USEPA/OECA/OC
State and Tribal Assistance Grants (STAG) 2000-2001
Massachusetts: Development and Evaluation of an IPM Compliance Assistance Program…in Schools, Daycare Centers and Childcare Programs
4th Quarter Report, 2001
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Quarterly Reporting Form for EPA's 2000 and 2001 Enforcement and Compliance Assurance Grants

Reporting Period: Year: 2001

☑ Jun-Dec (due last working day Jan)
☐ Jan-Mar (due last working day Apr)
☐ Apr-Jun (due last working day Jul)
☐ Jul-Sep (due last working day Oct)

I. Information

State and Department: Massachusetts Department of Food and Agriculture

Title of Project: Development and evaluation of an Integrated Pest Management compliance assistance program to protect the health of children in schools, daycare centers and child care programs

Grant Contact Person:
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Funds Received by State: $200,000 (June 4, 2001) :

EPA Regional Project Officer: Rob Koethe

Author of report: Gerard Kennedy and Reg Coler
Date Submitted: February 15, 2002

II Status of Project Milestones

Project Milestones	**Anticipated Completion Date**	**Completion Date**
1. Develop curricula and training materials to inform and instruct Massachusetts school personnel in the principles of IPM and the laws pertaining to the implementation of IPM in schools	Summer 2001	Completed
2. Conduct series of statewide training sessions for school personnel and pest management professionals in the principles of school IPM and its legal status in Massachusetts Series One Series Two	 Summer 2001 Fall 2001	 Completed Completed
3. Development of IPM Schools website **(a) General information about school IPM and the requirements under the Children's Protection Act** **(b) Creation of Interactive IPM Plan Development Tool**	 Fall 2001 November 2001	 Completed In Progress
PROJECT EVALUATION MEASURES ***OUTPUT MEASUREMENTS:***		
The numbers of persons attending educational sessions	Fall 2001	Completed
The number of "hits" on the website.	November 2001	In progress
The number of schools submitting plans will be a useful output measurement.	November 2001	Ongoing

OUTCOME MEASUREMENTS:		
Changes in Awareness and Understanding		
Workshop evaluation forms	Fall 2001	Completed
The numbers and types of schools accessing and interacting with the website to construct an individual IPM plan for their school. This information will feed directly into a database.	November 2001	In Progress
Types of schools submitting IPM plans	June 2003	In Progress
Changes in pesticides management practices		
Number of schools who develop and submit their IPM plan to the State.	Ongoing	In Progress
The number of schools who improve their understanding of pest management. Document of pest control procedures and quantification of pesticide use patterns for 12-24 schools (depending on availability and logistics) that will be adopting an IPM plan. In the second year, we will closely monitor pesticide use patterns and controls within those schools and compare the results to the previous year and to an additional 12-24 new sites.	June 2003	Under development

III. Status of Project Completion.
The project is on schedule to meet its target deadline of three years. The remaining two and a half years will involve the launch and promotion of the interactive website, continued educational workshops and development and implementation of an ongoing evaluation program.

IV Results:

1. The deadline for schools to submit their plans to the state was November 2001. Since the end of the year, plans have been submitted at an increasing rate. As of February 14, 2002, close to 1000 plans have been submitted. This represents less than 15% of all schools and daycares in the state. The plans are being analyzed for quality and type of facility.

2. Development of Informative Website – A significant amount of time was spent developing a website . (www.umass.edu/umext/schoolipm) which now serves to

disseminate School IPM information to facility representatives, pest management professionals (PMPs) and the general public. Aside from a *General* section which covers the topics of urban IPM, there are three additional sections *Parents*, *School Personnel*, and *Pest Management Professionals*

3. Development of an Interactive Website – this portion of the website will be used to provide schools with the mechanism to generate their own IPM plans. Initial demos of the interactive site, while effective, were thought to lead to overly generic plans. Subsequent refinements have led a site which can help schools develop useful plans which are more site specific. The site is in the final stages of development and is expected to be available to the public in the Spring of 2002.

4. The outreach training programs have consisted of a series of statewide training workshops held within the regional schools of Massachusetts. An outline of the training presentation and a factsheet used in the presentations are attached. These training forums, were scheduled during regular intervals from March through June of 2001 and in October and November. The presentations consisted of a formal presentation (available on CD to be mailed separately) and an onsite tour of the hosting school's facilities. The regularly scheduled "spring-time" School IPM Project workshops held throughout the state were attended by approximately 560 individuals representing 387 schools, daycare centers, school age childcare programs, or town members of the DPW or Boards of Health from ca. 120 (~33%) towns in the Commonwealth. For a list of towns represented please refer to the following website address: http://www.umass.edu/umext/schoolipm/school_ipm_attend.htm.

   Based upon responses from the workshop evaluations; 95% responded within the range of "Strongly Agreed" to "Agreed" that the presentations were clear and understandable; and again 95% responded similarly to the usefulness of all the information presented (see the attached documents which provide an outline of the presentations)

   An additional performance measure used in the workshops was to test the background knowledge of the audience before and after the workshops. Using the questionnaire on the following pages the audience was asked to answer four questions (two legal & two practical) before the presentation and then an additional four questions after the workshop. On average, the percentage of questions answered correctly before the workshop was 78% and after the workshop the percentage of correct answers increased 11 points to 89%.

UMASS EXTENSION

MASSACHUSETTS DEPARTMENT OF
FOOD & AGRICULTURE
Regulatory Services
Pesticide Bureau

TRAINING WORKSHOP EVALUATION FORM

	LEGAL ISSUES	**Before**	**After**
1.	Standard Written Notification is not necessary when spraying herbicides on a school parking lot to control weeds. True False		
2.	IPM programs must be established in a facility only when pest problems warrant it. True False		
3.	Any formulation or type of "indoor" pesticides may be used within a facility if the application is made according to the product label. True False		
4.	"Over the counter" non-restricted pesticides can be used in: schools, daycare centers and school age childcare programs by non-licensed personnel. True False		
5.	Pesticide application records: **(a)** Must be issued to all occupants of the facility, **(b)** Must be maintained for a period of no less than 1 year, **(c)** Must be made available to public upon request		
6.	By November, 1st of 2001, schools, daycare centers and school age childcare programs will be **required** to: **(a)** Know how to apply pesticides safely, **(b)** Stop using pesticides to control pests, **(c)** Practice integrated pest management, **(d)** Develop their own integrated pest management plan, **(e)** "c" and "d" **(f)** "a" through "d"		
7.	Chemical products that contain an EPA registration number are considered by Massachusetts Department of Food and Agriculture to be pesticides True False		
8.	Notification requirements for outdoor pesticide applications can be waived if the grounds and school remain unoccupied for a period of five days following the pesticide application. True False		
9.	Standard Written Notification as described by the Act Protecting Children and Families from Harmful Pesticides must be received at least how many working days before application? **(a)** 1 day, **(b)** 2 days, **(c)** 3 days, **(d)** 4 days		
10.	Since wasps and hornets are a potential risk to the inhabitants of a facility, the use of an over-the-counter pesticide designed specifically for these pests may be used by any unlicensed or uncertified applicator True False		

	IPM PRACTICES	**Before**	**After**
11.	Which statement is correct: **(a)** Integrated pest management is an effective, environmentally friendly approach to pest management that relies on a combination of commonsense practices, **(b)** A facility would be considered to be practicing integrated pest management if pesticides are applied according to product label instructions, **(c)** Integrated pest management is used only when pesticides are not available, **(d)** "a" and "b", **(e)** "a" through "c"		
12.	Select the option where both components listed are critical to the practice of integrated pest management. **(a)** Spray equipment maintenance and use of protective clothing, **(b)** Pest monitoring and pest identification, **(c)** Pest eradication and pest management, **(d)** Biological control and the elimination of pesticides		
13.	Integrated Pest Management consists of understanding and using multiple pest control practices to minimize or eliminate pest problems. True False		
14.	"Indoor" pests usually inhabit a structure because there are enough resources (food, water), and/or harborage (places to live) available to sustain the pest True False		
15.	When drafting an IPM plan, it is important to recognize that not all insects are pests. True False		
16.	Pesticides are one of many components that can be used in an integrated pest management program. True False		
17.	When practicing integrated pest management the best way to suppress pest populations is to first identify and use the proper pesticide that will effectively kill the pest. True False		
18.	Cultural control (reduction of: pest habitiats {places to live} and pest resources {food & water}) should be a primary practice of an indoor integrated pest management program True False		
19.	When practicing IPM, the first tactic used to control a pest is to safely place baits in the location where the pest activity is observed. True False		
20.	Mechanically excluding pests from entering a structure is considered a good integrated pest management practice. True False		

UMASS EXTENSION

MASSACHUSETTS DEPARTMENT OF
FOOD & AGRICULTURE
Regulatory Services
Pesticide Bureau

THE ACT PROTECTING CHILDREN AND FAMILIES FROM HARMFUL PESTICIDES

SYNOPSIS AND FACTSHEET

The Act Protecting Children and Families From Harmful Pesticides (Chapter 85 of the 2000 Massachusetts Acts) was passed by the Massachusetts Legislature and signed by the Governor. The goals of the act are to:

- Prevent unnecessary exposure of children to chemical pesticides
- Promote safer alternatives to pesticides
- Ensure that schools, daycare centers and school age child care programs notify employees, pupils or supervised children and their parents or guardians of pesticide applications
- Promote the use of Integrated Pest Management techniques to reduce the need to rely on chemical pesticides

I. WHO IS AFFECTED BY THE ACT?

- **Public** and **Private Schools** for preschool, elementary, middle or high school students.
- School Board members, administrators, staff, teachers, parents, custodians, food service workers, ground maintenance personnel, school nurses, pest control professionals, Boards of Health
- **Daycare Centers**
  "Day care center", any public or private facility operated on a regular basis whether known as a day nursery, nursery school, kindergarten, child play school, progressive school, child development center or preschool, or known under any other name, which receives children not of common parentage who are not more than six years of age, or who are not more than 21 years of age if such children have special needs, for nonresidential custody and care during part or all of the day separate from their parents.

  Daycare centers shall not include:
  any part of a public school system; any part of a private, organized educational system, unless the services of such system are primarily limited to kindergarten, nursery or related preschool services; periodic religious instruction classes conducted by a religious institution; a facility operated by a religious organization where children are cared for during short periods of time while persons responsible for such children are attending religious services; a ***family day care home****; an informal cooperative arrangement among neighbors or relatives; or the occasional care of children with or without compensation.*

  > **"Family day care home",** any private residence which on a regular basis, receives for temporary custody and care during part or all of the day, children under seven years of age or children under sixteen years of age if such children have special needs; provided, however, in either case, that the total number of children under sixteen in a family day care home shall not exceed six, including participating children living in the residence. Family day care home shall not mean a private residence used for an informal cooperative arrangement among neighbors or relatives, or the occasional care of children with or without compensation.

- **School Age Child Care Programs**
  "School age child care program", any public or private program or facility operated on a regular basis which provides supervised group care for children not of common parentage who are enrolled in kindergarten and are of sufficient age to enter first grade the following year, or an older child who is not more than 14 years of age, or not more than 21 years of age if such child has special needs. Such a program may operate before and after school and may also operate during school vacation and holidays.

  A school age childcare program shall not include:
  any part of a public school system; any part of a private, organized educational system, unless the services of such system are primarily limited to a school age day care program; periodic religious instruction classes conducted by a religious institution; a facility operated by a religious organization where children are cared for during short periods of time while persons responsible for such children are attending religious services; a family day care home; an informal cooperative arrangement among neighbors or relatives; or the occasional care of children with or without compensation.

II. WHAT DOES THE ACT REQUIRE?

The act is comprised of 17 sections.. Section 1 consists of the justification for this act. Sections 2-9 involve the definition of words or phrases used in the act. Section 10 pertains to utility companies. Section 11 of this act covers the restriction of indoor and outdoor pesticide applications, standard written notification, the posting of these notifications, and exceptions to the notification rule. Sections 12-16 cover information on the enforcement of this act; the penalties incurred if a school is found to be non-compliant; and a pesticide use reporting system. The final section (17) indicates November 1, 2000 as the date this act goes into effect.

Note: Although not part of this act, state law requires that NO person shall apply any pesticide in, on, or around structures or school grounds unless that person is a state-certified or- licensed pesticide applicator.

A. <u>As of November 1, 2000</u>

1. For Indoor Applications of Pesticides:

(i) Pesticides cannot be applied indoors while children are on the property, except for anti-microbial pesticides such as bleach; rodenticides placed in tamper resistant baits; insecticidal baits; ready-to-use dusts, gels, or powder formulations; termiticides in the presence of an active termite infection and only when non-chemical alternatives have been determined to be ineffective; and certain lower risk pesticides.

2. For Outdoor Applications of Pesticides:

(ii) Pesticides cannot be applied on the outdoor property while children are located in, on, or adjacent to the area of pesticide application.

(iii) When a pesticide is to be applied outdoors, the school administration, daycare center operator, or school child care program operator must ensure that employees pupils or supervised children and their guardians receive **standard written notification** at least two working days before pesticides are to be applied to the property. **Standard Written Notification** includes the following information:

- Approximate dates when the application shall commence and conclude;
- Specific location of the application;
- Product name, type and EPA Registration number of the pesticide;
- A Massachusetts Pesticide Bureau Fact Sheet;
- A description of the purpose of the application and
- A Massachusetts Pesticide Bureau approved statement describing ways to minimize exposure and precautions to be taken.

This information can be obtained from the pesticide applicator.

NOTE: While the act does not require this notification be made for indoor applications of pesticides, the Department of Food and Agriculture recommends that the notification requirements are followed for all indoor pesticide applications except in the case of anti-microbial pesticides such as bleach; rodenticides placed in tamper resistant baits; insecticidal baits; ready-to-use dusts, gels, or powder formulations; and certain lower risk pesticides.

(iv) Standard written notification must be posted in a common area of its facility at least two working days before and three days after the **outdoor** pesticide application. Treated areas will be posted with clear and conspicuous warning signs along the perimeter in accordance with regulations promulgated by the Department of Food and Agriculture governing indoor and outdoor pesticide applications at schools.

3. Records of Pesticide Applications

A written or electronic record of any pesticide application made at a school in the commonwealth shall be maintained on site for a period of not less than five years, and shall be made available to the public upon request.

B. <u>As of November 1, 2001</u>

1. For Indoor Applications of Pesticides:

(i) Only pesticides listed below can be applied in school buildings while children are on the school property.

- ❑ Anti-microbial pesticides
- ❑ Rodenticides placed in tamper resistant bait stations or placed in areas inaccessible to children and the general public
- ❑ Ready-to-use dust, powder or gel formulations of insecticide applied in areas inaccessible to children and the general public
- ❑ Insecticidal baits placed in tamper resistant bait stations or in areas inaccessible to children and the general public
- ❑ Termiticides used only in the presence of an active termite infestation and when non-chemical pesticide alternatives have been determined to be ineffective
- ❑ Pesticides classified by the United States Environmental Protection Agency as exempt materials under 40 CFR 152.25.

2. For Outdoor Applications of Pesticides:

(ii) Only the following pesticide products can be used on outdoor grounds:

- ❑ Pesticides used as part of the facility's IPM Plan;
- ❑ Pesticides which are not classified as known, likely or probable human carcinogens;
- ❑ Pesticides which do not contain any inert ingredients of toxicological concern; and
- ❑ Pesticides that are applied for reasons other than purely aesthetic purposes. *(HOWEVER, a municipality can decide to allow the use of pesticides for aesthetic purposes on outdoor grounds).*

3. For Indoor and Outdoor Applications of Pesticides

(iii) All schools, daycare centers and school age daycare programs must develop and implement an Integrated Pest Management plan.

III. WHAT DO YOU DO IN THE EVENT OF A HEALTH EMERGENCY?

Even in an emergency situation, the school must issue the standard written notification as described immediately prior to or, if necessary, immediately following the emergency application. Similarly, the school must ensure that conspicuous warning signs are posted near the treatment site prior to, and for at least 72 hours after application. A record of the emergency event, including the identification of the cause and the actions taken to address it, shall be maintained as a part of the records.

IV. EXEMPTIONS

A. <u>Five day rule</u>

A school is exempt from this notification policy if the facilities are not scheduled to be open for at least five consecutive days after the pesticide application date.

B. <u>Vocational / Technical Schools</u>

Pesticide applications made as a part of a supervised training program at any of the state-aided and approved vocational-technical or agricultural schools in the commonwealth are not subject to the rules of this act.

V. WHAT IS AN INTEGRATED PEST MANAGEMENT (IPM)?

Integrated Pest Management, or *IPM*, is an approach to pest control that relies on a combination of common sense practices for preventing and controlling pests. In an IPM approach all possible pest management options, not just pesticides, are considered. Considerable effort is also put towards preventing pest problems by controlling conditions in buildings, which may attract and support pests.

Integrated Pest Management de-emphasizes the use of pesticides by first identifying the cause of the pest infestation.

By reducing the problem by reducing pests' resources (food, water and shelter) and other non-chemical controls, such as caulking cracks and crevices, IPM addresses the *cause* of the problem not just the *symptoms.* Chemical control measures, such as poison baits placed in areas inaccessible to children, or boric acid dusts applied to cracks, crevices and wall voids should be used only as a last resort.

VI. WHAT IS AN INTEGRATED PEST MANAGEMENT PLAN?

The integrated pest management plan is a paper document which organizes all the IPM practices used by the school or daycare center. These practices include procedures for record keeping, notification and communication. The IPM plan serves as a reference for pest control contractors, school staff and others to assure implementation and compliance with the school's IPM policy.

VII. WHERE CAN SCHOOLS GET MORE INFORMATION ?

Efforts being made to help schools, daycare centers and school age childcare programs implement this act:

The Massachusetts Department of Food and Agriculture, in cooperation with the University of Massachusetts, Extension Integrated Pest Management Program, is addressing the issues of the Act Protecting Children and Families from Harmful Pesticides. Their efforts include developing training materials, training sessions, public presentations and a comprehensive website for school administrators, pest management professionals and the general public.

Individuals interested in this act can access the Massachusetts Department of Food and Agriculture website: http://www.massdfa.org/cpa/cpa.htm. This site presents a link to the act as presented in the 2000 Massachusetts Legislative Session (Chapter 85) as well as an overview of the act, fact sheets, and links to other School IPM websites. An additional School IPM resource list also provided by the Massachusetts Integrated Pest Management Council http://www.massdfa.org/ipm_resources_schools.htm

The complete Massachusetts School IPM Project website which includes information pertaining to this act, the theories and practices of IPM and generic IPM plans can be accessed at: http://www.umass.edu/umext/schoolipm

The Department of Education web site at www.doe.mass.us provides related information. Regular updates will appear in the Department of Education newsletters.

Contact information:

Questions regarding School IPM training programs and practices should be directed to:

Dr. Reginald Coler
UMass Extension School IPM Project
Ag. Engineering Bldg
University of Massachusetts
Amherst, MA 01003

(413) 577-3976

e-mail: rcoler@ent.umass.edu

Questions regarding legal aspects of the act and the general use of pesticides should be directed to:

Mr. John Kenney
Massachusetts Department of Food & Agriculture
251 Causeway St., Suite 500
Boston, MA 02114

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MASSACHUSETTS DEPARTMENT OF
FOOD & AGRICULTURE
Regulatory Services
Pesticide Bureau

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CONTACT INFORMATION

Training workshops
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Legal issues
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Phone:
(617) 626-1781 (617) 626-1783

Website:
www.state.ma.us/dfa/cpa/cpa.htm

WHAT IS IPM?

Massachusetts IPM Council's definition:

IPM is a systematic strategy for managing pests which considers prevention, avoidance, monitoring and suppression. Where chemical pesticides are necessary, a preference is given to materials and methods which maximize public safety and reduce environmental risk.

In brief >> *Integrated pest management is an effective, environmentally friendly approach to pest management that relies on a combination of commonsense practices.*

THE SCHOOL COMMUNITY NEEDS A SAFE LEARNING ENVIRONMENT

- Security – with respect to invading pests
- Structural integrity – to avoid injuries
- Comfortable atmosphere – not too hot or cold
- Sanitary/orderly facilities – clean and uncluttered
- Poison free – germs, drugs, chemicals

MASSACHUSETTS SCHOOL IPM

- Following a nationwide trend
- Taking the lead in legislating changes: the Act Protecting Children and Families from Harmful Pesticides.
- Reaches 6,500 facilities

STATES INVOLVED WITH SCHOOL IPM PROGRAMS

- States with School IPM Programs (7) - States with School IPM Legislation (12)

WHY SCHOOL IPM

- Enhance Health
  Suppress pests that may cause allergies or carry disease pathogens, Reduce human exposure to pesticides, Reduce environmental pollution
- Economically Beneficial
  Reduce pest damage to food, class supplies, school structure and grounds, Reduce unnecessary pesticide applications, Improve staff and student attendance
- Legalities and Liabilities
  The Boxer Amendment No. 2880, School Environment Protection Act (SEPA), Reduce liability concerning student exposure to pests and pesticides, Act Protecting Children and Families from Harmful Pesticides

CHAPTER 85 - ACT PROTECTING CHILDREN AND FAMILIES FROM HARMFUL PESTICIDES

- School Requirements
  Restrictions on outdoor pesticide applications
  School notification requirements
  Pesticide application records
  Restriction of pesticide products used outdoors
  Restriction of pesticide products used indoors
  Schools must adopt IPM and develop their own plan

JILL WARREN, STATE PESTICIDE INSPECTOR
MASSACHUSETTS DEPT. OF FOOD & AGRICULTURE, PESTICIDE BUREAU

PESTICIDE BUREAU

- Held within the Department of Food and Agriculture
- State lead agency responsible for the regulation of pesticide use in Massachusetts.
  - Licensing of pesticide applicators
  - Registration of pesticide products in Mass.
  - Enforce pesticide use and misuse

WHAT IS A PESTICIDE?

- Pesticides are substances or mixtures of substances that prevent, destroy, repel or mitigate pests, or defoliate, desiccate or regulate plants.
  - Insecticides (such as bug spray)
  - Herbicides (such as weed killer)
  - Fungicides (such as chemicals used to treat mildew)
  - Rodenticides (rat poisons & baits)
  - Anti-microbial (such as bleach)

WHICH SCHOOLS ARE COVERED?

- Public & Private Schools
- Day Care Centers
- School Age Child Care Programs

REQUIREMENTS

- Pre-notification and posting requirements
- Limits pesticide use in schools (indoor & outdoor)
- Development of a Integrated Pest Management Plan

PESTICIDE USE

- Indoor Pesticide Applications
- Outdoor Pesticide Applications

INDOOR PESTICIDE USE

- The only pesticides eligible for use indoors without requiring prior notification will be
  - anti-microbial pesticides such as bleach;
  - rodenticides placed in tamper resistant bait stations
  - insecticidal baits. Ready to use dust and powder formulations
  - Termiticides in the presence of an active termite infestation (when non-chemical alternatives have been determined to be ineffective).

PRE-NOTIFICATION (OUTDOOR)

- When a pesticide is to be applied outdoors, standard written notification must be sent to employees, students and supervised children and their guardians.
- The following must be included within the notification package.
  - The Pesticide Bureau's Consumer Information Bulletin.
  - Pesticide Bureau Standard Written notification form (provided by PMP); and
  - Pesticide fact sheets from EXTOXNET

OUTDOOR PESTICIDE USE

- Pesticides cannot be applied on the outdoor school property while children are located in, on, or adjacent to the area of pesticide application.
- A pesticide application may occur on school property while children are located in, on, or adjacent to the area to be treated, only if the following criteria are met
  - The area to be treated must be at least 150 feet away from the area the children are located in, on, or adjacent to
  - Children can not be scheduled to be on the area that would be treated for at least 8 hours after the application
  - The area to be treated must have posting around the perimeter

- Standard Written Notification must be sent
- Standard Written Notification shall be provided at all times except during periods when classes/activities are not scheduled for at least 5 consecutive days after the application
- The only pesticide products which can be used on outdoor grounds includes:
  - Pesticides used as part of the facilities IPM Plan;
  - Pesticides which are not classified as known likely or probable human carcinogens.
  - Pesticides which do not contain any inert ingredients of toxicological concern; and
  - Pesticides that are applied for reasons other than purely aesthetic purposes.

OUTDOOR AND INDOOR PESTICIDE APPLICATIONS,

- November 1, 2000
  - A written or electronic record of all pesticide applications must be maintained on site.

EMERGENCY WAIVERS

- A single-use waiver may be issued to a school, day care center, or a school age child care program
- A board of health agent, public health agent or the Department shall determine if such a waiver is warranted based on the following
  - The pest situation poses an immediate threat to human health
  - There are no viable alternatives to the use of chemical pesticides
- As a condition of approval, a school official or operator of a daycare center or school age child care program shall commit to identifying and addressing the pest problem in order to prevent future outbreaks
- Signs must be posted near the site of the application prior to, and for at least 72 hours after the treatment
- Standard Written Notification must be provided immediately prior to or, if necessary, immediately following the emergency treatment

INTEGRATED PEST MANAGEMENT (IPM) PLAN

As of November 1, 2001 schools, daycare centers and school age child care programs must develop and implement an IPM plan.

- One must be filed with the Pesticide Bureau; and
- One must be kept on site (available to the public upon request

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THE IPM PROGRAM & PLAN

IMPLEMENTING A SCHOOL IPM PLAN

The purpose of the pest management plan is to consolidate all of the information pertaining to a school's pest management practices into a paper document.**WHO IMPLEMENTS THE SCHOOL IPM PLAN**

- Administrative Tasks
  - *Step #1 - Appoint an IPM Committee*
- IPM Committee Tasks
  - *Step # 2 - Develop IPM plan*
  - *Step # 3 - Evaluate progress of the IPM program*

Other committee tasks not related to developing the IPM plan

- *Facilitate communication within the school about IPM practices*
- *Assist in development of contract specifications*
- *Provide notification to parents about pesticide use*

IPM PLAN COMPONENTS

- Create Policy Statement declaration of school's pest management policy
- Review Pest Management Roles - School Community & IPM Coordinator
- Set-up pest management Objectives and Thresholds

- Apply IPM strategies
  - Monitoring, Identification, Physical control, Mechanical control, Biological control, Chemical control, Even the option of "no action" will be considered when deciding on a pest management strategy.
- Evaluation and Plan Maintenance

STRUCTURAL PESTS

- Ants, Cockroaches, Clothes Moths and Carpet Beetles Fleas, Flies, Head Lice, Rats and Mice, Scorpions, Silverfish, Firebrats, Booklice, Spiders, Wood Damaging Pests, Weeds, Yellowjackets and Hornets.

TURF DISEASES

- Dollar spot, Fairy Ring, Necrotic ring spot, Leafspot and Melting-out

TURF INSECTS

- White grubs, Cutworms, Chinch bugs, Webworms, Billbugs

STICKY MONITORING STATIONS

FORMS AVAILABLE FROM SCHOOL IPM PROJECT WEBSITE

PHYSICAL CONTROL

CHEMICAL CONTROL

MINIMUM IMPLEMENTATION STANDARDS

- The school administration must be aware of their pest management program.
- Personnel responsible for the cultural (sanitation) and mechanical (exclusion) components of IPM must be trained to incorporate these techniques into existing job responsibilities .
- Personnel responsible for applying pesticides must be certified licensed applicators instructed to treat as needed and based on pest monitoring.

REASONS FOR FAILED IMPLEMENTATION

- Not understanding the technical situation | Too much paper work | Over reliance on written material | Not understanding the economic situation | Lack of motivation | Those responsible for changing behavior have no authority

REASONS FOR SUCCESSFUL IPM PROGRAMS

- Administrative commitment based on "it's the right thing to do" | Designated authority to IPM coordinator | Empower the school community through education | Technical confidence provided by training AND outreach resources | Confirmation to the community that right decision was made ($$, pests, risk reduction)

SCHOOL IPM WEBSITE

Programs, General, Parents, School Activities, Pest Mgmt Prof.

BEFORE SCHOOL IPM

- 71% of the schools report pesticides use
  - 36% of schools (54% in Boston) apply pesticides to prevent pest infestations
  - Most commonly sprayed area is the cafeteria (41%)
- 40% custodians reported to apply pesticides
  - 7% of principals reported that custodians applying pesticides were appropriately licensed

WHY CHANGE WHAT SEEMS TO WORK?

- It doesn't
- IPM is the "right thing to do"
- Education is what schools are about
- Minimal effort – maximum return
- Lead instead of follow