


Bed Bug Resource



Actual size: 

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Saskatchewan
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Introduction

Bed bugs are becoming increasingly common in Canada. They are often reported in apartment buildings, university dormitories, hotels, nursing homes, furniture rental stores, moving vans, public transportation, and detached homes. Bed bugs are not a health or safety risk to humans and do not spread disease. Like any other pest, bed bugs can be treated.

The vast majority of our tenants have not experienced a bed bug infestation. While bed bugs are reported more often in larger centres, housing agencies in smaller and rural communities are seeing an increase in the number of bed bug infestations.

How to use the Bed Bug Resource

The primary purpose of this resource is to provide housing agencies with step-by-step processes that they should follow to prevent, inspect for, and treat bed bugs. These processes are laid out in the next section, called “Bed bug protocols.” Follow the appropriate protocol depending on whether or not your project has a bed bug infestation.

As housing agencies follow the protocols, they may find that they need more information. A number of steps in the protocols direct the housing agency to pages in the reference and communication materials sections. These sections contain information and tools that housing agencies will find helpful as they proceed through the protocols and work with tenants.

Take-home messages of the Bed Bug Resource

- Bed bug infestations may be prevented through tenant education.
- Bed bugs are not the result of bad hygiene or poor housekeeping, so tenants should not be embarrassed about having bed bugs.
- Bed bugs do not cause or spread diseases.
- The use of bug-bombs, phosphine tablets, or other chemicals to treat bed bugs may spread the infestation or cause tenant illness and/or death.
- Housing agencies must assist tenants who have bed bugs in their units.
- Small bed bug infestations are easier to treat than large infestations.
- Contract a certified pest professional to treat bed bugs and follow their instructions.
- Housing agencies should contact their housing representative when they need help.

Bed bug protocols



Prevention protocol

Avoiding a bed bug infestation

Be prepared for bed bugs

Housing agencies should know:

- What bed bugs are and how to identify them (page 8);
- The ways tenants can prevent bed bugs (page 26);
- The ways to reduce the risks of working in units that may have bed bugs (page 15);
- Where to look for signs of bed bugs (page 27);
- What to do when bed bugs are confirmed to be in the building (page 6);
- The dangers of non-professionals using chemicals to treat bed bugs (page 16).

Be proactive

- When possible, inspect common areas, hallways, and vacant units for signs of bed bugs (page 9).
- When inspecting a unit (e.g., the annual inspection or an inspection after a tenant vacates), look for signs of bed bugs (page 27).
- Discuss the subject of bed bugs with tenants and share the information from this resource with them prior to occupancy, during the home visit, and any other appropriate opportunity.

Educate tenants

Before bed bugs are found in a housing project, tenants should know:

- What bed bugs are and how to identify them (page 25);
- How bed bugs can be prevented (page 26);
- Where to look for signs of bed bugs (page 27);
- To discuss their concerns about bed bugs with the housing agency;
- To contact the housing agency immediately if they find signs of bed bugs;
- The dangers of non-professionals using chemicals to treat bed bugs.
- Housing agencies may also deliver a presentation to tenants on bed bugs; this presentation is available from your housing representative.

When a complaint about bed bugs is received, proceed to the “Inspection protocol” on page 5

Inspection protocol

Responding to reports of bed bugs quickly and efficiently

When a complaint about bed bugs is received

- Contact your housing representative to let them know there has been a complaint about bed bugs. Continue to work with them throughout the inspection process.

Communicate with the tenant

- Ensure the tenant's well-being by:
 - being respectful;
 - explaining that bed bugs are not a health or safety issue;
 - explaining the inspection and treatment processes;
 - explaining why it is important for bed bugs to be treated quickly;
 - sharing information with the tenant from this resource as needed.

Unit inspection

- Within 48 hours, perform an inspection of the unit for signs of bed bugs (page 27) or contract a pest professional to inspect the unit (page 19).
- Provide 24 hour's notice to the tenant that you (or the pest professional) will be entering the unit to inspect for bed bugs, as per *The Residential Tenancies Act, 2006*.
- Take the necessary precautions before entering the unit and while in the unit (page 15).
- Maintain records of the pest professional's inspection, recommendations, and the costs incurred.

If bed bugs are not found

- Educate the tenant about what bed bugs are and the signs of bed bugs.
- Provide the tenant with the "Bed bug factsheet" (page 25) and bed bug prevention tips (page 26)
 - There is no need to send a letter to all tenants.

Proceed to the "Prevention protocol" on page 4

If bed bugs are found

- Inspect (or have the pest professional inspect) adjacent units for bed bugs. This includes the units above, below, across the hall, and on either side of the unit that has bed bugs.
- Complete the "Bed bug incident record" (page 17) and forward it to your housing representative.

Proceed to the "Treatment protocol" on page 6

Treatment protocol

Controlling bed bugs promptly and professionally

Contract a pest professional

- Follow the process on page 19 to contract a pest professional to develop a treatment plan.
- Review the treatment plan and the instructions that need to be followed with the professional.
- Contact your housing representative to inform them of the pest professional's treatment plan.

Communicate with tenants

- Send letters to affected and unaffected tenants (page 29).
 - Include the "Bed bug factsheet" (page 25) and the pest professional's instructions (if required);
 - If the laundry facilities are shared, schedule a time for tenants with bed bugs to launder their clothing and provide them with laundering instructions (page 36).
- If needed, convene a meeting with all tenants and ask the pest professional to attend.

Prepare for treatment

- Ensure the infested units are ready for treatment according to the pest professional's instructions.

Tenants who want to move before treatment: **Tenants who want to throw away items:**

- Encourage them to have their belongings treated before moving to ensure that they do not move bed bugs to their new home.
- If the tenant still wishes to vacate their unit before treatment, provide them with "Leaving bed bugs behind" (page 35) and "Laundry process" (page 36).
- The disposal of infested items may not be recommended by the pest professional and is done at the tenant's loss. The items must be:
 - destroyed (e.g., cut or slash the fabric of a mattress or couch);
 - wrapped in plastic and labelled with "INFESTED WITH BED BUGS"; and
 - put into garbage containers outdoors.

During treatment

- Assist the pest professional as required and keep records of the treatment and the costs incurred.
- Maintain open communication with tenants.

After treatment

If the treatment was successful:

- Advise your housing representative.
- Send a letter to tenants (page 29).

Proceed to the "Prevention protocol" on page 4

If the treatment was not successful:

- Advise your housing representative.
- Work with tenants and the pest professional through follow-up inspections and treatments.
- Send letters to tenants (page 29).

Refer to the "During treatment" step above

Housing agency reference materials

Guide to reference materials

		What are bed bugs? 8
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What are bed bugs?

Bed bugs are small, wingless insects that feed on the blood of people and animals, usually while they sleep. Adult bed bugs are about 1 cm (3/8 inch) long and resemble an apple seed. They have an oval body and a short, wide head. Adult bed bugs are brown and as flat as a debit card when they have not fed. After feeding, bed bugs bloat and become a dark red colour. Young bed bugs are shaped like adult bed bugs but are smaller (1.5 mm; 1/16 inch long) and lighter in colour.

Bed bugs are drawn by human pheromones and body heat and the carbon dioxide exhaled as people sleep. They move between objects in a room, from room to room in a unit, or between units in a building. Bed bugs move at about the same speed as an ant. They cannot fly or jump and cannot easily climb metal, very smooth, or polished surfaces.

Like ants or any other kind of insect that may get into one's home, bed bugs are a nuisance. They are not a threat to the health of humans and there is no evidence that they spread disease. Like other pests, bed bugs can be professionally treated.

The lifecycle of a bed bug

Bed bugs go through three life stages: egg, nymph, and adult.

The female bed bug lays at least 500 eggs in her lifetime at a rate of about two to four eggs per day. Bed bug eggs are white, 1 mm (1/16 inch) long, and are difficult to see on many surfaces. The eggs have a sticky coating and are laid in cracks and crevices, behind woodwork, or in other hidden locations. Bed bug eggs usually hatch in 6 to 17 days.

Young bed bugs (or nymphs) go through five stages before they reach the mature adult stage. When bed bugs hatch they are about the size of a poppy seed. As they grow, they shed their skins, which are transparent and orange-coloured. Each growth stage lasts about a week, depending on the room temperature and the availability of food. The lifecycle from nymph to adulthood takes about two months. Adult bed bugs usually live for about 10 or more months in a suitable environment with appropriate temperatures (21°C to 28°C) and blood to feed on; they may be dormant for up to two years without feeding.



Bed bug egg
(1 mm; 1/16 inch)



Bed bug nymph
(1 mm; 1/16 inch)



Bed bug nymph
(5 mm; 3/16 inch)



Adult bed bug
(1 cm; 3/8 inch)

Where bed bugs live

Bed bugs leave their hiding places to feed on people who are sleeping; this usually occurs at night but may occur during the day if that is when a person sleeps. Bed bugs prefer to live in locations where they can hide easily and feed regularly — usually around a bed. Bed bugs will typically only move to other rooms when there is a large infestation. Bed bugs will travel between 1 and 6 metres (3 to 20 feet) for a feeding. The vast majority of bed bugs will be found in the below locations:

- under the box spring, usually at the head of the bed and in the corners where the material is stapled to the wood frame; you may need to remove the dust cover to find evidence of bed bugs;
- in the top and bottom seams of the mattress;
- around the headboard, especially behind the headboard where the wood is joined;
- in the couch; and
- behind the baseboards of a bedroom or the baseboards near a couch.

What are the signs of bed bugs?

Evidence of bed bugs should be easy to find if they are present in a unit. Below are common signs of bed bugs:

- **live or dead bed bugs**, which may be found in any of the locations listed above.
- **bed bug droppings** are dark spots of digested blood. These droppings, or “blood spotting,” may be on bed sheets; the seams of mattresses; furniture; or any other places bed bugs hide. They will smear when you run a wet finger over them.
- **the skins of bed bugs** that are shed after each growth stage; these clear, orange-coloured skins can be found where bed bugs hide, such as along the seams of mattresses or box springs.
- **bed bug eggs** are cream in colour with a slight bend. They are about 1 mm (1/16 inch) long and are typically laid in crevices in dark areas, such as under a headboard or box spring.
- **a sweet smell** may be evident in extreme bed bug infestations.

Directions for inspecting units for bed bugs are on page 27.



Left: a bed bug that has not fed; its body is flatter and wider than the bed bug on the right that has fed.

Adult bed bugs are 1 cm (3/8 inch) long.

Bed bug bites

There is no evidence that bed bugs transmit diseases to humans.

Both male and female bed bugs bite. They will bite anywhere on the body, but often feed around the face, neck, arms, legs, and chest of a person. When bed bugs bite, they inject saliva into our skin that thins the blood and makes it easier for them to feed. Their saliva also contains a chemical that makes the bite less noticeable and delays the itchiness. Adult bed bugs will feed for about 5 to 10 minutes every day.

Bed bugs may bite a person repeatedly without the person seeing a bed bug or noticing signs of bed bugs. A bed bug bite can take as long as 14 days to appear, but this depends on the person. The bites can be mistaken for mosquito, flea, or spider bites. Bed bug bites often appear as a red spot with a small bump; sometimes they develop into larger red welts. Bed bug bites are often very itchy; this itchiness can be treated with calamine, hydrocortisone cream, or ice. Most bites go away without medical treatment.

Many people do not react to bed bug bites, while others may have minor skin reactions. In rare cases, some people may have allergic reactions to bed bug bites. Some bites may become infected due to excessive scratching.

Tenants who are concerned about their physical or emotional symptoms should be referred to a health care professional for advice. Housing agencies must not offer medical advice.

Even though bed bugs do not transmit diseases, bed bugs and their bites can greatly affect a person's well-being. People who have bed bugs in their homes may experience anxiety, sleeplessness, fear, or stress.



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Talking about bed bugs

Don't be embarrassed about bed bugs

Bed bugs are a very difficult subject for many people to talk about. Tenants who have bed bugs may not want to tell the housing agency because they are embarrassed. Housing agency staff or managers may be hesitant to talk to tenants about bed bugs because they feel awkward.

It is important for housing agencies and tenants to remember that bed bugs are becoming increasingly common in Saskatchewan. If bed bugs are in a tenant's unit, it does not mean that the tenant has poor hygiene or is a poor housekeeper. There are many ways bed bugs can enter a home and it may not be the fault of the tenant.

Individuals who have bed bugs in their homes may experience high levels of stress, anxiety, sleeplessness, or embarrassment. With this in mind, housing agencies and tenants must maintain a positive relationship and communicate about bed bugs in an open manner. Housing agencies may minimize the amount of stress tenants experience by responding in a timely manner to their concerns and by explaining that bed bugs are not a health and safety risk and that they do not transmit disease.

Communication challenges

Housing agencies serve a diverse population. This diversity poses particular challenges when communicating about sensitive subjects, including bed bugs. Housing agencies must make every effort to overcome communication challenges to ensure that tenants understand what they can do to prevent a bed bug outbreak, what their responsibilities are should an outbreak occur, and that they must not treat bed bugs themselves.

Communication tips for housing agencies:

- understand that not all individuals react to bed bugs the same way;
- communicate with tenants and educate them before bed bugs are a problem;
- do not dismiss tenants' concerns;
- be understanding of tenants whose behavior may have changed as a result of stress, anxiety, or fear caused by a bed bug outbreak;
- deal with tenants professionally (e.g., by not sharing their information with others);
- listen to what the tenant is saying and ask questions to make sure that you understand the tenant and their concerns;
- use clear language and avoid using acronyms or terms that tenants may not know; and
- be empathetic with the tenant and their situation.

Education and training

Education and training are essential for the prevention and treatment of bed bugs. There are a number of communication materials in the Bed Bug Resource that may be shared with tenants. Housing agencies may also contact their housing representative to obtain a presentation on bed bugs that they can deliver to tenants.

The elements of training

Training should cover the following items:

- that bed bugs are not a health and safety risk and that they do not spread diseases;
- the importance of spotting bed bugs early and reporting them;
- that there is no need to panic because bed bugs can be controlled;
- how to identify bed bugs at various stages of their life cycles;
- how to look for bed bugs and where to find them;
- proper maintenance and housekeeping procedures to avoid clutter;
- the ways tenants can avoid bringing bed bugs into their homes;
- the procedures intended to limit the spread of bed bugs;
- what the reporting process is when bed bugs have been discovered in a unit or in the building; and
- the treatment process for bed bugs and the responsibilities of tenants and the housing agency throughout this process.

Involving tenant associations

Tenant associations may be able to assist housing agencies with encouraging tenants to cooperate in training sessions and by sharing education materials. While housing agencies may involve tenant associations in this process, they must not share information that is private or confidential.

Bed bug prevention

Housing agencies and tenants should be proactive when it comes to bed bugs. Being proactive means doing all you can to prevent a bed bug outbreak and to look for signs of bed bugs.

Housing agency and tenant cooperation

Multi-unit housing projects pose particular challenges to the prevention of bed bugs. Typically there is greater tenant turnover in multi-unit housing, which may increase the chances of bed bugs being introduced into a building. With the number of individuals and families living in close proximity in multi-unit housing, bed bugs may move between the units. Tenants and housing agencies must work together to ensure that bed bugs do not become a problem in their housing units.

How to prevent a bed bug infestation

One of the most important ways for housing agencies to prevent a bed bug infestation in their projects is to educate tenants about how to identify bed bugs, how to look for bed bugs, and how to avoid bringing bed bugs into the building. Encourage tenants to discuss their concerns with you and to report signs of bed bugs. Ensure that tenants who are moving into the building know what bed bugs are and how to inspect their units and belongings.

Understand the inspection and treatment protocols (pages 5 and 6), which outline the steps that will be taken if bed bugs are found in the building or if a tenant complains about bed bugs.

Monitoring for bed bugs

When applicable, inspect vacant units or common areas, including social spaces and hallways, for signs of bed bugs.

Glue traps

Glue traps may be used to monitor for the presence of bed bugs in a building if they are placed in areas where bed bugs travel, such as behind furniture or along the baseboard of a hallway.

When placed around all four bed posts or all four legs of a couch, these traps may restrict the movement of bed bugs and prevent them from infesting furniture.

How tenants can prevent a bed bug infestation

Bed bugs are typically brought into a unit by a person. They are excellent stowaways, which means that they can hide in the seams or cracks of furniture or in the pockets of clothing. Tenants must exercise caution to avoid bringing bed bugs into their units.

Tenants should not bring bedroom furniture, box springs, mattresses, or any other furniture found on the street or in an alley into their units. These items may have been discarded because they were infested with bed bugs.

Tenants should also be very cautious when bringing second-hand or rented items into their units. These items should be thoroughly inspected for signs of bed bugs, including live bugs, bed bug feces, their eggs, or their skins. Bed bugs can be very hard to find in furniture with small cracks and seams — these are the spots where bed bugs like to hide.

When purchasing or receiving second-hand clothing, tenants should wash and dry these items thoroughly on the hot settings. This will kill bed bugs and their eggs. See page 36 for detailed laundering instructions.

If tenants are visiting a place where they know bed bugs are present, they should exercise caution because they can transport the bugs back to their own units. Tenants should also be aware that if they have bed bugs in their units, people who visit their unit may pick up and transport bed bugs back to their homes.

Bed bug inceptors

These devices are designed to prevent bed bugs from climbing up bed legs. These inceptors are often rough on the outer surface so that bed bugs can climb it; the inner climbing surface is smooth so that bed bugs become trapped in the base.

In order for such devices to be effective, bed sheets must not touch the floor or walls and the mattress and headboard must not be touching the walls.



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Westmead Hospital, Westmead.

Working in units with bed bugs

Housing agency staff and managers may need to enter units to inspect for bed bugs. They also enter units to complete emergency maintenance or to do a home visit. While the likelihood of taking bed bugs back to one's home is small, it is important to know how to reduce the risks.

By following the below processes, housing agency staff and managers will manage the risks associated with working in units infested with bed bugs.

Only bring necessary items into the unit

- The more items that are brought into the unit, the more hiding spots there will be for bed bugs.
- Avoid bringing purses, briefcases, or similar items into a unit, as these items are difficult to inspect.

While in the unit

- Do not sit on a couch, recliner, or bed. If you must sit, use a kitchen chair.

Have a second set of clothing ready if entering infested units

- Avoid wearing dark coloured clothing, wool, many layers of clothing, pants with cuffs, or shoes with grooves.
- When leaving the unit and before getting into your vehicle, change and place the removed clothing in a sealed plastic bag, taking extra care that the clothing does not come into contact with other personal items.
- The clothes worn in the unit must be laundered according to the process on page 36.

When you do not have a second set of clothing

- Roll up your shirtsleeves and pant cuffs before entering the unit.
- When you leave the unit, inspect your pant cuffs, shoes, bag, and other items where bed bugs may hide.
- Launder your clothing as soon as possible according to the process on page 36.

For large infestations

- You may want to wear disposable plastic coveralls (e.g., Tyvek suit) with shoe covers and latex gloves. These suits are similar to the ones worn during mould remediation.

When signs of bed bugs are found

When tenants find signs of bed bugs

If tenants find signs of bed bugs, they must inform the housing agency immediately — a small number of bed bugs in one unit is simpler and less expensive to treat than a larger infestation that has spread to multiple units. Signs of bed bugs may include suspected bed bug bites, seeing a bed bug, bed bug feces, or bed bug skins.

Reporting bed bugs is also a condition of tenancy, which means that tenants who do not report signs of bed bugs to the housing agency are in violation of their leases and may be evicted.

Housing agencies must maintain records of bed bug sightings and the steps they have taken to address the issue. A form is included on page 17.

When housing agencies are aware of signs of bed bugs

Housing agencies must respond quickly to reports of bed bugs. The process that they should follow to handle complaints about bed bugs is on page 5.

Housing agencies should be in regular contact with their housing representative when bed bugs have been reported in a building. The housing representative will be able to provide guidance throughout the inspection and treatment processes.

Do not attempt to treat bed bugs yourself

Tenants and housing agencies must not attempt to treat bed bugs on their own by applying insecticides, including bug-bombs or phosphine tablets. Using chemicals may cause the bed bugs to spread to other rooms of the unit or to other units in the building. These chemicals are also a risk to health and safety and may even cause death. Housing agencies must educate tenants about the risks of using insecticide chemicals in their homes.

Discarding items

Discarding furniture and clothing typically will not solve the bed bug problem in a unit and is not recommended by the pest professional in most situations.

If the pest professional has advised the tenant to dispose of their items, this is done at the tenant's loss. Tenants must follow the pest professional's instructions throughout this process, which may include destroying the items and wrapping them in plastic.

Bed bug incident record

Details about the incident

1. Name of tenant: _____
2. Unit number and address of tenant: _____
3. Number of occupants living in the unit: _____
4. Was a bed bug, bed bug egg, blood spotting, or other sign of bed bugs reported?
If so, in what room(s) of the unit? _____

5. Was a tenant or household member bitten by a bed bug? If so, in what room?

6. Has any furniture been added to the unit recently? _____
7. Has a household member stayed overnight in another person's home recently?
Or has a guest stayed in the unit recently? _____

Details about the housing agency response

8. What company has been contracted to inspect the unit? _____
9. When will the inspection take place? _____
10. Has the housing agency taken any other steps since the complaint? If so, what?

11. Have other tenants in adjacent units complained about bed bugs? _____
12. Have there been bed bugs in this unit before? _____
13. Has this tenant been involved in a previous bed bug infestation? If yes, explain.

14. Has the media been or expected to be involved? If yes, explain: _____

15. Other relevant information: _____

This record must be forwarded to your housing representative within 24 hours.

Pest professionals

Why contract a pest professional?

Housing agencies must contract a pest professional when bed bugs have been reported in a unit. Only those pest professionals who have received specialized training in inspecting for and treating bed bugs are to be contracted. The mismanagement of a bed bug outbreak by untrained individuals may spread the infestation and increase treatment costs. The use of insecticide chemicals by untrained people may cause serious illness or death.

If you require assistance with finding a qualified pest professional, please contact your housing representative. Instructions on how to contract a pest professional are on page 19.

Smaller communities

In smaller communities, housing agencies may not have staff trained in bed bug control and there may not be professional pest control services available in the area. Housing agencies in this situation must work closely with their housing representative to ensure that bed bugs are being managed appropriately.

Bed bug detection dog

Some pest professionals use bed bug detection dogs. These dogs have been trained to detect the scent of live bed bugs and their eggs. They can also detect dead bed bugs, bed bug droppings, and the skins they leave behind as they grow. If the pest professional will be using a bed bug detection dog, they will provide the housing agency and tenant with directions to follow before, during, and after the inspection.

Trained housing agency staff

A few housing agencies have staff who are certified or licensed to treat bed bugs; these individuals are pest professionals. Only those staff who have received such training may treat bed bugs.

Contracting a pest professional

Finding a pest professional

1. Look in the yellow pages of your local phone book under “extermination.” You may also search online for a local pest control company.
2. Obtain a referral for a pest professional from a nearby housing agency, someone in your community, or your housing representative.

Questions for a pest professional — prior to inspection

1. Do they serve your community?

2. If they do not serve your community, ask if they could refer you to a local pest professional. Also, you may ask if they are willing to provide you with advice on a go-forward basis.

3. If they do serve your community, how soon can they perform the inspection?

4. How will they inspect for bed bugs?

Questions for a pest professional — prior to treatment

1. Do they have a valid certificate or license for pest control? What training have they taken? Ask for proof.

2. How extensive is the bed bug infestation?

3. What treatments do they recommend? How successful are these treatments?

4. How soon can they perform the treatment?

5. What will be the cost for the treatment?

6. What warranty do they provide?

7. Do they have insurance for their staff throughout the treatment process?

8. Ask for a written treatment plan with an estimate of the costs.

9. Ask for references from past clients (references may not be provided due to confidentiality).

Bed bug treatment options

Housing agencies must not attempt to treat bed bugs on their own, even with non-chemical treatments. Treatments applied by those who have not been trained may cause bed bugs to spread to other units and be a risk to tenant health and safety.

There is no quick-fix treatment for bed bugs. Follow-up inspections and multiple treatments by a pest professional may be necessary for bed bugs to be treated successfully in a unit or building.

Below are the methods that the pest professional may use to treat bed bugs. If the pest professional has instructed the housing agency to use any of these methods, the housing agency must follow the pest professional's instructions.

Non-chemical treatments

Vacuuming

Bed bugs may be physically removed by vacuuming. A vacuum with a narrow nozzle may be used to remove bed bugs from the edges of carpet, bed frames, mattresses, or other places that bed bugs may hide.

Vacuuming cracks and crevices before chemical treatments are applied not only removes bed bugs but also dirt. The removal of dirt allows the chemicals to penetrate deeper and have a longer-lasting effect.

When vacuuming is complete, the vacuumed contents should be sealed in a plastic bag. The base and hose of the vacuum should be sterilized as soon as possible.

As vacuuming may spread bed bugs, the best kind of vacuum to use in the treatment of bed bugs is a wet/dry vacuum with disposable bags.

Steam

Pest professionals may use steam to treat bed bugs. The steam machine applies heat to surfaces to kill bed bugs and their eggs. Mattresses, cushions, chairs and sofas, carpets, and other items can be treated with the steam machine.

Heat

One of the most effective ways to kill bed bugs is to expose them to temperatures over 45°C. When heat is being used to treat bed bugs, the temperature must be increased suddenly; gradual increments in temperature may cause the bed bugs to disperse to a more comfortable environment.

For clothing or other items that may be laundered, drying these items in a hot dryer will kill bed bugs. Dry cleaning will also kill bed bugs in clothing.

Detailed laundering instructions are on page 36.

Cold

The cold is a less effective method for killing bed bugs than heat treatment.

Small household items may be sealed in a plastic bag and placed in the freezer for at least 10 hours. Alternatively, if it is –20°C or colder outside, larger items may be placed outside, such as on a balcony. Some items, such as a bag of laundry, may take a day or more to freeze in its centre and kill the bed bugs. Items placed outside are done so at the tenant's risk and must not be a risk to health or safety.

Thermal treatment

Pest professionals may use heat to kill bed bugs. Thermal treatment involves heating up the entire unit to a temperature around 50°C for about 2 hours.

Due to the high temperatures involved, the thermal treatment process may damage items in a unit, such as photographs. Items that may be damaged by the thermal treatment process must be labelled “sensitive item” and the pest professional will ensure that they are not damaged.

Chemical treatment

Insecticides may need to be used to treat a unit or building, as non-chemical treatments alone will likely not eliminate all bed bugs.

Unless they have received training in pest management, housing agencies and tenants should not use chemicals or insecticides to treat bed bugs. The use of such chemicals by untrained individuals poses great risk to health and safety and may even cause death.

Treatment preparation checklist

This page is for reference purposes only. Follow the instructions provided by the pest professional.

A unit or building must be prepared for it to be treated. What needs to be done to prepare the unit depends on the type of treatment.

Do not clean a unit or remove signs of bed bugs without being instructed to do so by the pest professional. This allows the pest professional to assess the area and develop an appropriate treatment plan.

If tenants require assistance with preparing their units for treatment, they should contact family, friends, or community agencies. If no supports are available, tenants should contact the housing agency.

1. Launder clothing, linens, and other items

- ☐ Put blankets, sheets, covers, pillows, towels, stuffed toys, and curtains in plastic bags. If the outbreak has spread throughout the unit, items in other rooms may also need to be put into plastic bags.
- ☐ Empty dresser drawers and closets of items that can be laundered and place these items in plastic bags.
- ☐ Take the bags to the laundry room and follow the laundry instructions provided by your housing agency.

2. Inspect the items left in the room; do not remove items until they have been inspected

- ☐ Electronics, books, small personal items, and any other objects that cannot be laundered should be placed in sealed plastic bags to be inspected.
- ☐ Remove picture frames from the walls so that they can be cleaned or treated.

3. Prepare the unit for treatment

- ☐ Ensure the unit is free of clutter so that the pest professional is able to access all furniture, closets, beds, and baseboards for inspection and treatment.
- ☐ Vacuum the mattress, bed frame, and flooring around the bed; seal the vacuum bag in a plastic bag and wash the vacuum.
- ☐ Furniture must be moved away from the walls by 50 cm (20 inches).
- ☐ Pets must be removed from the unit; their toys, beds, or kennels must remain behind, unless they have been inspected by the pest professional.
- ☐ If a fish tank is in the unit, it must be covered with plastic for a chemical treatment. If a thermal treatment is to be used, the fish tank will be inspected and removed from the unit.

After a bed bug treatment

Follow the pest professional's instructions

Tenants and housing agencies must follow the instructions given by the pest professional after the bed bug treatment is completed. Some of these instructions may include:

- do not enter the treated area for a period of time;
- do not vacuum floors or upholstered furniture that has been treated for at least 12 to 14 days (or for a period of time given by the pest professional);
- when possible, the unit should remain vacant until the pest professional has declared it free of bed bugs following an inspection;
- clean up dead bed bugs, their blood spotting, or any other sign of bed bugs remaining after treatment.

Was the treatment a success?

Only a pest professional can say that the treatment of bed bugs has been a success and that they are no longer present in a unit or building. The pest professional will perform a final inspection that should be as thorough (if not more so) than the initial inspection. They will pay particular attention to the places where bed bug activity was initially noted. If there are signs of live bed bugs, then the pest professional will perform another treatment of the area and a subsequent inspection.

Prevention

When bed bugs have been successfully treated in a unit or building, it is important that they are not reintroduced. Housing agencies must continue to work with tenants to ensure that they are doing everything they can to prevent another bed bug outbreak. See the protocol on page 4 for instructions on how to prevent bed bugs.




Tenant communication materials

Bed bug factsheet



What are bed bugs?

Bed bugs are small, wingless insects that are as long as 1 cm (3/8 inch) and resemble an apple seed (). They have an oval body and a short, wide head. Adult bed bugs are brown and as flat as a debit card when they have not fed. After feeding, bed bugs fatten up and become a dark red colour. Bed bugs cannot fly or jump.

Young bed bugs are shaped like adult bed bugs but are smaller (1.5 mm; 1/16 inch) and lighter in colour. Bed bug eggs are small (1 mm; 1/16 inch), oval shaped, and cream in colour.

Bed bug bites

There is no evidence that bed bugs transmit diseases. Bed bugs feed on the blood of people and animals while they sleep, so they may bite a person without being seen. Bed bugs will bite anywhere on the body, but often bite around the face, neck, arms, legs, and chest of humans.

A bed bug bite can take as long as 14 days to appear. Bed bug bites often appear as a red spot with a small bump; sometimes they develop into larger red welts. The itchiness of bed bug bites can be treated with calamine, hydrocortisone cream, or ice. Most bites go away without medical treatment.

Some people do not react to bed bug bites, while others may have minor skin reactions. In rare cases, some people may have allergic reactions to bed bug bites or experience an infection due to excessive scratching.

Where do bed bugs live?

Bed bugs prefer to live in locations where they can hide easily and feed regularly — usually around a bed. Their flat bodies allow them to hide in the seams or folds of a mattress or box spring, behind loose wallpaper, or around baseboards and window or door mouldings.

What if I have bed bugs?

Contact your housing agency immediately. Do not use insecticides, such as bug-bombs or phosphine tablets. These chemicals may spread bed bugs to other rooms in your unit or other units in the building. These chemicals are also a health risk and may lead to serious illness or death.

Bed bugs are common in Saskatchewan and not the result of poor housekeeping. If you have bed bugs, do not be embarrassed. Ask your housing agency for help.



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Bed bug prevention tips

for tenants



Check all used or rented furniture for bed bugs.

Bed bugs are excellent stowaways, meaning that they can hide in the seams or cracks of furniture and not be seen easily.

Do not bring bed frames, mattresses, box springs, or any upholstered furniture found on the street or in an alley into your home.

Furniture that is discarded on the street may be infested with bed bugs.

All second-hand clothing should be washed and dried on the hot settings.

Bed bugs or their eggs may be hidden in the seams, cuffs, or other parts of clothing.

If you may have been around bed bugs (e.g., while travelling), wash and dry your clothing on the hot settings when you get home (or keep your clothing in a sealed plastic bag until you can wash and dry it). Also inspect your suitcase.

Bed bugs may be on your clothing or items and you may be bringing them back to your home.

Keep your unit free of clutter.

A unit with lots of clutter provides bed bugs with lots of places to hide.

When staying at a hotel or a friend's house, check the bed and behind the headboard for signs of bed bugs.

If you find bed bugs, ask for another room or find other accommodations so you do not take bed bugs home with you.



Left: a bed bug has a flat body when it has not fed.

Right: after a bed bug has fed, it is a dark red colour and fattens up.


Adult bed bugs are about 1 cm (3/8 inch) long.

Bed bug inspection process

for housing agencies and tenants



What am I looking for?

- Live bed bugs; they vary from the size of an apple seed to the size of a poppy seed: 
- Amber-coloured skins of bed bugs that are shed as they grow.
- Dead bed bugs.
- Small red stains or dark spots that smear when rubbed with a wet finger. These are bed bug droppings.
- Bed bug eggs that are cream-coloured and 1 mm (1/16 inch) in size.

If you require assistance with inspecting your unit for bed bugs, contact family, friends, or community agencies. If no supports are available, contact the housing agency.

Where should I look?

Inspect the bed first — especially if someone has been bitten while sleeping. Bed bugs usually bite people when they sleep, so they are usually found on or around the bed. As a bed bug population grows, the bugs may move to other rooms. If bed bugs are suspected to be in other areas of the unit, inspect the items in those rooms as you have inspected the items in the bedroom.

The bedding

- Look at the pillows, bedspreads, blankets, and mattress protectors. Are there any small dark red stains or spots? If so, it might be bed bug droppings.
- Remove the bedding and place it in sealed garbage bags.

The mattress

- Inspect the area near the wall.
- Check along the top and bottom seams, along the piping material sewn on the edges, around the handles and inside the air holes.
- Lift the mattress; check between the mattress and box spring, platform, or frame.
- Inspect the inside folds and under any buttons or beading.
- If the mattress is covered in vinyl, look inside the seams of the cover and check for rips in the material.



Bed bug droppings are collected under the seam of this mattress.

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Bed bug droppings are found under the base of a bed where the fabric is stapled.

© Department of Medical Entomology, Westmead Hospital, Westmead.

The box spring

- Look at the top surface and along the folds in the material.
- Check along the top and bottom seams and along the piping sewn on the edge.
- Lift the box spring and check the spots where it sits on the frame.
- Look in the areas surrounding the staples and tacks.
- Look at the dark crevices where the wood of the box spring is joined.

The bed frame and headboard

- If the headboard has shelving, remove the items one-by-one. Look through these items as they are removed for bed bugs, their droppings, or eggs.
- Look around the bed frame and pay particular attention to where the frame connects to the headboard.
- If the mattress sits on wood slats, check underneath the wood slats, around the nail holes, and the areas where the wood is touching the metal frame.
- If the bed has drawers, remove the drawers. Look around the handles and through the contents of the drawers. Then look around the outside of the drawers and underneath them for signs of bed bugs; check the area where the drawers are inserted.
- Look at the backside of the headboard, underneath it, and where the headboard connects to the bed frame.

Inspect other bedroom furniture and storage areas

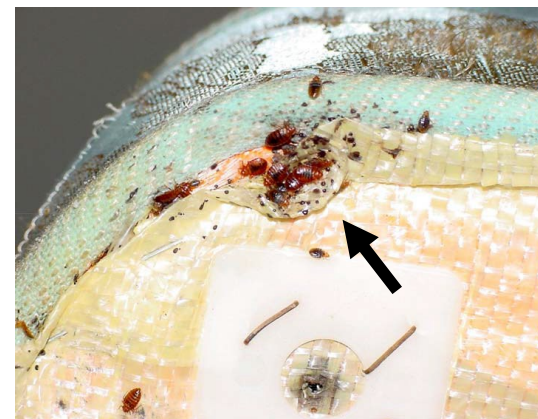
- Begin with furniture that is closest to the bed: inspect the outside and back for signs of bed bugs, paying close attention to small crevices, nail or screw holes, and the area around the handles.
- Pull out the drawers of dressers or night tables and inspect the contents. Remove the contents and look around the sides and bottom of the drawers for signs of bed bugs.
- Turn over furniture and inspect the bottoms, particularly the corners and nail or screw holes.
- If a closet is in the bedroom, remove and inspect the contents. Check the baseboards, the doors, and the mouldings. Are bed bugs, their eggs, or their droppings in any cracks or gaps?

**If you found signs of bed bugs,
notify the housing agency immediately.**



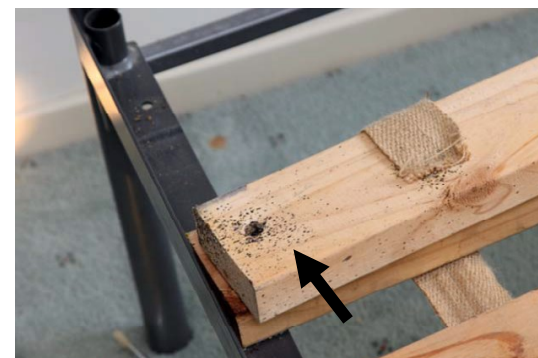
Bed bug eggs and droppings are on the bottom of this dresser.

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Westmead Hospital, Westmead.



Adult bed bugs and their droppings are on the underside of this box spring.

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Westmead Hospital, Westmead.



Bed bug droppings (tiny red-black spots) surround the nail holes on this bed frame.

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Sample letters to tenants

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Suspected bed bugs in a project

Tenant Name
Address
CITY PR POS COD

Dear Tenant:

It has been brought to our attention that we may have an issue with bed bugs in PROJECT. While we have not received any reports from tenants, some dead bugs were found in a vacant unit. We have contracted PEST PROFESSIONAL to help us determine if the bugs in question are bed bugs. On DATE, an inspection will be conducted on a select number of suites. Notices will be provided at a later date as to which suites will be inspected. The general rule is that we inspect the suite in question as well as the suites beside, above, below, and across.

Bed bugs are not a health issue and do not transmit disease. They are becoming a common issue in many countries. Over the past few years, bed bugs have increased dramatically across the United States and Canada. This has posed a problem for homeowners, property owners, hotel owners, retailers, and those living and working in public environments.

The HOUSING AGENCY is asking for your cooperation and assistance to help address this issue. If you notice any bed bugs in your suite, please try and catch one and put it in a sealed bottle or jar so we can inspect it. Also, please report any sightings of bed bugs to us immediately. We highly recommend that you advise your family of this matter so they can assist you (e.g., with checking your suite).

We have enclosed a bed bug information sheet to answer some questions you may have. Once PEST PROFESSIONAL has completed its inspection on DATE, we will advise you of the results. If you have additional questions or concerns, please contact me at PHONE NUMBER.

Sincerely,

Housing Agency Manager

Mid-treatment update: all tenants

Tenant Name

Address

CITY PR POS COD

Dear Tenant:

The HOUSING AGENCY has been working on the bed bug situation in PROJECT for some time now. The purpose of this letter is to provide you with a status update. Although we have not received any recent tenant reports of bed bug sightings or bites, we are not bed-bug-free just yet.

PEST PROFESSIONAL recently conducted a canine inspection in a few suites. Two bed bugs were found in one suite. We are making arrangements to steam treat this suite. No bed bugs were found in any of the other suites inspected; however, the dog performing the inspection did display some behavioural changes. These suites will be inspected at the same time the steam treatment is done. We will also be continuing with a canine inspection as recommended by PEST PROFESSIONAL until we are confident the issue has been resolved.

We recognize this situation has been very stressful. I would like to thank you for your patience and understanding as we work together to resolve this situation. Your assistance in identifying and reporting bed bugs has played a key role in getting this incident under control.

As previously discussed, bed bugs are not a health issue and do not transmit disease. They are becoming a common issue in many countries. Unfortunately we cannot make any promises that they will not return. I ask that you remain vigilant and report any concerns to us so that we can respond as quickly as possible. Quick identification and response will help minimize any future incidents.

Thank you again for your support and assistance. Please contact me if you have any concerns at PHONE NUMBER.

Sincerely,

Housing Agency Manager



Mid-treatment update: tenants who did not have bed bugs

Tenant Name

Address

CITY PR POS COD

Dear Tenant:

I assure you that HOUSING AGENCY is taking the recent bed bug issue very seriously and is working with tenants to resolve this situation. Open communication is encouraged and we will provide regular updates to ensure that everyone has accurate and timely information. The privacy of all tenants will be respected and no personal information or individual inspection results will be shared. A second information session for all tenants has been scheduled for DATE.

An inspection of PROJECT was completed on DATE. We are pleased to report the common areas are free of bed bugs, including the lounges; laundry rooms; and hallways. The results of the inspection of your suite indicate that no bed bugs were found, so no treatment of your suite will be required.

The inspection determined that initial chemical treatments were successful in some suites where bed bugs were previously detected and that nine suites require additional treatments. PEST PROFESSIONAL will treat those units with steam between DATE. Follow-up treatments will occur for those suites on DATE.

Thank you for your cooperation and patience during this difficult time. We are grateful to PEST PROFESSIONAL for their assistance in bringing this issue to a close. We are confident that PROJECT will be bed-bug-free as a result of the actions being undertaken and the cooperation of our tenants. If you have any questions, please contact me at PHONE NUMBER.

Sincerely,

Housing Agency Manager

Mid-treatment update: tenants whose units were successfully treated

Tenant Name

Address

CITY PR POS COD

Dear Tenant:

I assure you that HOUSING AGENCY is taking the recent bed bug issue very seriously and is working with tenants to resolve this situation. Open communication is encouraged and we will provide regular updates to ensure that everyone has accurate and timely information. The privacy of all tenants will be respected and no personal information or individual inspection results will be shared. A second information session for all tenants has been scheduled for DATE.

An inspection of PROJECT was completed on DATE. We are pleased to report the common areas are free of bed bugs, including the lounges; laundry rooms; and hallways. The results of the inspection of your suite indicate the initial treatment was successful and that bed bugs are no longer present in your suite. The pest professional will conduct more precautionary inspections to ensure the suites remain bed-bug-free.

The inspection determined that initial chemical treatments were successful in some suites where bed bugs were previously detected and that nine suites require additional treatments. PEST PROFESSIONAL will treat those units with steam between DATES. Follow-up treatments will occur for those suites on DATE.

Thank you for your cooperation and patience during this difficult time. We are grateful to PEST PROFESSIONAL for their assistance in bringing this issue to a close. We are confident that PROJECT will be bed-bug-free as a result of the actions being undertaken and the cooperation of our tenants. If you have any questions, please contact me at PHONE NUMBER.

Sincerely,

Housing Agency Manager

Mid-treatment update: tenants who did not have bed bugs but are at risk

Tenant Name
Address
CITY PR POS COD

Dear Tenant:

I assure you that HOUSING AGENCY is taking the recent bed bug issue very seriously and is working with tenants to resolve this situation. Open communication is encouraged and we will provide regular updates to ensure that everyone has accurate and timely information. The privacy of all tenants will be respected and no personal information or individual inspection results will be shared. A second information session for all tenants has been scheduled for DATE.

An inspection of PROJECT was completed on DATE. We are pleased to report the common areas are free of bed bugs, including the lounges; laundry rooms; and hallways. The results of the inspection of your suite indicate that no bed bugs were detected. However, due to your proximity to an infected suite, your suite has been deemed at risk. PEST PROFESSIONAL will conduct more precautionary inspections to ensure your suite remains free of bed bugs.

The inspection determined that initial chemical treatments were successful in some suites where bed bugs were previously detected and that nine suites require additional treatments. PEST PROFESSIONAL will treat those units with steam between DATES. Follow-up treatments will occur for those suites on DATE.

Thank you for your cooperation and patience during this difficult time. We are grateful to PEST PROFESSIONAL for their assistance in bringing this issue to a close. We are confident that PROJECT will be bed-bug-free as a result of the actions being undertaken and the cooperation of our tenants. If you have any questions, please contact me at PHONE NUMBER.

Sincerely,

Housing Agency Manager

Post-treatment: bed bugs found during an inspection

Tenant Name

Address

CITY PR POS COD

Dear Tenant:

As promised, we are committed to providing updates on the bed bug situation in PROJECT. On DATE, we were advised that we were bed-bug-free. On DATE, PEST PROFESSIONAL conducted follow-up inspections on a select number of suites. A small number of bed bugs were found in two of these suites. These two suites will be steam treated on DATE and canine inspected on DATE.

As previously discussed, bed bugs are becoming a common issue throughout the country. I ask that you remain vigilant and report any concerns so we can respond as quickly as possible.

Thank you for your patience and understanding during this stressful time. If you have any questions, please contact me at PHONE NUMBER.

Sincerely,

Housing Agency Manager

Post-treatment: no bed bugs found during an inspection

Tenant Name

Address

CITY PR POS COD

Dear Tenant:

As promised, we are committed to providing updates on the bed bug situation in PROJECT. On DATE, PEST PROFESSIONAL scheduled a canine inspection on a select number of suites. We are happy to report that we are bed-bug-free at this time. We appreciate your cooperation and assistance, which has made this outcome possible.

As previously discussed, bed bugs are becoming a common issue throughout the country; unfortunately we cannot make any promises that they will not return. I ask that you remain vigilant and report any concerns to us so that we can respond as quickly as possible.

Thank you for your patience and understanding during this stressful time. If you have any questions, please contact me at PHONE NUMBER.

Sincerely,

Housing Agency Manager

Leaving bed bugs behind



It is recommended that you leave your belongings in your unit so that they can be treated by a professional. If you are moving and unable to have the professional treat your items, please follow the below treatment process to avoid taking bed bugs to your new home.

Treating items

1. You should treat and pack items that can be sealed in garbage bags (e.g., clothing or decorative items) and leave the larger items (e.g., furniture) until the end. Since you must not use chemicals to treat bed bugs, you should use less effective, non-chemical methods (e.g., vacuuming or hand washing).
 - Put clothing, sheets, towels, and other items that can be laundered in clear plastic bags that are sealed tightly. These items must be laundered according to a particular process. For these laundering instructions, contact your housing agency.
 - Items that cannot be laundered, such as books, furniture, or electronics, must be inspected and treated or discarded. As these items are treated, they must be kept separate from the non-treated items in the unit.
2. If possible, you may purchase:
 - vinyl covers for the mattress and box spring to make these items bed-bug-proof. Any bed bugs that are on the mattress or box spring will not be able to escape through the cover and spread in the new home;
 - bed bug inceptors, which are small cups that are placed around the four bed posts. While these cups will not affect the bugs on a bed, they may prevent bed bugs from spreading from the bed to other areas of the new home.

Disposing of items

Disposing of your belongings will not typically resolve the bed bug issue and may not be recommended by the pest professional. If you must discard your belongings, follow the below process to ensure that bed bugs do not spread to other units. The discarding of your belongings is done at your loss.

- Label discarded items with "INFESTED WITH BED BUGS";
- Destroy the items (e.g., cut or slash the fabric of a mattress or couch);
- Wrap the items in plastic;
- Dispose of the items in garbage containers outside the building.

Laundry process

for items that may have bed bugs



Tenants must take every precaution to avoid spreading bed bugs to other areas in the building or to other tenants' laundry. If your housing agency has allocated time in the laundry room for you to do your laundry, please follow that schedule.

Step-by-step laundry process: dry - wash - dry

1. Place clothing, linens, curtains, and any other items to be laundered in sealed plastic garbage bags. Ensure the bags do not have tears or holes.
2. Take the bagged items to the laundry room along with unused garbage bags (to be used for bagging clean items).
3. Open the sealed garbage bag and shake the clothing directly into the dryer. Do not empty the bag onto the laundry room floor.
4. Tie the empty bag so that any bed bugs left in the bag cannot escape. This used garbage bag must be disposed of in an outside garbage bin.
5. Run the dryer on the hottest setting for at least 30 minutes; the heat will kill any bed bugs or eggs in the clothing.
6. When the cycle is complete, clean the lint trap and place the lint in a garbage bag, seal it, and dispose of it immediately in an outside garbage.
7. Remove the clothing from the dryer and place it in the washer.
8. Wash the clothing with detergent on the machine's hottest setting.
9. When the wash cycle is complete, place the clothing in the dryer. Dry these items on the hottest setting.
10. When the dryer is finished, clean the lint trap and place the lint in a garbage bag, seal it, and dispose of it immediately in an outside garbage.
11. Remove the clothing from the dryer and place it in the clean garbage bag.
12. Return the items to the unit after it has been treated for bed bugs.

Step-by-step dry cleaning process

1. Place clothing, linens, curtains, and any other items to be dry cleaned in sealed plastic garbage bags. Ensure the bags do not have tears or holes.
2. Label the bags "INFESTED WITH BED BUGS."
3. Take the bagged clothing to the dry cleaners; be careful not to rip the bags during transport.
4. Inform the dry cleaner that the clothing is infested with bed bugs.
5. Return the dry cleaned items to the unit after it has been treated for bed bugs.