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For information
on 5 October 2001

LegCo Panel on

Food Safety and Environmental Hygiene

Anti-mosquito and Anti-rodent Campaigns

PURPOSE

This paper briefs Members on the territory-wide Anti-mosquito and Anti-rodent Campaigns launched by the Food and Environmental Hygiene Department (FEHD) to prevent and control problems relating to mosquitoes and rodents respectively.

BACKGROUND

2. Mosquitoes and rodents are harmful pests that are commonly found in both urban and rural areas. They cause great nuisance to human beings and pose threats to public health as vectors of diseases like malaria, dengue fever, leptosptrosis, urban typhus and hantaviral disease. The table at Annex A shows the number of cases of mosquito-borne and rodent-borne diseases reported in Hong Kong during 1997-2001.

3. FEHD, being the pest control authority in Hong Kong, is responsible for formulating and enforcing preventive and control measures to tackle problems relating to mosquitoes and rodents. Regular inspection and disinfestation actions are carried out by our pest control staff throughout the year with the aim of bringing the problems under control. Besides, the Pest Control

Co-ordinating Committee comprising representatives of various government departments such as the Department of Health, Home Affairs Department, Housing Department, etc, has been offering valuable advice and assistance to our work on this front. Moreover, we also count on the efforts of the community to maintain good environmental and personal hygiene so as to help reduce the breeding of mosquitoes and rodents in the territory. In this regard, Anti-mosquito and Anti-rodent Campaigns are organised regularly to co-ordinate the joint efforts of the Administration and the community in carrying out the necessary preventive and control measures to tackle the problems.

ANTI-MOSQUITO CAMPAIGN

4. Dengue fever, an acute mosquito-borne disease, has re-emerged as a global threat in recent years affecting about 50 million cases each year in over 100 countries. Its symptoms include high fever, headache, rash, joint and muscular pain. *Aedes albopictus*, which is a vector of dengue fever, is prevalent in Hong Kong. Their breeding sites can be grouped into two categories generally:-

(a) artificial receptacles, e.g. containers, discarded tyres, lunch boxes, cans and clogged surface channels; and

(b) naturally occurring habitats, e.g. tree holes, bamboo stumps and leaf axils.

5. Dengue virus is transmitted by infected mosquitoes but does not transmit directly from person to person. The disease is endemic in tropical and subtropical regions including South East Asia, South Asia, the Pacific area, Africa and Central America. Although there has been no local case of dengue fever reported so far, Hong Kong is not invulnerable. From the experience of overseas countries, dengue fever would be difficult to control once it has established its foothold in the territory. The result of the Dengue Vector Survey conducted in 2000 showed that the average ovitrap index[1] at the 34 selected locations in Kowloon, Hong Kong and the New Territories regions was 24.1%,

[1] Ovitraps are devices made of small plastic containers that are placed at selected locations for detecting the larval breeding rate of mosquitoes. Ovitrap index is the percentage of ovitraps that are found to have positive larval breeding result.

indicating that about one fourth of the areas at these selected locations were infested with *Aedes albopictus*. As a precautionary measure, we have been putting in more efforts to tackle mosquito problems in general and dengue fever in particular through the launch of the Anti-mosquito Campaign 2001.

Implementation Details

6. Under the theme "Let's Remove Stagnant Water, Eliminate Mosquito for Healthy Living.", Anti-mosquito Campaign 2001 is being conducted in two phases on a territory-wide basis. Phase 1 took place between 9.4.2001 and 5.5.2001 while Phase II lasts from 31.8.2001 to 3.11.2001. Areas favouring the harbourage of mosquitoes or in close proximity to human residence such as construction sites, public housing estates, hospitals and schools are identified as areas for target control.

7. Anti-mosquito Campaign 2001 aims to achieve the following objectives:-

(a) to encourage community participation and collaboration among government departments in preventing and controlling mosquito problems;

(b) to eliminate breeding sites of mosquitoes, e.g. small containers and water holding tyres; and

(c) to heighten public awareness of the potential risk of dengue fever.

Phase I of the Campaign

8. With the concerted efforts of government departments concerned, Phase I of the Campaign was successfully completed in May 2001. We had made use of different promotional channels such as press briefing, FEHD's website, posters, leaflets and Announcements in the Public Interest (API) to publicise the Campaign. A total of 155 warning letters, statutory notices and summonses were issued during the period. Some 31,000 breeding places or

potential breeding places of mosquitoes were identified and eliminated by our pest control staff. More importantly, we have successfully heightened the community's awareness of the importance of mosquito prevention and control through organising various publicity and educational activities such as exhibitions and health talks. It is most encouraging to note that the average ovitrap indices in all regions (shown at Annex B) declined in January-June 2001 over the same period last year subsequent to the conclusion of Phase I of the Campaign.

Phase II of the Campaign

9. The recent outbreak of dengue fever in Macau and some Southeast Asian countries has sparked off the local community's concern about the risk of the disease. As part of the Administration's enhanced efforts to prevent the spreading of dengue fever in Hong Kong, Phase II of our Anti-mosquito Campaign 2001 which was originally scheduled for October has been advanced to commence on 31.8.2001 with emphasis placed on eliminating the breeding sites of *Aedes albopictus* and equipping the community with the necessary knowledge and skills to tackle the problems. We will continue to strengthen our education and enforcement efforts while monitoring the local situation closely.

ANTI-RODENT CAMPAIGN

10. Anti-rodent Campaign is another major activity of our pest control programme. Focusing on the rodent problems found in the market buildings and on the constructions sites, a territory-wide Anti-rodent Campaign was held in June 2000-July 2001. Evaluation results show that the Campaign has increased market stall keepers' and construction workers' awareness of the importance of rodent prevention and control. The Campaign has also reduced rodent population in the market buildings and on the construction sites. In view of the success of the previous Campaign and to maintain the momentum, we shall continue our territory-wide Anti-rodent Campaign.

Target Areas

11. Licensed food premises, with ample food sources and possible

harbouraging places, provide potential breeding havens for rodents. Dumping of refuse and preparation of food by their staff at the nearby rear lanes worsen the situation. These areas will become highly vulnerable to rodent infestation if no preventive and control measures are in place to combat the problems. In 2000, a total of 376 warnings against rodent problem were issued to licensed food premises during the inspections conducted by our District Health Inspectors. To improve the situation, we have chosen licensed food premises and their nearby rear lanes as the target biotope of Anti-rodent Campaign 2002.

Objectives

12. We aim to achieve the following objectives:-

(a) to reduce rodent population in the territory, particularly in licensed food premises and their nearby areas; and

(b) to equip the management of food premises with skills and knowledge on rodent prevention and control.

Implementation Plan

13. Under the theme of "Proofing Measures Done, Rodents We Have None.", the Campaign will be conducted in two phases, namely the Promotion Phase (2 January 2002 to 2 February 2002) and the Enhancement Phase (June 2002). During the Promotion Phase, we shall concentrate our efforts on the identification of rodent problems in licensed food premises as well as conveying knowledge and skills on rodent prevention and control to the management of the premises. District Health Inspectors will inspect the licensed food premises and advise their management of the proper rodent control and preventive measures. Rodent cage traps or poisonous baiting stations will be set at the peripheral areas of the premises by our pest control staff when signs of rodent infestation have been detected. We will hold press briefing and disseminate relevant information through FEHD's website, posters and leaflets to bring out the Campaign's message to the community.

14. The Enhancement Phase, which will last for about four weeks, provides an opportunity for us to reinforce the rodent prevention messages. By

the end of the implementation period, we aim to bring rodent problems found in areas around the licensed food premises under control. An assessment will also be made to see whether the licensed food premises have implemented appropriate rodent preventive measures.

CONCLUSION

15. Our battles against mosquito breeding and rodent infestation require sustained efforts. Moreover, pest prevention and control cannot be carried out effectively and efficiently without the participation of the community. Assistance rendered by the District Councils over the years in promoting the Campaigns and encouraging community participation at district level has greatly facilitated our work. We welcome any feedback from the community on our Campaigns and will take it into consideration with a view to further improving our pest control strategy.

Food and Environmental Hygiene Department
September 2001

Annex A

Number of Cases of Mosquito-borne and Rodent-borne Diseases Reported in Hong Kong during 1997 -2001

Disease / Year	Dengue Fever (mosquito-borne)			Malaria (mosquito-borne)			Leptosptrosis (rodent-borne)			Urban Typhus (rodent-borne)			Hantaviral Disease (rodent-borne)		
	Local	Imported	**Total**	Local	Imported	**Total**	Local	Imported	**Total**	Local	Imported	**Total**	Local	Imported	**Total**
1997	0	10	**10**	0	101	**101**	0	0	**0**	6	2	**8**	4	1	**5**
1998	0	15	**15**	1	53	**54**	0	0	**0**	4	1	**5**	9	0	**9**
1999	0	5	**5**	2	53	**55**	0	0	**0**	6	6	**12**	7	1	**8**
2000	0	11	**11**	1	34	**35**	0	1	**1**	0	3	**3**	2	0	**2**
2001 (Jan to Aug)	0	8	**8**	0	22	**22**	1	0	**1**	**1***(not yet classified)			1	0	**1**

Annex B

Comparison of Ovitrap Indices by Region (January to June in 2000 & 2001)