



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, the urban centers of Ontario are no exception.

The Region of Peel 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 to prevent 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.

We have developed a Residential Rat Control Subsidy Program along with an Education, Outreach, and Communications Strategy. This education campaign focuses on supporting the community by providing key information through a variety of print and digital platforms.

Finally, Peel Public Health is responsible for enforcing Food Safety Regulations in Ontario which address pest control provisions. It is the responsibility of a food premise to ensure all regulations are followed such as keeping garbage and wastes maintained and removed from a food premise, as well as protecting the premise 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, and/or offered for sale, shall be kept free from live birds or animals.

For a full list of food safety requirements in Ontario, visit [ontario.ca/laws/regulation/170493#BK16](https://www.ontario.ca/laws/regulation/170493#BK16) "O. Reg. 493/17: FOOD PREMISES (ontario.ca)

Table 1. Some examples of common Peel Region ICI facilities.

Facility Type	Vulnerability to Rats
Industrial	
Food/Pharma manufacturers/processing plants	High
Food warehouses and distribution centers	High
Non-food manufacturing industrial plants	Low
Non-Food warehouses and distribution centers	Low
Commercial	
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
Retail stores (nonfood)	Low
Institutional	
University Campuses	Moderate
Sports Stadiums	Moderate
Infrastructure depots (buses, trains, airports)	Moderate
Correctional Facilities	Moderate
Nursing Homes	Low to moderate
Hospitals	Low
Schools (K-12)	Low
Museums	Low
Day Care Centers	Very low

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What you need to know about rats:

Industrial, commercial and institutional (ICI) facilities of all types (Table 1), rats because they generate relatively large amounts of waste. Rats detect food generated by ICI properties. Once rats are rewarded with food from for several nights in a row, they attempt to nest as close to the food as



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 600-700g (1-1.5 lbs). Rats may appear larger to us because of their thick, hairy coats.
- Rats live from 7-18 months, depending on their access to accessible food and good shelter.
- Female rats can produce up to 200 babies within one year.
- Female rats (eight weeks and older) can produce up to three litters with 8-12 young (pups). But if food is scarce or undependable, only a few young survive. One typical family of rats (16 rats) will consume about five kg of food per week.

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 amounts of food odors escaping from windows, door thresholds, garbage bins, and compactors.
- Increase in rat populations and infestations occur quickly when their food (often our waste) is abundant and easy to get to.
- Rats cannot chew through any metal or cured concrete and these materials will deny rats entry. But 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 3-4cm 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 (E.g., 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 subfloors between each of the floors of a building.
- While traveling about inside the walls, rats may invade kitchens in the building when they discover plumbing pipes that are not sealed and thus allows them entry to the common space. Young rats should not be confused with adult mice. Young rats have large hind feet (2.5cm) and heads that are large and out-of-proportion to their bodies.

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 50-75m radius of where the rats are being seen (e.g., back yard areas or basements areas which are not visible from the street).

Once the rats become noticed, 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. Remaining 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. In addition to denying any night-time exploring rats entry into the building (or discouraging them from burrowing next to the building), rodent proofing door bases decreases the amounts of waste odors leaking out to 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 floor. 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. No food, no rats

(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 to the closest nearby with accessible food waste).

(b) All waste rooms and areas of buildings should be cleaned daily. If garbage bins are being used and/or compactors, the bins and/or compactors must also be maintained from accumulating greasy residues, spills and leaks.

(c) It is important to note that a once-a-week cleanups is not the best practice for preventing rats. This is because rats detect the attractive and increasing odours produced by the multiple days of accumulating food waste. Prolonged waste and collection give rodents multiple opportunities to discover properties and invade.

(d) For any ICI employing waste bins and waste bins alcoves, both must be kept with a strict level of cleanliness. Waste bins that remain with food residues are among the top reason's 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 tight otherwise, the greasy films left on the bin surfaces create the odors that get waft outwards attracting new 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 idle old equipment of any sort. Storage sheds should be kept orderly, and materials and equipment elevated off the floor by about 40-45 cm.

(b) Maintain landscaping to ensure materials and shrubs do not become overgrown and form thick caves below the shrubs. These "caves" are among the rat's 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 has 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 lay person, to control a couple of rats with store-bought traps or baits. But killing only a couple rats here and there is not effective and usually results in temporary relief followed by on-going recurrences. The secret to controlling rats – especially around ICIs is every attempt must be made to control all the rats because partial control efforts can continue for months and months. For certain types of ICIs, this may not be possible (exteriors of supermarkets and certain types of food manufacturing plants (e.g., grain processing, pet food plants, etc.).
- (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 curb an issue from developing severely. But their impact is not even close to the impact achieved with good housekeeping practices.

For further assistance:

Visit peelregion.ca/rat-subsidy-program

Contact the Region of Peel at **905-791-7800** or email zzgratcontrolsubsidy@peelregion.ca

