

RISK CONTROL

CONTROLLING AND PREVENTING MICE AND RATS IN MULTIFAMILY HOUSING



Mice and rats play an important role in the health of our grasslands and forests. But when these animals enter apartment buildings in search of food or shelter, they can quickly destroy property, create fire hazards, harm human health, and expose your organization to liability. Here's how to address the problem.

KEY FACTS

- A single apartment building can have thousands of mice.
- Rodents carry diseases that can harm human health.
- Humans can catch rodent-borne diseases through bite or scratch wounds and by consuming food or water or breathing dust that has been contaminated by rodent droppings, urine, or saliva.
- You can't tell whether a rodent is carrying a disease just by looking at it.
- Rodent infestations in and around homes are the main way rodent-borne diseases spread from rodents to people.
- Ticks, mites, and fleas can transmit infections to humans after feeding on diseased rodents.
- Rodent urine and dander contain allergens that can cause allergy or asthma attacks in susceptible people.
- Rodents' teeth continually grow, so they must constantly gnaw to keep them filed down.
- Tenants have the right to livable conditions; ignoring a rodent infestation could lead to a lawsuit.

The problem with rodents in multifamily housing

Each year, mice and rats cause significant structural damage to apartment buildings by gnawing on building materials, making nests, and urinating and defecating across various surfaces. Since rodents will chew through wood, sheetrock, insulation, furniture, cardboard, pipes, and wiring, gnawing is particularly problematic for property owners and maintenance crews. Besides ruining the building materials themselves, chewed items, like pipes, can cause extensive and costly water damage, and chewed wiring can create significant fire hazards.

Because vermin infestations are considered preventable, most property insurance policies won't cover the resulting damage.



Damaged building material caused by gnawing. Photo credit: NYS IPM Program.

Aside from the property damage they cause, mice and rats can trigger allergic reactions in sensitive people through their urine and dander, which they spread everywhere they go. They also carry diseases that can spread to humans, including:

- Hemorrhagic Fever with Renal Syndrome
- Lassa Fever
- Leptospirosis
- Lujo Hemorrhagic Fever
- Lymphocytic Choriomeningitis (LCM)
- Monkeypox
- Omsk Hemorrhagic Fever
- Rat-Bite Fever
- Salmonellosis
- South American Arenaviruses (multiple diseases are included in this group)
- Sylvatic Typhus
- Tularemia.

Detecting rodent infestations in multifamily housing

If you see a mouse or rat in your building, it's safe to assume you have a problem. But rodent infestations are often well established before you see any actual pests, so it's important to be aware of other, less obvious, signs. Be on the lookout for:

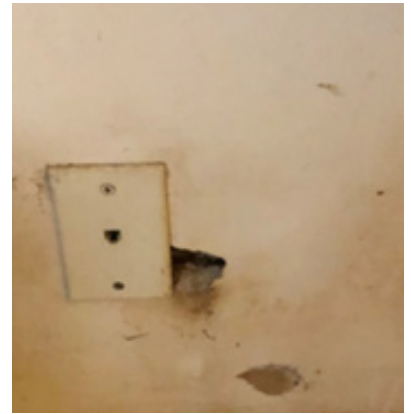
- Rodent droppings that are out of plain sight, such as around food packages, in drawers, cabinets, or cupboards, under sinks, in attic spaces, and around water heaters. Note that droppings don't necessarily mean you have an active infestation, since they may be old. Clean the area (more on that later) and return to see whether fresh droppings appear.
- Nesting material such as shredded paper, fabric, or dried plant matter
- Signs of chewing, especially on food packaging, wood, cardboard, electrical wires, and plastic
- Holes chewed through walls and floors that create entry points into a building or apartment unit
- Stale smells coming from hidden areas
- Nests
- Rub marks along walls (see picture at right)
- Noises, like scurrying and scratching, especially at night
- Tracks
- Burrows (see picture at right)
- Urine spots. (Pro tip: Use a black-light flashlight to find rodent trails. The urine mice and rats use to mark their trails will glow under black light.)

DID YOU KNOW?

Experts estimate that [rodents are responsible for 20–25% of all fires of unknown causes.](#)



Chewed wires are a leading cause of fires. Photo credit: Susannah Krusko, MS, StopPests.org



Rub marks, like the ones pictured here, are caused by the oils in rodents' skin and are a telltale sign that rats or mice are using the area as a travel route.

DID YOU KNOW?

An adult male house mouse releases 3,000 microscopic droplets of urine a day.



Rats travel from burrows like these underneath foundations to gain entry to buildings. If you have an active infestation, stuff the holes with mesh and cover with soil and dirt. Tamp down the area with a shovel to prevent rats from using the burrows. Photo credit: Jayne Windham, CEO of Livable Housing, Inc.

“Diseases and allergies aside, mice and rats are costly. One of the most common reasons for appliance repair is that a mouse chewed on a wire.”

— Dr. Bobby Corrigan



Rat droppings, pictured here, are rectangular, shiny, and black and ½- to ¾-inch long. Photo credit: NYS IPM Program.



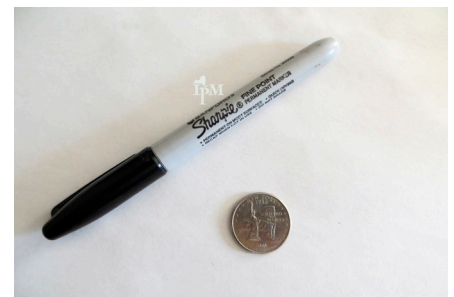
Mouse droppings, pictured here, are about the size of a grain of rice. Photo credit: NYS IPM Program.

Preventing rodent infestations

When it comes to controlling rodents, keeping them out of your building in the first place—known as exclusion—is your best option. Rats and mice commonly enter buildings through small holes, in cardboard boxes and food deliveries, via rooftops—rats and mice are excellent climbers—or after a disaster, such as a hurricane. Fortunately, exclusion isn’t difficult or expensive to achieve, according to [StopPests](#), a HUD-funded organization that educates the affordable housing industry about integrated pest management.

To prevent mice and rats from entering your building, StopPests recommends that you:

- Seal holes inside and outside the building, either by plugging them or patching the walls. Mice can (and do) squeeze through holes as small as a dime when they’re looking for food, water, or shelter.
 - If sealing, use cement, metal mesh, heavy-duty caulk, or a good, high-quality sealant. (Don’t skimp by using an inexpensive foam; rodents can chew through it.)
 - Look for areas where light leaks through, such as under doors, since these are prime entryways for rodents. Use door sweeps, pictured on the next page, to prevent rodents from entering your buildings. Install escutcheon plates (pictured next page) around pipes. Dr. Bobby Corrigan, a world-renowned pest control expert, considers them one of the most important preventative pest management devices that exist.
- Remove food and water sources.
- Remove items that can provide shelter to rodents.
- Remove leaf piles and deep mulch from your property—both make attractive nesting sites for mice and rats.
- Ask residents to clean up spills and messes promptly.
- Store garbage in receptacles with tight-fitting lids.
- Clean trash chutes and compactor rooms often; units located next to trash chutes tend to have more problems.
- Haul away trash, abandoned vehicles, discarded tires, and other items that might serve as nesting sites.
- Keep grass short and remove brush and shrubbery that may provide rodents with protection.
- Make sure you have enough trash receptacles and don’t let bags or boxes pile up around dumpsters.
- Trim tree limbs or shrubs that overhang or touch your buildings to prevent rodents from using them as ladders to gain entry.



Mice can squeeze through holes as small as a dime. Rats can enter buildings through holes as small as a quarter. Photo credit: NYS IPM Program.

Once you've rodent-proofed your building, it's important to note any changes during your regular building inspections. "Doors may come out of alignment, expand or contract due to temperature [fluctuations], and door frames may expand at different rates, creating gaps," says Dr. Corrigan. "There's wear and tear of materials—rodent exclusion is ongoing."



*Light leaks are prime entryways for rodents.
Photo credit: NYS IPM Program.*



Door sweeps, like the one pictured here, go a long way toward keeping rodents out of your building. Photo credit: NYS IPM Program.



*Escutcheon plates, like the one pictured here, help keep pests from entering buildings.
Photo credit: Amy Hourigan*

Enlisting the help of your residents

Since your residents probably have little to no control over how mice and rats get into your building and travel from unit to unit, they don't play as big a role in preventing these infestations as they do with other pests like bed bugs and cockroaches. Even so, clutter and unwrapped food will hinder your efforts to rid your complex of rats and mice, so it's important to enlist your residents' help. Ask them to:

- Keep food and water tightly covered and stored in rodent-proof containers (glass, metal, or thick plastic work well).
- Dump all water, including water that gathers in dishes or cups left in the sink.
- Wash plates, cups, and utensils immediately after use.
- Dispose of waste in garbage cans with tight-fitting lids.
- Throw away trash immediately.
- Refrain from eating or drinking anything that could have come in contact with rodents.
- Remove leftover food and clean up any spilled food from cooking and eating areas.
- Store pet food in rodent-proof containers.
- Promptly report any signs of rodents.

DID YOU KNOW?

Weather-stripping materials are not designed for pest proofing. Mice and rats can easily chew through vinyl.

Tackling a rodent infestation

If your maintenance team is trained in pest control, licensed to use pesticides, and has sufficient time to devote to a rodent infestation, you can tackle the problem in house. In fact, it may be your best bet. "When it comes to rodent infestations, in-house maintenance teams often do a better job than contractors," says Susannah Krysko, MS, a project coordinator with StopPests. One caveat: Make sure you're properly insured. Liability claims can—and do—arise from allegations of improper pesticide use. Talk to your insurance carrier to see whether you're covered, and that your limit—the highest amount your insurer will pay for a claim that your policy covers—is sufficient, since legal fees can quickly eat up a low limit.

Mice and rats follow predictable nesting patterns that make them fairly easy to control. "Their low body mass and high surface area mean they're always losing body heat, so their preferred places to build nests are in floor voids beneath radiators; in canyons and caves in the kitchen; in furniture voids, and in wall voids," says Dr. Corrigan.

Mice and rats multiply rapidly and are extremely territorial and aggressive, so once families become established in these preferred locations, new colonies will spread to other areas. “After furniture and walls, you’ll find mice in cluttered boxes in closets and pantry boxes that are out of reach and forgotten,” says Corrigan.

There are multiple ways to treat a mouse or rat infestation. Lethal traps, such as snap traps, trap and kill rodents. Live traps, such as cage-type traps, capture rodents unharmed, but you must release or kill them, and, of course, rodents released outside your property may find their way back inside unless you’ve sealed all entry points.

Poison baits (rodenticides), which combine poison with edible material that is attractive to rodents, require tamper-resistant bait stations. Many experts consider them a last resort because the chemicals are toxic to humans, pets, and wildlife. If you use them, be sure to follow all labels and precautions, and be mindful when using them inside individual units, taking care to determine whether the product is approved for indoor use.

Read more about how to safely use rodent bait products in [EPA’s guide](#).

Place traps in areas where you’ve seen mice or rats, nesting materials, urine or droppings, nibbled food, or gnaw marks, but keep them away from pets and children. Check bait weekly and reset traps for a week after the rodent activity has stopped.

Read [Dr. Bobby Corrigan’s “Considerations When Using Traps and Rodenticides to Control Mice”](#)

Disinfecting surfaces where rodents have traveled

While you’re tackling a rodent infestation, you’ll have to thoroughly clean areas with signs of rodent activity to reduce the likelihood of exposing your residents to germs and diseases.

To clean a rodent-infested surface, pull on a pair of rubber gloves and spray the affected area with a disinfectant or a 1:10 chlorine-to-water solution until the area is thoroughly soaked. Let the solution sit for five minutes, then use a paper towel to pick up the urine and droppings. Discard the soiled paper towel in a sealed garbage container outdoors, and then go back and disinfect any items that might have been contaminated. Take care not to stir up dust when you sweep or vacuum up droppings, urine, and nesting materials.

If you see any dead rodents, spray them with a disinfectant or your bleach mixture. Wearing gloves, double bag the carcass, then dispose of the rodent and/or trap in a sealed garbage can outside. If you’re reusing the trap, decontaminate it by immersing it in a disinfectant or bleach solution for at least five minutes and then rinsing it off.



Wall voids are a common nesting spot for mice. Photo credit: Susannah Krysko, MS

GOOD TO KNOW

Damaged or abandoned buildings may be infested with rodents. If a building has been abandoned for an extended period, air it out for a few days before entering. If you see signs of rodents, the building needs to be cleaned thoroughly. Contact your local health department or a pest control company for guidance.



Mice and rats like to travel along walls for safety. Placing traps here is a smart move. Photo credit: NYS IPM Program.

“Mice don’t get close to the attention that bed bugs get, but they’re as complex or more so to treat. Rodents in apartments are simply unacceptable, especially if there are children.”

—Dr. Bobby Corrigan



Rat near trash compactor. Photo credit: NYS IPM Program.

When you're finished with the cleanup, wash your gloved hands with soap and water or spray them with a disinfectant or bleach solution before taking them off. After removing the gloves, wash your hands with soap and water.

When to call an expert

If rodents continue to be a problem, or if your maintenance staff has too many other responsibilities to tackle an infestation, consider bringing in a professional pest control company. Keep in mind that even if you outsource rodent control, there's a good amount of work that still needs to be done in-house, including sealing holes, installing door sweeps, and keeping the property's trash disposal area clean.

Additional Resources

Want to learn more?

- Listen to Dr. Bobby Corrigan's recorded webinar: [Tools for Eliminating Mice in Multifamily Housing](#)
- Read StopPests' Guide: [Integrated Pest Management for House Mice: A Guide for Property Managers](#)
- Read [Pests Under Fire: Best Practices for Pest-Proofing Your Community](#)

HIRING A PEST CONTROL SPECIALIST

Before you sign a contract:

- Get quotes from several pest control companies.
- Ask to see the company's license. (Call your [state pesticide regulatory agency](#) if you have questions.)
- Request a certificate of insurance.
- Request estimates for inspections and treatment.
- Ask about warranties.
- Ask for referrals.
- Compare prices, treatment methods, and the safety of any proposed pesticides. (Low bid = high risk, according to Dr. Corrigan.)
- Send the contract to your HAI Group account representative. We'll make sure it is written in your favor from an insurance standpoint.

RENOVATING A PROPERTY OR BUILDING SOMETHING NEW?

Now is a great time to establish a pest control program. Consider hiring a licensed professional to point out the new building's vulnerable areas. And consider reading [Pest Prevention by Design](#) by Chris A. Geiger, PhD, San Francisco Department of the Environment, and Michael Baefsky, Trees, Bugs, Dirt LLC.

Contact our Risk Control Services Team

for more resources and answers to your housing organization's risk-related questions.

Got a question about insurance?

Our Account Services team is ready to assist you.

[CONTACT NOW](#)

[LEARN MORE](#)



Includes copyrighted material from a company under the HAI Group® family, with its permission.

This guide is for informational purposes only and is not meant to provide legal advice. Our purpose is to provide an overview of legal compliance and our recommendation is to play it safe, and consult with legal counsel or a compliance advisor who is familiar with the laws in your area.