

PRECAUTIONARY MEASURES FOR RAT CONTROL IN FOOD ESTABLISHMENTS

Rats are a public nuisance as they damage food and weaken building structures. They may also pose serious health threats to humans by contaminating food and transmitting dangerous diseases such as *Salmonellosis*, *rat bite fever* and *murine typhus*. The presence of rats in an establishment damages the reputation and result 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. NEA urges all foodshop operators to play their part in managing rat infestation in order to safeguard public health.

2 The National Environment Agency (NEA) has been receiving increased number of public feedback on rat infestation, especially in food establishments. NEA advises all operators of food establishments 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 & outdoor tamper-resistant baiting stations, if any.
- f) Service reports on pest situation (no. of rats caught) & service advice;
- g) Audit Reports on rat situation and advise on rat preventive measures

3 In addition, foodshop operators and food handlers should play their part in preventing rat infestation. During daily operations, foodshop operators should also adopt a system for routine inspections and be vigilant for any signs of rat infestation such as rat burrows, gnaw marks, rub marks, rat droppings and live sightings. Regular inspections should be conducted on areas (floors and ceilings) which may support rat activities, for example:

- Refuse management & dish-washing areas
- Open drains and sewers
- Food preparation and storage areas
- Behind and underneath bulky kitchen appliances such as freezers and refrigerators
- Any areas with structural cracks or crevices within the premises
- Unattended equipment and items such as clutter of undisturbed equipment and items

4 The good practices that can be adopted 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 • Floor traps, gullies and downpipes should be properly grated • Openings to premises shall be protected by installation of self-closing or tight-fitting door and windows (for doors made of wood, the bottom 300mm of door shall be metal-plated to prevent damages which allow pest access) • Install durable partition or wire mesh screens (not more than 10mm x 10mm openings) on windows and for compartmentalising purpose between false ceiling and ceiling level in building premises • Check the false ceiling regularly and replace damaged ones • All stores and storage cabinets shall be pest-proofed and rat-proofed • Adequate access openings to false ceilings should be provided to facilitate pest control inspection, when necessary • Dispose empty carton boxes, newspapers and other unwanted articles • Replacement of damaged bins and fittings such as ceiling panels, 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 there should not be 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 • Keep the areas below the cooking range and sinks clean • Clean drains, gullies and floor traps daily. • All food and ingredients should be stored and kept in rat-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 • Remove all loose items such as food stuff, crockery, cutlery, electrical appliances and personal items from cabinets and shelves during servicing to facilitate pest inspections and treatment • Follow up on findings and corrective actions stated in the pest control service reports

5 For rat control in food establishments to be successful, the collective support and efforts of stakeholders, foodshop operators and PCOs are crucial. Foodshop 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 engaging licensed PCOs with effective pest control programme. NEA takes such lapses seriously and will not hesitate to take errant operators to task. Under the Environmental Public Health (Food Hygiene) Regulations, licensees whose premises are found to have infestation of pest may be fined up to \$2,000. On conviction, they will also be issued with six demerit points. Under the Control of Vectors and Pesticides Act, 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. Licensees who fail to comply with the order may be liable to a fine up to \$20,000.