Procedure suggestions for bed bugs, cockroaches, and rodents
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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

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 CO₂
• 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 CO₂
  – 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

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**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

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**Treatment options**

- **In-house options (minimum training)**
  - Encasement
  - Monitoring
  - Quick (35 min) visual inspection
  - Steam
  - Clothes Dryer
  - Vacuum
  - Heat chamber (FL model)
  - Diatomaceous Earth (APPLICATOR’S LICENSE)
  - Resident training/support

- **Leave it to the experts**
  - Canine inspection
  - Whole-unit heat treatment
  - Pesticide application
  - Thorough inspection
  - Active Monitoring

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**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.

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**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

Don’t use over-the-counter sprays and fogggers

- Over-the-counter sprays and fogggers 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!!