

# Don't Let Rodents Wreck Your Reputation



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Guide to Preventing Rats and Mice from Chewing Away at Profits



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# A Gnawing Problem.

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**Champions of chewing. Deadly disease vectors. Prolific breeders. Rodents have a shockingly wide global reach, and here in the Northeast, they're happy to call warm, inviting environments like your business, home — making for a year-round battle for restaurants, hotels and multifamily and commercial properties.**

With more than 2,000 species scurrying across our planet, rodents make up about 40 percent of all mammals worldwide.<sup>1</sup> And they really get around: A full 20 percent of the world's food is believed to be contaminated by rats and mice,<sup>2</sup> while one in four structural fires are thought to be caused by rodent damage to electrical wires.<sup>3</sup> If your business has a gnawing problem, you're not alone — rodents are responsible for billions of dollars' worth of damage each year.

While you're chewing over the potential financial impact, rats will be chewing almost anything in their incisors' reach. Their front teeth grow nonstop at an average of 5 inches per year,<sup>4</sup> so rats must constantly nibble at food, furniture, walls, wiring - whatever they can sink their teeth into, *literally* — to wear them down.

So how do you protect your business from the real risks of rodent infestation, all in an increasingly strict regulatory environment? We've created a comprehensive guide to help you understand the dangers rodents pose and rat out the signs these vermin are on your premises.

# Rodent Risks

**Here's the dirty truth: your business has the food, water and shelter rats and mice need, and when they move in, they bring some very nasty stuff along. These pests have what it takes to ruin your profits, reputation and health:**



## MASTER CONTORTIONISTS

Rodents are masters at fitting into tiny spaces. Rats can contort themselves into shapes as small as a quarter, while mice can squeeze through holes that measure just a quarter of an inch – about the size of a dime.

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## DISEASE SPREADERS

According to the Centers for Disease Control and Prevention, rodents are known to directly and indirectly transmit 35 different diseases, many of which are potentially lethal.<sup>5</sup> Leptospirosis, salmonellosis and typhus can all be caused by rodents.

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## RAPID REPRODUCTION

A single rat can produce seven litters per year, with up to 12 pups per litter. So if you (or worse – one of your customers) spot just one rodent, chances are a full family reunion is taking place in your walls.

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## REPUTATION DESTROYERS

Nothing sends customers scurrying away like a rodent spotting, and like the pest itself, ratty reviews of your restaurant or property can be difficult to contain.

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## PROLIFIC POOPERS

Rodents have plenty of leave-behinds for your customers. A single mouse can produce 49 droppings per day – that's 18,000 per year. And with more than 25,000 pellets annually,<sup>6</sup> rats have even more to share.

# Reputation Tankers

In the world of business, reputation is king. And nothing creates more of a reputational risk than a rodent sighting, especially in the age of social media and online reviews. With the tap of a finger, videos named “Rodent Running Across Bakery,” “Mouse Sniffs Around Baby’s Crib In Apartment” and “Mouse In Our Hotel Room OMG” can become unwelcome viral marketing for your business. And what customers see about you online matters:

**88%**

of consumers trust  
online reviews as much  
as friends<sup>7</sup>

Customers are **73% more likely to trust** a local  
business because of **positive reviews**.<sup>8</sup>

+  
**50%** of customers report needing at least  
a four-star rating before using a business.<sup>9</sup>

**37%** of customers stopped eating at a restaurant  
because of food safety concerns.<sup>10</sup>

**12x the Effort<sup>11</sup>**

For an organization to counteract one  
negative review, it needs 12 positive reviews.





# The Foul Four

**Though there are six suborders of Rodentia representing more than 2,000 individual species, you can count the most common trespassers to your business on one hand. Meet the four rodents most likely to sink their teeth into your operations and profits.**

# House Mouse

(MUS MUSCULUS)

Don't take their name too seriously: house mice infest restaurants, hotels, schools, hospitals, offices and more. Known for their pervasiveness, these pests thrive thanks to their small size, secretive behavior and prolific breeding and have been nicknamed the "mammalian weed."



## APPEARANCE

Adults range in size from **5-8 inches long (tail included)**, with short hair that covers their bodies, moderately large ears, and tails as long as their bodies and heads combined.



## LIFE CYCLE

Females can produce **40-60 offspring in a single year**, breeding year-round over the course of their one- to-two-year lifespan.



## LOCATION

Though the house mouse most commonly exists in **fields and wooded areas**, the onset of **winter forces them to seek areas that provide food and warmth** – like your business.



## HABITS

These rodent marauders freely **forage for food and nest supplies from your property**, covering a 10- to 30-foot radius around their nests.



## DIET

House mice will eat anything they can sink their incisors into like seeds, roots, leaves and stems. When house mice live with or near humans, they become **opportunistic feeders that will eat any available food source or household item, including glue, soap, and paper.**



## Faster Than a Speeding... House Mouse?

House mice can run up to 12 feet per second (faster than 8 miles per hour), while hurdling over objects in their path.

# Norway Rat

(RATTUS NORVEGICUS)

The Norway rat originated in Central Asia (not even Norway) before migrating to the U.S. in the 1770s aboard ships from Great Britain. It's now the most widely distributed rat species in the United States. Thanks to its large size and aggressive behavior, it's earned the charming nicknames "Super Rat" and "King Rat."



## APPEARANCE

Norway rats are **LARGE**, typically measuring **over 15 inches in length from head to tail**, with some measuring up to 19 inches. Their tails are shorter than their bodies, which are covered in shaggy, grayish-brown hair.



## LIFE CYCLE

Though the average Norway rat lives only one year as an adult, **females can have three to 12 litters in a year**, with as many as **22 rat-pups per litter**.



## LOCATION

These rodents are ground-dwellers that **dig subterranean burrows alongside building foundations, underneath city streets or beneath heavy rocks**.



## HABITS

Norway rats tend to **live in family units**, comprised of a dominant male, a breeding female and up to 12 juvenile rats.



## DIET

**Cockroaches and sewer water** are what's for dinner when you're a Norway rat. These omnivores feed on virtually any food they can scavenge.

## Almost Amphibious

These expert swimmers can tread water for three days straight and hold their breath underwater for up to three minutes.<sup>12</sup>





# Deer Mouse

(PEROMYSCUS MANICULATUS)

Deer mice are the most abundant mammal in North America – a fact that became unsettling in 1995 when they were identified as the transmitters of a *Hantavirus* outbreak that spread across the Southwest, afflicting 728 people<sup>13</sup> with respiratory illness.



## APPEARANCE

Slender and small, deer mice range from **3-4 inches long (tail included)**, with a pointed nose and large black eyes. Deer mice are traditionally brown on the back and white on the underbelly, legs and tail.



## LIFE CYCLE

Deer mice give birth to as many as **11 litters in one year**.<sup>14</sup> Each litter consists of anywhere from one to nine pups who reach sexual maturity after five or six weeks. The gestation period lasts about 24 days, and females can become pregnant again shortly after giving birth.



## LOCATION

Unlike many rodents, deer mice prefer rural and semi-rural areas. They make homes in **piles of logs, tree cavities and abandoned bird nests**.



## HABITS

They don't hibernate in the winter, but **deer mice stay in their nests for several days at a time in the colder months**, eating stored food rather than braving the elements.



## DIET

Deer mice control many other pests, eating **thousands of insects including gypsy moths and cut worms**.



## Super Survivor

While most deer mice don't make it to their first birthday, one deer mouse lived for over eight years in captivity.

# Field Mouse

(MICROTUS PENNSYLVANICUS)

Field mice are prevalent across the northern and eastern United States, with 19 species spread across the country – four of which are known to tunnel, gnaw and sneak their way into commercial and residential buildings.



## APPEARANCE

**Small and stocky**, field mice typically measure between 4-6 inches. Unlike the rest of its rodent kin, it has a **short tail**.



## LIFE CYCLE

Field mice are the most prolific breeders of all rodent species, capable of producing **17 consecutive litters in one year**.



## LOCATION

**Moist areas overgrown with plants and grass** provide ideal conditions for field mice to make themselves at home and construct shallow runways across the surface of the ground.



## HABITS

Content to stay in their burrows aside from short visits down their runways and back, these quiet mice are **hard to spot**.



## DIET

These herbivores rely on **grasses, flowers, fruit and other plants for their sustenance**.

## On the Menu

Field mice are the most common food source for predatory birds, resulting in an annual mortality rate as high as 88 percent.





# Rodents Are Risky Business

**They may be small, but don't underestimate the bite rodents can take out of your business. Rodent control is a \$337 million industry for a reason: these pests are widespread, master infiltrators who chomp through wires, contaminate products and spread unsightly diseases.**

# Property Damage

Rodents don't ask before gnawing through anything and everything, including your profits. Blame it on their anatomy – with a pair of incisors that never stop growing and jaws that can exert up to 7,000 pounds per square inch,<sup>15</sup> they are driven by the need to chew constantly.

## FOOD CONSUMPTION



**30 grams**

of food consumed by  
1 rat in 1 evening



**23 pounds**

of food per week devoured by an  
infestation of 50 rats

## DAMAGE TO STRUCTURES

Approximately 2 percent of a rodent's day – that's about half an hour – is spent chewing on anything it can get its teeth on. Pair that with their incisors' length and hardness, and your property is under siege.

Across commercial buildings, rodents are capable of chewing through:

- × Utility gas lines
- × Water pipes
- × Asphalt
- × Electrical wires
- × Support beams
- × Walls, floors, window sills and doors
- × Soft metals, including lead and copper
- × Aluminum sheathing
- × Soft cement
- × Sheet rock

The consequences on your structure can be dire. Twenty-five percent of fires are believed to be started by rodent-damaged electrical wires,<sup>16</sup> and rodents burrowing beneath the ground can collapse your foundation. If they were to tunnel into your walls and ceilings instead, they can expel the insulation inside.

# Health Concerns

In the past century alone, more than 10 million people have died from more than 35 rodent-borne illnesses.<sup>17</sup> While rodents can spread diseases directly through a bite, most rodent-borne illnesses are spread indirectly through droppings, urine, saliva and/or blood. Here are just a few of the ailments they've been traced to:

## THE DISEASE

## THE TRANSMISSION

## THE DIRTY DETAILS



**FOOD POISONING**  
(including *Salmonella*)

Feces of rats and mice, food preparation surfaces and food storage

Ingesting contaminated food could lead to diarrhea, nausea and intestinal disorders.



**HANTAVIRUS**

Improperly cleaning up rodent feces, urine or body fluids - disease most commonly spread by deer mice

From 1993-1994, an outbreak of hantavirus resulted in more than 50 deaths in 17 states.



**BUBONIC PLAGUE**

Infected rat fleas bite human subjects

The Bubonic plague killed more than a third of the human population in 1347.<sup>18</sup> Today there are still more than 600 annual cases.<sup>19</sup>



**RAT-BITE FEVER**

Bacteria in mouth and nose of rats and mice is transmitted via bite

Most cases appear in Japan, but some are present in the U.S., Europe, Australia and Africa.<sup>20</sup>



# Ratting Out Rodents

**To protect your business from the sinister side effects of rodents, you'll need to keep a sharp eye on your building's danger zones and establish a maintenance routine that stops these destructive, disease-carrying critters in their tiny tracks. Let's start with how to spot rodent activity.**

# Top 5 Signs Of Rodent Infestations

If you detect any of these “tell-tail” signs, alert your pest control provider as soon as possible to begin remediation.



## DROPPINGS

Keep your eyes peeled for capsule-like pellets. Rodents do their business about 50 times per day.



## NESTS

Rats and mice use nests as both their shelters and food storage units.



## GREASE MARKS

Grease marks, from oil and dirt, are left along their runways, which includes walls and cracks.



## GNAWING

Check for chew marks on packages, walls, insulation, wires, flooring and pallets.



## BURROWS

While some rodents prefer the roof, others like to stay close to the ground, burrowing beneath buildings, walls and fences.

## Rodent Red-Carpets

Avoid these open invitations for rodents at all costs:

- × Left out food
- × Cluttered spaces, including attics and basements
- × Overgrown landscaping
- × Poorly maintained walls, foundations and roofs
- × Improperly sealed doors and other openings
- × Standing water





# How Rodents Join Your Ranks

**Your business is a pest paradise, stocked with food, shelter, warmth and miles of wires to chew on. Add the constant flow of people coming and going and easy food sources to the mix, and there are many ways you may be opening the door to rats and mice. But after 90+ years of partnering with and protecting restaurants, hotels and multifamily and commercial properties, we know how to keep these pests from moving in. Here are industry-specific tips to keep rodents from chowing down on your profits.**



# Rodent-Proof Your Restaurant

As a place where food is stored, prepared and enjoyed, your restaurant is susceptible to becoming a rodent magnet.

## Know Your Plan Of Attack



### 1. INSPECTION

Start with The Danger Zones, paying attention to hard-to-reach areas including basements, attics, crawlspaces and spaces that may contain traces of food. Look out for signs of rodents including droppings and grease marks.



### 2. EXCLUSION

Rats can sneak into holes the size of a quarter, and mice can squeeze through dime-sized openings, so it's essential to seal off any and all entry points. Install door sweeps, seal cracks and eliminate gaps around utility lines and boxes. Trim back vegetation that could touch the roof, cover exterior drains and vents with metal mesh, and install plastic, one-way rodent-proofing valves inside all drains.



### 3. CLEAN OUT

Cluttered storage areas and basements are a favorite for mice and rats, who source nearby supplies for food and nesting material. Be sure to clean out interior and exterior spaces frequently, including drawers, pantries and storage areas.



### 4. SANITATION

Rats need food and water to survive, and standing water and scraps in garbage bins are on their menu. Continuously empty garbage bins, clean out dumpsters, and check outside faucets and gutters for leaks and/or puddles.



### 5. MONITORING

Consistent monitoring and maintenance of your restaurant's unique problems are essential to identifying problems early. Keep the lines of communication open between your staff, building maintenance and your pest management provider.

## Check Danger Zones

- ✗ Stock rooms and stored product areas
- ✗ Roofs of cooler and freezer boxes
- ✗ Floor voids
- ✗ Storage shelving units
- ✗ Cluttered backrooms, basements and/or cabinets
- ✗ Warm suspended ceilings
- ✗ Coffee stations
- ✗ Custodial closets
- ✗ Wall, floor and ceiling voids
- ✗ And any place that provides food, water or shelter.

# Don't Invite Rodents As Your Guests

Nothing will send your guests packing like a rodent (or dropping) sighting, but your hotel has all the amenities rats and mice want.

## Know Your Plan Of Attack



### 1. INSPECTION

Start with The Danger Zones, paying attention to hard-to-reach areas including basements, attics, crawlspaces, and spaces that may contain traces of food. Look out for signs of rodents including droppings and grease marks.



### 2. EXCLUSION

Rats can sneak into holes the size of a quarter, and mice can squeeze through dime-sized openings, so it's essential to seal off any and all entry points. Install door sweeps, seal cracks and eliminate gaps around utility lines and boxes. Trim back vegetation that could touch the roof, cover exterior drains and vents with metal mesh, and install plastic, one-way rodent-proofing valves inside all drains.



### 3. CLEAN OUT

Cluttered storage areas and basements are a favorite for mice and rats, who source nearby supplies for food and nesting material. Be sure to clean out interior and exterior spaces frequently, including desk drawers, vending machines and storage areas.



### 4. SANITATION

Rats need food and water to survive, and standing water and scraps in garbage bins are on their menu. Continuously empty garbage bins, clean out dumpsters, and check outside faucets and gutters for leaks and/or puddles.



### 5. MONITORING

Consistent monitoring and maintenance of your hotel's unique problems are essential to identifying problems early. Keep the lines of communication open between your staff, maintenance crew and pest management provider.

## Check Danger Zones

- ✗ Stock rooms and stored product areas
- ✗ Roofs of cooler and freezer boxes
- ✗ Vending machines
- ✗ Floor voids
- ✗ Storage shelving units
- ✗ Cluttered backrooms, basements and/or cabinets
- ✗ Warm suspended ceilings
- ✗ Break rooms
- ✗ Coffee stations
- ✗ Dining areas
- ✗ Custodial closets
- ✗ Cluttered offices
- ✗ Wall, floor and ceiling voids
- ✗ And any place that provides food, water or shelter

# Rat-Proof Your Property

Multiple kitchens or office break rooms stocked with feasts for the taking and yards of wire for the chewing.

## Know Your Plan Of Attack



### 1. INSPECTION

Start with The Danger Zones, paying attention to hard-to-reach areas, including basements, attics, crawlspaces, and spaces that may contain traces of food. Look out for signs of rodents including droppings and grease marks.



### 2. EXCLUSION

Rats can sneak into holes the size of a quarter, and mice can squeeze through dime-sized openings, so it's essential to seal off any and all entry points. Install door sweeps, seal cracks and eliminate gaps around utility lines and boxes. Trim back vegetation that could touch the roof, cover exterior drains and vents with metal mesh, and install plastic, one-way rodent-proofing valves inside all drains.



### 3. CLEAN OUT

Cluttered storage areas, basements and attics are a favorite for mice and rats, who source nearby supplies for food and nesting material. Be sure to clean out interior and exterior spaces frequently and have your tenants do the same.



### 4. SANITATION

Rats need food and water to survive, and standing water and scraps in garbage bins are on their menu. Continuously empty common area garbage bins, clean out dumpsters, and check outside faucets and gutters for leaks and/or puddles.



### 5. MONITORING

Consistent monitoring and maintenance of your property's unique problems are essential to identifying problems early. Keep the lines of communication open between your staff, maintenance crew and pest management provider.

## Check Danger Zones

- ✗ Stock rooms and stored product areas
- ✗ Vending machines
- ✗ Floor voids
- ✗ Storage shelving units
- ✗ Cluttered rooms, basements and/or cabinets
- ✗ Warm suspended ceilings
- ✗ Break rooms
- ✗ Coffee stations
- ✗ Restaurants/cafeterias
- ✗ Custodial closets
- ✗ Cluttered offices
- ✗ Wall, floor and ceiling voids
- ✗ And any place that provides food, water or shelter

# Proactive Pest Control

Now you know your enemy and the nooks, crannies, crevices and burrows they like to hide in. You've also learned the unfortunately foul signs that they may be in your midst. If you've spotted any of their – ahem – leave-behinds, it's time to contact a pest control expert to do the dirty work for you.

Western Pest Services® offers thorough rodent control year-round. Using Integrated Pest Management (IPM), we not only get rid of rodents – we help you close the door on these pests for good.

## Outsmart the Enemy with Scanning Technology

Western's ScanPro® technology has upped the game in commercial rodent control. Bar-coded rodent stations allow our technicians to instantly capture inspection findings in an online database. This information provides serious trending insights over time and enables us to implement smarter, more targeted strategies tailored to your business. ScanPro is another tool in Western's commercial rodent control arsenal that makes service more effective and easier to track.



**Call Western To Start Protecting Your Reputation**

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\*Unless otherwise noted, all other facts were taken from [westernpest.com](http://westernpest.com) and [orkin.com](http://orkin.com).

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