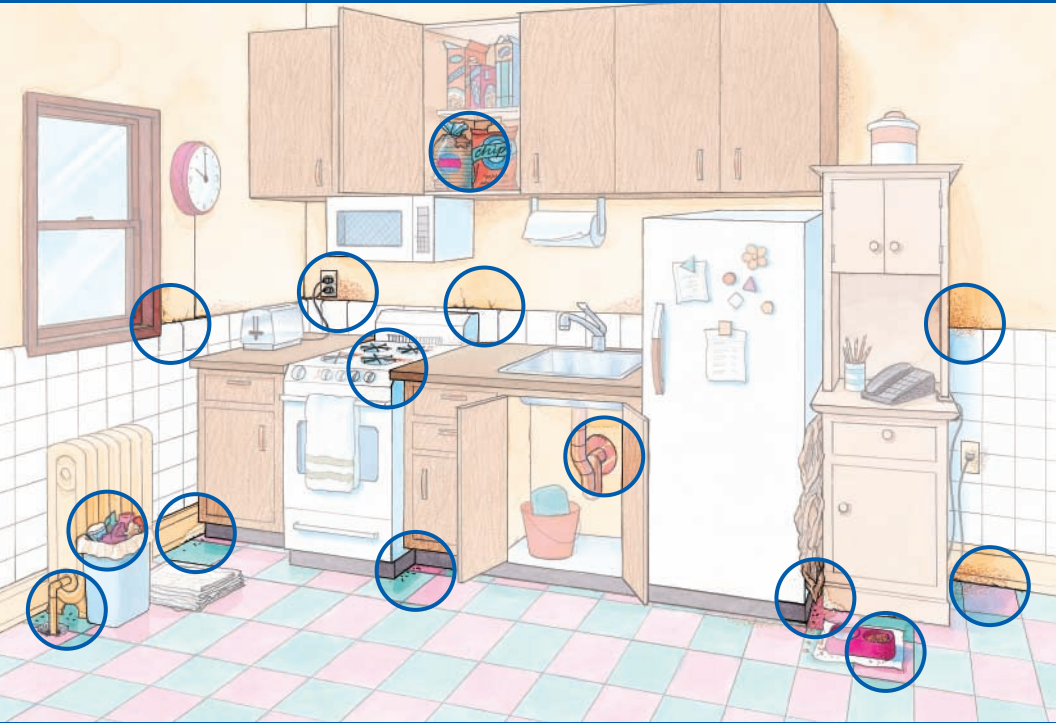


How to Control Pests Safely



Getting Rid of Roaches and Mice



A Healthy Homes Guide



THE NEW YORK CITY
DEPARTMENT OF HEALTH
and MENTAL HYGIENE

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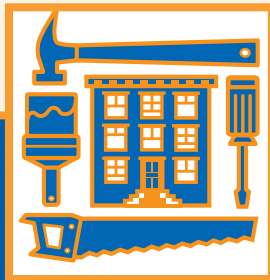
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Why You Need This Guide

Too many New Yorkers live in homes or buildings that have cockroaches, mice, or rats.

Nobody wants to live with pests!

Insects and rodents can contaminate food, damage homes, and make allergies and asthma worse. Chemicals people use to get rid of pests also cause problems. Pesticides can cling to carpets, furniture, and other surfaces, and many are dangerous to people and pets. The Poison Control Center takes about 1,000 reports of accidental pesticide poisonings or exposures every year – half of them to children under five.

What Are People Doing Wrong?

Many tenants, landlords, and pest control professionals make the same mistake: they turn to pesticides *first*. But chemicals kill only a *small number* of pests. Pests can become resistant, so the poison no longer kills them and their offspring. Pesticides – chemicals that kill pests – are often unnecessary. When they are needed, only safer products should be used.

Why This Guide Works

Good pest control gets to the root of the problem. To get rid of pests and keep them from coming back, you have to deprive them of everything they need to survive: food, water, shelter, and ways to get around.

This guide explains how to clean up, seal off trouble spots, and pest-proof your home in 3 easy-to-understand steps. *To get the most from this guide:*

- Don't try to do everything at once. It can take a few weeks to get rid of pests and keep them out. Just take it a step at a time and remember: *This guide works*. Most people who undertake this project only need to do it once every couple of years.
- Show this guide to your neighbors and give a copy to your landlord or building superintendent. Encourage them to use it!
- If you hire a pest control company, show them this guide and ask them to use it. Even professionals can benefit from these techniques.

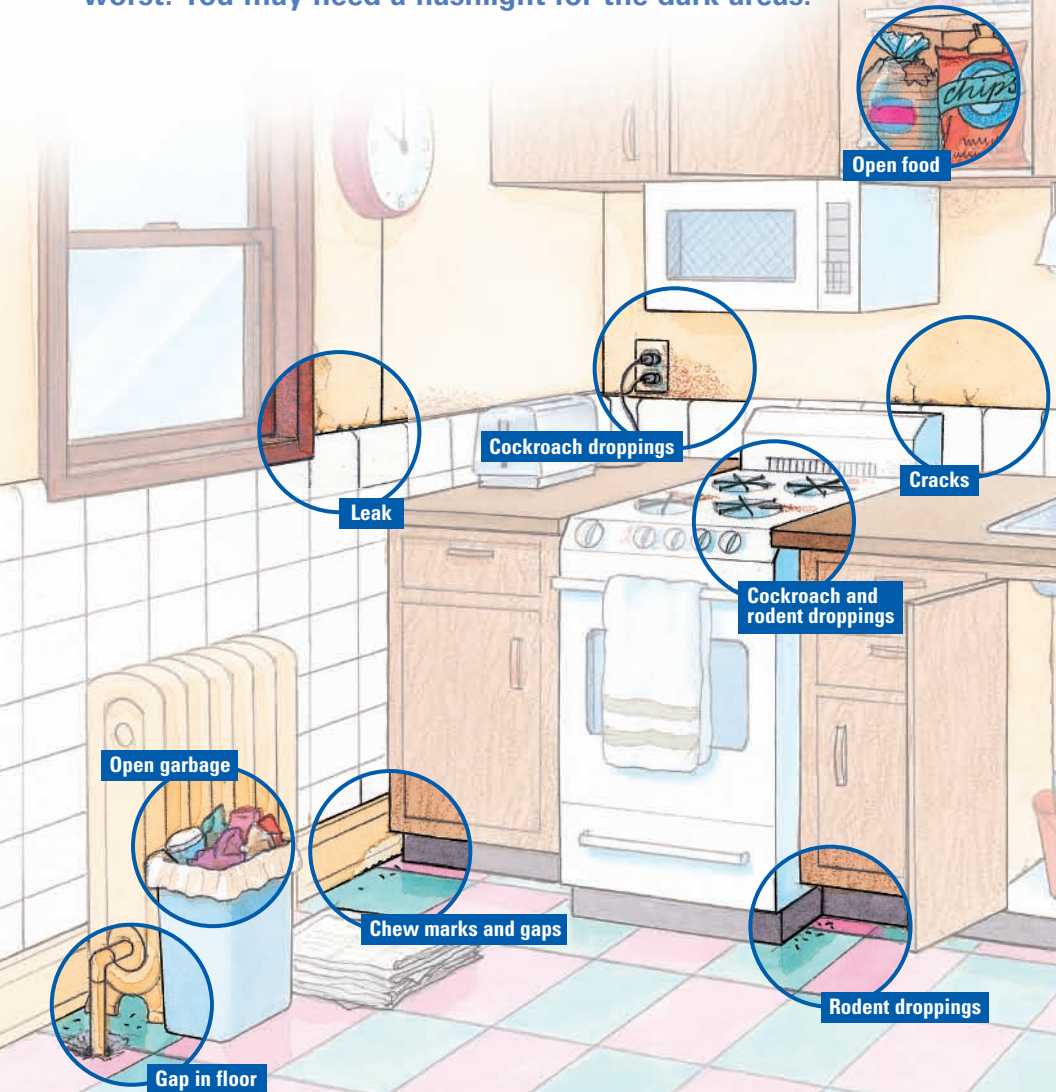


The good news is, you can control pests safely.

How to Find Pests

You probably already know if you have roaches, mice, or rats. But it is important to know how big the problem is, how pests are entering, and where pests are getting their food and water.

To find out, go through every room in your home, focusing on the kitchen and bathroom, where pests are usually worst. You may need a flashlight for the dark areas.



Start in Your Kitchen

Look for the problems shown below:

1 Waste and droppings:

- Cockroach droppings look like dark smudges with dark dots. Their egg cases are yellowish and ribbed, about the size of a small fingernail.
- Rodent droppings are brown, the size and shape of rice grains.

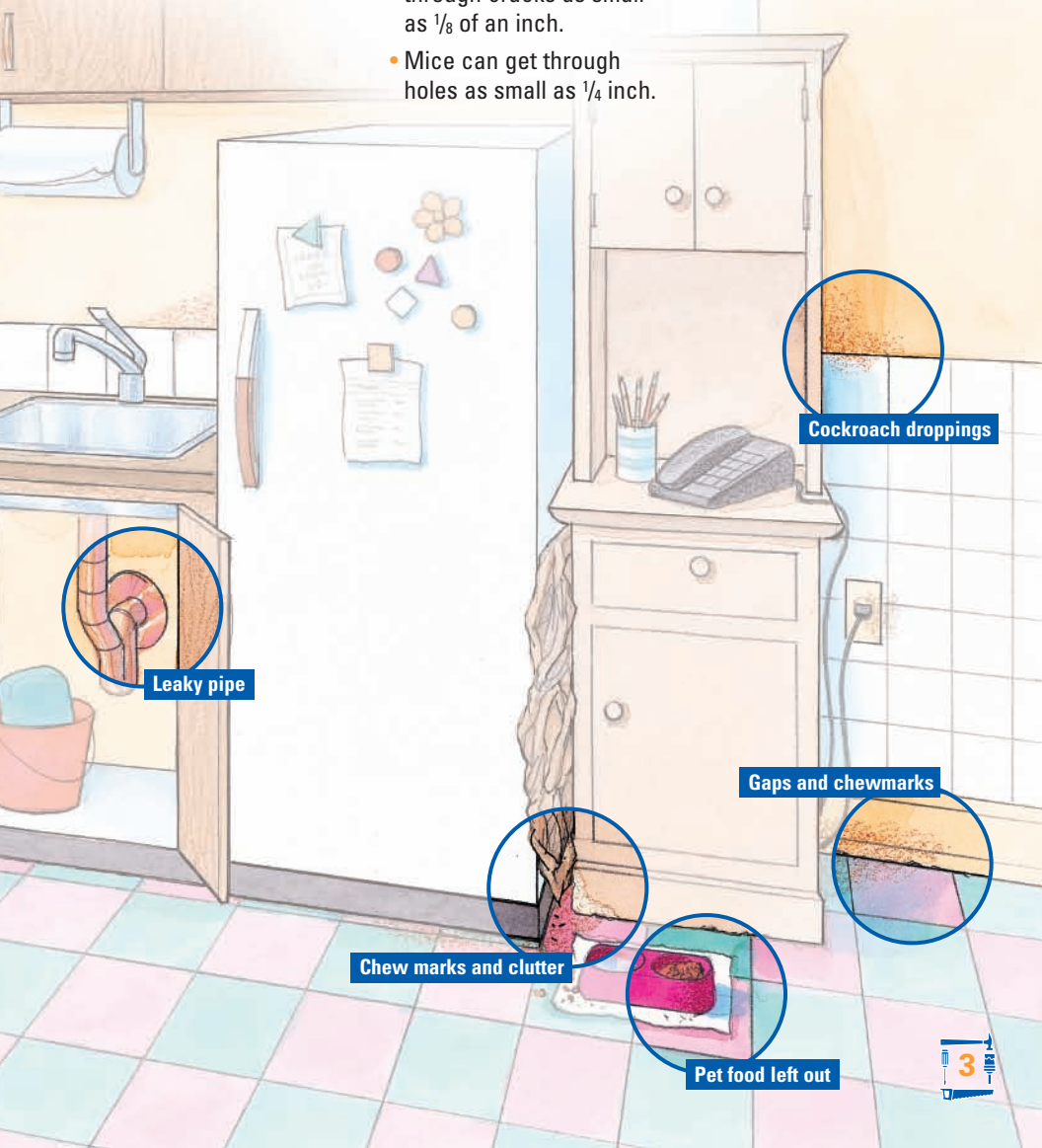
2 Chew marks in **woodwork**, walls, and food containers.

3 Gaps, cracks, and **holes** in walls, along baseboards and windows, and around pipes and wires, and drains.

- Cockroaches can squeeze through cracks as small as $\frac{1}{8}$ of an inch.
- Mice can get through holes as small as $\frac{1}{4}$ inch.

4 Leaky faucets and **pipes** or leaks in ceilings and walls.

5 Open food packages, sticky surfaces, pet food left out and garbage cans that don't close tightly.



Leaky pipe

Cockroach droppings

Gaps and chewmarks

Chew marks and clutter

Pet food left out

How to Control Pests Safely

Make it harder for roaches and rodents to get in, move freely, and find food, water, and shelter.



Step 1: Clean Up

To get rid of pests and keep them from coming back, these steps are key.

Reduce Clutter

- Recycle piles of newspapers, paper bags, cardboard, and bottles, especially around stoves and refrigerators.
- Store clothing and linens you don't use in sealed plastic boxes or bags.



Vacuum Thoroughly

- Use a vacuum with a hose and crevice tool. Special filter vacuums, known as HEPA or allergen-reducing vacuums, work best.
- Vacuum behind and under refrigerators and stoves.
- Empty cabinets, throwing away old food and items with signs of pests.
- Vacuum inside gaps and holes in walls and in and behind cabinets. Start high and work down.
- When you're done, seal the vacuum bag in plastic and throw it out.



Wash Hard Surfaces

- Wear household gloves.
- Fill two buckets with warm water: one with a mild soap or detergent, and one with plain water for rinsing. Separate rinse water will help you avoid spreading insect eggs, food, and other wastes. Change the water often.
- Use a sponge and plastic scouring pad or scrub brush to scrub and rinse:
 - Countertops, tables, and surfaces where food is stored, prepared, or eaten.
 - Under the stovetop, inside burners, and under and behind the stove, refrigerator, and dishwasher.
 - Inside the rubber seal of the refrigerator door.
 - Inside drawers, cabinets, and shelves in the kitchen and bathroom.
 - Floors.
- For hard-to-remove stains, use a mild bleach solution (1 part bleach, 10 parts water) or a cleaning product with bleach.
- ***Never mix bleach with ammonia or other cleaning products!***



Wash Small Area Rugs and Curtains

This gets rid of egg cases and reduces allergens.

Clean Small Appliances

Cockroaches like warm, dark places such as toasters, countertop grills, microwave ovens, and clocks.

- Unplug the appliances and vacuum them out.
- For serious infestations, after vacuuming, seal the appliance in a plastic bag and put it in the freezer overnight.





Step 2: Shut Pests Out

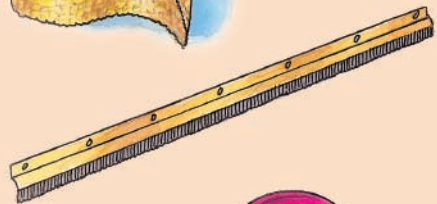
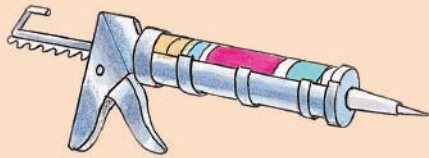
Cockroaches and rodents can squeeze into your home through very small cracks and holes. To keep pests out for good, fill holes and seal cracks in walls, floors, woodwork, and around the tub, shower, and sink.

If you have had a lot of cockroaches, first insert some boric acid, silica gel, or diatomaceous earth into the spaces. *For more information on these products, see page 10.*

These repairs are easy to do. The materials are inexpensive and can be found at most hardware stores. If you can't or don't want to do the repairs yourself, ask your landlord or superintendent.

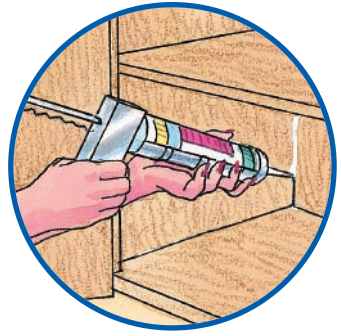
Inexpensive Materials for Filling Holes and Sealing Cracks

- **100% silicone caulk and caulking gun**
- **Steel wool or copper mesh**
- **Mesh screening**
- **Weather-stripping and door-sweeps**
- **Spackle or joint compound and 1" spackling knife**
- **Duct tape**
- **House paint and brushes**



Seal Cracks and Small Holes

- Seal narrow gaps with 100% silicone caulk. Caulk around bathtubs, showers, and sinks, where walls meet the floor, inside cabinets, and where cabinets meet the wall.
- Paint over small cracks in the walls, floor, or woodwork with a water-based latex paint.



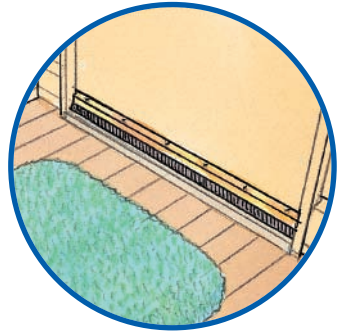
Fill Larger Holes and Gaps (more than 1/2" wide)

- Stuff soapless steel wool or copper mesh inside holes before sealing. This keeps rodents from chewing through.
- Use spackle or joint compound to fill gaps and holes that are too large to caulk. Do a little at a time, letting it dry between applications.



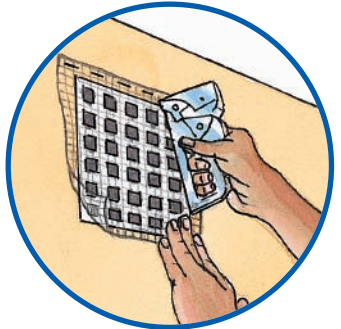
Close Gaps Under Doors and Around Windows

- Attach door sweeps to the bottom of doors leading outside or to a building common space.
- Mend holes in screens by weaving in small pieces of screen. You can also use staples or duct tape to mend small cuts or tears.



Screen Bathroom and Kitchen Vents

- Pests can enter through vents. Block their entry and keep air flowing through vents by using mesh screens, cut to size and placed under or over the vent cover. Secure the screen with caulk or a staple gun.



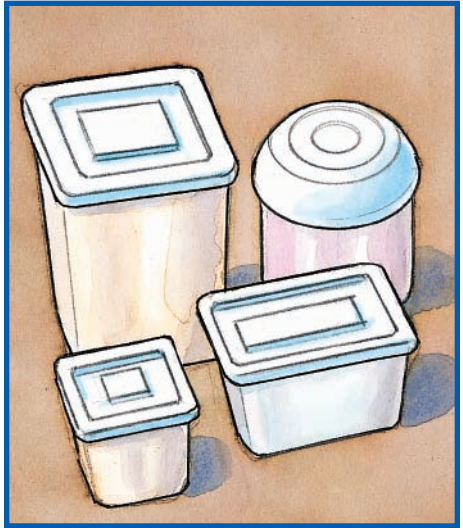


Step 3: Starve Them and Parch Them

Like all creatures, roaches and rodents need food and water to live.

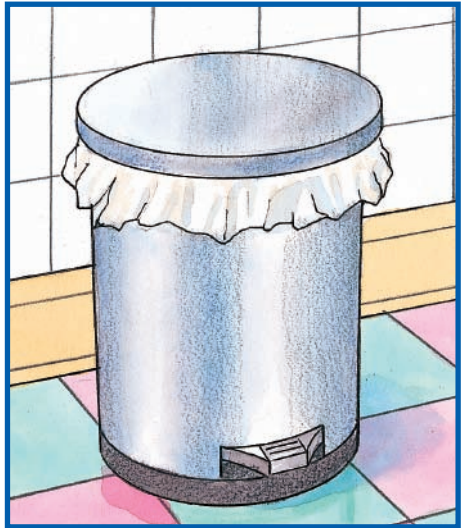
Pest-Proof Your Food

- Store all boxed or loose food in containers that seal tight – plastic, glass, or coffee cans with lids.
- Store as much food in your refrigerator as you can, especially foods you keep for a long time, such as flours, rice, and nuts.
- To store large bags of pet food, use a metal garbage can with a lid.



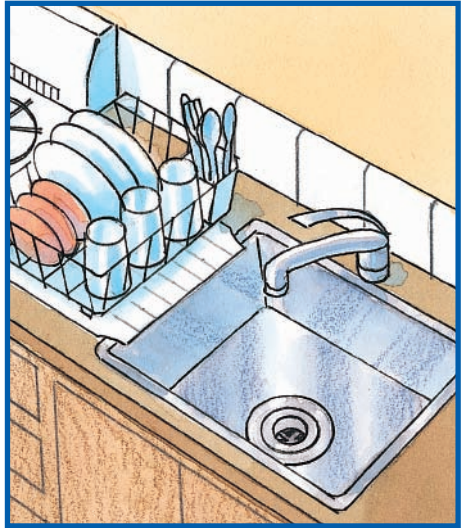
Manage Your Garbage

- Use garbage cans with tight-fitting lids (metal ones are best) for garbage and recycling.
- Clean them often, inside and out.
- In apartment buildings, put garbage down the chute or bring to the common room nightly.
- Bring garbage cans or bags to the curb as close to pickup as possible. Leaving them out overnight invites rats.



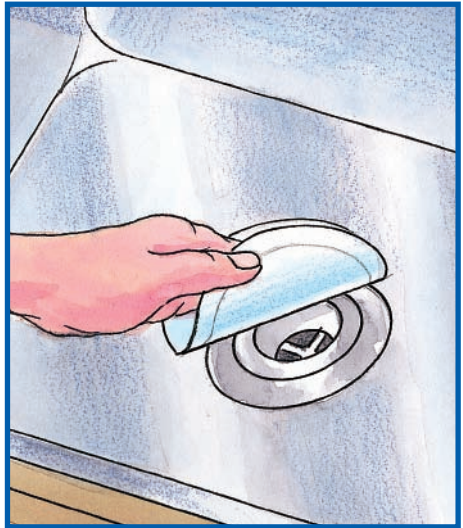
Put Food Away at Night

- Wash the dishes.
- Wipe down the stovetop, counters, and tables.
- Sweep up or vacuum away food on the floor.
- Don't leave pet food out.



Remove Water Sources

- Fix leaky faucets by replacing washers.
- Have a plumber fix leaks as quickly as possible.
- Use your bathroom window or fan to vent steam after showers and baths to prevent mildew and mold. Report or fix vents that aren't drawing air out.
- If possible, close off drains in showers, bathtubs, and sinks when not in use. You can use inexpensive rubber drain covers or metal drain screens.



How to Choose Safer Pest-Control Products

Pesticides are poisons. Some of the properties that make them hazardous to pests also make them potentially dangerous to people and pets. Use pesticides carefully.

- Avoid sprays, foggers, and bombs. They spread everywhere and land on surfaces where people sit, prepare food, play, or eat.
- Never purchase or use a product without a manufacturer's label and never buy pesticides from street vendors.
- Never use products called Chinese Chalk, Tres Pasitos, or Tempo®.
- Use the smallest amount that will be effective.
- Always follow the manufacturer's label. Never use a product for a different insect or rodent than is named on the label.
- Store chemicals safely and place traps where children or pets can't get to them.

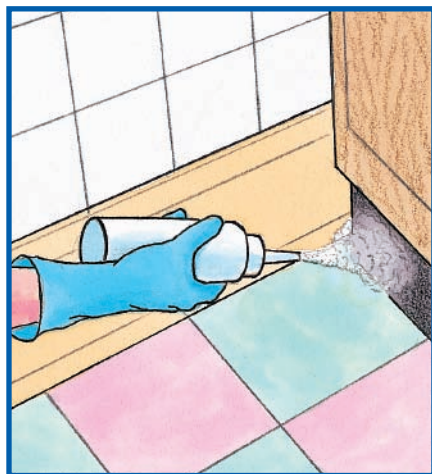


For Cockroaches

Dusts

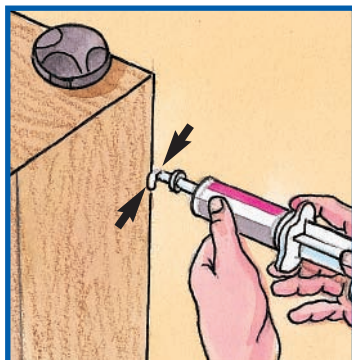
Dusts include boric acid, diatomaceous earth, and silica gel, all available at hardware and home improvement stores. Keep children and pets away, and wear safely goggles when you're applying them.

- Load a bulb duster or squeeze bottle (such as an empty, clean mustard or dish soap bottle) with boric acid, diatomaceous earth, or silica gel.
- Squeeze dust into cracks and holes and underneath and behind large appliances and cabinets – wherever roaches are active.
- Apply a *thin* layer. Cockroaches avoid large clumps.
- Afterward, seal up crevices, cracks and holes with caulk or spackle.
See page 7 for more details.
- Don't worry if you see cockroaches after applying dusts. They can take several days or weeks to work.



Gel Bait

- Baits do not kill pests right away, but are very effective. Pests eat them and die slowly, after they go back to their nests. Other cockroaches in the nest die when they eat the droppings and remains of cockroaches that ate the bait.
- Squeeze pea-sized dabs of gel every foot or so along crevices, cabinet shelves, and baseboards. Reapply after it gets eaten.
- Insert gels into cracks and holes before sealing them up.



Bait Stations and Sticky Traps

- Peel off the sticky tape on the bottom of the bait station or trap before pressing it to a surface.
- Place the bait or sticky trap where cockroaches travel – along edges, in crevices and corners, and inside, under, and behind cabinets, appliances, and sinks.
- Replace bait stations every 2 or 3 months. Change brands or types each year. Replace sticky traps every 2 weeks (more often if they fill up).

For Rodents

Rodenticide Bait

If you see mice only occasionally, you may be able to solve the problem yourself using rodenticide baits.

- Only use baits that come in tamper-proof containers. Never use loose bait.
- Wear gloves when handling the baits.
- Replace when empty.
- Remove them after mice have disappeared.



Traps

Many people hate the idea of trapping or handling animals. If you don't mind, choose glue traps or snap traps. Follow the directions on the package.

- Place traps out of the reach of children and pets.
- Check the traps daily and dispose mice in sealed plastic bags.
- Keep replacing the traps until you do not catch anything for at least one week.

When to Hire a Professional

If you have rats in your home, or a severe mouse or cockroach problem, then you need a pest control professional. Be sure the professional is a licensed exterminator. Ask to see a copy of the license or check directly with the New York State Department of Environmental Conservation by calling (718) 482-4994.

A good professional exterminator will identify the conditions that are contributing to the pests and will come up with a plan for getting rid of the pests. Some pest problems require several visits. It may take him days or even weeks to get rid of a serious rodent problem. Tell the exterminator you want him to use the least hazardous pesticide that will be effective. Don't allow him to use insect bombs or foggers. If you have children or pets, make sure the exterminator knows.

If you rent, your landlord is required to keep your home pest-free and must hire a professional if necessary. If you see rodents, tell your landlord immediately.

If your landlord does not correct the problem, **call 311**.



**For additional copies of this booklet, call 311.
For more information about pesticides,
visit nyc.gov/health.**



The good news is, you can control pests safely.

“There was a big change after I followed this advice in my apartment. To control mice, I used to use glue traps and loose rodent bait, but it didn’t work because there were a lot of holes around the radiator.

After the cleaning and sealing and fixing the holes, I haven’t seen any mice... I learned that I should never use dangerous pesticides, especially the illegal ones.”

Naomi Gomez, Bronx, NY

“I used to have a very bad cockroach infestation in my apartment that started to affect my asthma. I was controlling the roaches with sprays but the problem persisted. Fixing the crevices and removing the grease on top of the cabinets was very helpful.

Now I have zero roaches. Zero! I stopped using sprays and I am more aware now of how important it is to keep things clean.”

John McDulty, Queens, NY



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Michael R. Bloomberg, Mayor • Thomas R. Frieden, M.D., M.P.H., Commissioner