

Fact Sheet: Bedbugs

What are bedbugs?

Bedbugs 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. Bedbugs are not caused by poor hygiene or bad housekeeping. Bedbugs are not known to spread disease.

Adult bedbugs, or *Cimex lectularius*, are approximately 4-7 mm long. They are gray or brown in color, but turn red after finishing a blood meal. Female bedbugs will lay 200-500 eggs in a lifetime. Bedbug eggs are about 1 mm long and are cream colored and look similar to miniature pieces of rice.



The photo to the left shows an adult bedbug (large brown bug on left) and young bedbug nymph (small white bug on right).



The photo to the left shows bed bugs in tucks of mattress.

Photos courtesy of Cornell University's Insect Diagnostic Laboratory.

What are the signs and symptoms?

The bedbug bite often causes small itchy red bumps on the skin. Most people don't feel the bedbug biting. The bumps may appear in a line or a group of bites. Some people may experience 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 bedbug infestation in your home:

- Small bloodstains on your sheets and mattresses.
- Bedbugs 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.
- A coriander-like odor may be detected in some heavily infested homes.

How is it spread?

Bedbugs are found worldwide. In recent years bedbugs have been making a comeback because of changing insect control practices. International travel also spreads bedbugs because eggs, young, and adult bed bugs are easily transported in luggage, clothing, bedding, and furniture. Bedbugs can infest airplanes, ships, trains, and buses as well as hotel rooms, dorms, and apartment complexes.

How is it treated?

Treatment of bedbug 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. Take antihistamines if needed to help relieve allergic reactions. Consult your health care provider if you have severe reactions. An oral antibiotic may be recommended if infection occurs, and oral corticosteroids may be prescribed for severe allergic reactions.

Treatment of bedbug infestations can be difficult, as the pests are very good at hiding, and they can spread rapidly between rooms and buildings. The best method of dealing with bedbugs is through Integrated Pest Management (IPM). Treatment usually consists of a combination of environmental controls (daily laundering of bedding, vacuuming, caulking cracks and crevices, etc.) and insecticide treatments.

Environmental controls to help reduce bedbug infestations:

- Freeze pajamas, sheets and other bedclothes for at least 24 hours or wash them in hot water of at least 97°F (36°C).
- Reduce clutter to limit hiding places for bedbugs.
- 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 bedbugs from cracks and crevices. Vacuum the mattress, especially paying attention to tucks and along seams where bedbugs like to hide. Be sure to remove and seal the vacuum cleaner bag or vacuumed contents immediately after cleaning. Place the vacuum cleaner bag or vacuumed contents into a plastic garbage bag, tightly seal, and discard.
- Inspect and clean all hidden spots. Remove drawers from desks and dressers and turn furniture over, if possible. Taking apart bed frames will expose additional bug hiding places.
- Use special mattress bags to permanently seal mattresses and box springs. Once they are installed, inspect the bags. If you find any holes or tears, seal them completely with permanent tape. Any bugs trapped within the sealed mattress covers will eventually die. Bedbugs can live a long time without a meal, so it is best to leave the cover on the mattress for at least a year.
- Prevent bedbugs 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 the bed frame legs into dishes or cups with mineral oil, or coat the bottom 3-4 inches of the legs with petroleum jelly to prevent the bedbugs from crawling up onto the bed.

When using chemicals to control bedbugs:

- Do NOT apply any pesticide to mattresses or to surfaces that would be in direct human contact, except when the pesticide label specifically states that the product can be applied in that manner. Pesticides can be harmful to people and pets. READ and UNDERSTAND the label. Apply the product only if you understand the instructions.

If the infestation is severe, or you are unable to get control with other methods, it may be best to hire a professional pest control company!

How is it prevented?

If bedbugs are already present in your home, you can help ward off bites by wearing pajamas that cover as much skin as possible.

To help prevent bedbug infestations:

- Inspect antiques and secondhand furniture thoroughly before bringing them into your home.
- While you are traveling, inspect any room where you will be staying.
- After you return from a trip, check your luggage for insects.
- Change bed linens at least once a week, and wash in hot water of at least 97°F (36°C).
- Vacuum around the home at least once a week, paying special attention to areas surrounding bed and furniture posts.
- Caulk holes in floors and walls.

Resources:

- Harvard School of Public Health:
<http://www.hsph.harvard.edu/bedbugs/index.html>
- Michigan State University Extension:
<http://www.pested.msu.edu/Resources/pdf/Bedbug.pdf>
- Cornell University Insect Diagnostic Laboratory:
<http://www.entomology.cornell.edu/public/IthacaCampus/ExtOutreach/DiagnosticLab/Factsheets/BedBugs.html>
- Ohio State University Extension:
<http://ohioline.osu.edu/hyg-fact/2000/2105.html>
- Michigan Department of Community Health:
http://www.michigan.gov/documents/MDCH_Bedbugs_Fact_sheet_165671_7.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

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