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# School Pest Solutions

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## Cockroaches

Cockroaches can be common pests in schools. By contaminating human food with feces and saliva, cockroaches may vector food-borne illnesses like salmonella. Cockroaches are also known to trigger asthma attacks.

Cockroaches are flattened insects with long antennae. Their colors may vary but are usually brownish. Immatures (or nymphs) look like the adults but are smaller and have no wings. Nymphs and adults have similar habits and behaviors. They are usually found in dark, warm, moist environments; in protected areas like cracks and crevices in walls; cluttered environments; and near drains and leaking pipes. They are active at night where food is found, often in kitchens. Cockroaches are seldom found throughout an entire building, but tend to concentrate themselves in areas where water and food resources are readily available.



*German Cockroach*  
(*Blattella germanica*)



*American Cockroach*  
(*Periplaneta americana*)

## Prevention

Sanitation and maintenance provide the only permanent solution to cockroach infestations.

- Inspect food shipments immediately upon delivery.
- If possible, unpack cardboard boxes at or near the delivery area (or loading dock) rather than in the kitchen. Take cardboard boxes offsite, or at least out of the kitchen and pantry.
- Remove water sources by repairing dripping pipes or leaky faucets. Seal holes, cracks, and crevices in areas where cockroaches are found.
- Store food in sealed containers (not cardboard boxes), off the floor, in clean dry areas.
- Always keep areas where food is handled clean. Regularly mop, vacuum, sweep, or scrub areas where food is handled and eaten.
- Remove all garbage promptly from inside the school.
- Rinse out returnables and store in designated lined, non-absorbant, washable (plastic or metal) bins. Take them off-site at least weekly. Clean bins weekly.
- Clean all recyclable materials and store outside the school if possible.

- Keep clutter to a minimum.
- Limit eating to designated areas of the building.
- When food is eaten and/or stored in classrooms (even small candies or pet food), rugs, floors, cupboards, desks, and classroom cubbies should be cleaned daily.

## Monitoring

- Monitor areas where food, water, warmth, and protection are readily available: sinks, drains, vents, computers, leaky pipes, appliances, food-handling areas, air conditioning units, snack dispensers, dishwashing areas, trash receptacles, recycling and returnable bins, bathrooms, and storage areas.
- Monitor crawling insect activity (especially cockroaches) by using sticky traps placed at regular intervals, about every 10 to 15 feet.
- Cockroaches normally use vertical surfaces as guides while they move from place to place, so place traps along baseboards, against the sides of freestanding objects, and in suspended ceilings. Traps must open parallel to walls, baseboards, etc. Traps set in the open away from walls or edges are unlikely to catch cockroaches.
- Avoid extremely dusty areas that decrease the stickiness of the trap.
- Number and date the traps and mark their position on a map of the school building.
- Check traps weekly. If a single cockroach is found, check traps daily until no more cockroaches are found in traps for about a week. Record the number of cockroaches caught in each trap in the IPM logbook. Remove or mark counted cockroaches or replace sticky cards at each count.



*Traps such as this one help in controlling pests.*

## Management

In any area where cockroaches are detected, use increased sanitation and maintenance to eliminate sources of food, water, and shelter available to cockroaches. If this is not enough to control an infestation chemical pesticides may be needed. Several least-toxic pesticides are available but pesticides may only be applied by persons with a commercial applicator license. Discuss the following options with your licensed applicator.

- Cockroach bait is the most common form of chemical management. Baits include a pesticide combined with a food source. Baits allow precise placement making them available to cockroaches with no interference to people.
- For optimum control, have a licensed applicator place baits as close as possible to an infestation.
- A small amount of bait in several strategic places is more effective than large amounts of bait in only a few places.
- Place baits along edges, in cracks and crevices, and between hiding places and foraging sites. To minimize the potential of pesticide exposure, use baits that are packaged in plastic stations.
- Map the location of all baits and check them regularly to make sure they are still present and are being eaten by cockroaches.
- Do not use other types of pesticides around the bait stations (e.g., sprays or dusts). The pesticides may act as a repellent, driving the cockroaches away from the bait.



**Anyone making pesticide applications on school property must be licensed by the Board of Pesticides Control. See “Standards for Pesticide Applications and Public Notifications in Schools”.**

Cockroach References  
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