

CONTROLLING OFFICER'S REPLY

FHB(FE)125

(Question Serial No. 2140)

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 (Miss Vivian LAU)

Director of Bureau: Secretary for Food and Health

Question:

1. Please set out (i) the number of poison treatments of rodent infestation in building blocks; (ii) the number of rodent trappings; (iii) the number of dead rodents collected and live rodents caught; (iv) the number of rat holes filled; (v) the number of rodent control surveys conducted; (vi) the number of rodent infestation complaints received; and (vii) the Rodent Infestation Rate recorded, in each of the past 3 years (with a breakdown by District Council district).
2. With regard to (a) pest control work and (b) rodent control work, please provide (i) the total expenditure; (ii) the civil service staffing and the staff cost; and (iii) the total value of the outsourced service contracts and the total number of outsourced workers in the past 3 years and in the coming year.
3. How many anti-rodent operations were conducted in designated target areas in the past 3 years and how effective was each operation?
4. What rodent control methods have been adopted from Mainland China, Macao, Taiwan or overseas countries in the past 3 years and what methods will be adopted in the coming year? What are the expenditure involved (e.g. procurement of relevant devices) and the effectiveness of each method?

Asked by: Hon LEUNG Mei-fun, Priscilla (LegCo internal reference no.: 6)

Reply:

1. The information sought is detailed at the Annex.

2. The information sought is summarised as follows:

Year	Overall expenditure on pest control services^{note}	Expenditure on rodent control work^{note}	Staff costs for pest control work^{note}	Total value of pest control service contracts
2017-18	\$569 million	\$173 million	\$236 million	\$541 million
2018-19	\$630 million	\$198 million	\$248 million	\$610 million
2019-20	\$647 million	\$207 million	\$259 million	\$892 million
2020-21	\$667 million	\$209 million	\$266 million	\$1.066 billion

Note: Revised estimate and estimated expenditure for 2019-20 and 2020-21 respectively.

Year	Total number of staff engaging in pest control work	Total number of staff employed by pest control service contractors
2017	702	1 740
2018	699	1 860
2019	727	1 970
2020	740	2 040

3. In the past 3 calendar years, the Department launched a total of 6 anti-rodent operations in designated target areas in all districts in May and September 2017, April and October 2018 and May and November 2019 respectively. The measures taken included elimination of food sources and hiding places of rodents as well as blocking their passages. The results of these anti-rodent operations in the past 3 years are set out as follows:

Item	2017	2018	2019
Number of poison treatments of rodent infestation	15 972	17 678	16 637
Number of rodent trappings	24 556	22 475	38 274
Number of rat holes filled	757	803	799
Number of dead rodents collected	1 652	1 636	1 817
Number of live rodents caught	1 284	1 305	1 573

Disinfestation operations by the Department in public places alone cannot solve the problem. It is vital that members of the public should take rodent control measures in their own premises. To this end, it is part of the Department's anti-rodent operations to provide health education on prevention and control of rodent infestation to the public and to offer technical support.

4. Information on tests conducted by the Department on rodent control methods and technologies developed locally or adopted by other countries in the past 3 years is as follows:

Rodent control method/technology	Place of origin	Effectiveness	Expenditure
Using a non-poisonous bait having flavours of food for the Rodent Infestation Rate (RIR) surveys	Germany	The bait was tested in public rear lanes in 10 districts between February and September 2018. It was compared to sweet potatoes in terms of their attractiveness to rodents. The results have shown that the bait cannot attract rodents to take a bite, which means it is not so effective as sweet potatoes.	Around \$60,000
Rodent trapping device driven by pressurised gas	New Zealand	The rodent trapping device was tested in 4 public markets of the Department between October 2018 and June 2019. The devices installed failed to catch any rodents.	Around \$60,000
Night-vision camera surveillance system	Hong Kong	The system was tested in public markets in Kowloon City District and rear lanes in Mong Kong District between April and July 2019. The results have shown that the system with artificial intelligence analytical function is capable of identifying rodents in night-vision images and tracing their movements. It can be employed to monitor the areas and extent of rodent activities and is therefore conducive to quantifying and enhancing the effectiveness of anti-rodent measures.	Around \$760,000

The Department is conducting a trial test on the thermal imaging camera surveillance system in selected rear lanes in Kowloon City District, and plans to install thermal imaging cameras before and after the 2 phases of anti-rodent operations in designated target areas which will be conducted later in various districts with a view to quantifying and reviewing the effectiveness of the operations. The estimated expenditure involved is around \$2.1 million. The Department will continue to keep in view the methods of vector prevention and control recommended by the World Health Organization and adopted by other countries. The Department keeps an open mind on adopting or trying out rodent control methods that are suitable for use in local

circumstances for further improving the effectiveness of its rodent infestation surveys as well as prevention and control work.

District	2017							
	Number of poison treatments of rodent infestation in building blocks	Number of rodent trappings	Number of dead rodents collected	Number of live rodents caught	Number of rat holes filled	Number of rodent control surveys	Number of rodent infestation complaints received	RIR
Central and Western	4 306	4 881	1 932	1 689	234	27	871	3.6%
Eastern	7 430	2 450	2 407	871	152	47	765	6.0%
Southern	2 762	936	708	438	121	42	189	2.7%
Wan Chai	4 900	3 668	1 241	584	167	20	691	5.6%
Kowloon City	4 368	11 867	2 322	1 491	333	45	865	2.3%
Kwun Tong	6 390	1 291	2 213	448	241	42	477	4.3%
Wong Tai Sin	948	244	720	296	122	42	343	1.0%
Sham Shui Po	404	1 786	2 848	1 330	1 553	29	1 181	6.2%
Yau Tsim Mong	387	8 127	3 176	2 391	1 189	50	1 247	2.8% (Yau Tsim) 6.6% (Mong Kok)
Sha Tin	2 308	8 810	800	704	877	45	530	2.6%
Tai Po	10 476	376	1 254	938	711	25	346	1.8%
North	2 257	360	1 203	466	1 162	47	306	1.9%
Kwai Tsing	1 545	138	496	344	262	45	254	3.6%
Tsuen Wan	3 624	3 265	817	1 399	162	45	347	4.7%
Tuen Mun	4 938	1 811	415	88	56	45	354	1.3%
Yuen Long	6 492	637	2 084	735	88	45	795	3.5%
Sai Kung	6 238	1 189	513	252	145	45	358	1.8%
Islands	348	2 602	1 185	240	383	25	331	3.3%
Overall	70 121	54 438	26 334	14 704	7 958	711*	10 250	3.5%

* Only surveys conducted in relation to Rodent Infestation Survey and Rat-flea Survey are listed. Other rodent surveys (1 258) are not included in the breakdown.

District	2018							
	Number of poison treatments of rodent infestation in building blocks	Number of rodent trappings	Number of dead rodents collected	Number of live rodents caught	Number of rat holes filled	Number of rodent control surveys	Number of rodent infestation complaints received	RIR
Central and Western	4 432	4 772	1 890	1 763	258	45	992	3.6%
Eastern	18 699	2 480	2 398	890	156	45	884	2.1%
Southern	3 394	935	713	439	105	25	171	0.5%
Wan Chai	8 446	3 760	1 622	805	163	40	909	2.8%
Kowloon City	4 608	11 309	2 592	1 666	332	29	1 128	6.1%
Kwun Tong	6 587	1 876	2 434	819	225	42	487	5.8%
Wong Tai Sin	950	333	1 441	413	146	25	338	1.0%
Sham Shui Po	308	5 522	3 853	2 241	3 258	45	1 381	6.7%
Yau Tsim Mong	1 510	8 331	3 217	2 364	1 050	70	1 199	2.4% (Yau Tsim) 6.0% (Mong Kok)
Sha Tin	4 548	9 167	858	703	910	25	696	4.7%
Tai Po	13 560	384	771	585	902	40	352	2.7%
North	3 232	424	1 034	464	380	42	387	2.5%
Kwai Tsing	1 457	569	408	520	246	42	336	1.0%
Tsuen Wan	3 182	4 176	823	1 631	225	42	376	5.1%
Tuen Mun	4 703	1 927	503	128	102	45	411	2.1%
Yuen Long	6 585	664	1 654	602	43	42	892	3.9%
Sai Kung	6 966	1 201	480	231	244	30	381	2.2%
Islands	648	2 602	1 183	240	384	25	343	1.4%
Overall	93 815	60 432	27 874	16 504	9 129	699#	11 663	3.4%

Only surveys conducted in relation to Rodent Infestation Survey and Rat-flea Survey are listed. Other rodent surveys (1 334) are not included in the breakdown.

District	2019							
	Number of poison treatments of rodent infestation in building blocks	Number of rodent trappings	Number of dead rodents collected	Number of live rodents caught	Number of rat holes filled	Number of rodent control surveys	Number of rodent infestation complaints received	RIR
Central and Western	4 594	4 912	2 029	1 661	260	23	1 074	1.6%
Eastern	21 771	2 483	2 330	1 182	217	40	818	3.2%
Southern	3 815	1 117	611	464	73	25	112	2.2%
Wan Chai	12 544	3 569	1 533	1 213	611	42	988	11.7%
Kowloon City	4 640	11 196	3 459	2 019	415	28	952	6.2%
Kwun Tong	6 302	2 927	2 929	3 476	432	42	556	9.1%
Wong Tai Sin	960	1 210	1 557	606	201	25	357	4.9%
Sham Shui Po	284	5 286	3 578	3 291	2 963	34	1 200	5.3%
Yau Tsim Mong	1 482	10 334	4 172	3 031	4 653	50	1 161	6.0% (Yau Tsim) 3.0% (Mong Kok)
Sha Tin	4 693	9 608	1 018	766	922	25	711	3.4%
Tai Po	13 500	389	780	591	754	40	344	4.5%
North	1 667	449	1 119	580	380	35	485	1.6%
Kwai Tsing	1 305	2 672	395	768	234	42	295	4.6%
Tsuen Wan	3 009	4 716	1 125	1 767	186	42	311	5.2%
Tuen Mun	4 811	2 015	465	371	46	38	458	1.7%
Yuen Long	4 685	1 767	1 554	1 490	49	42	776	4.8%
Sai Kung	7 580	1 239	432	210	183	30	372	2.3%
Islands	680	2 601	1 173	241	384	30	359	5.3%
Overall	98 322	68 490	30 259	23 727	12 963	633 [^]	11 329	4.2%

[^] Only surveys conducted in relation to Rodent Infestation Survey and Rat-flea Survey are listed. Other rodent surveys (1 325) are not included in the breakdown.

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