What are bedbugs?
Bedbugs are small, wingless insects that feed on warm-blooded animals. Adult bedbugs are reddish-brown, oval-shaped, flattened insects. They measure approximately 4-5 mm in length and can easily be seen with the naked eye. Bedbug nymphs are much smaller and are often translucent and more difficult to see without the aid of a microscope. The group of insects that are commonly called bedbugs includes species that feed on other animals such as birds and bats. Human bedbugs (*Cimex lectularius*) are found throughout the world.

NOTE: It is very difficult to distinguish bedbugs from related insects (such as bat bugs and swallow bugs). Make sure you have an expert identify the insects before starting a treatment program.

How do bedbugs feed?
Bedbugs feed on human blood. They are nocturnal and prefer to feed in the predawn hours (2 to 4 a.m.). During the day they stay relatively motionless, hiding in cracks and crevices. They are most often found hiding in the vicinity of where the host’s head lies while sleeping (pillow, headboard). At night, bedbugs come out of hiding and are attracted to their human host by the carbon dioxide and heat that is given off by a sleeping person. When they begin to feed, bedbugs inject anti-coagulants (to keep the blood flowing) and anesthetics, which prevent the host from feeling the bite and waking up. The insects will feed for 3 to 5 minutes and then retreat back to their hiding places.

What is their life cycle and general behavior?
Female bedbugs lay 3 to 4 eggs per day and will lay up to 250 eggs in a lifetime. Eggs normally hatch in 6 to 10 days and the new nymphs actively seek out their first “blood meal”. Nymphs will molt 5 times to reach the adult stage. The nymphs require a blood meal before each molt, but once they reach the adult stage they can survive for many months without a meal.
How do bedbugs find you?
Bedbugs find their hosts by following the carbon dioxide trail of sleeping, warm-blooded animals. They inject anti-coagulants, to keep the blood flowing, and anesthetics, so you will not feel their bite and wake up. Bedbugs will feed for about 3 to 5 minutes if left undisturbed. After their meal, they will retreat to a nearby crack or crevice to digest their food.

Why are bedbugs commonly found in headboards?
Bedbugs are not fantastic climbers and cannot climb up most smooth surfaces. This is why wood (headboards and nightstands) is appealing to bedbugs. They can grip its rougher surface sufficiently to climb up and down, and it often has many cracks and crevices for them to hide in. Bedbugs are commonly found in hotel rooms in cracks and crevices on the backsides of headboards (see photo). Another common spot is on the underside of wooden nightstands.

What do bedbug bites look like?
Bedbug bites vary greatly. They are often mistaken at first for mosquito bites or a rash. The bites may be single or occur as a cluster of itchy bumps. There may be a delay of a few days from the time a person is bitten until the bites are visible or begin to irritate. Some people are very sensitive to bedbug bites and some people do not react at all.

Who is at Risk?

Anyone who travels.
Travelers most commonly pick up bedbugs in their luggage at hotels. However, luggage is also vulnerable to bedbugs in aircraft and train cargo holds as well as taxi trunks.

Parents of kids in boarding school/college/military.
Bedbugs have been found infesting college dormitories and military barracks. Make sure kids returning home don’t bring back bedbugs with them.

People living in multiunit dwellings (condominiums, townhomes, apartments, college dormitories).
Bedbugs from one infested unit can travel between walls to infest neighbors.

People who buy used furniture and household items.
These items from bedbug-infested residences may create a pathway into your own home.

People who frequently have numerous overnight guests/visitors.
Many bedbug infestations have been brought into homes by friends and relatives.
Traveler’s Bedbug Fact Sheet

- People are bringing home more than souvenirs in their luggage when they travel. Bedbugs are frequently hitching rides with travelers in their luggage.

- Bedbug infestations have recently had a dramatic increase.

- Bedbugs often “hitchhike” in luggage, used furniture, and used beds.

- Any hotel, condominium, apartment, house, cabin, etc. is susceptible to a bedbug infestation.

- Bedbugs have been found in even the most expensive hotels.

- Bedbugs have been found in movie theaters, ambulances, hospitals and airplanes.

- New York City logged almost 7,000 bedbug complaints in one year, and experts say they now can't keep up with all the calls.

Hotel Room/Bedbug Tips

- Upon entering any hotel room, immediately check the headboard and bed. If possible, remove the headboard from the wall and look for bedbugs, bedbug shed skins, and/or bedbug fecal spots (see figure at right). Also check the mounting board on the wall that supports the headboard.

Fecal Spots on Headboard Support
• Remove the sheets to check the mattress and box frame for bedbugs, bedbug shed skins, or bedbug fecal spots (see figure below). Inspect any tufts or folds in the mattress and/or box spring thoroughly. Concentrate your search at the head of the bed.

• Do not place your luggage on the bed or any piece of furniture in room. Keep your luggage off the floor by setting it on the metal luggage rack (often found in the closet) if available.

• A white powder residue found near cracks and crevices of furniture or the headboard may indicate that the room has been treated previously for bedbugs.

• Sticky-board monitoring traps around bed areas (see photo below) may also indicate that the room has been treated previously. Check the monitors for any signs of bedbugs.

• If any bedbug evidence is found, remove all of your personal items from the room and contact the hotel manager.

• To reduce the risk of introducing bedbugs into your home, treat your luggage with PackTite™ as soon as you arrive home and before bringing your luggage and its contents into your home.
Bedbug Infestations

What do I do if I have bedbugs in my home?
Call a Pest Management Professional. Once a home is infested with bedbugs, treatment is expensive, difficult and time-consuming and treatment should be conducted by a pest control specialist.

How is a home treated for a bedbug infestation?
A home treatment is time consuming and labor-intensive and can cost thousands of dollars. A typical bedbug treatment involves numerous visits by a pest control company. Bedbugs do not just infest beds. They will nest in cracks and crevices throughout the room. Often the home occupants are required to move out of their home while it is being treated. Every item in the infested area of a house or apartment should be treated with pesticide. Infested mattresses, box springs and padded furniture should be thrown out. Bedbug eggs are difficult to locate and may not hatch for several weeks. For this reason, inspections should be done every two weeks for months to insure that a re-infestation does not occur in a treated area.

Which hotels might have bedbugs?
Bedbugs can be found in any hotel, and this includes economy motels as well as 5-star resorts. Many state health departments maintain public records concerning bedbug reports in hotels. You may want to call or check online before you travel to check on the hotel you will be staying at.

What happens if you bring only a couple bedbugs home?
Left alone, a few bedbugs can create a colony of thousands within weeks. Once your home is infested, elimination is expensive, time consuming and difficult. Typical bedbug treatments involve numerous visits by professional exterminators costing thousands of dollars. Bedbugs do not just infest beds. When bedbugs find a human host they nest in numerous areas throughout the room. Therefore, everything in the infected area of the house must be heat treated or treated with poisonous chemicals. Often mattresses, box springs, and furniture must be thrown out. Bedbug eggs can be hidden anywhere in the area and may not hatch out for weeks restarting the infestation. If possible, many homeowners move out of their infested home until the problem is eliminated.

How do I prevent bringing home bedbugs when I travel?
While there is no sure way to prevent bedbugs from getting into your luggage, there are some precautions you can take to reduce the chances.

1. As soon as you enter your hotel room check for evidence of bedbugs (see tips above).
2. Do not keep your luggage on the floor or on the bed. The best place to keep your suitcase is on the foldout stand that is commonly found in the closet.
3. When you leave, enclose any clothing that has been on the floor in plastic bags.

Treat your luggage with PackTite™ as soon as you return home!
PackTite™ uses patent pending heating technology to eliminate bedbugs from luggage.

Why use heat to treat bedbugs?
Heat is the only non-chemical treatment that has been shown to consistently and effectively kill all life stages of bedbugs.

PackTite™ is the safe and easy way to prevent bedbug infestations.

Why is PackTite™ better than any other method for killing bedbugs?

- Freezing has been shown to be problematic in that bedbugs can recover after days of being frozen.
- Pesticides are a poor solution, because they require direct contact treatment, and often drenching, of clothes, belongings and luggage with toxic chemicals. Many pesticides being used to battle bedbugs have also been shown to have limited efficacy unless directly applied to the bedbug itself.
- It has been suggested that travelers should enclose their luggage and its contents in individual plastic sealed bags. While this could keep bedbugs from infesting your luggage contents, it is not practical.
- Treat your luggage with PackTite™ after every trip!

For more information about Packtite™ and bedbugs, visit our website at: www.PackTite.com

Other resources for bedbug information:
- www.bedbugger.com
- www.ext.colostate.edu/pubs/insect/05574
- www.ca.uky.edu/entomology/entfacts/ef636.asp