faced by various countries Following the World Health Organisation's relevant the world. recommendations and technical guidelines, the FEHD's existing rodent prevention and control work is an integrated approach which consists of improving environmental conditions, applying poisonous baits and setting traps. This approach is basically the same as that adopted in major overseas and Mainland cities. To further enhance the methods and techniques for rodent prevention and control, the FEHD maintains regular exchanges with relevant organisations of other countries / cities to share experience on pest control. August and September 2009, the FEHD visited the Tokyo authorities and the Tokyo Pest Control Association in Japan, and shared experience with the Mainland rodent control experts of the Guangdong Pest Control Association (廣 東省有害生物防制協會). In April this year, rodent control experts from the Centre for Disease Control and Prevention of Guangdong Province (廣東省疾 病預防控制中心) and the Office of Patriotic Health Campaign Committee of Guangdong Province (廣東省愛國衞生運動委員會辦公室) visited Hong Kong. During their visit, they conducted field inspections in Wong Tai Sin and Kwun Tong districts to observe the work of our pest control teams. Generally speaking, Tokyo, Guangdong Province and Hong Kong adopt a similar integrated approach towards rodent control and the rodent control experts from these places consider it an effective method in putting the rodent infestation problem under control.

9. In addition, a local pest control association invited the rodent control experts from the Guangdong Entomological Institute (廣東省昆蟲研究 所) to Hong Kong in February this year for professional exchange on rodent control methods and techniques employed locally. During their stay, the experts conducted field visits to various districts. When concluding their visit, the Mainland experts noted that the integrated approach adopted in Hong Kong was appropriate, the methods for eliminating rodents in public areas were sophisticated and the rodent control techniques used were on par with international standards. On the choice of baits, they shared the FEHD's view that the use of fresh food is suffice to attract rodents to the cage traps for effective rodent disinfestations and there was no need to specify any particular kind of food for that purpose. They pointed out that trapping alone was not the most effective measure insofar as rodent control was concerned. concluded that since most rodents in Hong Kong use indoor areas as harbourages and breeding grounds, effective rodent prevention and control hinges on the sustained co-operation between the community and the Government.

#### Work Plan for 2010

- 10. To promote the continuous and active participation of the public in rodent prevention and control work, the FEHD will conduct the two-month Enhancement Phase of the Anti-Rodent Campaign this year from 12 July to 10 September. During that period, disinfestation and publicity work will be carried out and inspections will be stepped up during the campaign period in targeted areas, including markets / market buildings, hawker bazaars, typhoon shelters, rear lanes close to licensed food premises and other problematic spots. The FEHD will also continue to monitor the situation of rodent infestation in districts and implement control measures accordingly.
- In addition, FEHD will continue to exchange experience with other countries / cities on pest control. The FEHD plans to attend international workshop(s) and forum(s) in the Mainland and overseas in the second half of this year to meet with experts from different places to discuss rodent disinfestation issues. The FEHD will also maintain its efforts in modernising the methods and techniques for rodent control by making reference to recommendations made by the World Health Organisation and experiences of other countries / cities so as to improve the approaches and strategies used in rodent disinfestations and enhance their effectiveness.

# **Advice Sought**

12. Members are invited to note and comment on the paper.

Food and Health Bureau Food and Environmental Hygiene Department July 2010

## Annex 1

# **Overall Rodent Infestation Rates (2000 - 2009)**

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Rodent Infestation Rate	16.0%	8.8%	9.0%	5.6%	4.1%	4.4%	2.9%	4.8%	6.3%	6.1%

## Annex 2

# **Rodent Infestation Rates for Various Districts (2009)**

District	1 <sup>st</sup> half of 2009	2 <sup>nd</sup> half of 2009	Overall of 2009	
Central / Western	5.5%	3.8%	4.7%	
Eastern	15.6%	0.6%	8.1%	
Southern	11.8%	1.1%	6.5%	
Wan Chai	3.2%	0.0%	1.6%	
Islands	12.0%	6.6%	9.3%	
Kowloon City	7.3%	2.8%	5.0%	
Kwun Tong	18.8%	6.0%	12.4%	
Mong Kok	4.0%	0.0%	2.0%	
Sham Shui Po	7.8%	7.8%	7.8%	
Wong Tai Sin	6.4%	8.6%	7.5%	
Yau Tsim	8.2%	2.6%	5.4%	
North	6.9%	7.5%	7.2%	
Sai Kung	7.3%	3.6%	5.4%	
Sha Tin	8.4%	2.6%	5.5%	
Tai Po	2.7%	0.9%	1.8%	
Tsuen Wan	7.1%	3.1%	5.1%	
Tuen Mun	16.7%	0.0%	8.3%	
Yuen Long	7.0%	6.1%	6.6%	
Kwai Tsing	4.1%	2.0%	3.1%	
Overall Rodent Infestation Rate	8.5%	3.6%	6.1%	

## Annex 3

# Number of Rodents Collected, Rat Holes Destroyed and Warnings Issued (2009)

No. of dead rodents rodents collected collected		No. of rat holes destroyed	No. of warnings issued	
25 035	6 828	9 318	6 271	