

Session One of Integrated Pest Management for Multifamily Housing




www.StopPests.org

Find handouts for today's session at:
<http://stoppests.org/go/onlinecourse>

Welcome!
While we wait, please tell us in the chat:
What's your name?
Where are you from?

Session One of Integrated Pest Management for Multifamily Housing



www.StopPests.org

- StopPests is a program of the Northeastern IPM Center of Cornell University, funded by HUD's Office of Lead Hazard Control and Healthy Homes.
- Training content is research-based.
- Products, vendors or commercial services pictured or mentioned are illustrative, not endorsements.

Session One of Integrated Pest Management for Multifamily Housing




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Session One - Meet Your Host







Our Schedule

- **Session 1: Introduction to IPM and Pesticide Use**
 - June 8, 2023; 1:00 pm – 2 pm Eastern
- **Session 2: Cockroaches**
 - June 15, 2023; 1:00 pm - 2pm Eastern
- **Session 3: Rodents**
 - June 22, 2023; 1:00 pm - 2pm Eastern
- **Session 4: Bed Bugs**
 - June 29, 2023; 1:00 pm - 2pm Eastern



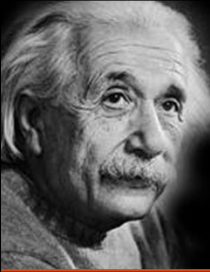
Session One Introduction

- Priority Pests
- Why IPM
- Pesticides & Health

Session One - Meet Your Trainer



www.StopPests.org



"Insanity is doing the same thing over & over again & expecting different results."

Albert Einstein

Is "exterminating" working?



Think about "Pest Management," rather than Exterminating.

The "Exterminator" is now a Pest Management Professional (PMP)



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Poll 1: What pests are most troublesome in your area?

- Cockroaches
- Mice
- Rats
- Bed Bugs
- Other

Select one answer. If you said "other," please enter in the chat.

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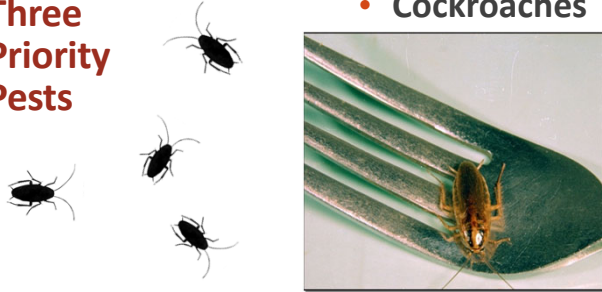
**Three
Priority
Pests**

- Cockroaches
- Rodents
- Bed Bugs

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**Three
Priority
Pests**

- Cockroaches



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**Three
Priority
Pests**

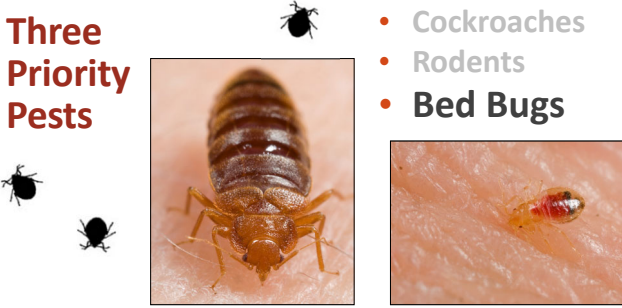
- Cockroaches
- Rodents
- Bed Bugs



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Three Priority Pests


- Cockroaches
- Rodents
- **Bed Bugs**



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Three Priority Pests

- Cockroaches
- Rodents
- Bed Bugs



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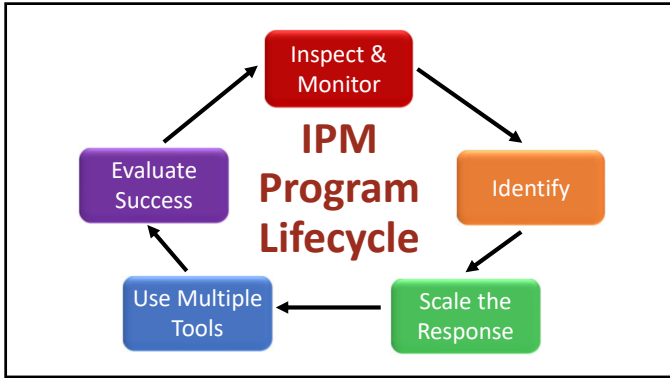
What is IPM?

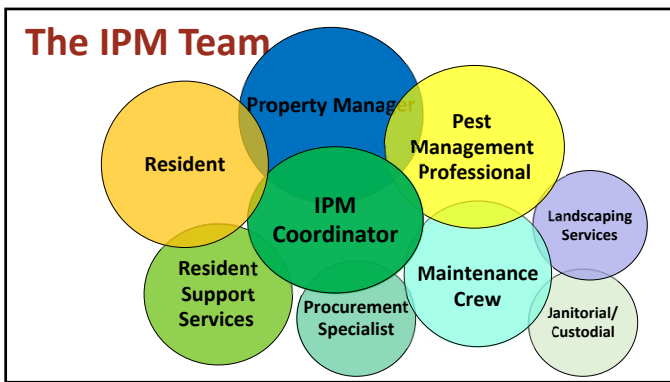
Integrated: Uses multiple approaches that work together

Pest: What the multiple approaches work to fight

Management: Use of the most economical means with the least possible risk to people, property, and the environment

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Poll 2: Who should coordinate pest control at a housing site?

- IPM Coordinator
- Building/property manager
- Building Super or Head of maintenance
- It's team effort
- The pest control professional
- I don't know

Select one answer.

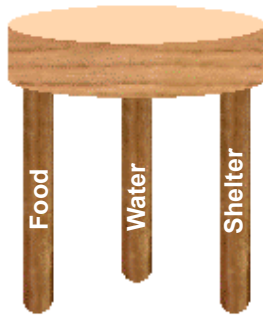
Benefits of IPM

- Cost savings
- A healthier building
- Fewer complaints
- Fewer pests

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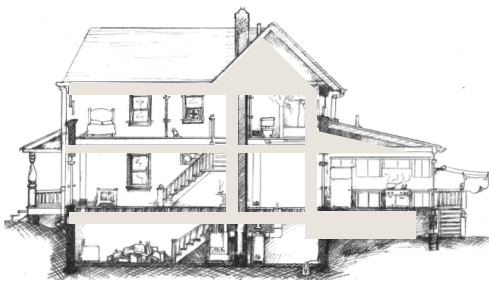
What all pests need

- Food
- Water
- Shelter



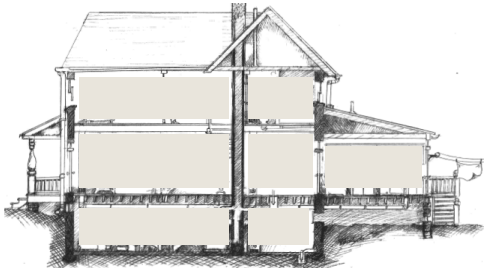
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Think Like a Pest



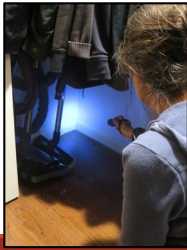
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Think Like a Pest



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Thorough Inspection Look Under & Behind



Thorough Inspection – Look Under and Behind



IPM Practice

Please chat!

Examine each photo, then tell us:

- What's the problem?
- How would you fix it?
- Who is responsible?

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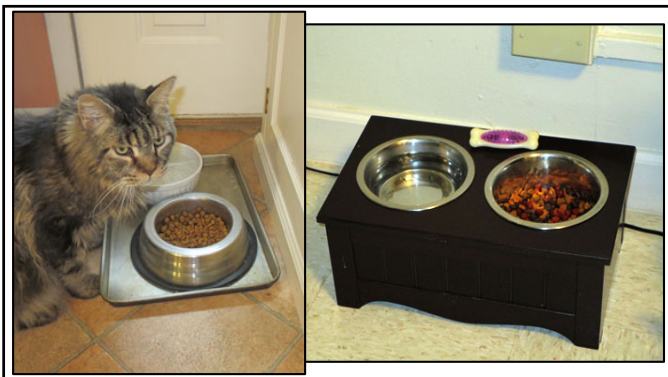












Healthy Homes & IPM

What is "Healthy Housing?"

Healthy Housing is designed, constructed, maintained, and rehabilitated in a manner that is conducive to good occupant health.

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Healthy Homes & IPM

To reduce housing-based health hazards, "keep it":

-  1. Keep it Dry
-  2. Keep it Clean
-  3. Keep it Ventilated
-  4. Keep it Safe
-  5. Keep it Contaminant-Free
-  6. Keep it Maintained
-  7. Keep it Thermally-Controlled
-  8. Keep it Pest Free

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What does HUD say about pest control?



• HUD is committed to IPM as a pest control strategy.

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 **What does HUD say about pest control?**

HUD's promotion of IPM complies with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)




- *"Federal agencies shall use Integrated Pest Management techniques in carrying out pest management activities, and shall promote Integrated Pest Management through procurement and regulatory policies, and other activities." 7 USC 136r-1*


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What does HUD say about pest control?

Real Estate Assessment Center (REAC)
NSPIRE Standards




- **Deficiency:** Evidence of live or dead rats, mice, cockroaches, droppings, holes, shed skins, eggs
- **Infestation:** Presence of potentially disease carrying animal or insect.




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MORE INFORMATION: None



NSPIRE Standard

DEFICIENCY 1:	Evidence of cockroaches.		
LOCATION:	<input checked="" type="checkbox"/> Unit	<input checked="" type="checkbox"/> Inside	
DEFICIENCY 2:	Extensive cockroach infestation.		
LOCATION:	<input checked="" type="checkbox"/> Unit	<input checked="" type="checkbox"/> Inside	
DEFICIENCY 3:	Evidence of bedbugs.		
LOCATION:	<input checked="" type="checkbox"/> Unit	<input checked="" type="checkbox"/> Inside	
DEFICIENCY 4:	Evidence of mice.		
LOCATION:	<input checked="" type="checkbox"/> Unit	<input checked="" type="checkbox"/> Inside	
DEFICIENCY 5:	Evidence of rats.		
LOCATION:	<input checked="" type="checkbox"/> Unit	<input checked="" type="checkbox"/> Inside	<input checked="" type="checkbox"/> Outside
DEFICIENCY 6:	Evidence of other pests.		
LOCATION:	<input checked="" type="checkbox"/> Unit	<input checked="" type="checkbox"/> Inside	

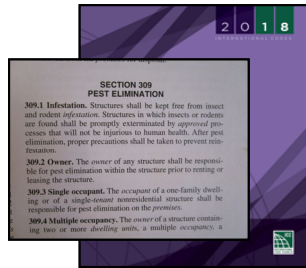


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What do your local codes say about pest control?



- Housing sites must also comply with local housing & habitability codes.
- The International Property Maintenance Code (IPMC) is an example of a habitability code
- Do you know...does your community have laws regarding bed bugs?



HUD's Guidance on IPM

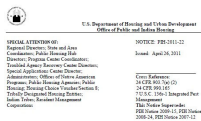


- Ensure efficacy of pest elimination
- Protect health of residents, staff and the environment
- Extend the useful life of a building
- Generate significant savings that could offset the costs of the pest control

IPM effectively eliminates pests in safer and longer-term, cost-effective ways than traditional pesticide treatments.

Promotion of Integrated Pest Management (PIH 2011-22)

HUD's Guidance on IPM



Promotion of Integrated Pest Management (PIH 2011-22)

Find this guidance at HUD.gov

Section: Promotion of Integrated Pest Management (PIH) in an environmental management and effective means to address a major resident concern.

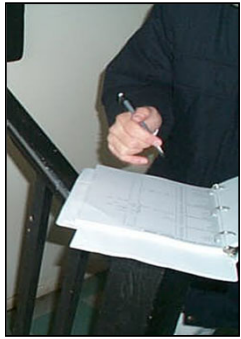
1. Budget: The promotion of IPM is to require and encourage the use of IPM by Public Housing Authorities (PHAs), Indian Tribes, State Department Housing Estates (SDHEs), and other public housing entities. PHAs, SDHEs, and Indian Tribes are required to submit a written plan for IPM to the HUD Office of Public and Public Housing Administration (OPPHA) as a condition of receiving HUD assistance. PHAs, SDHEs, and Indian Tribes are required to submit a written plan for IPM to the HUD Office of Public and Public Housing Administration (OPPHA) as a condition of receiving HUD assistance. PHAs, SDHEs, and Indian Tribes are required to submit a written plan for IPM to the HUD Office of Public and Public Housing Administration (OPPHA) as a condition of receiving HUD assistance.

2. Applicability: This notice applies to PHAs, Indian Tribes, State Department Housing Estates (SDHEs), and other public housing entities. PHAs, SDHEs, and Indian Tribes are required to submit a written plan for IPM to the HUD Office of Public and Public Housing Administration (OPPHA) as a condition of receiving HUD assistance.

Documentation is key

One IPM log in each building to:

- Track pest population
- Identify focus units
- Ensure prompt action



Find sample documents at stoppests.org

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Documentation is key

Have a system that is available and accessible to everyone who needs the information

- Manual (paper)
- Electronic



Find sample documents at stoppests.org

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What's in the IPM log?

- All documents related to pest management
- Information from HUD inspections related to IPM
- Schedules, Notifications, Product Info, Licenses, etc.

Find sample documents at stoppests.org

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What's in the IPM log?

- Educational materials for staff and residents
- Here's a poster on bed bug safety

Stop Bed Bugs Safely!

Use this information to help stop the spread of bed bugs in your home and community.



Remember that bed bugs:
Crawl long or fly
Do not spread diseases
Do not burrow into the skin

Look for signs of bed bugs: bites, black spots on the bed, live or dead bugs

Know where to look: paper thin crevices close to where you sleep

Check your home regularly

- Reduce household clutter and vacuum furniture and floors.
- Encase your mattress and box spring in bug proof covers.
- Wash clothes and linens and dry them on a hot setting.
- Do not use "bug bombs" or foggers, which may worsen the problem.
- Do not take discarded furniture or items from the street - these things may already have bed bugs.
- Ask for help! Do this to get a pest control pro involved:

Find sample documents in your handouts or at stoppests.org

What's in the IPM log?

This is the first page of a tri-fold flyer on the tenant's role in IPM.

Integrated Pest Management (IPM) in Housing [Housing Site]

Working together towards pest-free housing.

- Residents keep pests from getting food, water, and shelter.
- Resident Services help residents learn how to do their part and get support.
- Maintenance fixes holes that let pests in.
- Pest Control monitors for pests and applies pesticides.
- Management makes sure everyone is doing his or her part to keep our building pest-free.

Why does my housekeeping matter?

To live happily, pests need:

- ☐ food
- ☐ water, and
- ☐ a place to hide.

Make sure they don't get what they need!

Do these things daily:

- ☐ Clean and dry all dishes—no food out at night!
- ☐ Put all food in sealed containers or the refrigerator.
- ☐ Take the trash out.
- ☐ Wipe down the counters and stove.
- ☐ Sweep the floor.

Do these things weekly:

- ☐ Vacuum carpeted floors.
- ☐ Wash the bottles, cans, and cardboard.
- ☐ Do a load of laundry.
- ☐ Inspect your home for pests.

Call management to place a work order. Brought to you by the **Community Management Office** and **The Northeastern IPM Center**.

YOUR ROLE IN PEST CONTROL

You don't have to live with pests!

Find sample documents in your handouts or at stoppests.org

What's in the IPM log?

This is the second page of the flyer.

Got pests?

[Housing Site] will help. Help us get IPM services to you.

If you see:

- A cockroach, mouse, rat or bed bug.
- Signs that these pests have been around.
- A place where pests can get into your home, or
- A leaky pipe.

Call management to call in a work order.

Do not use sprays or foggers (bug bombs) in your home!

RODENTS

GERMAN COCKROACH

Cockroaches are health hazards! Even the dead ones can **make asthma worse** in sensitive people and **cause asthma** in preschool-aged children!

What you can do to kill pests:

- Trap them and throw them away.
- Vacuum them up (seal the bag in a plastic bag and put it in the trash).
- Pesticide spots when on housekeeping.

Get a professional to apply pesticides—don't use your own!

Keep my eyes open for bed bugs and let management know if I have a pest problem. **Resident** Rockford, VA

BED BUG

What you can do to keep your home pest free:

- Clean up crumbs and spills.
- Take out trash and recycling regularly.
- De-clutter! Limit the amount of unused stuff you store in your home. Clutter gives pests a place to hide.
- Be wary of used furniture—it might have bed bugs.
- Store food where pests can't get to it.
- Vacuum, sweep, and mop the floors.
- Report leaking faucets and clogged drains.

Find sample documents in your handouts or at stoppests.org

What's in the IPM log?

Other forms to include in the IPM Log include:

- Service schedule
- Applicator licenses
- Proof of insurance and business registration
- Potential notifications/ preparation instructions
- Contract/service agreement (Review regularly!)

Find sample documents at stoppests.org

What's in the IPM log?

Examples of Log Entries include:

- Locations of any traps and bait stations that are placed
- Notes about resident cooperation for follow up by resident services
- Notes about needed repairs for follow up by maintenance staff.

Copies of work orders will need to be filed, as well.

Find sample documents at stoppests.org

Poll 3: Does your organization have an IPM Log?

- Yes, contains all of these documents
- Yes, contains some of these documents
- No
- I don't know
- N/A

Select one answer.

Poll 4: What form is your organization's IPM Log?

- Electronic – all on the computer
- Paper
- Some electronic, some paper
- I don't know
- N/A

Select one answer.

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At First

- More Education, Repairs, and Monitoring
- Increased Work Orders
 - Pests and pest-friendly conditions that were previously overlooked are reported

At first more work, but then less



Then...

- Fewer Complaints
- Fewer Pests
- A Better Place To Live

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What's a Pesticide?

Any substance or mixture of substances intended for:

- Preventing
- Destroying
- Repelling or
- Mitigating

...any pest



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Pesticides



- Pesticides should be applied **only by a licensed PMP**
- The label is the law
- EPA does not assess effectiveness, only risk/benefit when used in accordance with the label
- Look for the key words **Caution, Danger** and **Poison**

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The chemicals that people use to kill pests pose a risk to humans, too



Concerns with Pesticides

Vulnerable populations:

- Elderly, children, pregnant women
- People with breathing or lung disorders such as asthma
- People with chemical sensitivities



Concerns with Pesticides

- Residents use of "illegal" pesticides



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Concerns with Pesticides

- Residents use of "illegal" pesticides
- Pests become tolerant/avoid
- Exposure risk may outweigh benefit
- Possible harm to pets and wildlife



Total Release Foggers or "bug bombs"



- Chemicals fail to reach places where cockroaches congregate

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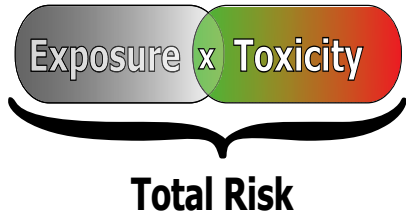
Total Release Foggers “bug bombs”



- Chemicals fail to reach places where cockroaches congregate
- Nasty toxic residue in... areas cockroaches generally avoid but which are heavily used by humans and pets

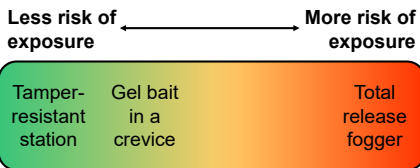
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Pesticide Risk



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Pesticide Risk of Exposure by Application Method



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Pesticide Risk of Exposure by Application Method

Less risk of exposure ← → More risk of exposure

The diagram features a horizontal gradient bar transitioning from green on the left to orange on the right. Above the bar, a double-headed arrow spans its width, with the text "Less risk of exposure" on the left and "More risk of exposure" on the right. To the left of the bar, there are two images: a black bait station and a bait box labeled "MAX". To the right of the bar, there is a blue spray can.

Pesticide Risk of Exposure by Application Method

Less risk of exposure ← → More risk of exposure

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Pesticide Risk of Exposure by Application Method

Less risk of exposure ← → More risk of exposure

The diagram features a horizontal gradient bar transitioning from green on the left to orange on the right. Above the bar, a double-headed arrow spans its width, with the text "Less risk of exposure" on the left and "More risk of exposure" on the right. To the left of the bar, there are two images: a bait station and a bait box labeled "MAX". To the right of the bar, there is a blue spray can.

How to Read a Label

For general questions about pesticides, including the potential risk to humans, pets, or the environment, call NPIC at 1-800-858-7378.

How to Read a Label

- EPA Registration number

EPA REGISTRATION NUMBER

What is the unique product number showing that the EPA has approved it?

IF YOU SUSPECT A REAG use. Take off contaminant with plenty of water for 15-2 Center or doctor for treating.

QUESTIONS: For non-REAG product, call the National P at 1-800-858-7378. For am Shelter 1-800-325-1228. Ho you when calling a Poison going for treatment.

EPA Reg. No. XXX-XXX-XX

How to Read a Label

- EPA Registration number
- Precautionary Statements

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals.

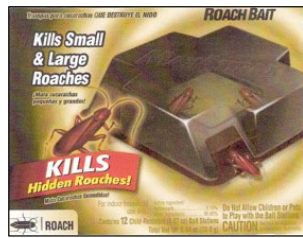
PRECAUTIONARY STATEMENTS
How can the product be used safely?

How to Read a Label

- Directions for: Use, Storage and Disposal

Signal Words on the Label

- Signal words:**
- CAUTION** = slightly toxic
 - WARNING** = moderately toxic
 - DANGER** = severe skin or eye irritation
 - DANGER-POISON** = highly toxic





Poll 5: Do residents apply pesticides on their own?

- Yes, without restrictions
- Sometimes, although we have a policy against it
- Never
- I don't know

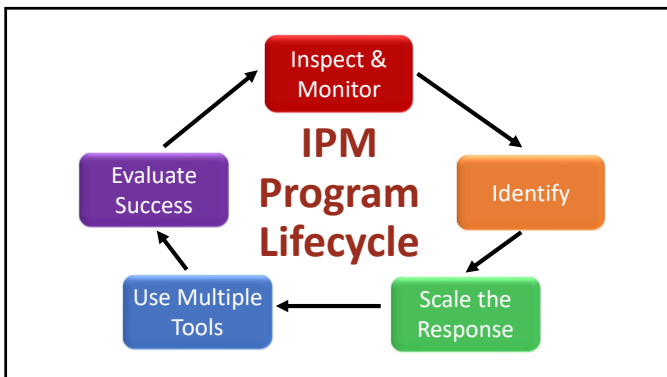
Select one answer.

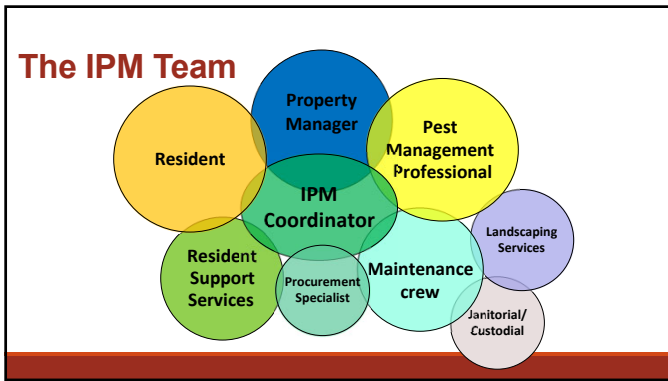
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If they're so bad, why do people tolerate exposure to pests and pesticides?

- Low expectations for pest control and maintenance
- Other priorities
- Not aware of the problems
- Accustomed to living with problems, and cannot envision a better way

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Session One Introduction

- Priority Pests
- Why IPM
- Pesticides & Health

Session Two Cockroaches

STOP Pests in housing
www.StopPests.org

What we learned...

Your Workplan - What Will You Do Now?	
IPM & Pesticides Who does what? Complete checklist Inspect Coordinate (clean, habits) Train PM's & resident observations Write work orders Educate residents (use by residents) Send IPM log Evaluate effectiveness	Resident? PM/P? Staff? (Specify department)
Cockroaches Who does what? Identify Determine/coordinate Coordinate (clean, habits) Apply cockroaches	Resident? PM/P? Staff? (Specify department)
Rodents Who does what? Identify Determine/coordinate Coordinate (clean, habits) Lockdown Coordinate/execute traps Coordinate/execute extermination	Resident? PM/P? Staff? (Specify department)
Bedbugs Who does what? Identify Determine/coordinate Coordinate (clean, habits) Laundry Encasements Visual inspection Coordinate/execute Review records	Resident? PM/P? Staff? (Specify department)

Your IPM Workplan: Who does what?

- IPM & Pesticides
- Cockroaches
- Rodents
- Bedbugs

Contract Language to Consider	
Pesticides Contract language to consider Floor and cracks Service scheduling Treat other than service Educational materials for residents	Notes
Cockroaches Contract language to consider No roach service No antitrust injury Use monitor in all units Treat based on monitor counts • bait • dust • gel Follow up schedule (2-4 weeks) Set coffee schedule	Notes
Rodents Contract language to consider Owners rodent control Mouse control Trap, placement, maintain, professional	Notes
Bed Bugs Contract language to consider Monitor in all 4 quadrants with Inspection of mattresses/units Inspection/inspect trap instructions Use of non-chemical treatments • Heat • Steam • Vacuum Use of traps Use of service Follow up treatment/schedule Coordination of estimation	Notes

**Your IPM Workplan:
Contract language**

- IPM & Pesticides
- Cockroaches
- Rodents
- Bedbugs

Homework for Housing Sites:

- Find your IPM log
- Remembering our suggested list of contents, is yours complete?
- What should you add?

?

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