

**Procedure suggestions  
for bed bugs, cockroaches, and  
rodents**

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**STOP  
Pests  
in housing**  
[www.StopPests.org](http://www.StopPests.org)

**Identify focus areas**

- Monitor and inspect
- Identify focus areas
- Look through service records and work orders for trends

**Solve problems**

- Allocate time and resources to focus areas
- Use renovation as an opportunity
  - Eliminate pests
  - Reduce the risk of pest infestation
    - Seal up holes and crevices where pests hide
    - Educate the incoming tenant
- Track data from work orders and PMP service reports to identify trends and track efficacy



Monitor under a well-sealed sink

**Focus units & housekeeping**

- Require housekeeping classes that focus on taking food, water, and shelter away from pests
- Case management
- Reach out
  - Family members
  - Faith-based organizations
  - Local support agencies
- Motivate with lease enforcement

**Maintain and expand  
pest-free housing**

- Inspect new residents' homes within 90 days of move-in
- Ensure the PMP gets access to units
- Teach everyone to prevent, inspect, and monitor so introductions never turn into infestations

**Bed bug review**

- Eat and drink blood
- Signs include fecal spots and the bugs
- Wander, seeking a source of heat and CO<sub>2</sub>
- Usually found wedged in cracks and crevices

### Advances in the last 10 years

- Research on biology
  - Resistance is present
  - Eggs are hard to kill
  - May die in under a year
  - Death at 122°F
- Research on behavior
  - Attracted to heat and CO<sub>2</sub>
  - Genetic information allows us to track how populations are related and study the spread

### Advice for staff, health aides, and contractors

- In units:
  - Avoid sitting or placing items on potentially infested surfaces
  - Wear a protective layer when moving infested items
- In the main office/community areas:
  - Replace fabric-covered furniture that has many crevices with plastic or metal items
  - Have residents set their belongings in plastic totes during meetings

### Advice for residents

- Keep coats, backpacks, purses, and bags off beds, recliners, and sofas at home and while out
- Inspect used furniture carefully before bringing it home—avoid it if possible
- Look for signs when sleeping away from home

### Prepare before you have to

- Once bed bugs are present, you don't want to disturb the area
- Ideally, residents routinely
  - inspect with a flashlight
  - launder bedding
  - vacuum
  - maintain their unit according to housekeeping standards

### IPM in action: bed bugs

- Someone reports bed bugs and the response (IPM) plan is initiated
  - Inspect
  - Identify
  - Plan treatment scaled to level of infestation
  - Take action
  - Evaluate effectiveness

### IPM in action: bed bugs

1. Inspect and interview
  - Find out where people sleep
  - Find out where people put the things that come in/out of the unit
  - Note financial, physical, or cognitive limitations that could influence treatment
  - Use a flashlight and look around sleeping areas and areas where introduction is likely

## Inspection

- Always use a flashlight
- If bed bugs are found, inspect all adjacent units
- Two types
  - Visual
  - Scent detecting canine

## Monitoring

- Trap and kill bed bugs
- Determine how bad the infestation is
- Two types
  - Passive
  - Active



Passive, moat-style interceptor

## IPM in action: bed bugs

2. Empower the resident
  - Encourage patience and cooperation
  - Ask them to NOT: fog/bomb, use their own pesticides, throw away items, change too much until a professional arrives to inspect and treat
  - Give them control options: vacuum with a pantyhose, clothes dryer for 30 minutes on high heat, encasement and interceptors, isolate belongings in plastic totes/bags
  - Give them an idea of the treatment timeline

## IPM in action: bed bugs

3. Rally the troops
  - Pest management professional (PMP): inspects, vacuums, installs encasements, installs monitors, steams, treats if necessary, schedules a follow-up 10-14 days later
  - Resident: prepares for the PMP according to provided instructions \*\*minimize burden and disruption of bugs and residents' lives\*\*
  - Staff member: "knock & talk": meet with the resident and makes sure preparation instructions are understood, get resident support/supplies if needed, check in on progress before the PMP comes to treat.

## Treatment options

- | In-house options<br>(minimum training)  | Leave it to the experts   |
|---|---|
| <ul style="list-style-type: none"> <li>• Encasement</li> <li>• Monitoring</li> <li>• Quick (15 min) visual inspection</li> <li>• Steam</li> <li>• Clothes Dryer</li> <li>• Vacuum</li> <li>• Heat chamber (FL model)</li> <li>• Diatomaceous Earth (APPLICATOR'S LICENSE)</li> <li>• Resident training/support</li> </ul> | <ul style="list-style-type: none"> <li>• Canine inspection</li> <li>• Whole-unit heat treatment</li> <li>• Pesticide application</li> <li>• Thorough inspection</li> <li>• Active Monitoring</li> </ul> |

## IPM in action: bed bugs


4. Focus until "no bugs, no bites"
  - PMP: follow-up visit 10-14 days after treatment, and routinely until infestation is gone
  - Resident: continues to cooperate and prevents reintroduction
  - Staff: supports resident and checks in on progress
5. Return back to routine inspection and monitoring—find introductions before they become infestations

### Cockroach review

- Like to be wedged in cracks/crevices
- Love warmth
- Signs include frass, cockroaches, and egg cases
- Most likely to travel between units along water pipes and heat ducts
- Populations limited by food, water, and shelter
- Females do not feed or wander far while pregnant

### Effective IPM tools for cockroaches

- Sanitation
- Exclusion
- Pesticides:
  - Bait
  - Insecticidal dusts
  - IGRs




Gel Bait



Bait Station

### Don't use over-the-counter sprays and foggers

- Over-the-counter sprays and foggers are not part of IPM in multifamily housing
- They are not compatible with baits
- Cockroaches develop resistance



### Rodent review

- Mice are curious
- Rats are cautious
- Signs include droppings, rub marks, gnawed holes, and indicator pests
- Can fit through small holes and gaps
- Love warmth
- Travel the same paths along walls

### Effective IPM tools for rodents

- Sanitation
- Exclusion
- Traps
- Rodenticides

### Good Luck!!

