



Keep It Pest-Free:
Bed Bugs and the Healthy Homes Initiative

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The bed bug epidemic

- Bed bugs are a growing problem in Detroit and most other major cities in the U.S.
- They are more of a problem in urban areas with high population density
- Most calls and complaints come from multi-family dwellings and apartments

Bed bug **biology**

- Insects that feed only on blood
- Small (about size of apple seed), translucent to brown in color, flat and good at hiding
- Live in our homes and hitchhike in our belongings



Bed bugs **hide**

- Not just in the bed
- In and amongst furniture, electronics, and the structure of the home
- Near where they feed, usually within 10 feet of the sleeping host
- Hide in any crack or crevice larger than the edge of a credit card
- Do not like to be disturbed



Bed bugs bite

- Bed bugs have “beak-like” mouthparts
- Bed bugs find people by seeking out warmth and carbon dioxide
- Bed bugs will come out of their hiding places late at night
- Most people cannot feel bed bug bites
- Bed bug bites may look like many other types of insect bite



Bed bugs spread

*Bed bugs are excellent hitchhikers.
Here are some common ways bed bugs can spread:*

- Bringing used, uninspected and untreated items into the home
- Visiting a residence that has a bed bug infestation
- Staying in a hotel/motel that does not inspect or treat their rooms appropriately
- In multi-family housing, bed bugs will spread to adjacent units through visiting, on items, or through walls

How can I
 avoid bringing
 bed bugs
 with me after
 home visits?

- Reduce the items you carry in/out
- Items to be carried in/out:
 - Contained in a plastic bag
 - Left in places least likely to be accessible by bed bugs
- Avoid sitting on soft or upholstered furniture
- Check your shoes and belongings after leaving

Bed bug health risks

Bites

- Reactions to bites may vary widely
- The most common symptom is itchy welts

Secondary Infection

- Scratching welts may cause infection

Psychological

- Anxiety and unhealthy stress
- Sleeplessness
- Phantom Itching



Anemia has been reported in children and older adults who have been severely bitten

Bed bugs and stress

- Bed bug infestations may cause severe stress and anxiety
 - Loss of sleep
 - Decreased work productivity
 - Stressors to social relationships
 - Economic hardship
- The stresses of bed bug infestations may lead people to dangerous activities that may harm themselves



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FDNY Warns Don't Use Gasoline Products On Bedbugs

Queens fire officials last month issued a warning to borough residents to steer clear of gasoline or gasoline products to fight bedbug infestation at home. FDNY officials said residents in Astoria have called 911 to report a gasoline odor coming from adjacent apartments in their buildings. Firefighters responding to the calls discovered several incidents where residents poured gasoline on mattresses to kill bedbugs. Allegedly a number of people, following dangerous, misleading advice had wiped gasoline on their own arms and their children's arms to stop the bedbugs from biting, officials said. Such incidents involving the use of extremely flammable gasoline prompted FDNY officials to issue the warning about fatal consequences that could result from the misguided use of gasoline to battle bedbugs. "This is not the first time we have issued this warning," a fire spokesperson said. "We warn people over and over, just how dangerous it is to use gasoline or gasoline-based products in the home, but they don't listen." Sources said, "Gasoline is a highly explosive compound that could ignite, pop and start a fatal blaze from something as simple as flicking a light switch."

Integrated Pest Management

Seeks to manage pest damage by the most *economical* means, and with the *least possible hazard* to people, property, and the environment

1. Inspect the home
2. Identify the pest
3. Prepare for treatment
4. Treat with safe and effective methods
5. Evaluate your progress

Inspect

- Bites are not enough
- Looking for live or dead bugs, cast skins, eggs, or fecal stains
- Save any bugs that you find
- Start looking within 10 feet of sleeping area



Identify

- Confirm that your bug is a bed bug
- Many insects look similar
- MSU Extension can identify
- Many pest control companies will also identify



Prepare

- Clean/organize
- “De-Clutter”
- Make repairs
- Mattress encasements



Treat

- Physical removal
 - Cleaning
 - Vacuuming
- Heat treatment
 - Whole house heat
 - Container heat
 - Household appliances
- Insecticide treatment
 - Sprays
 - Dusts
 - Strips
 - No to foggers!



Evaluate

- Complete elimination usually takes several treatments
- Helpful to determine the route of introduction
- Can use passive monitors to check treatment success
- Must remain vigilant



Strategies to avoid

- Using “bug bombs”
- Using kerosene or other flammable products
- Applying alcohol and pesticides to your body
- Using pesticides labeled for outdoor use inside the home
- Discarding the bed
- Buying “special” pesticides from unlicensed businesses
- Over-applying dusts such as diatomaceous earth or boric acid
- Unregistered “green” pest control products
- Ultrasonic pest repellent devices

Added benefits of IPM approach

- Encasing mattresses, vacuuming, and washing bedding helps control dust mites (a common cause of asthma)
- Keeping sleeping areas clutter-free gets rid of mouse and cockroach hiding spots
- Decluttering, vacuuming, and laundering makes homes cleaner and safer
- Repairing and sealing wall cracks and gaps improves energy efficiency

Green and healthy homes

- What is “green” when it comes to pest control?
 - A product is not “green” if it doesn’t work!
 - There are some safer and greener methods that can be used
- IPM improves cleanliness, enhances safety, reduces contaminants, and maintains a home (while eliminating pests!)



Challenges

- So much misinformation!
- Stigma and shame around having bed bugs
- Landlord/tenant issues
- Lack of money to assist homeowners with treatment
- Self-treatment issues
- Unlicensed pest control companies
- Lack of regulatory oversight

Online information and resources

MICHIGAN

www.michigan.gov/bedbugs

municipalities and industry groups to develop resources and materials for Michigan. The resources below will be updated periodically as more materials are developed and become available.

Centers for Disease Control and Prevention Bed Bug Health Alert regarding pesticide safety [\(click here\)](#)



Michigan Manual for the Prevention and Control of Bed Bugs

Michigan Manual for the Prevention and Control of Bed Bugs

Don't Let Bed Bugs Bite

Bed Bug Working Group International Parasites

NATIONAL

www.epa.gov/bedbugs/bedbug-clearinghouse.html



Bed Bug Information

The Bed Bug Information Clearinghouse

The information on these pages is intended to help states, communities, and consumers in effort control bed bug infestations. We want you to get the best information that's available so on this bug outreach from a variety of sources.

How We Choose What to Include in the Clearinghouse

The Bed Bug Information Clearinghouse currently includes only material from:

- Federal Agencies
- State and Local Governments
- Extensions Services
- Universities

When reviewing material for inclusion in the Clearinghouse, we consider

- The accuracy of information
- The discussion on pesticides
- The appropriateness for the audience
- How well the information is communicated, i.e., clarity of language, graphics, layout

If you would like us to consider including your material in the Bed Bug Information Clearinghouse

Detroit Bed Bug Coalition

Mission:

To increase awareness about bed bugs and their community effects within the City of Detroit; reduce bed bug infestations through timely, efficient, and healthy pest management practices; and promote sustainable relationships between community organizations and local governmental agencies.



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COLLEGE OF URBAN LABOR AND METROPOLITAN AFFAIRS

Center for Urban Studies

IPH
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DETROIT PUBLIC SCHOOLS

Michigan Pest Management Association

Im in.