

## Benefits of Using IPM in Schools

- Early pest detection
- Reduced pesticides use, which decreases risk to the environment
- Use of less toxic materials
- Cost savings
- Enhanced safety to students, faculty and staff
- Increased parent satisfaction of child's safety
- May improve student and staff attendance
- May reduce food waste from pest contamination

## Successful IPM Stories

IPM has been used in commercial agriculture since 1959.

Although IPM in schools is relatively new (since 1989 in Maryland), there are many success stories detailing pesticide reduction and cost savings to school districts.

- Monroe County, Indiana, schools eliminated 90 percent of pesticide applications and reduced pest control costs by 35 percent by using IPM.
- New York City schools (32 districts with 1,200 buildings) eliminated exposed rodenticides and indoor insecticide dusting and decreased aerosol insecticide spraying by 98 percent. These districts used over 8,000 tubes of silicon glue to seal pest harborages and entry points.
- In Santa Barbara, California, IPM techniques cut contracted pest control costs from \$1,740 per year to \$135 per year at Vista de las Cruces school.

Similar accounts can be reported from IPM projects in 13 other states.

## Where Can I Get More Information?

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### <http://school.ipm.iastate.edu>

Web site maintained by the Iowa State University Extension with information on pesticide use in schools, with links to many other informational sites.

### Poison Information Center

National Hotline 1-800-222-1222 for emergency information from pesticide poisoning.

### National Pesticide Information Center

A 24-hour number (800-858-7378) for information on the acute or chronic effects of pesticides.

### Chemical Manufacturers of America

1-800-262-8200, for non-emergency safety and health information on many chemicals, including pesticides.

## INTEGRATED Pest Management



## Pest Control Information for School Administrators and Faculty

### DEVELOPED BY

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## What is IPM?

Integrated Pest Management (IPM) is a scientific, environmentally sensitive approach to solving pest problems that focuses on evaluating the cause of pest infestations. IPM is used to manage pest damage by the most economical means with the least possible hazard to people, property and the environment. IPM relies on "pest proofing" to prevent pest access and monitoring to determine the location and degree of the problems. Routine housekeeping and maintenance can eliminate pest attractions and habitats.

The public's concerns about health and environmental risks associated with pesticides and other chemicals are increasing, particularly when children are involved. This awareness generates interest in seeking equally effective alternative pest control methods. Schools may be four to five times more densely populated than office buildings of similar size, and pest control practices should be carefully evaluated.

Some type of federal legislation regarding pesticide use on school properties is foreseeable. Formal school IPM programs exist as mandates in 10 states, and as voluntary efforts in other states. Knowing your options is the key to pest management. Sometimes a non-chemical strategy is as effective and convenient as a chemical alternative. For many pests, total elimination is almost impossible, but it is possible to manage them at acceptable levels.



## IPM Methods

Methods available to you include pest prevention, non-chemical management tools and pesticides. IPM may include:

- **Monitoring:** sticky traps, inspections and good record keeping used to pinpoint problems.
- **Physical:** removing food and water sources, caulking around pipes, fixing leaky faucets or repairing door thresholds to prevent pest entry into buildings.
- **Cultural:** staff training and associated behavioral changes and proper landscape plant selection and care.
- **Biological:** using natural enemies to control the pest. An example is ladybugs eating aphids that are feeding on a school tree or shrub.
- **Chemical:** use of a least toxic pesticide in concealed pest activity locations, which was preceded with various non-chemical attempts to manage the pest. Traditional pest control often includes the use of pesticides on a regular, preventive treatment schedule, with broad application that will include exposed surfaces.

### pes · ti · cide la · bel *noun*

Includes statements of active ingredients, signal words ("Caution," "Warning," and "Danger" in order of increasing toxicity), precautionary statements, environmental hazards and first aid instructions. Inert ingredients do not need to be listed on the label, but may also be classified as hazardous chemicals.

## Implementing IPM in Schools

An IPM program consists of a cycle of inspecting, identifying, monitoring, knowing when to act, choosing the appropriate method control, and then evaluating the effectiveness of management strategies. IPM can be integrated with the school's existing pest management plan and other school management activities. Activities such as preventive maintenance, scheduled janitorial activities, landscape installation and maintenance and staff education are important elements towards implementing an IPM program.

IPM programs can be successfully implemented by "in-house" school employees or by contracting with pest management professionals. A combination of in-house and contracted functions may also meet the needs and capabilities of the school system, especially when outdoor areas are considered. Use of outside pest management professionals may appear to increase costs but eliminate the need to hire and train personnel and store pesticides.

An IPM Policy Statement needs to be developed and pest management objectives need to be set by the district. The School Board must adopt these items. One individual must be identified as the school IPM coordinator; this person will oversee all pest management activities. The pest control contract must specify the use of IPM principles and practices. Threshold (action) levels will be set in advance of any pest management efforts.



### pes · ti · cides *noun*

Chemical agents that repel, change the regular growth rate of, kill or otherwise reduce levels of a targeted pest. These products are registered as herbicides (weeds), insecticides (insects, spiders or mites), fungicides (fungi), rodenticides (rats & mice) or other chemicals (such as disinfectants and household cleaners).

## Incorporating IPM in the Education System

Education is a vital component of pest management. Many schools across the United States have incorporated environmental issues into their curricula. If all stakeholders (administrators, teachers, custodial staff and parents) do not support IPM, it may not be effectively implemented. The classroom offers many opportunities to integrate IPM into the school system. Free teacher lesson plans are available at [http://school.ipm.iastate.edu/stories/storyReader\\$8](http://school.ipm.iastate.edu/stories/storyReader$8).