

WATCH OUT FOR RODENTS!!



Rodents: The Inside Story

Rats: The Black Plague

Before poisons, snap traps and glue boards, millions of people died in Europe of the Black Plague. This terrible disease is transmitted by the fleas that are carried by rats.

Even though the U.S. presently uses numerous rodent control methods, there are still six to twelve cases of Black Plague reported yearly in New York City alone.

It is estimated that the U.S. rat population is at least one per person. Norway rats have adapted to living around people and can be found living and breeding inside buildings, granaries, sewers, attics, warehouses, in ships and under concrete slabs.

Rat burrows can cause structural damage and disrupt sewer lines. Rats can chew through wood, glass, cinderblock, wire and lead. Rats destroy an estimated 20% of the world's food supply every year directly by feeding and indirectly by contamination.

Rats are wary of anything new that appears in their territory and will avoid a new object for a few days.

Even then, they will approach cautiously.

Pre-baiting of traps for several days is necessary for catching rats.



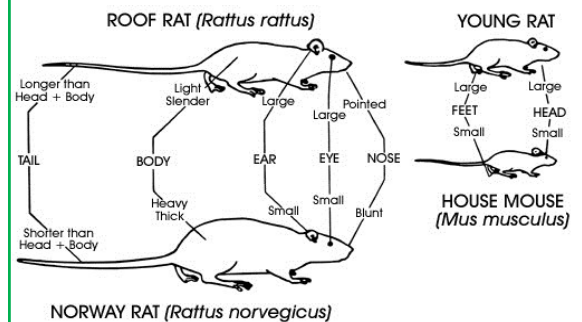
Did you know?

They have teeth called incisors that never stop growing.

They need to grind their teeth together or chew and gnaw on things to keep their teeth from growing into their skull!

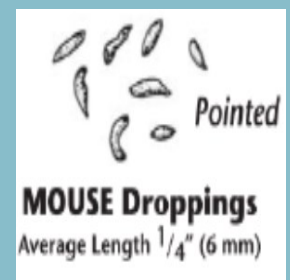
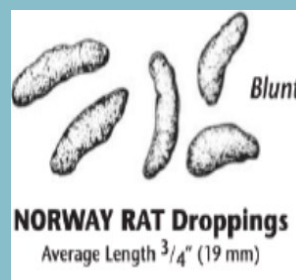
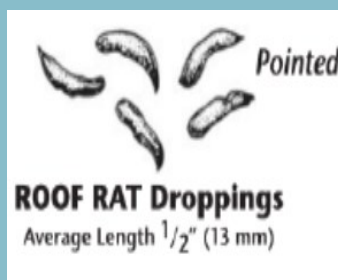
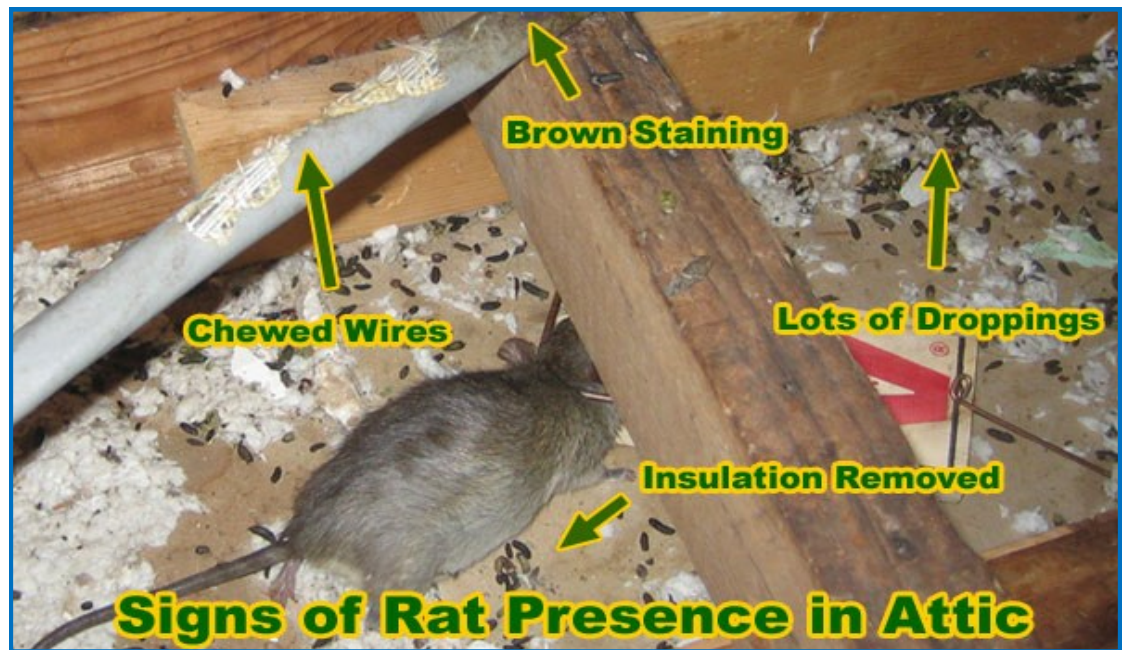


FIELD IDENTIFICATION of DOMESTIC RODENTS



Rodent facts

- All species of commensal rodents carry and spread various diseases. They include salmonellosis, plague, leptospirosis, hantaviruses, and rickettsial pox.
- Rodents are often infested with fleas which they often share with those with whom they live.
- Rodents consume and contaminate significant numbers of the world's food supply every year.
- Rodents cause extensive damage to properties by gnawing on wood and wiring, often causing fires.
- Rodents cause some people to jump on chairs and scream, often falling and breaking bones.





Rodents: The Inside Story



Physical Abilities of Rats and Mice

To prevent rodent entry, their capabilities must be understood. For example,

Both Rats and Mice can

- Run along or climb electrical wires, pipes, fences, poles, ropes, cables, vines, shrubs, and trees to gain entry to a building
- Climb almost any rough vertical surface, such as wood, brick, concrete, weathered sheet metal, and many plastic products;
- Crawl horizontally along or through pipes, augers, conveyors, conduit, and underground utility and communications lines;
- Gnaw through a wide variety of materials, including lead and aluminum sheeting, window screens, wood, rubber, vinyl, fiberglass, plastic, and low-quality concrete or concrete block.

Rats can:

- Crawl through or under any opening higher or wider than 1/2 inch (1.3 cm)
- Climb the outside of vertical pipes and conduits up to 3 inches (7.6 cm) in diameter; climb the outside of larger pipes attached to buildings by bracing themselves between the wall and the pipe; climb the inside of vertical pipes, wall voids, or earthquake safety seams and joints between 1 1/2 and 4 inches (3.8 and 10.2 cm) in diameter;
- Jump from a flat surface up to 36 inches (91 cm) vertically and as far as 48 inches horizontally;
- Drop 50 feet (15 m) without being seriously injured;
- Burrow straight down into the ground for at least 36 inches (91 cm);
- Reach as high or wide as 13 inches (33 cm);
- Swim as far as 1/2 mile (800 m) in open water, dive through water traps in plumbing, and travel in sewer lines against a substantial water current. In areas where high rat populations exist, it is common for both roof rats and Norway rats to enter buildings through toilets and uncovered drains.



House mice can:

- Enter openings larger than 1/4 inch (0.6 cm);
- jump as high as 18 inches (46 cm) from a floor onto an elevated surface;
- travel considerable distances crawling upside-down along screen wire;
- survive and reproduce at a temperature of 24oF (-4oC) if adequate food and nesting material are available

Common Rodent Entry Points

Commercial Office Buildings, Hotels, Hospitals, and Retail Stores.

- Most structures eventually become less rodent proof due to deterioration, alteration, or repair.
- Heating, air-conditioning, plumbing, electrical service, and fire sprinklers provide some of the most commonly encountered rodent entry points.
- Neoprene seals, spray-in-place foam, and similar products commonly used to close openings are not rodentproof.

- Even in new buildings, utility pipes, electrical conduit (often at meters or circuit breaker panels), water and gas lines, and communication cables generally have large openings that permit entry of mice and rats.
- Once rodents have entered walls, they generally have ready access to much of a building via holes for utility pipes and wires in the framing, and via overhead suspended ceilings or other types of construction adjacent to utility enclosures.



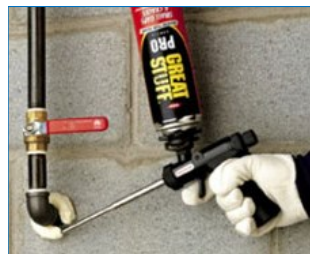
- Specific problem areas include poorly sealed heating and air conditioning ducts; roof and wall vents installed without strong, well-attached hardware cloth screening; roof and wall joints and edges without properly installed metal flashing; and doors hung unevenly or too high, or lined with unprotected soft rubber weather stripping.

- Refuse and food handling areas are likely to have the greatest rodent pressure.
- In older buildings, cracks in concrete slabs, brick and concrete block walls, or worn or damaged drain covers allow rodent entry.
- Air and elevator shafts and laundry chutes also merit close inspection

Exclusion Methods: Existing Structures and Equipment

Holes and Openings.

- By gnawing, rats can gain entry through any opening greater than 1/2 inch (1.3 cm) across, and mice through any opening larger than 1/4 inch (0.6 cm).
- The paired front (incisor) teeth of rats and mice curve slightly inward. This inward curve makes it difficult for them to gnaw into a flat, hard surface.
- When given a rough surface or an edge to bite into, however, they can quickly gnaw into most materials.
- To prevent rodent entry, seal all such holes with durable materials. Steel wool, copper gauze (Stuf-it® brand) or screen wire packed tightly into openings is a good temporary plug.



For long-term or permanent repair, mix a quick-drying patching plaster or anchoring such as Fixall® into a wad of Stuf-it® before pushing the material into the hole, and smooth over the outside.

If steel wool is used, rust stains are likely to result. Holes 3 inches (8 cm) or more in diameter should be covered or backed with 1/4-inch (0.6-cm) woven/welded hardware cloth prior to filling with a good patching compound (see recommendations under Foundations and Floors). Another backing material available is Strong Patch™ (D. P. Wagner Mfg. Inc.), a 6 x 6-inch (15 x 15-cm) sheet metal patch to cover holes up to 5 x 5 inches (11 x 11 cm). It has a self-adhesive backing and a mesh on the surface for better adhesion of the patching compound or other texture.

More info: www.cdc.gov <http://icwdm.org/>