

BEST PRACTICES FOR PEST PROOFING FOOD SERVICE ESTABLISHMENTS

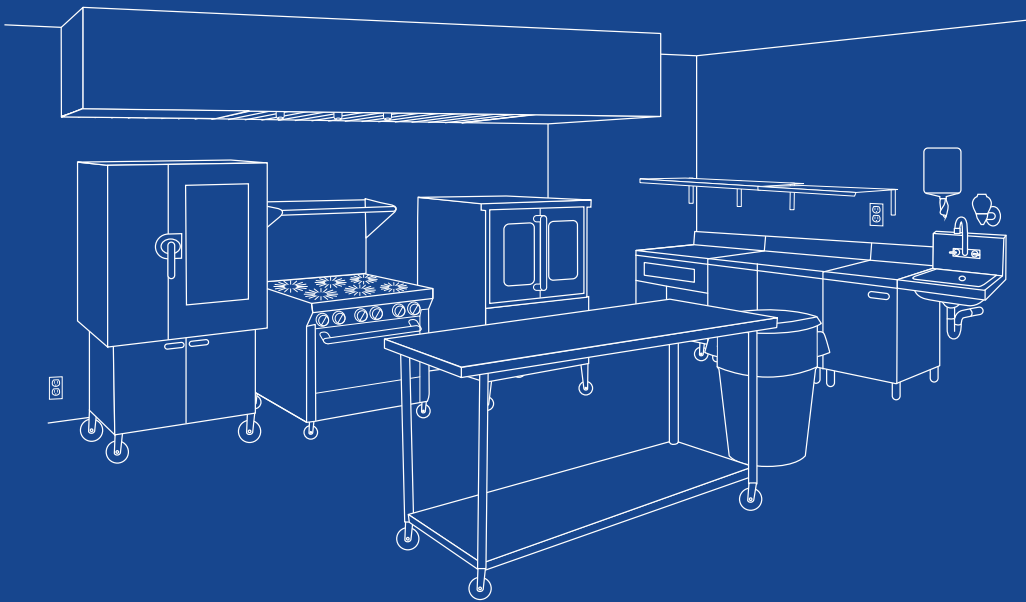


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The integrated pest management (IPM) strategies in this guide can help you control rodents and other pests in your food service establishment (FSE).

For more information, visit nyc.gov/health and search **operating a restaurant**.



Take an Active Role Against Rodents and Other Pests

Rodents and other pests are common problems in New York City. Food service establishments (FSEs) are especially vulnerable to rodents and other pests because they provide a continuous source of food, shelter and warmth.

Do not let your FSE become an inviting home for rodents and other pests. FSEs can control rodent and other pest problems by using a method known as integrated pest management (IPM). IPM helps you monitor where rodents and other pests might live, take steps to prevent them and use targeted treatment methods to control them.

The techniques and best practices in this guide will help you apply IPM strategies to maintain a pest-free environment.



Monitoring and Prevention

Routine monitoring and ongoing prevention is the food service operator's first defense in identifying and eliminating rodents and other pests. Having a good pest-monitoring plan helps FSE staff stay ahead of any rodent or pest problems before they start. It also promotes good communication between FSEs and contracted pest management professionals. Having a written description of monitoring devices, their locations and a daily checklist will help staff members identify problem areas and report conditions that attract rodents and other pests.

CAN FOOD SERVICE ESTABLISHMENTS USE STICKY TRAPS?

Yes – but only as part of an IPM program. FSEs can use sticky traps or stations as a monitoring tool to determine if they have a rodent infestation. Remove these traps as soon as they contain one or more rodents.

IDENTIFY ACTIVE RODENT SIGNS

Rodents are one of the most common problems FSEs face. When looking for signs of rodents, begin with a thorough inspection of the FSE and locate openings larger than a quarter inch, including openings where utilities enter. Let your pest management company know immediately if you see any of the following, as they may be signs of an active rodent problem:

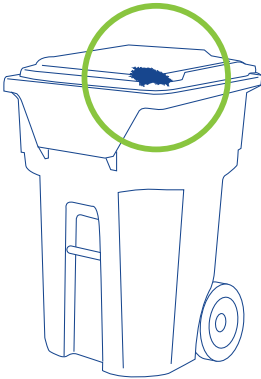
- Rodent feces or urine
- Rub or smudge marks (dark, greasy smears against baseboards and openings)
- Runways (paths that rodents use, leaving smudge marks along walls and baseboards)
- Burrows (tunnels where rats live, often seen as 1-4 inch-wide holes in dirt or concrete)
- Gnaw marks
- Holes in the FSE walls
- Holes in the sidewalks in front of the FSE



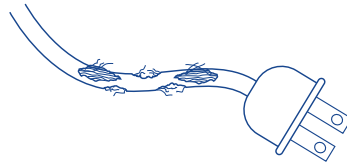
Norway rat droppings
Average length 3/4"



Mouse droppings
Average length 1/4"



Examples of
gnaw marks



REMEMBER: Contact your pest management professional if active rodent signs are found. To keep rodents out, make sure doors are flush and windows fit tightly. Get rid of clutter such as lumber, old boxes, unused equipment and appliances that could serve as shelter for rodents.

RODENT PREVENTION CHECKLIST

USE THIS RODENT MONITORING CHECKLIST TO IDENTIFY PROBLEM AREAS AND PREVENT RODENT INFESTATIONS.

EXTERIOR	YES	NO
Are grounds properly drained and free of excessive leaks, debris, trash, damaged pallets, equipment or other materials that attract rodents or provide them with shelter?	<input type="radio"/>	<input type="radio"/>
Are the front, side and rear yards free of burrows and/or rodent droppings?	<input type="radio"/>	<input type="radio"/>
Are rubber-encased steel fabric sweeps or high-density brushes installed and in good condition on all doors?	<input type="radio"/>	<input type="radio"/>
Are openings for utilities (A/C refrigerant, natural gas pipes and hoses) sealed with high quality sealants?	<input type="radio"/>	<input type="radio"/>
INTERIOR	YES	NO
Are all below-sink plumbing lines completely sealed with escutcheon plates?	<input type="radio"/>	<input type="radio"/>
Is the area where the floor meets the wall free of rodent droppings?	<input type="radio"/>	<input type="radio"/>
Are interior doors in good condition and free of holes or gaps larger than an eighth inch?	<input type="radio"/>	<input type="radio"/>
DRY STORAGE AREA OR CELLAR	YES	NO
Is the area free of excessive moisture due to: <ul style="list-style-type: none"> • Roof leaks • Leaking pipes or valves • Broken windows • Leaking drains • Condensation drips • Broken or damaged skylights 	<input type="radio"/>	<input type="radio"/>
Are food products stored inside rodent-resistant containers on clean, structurally sound shelving or racks?	<input type="radio"/>	<input type="radio"/>
Is the storage area free of active rodent signs?	<input type="radio"/>	<input type="radio"/>
Are products stored 6 inches from the floor and not immediately under open windows, unit heaters, vents, stairways and motors?	<input type="radio"/>	<input type="radio"/>
GARBAGE AREA (Interior and Exterior)	YES	NO
Are the garbage containers in good condition? (No holes or cracks)	<input type="radio"/>	<input type="radio"/>
Do you have enough garbage containers with tight-fitting lids to store all of the garbage without it spilling over?	<input type="radio"/>	<input type="radio"/>

If you answered no to any of these questions, take action to remediate problem areas.

Clean Pests Out!

Food, clutter, grease stains and odors can attract rodents and other pests. Inspect kitchens, storage rooms and garbage areas daily to make sure they are kept clean.

INSIDE YOUR FOOD SERVICE ESTABLISHMENT

- Keep kitchen and storage areas free of food waste, dirt and dust. Clean around cabinets, refrigerators, display cases and storage areas.
- Follow the Garbage Management Best Practices (page 5) as well as sanitation and recycling rules.
- Use garbage containers with tight-fitting lids.
- Discard:
 - Food and food packaging in trash bins lined with 1.9 millimeter thick heavy-duty plastic bags
 - Expired or damaged food boxes and canned goods
 - Unused paper bags, cardboard boxes and bottles

OUTSIDE YOUR FOOD ESTABLISHMENT

- Wash all garbage areas (including dumpsters, compactors and trash cans) and sidewalks and curbs around your FSE regularly with soap and water or a 10 percent bleach solution.
- Remove any standing water from around your FSE.

TIP: Storing materials flush against the wall can hide a pest infestation. Keep stored materials away from walls to provide a clear line of sight – key to effective pest control.

Starve Pests Out!

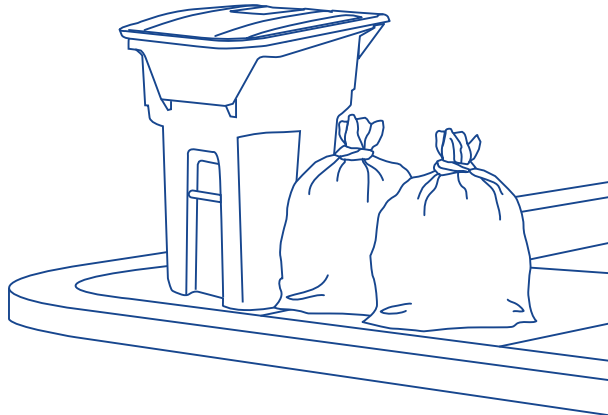
Rodents and other pests need food and water to live. To starve them out:

- Keep vegetables and grains like rice, oats and flour in rodent- and pest-resistant containers with tight-fitting lids.
- Promptly clean up and discard any spilled food in 1.9 millimeter thick heavy-duty plastic bags, tied tightly at the top to minimize leakage.
- Follow the Garbage Management Best Practices to make sure rodents can't access food waste.



GARBAGE MANAGEMENT BEST PRACTICES

- Line garbage cans with 1.9 millimeter thick heavy-duty plastic bags. Put rags soaked with a 10 percent bleach solution (one cup of bleach to two gallons of water) inside the bags. Add one rag to the bottom of the bag before you put trash in, and one on the top before tying the bag.
- **It's the law:** make sure you have enough garbage cans to hold trash for at least three days between pickups. Always use hard plastic or metal cans with tight-fitting lids.
- Bring garbage cans and bags to the curb as close to pickup time as possible. Arrange specific pickup times with your carter to reduce the time garbage is available to outdoor pests.



FREQUENTLY ASKED QUESTIONS ABOUT GARBAGE MANAGEMENT

1. Who is responsible for garbage collection from an FSE?

A: By law, FSEs must hire a private carter to collect their garbage.

2. When can an FSE put their garbage out for collection?

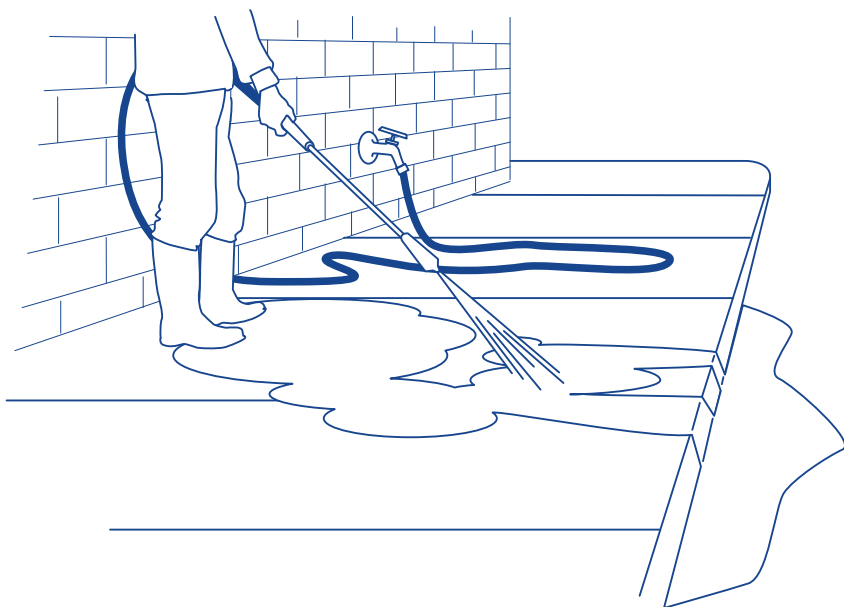
A: FSEs can put their garbage out an hour before closing. If garbage collection happens during the day, garbage can be placed outside within two hours of the actual collection time. Keep garbage containers and areas clean at all times.

3. Who is responsible for cleaning garbage spills on the sidewalk?

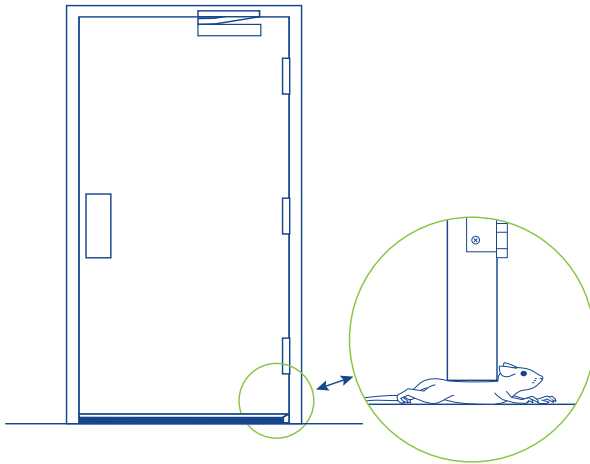
A: The FSE's private carter is responsible for cleaning any sidewalk spills. If the carter does not clean up the spill, the FSE is responsible for cleaning the sidewalk.

4. Can an FSE leave garbage out during a holiday or weekend?

A: No – garbage may never be left out on a holiday or weekend.

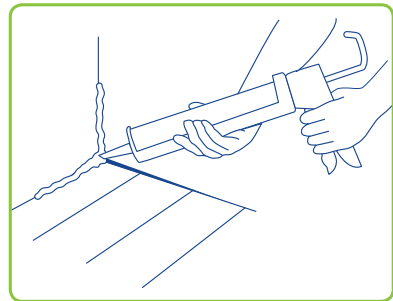
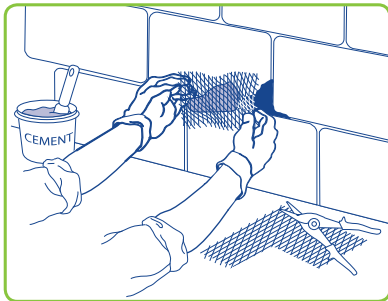


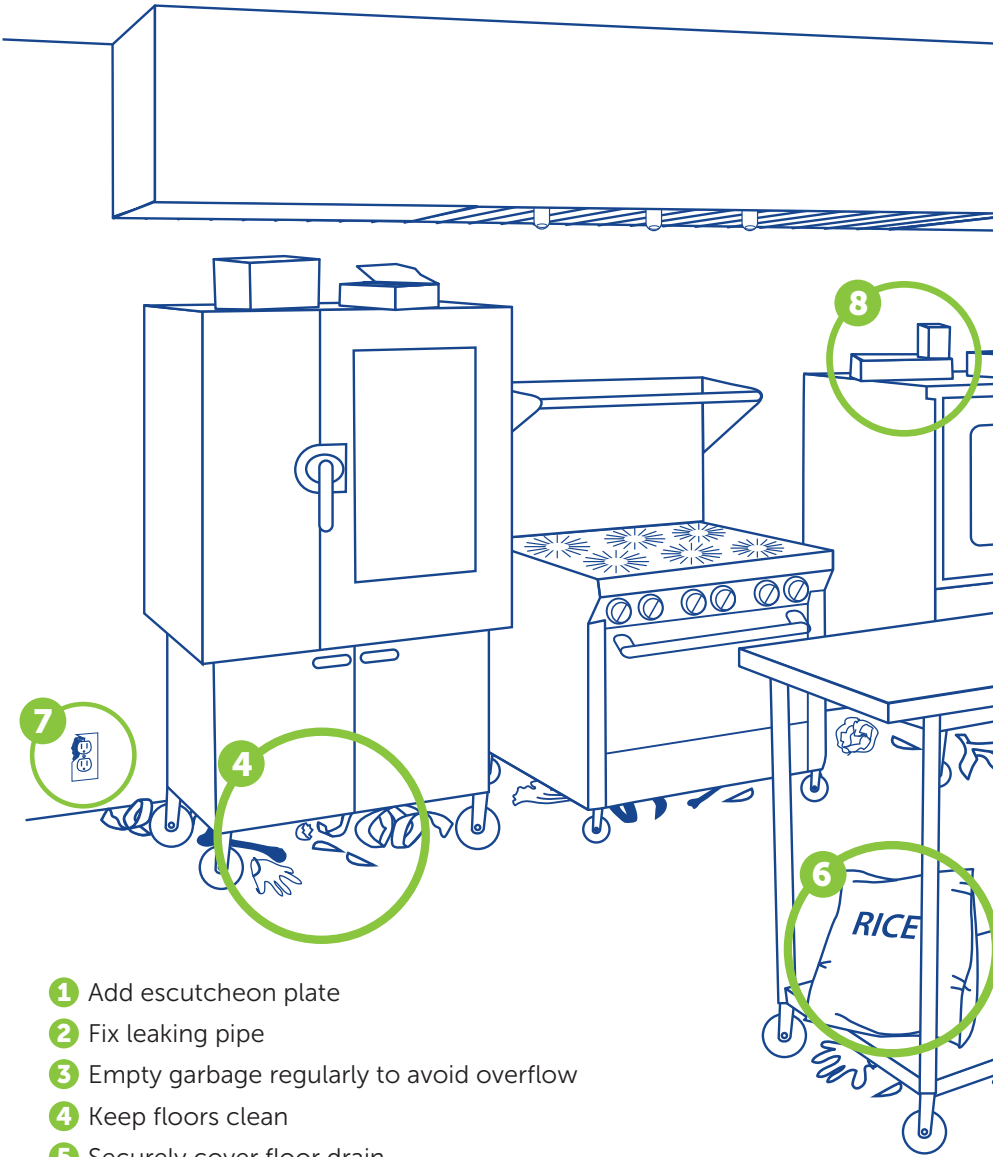
Seal Pests Out!



Keep rodents and other pests out by sealing all holes and cracks in your FSE. Use screens on open windows and doors, and add sweeps to the bottom of doors, to prevent rodents from entering through the gap between the door and the floor. Remember, a mouse can get through a hole the size of a dime and a rat through a hole the size of a quarter.

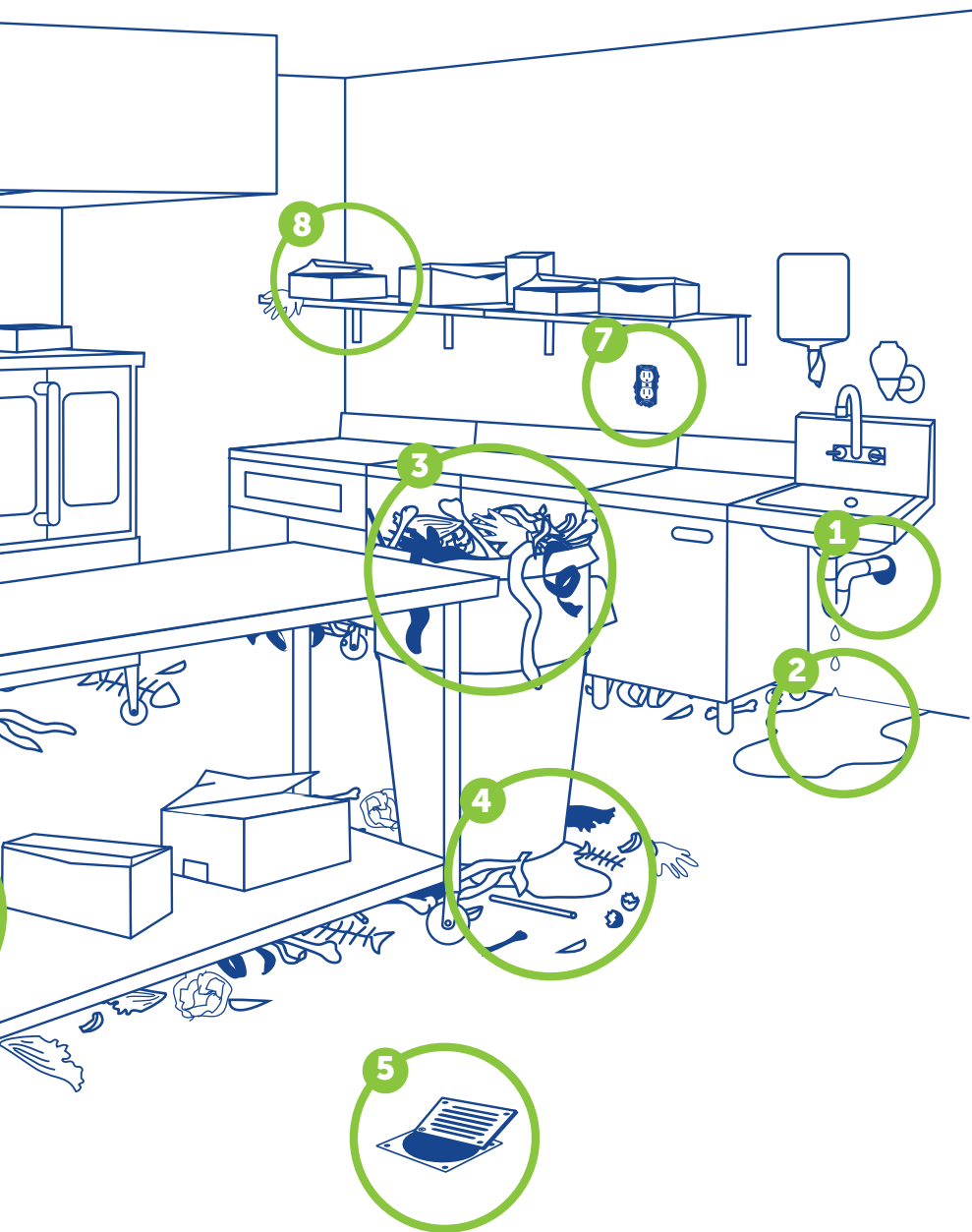
To make your FSE less welcoming to pests, focus on building maintenance and timely repairs — important elements of IPM. See page 10, *Pest Proofing by Area*, for best practices for preventing rodents and other pests in and around your FSE. Staff members can easily do many of these inexpensive repairs.



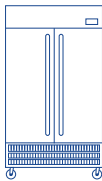
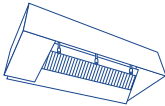
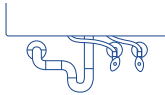


- 1 Add escutcheon plate
- 2 Fix leaking pipe
- 3 Empty garbage regularly to avoid overflow
- 4 Keep floors clean
- 5 Securely cover floor drain
- 6 Store food in pest-proof containers
- 7 Seal holes and use outlet cover
- 8 Remove clutter

PEST PROOF YOUR KITCHEN

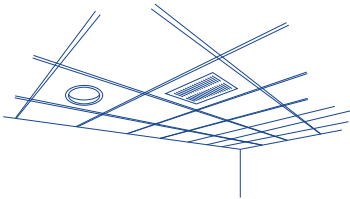


Pest Proofing by Area

	Where to look	What to look for	How to pest proof
INTERIOR			
	Refrigerators, freezers, ice machines, hot and cold holding units, ovens and other equipment	<p>Fallen food and sources of leaks behind equipment</p> <p>Doors that do not close or seal properly</p> <p>Damaged door gaskets</p> <p>Damaged insulation panels</p>	<p>Remove all sources of clutter from in and around equipment.</p> <p>Clean inside and outside of equipment. Clean food waste, dirt and dust from behind and under equipment.</p> <p>Replace damaged door gaskets and panels.</p>
	Ventilation hood	<p>Gaps around the edges</p> <p>Spaces or grooves in the walls and ceiling</p>	<p>Fill gaps and holes with sealant.</p>
	Wall or floor junction, molding (i.e., decorative chair rail and crown molding) and baseboards	<p>Gaps at junctions, edges and sides</p> <p>Loose baseboards and gaps between the wall and floor</p>	<p>Seal gaps between walls and floors before installing baseboards or crown moldings. Seal gaps before painting. Use backer rods for gaps larger than a quarter inch, and sealant for porous surfaces in restroom or kitchen or dining areas.</p> <p>Tightly seal baseboards at wall junctures. Use backer rods for gaps larger than a quarter inch and sealant for porous surfaces.</p>
	Utility and plumbing openings, wall penetrations	<p>Gaps around plumbing and gas line penetrations</p>	<p>Seal around plumbing and gas lines with sealant and copper mesh. Install a two-piece escutcheon plate.</p>
	Void under staircase	<p>Spaces where pests can shelter</p>	<p>Avoid clutter and keep area clean.</p>

Where to look	What to look for	How to pest proof
INTERIOR		

Doors, ventilation system and drop ceiling



Openings in ventilation screens or utility doors
Missing, stained or dirty ceiling tiles

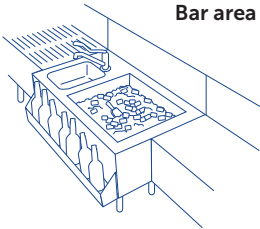
Install screens and rubber-encased steel fabric sweeps or high-density brushes around utility doors. Use welded stainless steel quarter-inch screens and metal stripping or high-density brush door sweeps where needed. Replace missing ceiling tiles. Also replace stained and/or dirty ceiling tiles.

**In and around cabinets and shelving
Under sink basin**

Cracks or gaps at wall junctions, in between cabinets and under sink basins

Fill all cracks or gaps with sealant. Use backer rods for gaps larger than a quarter inch.

Bar area



Gaps under bars or countertops
Wet or damp areas around sinks and ice machines

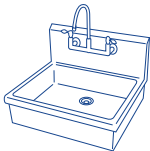
Fill all gaps with sealant. Check plumbing around sinks and ice machines for leaks and fill any gaps with water-resistant sealant.

Kick plates

Food and debris under roll-in refrigerator kick plates

Remove and clean under kick plates.

Sink backsplash



Gaps at the top edge and along the wall

Fill gaps with high quality sealant and backer rods for gaps larger than a quarter inch.

Where to look	What to look for	How to pest proof
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INTERIOR

Toilet

Gaps at edges and sides

Seal gaps with sealant and copper wool.



Electrical outlets, light switches, fuse boxes and circuit breaker boxes

Missing or broken covers and gaps around edges and sides

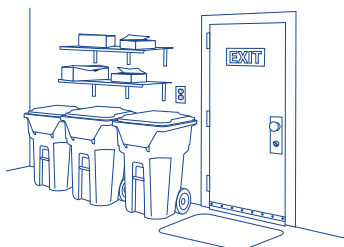
Replace missing or broken covers. Seal around edges and sides.

Storage and boiler rooms

Gaps or cracks around wall penetrations and under doors

Seal around pipes and electrical equipment using backer rods for gaps larger than a quarter inch, concrete sealant with epoxy or latex compound, and copper wool or rodent barrier cloth.

Garbage staging areas



Garbage on the floor
Trash cans that are broken, cracked or don't have lids

Dispose of garbage in trash bins lined with 1.9 millimeter thick heavy-duty plastic bags and tight-fitting lids. When possible, keep garbage cans 6 inches from the floor and 6 inches away from the wall. Wash the garbage area, sidewalks and curbs before closing time.

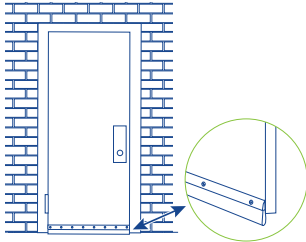
EXTERIOR

Entryway

Cracks in pavement, sidewalks and concrete slabs

Remove cracked, crumbling or loose concrete with a small hammer and chisel. For small cracks (one-eighth inch or smaller), seal using a putty knife and concrete sealant with epoxy or latex compound. For larger chips and cracks, use mortar mixes.

Where to look	What to look for	How to pest proof
EXTERIOR		

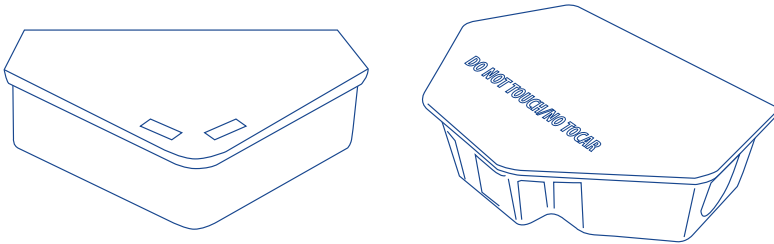
<p>Exterior entry doors</p> 	<p>Light penetrating underneath exterior doors</p> <p>Damaged door threshold</p> <p>Gaps in door seals</p>	<p>Install screens and rubber-encased steel fabric door sweeps or high-density brushes around utility doors. Install metal kick plates at the bottom of wooden doors to prevent gnawing from mice and rats.</p>
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<p>Exterior wall penetrations</p>	<p>Gaps around any areas where plumbing, electrical or cable lines enter the building</p>	<p>Seal all gaps using backer rods for gaps larger than a quarter inch and outdoor sealant.</p>
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<p>Exterior vents</p> 	<p>Holes in fitted screens or missing screens on vents</p>	<p>Replace or fix broken or missing screens with galvanized mesh.</p>
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<p>Landscape</p>	<p>Overgrown vegetation</p>	<p>Cut back overhanging branches and thick shrubs so they are at least 10 inches from the building. Create a 3-foot-wide vegetation-free zone around the building. This zone should be made from durable materials, such as landscape cloth covered by pea gravel.</p>
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Targeted Treatment

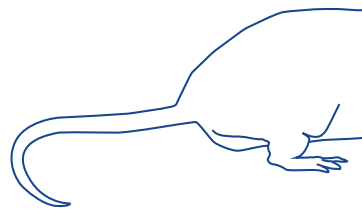


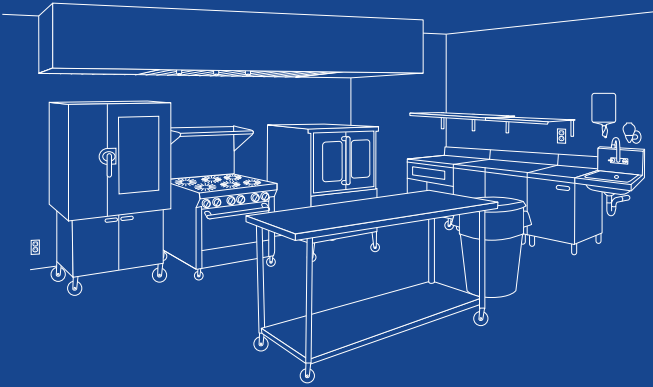
If you have an active rodent or pest infestation, targeted treatment may be necessary. All FSEs must contract with a pest management company licensed by the New York State Department of Environmental Conservation. The New York City Health Department has tools to help you select a pest management professional: visit nyc.gov/health and search **operating a restaurant**.

Your pest management professional may apply rodenticides to treat an active rodent infestation. Bait blocks are the preferred choice for indoor mice or rats infestations. Install bait blocks inside tamper-resistant bait stations.

Use snap traps inside tamper-resistant bait stations in areas where food is prepared and stored. Check snap traps daily until the rodent infestation is under control.

Once the infestation is under control, follow your pest management company's best practices and recommendations to maintain a pest-free environment.





FOR MORE INFORMATION:

Visit nyc.gov/health and search **operating a restaurant**.