

# INTEGRATED PEST MANAGEMENT

Integrated pest management (IPM), an environmentally friendly technique developed in the 1960s to control destructive insects in crops and gardens, is now being applied to schools in California. IPM has three main components: cultural control (good sanitation practices), biological control, and chemical application. The most important goal in IPM is to decrease the amount of chemicals (pesticides) needed to control pests. Remember, a pest can be a weed, or a bug, or a rodent, or a fungus.

## SO WHAT DOES THIS MEAN FOR SCHOOL EMPLOYEES?

The Healthy Schools Act requires, among other things:

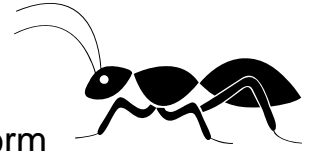
- The preferred method of managing pests at school sites must be the least toxic.
- Schools must adopt a policy of utilizing IPM practices at school sites.
- Each school site must maintain records of all pesticide use at the school site for a period of 4 years and make the records available to the public upon request.
- On an annual basis, the school district must provide to all staff and parents or guardians of pupils enrolled at a school written notification addressing, among other things, expected pesticide use.
- The school district must post warning signs prior to application of pesticides at a school site.

## Warning on the Use of Chemicals



- Pesticides are poisonous.
- Always read and carefully follow all precautions and safety recommendations given on the container label.
- Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.
- Confine chemicals to the property being treated. Avoid drift.
- Do not place containers containing pesticide in the trash. Do not pour pesticides down the sink or toilet. Either use the pesticide according to the label or take any unwanted pesticides to a Household Hazardous Waste Collection site.
- Dispose of empty containers by following label directions. Never reuse or burn the containers or dispose of them in such a manner that they may contaminate water supplies or natural waterways.

## COMMON PESTS FOUND IN SCHOOLS



**Ants** are among the most prevalent pests in schools. Ants perform many useful functions in the environment, such as feeding on other pests (e.g., fleas, caterpillars, termites). Inside a building, household ants feed on sugars, syrups, honey, fruit juice, fats, and meat.

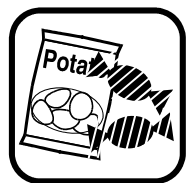
**Ant management** requires diligent efforts and the combined use of mechanical, cultural, sanitation, and often chemical methods of control. It is unrealistic and impractical to attempt to totally eliminate ants from an outdoor area. To keep ants out of buildings:

- Caulk cracks and crevices around foundations that provide entry from outside.
- Store attractive food items such as sugar, syrup, honey, and other sweets in closed containers that have been washed to remove residues from outer surfaces.
- Rinse out empty soft drink containers or remove them from the building.
- Thoroughly clean up grease and food spills.
- Do not store garbage indoors.
- Look for indoor nesting sites, such as potted plants. If ants are found, remove the containers from the building, then submerge the pots for 20 minutes in standing water that contains a few drops of liquid soap.
- One way to control ants in and around structures is to use toxic baits. However, ants will not eat bait if more desirable food is nearby. Remove any particles of food or other attractive material from the room and you shouldn't need to use bait.
- An insecticide can provide immediate knockdown of foraging ants. However, if ants can be thoroughly washed away and excluded from an area, an insecticide is probably not necessary. Sponging or mopping with soapy water, as an alternative to insecticides, may be as effective in temporarily removing foraging ants in a building because it removes the ant's scent trail.

**Spiders** are primarily beneficial and their activities should be encouraged in the garden. Pesticide control is difficult and rarely necessary. The best approach to controlling spiders in and around the home or school is to remove hiding spots, (for reclusive spiders such as black widows), and regularly clean webs off the building with brushes and vacuums.



- Spiders may enter structures through cracks and other openings. They also may be carried inside on items like plants and boxes. Regular vacuuming or sweeping of windows, corners of rooms, storage areas, and other rarely used areas helps remove spiders and their webs. Vacuuming spiders can be effective because their soft bodies usually do not survive. Indoors, a web on which dust has gathered is an old web that is no longer being used by a spider – brush it down.



- To prevent spiders from coming indoors, seal cracks in the foundation and other parts of the structure and gaps around windows and doors. Good screening not only will keep out many spiders but also will discourage them by keeping out insects that they must have for food. In other words, spiders eat bugs. If you can eliminate bugs, like ants and roaches, you won't have spiders.
- In indoor storage areas, place boxes off the floor and away from walls. Sealing the boxes with tape or using sealable plastic storage boxes will prevent spiders from taking up residence. Clean up clutter in garages, sheds, closets, and storage areas. Be sure to wear gloves to avoid accidental bites.
- Typically pesticide control of spiders is difficult unless you actually see the spider and are able to spray it. If you spray a spider, it will be killed only if the spray lands directly on it; the spray residual does not have a long-lasting effect. This means a spider can walk over a sprayed surface a few days (and in many cases, a few hours) after treatment and not be affected. Control by spraying is only temporary unless accompanied by housekeeping. It is just as easy and much less toxic to crush the spider with a rolled up newspaper or to vacuum it up.



**Weed** control options in the landscape include eliminating with a “weed eater”, hand-weeding and cultivation, mowing, mulching, and chemical control. All of these methods are used at one time or another in landscape maintenance operations. After elimination by hand-pulling, cultivation, or a post-emergence herbicide application, the growth of annual weeds can be discouraged with mulches and/or pre-emergence

herbicides.

### WHAT CAN I DO TO HELP?

- Eliminate food and snacks from the classroom. Do not allow students to keep food in their desks. If you must store food or snacks in your classroom, use plastic containers with lids that screw on. Do not store in boxes or plastic bags—they cannot be sealed.
- Empty trash cans daily. Rinse out soft drink cans. Spray or rinse trash cans with Simple Green or some other soapy solution to keep it clean and bug free!
- Store educational materials and supplies in plastic, sealable, storage boxes. Cockroaches love to eat cardboard and will take up residence in your supplies. They will not be attracted to the plastic boxes.
- Work with the custodians and maintenance staff at your site to develop ways to eliminate pests from the school in a non-toxic way.

The goal is to reduce children’s exposure to toxic chemicals – let’s work together to achieve a safer school environment.