Pest Control Newsletter (Dec 2017)

Handling Dengue Fever Cases

Dengue fever is an arboviral disease transmitted by two mosquito species, namely *Aedes aegypti* and *Aedes albopictus*. While the former one has not been detected locally, the latter one is, in contrast, commonly found in Hong Kong. To prevent transmission of the disease, immediate preventive and control measures against the mosquito vectors must be taken. Upon receipt of notification of a dengue fever case from the Department of Health, the Food and Environmental Hygiene Department (FEHD) will initiate prompt mosquito preventive and control actions.

FEHD staff will carry out anti-vector work by eliminating the vector breeding places (and also potential breeding places) discovered in public areas within 500 metres from the reported localities (e.g. patient's residence and work place). Special attention will be given to high human concentrated areas such as housing estates, hospitals and schools.

There is a wide range of man-made and natural habitats which attract vector breeding. Some of the more commonly seen vector breeding places and the corrective measures are:

Breeding place	Corrective measure
Flower vase / saucer	Change / drain water at least once a week.
for potted plant	
Tree hole and bamboo	Cover / fill them up properly with suitable material to
stump	ensure no water can be accumulated inside.
Water receptacle /	Cover them with suitable material (e.g. lid, screen
container	netting). Apply biological agent such as mosquito-eating
	fishes and Bacillus thuringiensis israelensis in suitable
	situation.
Key hole on manhole	Drain the stagnant water. Plug the key hole.
cover	
Roof gutter and surface	Clear fallen leaves and debris. Maintain regularly to
drainage channel	ensure proper draining.
Tyre (disused)	Store properly, e.g. stack up and covered, place under
	shelters, puncture to prevent accumulation of water.
Rubbish	Containers such as packages, bottles, cans, foam boxes,

etc. should be disposed of properly.

FEHD staff will carry out larviciding if the mosquito breeding places or potential breeding grounds are inaccessible or unable to be eliminated within a short period of time. We will also perform fogging of knock-down insecticide at places where adult vectors are detected. This aims at suppressing the adult vector population to lower the risk of disease transmission. Our staff will adopt appropriate safety measures during the course of applying pesticides.

To raise the awareness of the members of the public, FEHD staff will give advice and distribute education leaflets and posters on mosquito prevention and control to the public and the management of relevant parties during operations.

Prevention and control of dengue fever vector would not be successful without the active participation and sustained effort of the community. Let's work together to combat the mosquitoes to safeguard our health!

Points to Note for Property Management in Preventing and Controlling Rodent Infestation

Introduction

Rodent problems which are directly linked to human activities are usually more serious in areas with high human concentration as harborages, passages and sources of food for rodents are created in our daily lives. Residential estates are among the most densely populated places, hence the respective property managements have to deal with rodent infestation within the areas under their purview.

Recently, there are reports of serious rodent infestation in many residential estates. While some problems arise due to technical issues concerning rodent control methods, others are resulted from the lack of rodent prevention and control knowledges of estate management staff. As common mistakes in controlling rodent infestation had been discussed in the 41st issue of FEHD Pest Control Newsletter in 2016, this article will focus on some common management related problems.

Management Misconception

Since pest control services in residential estates are usually outsourced, some property management staffs tend to overlook the roles they are required to play and the need to acquire knowledge on rodent prevention and control. Some may even think that the responsibility of rodent control lies with the government. In fact, it is the responsibility of every property management to prevent and control rodent infestation in the area within the estate it manages.

Undesirable Design of Estate Facilities

The design and location of certain facilities in a residential estate are prone to facilitate the proliferation of rodents, such as the proximity of flowerbeds to refuse collection point. While it is understandable that such designs could not be altered easily, the property management should at least be aware of the potential risk they might bring and pay particular attention to prevent rodent infestation at these locations.

Lack of Regular Preventive Measures

In some estates, no regular rodent prevention and control measures are implemented. One-off rodent control service is engaged only after an infestation report has been received. Like any other routine maintenance or gardening works, rodent prevention and control work should be carried out on a regular basis. Inspections at an appropriate frequency should be conducted to identify potential factors that favour the breeding of rodents, so that preventive measures such as removing accumulated articles, sealing or screening openings and cracks, deploying rodenticides etc., could be implemented immediately. Rapid and effective eradication can only be achieved if the problems are detected and rectified promptly.

Slow in Response

Rodent infestation could be rapid under favourable conditions. However, the situation is being underestimated at times. The degree of infestation could become serious and widespread before control action is launched. The prolonged reaction time is usually the result of lack of regular inspection, insufficient awareness of frontline staff such as cleansing or gardening workers on signs of infestation, or the negligence of the management on reports of rodent infestation.

Selecting Pest Control Service Provider and Performance Monitoring

As mentioned above, pest control services at residential estates are usually outsourced. However, monitoring of service performance remains the responsibility of the property management. Estate management staff should be able to assess whether the rodent control and prevention plans proposed by the service provider are effective and reasonable. Awarding contracts solely based on tender prices should be avoided, the service provider's performance track record should also be taken into account. Quality of pest control service could vary greatly. The number of visits by the pest control personnel should not be used as an indicator to determine the strength of control measures or service quality. The estate management should closely monitor the performance of the service provider to ensure appropriate rodent control methods and materials are used. For example, only registered rodenticides should be used, the amount and locations for placing rodenticides or setting up of rodent traps should be sufficient and appropriate. They also need to ensure that thorough inspection and evaluation of the effectiveness of measures are conducted by the service provider by checking their work records regularly. All these point to the need to arm property management staff with the necessary knowledge to facilitate their playing of the supervisory role.

Environmental Hygiene

Direct control with poisonous baiting or trapping of rodents only provide a short term relief of an infestation and should not be considered as the only measure in controlling rodents. Environmental improvement, especially enhanced cleansing work is of utmost importance. In estates with serious or persistent rodent problems, their general hygienic condition is usually less than satisfactory. Keeping the environment clean and tidy could hardly be achieved by the pest control operators alone. Cleansing and other relevant staff of the estate should be mobilized to deny the access of rodents to any potential food source and harborage.

Conclusion

To conclude, property management should undertake rodent prevention and control regularly. Irrespective of whether or not rodent prevention and control work of a residential estate is outsourced, property management staff should be equipped with relevant knowledge in order to properly monitor the performance of their pest control service provider as well as to eliminate factors attracting rodents

to settle within their premises.



Fig.1 Proximity of flowerbed to facilities such as refuse collection point is a typical design fault in terms of rodent prevention



Fig. 2 Accumulation of articles outside a cooked food stall in a housing estate