



CLEVELAND EMS

Bed Bug Control Procedures

Presenter: Jamie Marquardt, Operations Sergeant

WHAT I AM NOT



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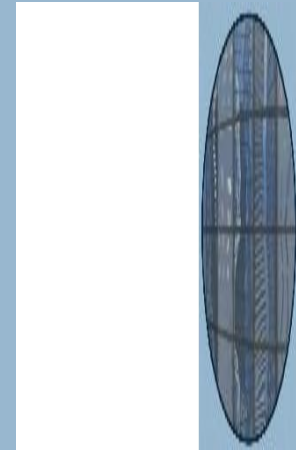
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We need to overreact to this issue rather than underreact. The last thing we want is a patient to get bed bugs from our ambulances or for one of our employees take bugs home to their families.

OVERVIEW



HOW DID WE ARRIVE AT THIS POINT?

- “Sleep tight and don’t let the bedbugs bite.”
- 1950’s Bugs were rare find
- Ban of DDT in 1972
- Reemergence 1990’s
 - Increased Travel
 - Illegal aliens
 - Thrift shops
 - No DDT
 - The economy
- Cleveland is greatly affected



HOW DID WE ARRIVE AT THIS POINT

- Major jump in incidents of bedbugs in 2010.
- Crews began voice concerns about PPE.
- Using insect bombs and bleach.
- Realized:
 - Prepared for chemicals.
 - Prepared for diseases.
 - Not prepared for bed bugs.
- Current practices did not protect or eliminate.



Major Concerns



- Are we cross contaminating patients?
- Are crews contaminating their homes?
- Are crews at risk of contaminating bases?
- Does our current measures kill bed bugs?
- What cost of hiring extermination company?
- Danger of chemicals to patients and crews.
- Out of service time for units.
- Patient confidentiality vs. Crew protection.
- Can we be contaminating hospitals?

PLAN OF ATTACK

- Extensive investigation started.
- Experienced and reputable sources used.
- Generated Research Paper
 “Bed Bug Control Strategies for Ambulance Personnel”
 February 4, 2011
- Research Paper converted to General Order



PLAN OF ATTACK

- Education

Background

- Why the increase?
- East vs. West

Images

- What do they look like?
- How big are they?

Description and Behavior

- Where are they?
- How can I tell them from a flea, tick or cockroach?
- What do they want?
- What should I look for?



PREVENTION

- Squads and bases kept clean.
- No furniture brought into base.
- Frequent inspection of squad and base.
- Linens
- Uniforms
- Personnel
- CAD



DETECTION

- Live Bug may be seen.
- Someone informed you.
- You inspect:
 - Patient
 - Surroundings



Procedures

- PPE (Personal Protective Equipment)
 - Jump suits
 - Boot covers
 - Head covers
 - May have allergies
- Protect Equipment Bags.
- Remove clothes, wrap patient up.
- Leave patient belongings or bag them
- Avoid riders from same house
- Notify Captain and receiving hospital
- Personal Inspection at hospital
- If time passed, steps retraced



Bed Bug Control Strategy Questionnaire

Date and Time of Call: 6/14/11 @ approx 1130am Unit Number: 14
 Crew: Gomez 248, Flores, M 192, McCool 252 Truck Number: 20
 Location of Call: This was removed for patient privacy purposes Transport Location: SVC
 Field Cpt: Captain Stritar RED Center Cpt.: Captain Moore
 CFD Unit(s): Ladder 13 CPD Unit(s): N/A
 Where did you find the bed bugs? ALL OVER!!! (pt/home) Not in our truck or cot.
 Did the patient claim to have bed bugs? yes What protective measures were used for patient? sheets/blankets
 What equipment was taken into the house? Cot
 Was the equipment set down on any soft surfaces? NO
 Did you witness any bugs on patient / surroundings? yes!!! Did the patient have insect bites on them? yes
 Did you witness any live bugs in squad or on equipment? no Where?
 At any point did you witness a live bug? yes Where? in home / on pt
 Did you take riders with you to the hospital? no Where did the rider sit? n/a
 Did the riders live at the same residence as infestation? n/a
 Did patient bring any items with them to hospital? 1 bag of muds Where were the items placed? on pts lap in between 5 sheets.
 What protective measures were used for crew? suit/gown/bonits/gloves/tape Did you see any live bugs on yourself? NO!
 Items needing replaced (Gowns, infection control kits, belonging bags, etc.) gowne/infection control kits
 Additional Comments:

Procedures Completed (Office use only)

Sprayed cot + mattress 2 Bellam. 8/20/11 CST

PLACE COMPLETED FORM IN SGT. J. MARQUARDT'S MAILBOX



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Decontamination Procedure

- Exposure Only

Concentrate on location of patient

Check mattress for integrity-Replace as necessary

Dispose all linen in patient care area★

Inspect equipment bags taken in the residence

Cover with Bedlam

- Cot Mattress

- Cot Frame

- All Seats

- Walls

- Floors

- Equipment bags taken in house

Decontamination Mattress

Inspect Mattress



Spray Mattress

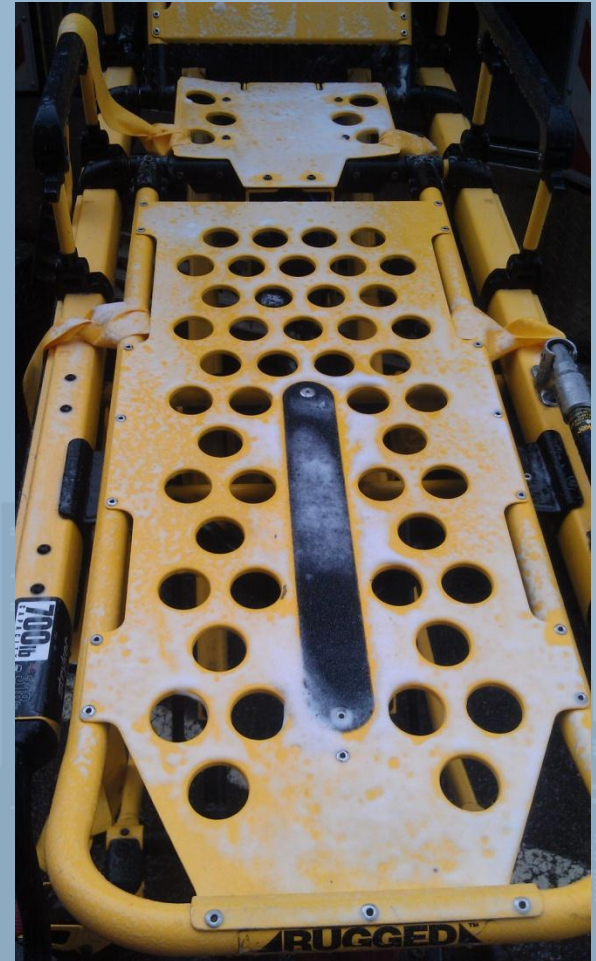


Decontamination Cot

Inspect Cot



Spray Cot



Decontamination Patient Care Area

Inspect Area



Spray Area



Decon

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the cot:

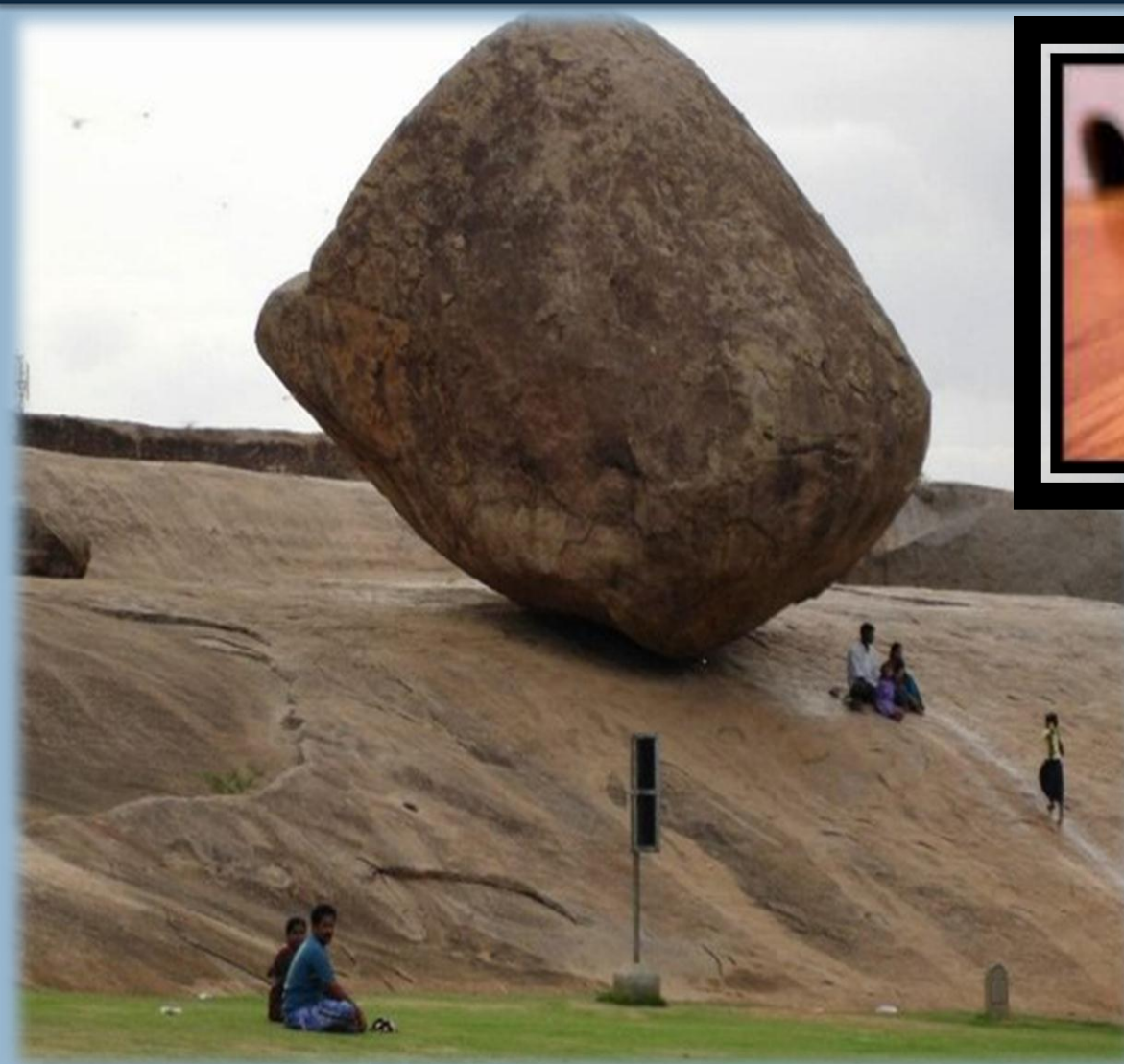
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Decontamination Procedure

- If bug seen inside the squad off the cot:
 - Remove everything from squad
 - Dry Vacuum (Clean filters and bags)
 - Steam at 329° F
 - Bedlam Spray
 - JT Eaton Powder
- Complete Infestation
 - Professional services contacted.
 - Attempts to track exposure.
 - Determine Scope of incident
 - All crews notified.
 - Exposed patients notified.
 - Follow up of truck, crews and patients

RISK VS. REWARD



THANK YOU FOR LISTENING

Feel free to call or Email me
with any questions or
suggestions you may have.

- ***Jamie Marquardt, Sergeant
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