

**CONTROLLING OFFICER'S REPLY**

**EEB(F)123**

**(Question Serial No. 1342)**

Head: (49) Food and Environmental Hygiene Department

Subhead (No. & title): (-) Not specified

Programme: (1) Food Safety and Public Health

Controlling Officer: Director of Food and Environmental Hygiene (Donald NG)

Director of Bureau: Secretary for Environment and Ecology

Question:

With regard to the prevention and control of rodents, please advise this Committee of:

1. the civil service staffing and the total number of outsourced pest control workers involved in pest control work, the overall expenditure on pest control services, the government staff cost for pest control work and the total value of the pest control service contracts in each of the past 3 years;
2. the number of poison treatments of rodent infestation in building blocks and other public places, the number of rodent trappings, the number of dead rodents collected, the number of live rodents caught, the number of rat holes filled, the number of rodent control surveys conducted and the number of rodent infestation complaints received in each of the past 3 years, with a breakdown by District Council district;
3. the new rodent control methods and technologies trialled by the Food and Environmental Hygiene Department in the past year, their effectiveness and the expenditure involved;
4. whether the Department has assessed the effectiveness of the Rodent Activity Survey (RAS) after the full adoption of thermal imaging cameras with artificial intelligence technology for conducting the RAS as a replacement for the original Rodent Infestation Survey starting from last year; if yes, the details; if no, the reasons; and
5. the public markets/cooked food centres and refuse collection points currently using alcohol rodent trapping devices, as well as the respective numbers of rodents caught. Will the use of alcohol rodent trapping devices be extended to other public markets/cooked food centres and refuse collection points? If yes, what are the details? If no, what are the reasons?

Asked by: Hon YANG Wing-kit (LegCo internal reference no.: 20)

Reply:

1. The staffing and expenditure involved in pest control work, including rodent and mosquito prevention and control, of the Food and Environmental Hygiene Department in the past 3 years are as follows:

Year	Civil service staffing		Total number of staff employed by pest control service contractors
	Planning and implementation of pest control work in districts	Vector surveillance, technical support and advisory work	
2022	745	109	1 977 <sup>Note</sup>
2023	745	109	1 860 <sup>Note</sup>
2024	745	109	1 573

Note: Excluding positions created under the Anti-epidemic Fund.

Year	Overall expenditure on pest control services <sup>Note</sup> (\$ million)	Government staff costs for pest control work (\$ million)	Expenditure on pest control service contracts (\$ million)
2022-23	786	286	457
2023-24	795	292	424
2024-25 (Revised estimate)	871	310	471
2025-26 (Estimate)	856	314	454

Note: The overall expenditure on pest control services includes the expenditure on government staff, service contracts and other day-to-day operating expenses.

2. The number of poison treatments of rodent infestation conducted in building blocks and other public places, the number of rodent trappings used, the number of dead rodents collected, the number of live rodents caught, the number of rat holes filled, the number of rodent surveys conducted and the number of rodent infestation complaints received by the Department in the past 3 years, with a breakdown by District Council district, are provided in **Annex 1**.
3. The rodent control technologies and tools adopted by the Department in the past year, their effectiveness and the expenditure involved are provided in **Annex 2**.
4. From 2024 onwards, the Department has fully adopted thermal imaging cameras with artificial intelligence technology for conducting the Rodent Activity Survey (RAS) as a replacement for the Rodent Infestation Survey (RIS). The RAS will be conducted in all districts across the territory once every 6 months. Artificial intelligence will be used in the survey to help analyse the thermal images and identify the presence of rodents. Based on the analysis results, the Department will enumerate a Rodent Absence Rate (RAR) for the district. The RAR is a useful indicator that enables the Department to effectively deploy resources and implement targeted rodent prevention and control measures according to the RAS results. Specifically, the Department will:
  - (a) analyse the thermal images captured by thermal imaging cameras at locations with lower RARs to obtain a clear picture of rodents' activities and their dispersal routes at such locations; and

- (b) deploy resources from locations with higher RARs to those with lower RARs, and carry out corresponding measures to strengthen the rodent prevention and control work at the locations concerned, which include:
  - (i) redeploying pest control teams to strengthen the daytime rodent prevention and disinfestation work for better resource allocation and efficiency;
  - (ii) stepping up rodent trapping operations by overnight rodent control teams at locations with lower RARs;
  - (iii) investigating the source of rodent infestation at nearby venues and premises. For premises found to be infested with rodents, the Department will intervene and, when necessary, deploy its staff to carry out vermin disinfestation operations;
  - (iv) providing health education to and taking enforcement actions at nearby food premises and private buildings to ensure proper waste disposal;
  - (v) strengthening street cleansing services and combating illegal refuse dumping in the vicinity; and
  - (vi) inviting nearby food premises to participate in the scheme of placing large-size waste containers in rear lanes and urging the premises to step up rodent prevention and control, with a view to improving the environmental hygiene of rear lanes.

For the first half of 2024, a total of 90 locations have an RAR below 80%, indicating that rodent activities were more active. Nearly 90% (78) of these locations saw improvement for the second half of the year, with 42 of them achieving an RAR of over 90%. This reflects the fruitful results of the new strategy.

- 5. In 2024, the Department adopted the use of alcohol rodent trapping devices as an additional rodent trapping tool in 92 markets/cooked food markets and 147 refuse collection points under its management. 680 and 1 592 live rodents were caught in markets/cooked food markets and refuse collection points respectively. The equipment will be deployed for use in other markets/cooked food markets and refuse collection points as necessary.

# Annex 1

District	2022						
	Number of poison treatments of rodent infestation in building blocks and other public places	Number of rodent trappings	Number of dead rodents collected	Number of live rodents caught	Number of rat holes filled	Number of rodent surveys	Number of rodent infestation complaints received
Central and Western	4 956	5 001	1 885	1 873	194	50	655
Eastern	14 152	3 467	1 363	2 982	47	50	682
Southern	3 843	1 240	465	936	472	50	134
Wan Chai	12 864	4 066	1 402	2 915	478	18	829
Kowloon City	6 505	4 983	1 915	2 271	172	52	823
Kwun Tong	7 028	4 673	2 037	3 779	123	52	346
Wong Tai Sin	2 904	4 092	1 298	2 481	329	44	243
Sham Shui Po	708	6 660	4 132	5 842	8 400	62	1 014
Yau Tsim Mong	5 445	13 496	6 639	6 862	6 858	62	1 741
Sha Tin	5 294	2 325	1 298	1 253	1 108	36	499
Tai Po	14 352	1 272	1 692	957	448	18	384
North	3 140	4 755	1 041	2 281	9	38	310
Kwai Tsing	1 296	3 106	692	1 007	377	38	632
Tsuen Wan	2 880	5 225	906	2 903	459	30	423
Tuen Mun	7 651	2 350	1 747	2 681	155	52	496
Yuen Long	7 339	6 955	1 550	2 723	285	38	887
Sai Kung	11 952	1 914	746	794	111	38	474
Islands	774	2 568	1 002	882	393	18	191
Whole territory	113 083	78 148	31 810	45 422	20 418	746^	10 763

^ Only surveys conducted under the RIS and the Rat-flea Survey are listed. Other rodent surveys (1 354 in number) are not included in the breakdown.

District	2023						
	Number of poison treatments of rodent infestation in building blocks and other public places	Number of rodent trappings	Number of dead rodents collected	Number of live rodents caught	Number of rat holes filled	Number of rodent surveys	Number of rodent infestation complaints received
Central and Western	4 713	5 935	1 370	2 261	172	84	640
Eastern	12 872	4 554	905	4 004	82	17	729
Southern	3 693	1 260	546	1 268	677	29	138
Wan Chai	14 084	6 166	1 231	4 402	598	20	705
Kowloon City	8 177	5 249	3 811	3 458	173	22	872
Kwun Tong	6 708	5 814	1 293	4 277	88	57	319
Wong Tai Sin	2 976	3 661	4 031	4 592	150	19	283
Sham Shui Po	821	6 384	3 926	6 133	6 568	85	1 151
Yau Tsim Mong	5 419	15 613	6 230	9 342	6 972	57	1 946
Sha Tin	4 622	3 562	917	2 598	741	54	501
Tai Po	14 103	1 307	2 322	1 465	765	12	319
North	3 840	3 223	527	2 414	35	53	245
Kwai Tsing	1 188	4 964	1 173	2 052	406	47	624
Tsuen Wan	2 881	6 975	557	2 491	201	41	429
Tuen Mun	7 717	2 541	2 501	4 521	191	53	588
Yuen Long	9 687	11 322	1 960	4 843	387	52	966
Sai Kung	11 910	2 263	592	1 087	73	18	423
Islands	816	2 611	604	2 136	206	19	197
Whole territory	116 227	93 404	34 496	63 344	18 485	739*	11 075

\* Only surveys conducted under the RIS and the Rat-flea Survey are listed. Other rodent surveys (1 220 in number) are not included in the breakdown.

District	2024						
	Number of poison treatments of rodent infestation in building blocks and other public places	Number of rodent trappings	Number of dead rodents collected	Number of live rodents caught	Number of rat holes filled	Number of rodent surveys	Number of rodent infestation complaints received
Central and Western	4 917	9 197	1 338	4 268	365	12	642
Eastern	12 250	7 845	714	5 819	111	12	1 016
Southern	3 883	2 104	440	1 562	1 152	46	167
Wan Chai	16 956	9 448	1 290	6 360	533	13	605
Kowloon City	7 739	8 131	4 213	5 356	49	12	900
Kwun Tong	6 708	5 844	1 166	5 016	72	46	323
Wong Tai Sin	2 976	4 922	4 304	6 566	293	45	610
Sham Shui Po	820	7 850	3 818	8 530	3 684	11	892
Yau Tsim Mong	6 064	19 176	6 128	14 550	7 376	22	1 677
Sha Tin	4 866	3 335	731	4 111	846	45	368
Tai Po	16 704	1 410	2 167	2 025	800	66	412
North	3 840	3 998	380	3 209	15	65	339
Kwai Tsing	1 242	9 856	1 245	3 917	403	45	405
Tsuen Wan	2 880	7 533	550	3 290	146	45	267
Tuen Mun	6 893	2 534	2 055	4 934	231	46	607
Yuen Long	9 750	12 107	1 639	5 528	405	47	944
Sai Kung	12 188	2 911	532	1 571	68	13	386
Islands	1 068	4 917	539	3 017	200	12	200
Whole territory	121 744	123 118	33 249	89 629	16 749	603#	10 760

# Only surveys conducted under the RAS and the Rat-flea Survey are listed. Other rodent surveys (1 143 in number) are not included in the breakdown.

**Technologies and tools for rodent control,  
their effectiveness and the expenditure involved**

<b>Rodent control technology and tool</b>	<b>Effectiveness</b>	<b>Expenditure in 2024-25</b>
<b>Thermal imaging camera surveillance system</b>	The Department conducted trials on thermal imaging cameras with artificial intelligence analytical function in 2020 and found it effective in facilitating objective assessment of rodent infestation situation. The Department has fully adopted thermal imaging cameras for conducting the RAS as a replacement for the RIS from 2024 onwards to enhance rodent surveillance in districts and deploy more effective anti-rodent actions at locations where the rodent problem is more serious.	About \$12.67 million
<b>Placing poisonous baits in a T-shaped bait box</b>	The bait box was tested between October and November 2020. Test results showed that the T-shaped bait box was more effective than ordinary rectangular bait boxes in attracting rodents to enter and consume the baits. The equipment has been widely employed.	About \$130,000
<b>Alcohol rodent trapping device</b>	The Department has conducted trials progressively on alcohol rodent trapping devices in public markets and refuse collection points since October 2022. The results are positive. The equipment will be used in suitable places as necessary.	About \$1.7 million

The Department will continue to keep track of the rodent control technologies and tools in the market and introduce them for use at locations with higher rodent activities when appropriate.