Managing Cockroaches & Rodents with IPM

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# Nine Strategies for Managing Cockroaches & Rodents with IPM

1. Know Your Enemy  
2. Monitoring  
3. Reduce Access  
4. Water  
5. Trash & Recycling  
6. Non-Chemical Solutions  
7. Lower the Toxicity  
8. Support & Cooperation of Residents  
9. Contractor Oversight

## What About You?

1. Does your agency handle pest management in-house?  
2. Does your agency contract with a pest management company?  
3. Do you currently inspect for pests?  
4. Do you currently inspect for pest entry points?
1. Know Your Enemy
   (3 Priority pests & 4 reasons they’re a problem)
3 Priority Pests

- **Rodents** such as mice and rats carry diseases, bite, destroy property, may cause fires, and may trigger asthma attacks
- **Cockroaches** cause asthma in infants, trigger asthma attacks, and contaminate food
  - **Bed bugs** bites are a nuisance, have psychological impacts, and are expensive to eliminate

4 Reasons They’re a Problem

1. Pests are health hazards
2. Pesticides can harm humans
3. Pesticides alone will not work
4. Pests violate Housing Codes
What’s IPM?

Evaluate Success
Use Multiple Tools
Inspect & Monitor
Identify
Scale the Response

What Do Pests Need?

Water  Food  Shelter
German Cockroach

- Medium size (3/4"), bronze, with “racing stripes” behind the head
- Found everywhere, but likes warmth, moist and dark conditions
- Reproduces quickly
- Mother carries eggs to term even if she is dead

One German Cockroach, 6 mos.

Stopping one cockroach does a lot!

One pregnant cockroach

January March May June

11
41
1,600
18,400
What is a Rodent?

• Gnaw constantly to create holes and pathways
  – Wood, plastics, hoses, sheetrock, copper, wires, etc.
• Most active during the first two hours after dusk
• Make lots of babies fast
• Travel the same paths nightly, staying close to walls or items that give them cover

Rats & Mice

**Rats**
- Mostly outdoors
- Travel up to 450 feet from their burrow

**Mice**
- Mostly indoors
- Travel 10-30 feet from their nest
2. Monitoring
(Do we have a problem? How big?)

Droppings and Stains

- Rodent urine stain in drop ceiling
- Mouse droppings by a power strip
Proactive Monitoring & Inspection

Monitor by placing sticky traps near areas where cockroaches might travel: at corners and near warmth, food, and water.

Coincidental Monitoring

- Maintenance techs:
  - Most familiar with building (“scouts”)
- Electricians:
  - Crawl spaces and inside drop ceilings
- Plumbers:
  - Spot leaks, humidity, condensation, and standing water
- Carpenters, roofers and other tradespersons
Thorough Inspection – Look Under and Behind

3. Reduce Access  (Keep them out of our space)
Unwelcome Visitors

• Make sure they don’t get in
  – Regular inspections of the building exterior to spot holes where pests may gain entry
• Block passageways from infested apartments to the rest of the building

Fix These

• Broken windows, screens, vent covers or holes in exterior walls
• Doors and windows that do not completely close

Install These

• Automatic door closers
• Frequently used doors that tend to be left open
• Screens
• Air intake and exhaust vents, doors, hatches, skylights
Use Appropriate Materials

Stuff it
Seal it
Check it often

The sealant:
• Blocks the entry of pests that can damage the house and its contents
• Contains no pesticides

BLOCK OUT PESTS

Great Stuff™ PestBlock Insulating Foam Sealant

Great Stuff™ PestBlock is an all-purpose, non-toxic, one-part urethane sealant with a variety of uses. It is specially formulated to block pests and bugs from entering your home. Great Stuff™ PestBlock can be used in areas where pests like to enter, such as around windows, doors, and other openings. It is easy to use and dries clear, making it an excellent choice for both indoor and outdoor applications.

Ingredients:
• Urethane
• No harmful pesticides

Instructions:
1. Clean the area where you want to apply Great Stuff™ PestBlock.
2. Apply a bead of Great Stuff™ PestBlock around the opening.
3. Use a knife or utility knife to spread the sealant.
4. Let it dry for 24 hours before using the area.

Applications:
• Windows
• Doors
• Electrical outlets
• Ceiling fans
• Light fixtures

Great Stuff™ PestBlock is a versatile product that can be used in a variety of situations to help keep pests out of your home. It is easy to use and dries clear, making it a great choice for both indoor and outdoor applications.
(Take away the)

4. Water

Eliminate the Water Fountains

- Leaking pipes and faucets
- Roof drains & downspouts
- Gutters - clean and unclogged
- Clogged or slow drains
- Water-damaged wood
- Pipes prone to condensation
- Mop buckets and mop heads
How long has this been going on?
Even clean units have their enticements

Stormwater (mis)-Management
5. Trash & Recycling
(Take away the fast food)

Recycle

• Equip storage bins with tight fitting lids
• Metal bins when practical
• Line bins with garbage bags
• Clean bins with detergent and hot water
• Wash recyclable containers
• Arrange for recyclables to be picked up frequently
Dumpsters

- Free of holes
- Covered
- Placed on concrete
- Away from the building
- Monitored
- Screen drain holes
- Emptied regularly

Rodent “Bait”

Rat Burrows – Can you guess what’s behind the fence?
6. Non-Chemical Solutions
(Save the people)

No License Required

- Exclusion
- Clean
- De-clutter
- Vacuum
- Check Monitors
- Check Traps
- Empty Traps
Traps

- Effective and reusable
- More ARE better
- Check often
- Placement is key
  - Where rodents travel
  - Bait side should touch the wall

7. Lower the Toxicity
   (When pesticides are necessary)
Leave Pesticides to the Experts

Any substance or mixture of substances intended for:

- Preventing
- Destroying
- Repelling or
- Mitigating

...any pest

Risk by Application Method

<table>
<thead>
<tr>
<th>Less risk of exposure</th>
<th>More risk of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamper-resistant station</td>
<td>Gel bait in a crevice</td>
</tr>
<tr>
<td></td>
<td>Total release fogger</td>
</tr>
</tbody>
</table>
Gel Baits for Cockroaches

- Cockroach control is **not** achieved with calendar pesticide sprays
- Rotate products
- More product for heavier infestations
- Monitors tell you where to apply
- No cockroaches? No bait

Insecticidal Dusts for Cockroaches

- Least toxic active ingredients:
  - Boric Acid
  - Diatomaceous Earth
- How they kill:
  - A stomach poison (boric acid)
  - Dry them out (silica)
- Long-lasting if dry (wall voids)
Insect Growth Regulators - Cockroaches

- Interfere with growth and egg hatching
  - Sprays, aerosols, and impregnated discs
- Take a month to work
- Stay effective for a long time
- Compatible with other IPM methods; may enhance baits

Tamper-Resistant Stations for Rodents

- The label is the law
- Label on both the station and the bait
- Secured, locked, and labeled
- If the rodents are inside, consider using traps

An opened bait station (only PMPs should open bait stations)
Prevention and Control: Dry Ice for Rodents

- Not approved in all states
- Only in outdoor burrows
- Suffocates
- Requires caution when handling
- Expensive and hard to find

Dry ice used in a rat burrow.
NBC Chicago

8. Support & Cooperation of Residents
(Everybody on board!)
Resident Education

- Eliminate harborage
- Report
  - Pests, leaks, entry points
- Don’t apply pesticides
- No scented cleaners
- Empty trash & recycling

Clean This...
And this…

Why Cleaning Matters

Mouse urine and droppings trigger Asthma and Allergies.

They also carry disease-causing pathogens.
Infested Stoves

- Mouse feces volatilizes when the stove heats up
- Prevent resident mice from escaping

Cleaning Mouse Urine and Droppings

**CDC Recommendations**
- Wear an N-95 mask and gloves
- Spray the nest, urine, and droppings with disinfectant or a mixture of bleach and water
  - One part bleach to 10 parts water
  - Let soak 5 minutes
  - For commercial disinfectant, following the label for dilution and disinfection time
- Use a paper towel to pick up the urine and droppings
- Dispose of waste in sealed bag
9. Contractor Oversight
(You get only what you ask for)

What’s in Your PMP Contract?

- *Non-chemical* tools (vacuum, trap)
- Monitoring
- Cleaning/Eliminating
- Exclusion
- Products/how much applied
- Inspection Frequency
  - Proactively or After treatment
- Will they eliminate pests?
Details You Can Require

• Number of techs servicing your units each month
• Specific monitoring techniques
• Products and how much product to apply
  – More product in heavy infestations
• Specify # of visits based on monitoring numbers
  – Maintain list of focus units visited monthly
• Record keeping & review requirement

Do You Have Fewer Pests?

Does your contract say the PMP will reduce/manage/eliminate pests?

*If pest numbers are not declining, you are throwing your money away.*
Stoppests.org

News You Can Use

August 29, 2018 Free webinar: Developing a Pest Exclusion Program for Cockroaches and Rodents. On September 12th at 1pm EDT, Matt Frye will present a free webinar “Developing a Pest Exclusion Program for Cockroaches and Rodents.” Register here: https://events.zoom.us/webinar/register/WN_xjCSz8pS-fLqU0azgOrC


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