

THE HEALTHY SCHOOLS ACT

Every Child Deserves a Healthy Schoolsite

WHAT IS THE HEALTHY SCHOOLS ACT ?

When pesticides are used at schools and child care centers in California, the Healthy Schools Act defines requirements for school and child care center staff, pest management professionals, and the Department of Pesticide Regulation. The California Legislature originally passed the law in 2000. The Healthy Schools Act also encourages schools and child care centers—collectively referred to as schoolsites—to adopt effective, low-risk pest management practices, also known as integrated pest management or IPM.

WHAT IS IPM ?

Integrated pest management, or IPM, focuses on effective, low-risk pest management practices. IPM is a big picture approach to pest management that considers people and the environment when pest management decisions are made. There are a variety of IPM practices, including cleaning regularly, closing gaps into buildings, fixing leaky pipes, setting traps, and choosing low-risk pesticides. With the amount of IPM information available today and an enthusiastic IPM leader, all schoolsites can successfully manage pests!

WHAT IS A PESTICIDE ?

A pesticide is any substance intended to prevent, destroy, repel, or mitigate any pest. Pests include insects, rodents, weeds, and germs. Insecticides, rodenticides, herbicides, sanitizers, and disinfectants are all pesticides.

WHAT ARE THE HEALTHY SCHOOLS ACT REQUIREMENTS ?

IDENTIFY



Choose an IPM coordinator who will make sure the requirements of the HSA are met.



TRAIN

Provide annual Healthy Schools Act training to all teachers, staff, and volunteers who use any pesticides, including exempt pesticides.



NOTIFY

Send an annual notification to all parents, guardians, and staff of all pesticides expected to be applied during the year.



REGISTER

Give parents, guardians, and staff the opportunity to register to be notified 72 hours in advance of individual pesticide applications.

PLAN



Create a plan for IPM and publish it on the school, district, or child care center website. If a website does not exist, include the plan in the annual written notification.



POST

Post warning signs in the area where a pesticide will be applied, at least 24 hours before and 72 hours after the application.



RECORD

Keep records of pesticide applications, and file these records for at least 4 years.



REPORT

Submit annual pesticide use reports to DPR by January 30 for the previous year's applications. Only report pesticide use by school personnel.



WHAT ARE THE REQUIREMENTS FOR LICENSED PEST CONTROL BUSINESSES ?

TRAIN



Complete Healthy Schools Act training during each license renewal period.

REPORT



Submit annual pesticide use reports to DPR by January 30 for the previous year's applications.

When contracting with a licensed pest control business, the schoolsite IPM Coordinator should provide information about the Healthy Schools Act. The IPM Coordinator can also specify in the pest management contract what IPM practices will be used and how pesticide use information will be provided to the schoolsite.

WHAT PESTICIDES CANNOT BE USED AT SCHOOLS ?

The Healthy Schools Act prohibits certain pesticide products from being used at schools and child care centers. Check the Pesticides Prohibited from Use on California Schoolsites list on the School and Child Care IPM website to see the most current version.

WHAT IS THE DEPARTMENT OF PESTICIDE REGULATION'S ROLE ?

The Department of Pesticide Regulation is the lead state agency providing Healthy Schools Act compliance assistance to schoolsites throughout California. By conducting a variety of outreach and training activities, the Department of Pesticide Regulation's School and Child Care IPM Team helps schoolsites implement IPM practices and shares IPM success stories statewide. The School and Child Care IPM Team is a resource for schoolsite staff, pest management professionals, parents, teachers, and the public who want more information about IPM and the Healthy Schools Act.

WHAT IS THE DEPARTMENT OF EDUCATION'S ROLE ?

The Healthy Schools Act requirements for schoolsites are in the California Education Code. The California Department of Education and the Department of Pesticide Regulation work together to interpret the law and provide accurate information to schoolsites throughout California. The California Department of Education also acts as an advisory resource for school districts, charter schools, and other local education agencies.

WHAT IS THE DEPARTMENT OF SOCIAL SERVICES'S ROLE ?

The Child Care Licensing Program of the Department of Social Services acts as a liaison between licensed child care facilities and the Department of Pesticide Regulation. With over 40,000 licensed child care facilities in California, the Department of Pesticide Regulation relies on the Child Care Licensing Program to share Healthy Schools Act information through newsletters, conferences, and other networks. The Child Care Licensing Program also includes Healthy Schools Act and IPM information in the training orientation required for new licenses.

HOW CAN YOU GET MORE HEALTHY SCHOOLS ACT INFORMATION ?



www.cdpr.ca.gov



school-ipm@cdpr.ca.gov

Healthy Schools Act Requirements for Public K-12 Schools and Child Care Centers



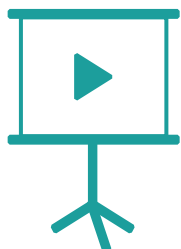
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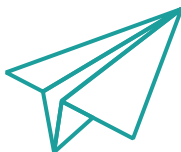
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REPORT

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Visit our website: www.cdpr.ca.gov

Questions? Email us at: school-ipm@cdpr.ca.gov

Table of Healthy Schools Act Responsibilities

Responsibilities	Public K-12 School	Child Care Center	Pest Control or Landscaping Business	Child Care Center Property Owner	Code/Regulation Authorizing Responsibility
 Identify	✓	✓			Education Code 17609(e)
 Plan	✓	✓			Education Code 17611.5
 Notify	✓	✓			Education Code 17612
 Register	✓	✓			Education Code 17612(a)(1)
 Post	✓	✓			Education Code 17612(d)
 Record	✓	✓			Education Code 17611(a)
 Report	✓	✓	✓	If owner applies pesticides	EC 17611(b) FAC 13186 3 CCR § 6625
 Train	✓	✓	✓	If owner applies pesticides	B&PC 8593.2 EC 17614 FAC 13186.5
 Inform contractor about child care center on property		✓		✓	FAC 13186(c) and (e)
 Notify child care IPM Coordinator 120 hrs before application			✓	✓	EC 17610(b)(1)(A) FAC 13186(d)

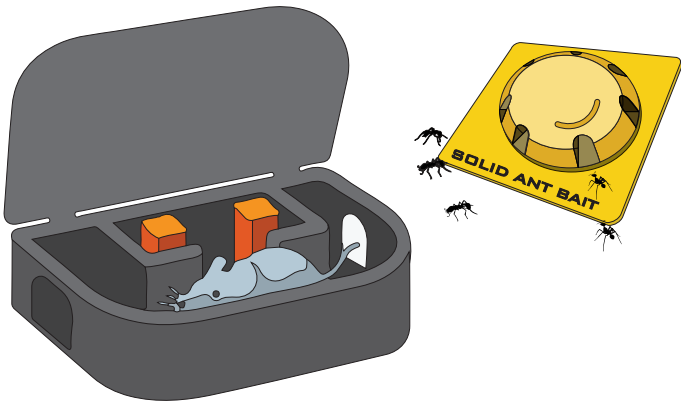
For more detailed information about each of the HSA Responsibility, refer to the Healthy Schools Act Requirements fact sheet at www.cdpr.ca.gov.

HEALTHY SCHOOLS ACT

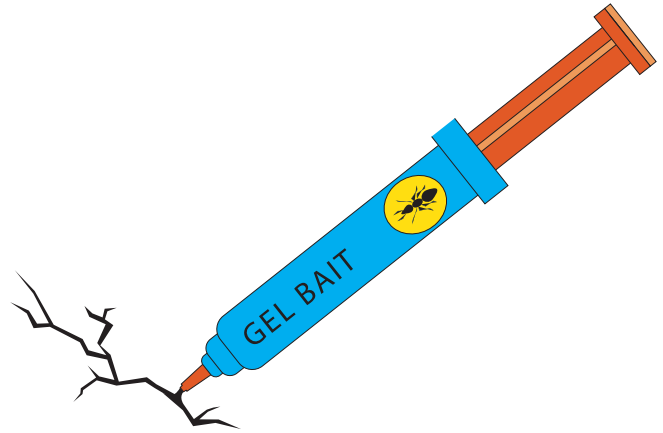
EXEMPT PESTICIDES

Anyone using these products at schoolsites must receive HSA training.
IPM plan, posting, notification, recordkeeping, and reporting are not required.

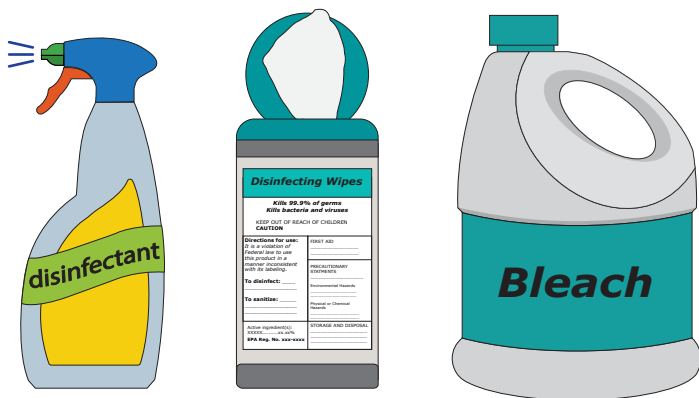
Self-contained bait stations



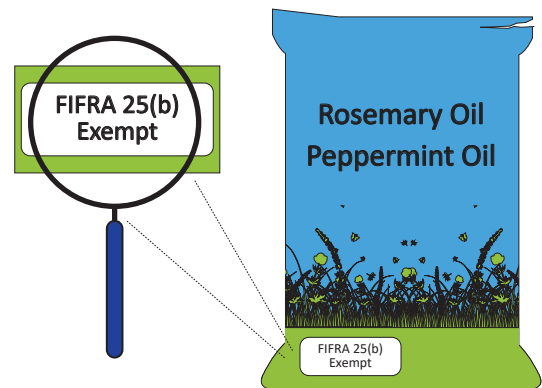
Gel and paste crack-and-crevice treatments



Antimicrobial pesticides



FIFRA 25(b) minimum-risk pesticides



U.S. EPA registration number will not appear on these product labels

Pest Control Businesses ONLY: In addition to training, licensed pest control businesses report all registered pesticides used at schoolsites.



www.cdpr.ca.gov

California Environmental Protection Agency
dpr Department of
Pesticide Regulation



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IPM for Child Care Programs

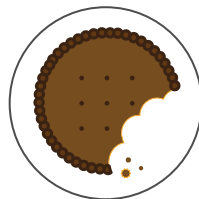
Integrated pest management, or IPM, is any approach that uses the least-toxic, effective method to solve pest problems. Proactively managing pests with IPM at child care facilities can help maintain clean, healthy, and safe spaces. With the help of staff and pest management professionals, all child care programs can successfully manage pests with IPM!

IPM practices that can be done by child care program staff:



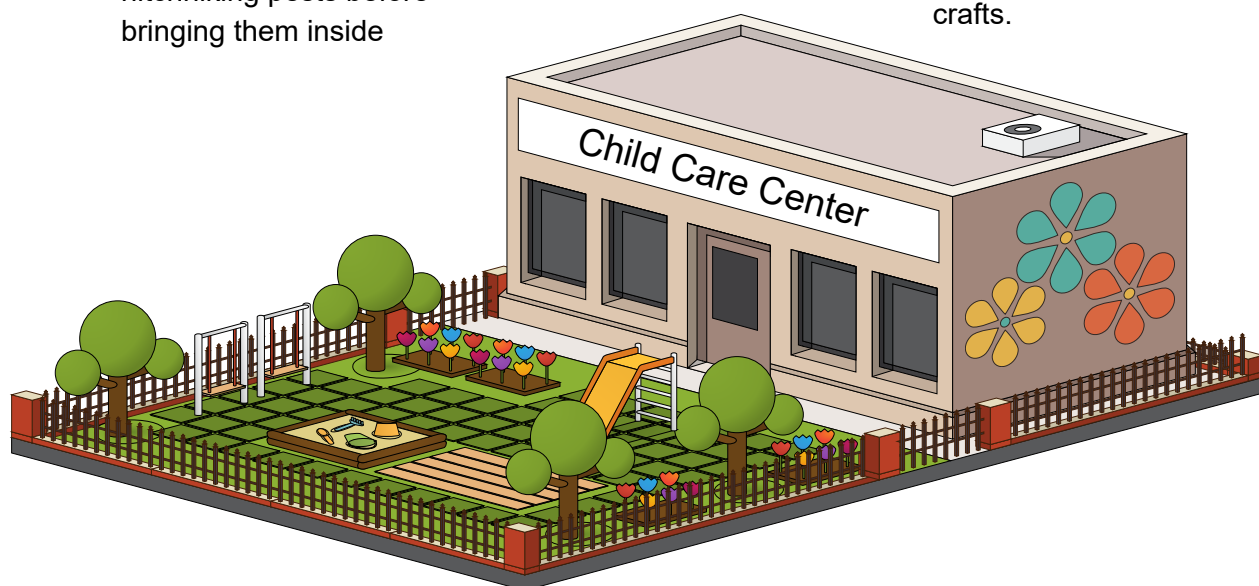
Eliminate pest ACCESS:

- Find and close gaps and holes in screens, walls, around pipes, or other areas into the building
- Look for light coming in underneath any outside doors, and have door sweeps installed
- Inspect all deliveries for hitchhiking pests before bringing them inside



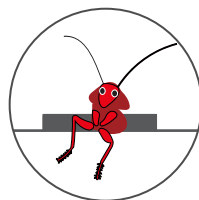
Remove pest FOOD:

- Empty trash cans daily and keep the areas around dumpsters clean
- Serve meals in designated eating areas and clean up promptly after meals
- Send art projects home with children, especially food-based crafts.



Dry up pest WATER:

- Have leaky pipes fixed
- Keep under-sink cabinets clean, dry, and clutter-free
- Eliminate stagnant water from inside and outside areas



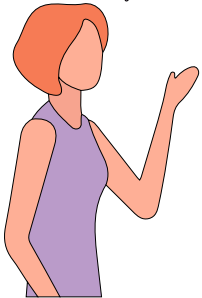
Get rid of pest SHELTER:

- Clean, declutter, and organize storage areas and classrooms regularly
- Use airtight containers, instead of pest-friendly cardboard, and place on shelving to keep them off the floor
- Inspect storage areas and containers regularly for pests

Many child care programs in California hire a pest management professional to take care of pest problems. This is a good way to make sure that you keep pests out of your facility. You can hire a pest management professional to use IPM!

Talking with a pest management professional about using IPM at your facility:

**ASK
them to...**



- Implement IPM strategies with a focus on prevention, and only use pesticides as a last resort
- Keep you updated on their inspection, monitoring, and prevention activities
- Tell you if there are potential access, food, water, or shelter sources that could attract pest
- Apply pesticides in areas inaccessible to the children, or when no children will be on the property
- Use pesticides that are the lowest risk available and exempt from the Healthy Schools Act requirements, such as self-contained baits, crack and crevice gels/pastes, and minimum-risk pesticides exempt from EPA registration

**VERIFY
they...**



- Are licensed to provide pest control services by checking for their DPR license and/or their Structural Pest Control Board license
- Have been trained in IPM as required by the Healthy Schools Act

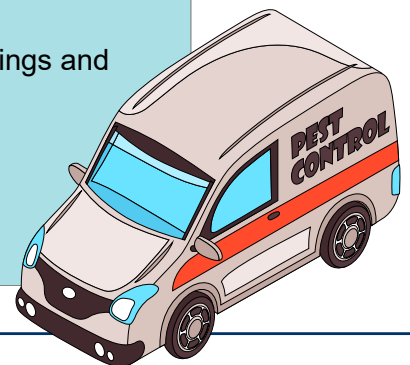
An IPM partnership between child care staff and pest management professionals in child care programs is a group effort that can be very effective. IPM may look different from what you're used to, but it can be just as successful at managing all types of pests. By using IPM, you can help to create healthy learning environments for the children in your care.

How pest management professional IPM practices might look:

**They
MAY...**



- Spend their time inspecting the property, monitoring for pests, and implementing prevention tactics instead of applying pesticides
- Use low-risk, Healthy Schools Act-exempt pesticides such as self-contained baits, crack and crevice gels/pastes, and minimum-risk pesticides exempt from EPA registration
- Point out issues that need to be addressed, such as gaps in buildings and leaky pipes
- Set out traps
- Ask you to be patient because IPM takes time and you may not see results right away



For more tips to help your child care program implement successful IPM strategies, visit the Child Care IPM Program website at www.cdpr.ca.gov or email us at ccipmlist@cdpr.ca.gov



INTEGRATED PEST MANAGEMENT: ANTS

Columns of ants marching through playrooms, eating areas and kitchens in early care and education programs are a common problem. Don't panic! There are safe and effective ways to reduce the number of invading ants. Integrated pest management (IPM) is a strategy to prevent ant invasions, minimize pesticide use and reduce harmful exposure to children, staff and the environment.

When are ants a problem?

Some ants bite or sting, but most ants in California do not threaten human health, and they help control other pests like fleas, caterpillars and termites. A few ants sting, like the native fire ants and harvester ants, which live outdoors. The most aggressive stinging ant is the red imported fire ant, which has been found in southern California. If you suspect a fire ant infestation, report it to your county agricultural commissioner.

Characteristics and habits

Ants look for food and water to take back to their nests. They may appear suddenly in buildings if other food sources become unavailable or weather conditions change. Ants live in soil next to buildings, along sidewalks, and under stones, tree stumps, plants, boards or other protected places. Depending on the ant species and the time of year, ants eat sweets—especially a sticky substance called honeydew that is made by aphids—fruits, seeds, cooking grease, dead or live insects or dead animals. Ants often enter buildings seeking food, water, warmth and shelter, or refuge from dry, hot weather or flooded conditions.

The most common ant in California is the Argentine ant. Other ant pests include the pharaoh ant, pavement ant, odorous house ant, thief ant and velvety tree ant.

A new colony is usually established by a newly mated queen. As the colony grows over the years, it produces winged male and female ants, which leave the nest to mate and form new colonies. Unlike other ant species in California, Argentine ants have colonies that blend together to make up one large super colony with many queens. This is one reason completely eliminating these ants is impossible.

IPM strategies

1 DON'T SPRAY!

Spraying pesticides may kill ants, but spraying will expose staff and children to harmful chemicals, and doesn't eliminate ants in their nests. Pesticide residues can build up indoors where children spend a lot of time. Ant management should focus on good sanitation and maintenance, not on spraying pesticides.

Ant management requires continuous effort and its goal is to reduce the number of ants in ECE programs. You don't have to completely eliminate ants from outdoor areas because ants help control other pests like fleas, caterpillars and termites.

2 KEEP ANTS OUT

- ▶ When you see ant trails in your building, follow the ants to their entry point. Caulk cracks around foundations or openings that provide entry from outside. Pay special attention to where wires and pipes enter the building, because this is a favorite entry point for ants.
- ▶ Keep plants and mulch at least 12 inches from the foundations of buildings; they provide nesting sites for ants.

3 REMOVE ANTS' FOOD, WATER AND SHELTER

- ▶ Store food items such as snacks, sugar, syrup, honey and pet food in closed containers.
- ▶ Wipe spills from outer surfaces of containers, and from counters, tables and floors.
- ▶ Remove garbage from the kitchen at the end of each day.
- ▶ Repair leaky sinks and pipes.
- ▶ Seal indoor cracks and crevices.



ACTION PLAN FOR ANTS

WHEN TO TAKE ACTION	NONPESTICIDE PRACTICES	LEAST HARMFUL PESTICIDE	LAST RESORT
<ul style="list-style-type: none"> ▶ If you see a few ants inside, there are likely to be more soon. 	<ul style="list-style-type: none"> ▶ Clean up ants using a sponge or paper towel with soapy water. ▶ Fill any ant entryways with caulk or petroleum jelly. ▶ Remove infested potted plants. ▶ Clean up food sources. ▶ Eliminate leaks or water sources. 	<ul style="list-style-type: none"> ▶ Rely on baits, a non-spray pesticide, to manage the ants. 	<ul style="list-style-type: none"> ▶ If you hire a PMP, insist that they use baits rather than perimeter treatments or monthly sprays.

When should you hire a pest management professional (PMP)?

If ants continue to plague you indoors, work with a PMP who practices IPM to create a management plan. Pesticides should only be used as a last resort.

RESOURCES

University of California Statewide IPM—Ants
www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7411.html
 Our Water, Our World—Controlling Ants in Your House
ourwaterourworld.org.dnnmax.com/Portals/o/documents/pdf/Ants%2009.pdf
 County Agricultural Commissioner List (if you think you have red imported fire ants)
www.cdffa.ca.gov/exec/county/county_contacts.html

California Childcare Health Program, University of California, San Francisco School of Nursing • cchp.ucsf.edu



INTEGRATED PEST MANAGEMENT: COCKROACHES

Cockroaches are common pests in child care. There are many kinds of cockroaches. Some live indoors; others live outdoors. Only some cockroaches cause problems indoors. Many providers respond to any cockroach by reaching for the spray can. There are health reasons for wanting cockroaches out of your indoor environment, but you can actually manage cockroaches much better when you don't spray.

When are cockroaches a problem?

Saliva and droppings (feces) from roaches can trigger asthma, especially in young children. Cockroaches also spread bacteria and other harmful germs as they crawl through sewers and decaying substances, and carry these germs into ECE facilities.

Characteristics and habits

Before you try to eliminate cockroaches, identify what kind they are. German cockroaches are the most common indoor cockroach in California.

GERMAN COCKROACHES:

- ▶ look like small adults without wings when young.
- ▶ shed their skin six times as they grow. These cast-off skins become an asthma trigger.



German cockroach, young and adult

To identify the cockroaches in your facility, visit: www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7467.html#IDENTIFICATION or consult with your pest management professional.

ALL COCKROACHES:

- ▶ leave droppings (dark spots or smears).
- ▶ need moisture or a reliable water source to live. Outdoor cockroaches live in moist environments such as sewers.
- ▶ are active at night. If you see cockroaches during the day, beware—you probably have a large infestation.

- ▶ Scurry into hiding places when they sense noise, movement and light. German cockroaches fit into spaces 1/16-inch wide. They avoid open spaces, so place sticky traps next to walls.
- ▶ Reproduce rapidly. One female German cockroach and offspring can produce 30,000 roaches in a year.

IPM strategies

1 DON'T SPRAY!

- ▶ Sprays or bug bombs may kill a few cockroaches but will not penetrate hiding places or kill eggs, and can harm people, pets and the environment.

2 KEEP COCKROACHES OUT

German cockroaches can enter buildings hidden in grocery bags or in deliveries. Cockroaches sometimes slip under doors from nearby infested buildings. Outdoor cockroaches can sneak in through narrow gaps in windows and doorways.

- ▶ Install tight-fitting weather stripping and screens on windows, and doorsweeps.
- ▶ Seal cracks and crevices in walls and floors.

3 REMOVE COCKROACHES' FOOD, WATER AND SHELTER

- ▶ Clean spilled food, dirty dishes and utensils, and surfaces before leaving for the day.
- ▶ Keep drains, shelves and counters clean.
- ▶ Store food in containers with tight-fitting lids.
- ▶ Fix leaks under sinks or dripping faucets.
- ▶ Vacuum possible cockroach hiding places thoroughly using a strong vacuum with a crevice attachment.
- ▶ Empty garbage at the end of each day and keep indoor garbage in lined, covered containers.
- ▶ Place outdoor garbage containers on hard, cleanable surfaces (concrete is best) away from building entrances.
- ▶ Rinse bottles and cans before placing in the recycling bin.
- ▶ Take supplies out of boxes and store in cupboards or on open metal shelving. Corrugated cardboard boxes are a favorite hiding place for cockroaches. They eat the glue and lay their eggs in the corrugation.



[IPM strategies continued]

4 MONITOR

- ▶ Look for cockroaches behind or under cabinets and appliances using a magnifying glass and dental mirror. Check behind bulletin boards, mirrors and other wall fixtures. Look for cockroach droppings, cast skins and dead cockroaches.
- ▶ Locate hiding places by placing sticky traps under sinks and on the floor next to walls and appliances. When traps become clogged with cockroaches, throw them away and replace with new ones.
- ▶ Once you find where cockroaches hide, focus your efforts there. Put monitoring traps in that area.
- ▶ Keep monitoring traps in the same places (don't move them around), and make sure they're inaccessible to children.
- ▶ Monitor daily during a severe infestation, and write down how many cockroaches you have per trap and their age range. A lot of young cockroaches (smaller and wingless) indicate you have an active infestation. Keep a written log to monitor where traps are located.

5 MANAGEMENT

GETTING RID OF COCKROACHES

- ▶ Don't spray or use bug bombs – cockroaches will just scatter and return later.
- ▶ Bait stations and gels are effective and exempt from the Healthy Schools Act.

Bait stations are:

- ▶ small plastic containers with a mix of insecticide and bait inside.
- ▶ placed where cockroaches have been found.
- ▶ effective for several months.

Gels are:

- ▶ applied with a syringe along cracks and crevices where cockroaches have been found.
- ▶ effective for a few days.

Boric acid powder is:

- ▶ not exempt from the Healthy Schools Act.
- ▶ effective when blown into wall voids, behind electrical outlets, appliances or other undisturbed hiding places.
- ▶ effective for years, as long as it stays dry.

ACTION PLAN FOR COCKROACHES

WHEN TO TAKE ACTION	NONPESTICIDE PRACTICES	LEAST HARMFUL PESTICIDE	LAST RESORT
<ul style="list-style-type: none"> ▶ When you see one cockroach! ▶ If you see one cockroach there are likely more. 	<ul style="list-style-type: none"> ▶ Monitor with sticky traps. ▶ Caulk and seal hiding places. ▶ Clean all surfaces and store food in sealed containers. ▶ Remove clutter. ▶ Vacuum with a HEPA vacuum. ▶ Fix water leaks. 	<ul style="list-style-type: none"> ▶ Cockroach bait stations or gel applied to cracks and areas out of children's reach. 	<ul style="list-style-type: none"> ▶ If you have a serious infestation or think an expert would do a more thorough job, hire a PMP who uses IPM practices. ▶ Insect growth regulators applied to areas where cockroaches are hiding. ▶ Boric acid powder applied to dry, inaccessible areas.

RESOURCES

University of California Statewide IPM Program:
Cockroaches
www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7467.htm

The Department of Pesticide Regulation, *Safely Managing a Cockroach Infestation*
www.cdpr.ca.gov/docs/pestmgmt/pubs/roach_color.pdf

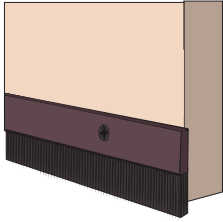
California Childcare Health Program, University of California, San Francisco School of Nursing • cchp.ucsf.edu



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Best Management Practices for Cockroaches

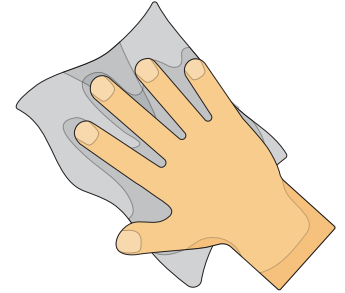
Prevent



Install door sweeps and seal gaps on exterior walls and around plumbing to prevent indoor access.

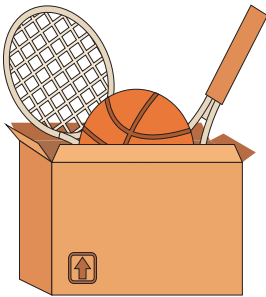
Clean

Remove food and water sources.



Declutter

Get rid of clutter to remove hiding places for cockroaches.



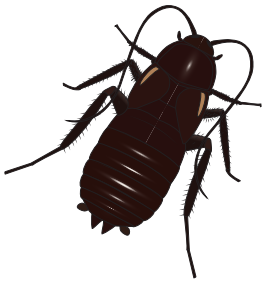
Monitor

Use traps and do site inspections year-round to monitor for cockroaches. Inspect boxes and other deliveries for hitchhiking pests.



Identify

Cockroach species have different behaviors and location preferences. Identify the species to plan for effective management.



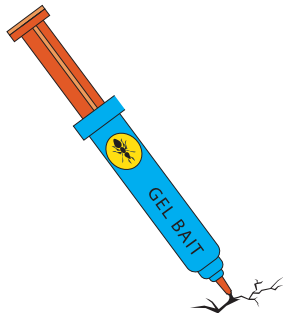
Remove

Use a vacuum with a HEPA filter to remove cockroaches, egg cases, droppings, and shed skins.



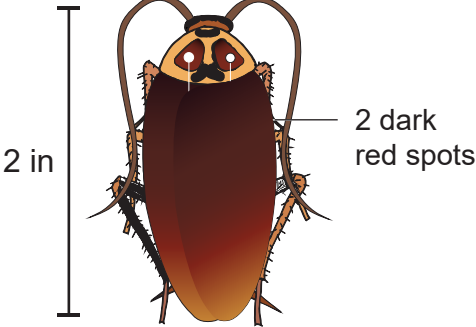
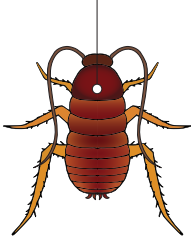

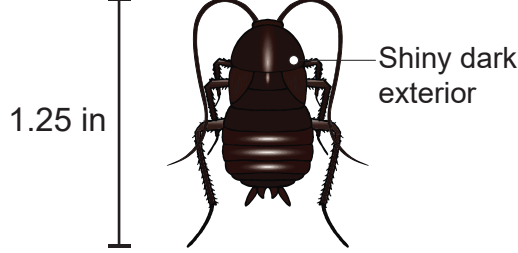


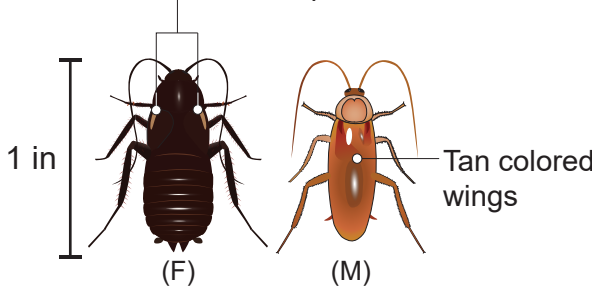
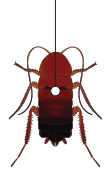

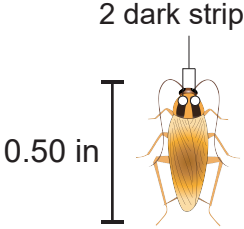

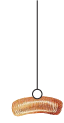
Bait

Use bait in combination with insect growth regulators to eliminate cockroaches.



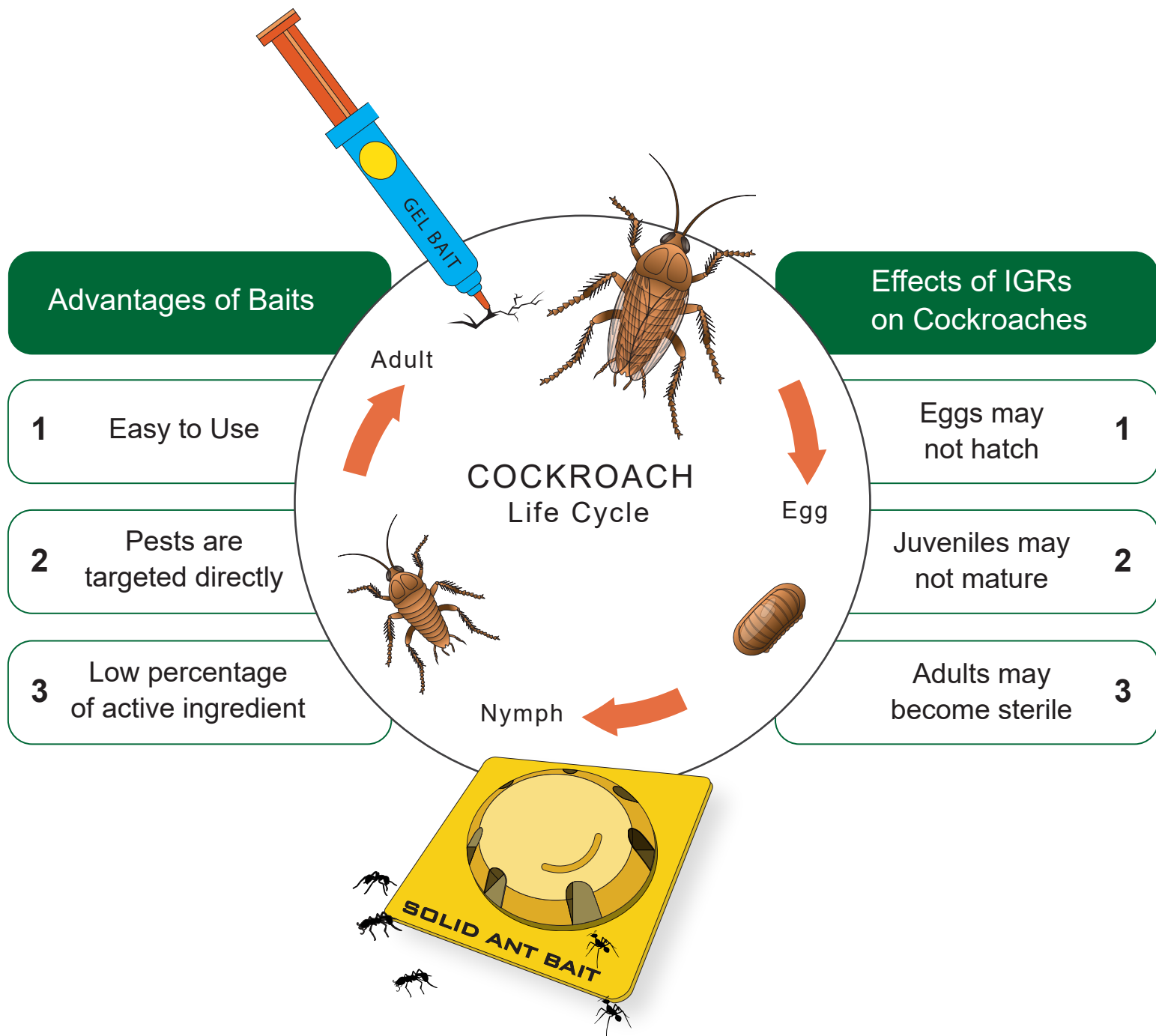
COCKROACH ID

Cockroach species have different behaviors and location preferences.
Identify the species, then choose effective management strategies

	ADULT	NYMPH	EGG
<p>American Cockroach</p> <p>Location: Humid environments Sexual maturity: ~15 months Life span: 2–3 years Ootheca: 16 eggs Egg size: 3/8 inch long</p>	 <p>2 in</p> <p>2 dark red spots</p>	<p>Reddish-brown exterior</p> 	<p>Symmetrical</p> 
<p>Oriental Cockroach</p> <p>Location: Indoor/Outdoor Sexual maturity: ~12 months Life span: 1–2 years Ootheca: 16 eggs Egg size: 3/8 inch</p>	 <p>1.25 in</p> <p>Shiny dark exterior</p>	<p>Light brown exterior, darkens with each molt</p> 	<p>Asymmetrical</p> 
<p>Turkestan Cockroach</p> <p>Location: Indoor/Outdoor Sexual maturity: ~7 months Life span: ~13 months Ootheca: 16 eggs Egg size: 3/8 inch</p>	<p>2 cream colored strips</p>  <p>1 in</p> <p>Tan colored wings</p> <p>(F) (M)</p>	<p>Red to black exterior</p> 	<p>Asymmetrical</p> 
<p>German Cockroach</p> <p>Location: Indoor Sexual maturity: ~2 months Life span: ~6 months Ootheca: 40 eggs Egg size: 1/4 inch</p>	<p>2 dark stripes</p>  <p>0.50 in</p>	<p>Yellow stripe in center</p> 	<p>Visible subsegments</p> 

Bait & GROWTH Regulate

To kill roaches and disrupt their life cycle, use bait in combination with an insect growth regulator (IGR)



INTEGRATED PEST MANAGEMENT: RATS AND MICE



The most common rodent pests are the roof rat, Norway rat, and house mouse. To protect the health of children and staff, you need a strong IPM program to manage rats and mice.

When are rats and mice a problem?

Rats and mice can damage buildings, food, clothing, and documents by gnawing, urinating, defecating, and nesting. Because they gnaw on hard objects, such as plastic electrical boxes, they can cause fires. Rats bite more than 4,000 people a year, mostly young children. The urine, droppings, saliva, and dead skin cells of rats and mice may also trigger asthma attacks.

What do rats and mice do?

Rats often live in packs, so if you see one, there are likely to be more around. Rats and mice reproduce often. If not properly managed, a rodent infestation will rapidly increase. Mice are 10 to 20 times more common than rats in indoor environments. Rats and mice are most active at night. If you see them during the day, you probably have a serious infestation.

IPM Strategies

Many people use poisons to get rid of rodents, but this won't solve a rodent problem without a comprehensive IPM plan. If rodents are killed, but food, water, and a place to live are still available, it's likely that other rodents will soon appear.

1 KEEP RATS AND MICE OUT

Rodents enter buildings through holes in walls, around pipe entries, through sewer outlets, and under doors. Mice can fit through a hole as small as ¼-inch. Rats fit through a hole as small as ½-inch.

- ▶ Use metal flashing, hardware cloth, copper wool, and escutcheons to seal floor drains, vents, holes, and gaps around pipes.
- ▶ Install a doorsweep under each exterior door.
- ▶ Seal cracks in the foundation and openings to keep rodents from entering the building.

2 REMOVE FOOD

In most areas, garbage is the main source of food for rats.

- ▶ Discard food waste in indoor and outdoor eating areas in tightly covered, indoor garbage cans lined with plastic bags.
- ▶ Clean indoor garbage cans frequently to prevent the build-up of food waste.
- ▶ Keep outdoor garbage bins on hard concrete surfaces away from the building.

3 MONITOR

Look for:

- ▶ rodent droppings,
- ▶ burrows in the ground,
- ▶ nests in ivy or around cluttered areas,
- ▶ fruit or nuts that have been gnawed or damaged food in pantry.

4 IDENTIFY WHAT KIND OF RODENT YOU HAVE

Norway rats are the best burrowers and stay in the basement or ground floor.

Roof rats are clever climbers and like enclosed elevated spaces in attics, walls, and false ceilings.

House mice can run up any rough, vertical surface and nest in enclosed places such as drawers and boxes.



[IPM Strategies continued]

5 GET RID OF RATS AND MICE

Traps

- ▶ Use snap or electrocution traps with bait.
- ▶ Keep traps away from children's reach.
- ▶ Always wear gloves when handling traps to protect yourself.
- ▶ Read directions and watch instructional videos about using the traps.

Snap traps

- ▶ Place traps parallel to the wall so rodents will be caught coming from either direction.
- ▶ Use a lot of traps to make the trapping period short. Empty and reset traps daily until there are no more rodents.
- ▶ Rats: Put the traps out for one or two days so the rats are used to them and then use baits, such as peanut butter.
- ▶ Mice: Place mouse traps no more than 10 feet apart in areas where mice have shelter and food.

Electrocution traps

- ▶ They are easy to use, battery-operated, shoebox-sized traps that electrocute the rodent as it crawls in.

- ▶ Place dried fruit in the back of the trap, press a switch, and go away. A blinking light will alert you that a rodent's been electrocuted.
- ▶ Dispose of the dead rodent in an outdoor garbage bin.
- ▶ One trap can be reused indefinitely.

6 CLEAN UP AFTER RATS AND MICE

- ▶ Don't sweep or vacuum rodent droppings, urine, or nesting materials; they can carry diseases. Sweeping or vacuuming will stir up dust and increase your chance of inhaling viruses.
- ▶ Wear gloves and disinfect the urine and droppings. (If using bleach, spray with a mixture of 1 part bleach to 10 parts water. Let soak 5 minutes.) See *Green Cleaning, Sanitizing, and Disinfecting* handout for safer alternatives to bleach.
- ▶ Use a paper towel to pick up the urine and droppings and dispose of them in the garbage.
- ▶ Mop floors with a disinfectant.
- ▶ Remove and dispose of gloves and wash hands.

ACTION PLAN FOR RATS AND MICE

WHEN TO TAKE ACTION	NONPESTICIDE PRACTICES	LAST RESORT
<ul style="list-style-type: none"> ▶ If you see a rodent, or any evidence of rats and mice such as droppings or chewed wires. 	<ul style="list-style-type: none"> ▶ Clean up cluttered areas. ▶ Sanitize and keep things clean. ▶ Seal all cracks and openings that are bigger than ¼-inch. 	<ul style="list-style-type: none"> ▶ Identify rodent pathways by looking for rub marks or trails of urine. ▶ Use snap or electrocution traps (such as a Raticator™) and make sure they're out of children's reach.
		<ul style="list-style-type: none"> ▶ Contact a pest management professional to help with traps. Do not use rodenticide baits.

LESS COMMON SITUATIONS

House mice may spread lymphocytic choriomeningitis, a viral disease that causes inflammation of the membrane that surrounds the brain and spinal cord. The disease can be transmitted from pregnant women to their unborn infants, and is an under-recognized cause of hydrocephalus (a buildup of fluid in the brain) in newborns. Mice can also cause salmonellosis, a form of food poisoning.

RESOURCES

- DPR Pest Management & Licensing Branch—Frequently Asked Questions about Rodents and Rodenticides
www.cdpr.ca.gov/docs/dept/factshts/faq_rodents_rodenticides.pdf
- University of California Statewide IPM Program: *Rats*
www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74106.html
- DPR Pest Info, IPM for Schools—Preventing Mice and Rats from Invading Your School www.cdpr.ca.gov/docs/pestmgt/pubs/rats_color.pdf
- eXtension Integrated Pest Management Action Plan for Rodents
www.extension.org/pages/63911/ipm-action-plan-for-rodents#.VfiA1fVg4k

California Childcare Health Program, University of California, San Francisco School of Nursing • cchp.ucsf.edu

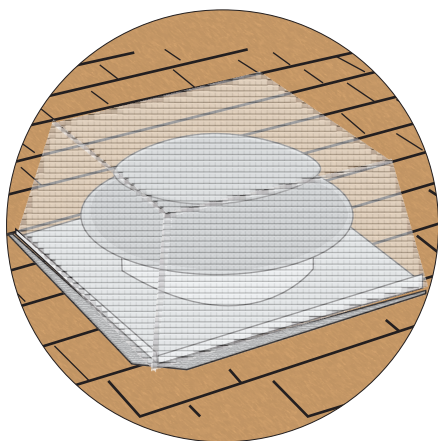


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BEST MANAGEMENT PRACTICES

Commensal Rodents

EXCLUDE



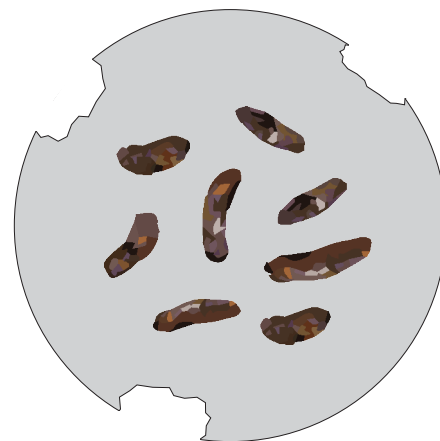
Seal gaps, cover vents, and install door sweeps to prevent access

CLEAN



Improve sanitation habits to remove food, water, and shelter for rodents

MONITOR



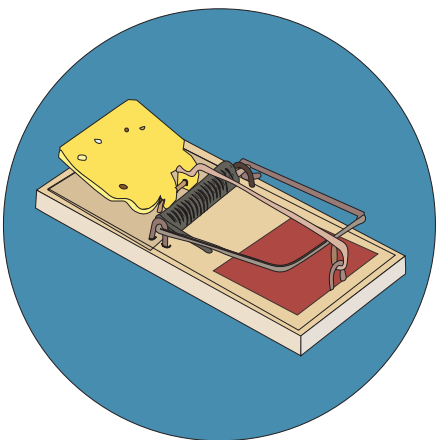
Monitor for rodent activity year-round to avoid infestation

IDENTIFY



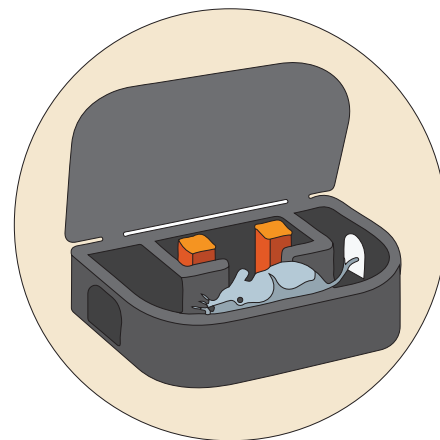
Identify rodent species to ensure effective management

TRAP



Set traps in locations where pest activity is found to eliminate rodents

BAIT



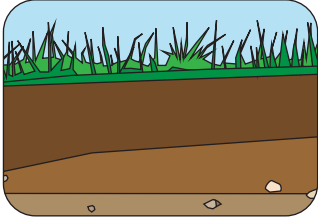
Place traps or baits in tamper-proof bait boxes to reduce exposure risks

Visit our website:
www.cdpr.ca.gov

Email us at:
school-ipm@cdpr.ca.gov

Alternatives to Herbicides for **WEED MANAGEMENT**

SOIL HEALTH



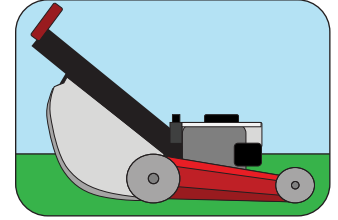
Cultivate your soil for growing grass, not weeds.

OVERSEEDING



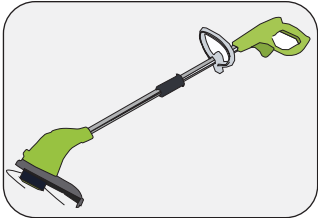
Help grass outcompete weeds and repair patchy spots in lawns.

MOWING



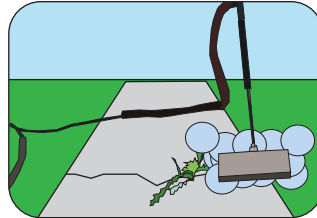
Mow at the proper height to reduce weeds. Standard practice is to remove the top third of the grass height.

STRING TRIMMER



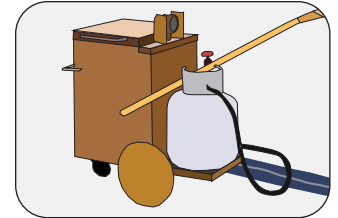
Clear weeds from hardscapes with a string trimmer.

HEAT



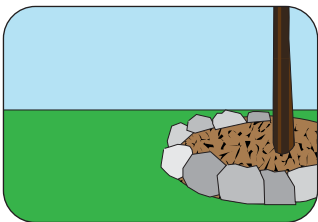
Kill weeds at the roots with heat using flame weeders, steam weeders, or foam steamers.

CRACK SEALING



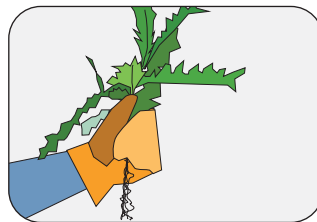
Repair cracks in pavement to help prevent weed seeds from germinating.

MULCH



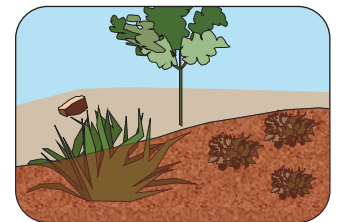
Maintain mulch at 3 to 5 inches to improve water conservation and weed management.

HAND-PULLING



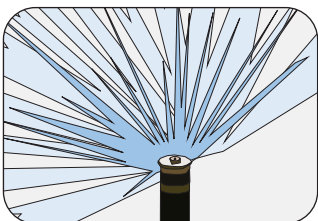
Hand-pull weeds before they set seed to help reduce infestations.

XERISCAPING



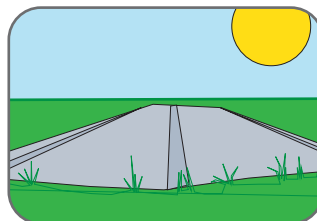
Replace ornamental plants with native species that require less water and maintenance.

IRRIGATION



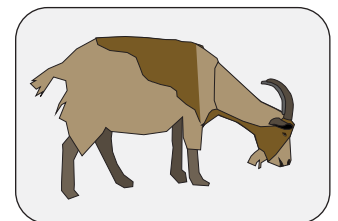
Prevent excess weed growth with proper irrigation timing and equipment.

SOLARIZATION



Kill weed seeds with soil solarization by cooking the soil under a plastic tarp

GOATS



Hire goats to eat weeds and clear fields of unwanted vegetation.

HEALTHY SCHOOLS ACT REQUIREMENTS

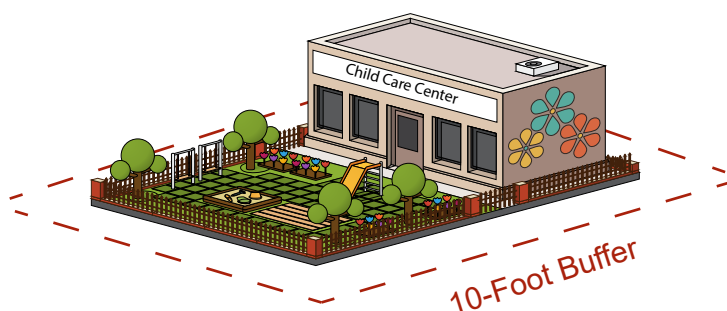
for Child Care Property Owners & Their Contractors

Do you manage a property where a child care facility is located?

- Follow the Healthy Schools Act requirements when pesticides are applied at California licensed child care facilities.
- Reduce children's exposure to pesticides by managing pests using safer, more sustainable integrated pest management (IPM) practices.

Healthy Schools Act

The Healthy Schools Act is a right-to-know law that requires property owners, outside contractors such as custodial services and pest management professionals, and staff, to follow certain rules when anyone applies a pesticide at a public K-12 school or public or private child care facility.

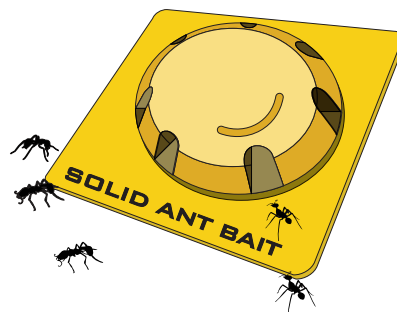


Child Care Facilities

Under the law, child care facilities include day care centers, employer-sponsored child care centers, preschools, and extended day care centers. This includes buildings, play areas, and a 10-foot buffer surrounding any areas regularly used by children.

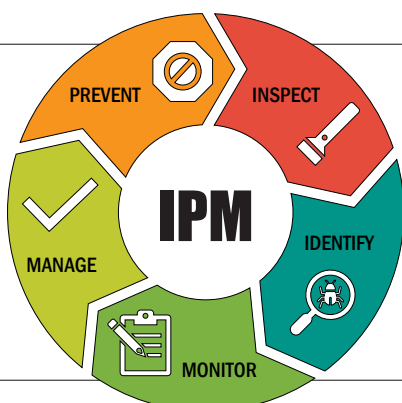
Pesticides

Pesticides are products labeled to kill or repel pests such as bugs (insecticides), weeds (herbicides), rodents (rodenticides) and even germs (surface antimicrobials). If using a pesticide is necessary, make sure to follow the Healthy Schools Act requirements.



Integrated Pest Management

Integrated Pest Management, or IPM, is a safer, more sustainable way to manage pests that focuses on a variety of pest prevention and exclusions techniques before a non-toxic or least-toxic pesticide is used. According to the law, the least toxic method should be the preferred method for managing pests at schools and child care facilities.



HEALTHY SCHOOLS ACT REQUIREMENTS

for Child Care Property Owners & Their Contractors

If you hire an outside contractor to apply pesticides, you are required to:



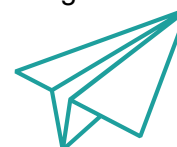
Inform the contractor there is a child care facility on the property and that the Healthy Schools Act must be followed



Provide the child care facility with an annual list of all pesticides expected to be used by the contractor

Notify the child care center 120 hours (5 days) **before any contractor** plans to make a pesticide application and provide the pesticide product information including:

- Product name
- Manufacturer
- Active ingredient
- EPA registration number
- Intended date of application
- Areas of application
- Reason for application



If you apply pesticides on the property yourself, you are required to:



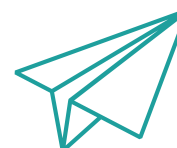
Take a DPR-approved Healthy Schools Act training course before applying a pesticide and annually thereafter



Provide the child care facility with an annual list of all pesticides expected to be used

Notify the child care center 120 hours (5 days) **before you** plan to make a pesticide application and provide the pesticide product information including:

- Product name
- Manufacturer
- Active ingredient
- EPA registration number
- Intended date of application
- Areas of application
- Reason for application



Report all pesticides applied during the year to DPR by January 30th using form DPR-HSA-118 available at www.cdpr.ca.gov

Notification and reporting are not required when these types of pesticides are used by the property owner or staff: antimicrobials (such as disinfectants), self-contained baits or traps, gels or pastes used as crack and crevice treatments, and FIFRA 25(b) pesticide products exempt from U.S. EPA registration. Training is required for any pesticide.

Licensed pest control operators must complete training and report all registered pesticides used at schoolsites.

For more information, visit the Child Care IPM Program website at www.cdpr.ca.gov or email us at ccipmlist@cdpr.ca.gov

INTEGRATED PEST MANAGEMENT (IPM) POLICY FOR CHILD CARE CENTERS

NAME OF PROGRAM

DATE

All of our program staff follow California's Healthy Schools Act (HSA) and practice integrated pest management (IPM) to keep children and staff safe from pests and pesticides. Exposure to pesticides can pose a health risk to children, staff, and others.

1. We minimize pest infestations and exposure to pesticides through a range of practices that restrict pests' access to food, water, and shelter.
2. Our IPM plan is available in our office and on our website, and is reviewed, updated, and distributed annually.
3. An IPM coordinator (name in the IPM plan) is responsible for overseeing the implementation of IPM practices.
4. We regularly monitor for pests and keep records of pest sightings and evidence of pests (for example, gnaw marks, rub marks). We use the IPM Checklist for Early Care and Education to inspect our facility (cchp.ucsf.edu/IPM).
5. We start with nonchemical management practices (for example, cleaning, repairs, and traps) to address pest problems. When necessary, we use least-hazardous pesticides (such as self-contained bait stations and gels) after nonchemical management practices have failed.
6. Prohibited pesticides are never used (list found at apps.cdpr.ca.gov/schoolipm).
7. Pesticides, including antimicrobials, are used according to the manufacturer's instructions, and stored in their original containers in a locked room or cabinet accessible only to authorized staff.
8. If pesticides are used (unless exempt from HSA requirements), the type, active ingredient, and time of the application are reported to the California Department of Pesticide Regulation at least annually (using form DPR-HSA-118.)
9. Warning signs will be posted in all of the areas where pesticides will be applied. These signs will be in place 24 hours before pesticides are used and stay in place until 72 hours after pesticides are used.
10. All staff and parents/ guardians have the opportunity to register to be notified about individual pesticide applications at least 72 hours before they are applied. The notification will include the pesticide name, active ingredient, and intended date of application.
11. Written notification is given to parents/ guardians and staff as specified in the HSA:
 - ▶ Any planned pesticide applications in the upcoming year (include pesticide name and active ingredients);
 - ▶ 72 hours in advance of a pesticide application not included in the annual notification;
 - ▶ Every effort is made to provide advance notification if an emergency condition requires a pesticide application not included in the annual notification.
12. Records of pesticide applications made by center staff and/or pest management professionals are kept for at least four years. Records are available to parents, guardians, and staff.
13. Annual training is provided for all staff who apply pesticides, including antimicrobials, on IPM practices and HSA requirements.

Optional: Recommendations for parents exposed to pesticides at work

1. Wash your hands before leaving work.
2. Change your work clothes before picking up your child. Don't hug or carry your child until after you have changed your work clothes.
3. Store and wash your work clothes separately from the rest of your clothes and your children's clothes.
4. Leave your work shoes outside the child care facility before you enter to pick up your child.