Bed bugs have been common in U.S. history. Although bed bug populations dropped dramatically during the mid-20th century, the United States is one of many countries now experiencing an alarming comeback in the population of bed bugs. Though the exact cause is not known, experts suspect the reappearance is associated with increased resistance of bed bugs to available pesticides, greater international and domestic travel, lack of knowledge regarding control of bed bugs due to their prolonged absence, and the continuing decline or elimination of effective vector/pest control programs at state and local public health agencies.

Although not known to transmit any human disease, they leave a trail of potentially itchy or painful bite reactions, and costly extermination bills in their wake. Most people are not aware they have been bitten because they inject an anesthetic that prevents a person from feeling the bite. The bites look like little red bumps; sometimes resembling mosquito bites, but people who are more sensitive to the bite can have localized allergic reactions. Scratching the bitten areas may lead to infection.

Bed bugs are small, flat insects that feed on the blood of sleeping people and animals. Approximately the size and shape of an apple seed, they are reddish-brown in color and wingless, and range from ¼ to ⅜ inches in length. They can live several months without a blood meal.

Infestations of these insects usually occur around or near the areas where people sleep or spend a significant period of time. These areas include apartments, shelters, rooming houses, hotels, nursing homes, hospitals, cruise ships, buses, trains and dorm rooms.

Bed bugs are experts at hiding. They hide during the day in places such as seams of mattresses, box springs, bed frames, headboards, dresser tables, cracks or crevices, behind wallpaper and under any clutter or objects around a bed. Their small flat bodies allow them to fit into the smallest of spaces and they can remain in place for long periods of time, even without a blood meal. Bed bugs can travel more than 100 feet in one night, but they tend to live within eight feet of where people sleep.

Bed bugs are usually transported from place to place as people travel. 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 can transport stow-away bed bugs as they travel, potentially infesting new areas, including their homes, as they relocate.

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.

One of the easiest ways to identify a bed bug infestation is by bite marks that appear on the face, neck, arms, hands and any other body parts. However, these bite marks may take as long as 14 days to develop in some
Integrated Pest Management for Bed Bugs

Integrated pest management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use information on the life cycles of pests and their interaction with people and the environment. This information, in combination 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.

Bed bug control is most effective when an IPM approach is applied with active participation by the residents. In multi-family housing, diligent participation is also required of the building management. IPM takes advantage of all appropriate pest management options, including the careful use of pesticides. A comprehensive IPM program to control bed bugs may include a number of methods such as:

- using monitoring devices,
- removing clutter where bed bugs can hide,
- applying heat treatment,
- vacuuming,
- sealing cracks and crevices to remove hiding places,
- using non-chemical pesticides (such as diatomaceous earth) and
- judicious use of effective chemical pesticides

Some things NOT to do with a bed bug infestation are:

- DO NOT use bug bombs or foggers. They do not work against bed bugs and may cause the bugs to scatter and worsen the problem.
- Usually furniture can be treated, so do not dispose of any furniture. Bed bugs quickly infest replacement furniture. Items placed on the curb are often picked up and reused, spreading bed bugs to other households.
- DO NOT apply insecticides to human skin, clothing, bedding or bed linens. Products containing DEET have not been shown to repel bed bugs.
- Grocery store insect sprays won’t eliminate a bed bug infestation. They must be sprayed directly on the bed bugs, but most are hiding and will not be killed. They break down quickly and have little or no residual activity.
- Boric acid products don’t work and won’t kill bed bugs. Boric acid is a stomach poison that must be eaten by an insect, but bed bugs only feed on blood.

For additional information about bed bugs and their control, please see the Arkansas Department of Health website:  http://www.healthy.arkansas.gov/programsServices/environmentalHealth/generalSanitation/Pages/BedBugs.aspx