

## Bed Bugs

*DHEC does not have the authority or adequate staff to inspect homes or businesses for bed bugs.*

*DHEC can not force a landlord, hotel, or other business to resolve a bed bug-related problem.*

### What are bed bugs?

Bed bugs feed only on human or animal blood. During the day, they typically hide in tiny cracks or crevices. They usually feed on a sleeping person's blood at night or in dim lighting.

### Who gets bed bugs?

Bed bugs are most commonly found in places that house sleeping people and have a high turnover rate for people such as hotels, cruise ships, dormitories, shelters, apartments, time-share condominiums, prisons, nursing homes, and hospitals.



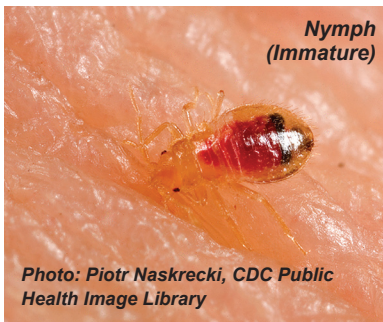
People transport bed bugs or their eggs to new locations either on themselves or their belongings. Bed

bugs hitchhike to places such as private homes, businesses, and vehicles. Bed bugs infest clean and luxurious homes and businesses just as often as poorly maintained properties.

### What is the life cycle of a bed bug?

A female bed bug typically lays 5 to 7 eggs per week. Bed bugs have 3 life stages: eggs, nymphs, and adults. The transition from egg to adult usually takes about 7 1/2 weeks. Eggs hatch in about 12 days. Nymphs pass through 5 immature stages over about a 6-week period and shed their skins as they grow. Adults live 6 to 18 months and can survive up to 1 1/2 years without a blood meal. Early-stage nymphs can only survive several months without a blood meal, but later-stage nymphs can survive over a year without a blood meal.

### What do bed bugs look like?



Unfed bed bugs are flattened, tan or brown, oval, and wingless insects. Adult bed bugs are about 1/4 of an inch long and less than 1/8 of an inch wide. Nymphs look like adult bugs, but are lighter in color and smaller; nymphs range in size from 2/32 inch to

3/16 inch. Bed bug eggs are about 1/32 inch and white.

Unfed nymphs are yellowish tan, but they turn a bright red after feeding on blood. Adults turn from brown to a darker reddish or mahogany brown after feeding on blood. Adults and nymphs have short, golden hairs.

### How do bed bugs spread from one place to the next?

Bed bugs do not fly, but they can crawl fairly rapidly. Bed bugs move through a building by crawling inside of walls. They can be carried by people on themselves, their belongings, or new merchandise. Sources for new infestations include clothing, shoes, luggage, handbags, furniture, bedding, carpet, fabrics, fixtures, electrical devices, storage units, moving vans, laundry, new or used merchandise shipments, hair, and clothing.

### When do bed bugs feed on blood?

Bed bugs typically feed in the dark or dim light, and they are most active from midnight until dawn. However, bed bugs can be seen during the day or in bright light. Once swollen with blood, the bed bug crawls away to a nearby hiding place.

Do bed bugs cause health problems or transmit diseases?

Although bed bugs have been found naturally infected with various disease-causing agents that survive for varying lengths of time, they are not effective transmitters of disease. Bed bugs create tremendous stress for people. People report anxiety, insomnia, anger, irritability, fear, shame, and depression. People should not feel shame because bed bugs are not related to cleanliness, personal hygiene, personal flaws, income, or social class.

### How do people react to bed bug bites?

Bites might cause red, swollen, itchy areas, but the reaction to bites varies from person to person. Welts typically occur in a row on your arms, face, hands, legs, or other parts of your body that were exposed while you slept.

People react to bed bug bites in one of four ways: (1) No response at all; (2) An immediate reaction within 1 hour to 1 day; (3) A delayed reaction within 2-14 days; or (4) A severe, life-threatening, whole-body allergic reaction (anaphylaxis)



that requires immediate professional medical attention.

### How do you care for bed bug bites?

Swelling and itching can be relieved by ice or by corticosteroids and antihistamines applied to the skin or taken by mouth. Antiseptics or antibiotic ointments can help prevent secondary bacterial infections.

### Do bed bugs bite pets?

Bed bugs may feed on dogs, cats, birds or rodents. Two other species related to bed bugs are “bat bugs” and “swallow bugs”, which feed on bat and bird blood, but will feed on humans if bats and birds are not around.

### What are the signs of a bed bug infestation?

Signs of an infestation include black stains from dried bug feces on bedding or in hiding places, blood smears on bedding, live or dead bed bugs, cast-off skins of nymphs, eggs, and a musty, sweet odor in cases of heavy infestations.

### Where do bed bugs hide?

Bed bugs do not remain attached to people like head or pubic lice. Bed bugs are found in tiny cracks and crevices on textured or rough surfaces in dark areas with no air movement.

For mattresses and other upholstered items, inspect piping, seams, folds, tufts, rips, buttons, hems, and labels. Inspect cracks and crevices in other areas: carpet edges, carpet tack strips, baseboards and other molding, plaster, wallpaper, and chipped paint. Look behind electrical outlet and lighting switch plates, headboards, pictures, mirrors, etc. Look inside of electrical devices like clocks, phones, and smoke detectors. Look among clothing and clutter. Inspect hollow items such as clothes hangers, bed posts, curtain rods, and box spring coils.

### How do I get rid of bed bugs?

Eliminating bed bugs involves many treatment methods that are repeated over several weeks or months. Strongly consider hiring a pest control professional who has detailed knowledge of bed bug habits and will use a combination of the latest tools, technology, and treatment methods.

- Prevent the spread of bed bugs. Treat, bag, or wrap all items in plastic before moving them. Tape a sign to discarded infested items that reads, “Infested with Bed Bugs”. Never resell or donate infested items.
- Wash washable items in hot water. Allow wet clothes to completely dry in a clothes dryer. Heat dry items such as shoes or toys in a clothes dryer (30 minutes for a full load and 5-20 minutes for a few items). Dry clean non-washable items to kill all stages of bed bugs, but inform the dry cleaner of the bed bugs to prevent spreading.
- Freeze items below 32°F for several days to kill bugs and for 60 days to kill eggs. Heat items in plastic bags outdoors in a sunny location (104°F for 24 hours). Packing fewer items per bag makes it harder for the bugs to find cooler places to hide. *This type of treatment might be ineffective for large items.*
- Place electrical devices such as clocks or telephones in plastic bags with a “No-Pest-Strip” for at least 2 weeks to kill bugs that emerge from hatching eggs. Follow the label.

- Vacuum live bed bugs; vacuuming will not completely dislodge eggs that are cemented to surfaces. Avoid brush attachments because bugs and eggs can attach to the bristles. Seal vacuum cleaner bags before disposal. Clean the HEPA filter and sterilize hoses in hot water.
- Pull the bed and all bedding away from walls, the floor, and other furniture. Put encasements labeled as “bed bug proof” or “bite proof” on all mattresses and box springs. Monitor for bed bugs by placing bed legs into a moat-style interceptor with talcum powder to trap bed bugs inside.
- Clear your home of all clutter. Seal cracks in walls, wallpaper, and baseboards and other molding with caulking material.
- Use pesticides or strongly consider hiring a licensed pest control operator with experience in treating bed bugs. An exterminator might use: (1) **Dry steam** — Move the steam nozzle at a rate of 10-15 seconds per linear foot. The surface must reach 158°-176°F. (2) **Dry heat** — Special heaters are used to rapidly heat a building to kill bed bugs even inside of walls. A gradual rise in temperature will cause bed bugs to spread into new areas; (3) **Snap freezing** — A machine with a special nozzle is used to spray carbon dioxide snow to kill bugs and eggs. (4) **Fumigation** — Fumigation with an invisible gas is effective at killing all bed bug stages. (5) **Pesticides** — Some over-the-counter pesticides may not kill all bugs, or may act as a repellent, causing bugs to spread. Apply pesticide dusts in crevices or electrical outlets. Use liquid insecticides for carpet edges and wall/floor intersections. For mattresses or upholstered furniture, only treat seams, tufts, and crevices, not the entire upholstered surface. Insecticides must be labeled for use on upholstered furniture.

### What bed bug control methods do not work?

Methods of bed bug control that do not work include vacating a room, bug bombs/foggers, insect repellents, sleeping with the lights on, boric acid, and baits designed to control ants and cockroaches.

### How can I protect myself from bed bugs while traveling?

Inspect your hotel room for signs of bed bugs before bringing in your luggage (see hiding places above). If you discover bed bugs, request another room, preferably in another section of the building. Use hard, smooth-surfaced luggage instead of soft-sided, rough-textured luggage. Do not place items or dirty clothes on the floor or bed. Keep bags closed, all pockets zipped shut, and/or enclosed in plastic bags. If you suspect bed bugs during your travel, you should wash, dry, dry clean, or treat items with heat or cold before bringing these infested items into your home.

### How can I prevent bed bugs from infesting my home?

Take precautions while traveling (see above). Do not bring home discarded or abandoned items. Inspect bought, rented, or reconditioned items for signs of bed bugs before placing them in your home. Be careful when storing furniture in storage units or moving vans that possibly were infested.