

IPM and Prevention in Bed Bug Control

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IPM defined

- Integrated Pest Management (IPM) is the coordinated use of pest and environmental information with available pest control methods to prevent unacceptable levels of pest damage by the most economical means and with the least possible hazard to people, property, and the environment (Environmental Protection Agency, 2010).
- In a structural setting, an IPM program consists of
 1. inspection,
 2. identification,
 3. establishment of threshold levels,
 4. employment of two or more control measures (which may be cultural, mechanical, biological, or chemical), and
 5. evaluation of effectiveness

(Adapted from the National Pest Management Association's Urban IPM Handbook, 2006).



Bed bug prevention as part of IPM

- Educate everyone on the IPM Team who may come in contact with pests.
 - Pest management professionals
 - Housekeeping staff
 - In-home care providers
 - Maintenance workers
- Enact procedures that help prevent introduction and spread based on the observations of the IPM team members.



Inspection and monitoring

- Finds pests or evidence of pests visually or using a monitoring device.
- Done by everyone on the IPM team.
- Inspection of the premises can
 - Confirm an infestation,
 - Determine the location and extent of the infestation,
 - Identify items or factors that would impact the development of a pest management program, and
 - Track successes and failures.



Visual inspections

- *Pros*: Effective when done by a trained inspector with the proper equipment. An opportunity to educate.
- *Cons*: May miss bed bugs or severely underestimate the number.
- *Recommendations*: Essential for early detection and a well planned treatment. Include all adjacent units. Everyone needs to know what to look for, where to look, and what to do if a bed bug is found.



Canines

- *Pros:* Effective at assessing and monitoring situation quickly.
- *Cons:* Concerns with the training of the teams. Dog needs special care. Dogs can have bad days too.
- *Recommendations:* Use for property-wide inspection, verifying treatment success, and investigating reported problems when visual inspection fails to find a bed bug. Teams must be certified to be able to detect live bed bugs and viable eggs.



Monitors

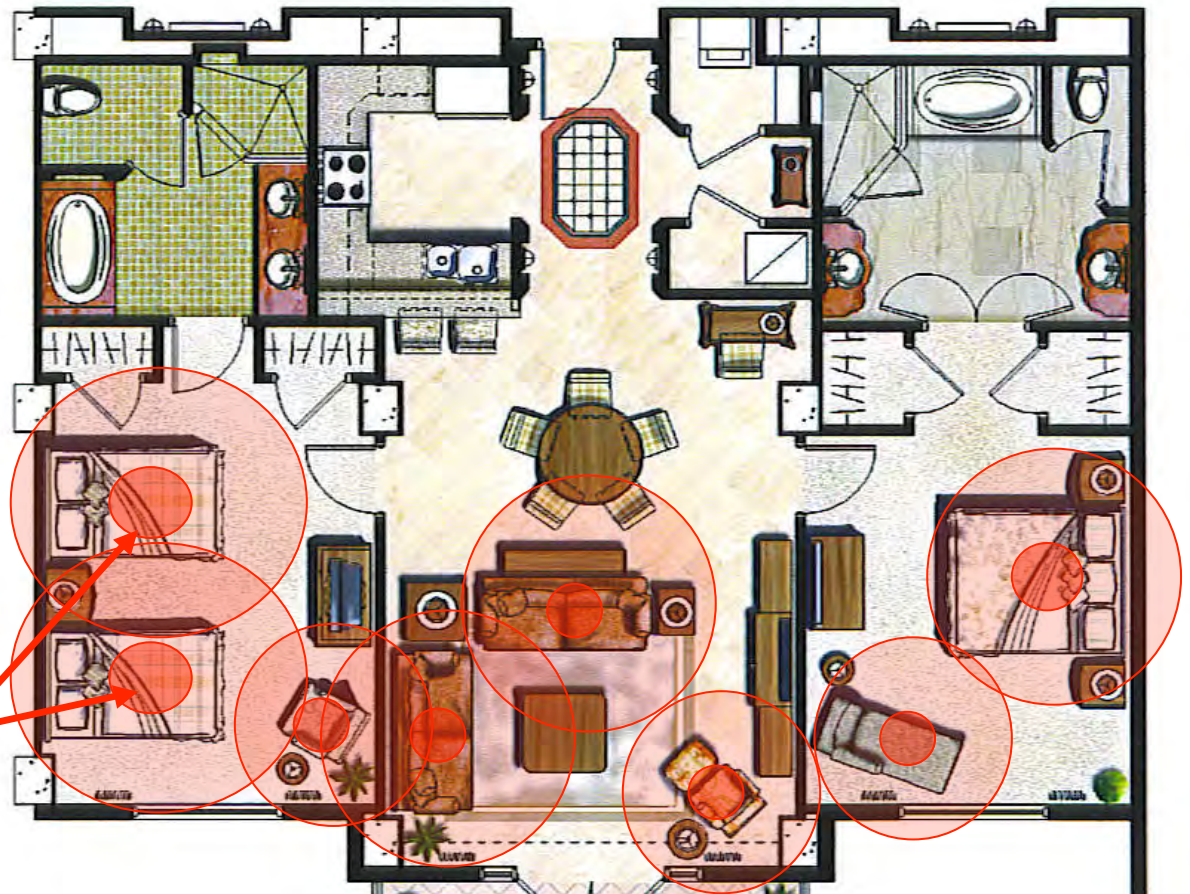
- *Intent:* Identify the presence of a bed bug infestation.
- *Methods:*
 - Passive—no attractant
 - Active—attractant
 - Moat style—human is the attractant



Where bed bugs live in a home

Beds,
bedding,
sofas,
bedside tables,
recliners,
picture frames,
and ...

● = Hot Spot



Signs of bed bugs

- *Bites*
- *Blood spots*
- *Shed skins*
- *Dead bed bugs*
- **Live bed bugs and viable eggs**

