Recently, Michigan and other states have seen an increased number of bed bug infestations plaguing residents. As bed bugs infest more and more homes, they are finding their way into camps. Camps should take preventive action to avoid infestation, and if they are found, stop them from spreading.

**What are bed bugs?**

Bed bugs are small, brownish, flattened insects that feed on the blood of people while they sleep. Although the bite does not hurt at the time, it may develop into an itchy welt similar to a mosquito bite. Bed bugs do not transmit disease, but they can cause significant itchiness, anxiety, and sleeplessness. Bed bug infestations are also very difficult and expensive to control.

Usually, bed bugs will hide during the day and only come out to feed during the night. Unlike head lice, they do not live on a person. However, they can hitchhike from one place to another in backpacks, clothing, luggage, books, and other items.

**How does a camp become infested?**

Bed bug infestation in camps is an increasing problem nationwide. Most commonly, a few bed bugs will “hitchhike” to the camp from an infested home by hiding in a camper’s clothing or luggage. Bed bugs that hitch a ride into the camp in one camper’s belongings could infest the camp and be taken home by other campers. This is not a minor concern; bed bugs are very difficult to get rid of and the camp’s reputation may be damaged.

An infestation usually is not discovered until weeks or months after the bed bugs were first brought into the camp, making it difficult to determine where the bed bugs came from. The most important things for camps to focus on are planning, prevention, early detection, and prompt treatment.

This fact sheet has been published by the Michigan Bed Bug Working Group (April 2011)
For more information, please visit [http://www.michigan.gov/bedbugs](http://www.michigan.gov/bedbugs)
How do we plan for and prevent bed bugs?

Make the camp less hospitable for bed bugs

- Before camp season begins, inspect sleeping areas and make repairs. Caulk cracks and crevices, replace or encase mattresses, replace damaged furniture with metal or plastic. These repairs will make it easier to detect bed bugs, and harder for bed bugs to spread.

Prevent campers from bringing bed bugs to camp

- Consider drafting a “Packing for Prevention” guide as part of general camp enrollment materials. This guide may help to prevent campers from bringing bed bugs into the facilities. A sample packing guide is provided at the end of this fact sheet.

Be vigilant for signs of a bed bug infestation

- Train all camp staff to identify the signs of a bed bug infestation. Signs may include bites on campers, evidence of bugs in the facility, or even blood spots on sheets.

- Use bed bug passive monitors. Inexpensive sticky traps or interceptors can provide an early warning that bed bugs are present in an area.

Promptly respond to signs of an infestation

- It is easier to control a bed bug infestation when it is detected and addressed early. Plan with an experienced pest management professional, using an Integrated Pest Management (IPM) approach, to find and treat an infestation if it occurs.

What are some signs of bed bugs in camps?

- **Bites** – Campers may receive many types of insect bites during their time at camp. If a camper is regularly using repellents for outdoor insects and they are still finding a significant number of new bites, the sleeping area should be inspected for bed bugs.

- **Live or dead bed bugs** – Look around mattress seams and furniture crevices. If a suspected bed bug is found, it should be identified by an expert before any treatment is attempted.

- **Passive monitors** – Check passive monitors regularly for trapped bed bugs.

- **Dark or reddish marks on bedding** – small dark marks may be bed bug excrement. You may also see blood marks from crushed bed bugs.
What should we do if we find bed bugs in our facility?

• The camp director should contact their pest management company and/or local health department for assistance in identifying the specimen(s). It is important to confirm that the bugs found really are bed bugs before proceeding.

• If the specimen is confirmed as a bed bug, then the entire cabin, tent, or room should be inspected, as well as any adjoining rooms or sleeping areas.

• If a sleeping area is found to be infested, all the campers' machine-washable bedding, clothing, towels, etc. should be machine dried for 30 minutes on the hottest recommended setting, and then sealed into plastic zippered bags. Once their belongings have been treated, the affected campers should be moved to another (non-infested) sleeping area.

• There is no reason to exclude affected campers from camp activities. Bed bugs infest places, not people, and there is no scientific evidence that bed bugs spread disease.

• Before the affected campers return home, the camp director or nurse should inform the campers’ parents and/or guardians of their child’s exposure or potential exposure to bed bugs. Educational materials should also be provided to the families, such as those found at http://www.michigan.gov/bedbugs.

• Ongoing pest management should be overseen by the camp director in partnership with a licensed pest management professional and should conform to an Integrated Pest Management plan. Previously infested areas should not be used until they are certified as bed bug free by a pest management professional.

Additional Resources

This fact sheet provides broad guidelines for prevention and control. For more detailed information and guidance, please consult the Michigan Bed Bug Manual and other resources at:

http://www.michigan.gov/bedbugs

or

http://www.epa.gov/bedbugs

Bed bug images provided by U.S. Centers for Disease Control and Prevention

Bed bug bite image provided by University of Sydney Department of Medical Entomology

Bed bugs on sleeping bag image provided by Mark Sheperdigan, Rose Pest Solutions

Interceptor image provided by Susan McKnight, Inc.
Camp & Bed Bugs: Packing for Prevention

Whether they come to camp every year or this is their first trip, attending camp is an exciting time for children. Making new friends, exploring nature, and trying new things are all part of the camp experience and create memories that will last a lifetime.

However, along with all the good parts of camp, a pesky little bug can also be part of the experience. In recent years, bed bugs have made a resurgence in North America. They are often found in hotels, multi-unit dwellings, and other structures that house people for short periods of time, such as camps. While bed bugs may be a nuisance, they do not transmit disease to people.

The good news is that there are simple steps that can be taken to help ensure that children do not bring bed bugs to camp or back home. We are taking proactive steps in our camp facilities, please help us by following the packing advice listed below:

PACKING FOR CAMP

√ Visually inspect items for bugs. Take sleeping bags, blankets, and luggage out of storage, place them outdoors, and inspect them carefully for any signs of bugs or eggs.

√ Tumble bedding and luggage in clothes dryer. Place bedding or luggage in the clothes dryer and tumble them on a high heat setting for 30 minutes. The heat from the dryer kills bed bugs and eggs. For items that cannot be placed in a dryer, vacuuming or cleaning with soap and water or alcohol based cleaning products will kill bed bugs.

√ Use a heavy gauge garbage bag as a liner in luggage. Place all clothing inside the liner and tightly twist and knot to seal. This will help keep bed bugs out of clothing. In addition, place bedding in a separate garbage bag. Duffle bags are recommended as luggage for campers as they can be placed in a dryer.

√ Pack extra garbage bags. Be sure to pack two extra garbage bags for your child. One bag will be used for all dirty clothing and the other will be used for dirty bedding.

√ Repellents. Children should use insect repellent during the day to protect against mosquitoes and ticks. Repellents should be used while sleeping. To protect a child’s belongings from bed bugs, products containing permethrin which are labeled for use on fabrics can be applied to backpacks, duffel bags, and the outside of sleeping bags. Always follow the label directions when applying permethrin products.

COMING HOME FROM CAMP

√ Inspect items before you bring them indoors. Inspect items that cannot be placed in a washer/dryer for evidence of bed bugs outdoors and clean if necessary before bringing them indoors. Place bedding and clothes stored in garbage bags directly into the washer/dryer. Dispose of the plastic bag outdoors.

√ Clean all camp items. For items that can be laundered, use a hot water setting and tumble dry on high heat for at least 30 minutes. For items that cannot be laundered, such as suitcases, vacuuming or cleaning with soap and water or alcohol based cleaning products are other options.

√ Wipe off shoes. Use rubbing alcohol or soap and water to wipe off the bottoms of shoes.

If you have any further questions, please feel free to contact us at (xxx)xxx-xxxx

Sample letter developed in conjunction with local Michigan camps and the Michigan Bed Bug Working Group