

- ❖ Bed Bugs FAQs
- ❖ <https://www.cdc.gov/parasites/bedbugs/faqs.html>

What are bed bugs?

Bed bugs (*Cimex lectularius*) are small, flat, parasitic insects that feed solely on the blood of people and animals while they sleep. Bed bugs are reddish-brown in color, wingless, range from 1mm to 7mm (roughly the size of Lincoln's head on a penny), and can live several months without a blood meal.

Where are bed bugs found?

Bed bugs are found across the globe from North and South America, to Africa, Asia and Europe. Although the presence of bed bugs has traditionally been seen as a problem in developing countries, it has recently been spreading rapidly in parts of the United States, Canada, the United Kingdom, and other parts of Europe. Bed bugs have been found in five-star hotels and resorts and their presence is not determined by the cleanliness of the living conditions where they are found.

Bed bug infestations usually occur around or near the areas where people sleep. These areas include apartments, shelters, rooming houses, hotels, cruise ships, buses, trains, and dorm rooms. They hide during the day in places such as seams of mattresses, box springs, bed frames, headboards, dresser tables, inside cracks or crevices, behind wallpaper, or any other clutter or objects around a bed. Bed bugs have been shown to be able to travel over 100 feet in a night but tend to live within 8 feet of where people sleep.

Do bed bugs spread disease?

Bed bugs are not known to spread disease. Bed bugs can be an annoyance because their presence may cause itching and loss of sleep. Sometimes the itching can lead to excessive scratching that can sometimes increase the chance of a secondary skin infection.

What health risks do bed bugs pose?

A bed bug bite affects each person differently. Bite responses can range from an absence of any physical signs of the bite, to a small bite mark, to a serious allergic reaction. Bed bugs are not considered to be dangerous; however, an allergic reaction to several bites may need medical attention.

What are the signs and symptoms of a bed bug infestation?

One of the easiest ways to identify a bed bug infestation is by the tell-tale bite marks on the face, neck, arms, hands, or any other body parts while sleeping. However, these bite marks may take as long as 14 days to develop in some people so it is important to look for other clues when determining if bed bugs have infested an area. These signs include:

- the bed bugs' exoskeletons after molting,
- bed bugs in the fold of mattresses and sheets,
- rusty-colored blood spots due to their blood-filled fecal material that they excrete on the mattress or nearby furniture, and
- a sweet musty odor.

How do I know if I've been bitten by a bed bug?

It is hard to tell if you've been bitten by a bed bug unless you find bed bugs or signs of infestation. When bed bugs bite, they inject an anesthetic and an anticoagulant that prevents a person from realizing they are being bitten. Most people do not realize they have been bitten until bite marks appear anywhere from one to several days after the initial bite. The bite marks are similar to that of a mosquito or a flea — a slightly swollen and red area that may itch and be irritating. The bite marks may be random or appear in a straight line. Other symptoms of bed bug bites include insomnia, anxiety, and skin problems that arise from profuse scratching of the bites.

Because bed bug bites affect everyone differently, some people may have no reaction and will not develop bite marks or any other visible signs of being bitten. Other people may be allergic to the bed bugs and can react adversely to the bites. These allergic symptoms can include enlarged bite marks, painful swellings at the bite site, and, on rare occasions, anaphylaxis.

How did I get bed bugs?

Bed bugs are experts at hiding. Their slim flat bodies allow them to fit into the smallest of spaces and stay there for long periods of time, even without a blood meal. Bed bugs are usually transported from place to place as people travel. The bed bugs travel in the seams and folds of luggage, overnight bags, folded clothes, bedding, furniture, and anywhere else where they can hide. Most people do not realize they are transporting stow-away bed bugs as they travel from location to location, infecting areas as they travel.

Who is at risk for getting bed bugs?

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

How are bed bugs treated and prevented?

Bed bug bites usually do not pose a serious medical threat. The best way to treat a bite is to avoid scratching the area and apply antiseptic creams or lotions and take an antihistamine. Bed bug infestations are commonly treated by insecticide spraying. If you suspect that you have an infestation, contact your landlord or professional pest control company that is experienced with treating bed bugs. The best way to prevent bed bugs is regular inspection for the signs of an infestation.

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*This information is not meant to be used for self-diagnosis or as a substitute for consultation with a health care provider. If you have any questions about the parasites described above or think that you may have a parasitic infection, consult a health care provider.*

<https://www.epa.gov/bedbugs/controlling-bed-bugs-using-integrated-pest-management-ipm>

## **Controlling Bed Bugs Using Integrated Pest Management (IPM)**

### **Related Information**

The Federal Bed Bug Workgroup has completed a [Collaborative Strategy on Bed Bugs](#).

The strategy highlights ways that all levels of government, community, academia and private industry can work together to reduce bed bugs across the United States. It outlines four priority areas for bed bug control:

- Prevention.
- Surveillance and Integrated Pest Management [IPM].
- Education and Communication.
- Research

Controlling bed bugs takes time and patience. The biology of bed bugs dictates this, since they reproduce quickly and their eggs are resistant to many methods of pest control, both chemical and non-chemical. This page describes some of the techniques that have been found to be effective against bed bugs.

### **Understanding IPM**

Integrated pest management is an effective and environmentally sensitive approach to pest management. IPM programs use information on the life cycles of pests and their interaction with people and the environment. This information, combined with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment.

IPM takes advantage of all appropriate pest management options, including the judicious use of pesticides. Although bed bugs may sometimes be controlled by non-chemical means alone, this approach is often very difficult, potentially less effective, and usually more resource intensive.

Bed bug control is most effective when an IPM approach is implemented with diligent participation by the residents. In multi-family housing, diligent participation is also required of the building management.

A comprehensive IPM program to control bed bugs may include a number of non-chemical and chemical methods. Some of these are described in the following sections.

### **Non-Chemical Methods**

- Put bedding and clothing in the dryer at high temperatures for 30 minutes to kill bed bugs (just washing will generally not kill bed bugs).
- Heat infested articles (e.g., furniture, luggage, other items that can't go in a clothes dryer) and/or areas (i.e., a room in a house or apartment, or a whole house) to at least 120 °F (approx. 49 °C) for 90 minutes to ensure that eggs are killed.

- The higher the temperature, the shorter the time needed to kill bed bugs at all life stages.
- This is often done using a heat-generating device or in a specially constructed heating unit, some of which are portable.
- Cold treatments (below 0 °F (-19 °C) for at least 4 days) can eliminate some infestations.
  - The cooler the temperature, the less time needed to kill bed bugs.
  - Home freezers may not cold be enough to reliably kill bed bugs. Always use a thermometer to measure the temperature.
  - Read more at [Using Freezing Conditions to Kill Bed Bugs EXIT](#)
- Use mattress, box spring, and pillow encasements to trap bed bugs and help detect infestations.
- Use monitoring devices such as bed bug interceptors to ensure that the bed bugs have been truly eradicated.
- See the "[do-it-yourself](#)" steps for more details on methods to reduce and control bed bug populations.

### **Using Pesticides**

- Use a comprehensive strategy for controlling bed bugs - pesticides should be only one part of a multi-part IPM plan.
- [Use the Bed Bug Product Search tool](#) to help you find a pesticide product that meets your needs. Currently, there are over 300 products registered by EPA for use against bed bugs -- the vast majority of which can be used by consumers.
- Before reapplying or trying a different product read, [When Treatments Don't Work](#).
- You may want to [consult a pest management professional](#) to inspect your residence and, if needed, apply approved pesticides to treat any infestation.
- For assistance with choosing a pesticide registered for consumer use, you may also check with the [Cooperative Extension Service](#) office in your area.