Introduction to Integrated Pest Management (IPM) Requirements for Maine Schools

Responsibilities of the School IPM Coordinator

Creating Safe and Healthy Spaces for Learning is a Priority of Maine Schools

- Clean, well-maintained buildings and grounds promote learning.
- Pests can threaten human health and safety.
- Pests can also reduce indoor air quality, damage property and cause unsafe, distracting conditions.
- Improper use of pesticides threatens the health and safety of students and staff.
- **Proper management of pests using Integrated Pest Management (IPM) practices protects people and property.**

Risks of Unmanaged Pests

- **Food Contamination:** mice, rats, insects
- **Allergic Reactions:** stinging insects, poisonous plants, mold, rodent urine and insect parts
- **Disease:** West Nile virus, Eastern equine encephalitis, Salmonella, Hantavirus, Lyme disease, asthma, dermatitis
- **Property Damage:** insects, mice, rats, birds, weeds

Why be Concerned About Pesticide Use in Schools?

All Pesticides Pose Risk!

- **Kids are more sensitive** to chemical exposure than adults *(smaller size, closer to the treatment areas)*
- **Acute Poisoning:** Rodenticide exposure
- **Delayed Effects:** Tumors, cancer, birth defects, blood and nervous system disorders.
- **Allergic Effects:** Asthma and skin, eye and nose irritation.
- **Environmental Impacts:** Water quality, wildlife impacts

Maine Strictly Regulates Chemical Use and Requires All Schools to Implement an Integrated Pest Management (IPM) Program

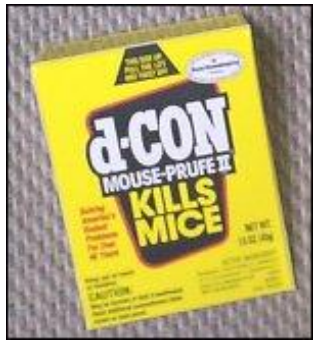
1. Schools must adopt Integrated Pest Management (IPM) policies and procedures.
2. Pesticide applicators must be properly licensed by the Board of Pesticides Control.

What is a pesticide?

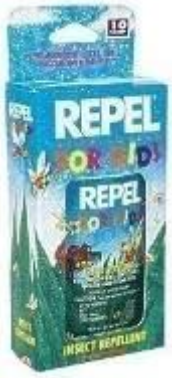
- Any substance or mixture of substances (natural, organic or synthetic) intended for:
  - preventing,
  - destroying,
  - repelling, or
  - mitigating
    any pest

- Any plant regulator, defoliant or desiccant.
  - Note: Fertilizers and plant nutrients are NOT pesticides

Some Examples of Pesticides



- Insect sprays, granules, dusts: *Raid, Safer's Soap*
- Weed killers: *Round-Up,* weed & feed
- Plant disease protectants: rose sprays, fungicides
- Ant cups and baits: *Tat, Terro*
- Rat & mouse baits: *D-con*
- Insect & tick repellents
- Mold & mildew products
- Disinfectants & bleaches: *Lysol*, pine oil
- These and more!



No product recommendations or endorsements intended

Many Natural and Organic Products **ARE** Pesticides too

- The same regulations apply to **all** pesticides including organic, natural and conventional pesticides.
- Although some pesticides are advertised as 'safer', none are non-toxic.
- Some 'natural' pesticide products contain concentrated plant oils that can cause blistering, organ damage or allergic reactions.

No endorsement intended or implied

These are NOT Pesticides

- Fertilizers **without** added weed or insect controls
- Biological pest control agents such as beneficial nematodes, insects and mites
- Mechanical pest control devices such as mouse and insect traps

Quiz: Which of the following are NOT pesticides?

a) Natural or organic products used to control a pest
b) Weed and feed lawn care products
c) Mosquito repellents
d) Mouse traps
e) Rat poison
f) RoundUp® weed killer
g) Lady bugs or beneficial nematodes

See answers on next slide

Quiz: Which of the following are NOT pesticides?

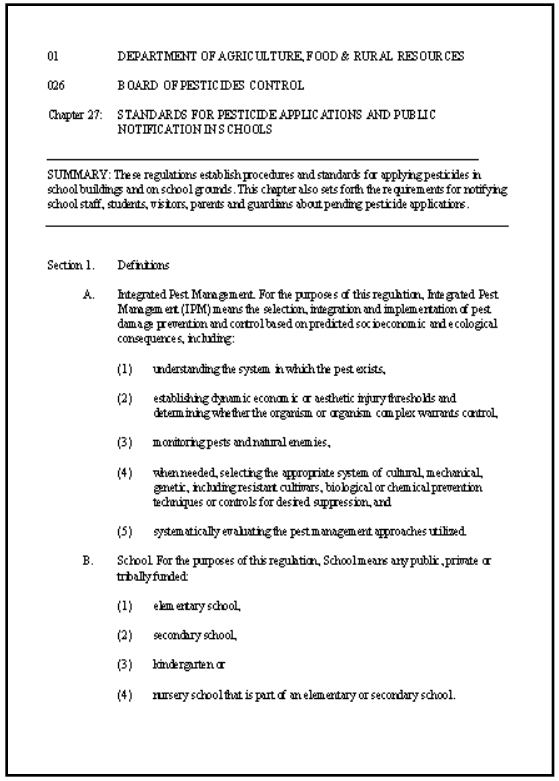
a) Natural or organic products used to control a pest
b) Weed and feed lawn care products
c) Mosquito repellents
d) **Mouse traps**
e) Rat poison
f) RoundUp® weed killer
g) **Lady bugs or beneficial nematodes**

Right! 4 and 7. Mouse traps and lady bugs or nematodes. Mechanical devices are not pesticides. Beneficial organisms like insects, nematodes and mites are not pesticides.

Rules for Pesticide Use in Schools and on School Grounds

Standards for Pesticide Application and Public Notification in Schools (Chapter 27)

- Includes *all* K-12 public or private schools and any nursery school that is part of an elementary or secondary school
- Includes pesticides used in or on *any* building or land used regularly and primarily by a school.



01 DEPARTMENT OF AGRICULTURE, FOOD & RURAL RESOURCES

026 BOARD OF PESTICIDES CONTROL

Chapter 27: STANDARDS FOR PESTICIDE APPLICATIONS AND PUBLIC NOTIFICATION IN SCHOOLS

SUMMARY: These regulations establish procedures and standards for applying pesticides in school buildings and on school grounds. This chapter also sets forth the requirements for notifying school staff, students, visitors, parents and guardians about pending pesticide applications.

Section 1. Definitions

A. Integrated Pest Management. For the purposes of this regulation, Integrated Pest Management (IPM) means the selection, integration and implementation of pest damage prevention and control based on predicted socioeconomic and ecological consequences, including:

(1) understanding the system in which the pest exists,

(2) establishing dynamic economic or aesthetic injury thresholds and determining whether the organism or organism complex warrants control,

(3) monitoring pests and natural enemies,

(4) when needed, selecting the appropriate system of cultural, mechanical, genetic, including resistant cultivars, biological or chemical prevention techniques or controls for desired suppression, and

(5) systematically evaluating the pest management approaches utilized.

B. School. For the purposes of this regulation, School means any public, private or tribally funded:

(1) elementary school,

(2) secondary school,

(3) kindergarten or

(4) nursery school that is part of an elementary or secondary school.

Maine's School Pesticide Regulations: Areas Covered (and Not):

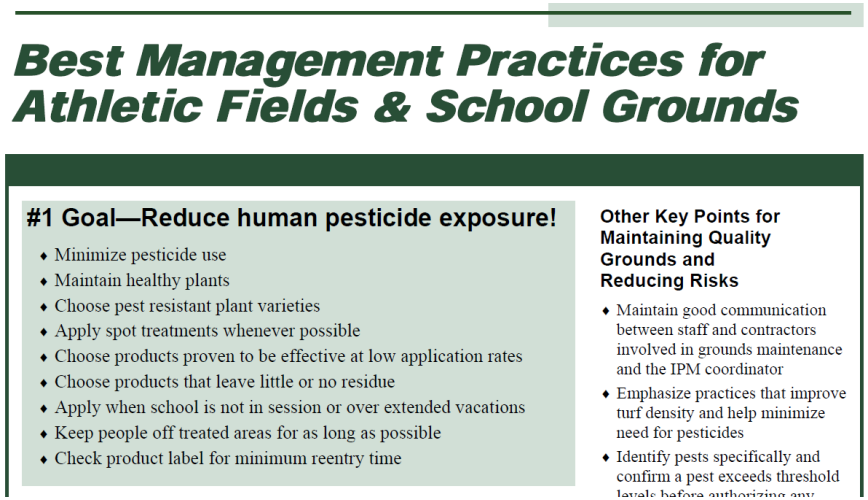
- Buildings and land owned by a school
  - Including playgrounds, athletic fields, agricultural fields
- Private or public properties used primarily and regularly for school-related activities
  - Including ball fields owned or managed by town or non-profit organization
- Does **not** include non-school properties used mostly for non-school activities such as
  - Public or private golf courses and tennis courts
  - Museums, parks or buildings visited on field trips

Maine School Pesticide Regulations

- Are designed to reduce student and staff exposure to pesticides
- Reduce pesticide use in schools and on school grounds
- Require the use of Integrated Pest Management (IPM)

Integrated Pest Management (IPM)

- IPM is the use of accepted 'best management practices (BMP)' for preventing and managing pests such as insects, weeds, plant diseases, and animals or birds
- BMPs for athletic fields and school grounds and pest-specific guidance available at www.maine.gov/schoolipm



Best Management Practices for Athletic Fields & School Grounds

#1 Goal—Reduce human pesticide exposure!

- Minimize pesticide use
- Maintain healthy plants
- Choose pest resistant plant varieties
- Apply spot treatments whenever possible
- Choose products proven to be effective at low application rates
- Choose products that leave little or no residue
- Apply when school is not in session or over extended vacations
- Keep people off treated areas for as long as possible
- Check product label for minimum reentry time

Other Key Points for Maintaining Quality Grounds and Reducing Risks

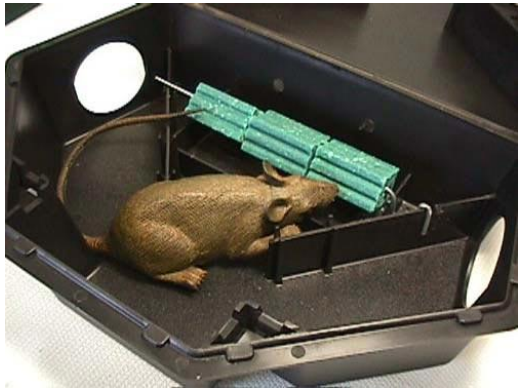
- Maintain good communication between staff and contractors involved in grounds maintenance and the IPM coordinator
- Emphasize practices that improve turf density and help minimize need for pesticides
- Identify pests specifically and confirm a pest exceeds threshold levels before authorizing any

Schools are Required to Use IPM to Prevent and Manage Pests

- Before pesticides may be used, the school must:
  - Monitor for pests
  - Identify pests
  - Assess & document pest severity
  - Use non-pesticide control measures such as sanitation, maintenance, barriers (such as door sweeps and screens), mechanical controls (such as mouse traps and weed-whackers) whenever feasible and effective.

Pesticide Choice

- When pesticides must be used, lowest risk treatments available must be chosen
- Low risk = low exposure, low toxicity and/or fewer applications required



No recommendations or endorsements intended

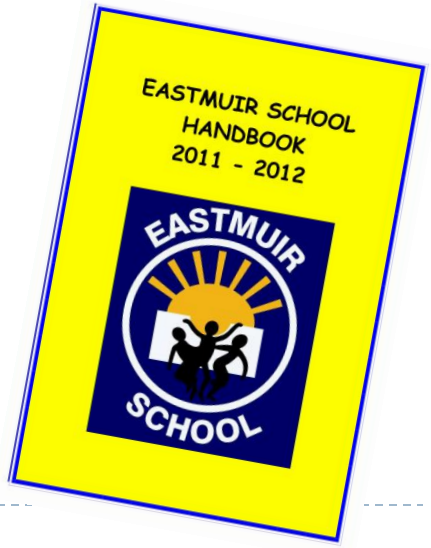
School Pesticide Regulations were Recently Amended (effective Sept. 1, 2013)

New School Requirements:

1. IPM Coordinator must keep a Pest Management Activity Log
2. IPM Coordinator must pre-approve each pesticide application by signing the pest management log

New Requirements (cont.)

3. Annually report IPM Coordinator's name and contact information to Department of Education or Board of Pesticides Control
4. Ensure IPM Coordinator completes mandatory training
5. Publish annual IPM notice in student/parent and staff handbooks



Amended (2013) School Pesticide Regulations

Schools are still required to:

- Adopt an IPM Policy
- Appoint an IPM Coordinator
- Notify parents & staff and post signs <u>before</u> higher risk pesticide applications
- Use IPM to prevent and manage pests

As the IPM Coordinator, You are Responsible for:

- Ensuring your school(s) use IPM practices consistent with your IPM policy
- Coordinating all pest monitoring, prevention, and management activities including any pesticide applications
- Authorizing (with your signature) each pesticide application (unless exempted)
- Notifying parents, guardians and staff, and ensuring signs are posted, before pesticides are applied (unless exempted)
- Maintaining an up-to-date Pest Management Activity Log and making it, and your IPM policy, available upon parent, guardian or staff request
- Completing required training

The IPM Coordinator Keys to Success

- Communicate
  - Everyone has a part in IPM
    - Reporting pests
    - Setting and checking traps, baits
    - Proper cleaning and maintenance
    - Making sure all required notices are given
- Record
  - Use a Pest Management Activity Log
    - Keeps you and outside contractors up to date
    - The rules require thorough records
- Approve
  - No pesticide applications allowed unless approved by the IPM Coordinator

Pest Management Activity Log

- Application records must include
  - date, time and location
  - trade name and EPA registration number of pesticide applied
  - applicator company name, and
  - name and license number of applicator
- If pesticide product has no EPA registration number (reduced risk products) then must have copy of product label

Download sample pesticide application log page at www.maine.gov/schoolipm

Pest Management Activity Log
Pesticide Application

Site_____(can be building, room, field, playground, etc)

Application Number from Monitoring/IPM page _____

1) What is the pest? How was the pest identified?

2) How was it determined that a pesticide application was necessary? Include information about the safety, economic or aesthetic threshold reached (see chapter 27 section 5C)

3)Application information:
Date/Time Applicator Name

Pest Management Activity Log Records

- Sample log pages available at www.maine.gov/schoolipm
- Keep records for 2 years
  - Pest monitoring records
  - Documentation of IPM steps taken
  - Pesticide authorization records
  - Notification records
  - Pesticide application records
  - Copies of labels for reduced risk pesticides

Pest Management Activity Log
Monitoring/IPM

Site_____(can be building, room, field, playground, etc)

Date/ Time	Pest(s) or Evidence Seen/ Extent of Infestation	Specific Location (under sink, west goal soccer field, etc.)	By Whom	Company	IPM Steps Taken*	A N

IPM Coordinator Must Pre-approve any Pesticide Application

- Indicate authorization by signing an entry on the Pest Management Activity Log on or before the date of minimum notification requirements.
- For wasp/hornet/yellow jacket control, can authorize and sign just before pesticide application

3

Pest Management Activity Log
Page 3—Pesticide Application

Use this page when Pesticide Applications are necessary. Use the chart to determine what type of notification and/or signage is required. The Reference number should connect to the last column on Page 1—Monitoring/IPM.

Site_____(can be building, room, field, playground, etc)

Reference Number from Monitoring/IPM page _____

1) What is the pest? How was the pest identified?

2) How was it determined that a pesticide application was necessary? Include information about the safety, economic or aesthetic threshold reached (see chapter 27 section 5C)

3) Application information:
Date/Time _____ Applicator Name _____

Product Name _____ Applicator License # _____

EPA Reg # _____ Company _____

Specific Location (under sink, west goal soccer field, etc) _____

4) Identify the type of application from the chart and continue to the required sections below.

Check one	*See BPC Chapter 27 Section 3 for details about specific pesticide applications*	**IPM coordinator authorization**	**5 day notice to parents, guardians, staff**	**Signs posted 2 days prior to application**
	INDOOR			
	General use antimicrobial products for cleaning	NA	NA	NA
	Paints, stains or wood preservatives	NA	NA	NA
	for control of stinging or biting insects	required (go to 5)	NA	NA
	injected into cracks, crevices or wall voids	NA	NA	NA
	bait blocks, gels, pastes, granular and pelletized materials in areas inaccessible to students	NA	NA	NA
	indoor application with no re-entry or restricted entry interval, but entry is restricted for 24 hours	NA	NA	NA
	mosquito control in the event of arbovirus positives as defined in Section 3C	NA	NA	required (go to 7)
	in facilities used for agricultural or horticultural education (see chapter 27 section 3D)	NA	NA	required (go to 7)
	Any other applications made while school **is not** in session*	required (go to 5)	NA	required (go to 7)
	Any other application made while school **is** in session*	required (go to 5)	required (go to 6)	required (go to 7)
	OUTDOOR			
	Any application made while school **is not** in session*	required (go to 5)	NA	required (go to 7)
	Any application made while school **is** in session*	required (go to 5)	required (go to 6)	required (go to 7)

(Use the chart above to determine which of the following are required. For further clarification consult BPC Chapter 27)

5) Authorization by IPM coordinator _____
signature date

6) Date notification sent to parents, guardians and staff: _____

7) Date and locations of signs posted: _____

These applications Do NOT Require Prior Authorization by IPM Coordinator

- Routine disinfection
- Paints, stains and wood preservatives
- Baits, gels, pastes, injections into crack, crevice or wall void
- Mosquito control when Maine CDC has identified arbovirus-positive animals in the area.
- Pesticides used to manage agricultural or horticultural crops in areas not normally used by the general school population

Quiz: Which of the following is **NOT** required to be recorded in the Pest Management Activity Logbook?

a) Records of each pesticide application showing prior authorization by the IPM Coordinator and details about why, where, how and what pesticide was used

b) Pest monitoring records such as mouse trapping records, pest sighting records, and pest inspection reports from contracted pest control company

c) MSDS and labels for all disinfectants used in the school(s)

d) Copies of labels of any pesticides used that do not have an EPA registration number

See answers on next slide

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a) Records of each pesticide application showing prior authorization by the IPM Coordinator and details about why, where, how and what pesticide was used

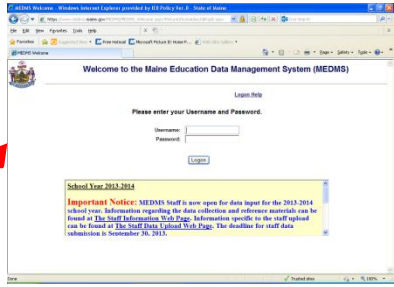
b) Pest monitoring records such as mouse trapping records, pest sighting records, and pest inspection reports from contracted pest control company

c) MSDS and labels for all disinfectants used in the school(s)

d) Copies of labels of any pesticides used that do not have an EPA registration number

Right again! c). disinfectants are exempt from all pesticide record-keeping, licensing and notification requirements, although you'll still want the MSDS with your chemical safety records.

All School Units are Required to Report the Name and Contact Information of the IPM Coordinator Annually by Sept. 1



- Public School Units:
  - Report using Department of Education MEDMS website if possible: www.medms.maine.gov/MEDMS/
  - Alternatively, e-mail school unit name, and name, e-mail address and phone of IPM Coordinator to pesticides@maine.gov or call 207-287-2731
- Private Schools:
  - e-mail school name, and name, e-mail address and phone of IPM Coordinator to pesticides@maine.gov or call 207-287-2731

IPM Coordinator must Complete all of these Trainings:

- Introduction to IPM (this module) by Sept 1, 2013 or within first month of appointment
- Comprehensive IPM Training Module (or approved workshop) by Sept 1, 2014 or within one year of appointment
- Annually obtain at least one hour of BPC-approved continuing education
- Find workshop announcements and training modules at www.maine.gov/schoolipm

Annual IPM Notice Must be Published in Student/Parent and Staff Handbooks

Must Include the following statements and information:

1. Statement that your school(s) have adopted an IPM policy and where it can be viewed
2. Statement that pesticides may be applied
3. Statement that notices will be given before higher risk pesticide applications
4. Contact information for the IPM Coordinator
5. Statement that a Pest Management Activity Log is kept and how to view it
6. Where a copy of the Maine School IPM regulation (Chapter 27) is available for review

- Download sample notice at www.maine.gov/schoolipm

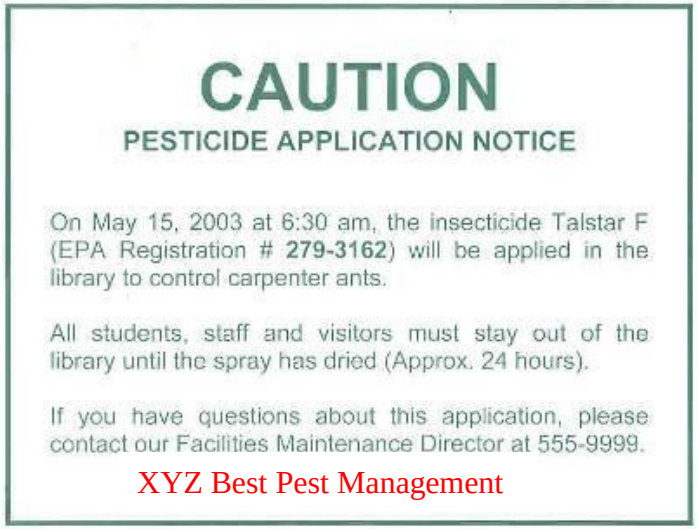
Some pesticide applications require advance notice

- Higher risk applications made while school is in session require a 5-day notice to parents/guardians and staff
- Use the sample Pest Management Activity Log and the rule to determine whether notice is required
- Note: 5-day notice is NOT required for applications made during week-long or summer vacations (because school is not considered in session)

Signs Required for Pesticide Applications

- All year round, (vacations included) signs must be posted 2 working days before and left up for 48 hours after application at:
  - Main entrance to treated area <u>and</u>
  - Central communication center (such as bulletin board next to main office)
  - Sample signs available at www.maine.gov/schoolipm

Indoor sign


CAUTION

PESTICIDE APPLICATION NOTICE

On May 15, 2003 at 6:30 am, the insecticide Talstar F (EPA Registration # **279-3162**) will be applied in the library to control carpenter ants.

All students, staff and visitors must stay out of the library until the spray has dried (Approx. 24 hours).

If you have questions about this application, please contact our Facilities Maintenance Director at 555-9999.

XYZ Best Pest Management

Outdoor sign

4 x 5 inches min

On back, must add date and time of application and when to remove sign

- $8^{1/2}$ x 11 inches min

Pesticide Uses Exempt from 5-day Advance Notice and 2-day Advance Signage

- Pesticide baits (such as mouse, rat, cockroach, and ant baits) placed in location inaccessible to students
- Ready-to-use wasp spray when urgently needed to kill a nest of wasps, hornets, or yellowjackets
- Repellents used for personal protection

No recommendations or endorsements intended

Pesticide Uses Exempt from 5-day Advance Notice and 2-day Advance Signage (cont.)

- Disinfectants used for routine cleaning
- Paints
- Pesticides injected into cracks, crevices or wall voids
- Indoor application of a pesticide with no re-entry interval specified on the label but entry to the treated area is restricted for at least 48 hours.

Pesticide Uses Exempt from 5-day Advance Notice and 2-day Advance Signage (cont.)

- Pesticides used on agricultural or horticultural crops in areas not normally used by the general school population however,
  - Parents, staff and students using those areas must be informed about the potential for exposure, and
  - students must be trained as Agricultural Workers under the EPA Worker Protection Standard

Pesticide Uses Exempt from 5-day Advance Notice and 2-day Advance Signage (cont.)

- Pesticides applied for mosquito or tick control when Maine Centers for Disease Control has identified arbovirus-positive animals in the area.

Quiz: Before a weed control application can be made during summer vacation period which of the following steps is NOT required?

a) IPM Coordinator determines that a pesticide application is needed and that other IPM methods (hand-pulling, flaming, weed-whacking) are not feasible
b) IPM Coordinator pre-authorizes this pesticide application to be made by a licensed applicator and records details about the application in the logbook
c) Parents and staff are notified 5 days in advance
d) Signs are posted at the area to be treated and on a communication bulletin board at the school's main office 2 working days in advance

See answers on next slide

Quiz: Before a weed control application can be made during summer vacation period which of the following steps is NOT required?

a) IPM Coordinator determines that a pesticide application is needed and that other IPM methods (hand-pulling, flaming, weed-whacking) are not feasible
b) IPM Coordinator pre-authorizes this pesticide application to be made by a licensed applicator and records details about the application in the logbook
c) Parents and staff are notified 5 days in advance
d) Signs are posted at the area to be treated and on a communication bulletin board at the school's main office 2 working days in advance

Right! c). 5-day advance notice to parents and staff is only required during the school year, not during vacations. The other three steps above ARE required though!

You Need a Special License to Use Pesticides on Properties Used by Schools

- Valid Commercial Pesticide Applicators License is required for most pesticide use in school buildings or on any properties used for school functions, including private or municipal ball fields used for school sports.
- If a school staff member applies pesticides, they must also have, or be directly supervised by someone with a valid Commercial Applicator license.

Maine Department of Agriculture
Board of Pesticides Control
28 State House Station
Augusta, ME 04333-0028
Commercial Pesticide Applicator License
Issued under Title 22 M.R.S.A. 258-A to:

CMA9000 / 3A 3B
JOHN DOE
GREEN COMPANY
999 MAIN ST
E NOWHERE ME 04499

Signature John Doe
Expires DEC 31, 2003

BOARD OF PESTICIDES CONTROL
Think First...
Spray Last!
STATE OF MAINE

How do I Get Licensed?

- Obtain study guides from University of Maine Pest Management Office (see http://umaine.edu/ipm/pesticide-safety/certification-manual-prices/ or call 800-287-0279
- Complete an application for commercial applicator exams http://www.maine.gov/agriculture/pesticides/pdf/commercial_exam_app.pdf
- Pass two written tests (commercial operator license) and an additional regulations and oral exam (commercial master license).
- Each location (school or unit) must first license a master level applicator

How do I Get Licensed?

- Master level applicators must complete 18 hours of approved continuing education credits over 6 years
- Operator level applicators must complete 12 hours over 6 years
- For More Information: www.maine.gov/agriculture/pesticides/cert/exams.htm
- Or call the Board of Pesticides Control: 207-287-2731.

However, You do NOT Need a Pesticide Applicator's License for:

- Disinfectants used in routine cleaning
- Emergency stinging insect control (wasps, hornets, bees)
- Repellents for personal protection from ticks and mosquitoes
- Non-powered application of wood preservative and other pesticide-containing paints/stains

No recommendations or endorsements intended

A Few Examples of Pesticide Applications Requiring a Commercial Applicator License:

- Weed control on lawns, athletic fields, fence rows, parking lots
- Insect or disease control on trees, shrubs, lawns or around the building
- Mosquito or tick control
- Rat and mouse baiting
- Bed bug, ant and fly control
- Grub control on lawns and athletic fields
- Ant 'cups' & other pesticide-containing devices
- Use of organic and 'natural' pesticides such as *Safer's Soap*, diatomaceous earth, mosquito dunks, vinegar, essential oils, etc.

No recommendations or endorsements intended

Quiz: Which of the following pesticide uses in a school **DO** require a licensed applicator?

a) Ant cups, baits or sprays
b) Wasp spray applied to nest of hornets on playground.
c) Weed sprays (such as *RoundUp*)
d) Disinfectants for duct cleaning & mold remediation
e) Mouse or rat baits
f) Grub control treatments

See answers on next slide

Quiz: Which of the following pesticide uses in a school **DO** require a licensed applicator?

a) Ant cups, baits or sprays
b) Wasp spray applied to nest of hornets on playground.
c) Weed sprays (such as *RoundUp*)
d) Disinfectants for duct cleaning & mold remediation
e) Mouse or rat baits
f) Grub control treatments

Correct! All of the above uses require a commercial pesticide applicator's license <u>except</u> for 2) wasp sprays. Unlicensed school staff can apply wasp spray to a wasp (or hornet or yellowjacket) nest if its location poses a stinging threat to school occupants and visitors. All other uses of pesticides listed above require a license.

If Contracting for Pest Control Services:

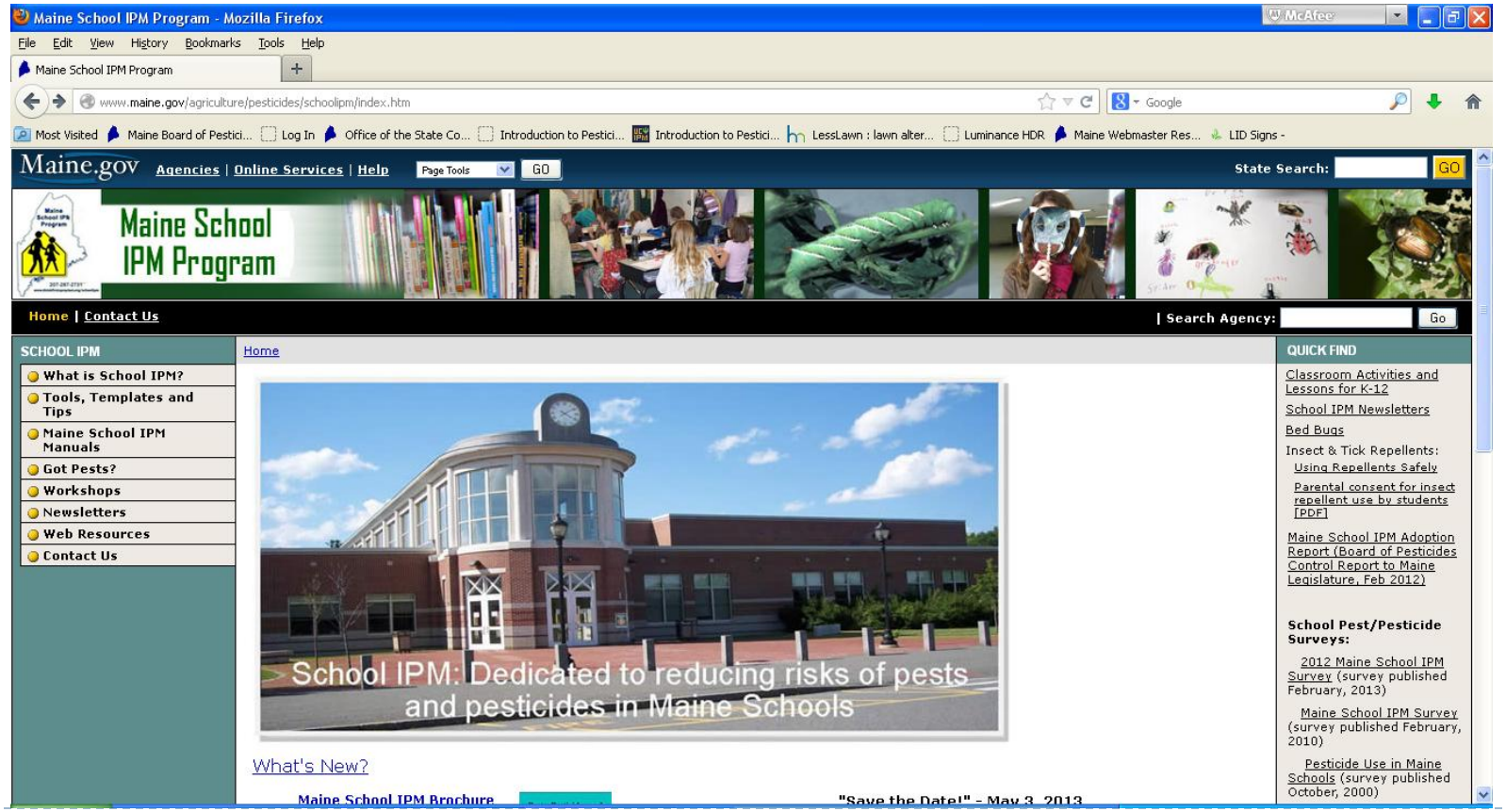
- Develop a written IPM contract (sample contract available at www.maine.gov/schoolipm
- Specify how contractor will:
  - Inspect and monitor for pests
  - make recommendations for sanitation, maintenance, prevention.
  - Use pesticides only where and when there is a demonstrated need and a pest identified
  - Use least-risk methods available
- Pesticides must NOT be applied on regular basis or as a preventative.

New requirements for commercial applicators

- Commercial applicators must get prior authorization for high risk applications no more than 10 days prior to application
- Must provide application information to the IPM coordinator to include in Pest Management Log within one business day of each application
- Must inform IPM Coordinator about any pest monitoring activity and results and record in the log book.

Forms, Templates, Regulations, Guidance, and More Available at:

- www.maine.gov/schoolipm



Help is available

- Education, consultation, referral 287-2731, gary.fish@maine.gov or kathy.murray@maine.gov
- Pest identification (1-800-287-0279) or ckirby@umext.maine.edu
- Other resources
  - How-to manuals, fact sheets, checklists, templates, sample IPM plan, workshop announcements
- www.maine.gov/schoolipm/

Maine School IPM Program

Now take the quiz and print your certificate

- To take the quiz now, click on the link below
- http://www.surveymonkey.com/s/2BT96G5
- After completing the quiz, be sure to print and sign your certificate and add it to you IPM Log Book.