

Do not underestimate a **RODENT'S CAPABILITIES**

185KG 

A population of 40 rats living in rice storage could consume 185kg of rice per year

8X 

Rats reproduce 3 to 8 times a year on average

2,000 descendants

Rats generate as many as 2,000 descendants in a year



50 droppings 

A rat can excrete 20 to 50 droppings and 14ml of urine in 1 day

10 offsprings 

Rats generate around 4 to 10 young per litter



Gnawing causes destruction to your business

- ✗ Structural support timbers
- ✗ Electrical wires may cause short circuit or fires
- ✗ Furnitures will be destroyed
- ✗ Wooden doors and beams (including attic roof)
- ✗ Plastic and cardboard food packaging
- ✗ Plastic and metal including pipes may be damaged

Contaminated food and water will cause

- ✗ Leptospirosis (Weil's diseases)
- ✗ Salmonellosis
- ✗ Hantavirus
- ✗ Bubonic plague
- ✗ Murine typhus affecting respiratory system
- ✗ Rat bite fever

CAN YOU SPOT THEIR **PRESENCE?**

Partially Eaten Food

Teeth marks on food packages from rats' bites

Distinctive Odour

Rat's urine has a distinct odour - deposit several hundred droplets of urine

Soil Burrows

Found along foundation walls near large objects or beneath shrubbery



Droppings

Shiny black or brown rat droppings - underneath food racks, kitchen drawers, cabinets and pantry

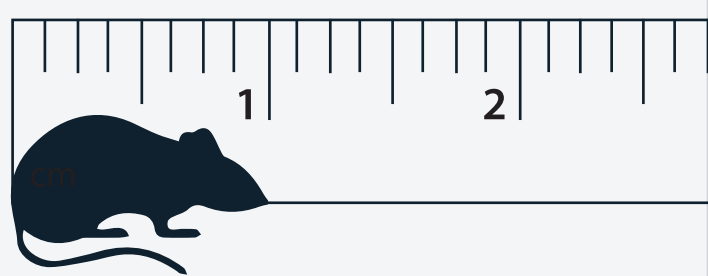
Gnaw Marks

Rats have long and sharp front teeth (incisors) to gnaw on wood and plastic

Grease Marks

Marks left on wall by rats from oil and dirt off their fur

A RAT CAN SQUEEZE THROUGH A **1CM** GAP



SOME QUICK TIPS TO **DENY THEIR ENTRY**



Install wire mesh at doors and windows



Seal holes or crevices in the ceilings, walls or floors



Dispose unwanted boxes, crates and piles of articles



Fix leaky taps to deny water access to rats

DEPRIVE RODENTS of their food meals

- ✔ Keep all food in sealed containers
- ✔ Proper refuse management daily
- ✔ Clear food/refuse spillage immediately
- ✔ Ensure cooking area and sinks are dry and clean
- ✔ Keep trash bins lids on

QUICK EASY STEPS to control these rats

- ✔ Uncover nesting or habourage areas
- ✔ Seal all entry points
- ✔ Remove food source
- ✔ Install rodent traps
- ✔ Utilise inspection camera to monitor rodent access/activity in hidden ceiling



References

- ¹<http://www.nea.gov.sg/docs/default-source/public-health/food-hygiene/guidelines-on-prevention-of-rodent-and-cockroach-infestation.pdf>
²<http://www.nea.gov.sg/public-health/vector-control/recalcitrant-mall-managements>
³<http://www.nea.gov.sg/public-health/food-hygiene/info-on-fsms>