

Bed Bugs

What they are
and

How to: *Avoid, Detect and Treat*

Baltimore City Health Department
Healthy Homes and Communities Division



September 29, 2010

Bed bugs in Baltimore City

- They are here - after a decades-long lull, bed bugs cases surged across U.S. (and in Baltimore) starting around 2006
- We'll be fine. We've had them before. There are simple ways to detect and combat them.
- Health implications – distress, secondary infections, but do not transmit disease
- Messages we would like to impart today:
 - Live your life – no need to panic
 - Bed bugs are no one's fault – don't discriminate – anyone can have them
 - We need to work together
 - Early detection and prompt response avoid larger problem
 - Bombs and foggers do not work! – don't eliminate, they spread bed bugs

Bed Bug Basics

- Adults - small, oval, beige-brown-red (apple seed)
- Crawl – don't jump or fly
- Nocturnal and secretive
- Tend to congregate
- Don't burrow under skin
- Don't spread disease



Avoiding Bed Bugs

You can get bed bugs despite best efforts

Bed bugs are no one's fault

Avoiding Bed Bug Infestations

Live your life – no need to panic

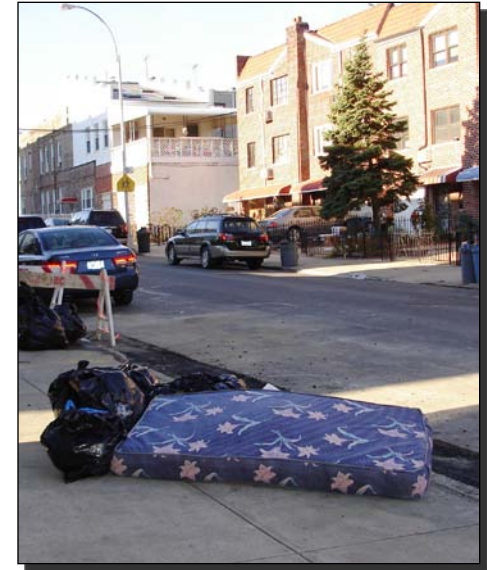
- Problems begin with a small number of bed bugs
- With **early detection**, problems easily resolved



How do We Get Bed Bugs?

How do Bed Bugs Get Around?

- Keep in mind bed bugs can be just about anywhere (and they hitchhike)
 - Clean places and dirty places
 - Public places – stores, hotels and motels, theaters, libraries, etc.
 - Private residences
- Used mattresses, box springs and furniture
- Bed bugs crawl between residences with shared walls, floors or ceilings



Avoiding Bed Bug Infestations

- Routinely practice checking yourself, mattresses, box springs
- Once/week wash and dry on high heat bed sheets and linens
- Reduce clutter in your home – difficult to check for bed bugs and creates hiding places for them



Avoid Spreading Bed Bugs

- Before discarding mattresses, box springs, and furniture, damage or wrap the item and label it “bed bugs/chinches”
- Do not move to another residence before exterminating
- When purchasing used items – inspect, bag then dry on high heat (and discard bag)
- Travelers – use luggage stands in rooms; check for bed bugs in bed frames and mattresses

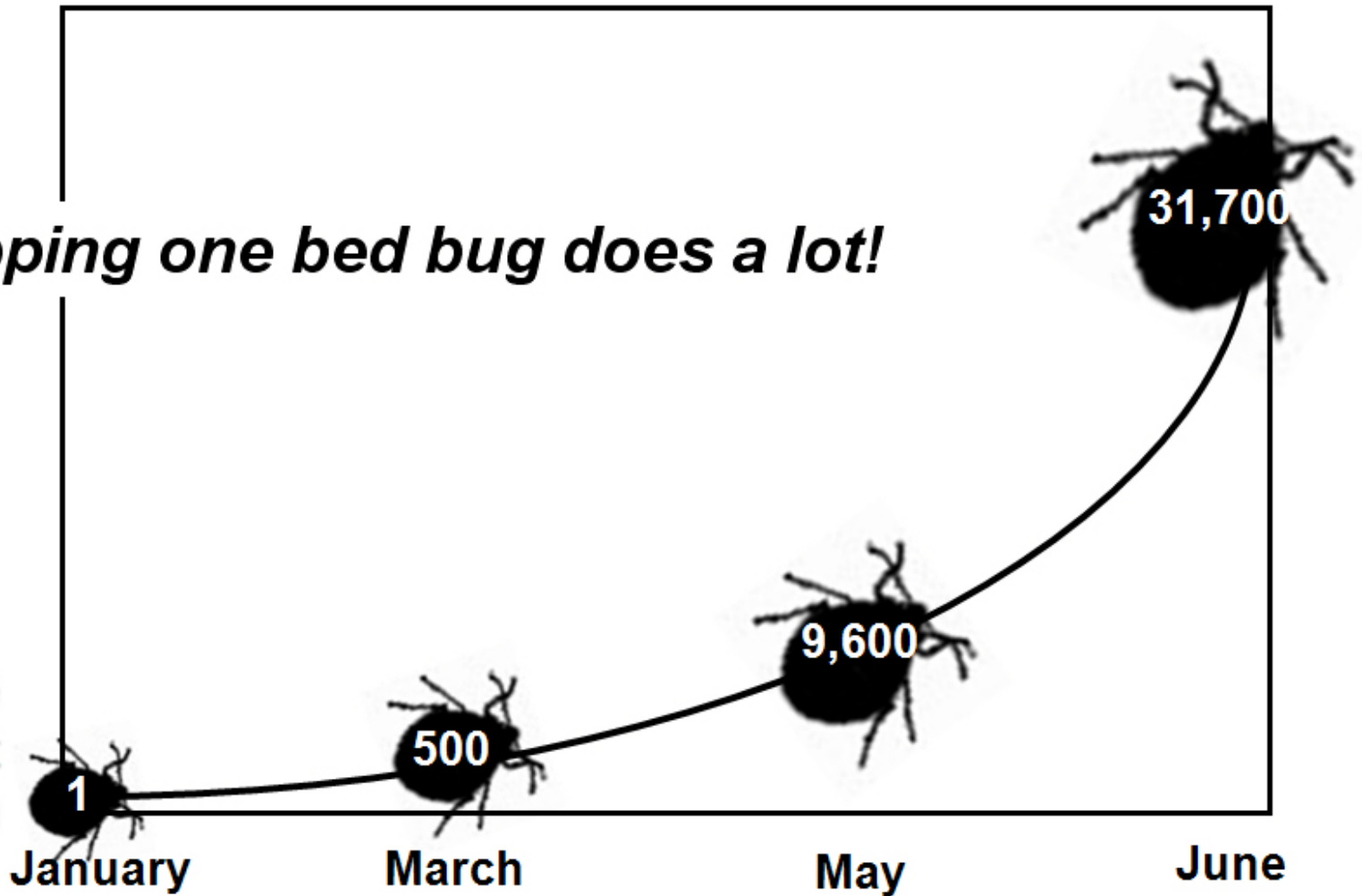


Bed Bug Detection



Stopping one bed bug does a lot!

One
pregnant
bed bug



Bed Bug Size



Bed Bug Life Cycle



Signs of bed bugs

Detect and confirm live bed bugs before treating

Signs triggering action:

- ❑ Bites
- ❑ Blood spots
- ❑ Shed skins
- ❑ Dead bed bugs
- ❑ Live bed bugs



Bed bug bites

Detection: Blood Spots

- ❑ Blood spots are bed bug droppings.
- ❑ Bed bugs cannot be confirmed by blood spots alone.



A bad infestation



The start of an infestation

Identification: Molts



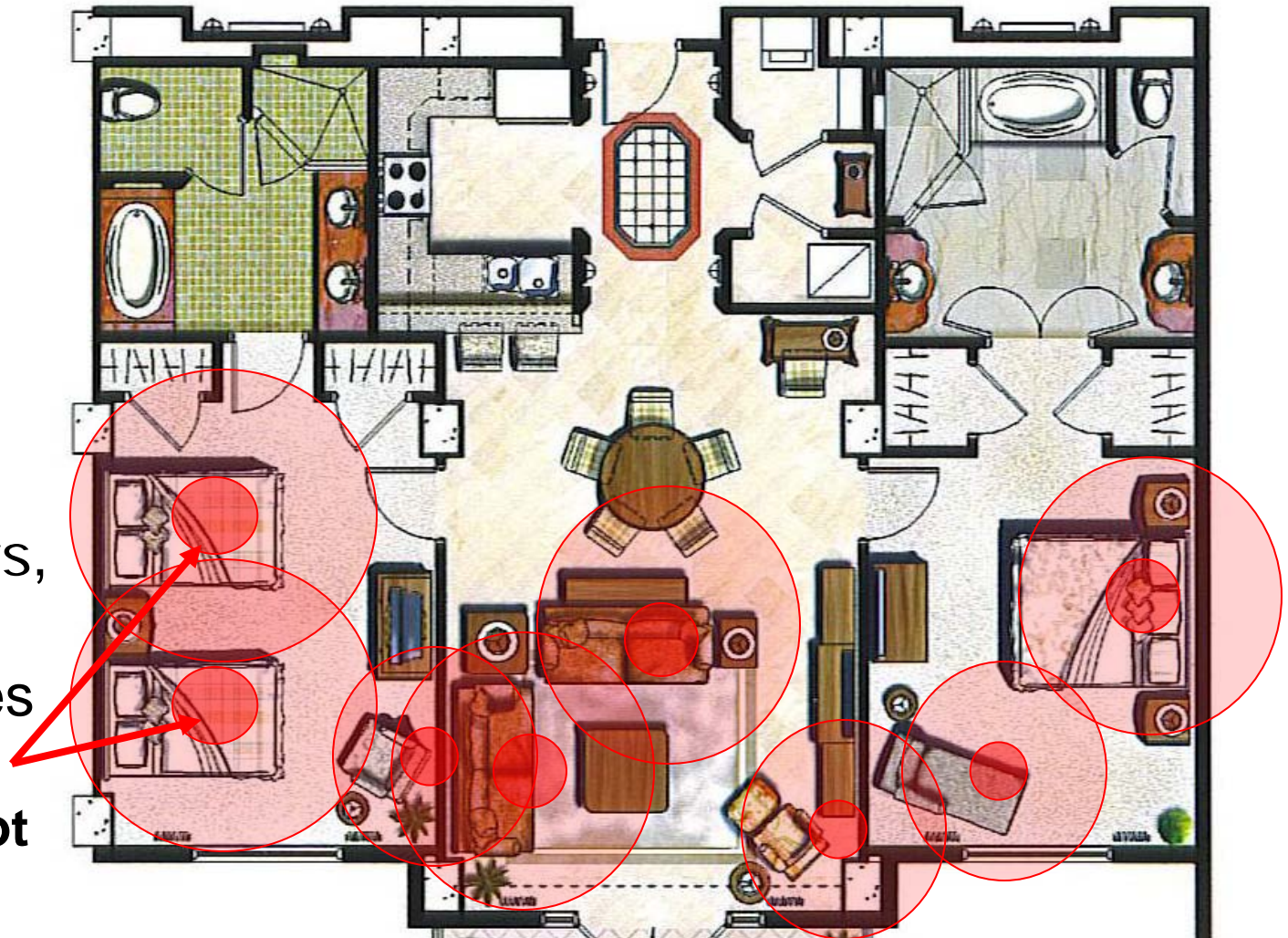
Shed skins on a mattress seam

Bed bug “hot spots” in a home

Cracks
Crevices
Clutter

Mattresses,
box springs,
night stands,
sofas, chairs,
baseboards,
picture frames

● = Hot Spot



Treatment

Treatment Can Include

- ❑ Inspection
- ❑ Taking apart furniture
- ❑ Discarding heavily infested items
- ❑ Mattress encasements for control
- ❑ Vacuum or other removal
- ❑ Non-chemical treatment (steam, etc.)
- ❑ Pesticides (safer products available)

Selecting a Pest Management Professional

- ❑ Choose only MD licensed pest professionals
- ❑ Ask about experience treating specifically for bed bugs
- ❑ Ask for references
- ❑ Ask about treatment methods used
- ❑ Should suggest encasements as option for mattresses
- ❑ Service will involve multiple treatment visits
- ❑ Service will require extensive preparation for extermination, including:
 - the removal or safeguarding of pets
 - clearing clutter and other obstacles to treatment – e.g. pictures, electrical outlet and light switch covers
 - movement of beds and furniture away from walls
 - removal of objects from walls
 - washing, drying (high heat), and safe storage of clothing and other items until treatment is complete

Pesticides and Bed Bugs

- ❑ Sprays alone will not fix the problem
- ❑ Foggers will not reach hiding bed bugs
- ❑ Sprays, especially foggers, can cause the bugs to scatter and spread
- ❑ Pesticides sprayed around beds and bedrooms can be very risky



Treatment:

Simple and Safe Ways to
Combat Bed Bugs in Your
Home

Take Away Their Hiding Spots

- ❑ Remove clutter around beds and sofas
- ❑ Place unused shoes and clothing in sealable plastic bags
- ❑ Remove pictures and posters from the walls
- ❑ Repair or remove any peeling wallpaper
- ❑ Remove area rugs



Make Your Bed an Island

- Make sure nothing on the bed touches the floor
 - Bed skirts make it easy for bed bugs to climb up and down the bed
- Move bed away from the wall
 - Only the four bed posts should touch the floor
 - The space below the bed should be empty

Use Bed Bug Interceptors

Interceptors trap bed bugs as they climb up and down your bed, chair or sofa.

- ❑ Examine daily for bed bugs
 - Flush trapped bed bugs down the toilet
- ❑ Apply additional talc as needed



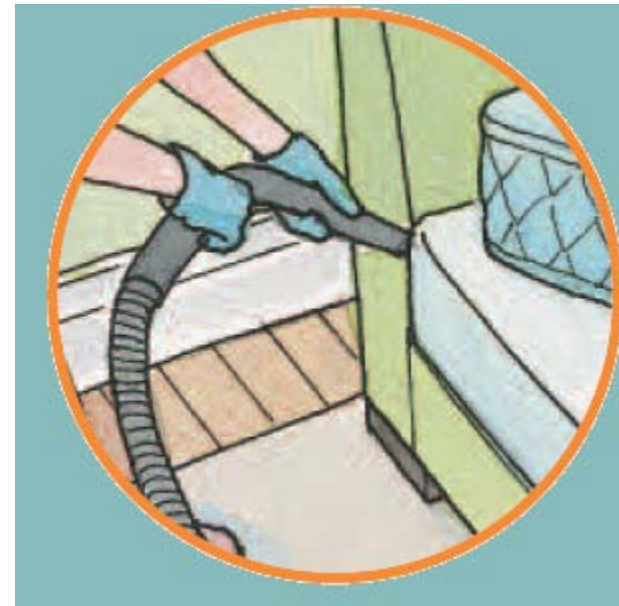
Bag, Wash, and Dry

Bag, wash, and dry clothes, bedding, curtains, and other fabric items with these steps

- 1) Bag items. This keeps the 'infested' items separate from the clean items.
- 2) Wash and dry on high heat for 60 minutes. For items that you cannot wash, dry on high heat for 30 minutes.
 - Seal and throw away the used plastic bags.
- 3) Do not bring 'clean' items back into an infested room.
 - You can put 'clean' items in new bags to protect them until the bed bugs are gone.

Vacuum

- ❑ Scrub infested surfaces with a dry, stiff brush to dislodge eggs.
- ❑ Vacuum all floors and carpets, including areas covered by carpets
- ❑ Use the small vacuum attachment for hard-to-reach corners.
- ❑ Vacuum all sides of the mattress, box spring, and furniture, including underneath.
 - Focus on seams, creases, and folds
- ❑ Dispose of the vacuum cleaner's contents right away, in a tightly tied or sealed plastic bag outside your home



Steam Clean

Steam will kill bed bugs and eggs.

- Use a “dry” steam cleaner for:
 - Floors, carpets, baseboards, bed frames and other furniture
- Steam only works through direct contact, so work slowly
- The steamer should not “blow” air forcefully or it may cause bed bugs to scatter.

*Do not apply steam to electrical outlets

Use Mattress Covers for Bed Bugs

Mattresses and box springs do not need to be discarded. Covers that are used correctly will give good protection at a lower cost.

- Covers should be labeled for “bed bugs.” Many mattress stores now carry them.
- Covers work by trapping bed bugs inside and preventing other bed bugs from getting into the mattress.
- Do not remove the cover for any reason for at least a year.



Apply Diatomaceous Earth

Diatomaceous Earth is a natural, white, powder-like substance that kills insects. When used properly, bed bugs will have to crawl through diatomaceous earth when moving around your home.

- Only use diatomaceous earth **labeled for insects**, and follow the instructions carefully.
- Apply diatomaceous earth to cracks and crevices in the walls, bed frames, and spaces around the bed.
- It can take up to two weeks to kill bed bugs.

Seal Cracks

Use silicon caulk to seal cracks and crevices where bed bugs can hide and travel.

- ❑ Pay attention to walls that are shared with other homes.
- ❑ Be sure plates covering wall openings are in place and sealed.



Work with Your Neighbors

If you share walls (or ceilings or floors) with neighbors, you have to work together.

Even if you think you got rid of the bed bugs in your own home, they can easily crawl back in from your neighbor's home.

City Services

□ Inspection and Identification

If you suspect a bed bug presence:

- Dial 311 and report bed bugs
- BCHD Sanitarians:
 - investigate and identify the pest
 - provide bed bug consultation and literature

□ Community Forums – 10 planned forums, more as resources allow

□ Do-it-yourself Bed Bug Manual

- On the topics covered today
- Provided on-line, to community organizations and neighborhood associations

Bed Bug

QUESTIONS

and

ANSWERS