

Rat Fact Sheet

Rats are a destructive pest which can be found in both city and rural areas. Rats eat and contaminate food, damage buildings and other property by their gnawing and burrowing, and can spread diseases which can affect both people and pets.

Recognizing Rat Activity



Rat activity can be confirmed by the presence of droppings, gnawing and/or grease marks in heavily traveled areas. Tracks can be found in dust, snow and mud. Runways and burrows may be found next to buildings, along fences and railroad tracks, as well as under low vegetation and debris.



Rat Facts

Rats are brownish-grey rodents that weigh about 11-16 ounces. They are about 13 to 18 inches long including the 6 to 8 1/2 inch tail. The tail is

hairless and their fur is coarse and mostly brown with scattered black or grey on the upper surfaces. The underside is typically light grey to white.

Rats will use nearly anything as a food source, but they prefer high-quality foods such as meats, fresh fruit and grains. They require .5 to 1 ounce of water daily when feeding on dry food. Rats do not see well but they have a keen sense of smell, taste, and hearing. They will climb in search of food or shelter, and can gain entrance to a building through an opening greater than 1/4 inch across.

Rats have an average of 6 to 12 babies per litter, which are born 21 to 23 days after mating. Juveniles reach reproductive maturity at approx. 3 months of age. Breeding is most active in spring and fall but can occur at any time during the year. The average female has four to six litters per year and they will breed amongst themselves. Rats can live for up to 18 months, but most die before 12 months.

Disease

Worldwide, rodents transmit over 35 diseases, both directly and indirectly. These diseases can be spread to humans directly, through handling of rodents, direct or indirect contact with fecal matter, urine, & saliva, or through rodent bites. Indirect transmission can occur, through ticks, mites or fleas that have fed on an infected rodent.

The primary strategy in preventing human exposure to rodent diseases is effective rodent prevention in and around the home. This is achieved by eliminating any food sources, sealing even the smallest entries into homes, and regular landscape and environmental maintenance. In the event of exposure to rodent activity, all entry points should be sealed, rodents trapped and all areas infected by rodent activity cleaned and disinfected, discarding any items chewed or which cannot be properly disinfected.



Diseases directly transmitted by rodents

Hantavirus Pulmonary Syndrome
 Hemorrhagic Fever with Renal Syndrome
 Lassa Fever
 Leptospirosis
 Lymphocytic Chorio-meningitis (LCM)
 Omsk Hemorrhagic Fever
 Plague
 Rat-Bite Fever
 Salmonellosis

Diseases indirectly transmitted by rodents

Colorado Tick Fever
 Human Granulocytic Anaplasmosis
 Lyme Disease
 Powassan Virus
 Scrub Typhus
 Relapsing Fever
 Rocky Mountain
 Spotted Fever
 Sylvatic Typhus
 West Nile Virus



Where they live

Rodents will find shelter and nest in places such as homes, garages, sheds and gardens, particularly:

- in wall voids, ceilings and sub floors
- in false bottoms of cupboards or bathtubs
- behind furniture, stored boxes and other stationary items
- in foliage, wood piles, thick vegetation, shrubs and bushes
- in burrows under cement slabs and structures

Recognising rodent activity

While rodents are typically more active at night and late summer/early autumn, they can be seen year round and anytime during the day. If you see rats or mice during the day, this usually indicates large population numbers or a good food source in close proximity.

When inspecting for evidence of rodent activity, look for:

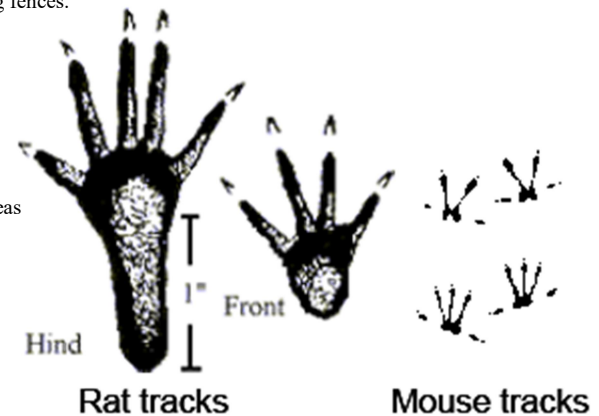
- Black, thin droppings.
- Debris from rodents feeding
- Signs of gnawing damage in food, on materials such as wood and electrical cabling.
- 'Runways' formed by rodents using the same path such as through tall grass or along fences.
- Rub marks on walls or base boards where rodent trails are active.
- Burrow holes near structure, tree stump or cement slab

Avoiding rodent problems

Rodents can adapt to living in human environments. To reduce the pressure on your property:

Dispose of food scraps and clean kitchen and bbq areas after use. Inspect living and working areas for potential rodent entrances and seal them with concrete, wood or other permanent material.

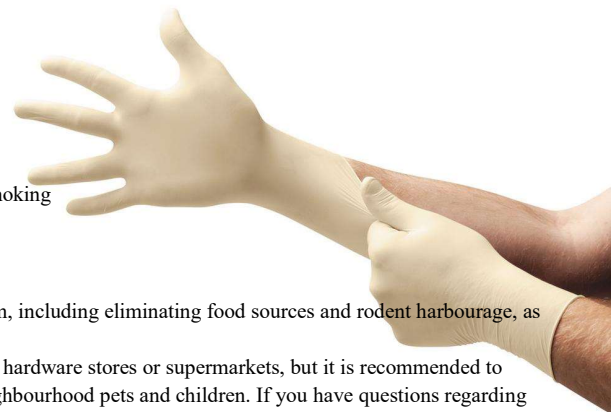
- Ensure trash and recycling bins have tight-fitting lids and are emptied weekly.
- Keep your home and property clear of garbage and debris
- Keep stored items such as wood, bricks or equipment at least 30cm above the ground to reduce potential harboring areas for rodents.
- Regularly clean out sheds, storage areas and dispose of unwanted items and rotate stored goods.
- Cut back grass, trees, bushes, and creepers which may provide cover or access to the roof.
- Dispose of fallen fruit, seed and waste from trees and bird feeders.
- Keep Compost well sealed
- Do Not leave pet food out when unattended
- Store pet food in vermin proof containers with tight fitting lids.
- Cover rainwater tank with wire mesh and check and maintain these regularly.



Protecting yourself

If rodents are present:

- secure all food items in sealed plastic or glass containers
- throw away food that has come into contact with rodents
- wash cookware and cutlery before use
- wash hands thoroughly before preparing food, eating, drinking or smoking
- do not lie or sleep on areas where rodents have been active.



Chemical control

Chemical control should only be considered as part of a broader control program, including eliminating food sources and rodent harbourage, as well as, sealing all entry points.

Rat poisons or rodenticides containing an anti-coagulant can be purchased from hardware stores or supermarkets, but it is recommended to contact a local professional when using rodenticides, to assure the safety of neighbourhood pets and children. If you have questions regarding chemical control measures or are uncomfortable using chemical baits contact a licensed pest control operator.

Chemical control may not always be appropriate. Prior to treating with rodenticides, consider the following:

- If rodents die and decay in wall void or other hard to reach place they may cause a lingering foul odour.
- Pets and children may consume toxic baits.
- Some individuals are sensitive to rodenticides in their environment

Warning

Extreme care must be taken when using and storing poisons (read all instructions thoroughly) to prevent the risk of exposure to children or pets.

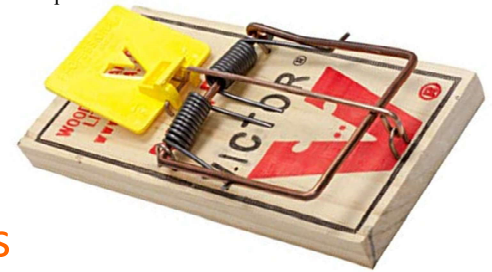
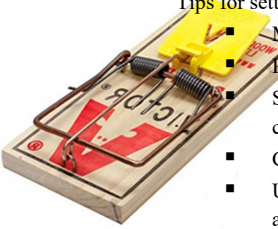
Trapping

Mouse and rat traps are similar but differ in size and strength. It is important to properly identify the type of rodent and the proper trap to use.

Tips

Tips for setting traps:

- Multiple traps should be deployed at the same time.
- Place unset traps in 'runways' for a few days before setting traps to allow rodents to get used to the traps.
- Successful trapping can be gained using bacon, peanut butter, fish, meat, bread or even chocolate as bait. Utilize food that rats have contaminated as bait, when possible.
- Check traps daily; remove dead rodents and refresh the bait in traps.
- Use an insecticidal surface spray around area to kill any fleas which may leave a trapped rodent and protect bait from insects such as ants.



Disposal of dead rodents

Dead rodents can be buried or double bagged and placed into a domestic trash bin.

Gloves should be worn at all times.

Remember to wash your hands immediately after handling any dead rodents.

Cleaning Up After Rodents

Urine and Droppings

Precautions must be taken before, during and after clean-up of rodent-infested areas. Before sanitizing, trap the rodents and seal up any entryways to ensure that no further activity occurs. Continue trapping for 2 weeks after last trapped rodent, prior to sanitizing.

Before starting clean up of confined spaces, ventilate the space by opening doors and windows for at least 30 minutes to allow fresh air to enter the area. Use cross-ventilation, when possible, and leave the area during the airing-out period.

First, clean up any urine and droppings

It is important that you **do not** create dust by sweeping or vacuuming up droppings, urine, or nesting materials.

- Wear latex, rubber or vinyl gloves and a mask when cleaning urine and droppings. (Not cloth or lined gloves)
- Spray the droppings and urine with a disinfectant or a bleach water mixture and let soak 5 minutes. (Do not let dry)
- Use a paper towel to pick up the urine and droppings, and dispose of the waste in the garbage. Nesting material and droppings can be swept up cautiously when wet with disinfectant.
- After the rodent droppings and urine have been removed, clean, disinfect and sanitize any items that may have been contaminated by rodent activity.



Next, clean and disinfect the whole area

Mop floors and clean all surfaces with disinfectant or bleach solution.

Steam clean upholstered furniture and carpeted areas with evidence of rodent exposure.

Double Wash any bedding and clothing with laundry detergent and bleach, when possible, in hot water if exposed to rodent urine or droppings.

Lastly, remove gloves, and thoroughly wash hands, arms and face with soap and water. Remove soiled clothing and wash immediately to avoid further contamination.

Attics, Basements, Crawlspace, and Other Storage Areas

Prior to cleaning the space, ventilate the area for at least 30 minutes to remove potentially contaminated air from the area.

When cleaning attics, basements, crawlspaces and other storage areas:

- Wear gloves and a mask when cleaning up infected areas. Note: dust masks may provide some protection against dust, molds, and insulation fibers, but won't protect against viruses.
- Soak any urine, droppings, and nesting materials with either a bleach water solution or a disinfectant prepared according to the label instructions for dilution and disinfection time. Soak well. This will inactivate any virus..
- Mop all floors using bleach water solution or a disinfectant. Dirt or porous cement floors can be sprayed with either bleach water or a disinfectant.
- Exposed insulation contaminated with urine and droppings, should be placed into plastic bags for disposal.

Once released by the rodent, Hantaviruses can survive in the environment in an infectious state for a period of 2-3 days. Ultraviolet rays in sunlight inactivate Hantaviruses.

- To remove any potentially contaminated materials from storage or boxes:
 - First, move boxes outside and place them in direct sunlight in an open area away from children and pets. The exterior of the boxes can be disinfected using bleach water or disinfectant
 - Next, remove the potentially contaminated items while remaining outside. Remain upwind to prevent dust or debris from blowing toward your face.
- Dispose of any infected cardboard boxes. Plastic, glass, metal or other nonporous containers can be disinfected by treating with bleach water or disinfectant. Then, using a rag or paper towel, clean the urine or droppings and dispose of waste.
- Clean countertops, cabinets, and drawers then disinfectant or bleach water.
- Wash hands wearing gloves, Remove Gloves, Wash hands well with soap and hot water.

Heavy Rodent Infestation

Extra precautions should be used when cleaning homes or buildings with heavy rodent infestation. The special precautions also apply to vacant dwellings that have attracted rodents and to infestations where Hantavirus has been confirmed in the rodent population.

All people involved in clean up and sanitizing effected areas should wear the following:

- coveralls (disposable, if possible);
- unlined rubber, latex, or vinyl gloves;
- rubber boots or disposable shoe covers;
- protective goggles;
- Respiratory protection device, such as a half-mask air-purifying (or negative-pressure) respirator with a HEPA filter.
- Personal protective gear should be sanitized prior to removal. All potentially infective waste (including respirator filters) from clean-up should be burned or deep-buried on site or double-bagged in appropriate plastic bags and discarded as infectious waste.



For additional information or to schedule professional remediation, Contact:

G.P.C.
 1-819-744-7424
gpc@gpcpest.ca