



# Rat prevention guide

Industrial, commercial and institutional (ICI) facilities



## Property manager or property owner

Rats are common pests of modern-day life. They exist in cities and towns around the world, as well throughout most urban areas of Canada. Data suggests that global rat populations are on the rise in many parts of the world and the urban centres of Ontario are no exception.

Peel Region is working with the community to take a pro-active approach to minimizing rats in Peel. To accomplish this, it will take action from all members of the community, including residents and local businesses.

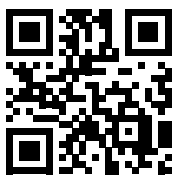
This rat prevention guide provides preventive measures and techniques for preventing rats. A pro-active approach for controlling rats at ICI properties is both smart and cost-effective. Identifying rat activity and addressing the issue early saves significant time and money for business owners and property management.

## The role of Peel Region

We are working with the community to take a pro-active approach to rats to minimize their expansion in Peel as much as possible.

Peel Public Health is responsible for enforcing Food Safety Regulations in Ontario which address pest control provisions. It is the responsibility of a food premises to ensure all regulations are followed such as keeping garbage and waste maintained and removed from a food premises, as well as protecting the premises against entry of pests or any conditions that can lead to the harbouring or breeding of pests. Also, rooms where food is prepared, processed, packaged, served, transported, manufactured, handled; sold, or offered for sale, shall be kept free from live birds or animals.

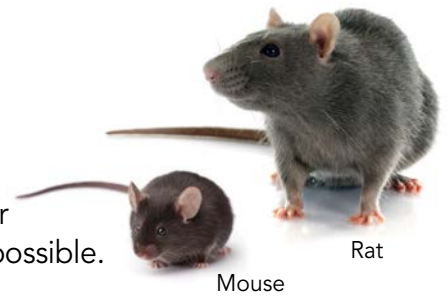
A full list of food safety requirements in Ontario is available; visit [bit.ly/4fd7TwG](https://bit.ly/4fd7TwG)



We have implemented pest control measures on various Regional construction projects and will continue to take preventative measures on Peel construction sites.

# What you need to know about rats

Industrial, commercial and institutional (ICI) facilities of all types (see Tables 1.1 to 1.3) are attractive to rats because they generate relatively large amounts of waste. Once rats are rewarded with food for several nights in a row, they attempt to nest as close to the source as possible.



## General information

- The brown rat (also known as the Norway rat) is the most common species of rat found in Peel.
- Adult rats weigh between 600 to 700 g or 1 to 1.5 pounds. Rats may appear larger to us because of their thick, hairy coats.
- Rats live from 7 to 18 months, depending on their access to accessible food and good shelter.
- Female rats (eight weeks and older) can produce up to three litters with 8 to 12 young (pups). But if food is scarce or undependable, only a few young survive. One typical family of rats (16 rats) will consume about 5 kg of food per week.
- Young rats should not be confused with adult mice. Young rats have large hind feet (2.5 cm) and heads that are large and out-of-proportion to their bodies.

## Behaviours/habits

- Rats cannot “flatten out” their bodies and slide beneath any door. It requires a hole the size of a quarter to allow a rat entry beneath a door or through a hole in the wall.
- Rats are attracted to the exteriors of ICI buildings because of the food odours escaping from windows, door thresholds, garbage bins, and compactors.
- Increases in rat populations and infestations occur quickly when their food (often our waste) is abundant and easy to get to.
- Rats cannot chew through metal or cured concrete and these materials will deny rats entry. However, they can gnaw through wood, plastic, and all types of wiring very quickly.

- Rats in Peel prefer to live in burrows outside buildings. Their burrow entrance and exit holes are about 3 to 4 cm wide and there is typically three holes per burrow. The burrows are dug beneath thick bushes or other vegetation, or alongside and beneath building foundations.
- Usually, rats establish their exterior and interior nests close to a garbage source or other foods that is accessible (30 m radius).



## Rats and ICI properties

- Rats will move inside ICI buildings if the building’s doors and penetrating utility lines are not rat-proofed. Once inside, they travel up, down and sideways between floors or walls by climbing and running along the outside of plumbing pipes. They may build their nests in the walls, ceilings, and sub floors between each of the floors of a building.
- While traveling inside the walls, rats may invade kitchens in the building when they discover plumbing pipes that are not sealed, allowing them entry to the common space. Young rats should not be confused with adult mice.

## Common Peel Region facilities and their vulnerability levels

**Table 1.1 Industrial facility examples**

Facility type	Vulnerability to rats
Food/pharma manufacturers/processing plants	High
Food warehouses and distribution centres	High
Non-food manufacturing industrial plants	Low
Non-food warehouses and distribution centres	Low

**Table 1.2 Commercial facility examples**

Facility type	Vulnerability to rats
Supermarkets	Very high
Delicatessen/convenience store/cafes	High
Shopping malls/strips	High
Restaurants (fast/formal)	Moderate to High
Hotels	Moderate
Office buildings	Low to Moderate
Non-food retail stores	Low

**Table 1.3 Institutional facility examples**

Facility type	Vulnerability to rats
University and college campuses	Moderate
Sports stadiums	Moderate
Infrastructure depots (buses, trains, airports)	Moderate
Correctional facilities	Moderate
Nursing homes	Low to moderate
Hospitals	Low
Schools (K to 12)	Low
Museums	Low
Child care centres	Very low

Prepared for Peel Region by: Robert M. Corrigan, Ph.D. Urban Rodentologist



## Where are the rats coming from?

Rats may be living nearby in fields and parks, along creek banks and other water ways, on farms, or in a neighbour's cluttered backyard or basement. While their numbers are low, and because rats are active at night, you may not see them.

Even though there are always exceptions, rats are usually not associated with simple explanations. When rats are seen regularly on properties or in yards, more times than not, the rats are there because there is some type of food source nearby. Most of the time, there is simply untidy waste areas within about a 50 to 75 m radius of where the rats are being seen (For example, in back yards or basements that are not visible from the street).

Once the rats become noticeable, it is usually because the previously unseen rats have now discovered easy-to-access food on a property.

Sometimes rats are in fact completely new to the area because humans commonly move rats from place to place in truck trailers, cars, trains, or delivery trucks from different storage warehouses.



## Preventing rats at ICIs

A pro-active approach for controlling rats at ICI properties is both smart and highly cost-effective.

### 1. Remain alert

- (a) Spotting a rat occurrence early saves significant money and time for businesses and property management compared to rats that have moved in unnoticed and are now multiplying and spreading in different directions on the property.
- (b) Keeping rats out of an ICI building is neither expensive nor difficult and is the best approach for any property to remain rat free.

### 2. Deny rats entry

- (a) Property managers or business owners should perform weekly inspections. This includes foundations, doors and the grounds, keeping an eye open for any obvious problem issues such as newly appearing rat burrows below bushes; doors needing repairs; proper waste storage and collection procedures.
- (b) If rats are spotted, notify the property's pest professional as soon as possible.
- (c) Although rat-proofing an ICI building is not difficult to do, it must be done right. Spraying canned foam or merely stuffing a wad of stainless steel into a hole is not sufficient. In most cases, a contractor, or a pest professional trained in the rodent-proofing of doors and utility lines are the most qualified people for the job. Over the past few years, new technology and materials have emerged that provide highly effective rodent-proof door sweeps and high-tech stainless mesh materials for sealing holes and gaps around pipes.

- (d) It is particularly important to keep ground-level storage rooms tight from the exterior. With facilities, all doors to basement areas must be rodent-proofed. Weather stripping a door will not rodent-proof a door. Rodent proofing doors will help keep rats from entering the building or burrowing next to the building. It will also decrease waste odours that draw rats to the property in the first place
- (e) Close all basement storage rooms, and ground floor maintenance rooms, all conduit pipes (electrical, plumbing, cables) that penetrate through walls from the outside, or through any basement ceiling connecting to the ceilings, floors and walls of upper floors. This can be done using ordinary plates at the point of pipe or cable penetration. If the plates do not fit tightly to the wall surface, they can be properly sealed with a hi-grade mesh.



### 3. Rat food sources

- (a) Hungry rats rapidly start eliminating one another or their offspring, and thus exterminate their own numbers “naturally.” If the survivors still have trouble finding food due to cleanliness, they will abandon a property and go looking for new spots with easy access to food (usually the closest nearby with accessible food waste).
- (b) If garbage bins or compactors are being used, the bins and compactors must also be maintained from accumulating greasy residues, spill and leaks.
- (c) Once-a-week cleanups will not necessarily prevent rats. Multiple days of accumulating

food waste produces odours which attract rats. Delayed waste collection gives rodents opportunities to discover properties and invade them.

- (d) For any ICI using waste bins and waste bin alcoves, both must be kept clean. Waste bins with food residue are among the top reasons rats can find their way to ICI facilities.
- (e) Also, of particular importance for ICI using compactors are the hard-to-reach, tight spaces below compactors as rats love this tight nook where food fragments collect and remain.
- (f) The outside surfaces of all single bins and their lids must remain clean and tightly closed. Otherwise, the greasy film left on the bin surfaces create odours that attract rats.
- (g) If waste with food is not scheduled for collection for several days (or longer), it is essential that all waste bins contain tight lids, and the bins are maintained free of food residues and films. Any lids that are sitting open on top of waste will not only attract rats, but also raccoons, and other wild animals.

### 4. Deny rats exterior shelter

- (a) ICI property grounds should be kept free of any junk piles, or old equipment of any sort. Storage sheds should be kept orderly, and materials and equipment elevated off the floor by about 40 to 45 cm.
- (b) Maintain landscaping to ensure materials and shrubs do not become overgrown and form thick caves below the shrubs. These “caves” are among rats’ favourite places because they are so well-protected and out-of-sight to both people, and natural predators. Once shrubs become thick and hug the ground, they can’t be easily cleaned of wind-blown trapped litter (also very attractive to rats).

## 5. ICI rat extermination programs

Despite the good property management procedures discussed above, sometimes determined rats still manage to invade ICI properties.

- (a) Because ICI facilities often have staff and the general public active at the property, it is recommended to hire a licensed pest control vendor to assist in eliminating rat populations on the property.
- (b) Food waste management is the key to controlling rats. Rats will show little interest in a pest professional's baits or traps if there is ample food waste and easy access.
- (c) It is not difficult, even for a layperson, to control a couple of rats with store-bought traps or baits. Killing only a couple of rats here and there is not effective and usually results in temporary relief followed by ongoing recurrences.
- (d) Keep in mind that the pest professional's exterior bait boxes will not prevent rodents from invading an ICI property. These boxes are meant to help keep a rodent problem under control, and in some cases, they will prevent a severe issue from developing. While these boxes might help, good housekeeping practices are even more important.

### For further assistance:

Visit [peelregion.ca/health/protecting/rat-prevention](https://peelregion.ca/health/protecting/rat-prevention)

Contact Peel Region at **905-791-7800** or toll-free at 1-888-919-7800

Or email [peelhealth@peelregion.ca](mailto:peelhealth@peelregion.ca)

