

Bed Bugs!

What's the BIG deal?



What are bed bugs?

- ⌘ Small insects that feed on blood
- ⌘ Usually active at night
- ⌘ Are large enough to be seen.



Bed Bugs are small insects that feed on human blood. They are typically active at night but keeping lights on at night will not deter them from biting you. They are red colored and oval, and about the size of an apple seed. They can be seen with the naked eye.

What are bed bugs?



As you can see in this picture, the adult bed bugs, nymphs, and eggs are easily seen, but they often hide in cracks of furniture, floors, or walls.

What are bed bugs?



When bed bugs feed, their bodies become brighter red and swell. Bed bugs can live several months without feeding on a host so it is important to keep this in mind when watching for re-infestation after treatment.

Why are they becoming an issue?

- ⌘ Increase in prevalence
- ⌘ Showing up in surprising places
- ⌘ They breed rapidly
- ⌘ There are several types of bed bugs



Swallow Bug



Bat Bug



Poultry Bug

Before WWII, the bed bug was a common pest, but following WWII the numbers of bed bugs decreased dramatically, so much so that many pest management professionals have never seen a live bed bug. Many specialists believe that the drop in bed bug infestations were a result of the widespread use of DDT that was used to control cockroaches. Home furniture trends, turned away from bulky headboards and odd shaped corners, which once provided spaces for bed bugs to hide, and with the invention of the vacuum cleaner, bed bugs no longer had a chance to survive in the common household.

Recently bed bugs have started making a come back. Experts believe globalization and the mass amounts of people and goods that are traveling across the country everyday has made the bed bugs a perfect way to stowaway and travel. Creating a widespread infestation in areas such as hotels, hospitals, college dorms, laboratories, airports, and schools.

Bed bugs typically breed about three generations per year, with females laying 200-400 eggs in their lifetime, which is generally 10 months to one year long. Eggs hatch within 10 days and can reach adulthood within five to eight weeks.

There are several types of bed bugs. A few are listed in the slide. As their names suggest, they prefer to feed on certain animals, including swallows, bats, and poultry. But like most vectors, while they prefer one species they will feed on other species including humans and domesticated animals if in need.

What to do if you have them?

- ⌘ Clean – Remove Clutter
- ⌘ Vacuum
- ⌘ Clean Linens
- ⌘ Seal Crevices
- ⌘ Call a Professional



Get rid of clutter, remove things they could hide behind or underneath, such as pictures, posters, and area rugs.

Vacuuming is an effective way to remove bed bugs and the dirt that provides them with shelter. Vacuum each area thoroughly everyday. Tilt furniture upside down so you can reach all sides. Concentrate on seams, creases, folds, and around any tufts or buttons. Empty the vacuum immediately, if your vacuum has a bag, close the bag, and put it in the freezer for 24 hours before disposing of it, this will kill the bed bugs.

Bed bugs are sensitive to extreme temperatures in all their life stages, so toss all linens into HOT dryers at 140 degrees for 20 minutes to kill the bed bugs.

Seal crevices found through inspection. Fill cracks in floorboards and furniture. Repair or remove peeling wallpaper and tighten loose light covers. Seal any openings where pipes or wires come into your facility. These actions will help prevent future invasions.

Pesticides are an option, but if used inappropriately can be extremely dangerous to the health of students and staff. Contact a professional.

What is the REAL concern?

- ⌘ Its not just an east coast problem
- ⌘ Social Economic Status is not a factor
- ⌘ Bed Bugs Don't Transmit Disease
- ⌘ Children are susceptible to improper treatment



Most people have heard about bed bug infestations on the east coast, but a recent survey conducted by BASF pest control solutions, found that Texas tied for fourth place, as the state with the most bed bug reported incidences. First place was New York, followed by California, then Florida, and then Texas and Alabama. In the Austin area alone, reported bed bug incidences soared 1,000 percent since 2006.

Bed bugs do not discriminate and can come in on students and teachers from all social economic status. They can be transferred from clothes, backpacks, purses, briefcases, and toys.

Bed Bugs do not transmit disease, however they are quite annoying. Bites become itchy, and these bites can cause distraction for students and teachers, and if scratched excessively can become infected.

Children are highly susceptible to pesticide exposure, because they are in the process of growing and many of their organ systems have not yet reached developmental maturity. Many symptoms of pesticide exposure in children present with nausea, headache, cough, and shortness of breath, all symptoms which often can be misdiagnosed as a viral infection. Cases such as these have been identified in New York. It is essential that school nurses incorporate environmental health assessment tools into their routine assessments of students and faculty. What might seem like a common cold, might be something much more.

Tools and Resources

- * EPA How to Manual
<http://www.epa.gov/pesticides/ipm/schoolipm/index.html>
- * HealthySEAT Version 2
<http://www.epa.gov/schools/healthyseat/downloads1.html>
- * ABC's of IPM Training Series
<https://agrilifebookstore.org/>
- * Resources and Forms from AgriLife
<http://schoolipm.tamu.edu/forms/>
- * Playback Link for Webinar:
<https://sas.illuminate.com/mr.jnlp?suid=M.643CA475977D25AEE8E6DC7AE14C1F&sid=2009292>

EPA has a how to manual on developing an IPM Program, and provides IPM strategies for managing common pests in schools.

EPA has a software that helps school districts evaluate and manage their school facilities for key environmental, safety and health issues. Healthy Seat, is designed to be customized and used by district-level staff to conduct completely voluntary self-assessments of their school (and other) facilities and to track and manage information on environmental conditions school by school.

The Texas Agrilife Extension Service has a video training series that is designed to introduce IPM concepts and help school district personnel implement IPM programs.

The Texas AgriLife Extension Services also has a page specifics for school IPM that provides, forms, posters, and presentations that can be used to help make implementing IPM programs in schools easier.

This webinar will be made available for replay, for the next 5 business days. Please share as needed with others.