

PestInfo



INTEGRATED PEST MANAGEMENT FOR CHILD CARE CENTERS

SAFELY MANAGING A COCKROACH INFESTATION

Before you try to kick out your roaches, figure out what kind they are. This will make it easier to choose the best management strategy. German cockroaches commonly infest activity rooms and kitchens. The less common brownbanded cockroach also lives indoors, but prefers warm spots behind electrical appliances. You'll often find the Turkestan cockroach and oriental cockroach living underneath cracked and raised asphalt and concrete. The American cockroach usually lives in sewers and basements. The smoky brown cockroach and field cockroach live outdoors, but occasionally come inside. To identify which species you have look at the University of California Pest Note #7467 (www.ipm.ucdavis.edu) or take samples to your UC Cooperative Extension office (see county pages of your local phone directory).



CHECKLIST FOR MANAGING A COCKROACH INFESTATION

- ✓ Find out which roach species you have so you can get the most out of your management strategy.
- ✓ Monitor with sticky traps. The sticky traps alone won't get rid of all the roaches. Keep checking hotspots even after roaches appear to be gone.
- ✓ Include cleanliness to stop a roach infestation. Clean up food waste in activity rooms and offices. Empty all garbage cans daily. Rinse recyclables before storing. Place outdoor garbage cans and receptacles away from doorways.
- ✓ Keep pests out by caulking cracks and holes. Seal spaces around permanent fixtures such as bulletin boards and cabinets.
- ✓ Use a strong vacuum to suck roaches out of their hiding places.
- ✓ Communicate! Let teachers and other staff know what you're doing to manage pests.
- ✓ Teach staff how they can help keep roaches out. Show them how they can make your treatment work better.
- ✓ If you need to use chemicals, use least-hazardous products such as bait stations and bait gels. Sprays tend to scatter roaches. You may kill a few, but most will run away and return later.

WHAT DO ROACHES WANT MOST?

Food, shelter, and water! Deny roaches food, entry and water and you'll wipe out any infestations.

BIOLOGY AND BEHAVIOR

- Active at night—if you see them during the day, you have a heavy infestation.
- Live in cracks and crevices near food sources.
- Like to crawl along edges of counters or floors—rarely venture into the middle of rooms.
- Scatter when they feel vibration such as the sound of a spray can.

INSPECTION AND MONITORING

- Locate hiding places by putting sticky traps on the floor next to walls, outside doors and under refrigerators, dishwashers, sinks, and ranges.
- Check traps on a regular basis. Note how many cockroaches per trap and the age range. Lots of young roaches (they're smaller and wingless) mean you have an active infestation.
- Use a flashlight and small mirror to check behind or under cabinets and appliances.
- Flush roaches out of hiding places with a hair dryer, not sprays.

HOW MANY ROACHES ARE TOO MANY?

You may be able to put up with a few roaches in outdoor garbage areas, but none in kitchens. Keep in mind the number you're willing to put up with when you monitor. Remember that even one female German cockroach can produce thousands more cockroaches.

WHAT YOU CAN DO TO MANAGE ROACHES

IN THE ACTIVITY ROOM

- Keep rooms clean by allowing food and beverages only in chosen areas. Clean thoroughly.
- Take pets home when you know roaches are around. Roaches will eat pet food and water.
- Take food out of cubbies and desks every day.
- Get rid of hiding places for cockroaches by taking down old signs and art projects from walls. Keep down clutter.
- Clean up the teachers' area before heading home every day.
- Talk to cleaning staff about special needs or if you see roaches.

IN THE KITCHEN

- Store food in containers with tight lids made of plastic, glass, or metal.
- Store and seal food waste in plastic bags before removal.
- Remove garbage at the end of each day.
- Keep indoor garbage in lined, covered cans.
- Clean food spills right away.
- Clean dirty dishes, utensils, and surfaces by the end of each day.
- Keep shelves in storage areas clean.
- Check all received goods. Refuse anything that's infested, leaking, or contaminated.
- Take food out of boxes and keep on pallets or open metal shelving. Keep pallets away from walls.
- Talk to cleaning staff about emptying garbage daily, cleaning behind appliances—including refrigerators—and washing floors and vacuuming carpets daily in areas where food is served.

CLEANING UP

- Vacuum roach hiding places using a strong vacuum with a crevice attachment. Vacuum twice, about five minutes apart. During the first pass, the roaches will scatter because of the air current. They'll resetttle by the time you vacuum again.
- Empty garbage daily.
- Place outdoor garbage cans on hard, cleanable surfaces at least 50 feet from building entrances.
- Wash all garbage cans regularly. Wash outdoor cans at least monthly and keep the area around them clean.
- Pick up litter from grounds at least once weekly.
- Have recyclables picked up at least once weekly.
- Keep drains clean.
- Empty and carefully clean cubbies and desks at least twice per year (e.g., winter break and at the end of each school year).
- Clean every year under and around rarely moved furniture (e.g., desks, bookcases, filing cabinets).

MAKING REPAIRS

- Repair cracks and crevices in walls, floors and pavement.
- Seal openings around potential cockroach runways (electrical conduits, heating ducts, plumbing).
- Caulk permanent bulletin boards, mirrors and other wall fixtures.
- Seal all permanently installed furniture and cabinets at points of attachment, under counter tops, and inside so pests can't hide in the gaps.
- Cover floor drains with screens.

CHEMICAL CONTROL OPTIONS *(Least-hazardous)*

INSECTICIDAL DUSTS – Injected into wall voids and cracks and crevices. Active ingredients include boric acid, diatomaceous earth, and silica aerogel. The roaches die by drying out.

IGRs – Insect growth regulators stop roaches from mating. Available products contain the active ingredients hydroprene or pyriproxyfen.

BAITS – Active ingredients include abamectin, boric acid, fipronil, hydramethylnon, indoxacarb and imidacloprid. Roaches won't eat the bait if there is other food around, so cleanliness is important.

NOTE: Baits are exempt from Healthy Schools Act (HSA) notification and posting requirements if they are confined in a self-contained trap (bait station), or formulated as gel or paste applied to cracks and crevices. Dusts and insect growth regulators (IGRs) are not exempt from Healthy Schools Act requirements. The ones described here are considered least hazardous when used according to label directions. Don't be tempted to spray roaches or use bug bombs—the roaches will scatter and then return later.

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*now of the San Francisco Department of the Environment.



WHAT IS INTEGRATED PEST MANAGEMENT (IPM)?

Integrated pest management is a widely accepted approach toward pest management that results in effective suppression of pest populations while minimizing hazards to human health and the environment.

FOR MORE INFORMATION

Visit DPR's child care IPM Web site at www.cdpr.ca.gov/schoolipm/childcare/main.cfm. For additional information about cockroaches see the link to UC IPM's Pest Note #7167.

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