## WHEA Lunch & Learn Series Webinar "Be Bed Bug Aware-Not Bed Bug Scared"

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# **IDENTIFICATION**





## Adults

- Easily seen with naked eye
- Reddish-brown, wingless, size of an apple seed









## Nymphs

- Yellowish/translucent
- Bright red after blood meal











## **Mistaken Identity**

- German Cockroach
- Larder Beetles
- Carpet Beetles
- Ticks
- Debris (lint or dirt)









# **SIGNS YOU MAY HAVE A PROBLEM**

## **Bed Bug Red Flags**









**Bed Bug Bites** 





# Do not diagnose a bed bug infestation based on bites alone!







# **HOW TO PERFORM AN INSPECTION**

#### What do I need for an inspection?

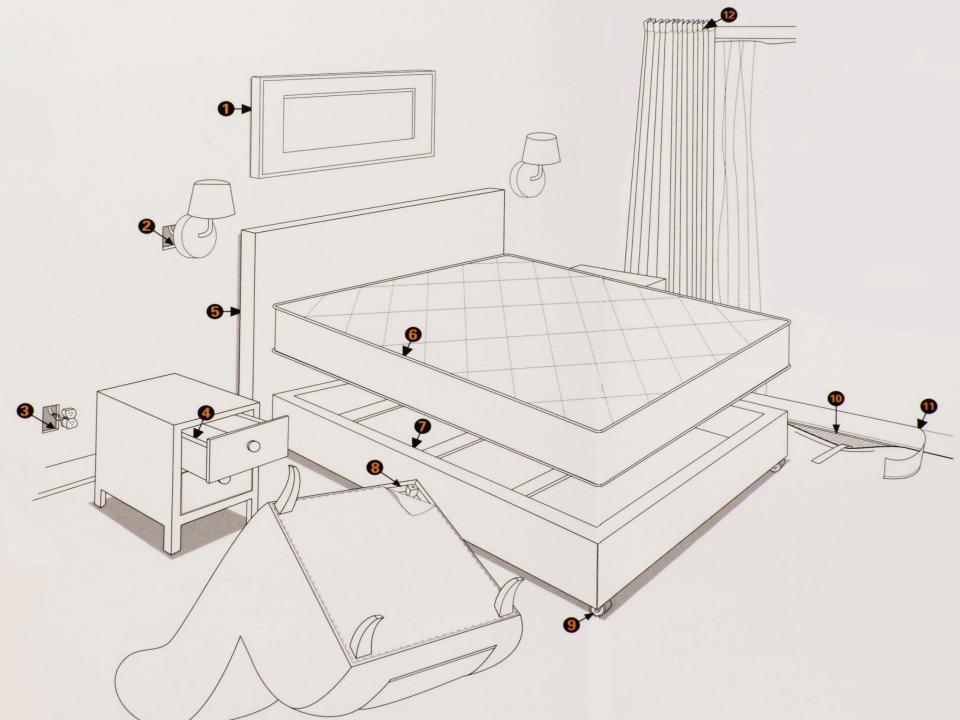












#### Linens

• Slowly peel back sheets









Mattresses

• Piping, tufts, folds, tags







#### **Box Springs**

- Wooden frame
- Plastic edge guards
- Fabric backing













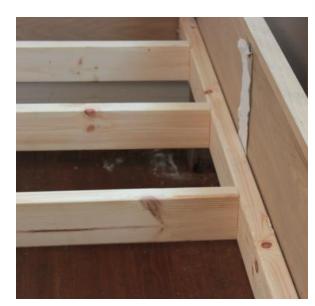
**Bed Skirts** 

• Under mattress, corners and folds



**Bed Frames** 

• Several hiding spots













#### Surrounding areas

- Baseboards
- Peeling wallpaper
- Popcorn ceiling











#### Furniture









- Drapes
- Pictures frames
- Night stands
- Electrical outlets
- Curtains









## I Found A Bug, Now What?

- Collect a sample
- Have a plan
- Keep cool









# PREVENTING AND ADDRESSING OUTBREAKS





## The Spread of Bed Bugs





- Luggage
- Backpacks
- Purses
- Clothing
- Used furniture



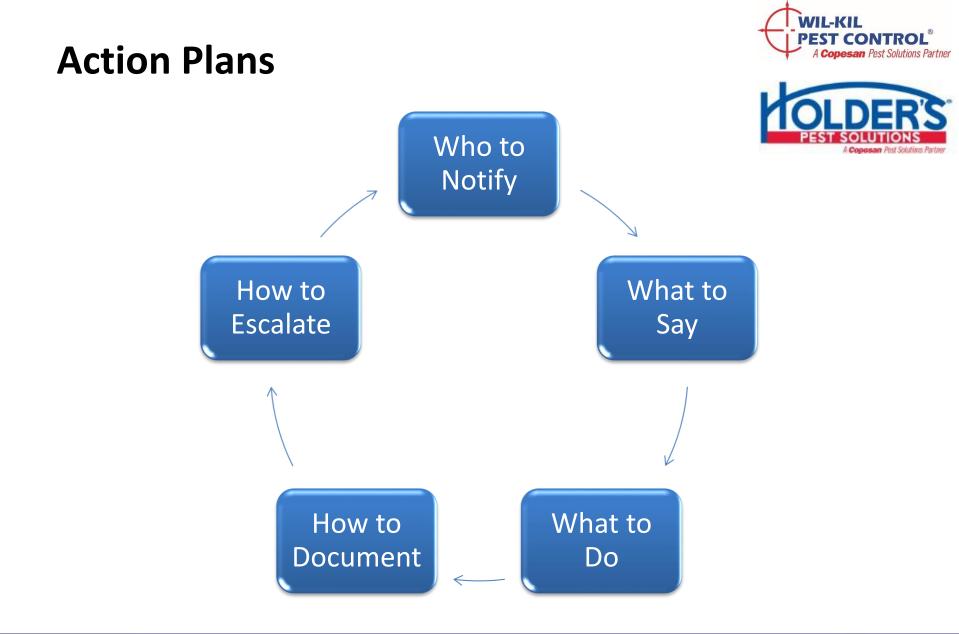
#### **Be Proactive**





- Perform inspections (document everything)
  - Annually (at a minimum) with a professional
  - Ongoing with staff
- Educate staff, guests and patients
- Create an action plan









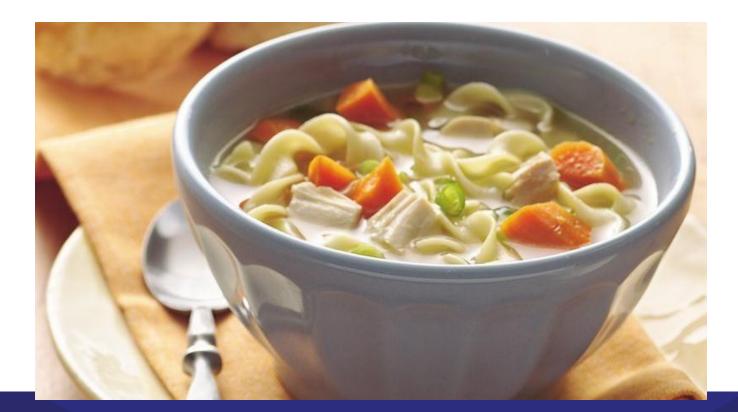
# **K9 SCENT DETECTION**

## **Chicken Noodle Soup**





• What humans smell



## **Chicken Noodle Soup**





• What dogs smell



## Training





- J&K Academy High Springs, FL **pepedogs**
- Obedience/Training Division scentworx
  - -Training dogs in scent detection in:
    - Agricultural Government
    - Conservation
      Entomology





## **Bed Bug Training Program**



| February |                |    |    |    |    |    |
|----------|----------------|----|----|----|----|----|
| 1        | 2              | 3  | 4  | 5  | 6  | 7  |
| 8        | 9              | 10 | 11 | 12 | 13 | 14 |
| 15       | 16             | 17 | 18 | 19 | 20 | 21 |
| 22       | 23             | 24 | 25 | 26 | 27 | 28 |
| 29       | € (2016, 2020) |    |    |    |    |    |

| March |    |    |    |    |    |    |  |
|-------|----|----|----|----|----|----|--|
| 1     | 2  | 3  | 4  | 5  | 6  | 7  |  |
| 8     | 9  | 10 | 11 | 12 | 13 | 14 |  |
| 15    | 16 | 17 | 18 | 19 | 20 | 21 |  |
| 22    | 23 | 24 | 25 | 26 | 27 | 28 |  |
| 29    | 30 | 31 |    |    |    |    |  |

| June |    |    |    |    |    |    |
|------|----|----|----|----|----|----|
| 1    | 2  | 3  | 4  | 5  | 6  | 7  |
| 8    | 9  | 10 | 11 | 12 | 13 | 14 |
| 15   | 16 | 17 | 18 | 19 | 20 | 21 |
| 22   | 23 | 24 | 25 | 26 | 27 | 28 |
| 29   | 30 |    |    |    |    |    |

| July |    |    |    |    |    |    |
|------|----|----|----|----|----|----|
| 1    | 2  | 3  | 4  | 5  | 6  | 7  |
| 8    | 9  | 10 | 11 | 12 | 13 | 14 |
| 15   | 16 | 17 | 18 | 19 | 20 | 21 |
| 22   | 23 | 24 | 25 | 26 | 27 | 28 |
| 29   | 30 | 31 |    |    |    |    |

# Dog and staff 1 on 1









#### Dog and handler

- Field work
- Written test

#### **Bed Bug Training Program**







# Final field test to graduate

### Certifications







## (NESDCA) National Entomology Scent Detection Canine Association

- Alerts to only live bed bugs and or viable bed bug eggs
- Each team (dog and handler) must pass annual test

# **K9 INSPECTION**



PEST CONTROL

**Copesan** Pest Solutions Partner

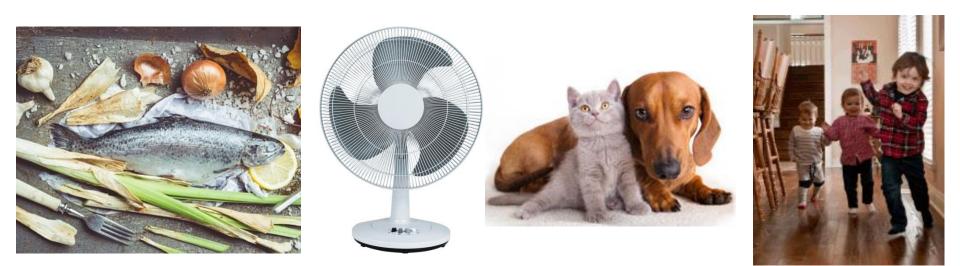
WIL-KIL

#### **K9** Inspection





- What needs to be done prior to team's arrival?
- Control the environment!











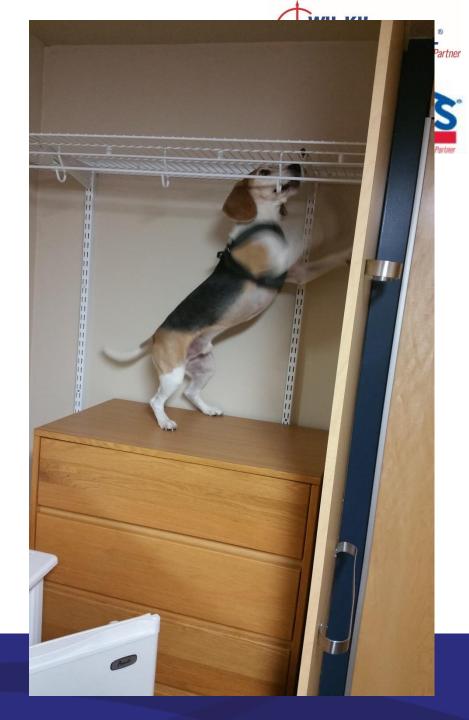




















✓ Efficiency
 ✓ Accuracy
 ✓ Documentation
 ✓ Peace of Mind









## **MEET THE TEAMS**





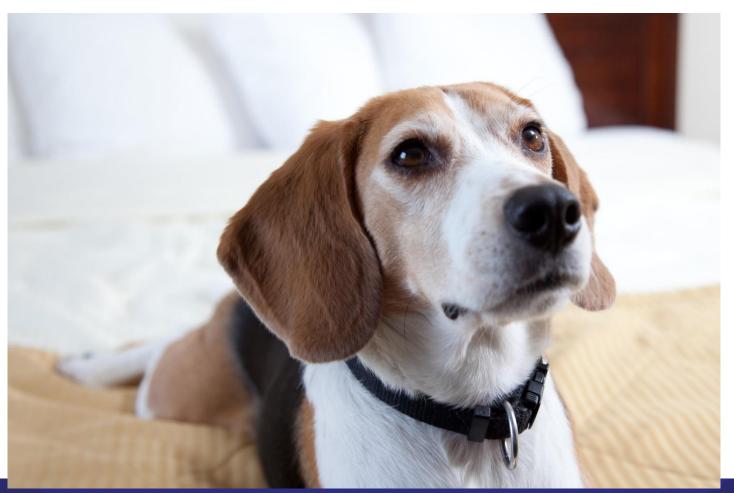


- 3 teams
- All teams are Wil-Kil employees
- Cover entire service footprint

Max

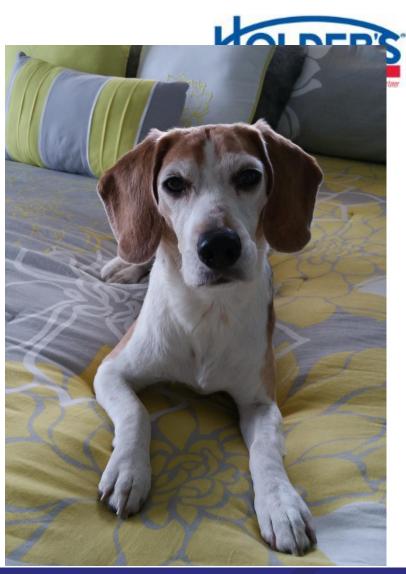






#### Max

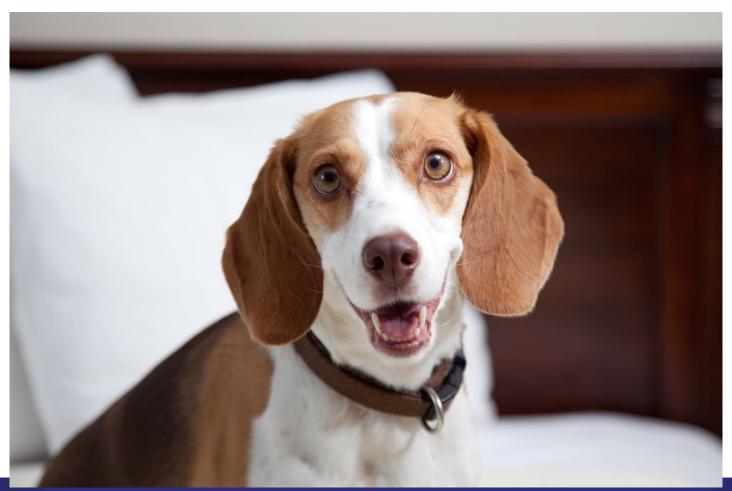
- 9 years old, pure bred beagle
- Florida
- Started with Wil-Kil: Jan 2010
- Lives in Racine, WI
- First scent detection dog for hire in state of WI
- Best friend/Handler: Rick



### Daisy









## Daisy

- 8 years old, pure bred beagle
- Rescue from Florida shelter
- Started with Wil-Kil: 2011
- Lives in Milwaukee, WI
- Best friend/Handler-Mike



Bull



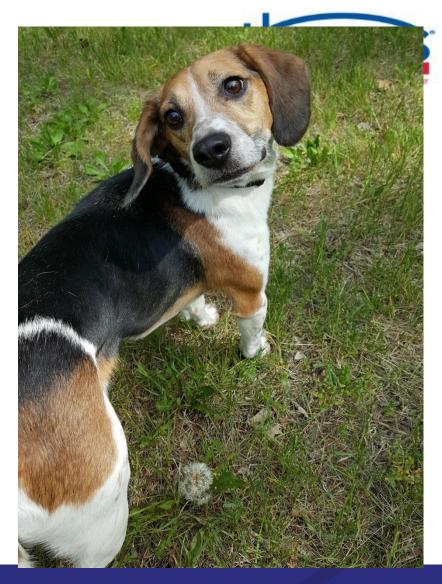




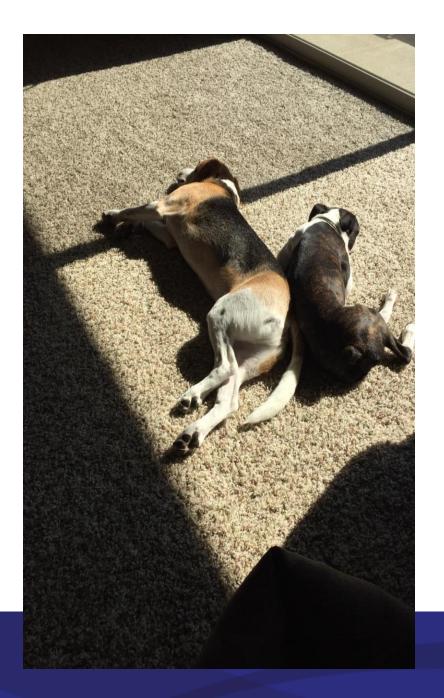


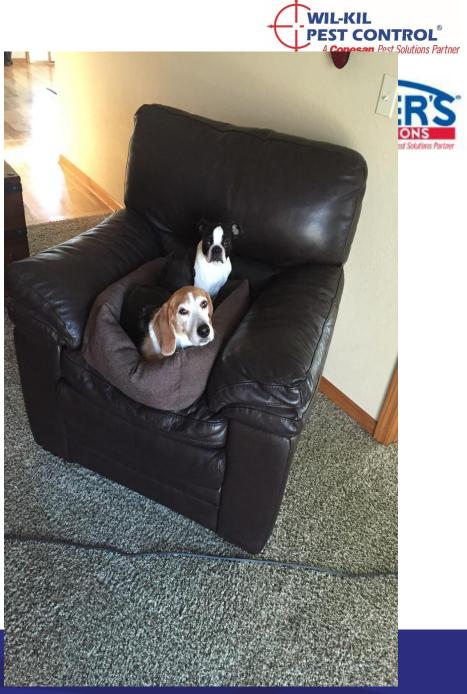
## Bull

- 2½ year old, beagle-hound mix
- Georgia, deer herding background
- Started with Wil-Kil: Feb 2016
- Lives in Wisconsin Dells, WI
- Best Friend/Handler: Jason

















# TREATMENT OPTIONS FOR BED BUGS





### **Prior to Selecting Treatment**

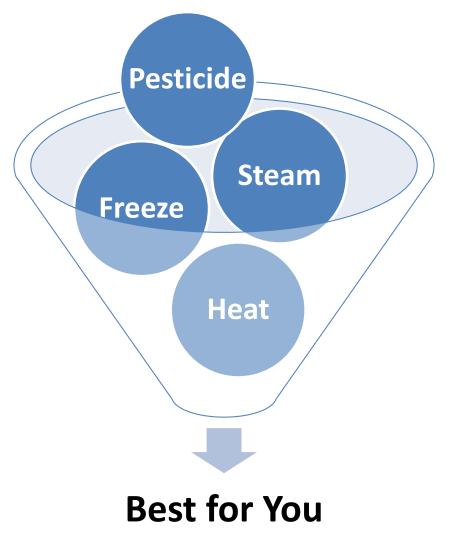




- Do not panic
- Do your homework
- Ask questions



### **Several types of Treatments**





- Steam
  - Time consuming
  - High margin for error
  - Not treating all areas











- Cryonite (freeze)
  - Similar to steam
  - 0 F for 3-4 days







- Conventional (Pesticide)
  - Low infestation
  - Isolated to one area
  - Cost-efficient







- Thermal Remediation (Heat)
  - Effective
  - Minimal preparation
  - Quick turnaround
  - Large/widespread infestations
  - Warranty



## **Health Care Facilities**





- Common strategy:
  - Thorough inspection
  - Pesticide application
  - In house deep clean
  - Release room back into service

# HEAT TREATMENT BEST PRACTICE



CONTROL esan Pest Solutions Partner

WIL-KIL

## Equipment







## Equipment





- One heat rig (truck, equipment and trailer)
  - 1-2 bed apt
  - Some 3 bed apt/townhouse
  - Hotel rooms



# Equipment

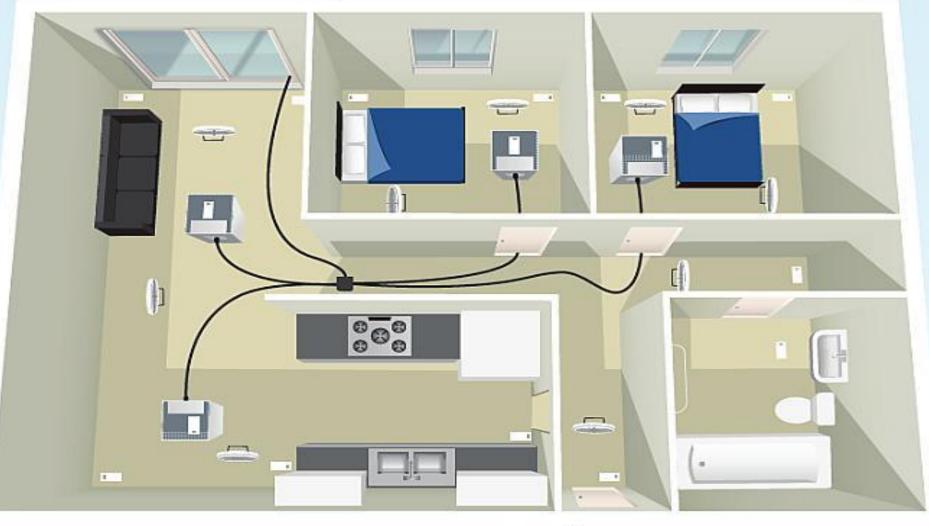




- Trailer to unit
  - 300' of cord
  - $-25^{th}$  floor



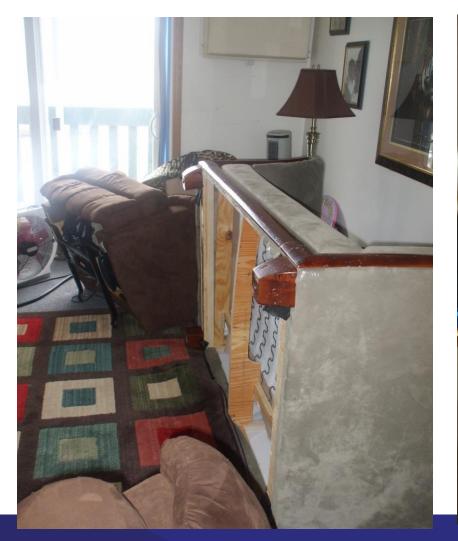


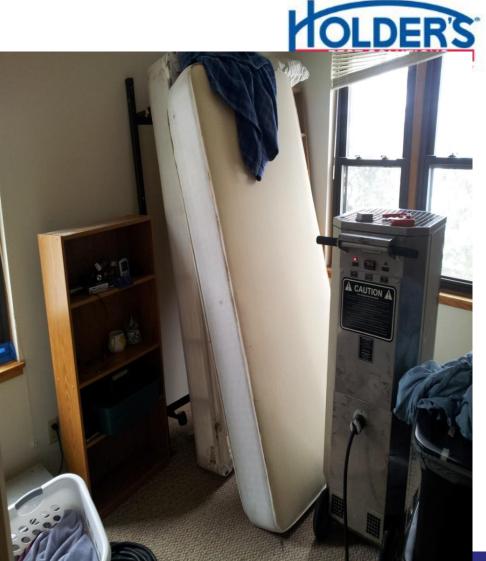




#### **Treatment Day**



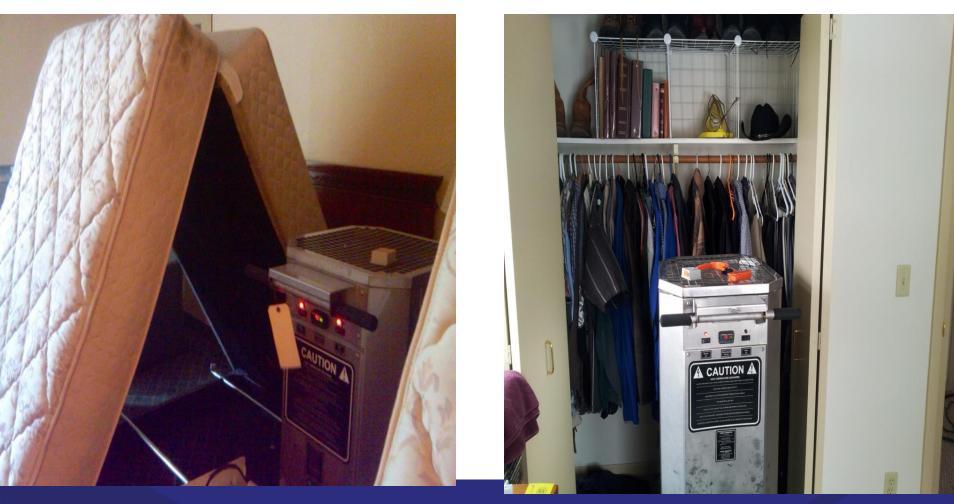




#### **Treatment Day**













## **Treatment Day**





- Treatment unit
- Inspection
- Pesticide applications
  - Adjoining units
  - Hallways
  - Common rooms



## Summary





- Proper Identification
- Action Plan in Place
- Ongoing Inspections





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