

PRECAUTIONARY MEASURES FOR RAT CONTROL IN SHOPPING MALLS

Rats have adapted well to our urban environment, multiplying quickly in poorly managed bin centres and refuse chutes. As rats and rat fleas can carry and transmit various diseases, they are of public health importance, although the occurrence of such diseases in Singapore is very low. The presence of rats in an establishment damages the reputation and results in business and financial losses. As all pests need shelter, food and water, reducing the availability of these factors would help control the extent of the pest infestation. The National Environment Agency (NEA) urges all shopping mall management and shop owners to play their part in managing rat infestation in order to safeguard public health.

2 NEA advises all shopping mall management and shop operators to have an effective pest control programme which includes practising good hygiene habits, adopting a proper refuse management system and engaging licensed Pest Control Operators (PCOs) in order to prevent or reduce rat infestation within the premises. To help assess which PCO to engage, some good contract components include:

- a) Annual maintenance contract with regular service frequency
- b) Defined service areas
- c) Night Treatment recommended
- d) Option for 'Intensive Treatment' depending on rat situation
- e) Sketch plans showing all rat monitoring stations, including traps and outdoor tamper-resistant baiting stations, if any
- f) Service reports on pest situation (number of rats and species caught) and service advice
- g) Audit Reports on rat situation and advice on rat preventive measures

3 Besides engaging licensed PCOs, regular inspections and close monitoring of premises for any signs of rat infestation such as gnaw marks, rub marks, rat droppings and live sightings during daily operations should be conducted by the building management and all shop operators, especially on areas which may potentially support rat activities. These areas include:

- a) Refuse management areas, including any transit bin centres
- b) Loading and unloading bays
- c) Areas above false ceilings
- d) All storage areas
- e) Open drains, sewers and gullies
- f) Perimeter landscape and planter boxes
- g) Food preparation and storage areas of food retail outlets
- h) Areas behind or beneath bulky kitchen appliances such as freezers and refrigerators
- i) Any areas with structural cracks or crevices which may allow entry of rats into the building and shops within
- j) Unattended equipment and items such as old pallets

4 The good practices that shopping mall management and shop operators should adopt are summarised in the table below. For more information, please refer to the Guidelines on Good Pest Management Practices available at <http://www.nea.gov.sg/public-health/food-hygiene/food-hygiene-practices-guidelines>.

Good Practices	Examples
Eliminate shelters and entry points for rats	<ul style="list-style-type: none"> • Holes and gaps in ceilings, floors and walls should be sealed using durable materials like metal plates or cement • Ensure all floor traps, gullies and downpipes are properly covered with grating • Check false ceilings regularly and replace damaged ones • Adequate access openings to false ceilings should be provided to facilitate pest control inspection, where necessary • All stores and storage cabinets shall be pest-proof and rat-proof • Dispose empty carton boxes, unusable pallets, newspapers and other unwanted articles • Compartmentalise the ceiling space between F&B outlets and common areas with suitable rat-proofing materials e.g. wire mesh screens (not more than 10mm x 10mm openings) to prevent rats from infiltrating both ways • Replacement of damaged bins and fittings such as ceiling panels and floor trap covers
Practise proper refuse management	<ul style="list-style-type: none"> • Proper storage of refuse in covered rat-proof containers • Dispose waste properly and regularly (bags should be tied up and should not have any holes) • Waste should be disposed into rat-proof bins that are covered and lined
Adopt good housekeeping practices	<ul style="list-style-type: none"> • Maintain cleanliness of premises at all times • Drains, gullies and floor traps should be cleaned daily and provided with pest valves, where necessary • Food ware should be stored and kept in pest-proof containers or cabinets, especially after operating hours • Avoid accumulation of unused articles in premises
Practise good pest management practices	<ul style="list-style-type: none"> • Check all bait stations or traps according to schedule to prevent excessive accumulation of dust or dead pests • Follow up on findings and corrective actions stated in pest control service reports

5 The key to effective pest control is to identify the source and activity areas of the rats. With the information gathered from regular inspections, the mall management can work concurrently with the PCOs to curb rat population with measures such as sealing potential entry points, trapping and poisoning of rats. Monitoring of the problem should be done continuously so that any recurrence of pests can be treated accordingly.

6 The support and collective efforts of stakeholders, shopping mall management, shop operators and PCOs are crucial for the success of rat control in buildings and shopping malls. The mall management and shop operators have a duty to ensure their premises are clean and free from pests by putting in place a good housekeeping and monitoring regime and an effective pest control programme. NEA takes such lapses seriously and will not hesitate to take errant management or operators to task. Under the Control of Vectors and Pesticides Act, mall management or operators whose premises are found to have infestation of pest shall be liable on conviction to a fine up to \$5,000. An order may also be issued for closure or halting of operations either indefinitely or until specific measures have been taken to resolve the rat infestation. Building management and operators who fail to comply with the order may be liable to a fine up to \$20,000 and such rat-related lapses and findings may also be published on the NEA website.