

Fact Sheet: Bed Bugs

What are bed bugs?

Bed bugs, or *Cimex lectularius*, are small, wingless, blood-sucking insects. They feed on warm-blooded animals, such as birds, bats and humans. They hide in cracks and crevices in beds, wooden furniture, floors and walls during the day, and come out at night to feed on sleeping hosts. Bed bugs are not caused by poor hygiene or bad housekeeping. Bed bugs are not known to spread disease.

Adult bed bugs are approximately 4-7 mm long, about the size of a lady bug. They are gray or brown in color, but turn red after finishing a blood meal. Bed bugs can survive a very long time without eating – perhaps several months. Female bed bugs will lay 200-500 eggs in a lifetime. Bed bug eggs are about 1 mm long, are cream colored and look similar to small pieces of rice.

What are the signs and symptoms of bed bugs?

The bed bug bite often causes small itchy red bumps on the skin. Most people don't feel the bug biting. The bumps may appear in a line or a group of bites. Some people may have more serious or allergic reactions to the bites, such as:

- Large, itchy bumps up to 8 inches across.
- Blister-like skin sores.
- Groups of small, swollen sacs of pus.
- Skin rashes similar to hives.
- In very rare instances, a severe allergic reaction can lead to anaphylactic shock.

Signs of a bed bug infestation in your home:

- Small bloodstains on your sheets and mattresses.
- Bed bugs or their eggs may be found in the folds and creases in the bed linens and seams or tufts of mattresses and box springs. They may also be found within pleats of curtains, beneath loose areas of wallpaper near the bed, in corners of desks and dressers, in crevices of sofas and chairs, on furniture, behind cove molding, and in laundry or other items on the floor or around the room.
- Sometimes, characteristic dark brown or reddish fecal spots of bed bugs can be found on the bed linens, mattress or walls near the bed.
- Large bed bug infestations can smell like coriander or crushed cilantro.



Pictured left:
female (top) and male (bottom) bed bugs

Pictured below:

5 life cycle stages of unfed (top row) and fed (bottom row) bed bugs



How are bed bugs spread?

Bed bugs are found worldwide. In recent years, bed bugs have been making a comeback because of changing insect control practices, pesticide resistance and increased international travel. Travel spreads them because the bugs and their eggs are easily transported in luggage, clothing, bedding, and furniture.

How is it treated?

Treatment of bed bug bites is mostly for the relief of symptoms. Bites usually heal within one to two weeks. An over-the-counter topical cortisone cream can be used to relieve itching. It is important to avoid scratching to prevent infection. Consult your health care provider if you have concerns. An oral antibiotic may be recommended if infection occurs, and oral corticosteroids may be prescribed for severe allergic reactions.

Treatment of bed bug infestations can be difficult, as the pests are very good at hiding, and they can spread rapidly between rooms and buildings. Treatment usually consists of a combination of environmental controls (daily laundering of bedding, vacuuming, caulking cracks and crevices, eliminating clutter, etc.) and insecticide treatments.

Environmental controls for bed bug infestations:

- Wash items such as sheets and clothing in the hottest water the fabric can stand or place in a dryer set on high heat for a minimum of 20 minutes.
- Reduce clutter to limit hiding places for bed bugs.
- If you are throwing things out, put small items in a tightly sealed trash bag and discard in a garbage bin outside your home. For larger items, such as furniture or mattresses, wrap the item in plastic if possible and clearly mark that the item may be contaminated with bedbugs to discourage others from bringing the item into their home.
- Thoroughly clean the infested rooms as well as other rooms in the residence. Scrub infested surfaces with a stiff brush to dislodge eggs and use a powerful vacuum to remove bed bugs from cracks and crevices. Vacuum the mattress, especially paying attention to tucks and seams where bed bugs like to hide. Immediately after cleaning, place the bag or vacuumed contents into a plastic garbage bag, tightly seal, and discard outside your home.
- Inspect and clean small spots where bed bugs can hide. Remove drawers from desks and dressers and turn furniture over, if possible. Take apart bed frames to expose additional bug hiding places.
- Use special mattress covers to encase mattresses and box springs. Once they are installed, inspect the bags. If you find any holes or tears, seal them completely with tape. Any bugs trapped within the sealed mattress covers will eventually die. Bed bugs can live a long time without a meal, so leave the cover on the mattress for at least a year.
- Prevent bed bugs from crawling onto the bed. Pull the bed frame away from the wall and tuck sheets and blankets so they will not contact the floor.
- Place bed frame legs into dishes or cups filled with vegetable oil, or coat the bottom 3-4 inches of the legs with petroleum jelly to prevent the bugs from crawling up onto the bed.

When using chemicals to control bed bugs:

- Pesticides can be harmful to people and pets. Do NOT apply any pesticide to mattresses or to surfaces that will be in direct human contact, except when the pesticide label specifically states that the product can be used in that manner. READ and UNDERSTAND the label. Apply the product only if you understand the instructions. To check a product's effectiveness against bed bugs, go to the EPA's website at: www.epa.gov/bedbugs/productsearch

If the infestation is severe, or you are unable to get rid of the bed bugs, you may need to hire a professional pest control company. Recommendations for choosing a company:

- Must be licensed by the Michigan Department of Agriculture.
- Ask friends or neighbors for recommendations.
- Get quotes from several companies.
- Ask for references from the companies.

What if I have a complaint regarding a hotel, apartment or other facility regarding bed bugs?

- Contact the manager of the facility first and explain your situation. Most facilities have existing contracts with pest control companies. If you live in an apartment, work with the apartment manager and the pest control company on any recommendations they have to help treat the area for bed bugs. You may be asked to remove clutter from a room, launder sheets, elevate furniture, etc.
- If you feel you are not getting an adequate response to your concerns, you can contact Washtenaw County Environmental Health at 734-222-3800 for assistance.

How is it prevented?

If bed bugs are already present in your home, you can help prevent more bites by wearing pajamas that cover as much skin as possible.

To help prevent bed bug infestations:

- Inspect antiques and secondhand furniture thoroughly before bringing them into your home.
- Place new or second-hand clothing in a dryer set on the highest heat the fabric can stand for at least 20 minutes when you bring the clothing home.
- While you are traveling, inspect any room where you will be staying, paying close attention to the sheets and mattress.
- After you return from a trip, check your luggage for insects.
- Change bed linens at least once a week, and wash in the hottest water the fabric can stand.
- Vacuum around the home at least once a week, paying special attention to areas around the bed.
- Caulk holes in floors and walls.

Resources:

- Michigan Department of Community Health: www.michigan.gov/bedbugs
- Michigan State University Extension: www.pested.msu.edu/Resources/pdf/Bedbug.pdf

This fact sheet is for information only and is not meant to be used for self-diagnosis or as a substitute for consultation with a health care provider. For more information call your health care provider or call Washtenaw County Environmental Health at 734-222-3800.

Visit our website at: <http://publichealth.eWashtenaw.org> or the Centers for Disease Control & Prevention at: www.cdc.gov

