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INTEGRATED PEST MANAGEMENT FOR CHILD CARE CENTERS

BED BUGS ARE BACK!

Common before the 1950s, bed bugs are back, showing up in homes, apartment buildings, dorm rooms, hotels, and child care centers. How do these blood-sucking insects get around? They usually arrive with a child who has an infestation at home by attaching to clothing, blankets, backpacks, or soft toys. Bed bugs will infest spotlessly clean rooms as well as messy or filthy ones. Since bed bugs are so good at hiding, the more clutter you have, the harder it is to find them—and the more likely their numbers will increase.

BED BUGOLOGY

Bed bugs are flattened brownish-red insects, about 1/4-inch long, that look like apple seeds. They're fast movers, but they don't fly or jump. They feed only on blood and can survive several months without a meal.

- ✓ Young bed bugs, called nymphs, look like small versions of adults. The youngest nymphs are the size of a poppy seed and turn dark red after they feed.
- ✓ As a nymph grows to the next stage, it sheds its skin. The skins accumulate where the bugs hide.
- ✓ Bed bugs live in groups. Once females mate, they often wander away to lay their eggs somewhere else. This is usually how the bugs end up in other rooms.
- ✓ Eggs are tiny, pale, see-through, and hard to find.
- ✓ Eggs are glued to surfaces, especially wood, cardboard, and fabric, which is why you should check furniture, cardboard boxes, and clothing for bugs, their droppings, shed skins, and eggs.
- ✓ You'll find bed bugs year-round.
- Bed bugs usually move around and feed at night, but visit daytime nappers.

BED BUG BITES

Thankfully, bed bugs don't spread disease. But, when people think they have bed bugs, they may sleep poorly and worry about being bitten.

- Bites can cause swelling, redness, and itching, although many people don't react at all
- Found singly or in groups, often arranged in a semi-circle or line on the face, neck, arms, and legs
- Resemble rashes, hives, or bites from other insects such as mosquitoes or fleas
- Can get infected from frequent scratching.

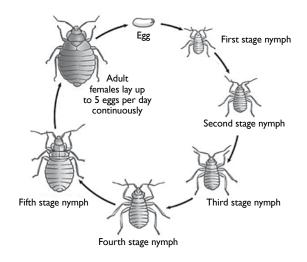
BE A BED BUG DETECTIVE

Prepare an inspection kit that includes a good flashlight and magnifying glass to look for bed bugs, bloodstains, or shed skins.

Inspect the nap area regularly. Use a flashlight to examine nap mats, mattresses (especially seams), bedding, cribs, and other furniture in the area.

- Check under buttons of vinyl nap mats.
- Roll cribs on their side to check the lower portions.
- Scan the walls and ceiling and look behind baseboards and electrical outlet plates for bugs, bloodstains, and shed skins. The bloodstains may look like dark-brown ink spots and splatters.
- Examine upholstered furniture and wall-mounted items such as clocks, pictures, and mirrors.

Collect any suspicious insects or shed skins for an expert to identify. Use a small vial or clear packing tape for this purpose.



Illustrations courtesy of Orkin (bed bug drawing) and UC IPM (bed bug life cycle), used with permission. Written by Nita A. Davidson (DPR) and coordinated by Belinda Messenger (DPR). Reviewed by Gail M. Getty (Gail M. Getty Consulting).

PREVENTION CHECKLIST

Use the following approaches to discourage other pests, too:

- ✓ Reduce clutter! Store toys, stuffed animals, and dress-up clothes in plastic boxes with tight-fitting lids.
- ✓ Seal cracks and crevices to eliminate hiding places for bed bugs and other pests. Caulk and paint wooden baseboards or molding around ceilings.
- ✓ Vacuum the nap area frequently using a crevice tool around molding and the area between wall and ceiling. Vacuuming is the most important thing you can do to catch stray bed bugs.
- ✓ Wash bedding frequently. Every few days, toss pillows and blankets into a hot dryer for 20 minutes.
- ✓ Enclose crib mattresses in high-quality mattress encasements.

WHAT TO DO IF YOU FIND BED BUGS

Collect any suspicious insects or shed skins—or photograph evidence of bed bugs you've found, such as bloodstains on mattresses.

Call your pest management professional and mention what you've seen, collected, or photographed.

Don't throw anything away, even nap mats and mattresses! You can easily clean these, especially if you've caught the infestation early.

- Mattresses. Vacuum thoroughly, especially around seams and anywhere a small, flat bug could hide. Enclose the mattress in a high-quality mattress encasement (See Got Cribs? box on right).
- Nap mats. For vinyl mats, vacuum and then wash with soapy water, especially along seams and under buttons. For soft, washable mats, machine-wash and then place in a hot dryer for at least 20 minutes.
- **Soft items** such as pillows, linens, blankets, stuffed animals. Machine-wash and then place in a hot dryer for at least 20 minutes. If the item isn't washable, tumble in a hot dryer for 20 minutes.

Use traps such as ClimbUp® Interceptors under crib legs. Pull cribs away from the wall so bugs don't have a natural bridge from wall to mattress.

JUST SAY NO TO SPRAYS

If you're worried that your center has bed bugs, your first impulse might be to spray. Resist this impulse! **Spraying will not prevent infestations**. Never try to tackle bed bugs yourself. This is a job for an expert.

- Don't set off foggers or bug bombs. The pesticide mist won't reach places where the bugs are hiding.
- **Never spray pesticides** on bed linens, pillows, stuffed animals, clothing, or people.
- Don't use pesticide-containing mattress covers. Use a mattress encasement instead.

GOT CRIBS? USE MATTRESS ENCASEMENTS

Encasements are machine-washable covers that snugly wrap around mattresses. Good encasements have bug-tight zippers and are made of strong-butflexible fabric that won't easily tear.

- If bed bugs already live in a mattress the encasement will trap them inside so they won't bite the sleeper.
- Bed bugs can live on top of an encasement, but they'll be easier to find. (They can still live elsewhere in the room and bite sleepers.)

The following encasements have bed bug-proof fabric and zippers: Allergy Luxe®, National Allergy® BedCare Elegance, and Mattress Safe®. All come in crib mattress size.

PUT TOGETHER AN ACTION PLAN

If you ever find a bed bug, have a simple action plan ready for staff members so no one panics. Include the phone number of your pest management professional or PMP (see HIRE A PROFESSIONAL below).

HIRE A PROFESSIONAL

Chances are you already have a pest management professional or PMP (also known as a pest control operator or PCO) who services your child care center.

If your center doesn't use a PMP and you're concerned about bed bugs, hire a PMP who's licensed, insured, and has experience working with bed bugs. (See www.pcoc.org to find qualified PMPs in your area.) Many PMPs prefer treating bed bugs with heat rather than spraying pesticides because heat reaches places where bed bugs hide.

- Make sure you actually have bed bugs before any treatment starts.
- Be prepared to work closely with your PMP, who will explain how you can prepare for treatment by reducing clutter, vacuuming, cleaning, and laundering.
- Expect 2–4 visits to be sure the bed bugs are gone.



WHAT IS INTEGRATED PEST MANAGEMENT (IPM)?

Integrated pest management is a widely accepted approach toward pest management that results in effective suppression of pest populations while minimizing hazards to human health and the environment.

FOR MORE INFORMATION

UC IPM Pest Notes (UC IPM Program) www.ipm.ucdavis.edu/PMG/ PESTNOTES/pn7454.html

EPA's Bed Bug Resources www.epa.gov/pesticides/bedbugs

National Pest Management Association

www.pestworld.org/all-things-bed-bugs

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