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Bed Bugs Issue Brief

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Impact of Bed Bugs on Public

Although bed bugs are not known to transmit disease, they are a pest of significant public health importance.

Bed bugs fit into a category of blood-sucking ectoparasites (external parasites) similar to head lice. Bed bugs, like head lice, feed on the blood of humans but are not believed to transmit disease.

Bed bugs cause a variety of negative physical health, mental health and economic consequences. Many people have mild to

severe allergic reaction to the bites with effects ranging from no reaction to a small bite mark to, in rare cases, anaphylaxis (severe, whole-body reaction). These bites can also lead to secondary infections of the skin such as impetigo, ecthyma, and lymphangitis.

Treatment requires keeping the person from being repeatedly bitten and possible symptomatic use of antihistamines and corticosteroids. There is no evidence that medications improve



outcomes and symptoms usually resolve without treatment in 1-2 weeks.

Bed bugs may also affect the mental health of people living in infested homes. Reported effects include anxiety, insomnia and systemic reactions.

Bed Bugs are not Unique to the US

Bed bug populations dropped dramatically during the mid-20th century, the US is now experiencing alarming resurgence in the population of bed bugs.

Experts suspect the resurgence is associated with increased resistance of bed bugs to available pesticides, greater international and domestic travel, lack of knowledge

regarding control of bed bugs and the continuing decline or elimination of effective vector/pest control programs at state and local public health agencies.

Everyone is at risk for bed bugs bites when visiting an infested area. However, anyone who travels frequently and shares living and sleeping quarters where other people have previously slept has an increased risk for being bitten and for spreading a bed bug infestation.

Bed bugs are not attracted by filth. They are insects of convenience like lice and fleas. Bedbugs can come into an apartment on someone's clothing, in suitcases, backpacks, storage boxes, used furniture, and rental furniture. Apartment owners and tenants have no control over what attracts bed bugs.

Why is Community Control

Local public health has limited resources to combat this problem and frequently in comparison to other issues is not seen as a priority.

Treatment costs are high and transient populations make it difficult or impossible to assign responsibility.

Municipal codes struggle to identify those responsible for control of bed bug infestations. Tenants and landlords often dispute who is responsible for the cost of control & treatment.

Pesticide resistance and limited control choices make treatment even

more difficult. Some bed bug populations are resistant to almost all registered pesticides.

Pesticide misuse is also a potential public health concern. Residents may resort to using pesticides that are not intended for indoor residential use or according with their labeling.

What Is Integrated Pest Management (IPM)?

Integrated pest management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their

interaction with people and the environment in combination with available pest control methods results in the most economical means of managing pests with the least possible hazard to people, property, and the environment.

Bed bug control is most effective when the

approach is implemented with participation by the residents. In multi-family housing, diligent participation is also required of the building management. IPM takes advantage of all appropriate pest management options, including the use of pesticides.

Elements of successful IPM

- Use monitoring devices
- Remove clutter where bed bugs can hide
- Apply heat treatment
- Vacuuming
- Seal cracks and crevices to remove hiding places
- Use non-chemical pesticides (such as diatomaceous earth)
- Judicious use of effective chemical pesticides

What are other states and communities doing?

- Bed Bug Task Forces or Advisory Groups
 - Implement a coordinated community control program
 - Advocate utilization of IPM
 - Rental code enforcement of pests
 - State laws enforcing bedbug control in rental units Disposal laws for mattresses and infected belongings
 - Guidelines for shelters and group living facilities
 - Protocols for timeframes in which to respond to rental unit infestation
 - Extermination protocols
 - Education, Education, Education!
- (See attached table of some laws and efforts as well as a summary of various litigation)**

Some people claim that the laws affecting bed bug removal actually help spread the bed bug to more locations. Implementing laws need to be thought out carefully.

The most important thing we can do locally is educate the public on bed bug prevention and control. The second most important thing we can do is have consistency in our message. This is why it is so important to have public health create the message and coordinate with partners the way in which it is relayed.

Government Engagement

Local Public health provides information and education on prevention, control and best practices of bed bug eradication and control to the public and private sector. Ensures consistent messaging as well as advocating for adoption of State and

local laws. Centers for Disease Control conducts research in the areas of medicine, entomology, epidemiology and environmental toxicology and provides information on emerging trends and national

strategies to reduce bed bug populations

EPA has dual statutory charges to ensure that the pesticides with public health uses are (1) safe and (2) effective against the pests on their labels.

Strategy Recommendations for Polk County

1. Form a community task force that includes:
 - Local health department
 - Environmental health
 - Local government officials or staff
 - Property managers
 - Used/rental furniture owners
 - Pest management
 - Consumers
2. Develop guidelines for
 - Multi-Unit Housing and Group Living Environments
 - Motels, hotels, and extended stay units
 - Shelters and group housing
 - Nursing homes, hospitals, and assisted living facilities
 - Agencies who receive donated clothing and household items
 - Used/Rental Furniture
3. Review local public health nuisance and housing codes, ordinances & regulations
4. Local Public Health will increase and coordinate community-wide education and outreach efforts including a community-wide campaign as well as targeted education.
5. Include task force as partners with local public health on healthy home program.
6. Local public health will continue to pursue EPA and HUD healthy home program funding.
6. Advocate for state/local laws to ensure safe disposal of mattresses and other infected materials.
7. Advocate for all jurisdictions to add bed bugs to home inspection reports
8. Promote Integrated Pest Management as a primary strategy

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Find the Polk County
Health Department:

www.polkcountyiowa.gov/health



The Polk County Health Department is the designated local public health agency for Polk County. It is governed by the Polk County Board of Health/Supervisors and Board of Health Advisory Council.

The Director of the Health Department is Terri Henkels and includes medical oversight by Carlos Alarcon, M.D. and laboratory oversight by Gregory L. Schmunk, M.D.

The Health Department is comprised of the following:

- Clinical Services including
 - Prevention screening
 - Disease treatment and management
 - Child and adult vaccinations
 - Family planning,
 - Acute and primary care
 -
- Community Health Planning, Outreach and Education Division including
 - Community and neighborhood health planning
 - Community outreach and education
 - Community health assessments, improvement plans and profiles
 - Emergency preparedness
 - Lead poisoning prevention and case management
 - Lead poisoning home remediation and healthy homes programs
 - National Children’s Study (21 year longitudinal study of the environmental impacts on children
 - Project Launch (coordination and integration of social and emotional services to children 0-8 years of age)
- Chronic Disease Management and Injury Prevention Services
- Communicable Disease Investigation and Treatment
- Breast and Cervical Cancer Services including care coordination
- Laboratory Services

Reference Sources for Issue Brief

<http://www.polkcountyiowa.gov/health/Pages/Bedbug.aspx>

Centers for Disease Control

Environmental Protection Agency

Michigan’s Comprehensive Guidance to Identify, Treat, Manage and Prevent Bed Bugs

Bed-bug.org