



Maine School IPM Fact Sheet

Choosing the Right Pesticide



Whether you contract for pesticide applications or do it yourself, there are important regulations and guidelines to follow. The health of school residents and prevention of pest problems must be the primary objectives that guide pest management in schools.

- Look for alternatives to pesticides first, like sanitation practices to prevent wasp, fly, and rodent problems and watering, mowing, and fertilization practices to reduce weed problems in lawns and athletic fields.
 - If a pesticide application is still deemed necessary to adequately manage pests; follow these essential steps to ensure the pesticide is applied properly and effectively.
1. **A Commercial pesticide applicator license is required** to apply pesticides on school grounds. This includes ‘weed and feed’ fertilizers, herbicides (weed-killers), rodenticides (mouse and rat baits), insecticides (insect-killers), fungicides (most mold and mildew treatments, plant disease treatments)...any product with an EPA Registration number on the label is a pesticide. **Verify that the person doing the application is licensed.**
 2. Ensure that **all pesticide applicators**, whether contracted professionals or school staff, **observe the following practices**.
 3. **Choose least-toxic pesticides.** Read the label and MSDS sheets that come with the pesticide or call the Board of Pesticides Control to have them faxed to you (also available on line—website listed below). Choose products with the signal word **Caution** if possible. Avoid those with the signal words **Warning** or **Danger**. Check the MSDS for other human health risks. Chronic toxicity and environmental impact are also important—Check the label and MSDS for mentions of these hazards, especially if well-heads, ponds or streams are nearby. Some newer, less-toxic pesticides appear more expensive than some older, more toxic ones. But the newer materials tend to be effective in smaller doses—one container goes a long way. **The less-toxic pesticides are often the best buy in the long-run.**
 4. **Choose an effective product.** Identify the pest, then make sure the pesticide is labeled for use against your pest. **Pesticidal soaps and oils** can be effective against soft bodied insects and some weed seedlings and are safer to humans and beneficial insects such as lady bugs. Microbial pesticides containing **Bacillus thuringiensis (Bt)** can be purchased for control of caterpillars or mosquito larvae.
 5. **Choose the best formulation.** Carefully consider risks of human exposure, environmental impact and effectiveness when determining which formulations (liquid, granular, dust, etc.) to use. For example, spot treatment with baits, granulars, or ready-to-use formulations present less exposure potential than broadcast applications.
 6. **Choose a product with less odor when possible.** A product’s effectiveness is not re-

Choosing the Right Pesticide—page 2

lated to its odor, but odors can cause adverse chemical reactions in persons with chemical sensitivities.

7. **Follow the label's instructions carefully.**

- Applicators are required by law to wear the safety equipment specified on the label. Make sure all necessary safety equipment and clothing are worn.
- Mix, apply and store pesticides exactly as directed. **Never apply at a higher rate than the label allows.**
- Calibrate the application equipment to make sure pesticide is applied at the labeled rate.

8. **Spot Treat Whenever Possible.** Direct the pesticide to the infested area rather than applying a broadcast treatment. This method reduces risks and pesticide costs while assuring effective pest control.

9. **Timing is Everything!** It is critical to ensure children and other people do not enter the treated area too soon. Check the label for the Re-Entry Interval (REI) to determine how soon after the application it is legal to allow people to enter the area. The REI should be considered the minimum time period between application and entry. In school settings, it's best to allow for as long an interval as possible. **Apply pesticides only when students and staff are not present and allow enough time before people are allowed to enter.**

10. **Keep records.** Record when, what, and where pesticides are applied, name of applicator and rate used. Keep labels and MSDS sheets on file.

11. **Monitor for effectiveness.** Check the pest population afterwards to see if treatment was effective. Keep checking to see how long it was effective.

12. **Be Prepared for Chemical Emergencies.** Keep a list of whom to call for help and the kinds of first aid to be administered before help arrives. Place the list in an accessible area near a phone.

13. **Dispose of pesticides properly.** Do not pour them down the drain or into toilets! Contact the Maine Board of Pesticides Control if unsure about how to dispose of the pesticide.

14. **Notification and Posting.** Outdoor areas treated with pesticides must be posted according to state regulations (Chapter 28) which require that 4"x5" signs be placed around the treated area at points of entry. It is advisable to notify students, staff and parents of upcoming pesticide applications, paying particular attention to those individuals that may be of higher risk. You may also be required to notify neighbors when pesticides are applied if they request.

15. **Ask, Don't Guess.** Choosing pesticides is important and not necessarily simple but use the following resources for more help.

Resources

- **Pest control product manufacturers and dealers** ought to know their products best, so ask about toxicity, effectiveness, formulations, and least-toxic (including traps and other non-toxic) products available.
- **University of Maine Pest Management Office**, tel. 1-800-287-0279 or 581-3880. Pest diagnoses, product recommendations.
- **Maine Forest Service**, tel. 287-2431. Tree and forest pest diagnoses, tick, mosquito and browntail moth management and product recommendations.
- **BPC**, tel. 287-2731 or www.state.me.us/agriculture/pesticides. No product recommendations *per se*, but a good place to find out how toxic or leachable a product is, if labeled for intended site and/or registered in Maine. Product facts sheets too. Links to sites for MSDS and pesticide labels.
- **ExToxNet**, For internetters this resource is ideal for comparing product toxicities. Compiled by Extension offices nationwide, it's found on this web page:
<http://ace.ace.orst.edu/info/extoxnet/>
- **U.S.EPA**, One would think the folks who regulate the stuff ought to offer fact sheets and other product-specific information. They do: www.epa.gov/pesticides/factsheets/