

Session One of Integrated Pest Management for Multifamily Housing

STOP Pests in housing
www.StopPests.org

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

Good Morning,
USVI Housing
Authority!

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

STOP Pests in 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

USDA
United States Department of Agriculture
National Institute of Food and Agriculture

STOP Pests in housing
www.StopPests.org

National Center for Healthy Housing

Regional IPM Centers

CDC
Centers for Disease Control and Prevention

Session One - Meet Your Host

STOP

Pests

in housing

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Where do they hide?

- Behind pipes
- Under floors
- In wall voids
- Behind baseboards
- Under beds
- Behind furniture
- In cracks and crevices
- In clutter

Session One Introduction

Session Two Cockroaches

Session Three Rodents Pigeons

Session Four Bed Bugs

- Priority Pests
- Why IPM
- Pesticides & Health

- What they are
- Associated Health Hazards
- What they eat & drink
- Where they live
- Prevention & Control

STOP

Pests

in housing

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Session One Introduction

- Priority Pests
- Why IPM
- Pesticides & Health

STOP

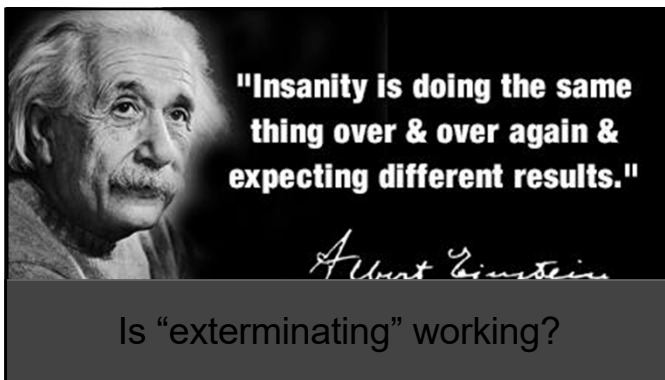
Pests

in housing

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Session One - Meet Your Trainer





Think about "Pest Management,"
rather than Exterminating.

The “Exterminator” is now a Pest Management Professional (PMP)



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Poll: What is the most troublesome pest in your housing?

- Cockroaches
- Mice
- Rats
- Bed Bugs
- Other

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

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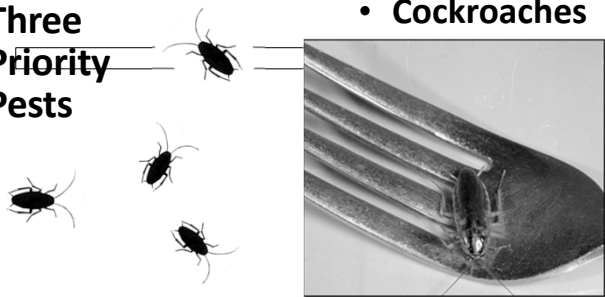
Three Priority Pests

- Cockroaches
- Rodents
- Bed Bugs

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**Three
Priority
Pests**


- Cockroaches



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**Three
Priority
Pests**

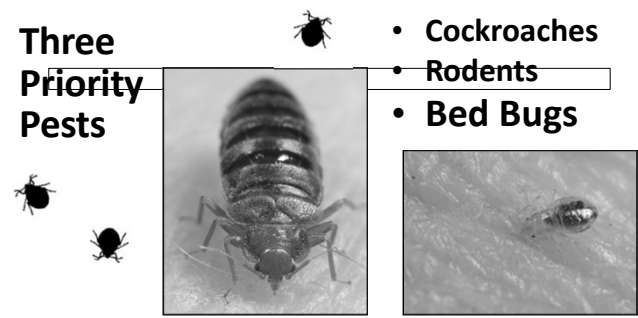
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**Three
Priority
Pests**

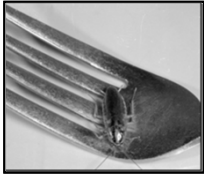
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- Bed Bugs



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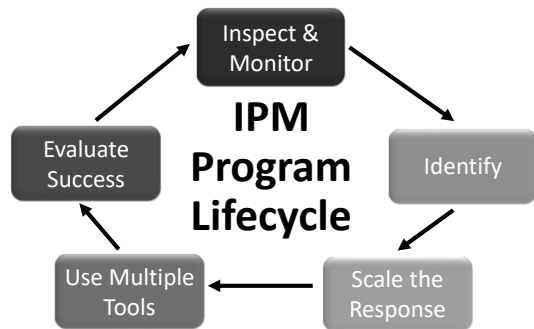
Three Priority Pests

- Cockroaches
- Rodents
- Bed Bugs

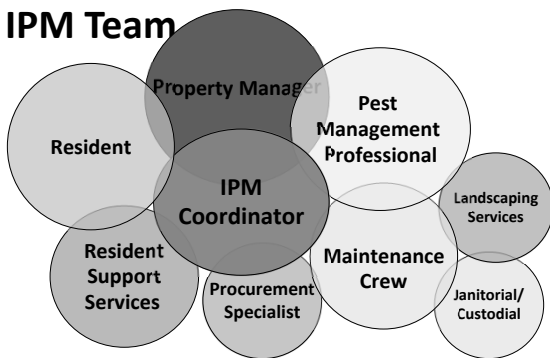


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IPM Program Lifecycle



The IPM Team



Poll: Who coordinates pest control at your worksite?

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

Select one answer.

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Your Workplan - What Will You Do Now?	
IPM & Pesticides Who does what? Contract language to consider: • Inspect • Confirm traps, baits • Use IPM & resident observations • Use pest traps • Encourage pesticide use by residents • Control of IPM • Evaluate effectiveness	Resident? PMP? Staff? (Specify department)
Cockroaches Who does what? • Inspection • Sanitation • Exclusion • Trapping • Pesticides	Resident? PMP? Staff? (Specify department)
Rodents Who does what? • Inspection • Sanitation • Exclusion • Trapping • Pesticides	Resident? PMP? Staff? (Specify department)
Bedbugs Who does what? • Inspection • Sanitation • Exclusion • Trapping • Pesticides	Resident? PMP? Staff? (Specify department)

Your IPM Workplan: *Who does what?*

- IPM & Pesticides
- Cockroaches
- Rodents
- Bedbugs

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Contract Language to Consider	
Pesticides Contract language to consider: • Inspect and schedule • Service scheduling • Units other than spray • Substantial materials for residents	Notes
Cockroaches Contract language to consider: • No routine services • No pestproofing services • Use monitors in all units • • Baits • • Gels • • Gel • Follow-up schedule (2-4 months) • Pest control schedule	Notes
Rodents Contract language to consider: • Control rodent infestation • Monitor traps • Trap, document, replace, exterminate	Notes
Bed Bugs Contract language to consider: • Monitor in all at high-risk units • Inspection of carpeted units • Assessment based on instructions • Use of non-chemical treatments • • Steam • • Heat • • Vacuum • Use of traps • Follow-up treatments scheduled • Confirmation of extermination	Notes

Your IPM Workplan: *Contract language*

- IPM & Pesticides
- Cockroaches
- Rodents
- Bedbugs

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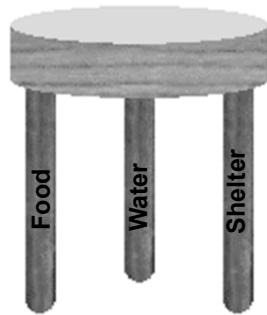
Benefits of IPM

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

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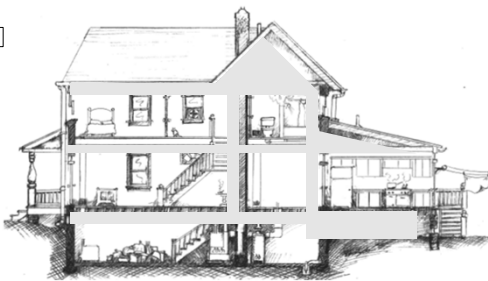
What all pests need

- Food
- Water
- Shelter



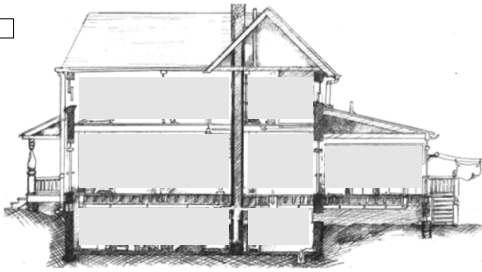
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Think Like a Pest



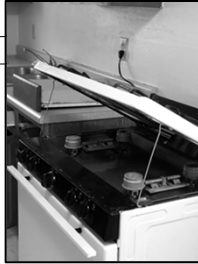
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Think Like a Pest

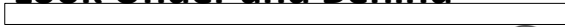


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Thorough Inspection Look Under & Behind



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?

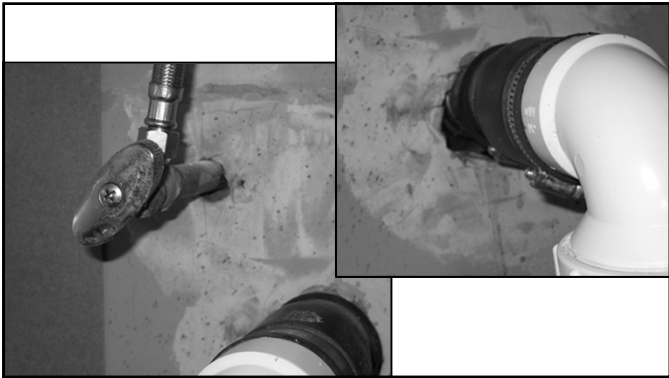


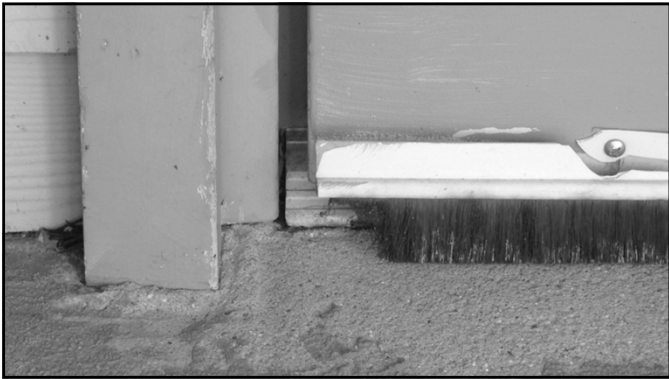




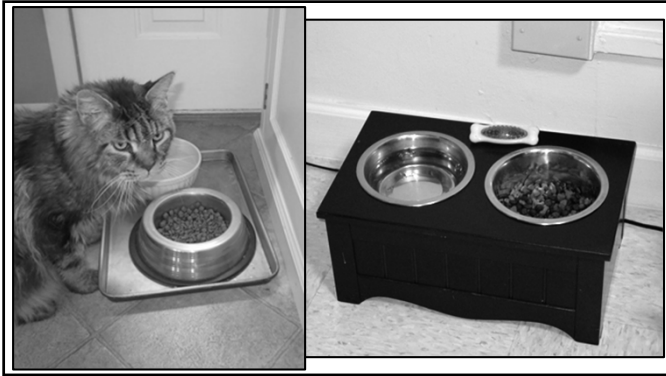












Healthy Homes & IPM

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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Dale Morton

Healthy Homes Program

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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)

- **Deficiency:** Evidence of rats, mice, cockroaches (droppings, holes)
- **Infestation:** Live roaches, mice or rats; more than one dead roach



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What does HUD say about pest control?

- Uniform Physical Condition Standards (UPCS)
- Housing Quality Standards (HQS)



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What does HUD say about pest control?

- Uniform Physical Condition Standards (UPCS)
- Housing Quality Standards (HQS)



Quotes from these provisions:

- Structures shall be kept free from insect and rodent infestation
- Where...insects or rodents are found... promptly managed by approved processes... not injurious to human health
- Proper precautions to prevent re-infestation

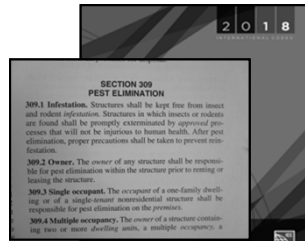


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What do your local codes say about pest control?



- 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?



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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)

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HUD's Guidance on IPM

Promotion of Integrated Pest Management (PIH 2011-22)

Find this guidance at HUD.gov



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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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[illegible]

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:
Cannot jump 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.



DON'T SELF TREAT

Why does my housekeeping matter?

To live happily, guests 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 all 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
- Recycle bottles, cans, and cardboard
- Fix a leaky faucet
- Inspect your home for pests

Call management to place a work order.
Brought to you by the
Environmental Health Management Office and
The Neighborhood IPM Center



YOUR ROLE IN PEST CONTROL
You don't have to live with pests!

STOP
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 Egg 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 gels often use 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
Richmond, 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

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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

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Poll: Do you know...does your development have an IPM Log?

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

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

Then...

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

**At first more work,
but then less**

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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



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

Total Release Foggers “bug bombs”



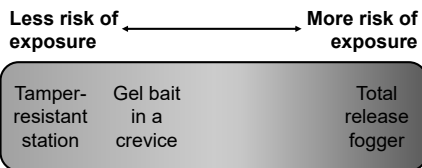
- Chemicals fail to reach places where cockroaches congregate
- Nasty toxic residue in... areas cockroaches generally avoid but which are heavily used by humans and pets

Pesticide Risk



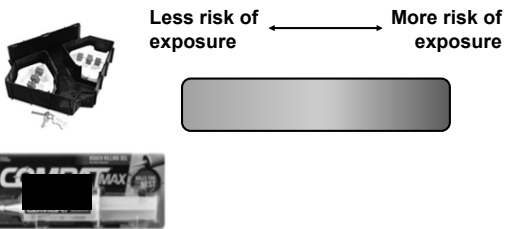
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Pesticide risk of exposure by application method



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Pesticide risk of exposure by application method



Pesticide risk of exposure by application method

Less risk of exposure

More risk of exposure



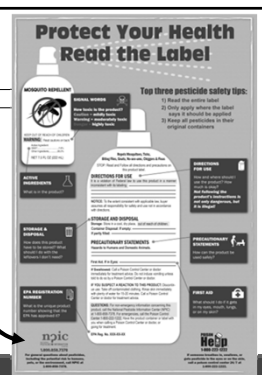
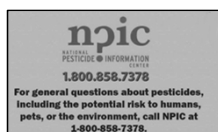
Pesticide risk of exposure by application method

Less risk of exposure

More risk of exposure



How to Read a Label



Signal Words on the Label

Signal words:

CAUTION = slightly toxic

WARNING = moderately toxic

DANGER = severe skin or eye irritation

DANGER-POISON = highly toxic



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Poll: Do your residents apply pesticides on their own?

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

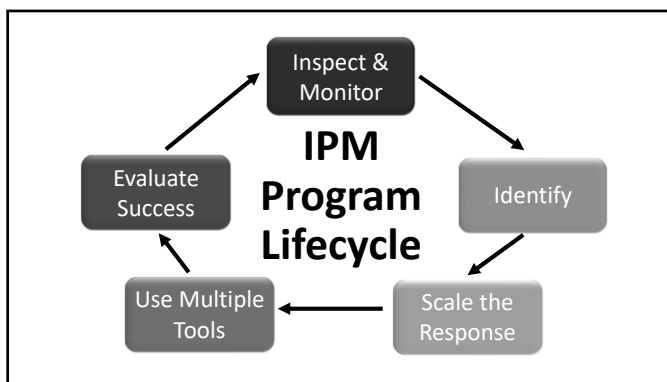
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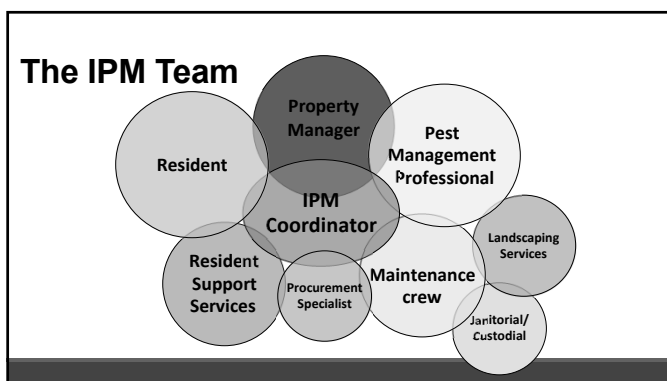
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If they're so bad, why do people tolerate exposure to pests and pesticides?

- 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

Session Two
Cockroaches

- Priority Pests
- Why IPM
- Pesticides & Health



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www.StopPests.org

What we learned...

Homework for Session 1

Pesticides & Health – Who Does What?

- Encourage reporting
- Turn PMP & resident observations into work orders
- Discourage pesticide use by residents
- Keep IPM log
- Evaluate effectiveness

Homework for Session 1

Pesticides & Health – Contract Language

- Focus Unit Schedule
- Service Schedule/log
- Tools other than sprays
- Educational materials for residents

