Peterborough Public Health

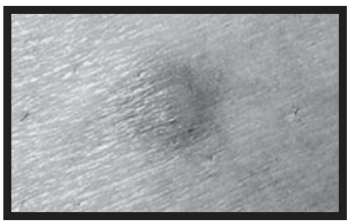
BED BUGS

Information for Health Care Professionals

The common bed bug (*Cimex lectularius*) is an exclusive blood feeder. Adults are a deep red-brown colour and 5-6mm in length— the size of an apple seed. Bed bugs usually feed at night and can live from several weeks to a year without feeding. The act of feeding involves injecting saliva that contains anticoagulants and protein fractions to which some people may be allergic. Most bites occur on exposed areas of the body such as the arms, shoulders and legs.

In recent years, there has been a resurgence in the bed bug population in many North American communities. It is important for healthcare providers to correctly identify bed bug bites, inform their patients of what to do if there is a bed bug infestion and to be be aware of the physical and psychological effects of infestations.

Clinical Presentation



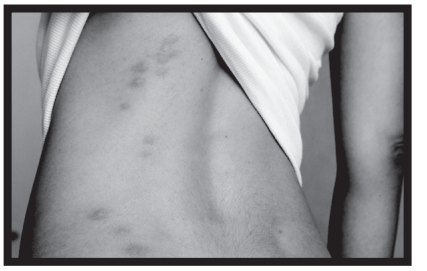
Bed bug bites typically present as small red macular spots that may develop into wheals. These wheals may be very itchy and inflamed for several days. An erythematous rash or papular urticaria may also occur. Bullous eruptions are also possible, though rare, and may be accompanied by fever and/or malaise.

Reactions to bed bug bites vary depending on the individual – an estimated 20-30% of people show no clinical reaction. Reactions can be delayed with lesions appearing up to nine days or more after a bite.

Medication and the age of an individual can affect the reaction to bed bug bites. Corticosteroids can suppress the immune response to allergens. The elderly may also be less reactive because of a natural decrease in responsiveness to allergens. In addition, they may be less aware of bites if they are focused on other personal health concerns. These factors suggest a need for greater vigilance toward the detection of bed bug bites among the elderly and those who have other health conditions.

Currently, there is no evidence that suggests that bed bugs are able to transmit blood-borne infectious diseases such as Hepatitis B, Hepatitis C and HIV.

Appearance of Bites



Bites may appear in a linear or clustered pattern, or in groups of three, classically known as ‘breakfast, lunch and dinner’. The bites also may appear similar to other conditions such as: scabies, antibiotic reactions, food allergies, hives, chicken pox, Staphylococcus infection and insect bites.

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Clues to Bed Bug Infestation

Bed bugs should be suspected if clients have acquired bites or rashes during the night. Other clues to bedbugs may be living at a location of high resident turnover (e.g. hotel, hostel, shelter, etc.) or recent acquisition of second-hand mattresses or furnishings. Advise clients to look for evidence of bed bugs. Bed bugs hide in crevices of floors and walls, bedding and upholstered furniture. There can be small blood stains on sheets, blankets or pillow cases or black spots (bed bug feces) on bedding.

Treatment

Bed bug bites often do not require any medical treatment, although corticosteroids and antihistamines may be used in severe cases. Patients should be advised to resist the urge to scratch the bites to reduce local irritation and prevent secondary infections, abrasions and further inflammation. Secondary infections may require local application of topical antiseptic or antibiotics.

Bed bugs can cause significant psychological distress due to a stigma that associates bed bugs with poor housekeeping and hygiene. Health care professionals should remind patients that even the cleanest people can get bedbugs, whether at home or a five-star hotel.

There are many ways to treat bed bug infestations: identification, prevention, pest control and education. The best immediate solution is to eliminate bed bugs through removal of clutter, cleaning and the use of a licensed pest control company.

For more information and resources on bed bug identification, treatment, control and prevention, visit ***bedbugsinfo.ca*** or call the Peterborough Public Health at 705-743-1000 for assistance by phone.

References

Doggett SL, Russell R, Bed bugs: What the GP needs to know, 2009, *Australian Family Physician*, 2009;38(11):880-4.

Kolb A, Needham GR, Neyman KM, High WA, Bedbugs, *Dermatologic Therapy*, 2009;22(4):347-52.

Potter, MF, Haynes KF, Connelly K, Deutsch M, Hardebeck E, Partin D, Harrison R, The sensitivity spectrum: Human reactions to bed bug bites, *Pest Control Technology*, 2010;100:71–74.