

DON'T BE A PEST!

F925

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OBJECTIVES

1. Understand why facilities are an attractive setting to many pests.
2. Integrated Pest Management (IPM) plan that stresses ongoing sanitation, pest monitoring and prevention.
3. To present an effective pest control process to prevent illness in residents.



F925

Maintain an effective pest control program so that the facility is free of pests and rodents.

- §483.90(i)(4) Maintain an effective pest control program so that the facility is free of pests and rodents.

GUIDANCE: §483.90(i)(4)

- An “**effective pest control program**” is defined as measures to eradicate and contain common household pests (e.g., bed bugs, lice, roaches, ants, mosquitoes, flies, mice, and rats).

PROCEDURES: §483.90(i)(4)

- As part of the overall review of the facility, look for signs of vermin. Evidence of pest infestation in a particular space is an indicator of noncompliance.



Pest Prevention and Management

Bed bugs:

- Live on the blood of animals or humans causing itchy bites and generally irritating their human hosts.
- After feeding, their bodies swell and are a reddish color.
- Active generally at night and typically bite people while they are sleeping.
- Feed from **three to 10 minutes** to become engorged and then crawl away unnoticed.



Unlike most public health pests, bed bugs are not known to transmit or spread disease.

Let's talk about common pest found in Nursing Facilities...



Flies

Millions of microorganisms may grow in a single fly's gut, whereas a half-billion more horde over its body and legs.

Flies spread diseases because they travel from feces, decaying animals and garbage to our exposed foods.



Every time a fly lands, it sloughs off thousands of microbes which can cause serious illnesses like:

- Bloodstream infections
- Diarrhea
- Food poisoning
- Meningitis



Fruit Flies/Gnats

- These pest are found any where food is allowed to rot and ferment.
- Fruit flies lay about **500 eggs** and will hatch in as little as **24-30 hours**.
- Gnat lifespan is one week, and they can lay up to two hundred eggs in that time
- They breed in drains, garbage disposals, empty bottles and cans, trash containers, mops and cleaning rags!



BOTH have the potential to contaminate food with bacteria and other disease-producing organisms.



Bed Bugs, Gnats and Flies, Oh My!

- Surveyors' Observations

Rodents/Mice

A close-up photograph of two mice on a wooden surface. The mouse in the foreground is looking towards the camera, while the one behind it is slightly out of focus. The background is a blurred wooden wall.

- **Clean Environment**


- Trash Area
- Kitchen Focus
- Resident Room Clutter

- **Regular Inspection of Entry Points**

- Inspect for Droppings
- Complete closure-Doors Not Propped-Repair Damage (Mice can fit in the smallest areas.)
- Spackle, Caulk, Weather Seal, Patch, Complete Repair

- **Types of Control**

- Bait Stations
- Ultrasonic Pest Repeller
- Pest Control Services (Follow Recommendations)
- Peppermint Oil (Scent Sensitive Residents)



Importance of Control and Prevention

- Destructive and can spread disease
- Occurrences of the Hantavirus transmitted to humans
- Carriers of Lyme Disease

Bat Control

• Bat-proofing Structures

- After bats have left for their hibernation periods in the autumn.
- Attempting to bat-proof at any other time raises the possibility of boxing in babies who will then look for other parts of the facility to escape to.
- At dusk, you should inspect the exterior of the facility and observe where bats may enter and exit.
- Common access points include attic louvers and under fascia boards.




Active Infestations

- Recommended to contact licensed pest professionals
- Problem often cannot be controlled with do-it-yourself measures
- Many states also have laws protecting bat species and removal may require a special license or approval.
- Infectious Disease- Rabies transmission risk is most common
- An accumulation of droppings should be professionally decontaminated and removed.
 - Fungi that harbor in bat droppings can cause a lung disease known as histoplasmosis
 - Their waste also attracts other pests like cockroaches, and the smell of their feces encourages other bats to invade the home.
 - Important to treat the area for bat mites and bat bugs, which will bite humans.

Roaches

- **Professional Pest Control**
 - Cockroaches are better at hiding than you are at finding them
 - Eggs are naturally protected from many over-the-counter insecticides and are elusive when it comes to cockroach traps
 - Without special equipment, materials and know-how, pest control for cockroaches can be a losing battle





Cockroaches often taint food with E. coli and Salmonella bacteria, so it's not safe to ignore these pests.

Exposure to cockroach feces and the body parts of dead roaches over time can even trigger allergies and asthma.

Importance of sealing off points of entry as with Bats and Mice/Rats.

• Concerns Leading Investigation

- Resident Complaints of Insects/Mice/Bats
- Signs of Droppings-Observed Wall Breaches
- Sightings of Pests During Investigations/Inspection
- Infection Surveillance- Infections suggestive of pest origin

• Evidence to Support Compliance

- Pest Control Logs
- Acknowledgement of Issue and Efforts to Mitigate
- Follow Suggested Professional Recommendations



Nursing home kitchens in 'horrible' condition endanger the elderly, advocates say

An investigation found food safety problems at nursing homes nationwide.



Bowed out Backsplash: Centipede Home

* Use solid surface sinks or keep laminate edges caulked to seal any potential pathways for insects and prevent moisture from penetrating substrate.



The Solution: Integrated Pest Management IPM

IPM MADE SIMPLE

1. KEEP PESTS OUT
2. KEEP THINGS "PEST CLEAN"
3. STORE FOOD IN PLASTIC CONTAINERS
4. GET RID OF CLUTTER
5. GET RID OF CARDBOARD
6. MONITOR FOR PESTS
7. ADOPT IPM



WHAT DO PESTS NEED?

1. FOOD
2. WATER
3. WARMTH
4. A HIDING PLACE
5. A WAY IN

What is IPM?

Integrated pest management (IPM) is a "pest management system that uses all suitable techniques in a total management system, to prevent pests from reaching unacceptable levels, or to reduce existing pest populations to acceptable levels."

Purpose: To manage pests with the least possible impact on people, property, and the environment.

The Michigan Natural Resources and Environmental Protection Act, Act 451 of 1994, as amended, and Regulation 637 require that before a pesticide application is made in schools, public buildings, day care centers and health care facilities, two things must take place:

1. A pesticide applicator must attend a Michigan Department of Agriculture & Rural Development approved IPM Training Program.
2. A verifiable IPM Program must be in place for each building.



Who Needs to Comply?

Anyone making a pesticide application in:

A. School

- Public Schools
- Private schools
- Charter schools
- Parochial schools
- Any school grades K-12



B. Health Care Facility

A facility which is not a private home, where people may stay one or more nights and receive medical care, such as a nursing home or hospital.



C. Public Building

A building that is owned or operated by a federal, state, or local government, including public universities.

D. Day Care Center

A facility, other than a private residence receiving one or more preschool or school-age children for periods of less than 24 hours a day, licensed under Michigan Act 116.

IPM Key Facts

Applicator

A person who applies pesticides by any method for any purpose at any place.

Certification

Applicator certification is required to apply pesticides in a workplace. Certification is not required for pesticide applicators using "general use ready-to-use" pesticides in the course of their employment; however, IPM training is still required. This exemption does not apply to applicators working for a licensed firm.

Ready-to-Use

Ready-to-use pesticide is any pesticide used directly from its original container, consistent with label directions, without mixing or loading.

IPM Program and Service Record

The applicator shall provide the IPM program and initial service inspection record to the building manager at the time of the initial service.

Schools/Daycare Centers Only

The administrator shall provide written notification to parents or guardians of children attending the school or day care center of their right to be informed before any pesticide application is made on school or day care center property.

Definitions

Building manager: A person who is designated as being responsible for the building's pest management

program and to whom any reporting and notification shall be made.

Certified applicator: A person authorized under Act 451, Part 83, Pesticide Control to use and supervise the use of a restricted-use pesticide.

Commercial applicator: A person who is required to be a registered or certified applicator under Act 451, Part 83, Pesticide Control, or who holds themselves out to the public as being in the business of applying pesticides. A commercial applicator does not include a person using a pesticide for a private agricultural purpose.

General use pesticide: A pesticide that is not classified as a restricted use pesticide and can be purchased without restriction.



Definitions cont'd

- **Incidental use:** The application of a general use pesticide as an accompanying minor occurrence to a primary work function. Example: A postman who uses a dog repellent.
- **Ready-to-use pesticide:** A pesticide that is applied directly from its original container consistent with label directions, such as an aerosol insecticide or a rodenticide bait pack that does not require mixing or loading prior to the application.



State of Michigan Regulatory Requirements

- Michigan law requires pesticide applicators who apply pesticides as part of their work activities to be a certified applicator or a registered applicator, with some exceptions for persons who are using general-use ready-to-use pesticides.
- A custodian using a hand-pump sprayer in which pesticides were mixed from concentrate would need to be certified or registered.
- A person who applies a granular weed-and-feed product from a spreader as part of their work activities would need to be certified or registered.



Pesticide Application in Health Care

State law requires that before a pesticide application is made in a school, day care center, public building, or health care facility:

- The pesticide applicator must have participated in a verifiable training program (studying this manual and submitting the verification of training form fulfills that requirement), and
- There must be a verifiable IPM program in place for the facility.
- There are also specific requirements for posting, notification, reentry, and IPM.



Creating an Effective IPM program

An efficient IPM program should be integrated with existing facility management programs such as janitorial practices, lawn care and facility maintenance. An efficient IPM program should include the cooperation of the staff using the facility. The following steps are an example of how an IPM program can be developed:

1. **Develop an official IPM policy statement.** This useful first step in making the transition from a conventional pesticide program to an IPM program goes beyond simply stating a commitment to support and implement an IPM approach. It acts as a guide for the pest manager to use in developing a specific IPM program.
2. **Designate pest management roles** for occupants, pest-management personnel, and key decisionmakers, and assure good communication among them. Educate and train people for their respective roles.
3. **Set pest management objectives for the site(s).** For every site, pest management objectives will differ. The type of pest management should be outlined.
4. **Inspect site(s)** and identify and monitor pest populations for potential problems.
5. **Set action thresholds.** These are the levels of pest populations or site environmental conditions that require remedial action.
6. **Apply IPM strategies to control pests.** These include redesigning and repairing structures, improving sanitation, using traps and applying pesticides only when needed.

Responsibility Section

Designating pest management roles of the parties involved is an important key to the success of the IPM program. When the respective roles of all the parties involved are identified and agreed upon, and when parties communicate well with each other and meet their responsibilities, then a successful outcome is much more likely.

For example:

- The building manager is responsible for the buildings pest management program. Any reporting and notification shall be made to the building manager.
- The pest control operator and/or pesticide applicator shall monitor and evaluate the site and decide what actions need to be taken to achieve the site's pest management objectives.
- The custodial staff is responsible for sanitation and monitoring of the site for pest infestation. Much of the prevention and control of pests depends on whether or not proper maintenance and cleaning is performed.
- The facility employees are responsible for sanitation and monitoring of their work areas. Storing snacks in work areas can attract pests to the site. Facility employees will report pest sightings and unsanitary conditions to the building manager for further action.

Integrated Pest Management Pest Sighting Log



Facility: _____

To Be Completed By Facility Official / Manager			To Be Completed By Pest Control Manager		
Specific Location of the Pest Sighting	Type of Pest Sighted & Number of Pests	Date and person's name noting pest	Action(s) taken	Technician Name	Date

Integrated Pest Management Pesticide Applicator Information



Facility: _____

Record information pertaining to all pesticide applicators who work at this facility.

Applicators must be trained in IPM, which is a one-time requirement, the training credential does not expire.

Applicators must have a current commercial pesticide applicator certification or registration credential if they will be applying pesticides other than general-use ready-to-use products. Certification/registration credentials have an expiration date and must be renewed every third year.

Name of Applicator	Date IPM Training Was Completed	Certification/Registration Number	Certification Categories	Certification Expiration Date



Perimeter Pest Management



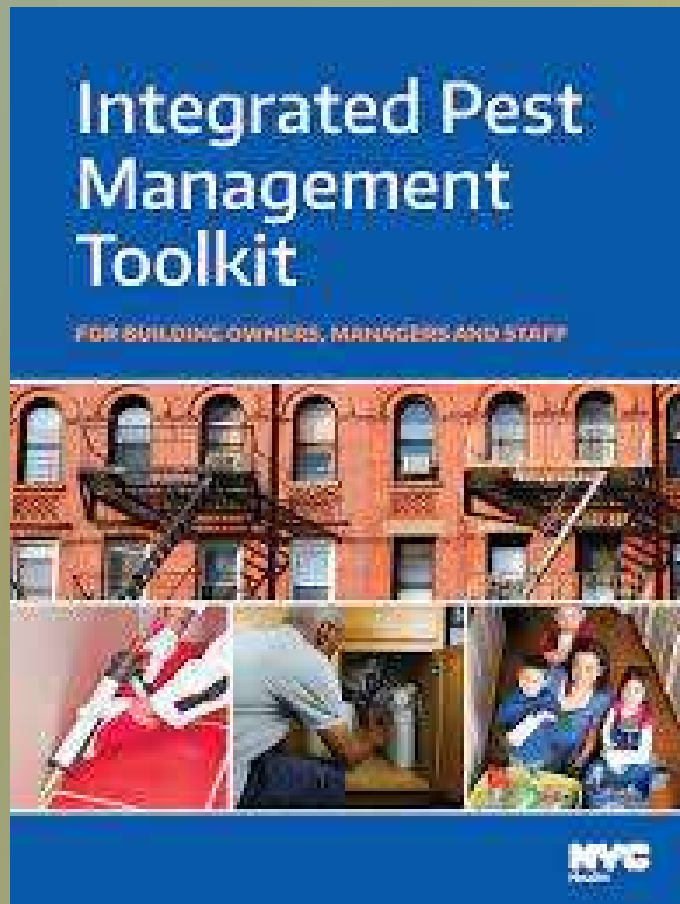
Perimeter Pest Management

- **Entryways:** Gaps around doorways and windows, open windows and doors, holes and cracks in exterior walls and floors, openings around pipes and electrical chases, or HVAC ducts:
- Keep doors and windows shut when not in use.
- Place weather stripping, door and bottom sweeps on exterior doors.
- Seal gaps around windows and place weather stripping where missing.
- Seal openings in walls and floors with pest-resistant and structurally sound materials.

Perimeter Pest Management cont'd

- Install or repair screens in doors, windows, and other exterior openings.
- **Keep vegetation, shrubs, and wood mulch at least 12 inches away from structures. (e.g. stone landscape around building perimeter)**
- Trim tree branches to at least 6 feet away from building exteriors and roof lines.
- Use low UV-emitting light bulbs for security lighting on buildings to avoid attracting pests, or mount security lighting away from doors so that it shines on the entrance but attracts pests away from it.

A Few Additional Resources



State of Michigan



Integrated Pest
Management
Training Manual

Pesticide & Plant Pest Management Division
P.O. Box 30017
525 W. Allegan
Lansing, MI 48909
PH: 800-292-3939
FAX: 517-335-4540

Required IPM Recordkeeping Information*

- Site address
- Date of service
- Target pest or pests
- Number of pests found
- Conditions conducive to infestation
- Pest management recommendations
- Structural or habitat modifications
- Name of pesticide(s)
- Quantity of pesticide(s)
- Location of pesticide application
- Name of the pesticide applicator
- Name of pest control firm used, including its emergency telephone number

*Additional Recordkeeping requirements are found in Regulation 636.



Steps in Establishing an IPM Program

- Develop an official IPM policy
- Designate pest management roles
- Set pest management objectives
- Inspect site and identify pests
- Set action thresholds
- Apply IPM strategies
- Evaluate results

IPM Methods

- Mechanical control
- Habitat modification
- Biological control
- Sanitation control
- Physical control
- Chemical control

Michigan Department of Agriculture & Rural Development

Pesticide & Plant Pest Management Division

P.O. Box 30017, Lansing, MI 48909

PH: (800) 292-3939 • eFAX: (517) 763-0090

www.michigan.gov/mdard

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Integrated Pest Management

Legal Requirements for Pesticide Use in Schools, Day Care Centers, Health Care Facilities, and Public Buildings

www.michigan.gov/mdard

Michigan IPM – Integrated Pest Management

Preface

In Michigan, Integrated Pest Management (IPM) is a requirement of law for persons who apply pesticides (other than sanitizers, germicides, disinfectants, or antimicrobial agents) in schools, day care centers, public buildings, and health care facilities. IPM is regulated under Michigan's Natural Resources and Environmental Protection Act, Act 451 of 1994, Part 83, Pesticide Control and under Mi Regulation 637, Pesticide Use.

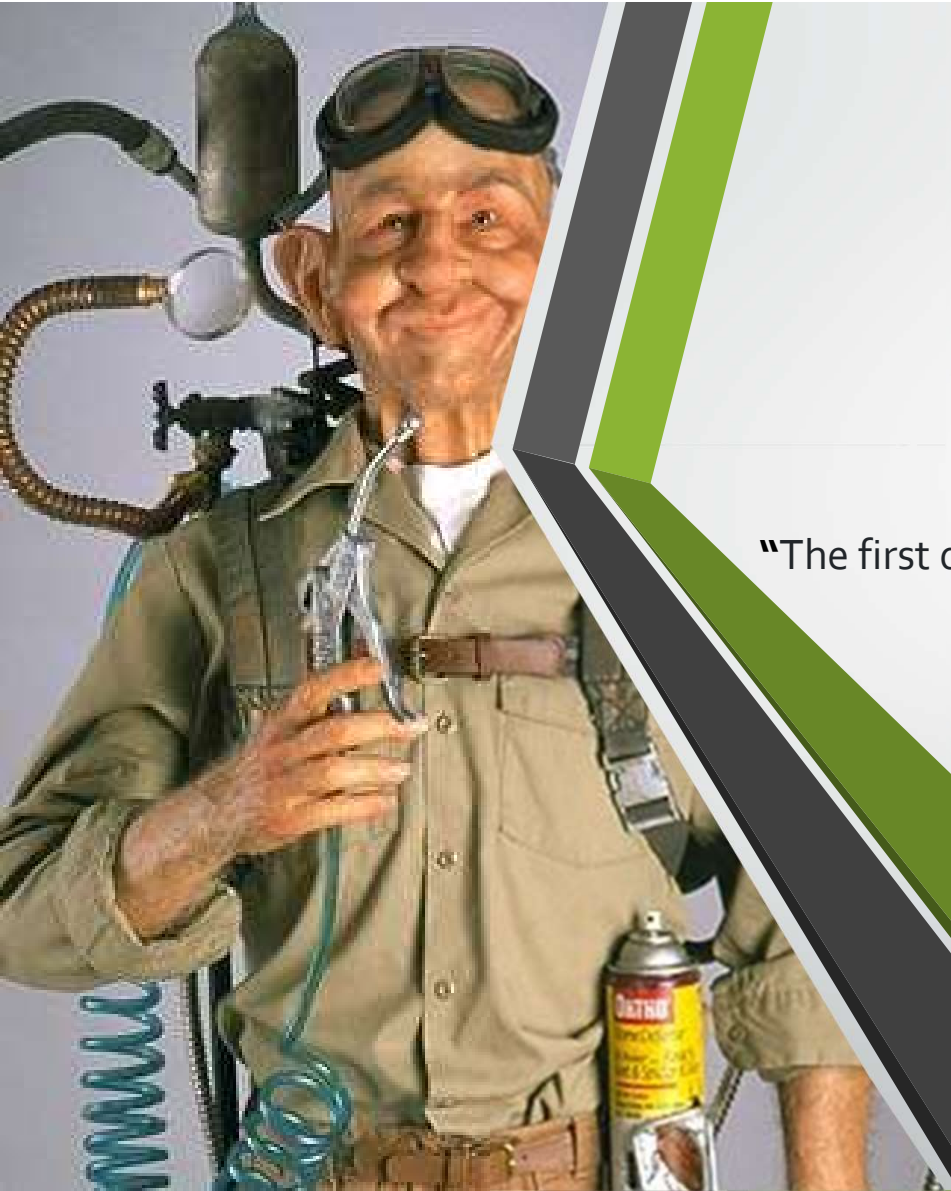
Regulation 637 requires pesticide applicators who are applying pesticides (other than sanitizers, germicides, disinfectants, or antimicrobial agents) in schools, day care centers, public buildings, and health care facilities to receive verifiable training in IPM.

Because IPM training must be verifiable, you will need to provide the Michigan Department of Agriculture and Rural Development (MDARD), Pesticide and Plant Pest Management (PPPM) Division with confirmation of your completion of their training manual. This is done by completing the training verification form found on page 16 of the manual and returning it to the MDARD office in Lansing.

The MDARD training records may be used to verify compliance with Michigan law for applicators utilizing this self-study tool and failure to comply with those regulatory requirements could result in enforcement actions.

If you have any questions, please contact the MDARD at 800-292-3939.





QUESTIONS??

“The first day one is a guest, the second a burden, and the third a pest”.
-Jean de la Bruyere