



The Maine School IPM Program

www.thinkfirstspraylast.org/schoolipm
207-287-2731

All Maine schools, both public schools and private schools, are now required to adopt integrated pest management (IPM) practices and appoint an IPM coordinator. School IPM is an effective and environmentally sensitive approach to pest management that relies on common sense practices and shared responsibilities. The goal of School IPM is to protect students, staff, and visitors from harmful exposure to pests, diseases, or harmful chemicals.

Pesticide use is strictly regulated in Maine schools. IPM will help schools manage pests through regular pest monitoring, effective communication, good facilities management practices, and the use of low-risk pest control.

To facilitate IPM, schools are encouraged to form an IPM advisory committee to guide your schools in developing and maintaining a strong IPM program - using materials in this kit - customized to fit your schools' specific needs. Your IPM coordinator is responsible for the day-to-day operation of the IPM program. This tool kit provides checklists, factsheets, sample letters, and resources to enable you to incorporate IPM into your schools' current facilities management programs.

For more information

Maine School IPM Program, 207-215-4793
schoolipm@maine.gov
www.thinkfirstspraylast.org/schoolipm

Maine Board of Pesticides Control, 207-287-2731
pesticides@maine.gov
www.thinkfirstspraylast.org

UMaine Cooperative Extension Pest Management Office
800-287-0279 (Maine only) or 207-581-3880
www.umext.maine.edu/topics/pest.htm



Maine Department
of Agriculture, Food
and Rural Resources



Maine Board of
Pesticides Control



University of Maine
Cooperative Extension



Using the Tool Kit

This document was prepared by the Maine Department of Agriculture and the University of Maine Cooperative Extension under a federal grant provided by the United States Environmental Protection Agency. The goal of this School Tool Kit is to assist Maine schools in complying with state IPM and pesticide use regulations. Pests such as stinging insects, rodents, mold, and noxious weeds pose risks to the health and safety of students and staff, but unnecessary use of pesticides also presents risks. This kit provides clear and easily applied guidance to help prevent and solve pest problems promptly, economically, and safely. It recommends practical actions that can be carried out by the school staff with flexibility to meet the specific needs of your school. This program is designed to be easily adapted into normal school staff scheduling and training activities.

Why Follow This Guidance

- This tool kit provides guidance in meeting state requirements for IPM and pesticide use.
- IPM can save money and provide a healthier, better managed school environment.
- School staff, administrators, and even students play critical roles in a successful IPM program. This tool kit is designed with pull-out sections to guide each member of your IPM Team.
- Information in this tool kit will assist you in garnering support from parents, staff, and the community, especially among those concerned about health and environmental risks associated with pesticides and pests.

Why Schools Need to Use Integrated Pest Management

To minimize risks posed by pests and pesticides, a balanced approach that relies on prevention, regular monitoring, and combinations of pest management tactics provides long-term solutions with the least risk. This sensible and systematic approach is termed Integrated Pest Management, or IPM.

The four basic principles of IPM are:

- Pest prevention.
- Systematic monitoring and accurate identification of pests.
- Combinations of pest management tactics--using pesticides only if, when, and where necessary.
- Record-keeping and regular evaluation.

Use This Kit To:

- Start an IPM Program for your school(s).
- Designate pest management roles for school personnel, pest management personnel, and key decision makers.
- Provide support for an existing school IPM program.
- Train IPM team members.

This kit, including checklists and sample forms, can be downloaded at www.thinkfirstspraylast.org/schoolipm. Some of the forms are also available in Microsoft Word.

How To Use This Tool-Kit

- Look over the Table of Contents to see how this kit is organized.
- Read the first section for an overview of IPM and tips on getting started, including:
 - Appointing an **IPM Coordinator**. **Note: This is required in Maine.**
 - Establishing an **IPM Committee** or adding IPM responsibilities to an existing one.
 - Developing an **IPM Policy** and presenting it to the school board for adoption. **Note: This is required in Maine.** A formal school IPM policy and a written IPM plan help you to establish priorities, assign responsibilities, and coordinate actions among your team members. If your school already has an IPM policy, review it as part of your annual IPM program evaluation.
 - Developing or updating your school's written **IPM plan** that designates and assigns responsibilities to your school's **IPM team**, including tasks served by any contracted service providers. It may be helpful for key team members to first inspect the entire school facility using the **Annual IPM Checklist** to develop a prioritized list of IPM actions for inclusion in the IPM Plan. IPM can also be readily incorporated into service-learning projects or classroom learning experiences to engage teachers and students in your school's IPM program.
 - Preparing and distributing **Action Packets** to each IPM team member. This packet is designed to provide guidance to each member of your IPM team. In schools, IPM must be a team effort. Successful IPM programs rely largely on good cooperation and timely communication among staff, students, parents, and any contracted service providers. Use this tool kit to assemble customized Action Packets for each of your IPM team members.
 - **Evaluating** the effectiveness of your IPM program. Do this at least annually and modify as necessary.
- Adapt or photocopy the **inspection checklists** and include in the IPM Action Packets. These are specific for custodial and building maintenance staff, grounds keepers, athletic field managers, landscapers, food services staff, school nurse/health coordinator, office staff, teachers, and students.
- Refer to the **fact sheets** as you develop and promote your school IPM policy and plan. School staff may also find them useful as a quick reference. For more information see *Outdoor Integrated Pest Management for Maine Schools* and *Integrated Pest Management for Northeast Schools*. These are available through the Maine School IPM Program (207-287-2731).
- Use the **record keeping and monitoring forms** as they are or as templates for developing your own forms. Accurate record keeping is not only required, but written records of pest monitoring or management actions provide a means for effective communication among staff or between the school and any contracted service providers. Records are also important for planning and prioritizing pest prevention and management activities, enabling the IPM team to track pest problems and mitigation efforts, and in determining the effectiveness of the school IPM plan and policy.
- Use the **planning and notification templates** to guide you as you develop or revise your IPM plan, IPM policy, notification letters, and IPM service contracts if your school hires outside pest management services. Notices posted on bulletin boards or sent home for parents help to inform and engage the school community to provide cooperation and support. There is plenty of help available for schools that are committed to IPM. The **Appendix** lists companies selling IPM supplies, regional IPM experts, IPM publications, state and federal resources, and Cooperative Extension offices and contacts.



What Is IPM?

Integrated pest management, IPM for short, is a decision-making process that combines practical pest management strategies to prevent or control pests in ways that reduce risks to health and the environment. IPM offers practical, affordable, long-term solutions for managing school pest problems in ways that ensure a healthy learning environment. The success of school IPM depends on the involvement of many individuals; students, teachers, school staff, administration, and parents are all participants in the IPM program.

IPM is:

- An effective and environmentally sensitive approach to pest management.
- A program that relies on a combination of common sense practices.
- A management strategy based on communication and education, and supported by a committed school administration.
- A partnership between the school community and qualified pest management professionals.
- An elimination or reduction of the reasons that insects, rodents, and plants become pests.
- The knowledge of when and how to remedy pest problems.
- Prevention of pest entry into school facilities.
- Integration of cultural, mechanical, and lowest-impact chemical controls.

IPM includes:

- Pest prevention—outsmarting pests for long-term solutions.
- Monitoring regularly to detect pests before they become a problem.
- Acting against pests only when necessary.
- Applying pesticides only when all other management methods fail.
- Choosing effective, low-risk pest control materials and precision application methods.
- Making pesticide applications only in areas that are inaccessible to students, faculty, and staff.
- Record-keeping and regular program evaluation and revision.

Examples of IPM Practices:

- Custodians and their managers learn the work habits and conditions that help or hinder pests.
- Grounds managers minimize environmental conditions that attract or support pests.
- Food services staff learn to minimize the availability of food and water to insects and rodents;
- Students and teachers take responsibility for keeping their rooms as clean as possible.
- Keep vegetation, shrubs and wood mulch at least one foot away from structures.
- Fill cracks and crevices in walls, floors and pavement.
- Empty lockers and desks and thoroughly clean them at least twice yearly.
- Clean food-contaminated dishes, utensils, and surfaces by the end of each day.
- Clean garbage cans and dumpsters regularly.
- Collect litter and dispose of properly at least once a week.
- Apply fertilizers to athletic fields several times during the year, rather than one heavy application.
- Identify the pest or problem before taking action.
- Use spot treatments when pesticides are necessary, not area-wide applications.



Why Use IPM?

IPM is REQUIRED in Maine Schools

All Maine schools are required by law to adopt an IPM policy, appoint an IPM coordinator, use IPM practices, and notify parents and staff before pesticides are used. (See the ‘Fact Sheets’ section for the full regulation: *Standards for Pesticide Applications and Public Notifications in Schools.*)

IPM Reduces Risk

People vary widely in their sensitivity to chemicals such as pesticides, but children are among the most vulnerable to chemical-exposure risks. Similarly, some people are very sensitive to certain pests, such as stinging insects and poison ivy. In Maine, as elsewhere, schools must balance health risks of uncontrolled pest infestations with those of pesticides to ensure the health and safety of school children, staff, and visitors.

IPM reduces risk. Under IPM, an efficient and low-risk system is in place to prevent pests from becoming problematic. IPM targets troublesome pests and minimizes risks to people and the environment.

IPM Can Save Money

Depending on your school system’s current practices, IPM has the potential to save time and money. By taking actions to avoid pest problems and applying pesticides only when necessary, many schools will reduce costs over the long term while providing a healthy school environment.

What You Should Know About Pesticides in Maine Schools

Pesticides include bug sprays, ant cups, weed-killers, ‘weed and feed’ lawn products, plant disease control products, disinfectants, pool chemicals, repellants, and any other chemical used to kill a living organism. Most schools use pesticides. A survey conducted in 2000 showed that three out of four Maine schools use pesticides (in addition to disinfectants which are used by all schools), and one out of three Maine schools use pesticides regularly (3 or more times/year). The survey report is available at www.thinkfirstspraylast.org/schoolipm.

Maine law requires a license to apply any pesticides in schools or on school grounds except for routine cleaning or emergency protection from stinging insects. Our survey showed that pesticides are applied by unlicensed staff in violation of state law in more than half of Maine schools!

IPM provides an excellent way to educate the entire school community about pest prevention and pest management and to prevent unnecessary and unlawful pesticide use.



Starting Your IPM Program

The IPM Team

IPM is a Team Effort

Just like academics and athletics, an effective IPM program relies on teamwork. Administration, staff, students, and the community all play important roles. Contributions by each team member are critical and communication among team members is essential to a successful IPM program. If your school system is small, your team may be able to function well with a small team. A bigger school system needs a more complex system for coordinating and communicating IPM activities among departments and outside contractors. An advisory committee can be helpful for long-range planning and regular evaluation of the IPM program in a large school district. In all schools, however, the key to an effective IPM program is designation of a key staff member to coordinate the program and incorporate IPM activities into the school's policy and administrative and facilities management programs. Adding IPM to the academic curriculum will further enhance the effectiveness and sustainability of your school's IPM program.

| Suggested IPM Team | |
|--|--|
| <p style="text-align: center;">Independent Schools</p> <ul style="list-style-type: none"> • IPM coordinator (administrator or knowledgeable staff member) • Administrator (headmaster or principal if that person is not the IPM coordinator) • Head custodian • Head maintenance staff • Head cook • Teacher • School nurse • Student representative • Any contracted service providers (including pest control technicians, janitorial service providers, maintenance contractors) | <p style="text-align: center;">School Departments and Districts</p> <ul style="list-style-type: none"> • District IPM coordinator (often this is the facilities director) • Team leader from each school (such as school principal or head custodian at each school) • District business official • District or school nurse • District maintenance director • District head custodian • District sports fields and grounds maintenance director • District athletic director • District food service director • Student representative • Science or horticulture teacher • Any contracted service providers • Technology coordinator (for electronic record-keeping and notification systems) |



For the School Administrator

Health and Safety are the Primary Goals of IPM

School administrators are responsible for the health and safety of their school facilities. Students and staff spend a significant part of each day on school property and should not be stung, bitten, or otherwise harmed by pests; nor should they be exposed to pesticides. IPM addresses these concerns but needs administrative leadership and support. As a school administrator you play a critical role in ensuring that your school's IPM program meets mandated requirements, that staff are adequately trained, that contractors provide quality services, and that adequate resources are made available. Although you will probably delegate tasks required for the day-to-day operation of your schools' IPM program, you must be familiar enough with your program to ensure that it meets your schools' needs and complies with state requirements.

Many Maine schools rely entirely on well-trained staff to implement their IPM program. Other schools may choose to augment their IPM program with contracted pest service providers. Either way, the key to IPM is to focus on incorporating IPM tasks into your schools' regular facilities management practices. Incorporating IPM lessons into academic and service-learning programs provides additional opportunities for strengthening the effectiveness and sustainability of your schools' IPM program.

IPM relies on:

- Pest prevention through sanitation and maintenance.
- Systematic monitoring for common pests.
- Effective communication to report and manage pest prevention and pest control needs.
- Combinations of low-risk tactics for managing pest problems when they occur.
- Record keeping and regular program evaluation.

The administrator checklist provides an overview of administrator's responsibilities for establishing and maintaining the school IPM program. An asterisk (*) indicates items mandated by Maine regulations and apply to all Maine schools serving any grade kindergarten through 12. Subsequent chapters provide additional guidance for each member of your schools' IPM team.



IPM Advisory Committee

A school-wide IPM program involves the cooperation of the entire school community. For members of the community to accept their roles in the program, they must understand how IPM benefits the members individually and the community as a whole. Schools often find it useful to establish an IPM Advisory Committee to help support development and provide oversight for the schools' IPM program. The committee can provide valuable input from interested parties in the school community and is typically derived from an existing health and safety, indoor air quality, or facilities management committee. This team can—and probably should—include representatives from the following distinct groups.

Teachers and Support Staff play a strong role in IPM for several reasons. They are often the first to observe pests or pest-prevention needs in classrooms. They are also the primary contact with students and their families. Sanitation, food, pets, and plants can be critical issues for pest prevention in the classroom. IPM is even more effective when it is included as part of the academic curriculum, too.

Maintenance, Custodial, and Grounds-keeping Directors and Staff play key roles in an IPM program. These people are responsible for recognizing and correcting conditions that may lead to pest problems. Examples include water leaks, potential pest entryways, and poor sanitation practices. It is essential that this staff be adequately trained to recognize and prevent pest problems.

Kitchen Staff. Food handling and preparation areas are among the most critical areas for pest management. It is essential that kitchen staff understand the importance of good sanitation and proper food storage and play an active role in implementing the IPM program.

School Nurse. The school nurse should maintain copies of material safety data sheets (MSDS) for all chemicals used on school property and keep a list of any students with asthma or chemical sensitivities. The nurse may also help coordinate notification about the use of chemicals at the school. If head lice are a potential problem, the school nurse should educate parents and staff about preventing their spread.

Administrators and School Board Representatives can provide the resources and authority necessary to implement an IPM Program, including preventive maintenance and repair.

Contract Service Providers, if employed by a school system, can provide much of the expertise required to establish an IPM program. If professional pest managers are contracted, their input to committee decision-making may be very valuable.

Students. Information should be shared with students so they understand their role in IPM such as keeping lockers and desks clean, cleaning up trash and spilled food, and maintaining good personal hygiene. In some schools, students are active participants in the IPM program. Students can also provide important information by reporting the pests they see in the Pest Sighting Log.

Parents. It is important that parents be included and that they be aware of the role that the community plays in the schools' IPM program. Sharing information with parents supports IPM by identifying community concerns and improving pest prevention practices. Including parents on the advisory council can also attract additional resources and expertise to the school.



IPM Advisory Committee Roster

Use this worksheet to record committee member names, contact information, and dates of service on the committee.

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| Chair Name | Phone | E-mail | Term End Date |
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Annual IPM plan review will be completed by: _____ (date).



The School IPM Coordinator

Role and Function of the IPM Coordinator

The IPM coordinator is a school employee who coordinates and leads the day-to-day IPM activities within the school unit. The coordinator can be any school staff member with good organizational skills and willingness to learn about IPM. The choice for IPM coordinator depends on the organization of your school system. In larger school districts, the IPM coordinator may be a district-level staff member or administrator, such as the facilities manager, the head custodian, the business manager, or a health and safety officer. In smaller school systems and individual schools, the IPM coordinator may be a custodian, the principal, the school nurse, a teacher, or other school staff.

A successful program depends on having someone who can manage the team and who is empowered to take action. This includes authority to interact with district-level administration, school staff, students, and parents, and to make budget recommendations. Note the IPM coordinator does not have to be a pest management expert; support is available from a variety of sources (see Appendix).

The coordinator may be responsible for most of the day-to-day program operation or may simply coordinate others who share those responsibilities. However, it is essential that the coordinator ensures that all necessary information is communicated and that all necessary activities are completed in a timely manner. The IPM program will fail if no one takes responsibility, but it also requires the support and cooperation of administration and the other school staff.

Functions of the IPM Coordinator

Most of the daily IPM routine is shared among program participants who are organized into the IPM Team. The IPM coordinator is a team manager and leader. Team members address specific portions of the IPM plan. For example, administrative staff might copy and disseminate the Action Packets and notification letters or summarize data from inspection sheets, a custodian is trained to inspect for indoor pests, groundskeepers monitor athletic fields, the school nurse maintains MSD sheets, etc. The individual and team responsibilities are determined by the IPM Advisory Committee. The coordinator ensures all tasks remain on track. The primary responsibilities of the IPM coordinator are:

Leadership

The IPM coordinator leads an “IPM Team” comprised of all school staff members with IPM responsibilities. The coordinator encourages a sense of shared responsibility and cooperation among team members, provides team members with the IPM Action Packets to direct their activities, and coordinates implementation of the IPM plan.

Emergency Response

Whether it is pest or pesticide related, the IPM coordinator is prepared to take appropriate measures in emergency situations. This individual determines if and when outside professional assistance is needed and coordinates pest management actions.

Key Authority

The IPM Coordinator disseminates IPM information, handles pest complaints, and communicates IPM issues and status to school administration, staff, students, parents, and the press.

Start-Up Hints

In addition to the checklists and factsheets included in School Tool Kit, there is other information you should gather to make starting an IPM program easier:

- Get a map or blueprint of the school.
- Count the number of staff and their job category. You will need this information to distribute checklists, etc.
- Obtain the names and contact information for any outside contractors the school uses, such as vending machine suppliers, trash disposal, building maintenance, or pest control professionals.
- Set up a filing system for all the paperwork you will generate. Keep it in a convenient location.
- Set up a location for turning in checklists.
- Set up an IPM area at your school where staff members can access information at their leisure. This is also a great place to post important reminders and communicate with your staff when something comes up.

Remember, implementing an IPM program is an on-going process, not an overnight miracle. Be patient. Stay consistent, be organized, and never forget that you are doing something important for the staff and students at your school.



IPM coordinators coordinate an “IPM Team” comprised of all school staff members with IPM responsibilities.



Team Member Action Kits

Action Kits provide specific guidance customized for each member of your IPM Team. You select which of the Tool Kit's report forms, checklists, and information to include in each Team Member Action Kit to assist them in meeting their responsibilities as outlined in the IPM plan. For instance, if custodial staff clean the floors and floor drains in the kitchen put the Food Services Checklist into the appropriate custodian's Action Kit, circling items that are the responsibility of the custodian, or marking out those that are not included in that person's responsibilities. Similarly, if it is the head cook's responsibility to check pest monitoring traps in the kitchen and pantry, add the 'Trap and Bait Monitoring Form' to that person's Action Kit. Each team member should receive a customized Action Kit containing the information, checklists, and report forms necessary to fulfill their responsibilities to the schools' IPM program.

To assemble an Action Kit individualized for each member of your IPM team photocopy pages from this tool kit or customize downloadable forms from the website (www.thinkfirstspraylast.org/schoolipm) and add your schools' own forms and documents.

Every Action Kit should contain the following:

- **Introduction to IPM.** A simple introduction provides a summary of important issues regarding IPM: what it is, why it is important, basic problems and control methods, the team approach, and communications.
- **Your Schools' IPM Policy.** The policy describes the reasons for implementing an IPM program, outlines the objectives of the IPM program, emphasizes the importance of IPM, and provides incentive to school staff to actively implement appropriate IPM procedures. A sample school IPM policy is provided in the Appendix.
- **Your Schools' IPM Plan.** The IPM plan is a detailed description of *how* IPM will be used to meet each of the school's pest management goals. Individual responsibilities are noted with associated timelines. An IPM Plan Worksheet and sample plan are found in the Appendix.

Select the appropriate checklists, forms, and fact sheets, found in the next three sections of this tool kit, for inclusion in each Action Kit.

- **IPM Checklists.** Select the appropriate checklists that best describe the team member's responsibilities or mix and match. The checklists provide easily performed but detailed activities for each participating staff member. These activities are based on the specific functions of each staff member as detailed in the IPM plan.
- **Record-keeping and Monitoring Forms.** These forms may be modified for specific pest situations and used in conjunction with the IPM checklists. Select one or more of the forms for each Team Member Action Kit as needed.
- **IPM Fact Sheets.** These fact sheets outline IPM methods to reduce the incidence of the more common pests in our schools. Much more information is readily available from sources listed in the Appendix.

