Bedbug Risk Assessment and Action Algorithm

Screening questions
Have you stayed or lived in a place where you think you may have been exposed to bedbugs or have you noticed unexplained bites occurring in the past year?

What is your current situation?
Was your home/building treated for infestation by a licensed pest control operator?
Have you noticed any new bites or other evidence of a new or continued infestation in your residence?

Is there any evidence of bedbugs?
Examine individual for bites and inspect belongings.

NOTE: If the individual came from a residence that was professionally treated, and there is no evidence of current infestation (no bites or bugs), then answer NO.

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Bedbugs suspected or confirmed

INSTITUTE RESPONSE PROTOCOL
OUTPATIENT CLINICS OR EMERGENCY DEPARTMENTS (SEE PAGE 4)
ACUTE CARE INPATIENT, CONTINUING CARE FACILITY and CORRECTIONS SETTINGS (SEE PAGE 5)
PRIVATE CLIENT RESIDENCE (SEE PAGE 6)

NO FURTHER ACTION REQUIRED
BEDBUG FACTOIDS:

- Bedbugs are not known to transmit any human communicable diseases.
  - Adult bugs are wingless, oval, flat, reddish brown insects, about the size of an apple seed.

- Bedbugs that have recently fed are brighter red and engorged, they look less flat and less brown.
- They prefer to feed on human blood, but will feed off of other mammals (e.g. dogs and cats).
- Bedbugs do not jump or fly, but they do crawl. Usually they are spread by belongings or clothes.
- Bites usually cause small, hard, white welts that are often itchy. Reactions to bedbug bites may result in bumps or welts that resemble mosquito or other insect bites. Not everyone will experience a reaction so history and other physical evidence must be considered.
- Evidence of feeding and excreta (small blood stains and/or dark spots) can be found on sheets and mattresses. Heavy infestations are often accompanied by a sweet, sickly smell.
- Bedbugs dislike light and movement and are rarely seen during the day or on a person’s body or clothing. They like to hide in the seams of mattresses and covers, but may also be present on items that are in extended/frequent contact with the individual (e.g. wheelchairs and cushions). They are attracted to warmth and may be found hiding around any mechanical device that produces heat (e.g. O₂ compressors, home dialysis units, home electronics). They may be also present in crevices in nearby furniture, walls or fixtures.
- Ordinary household insecticides and disinfectants are not effective in eradicating an infestation. The service of a licensed pest control operator is required.
General Prevention in All Health Care Settings

PERSONAL or CLIENT MEASURES:

- Whenever possible, ask that clients/patients DO NOT bring unnecessary equipment or personal belongings into health care settings.
- If personal furnishings and belongings are brought into assisted living sites: these items should be assessed when the resident first moves in. Residential spaces should be inspected on a regular basis. For specific information on inspecting personal items contact Environmental Public Health.
- Healthcare workers should not bring unnecessary equipment, supplies or personal belongings into the treatment setting.
- Be alert for bedbugs on patient clothing or belongings.

- If bedbugs are suspected or seen, refer to the Response Protocol for the type of health care area for reporting and further actions:
  - OUTPATIENT CLINICS OR EMERGENCY DEPARTMENTS (SEE PAGE 4)
  - ACUTE CARE INPATIENT, CONTINUING CARE FACILITY and CORRECTIONS SETTINGS (SEE PAGE 5)
  - PRIVATE CLIENT RESIDENCE (SEE PAGE 6).

ENVIRONMENTAL or FACILITY MEASURES:

- Eliminate sites where bedbugs hide to prevent infestation and transmission:
  - Remove clutter.
  - Healthcare facilities should seal cracks and crevices in patient/resident rooms and common spaces (e.g. lounges). This is especially important to prevent bugs from migrating through walls and wherever a pipe or wiring goes through a wall or floor (e.g. heated ducts, plumbing pipe, TV cables, medical gasses).
  - Laundry handling practices: limit agitation/shaking of laundry, clear separation of clean and soiled laundry, and using hot wash and hot dry cycles whenever the fabrics will tolerate it. Dry cleaning is also effective in killing the bugs and may be an alternative for more delicate fabrics.
  - Periodically vacuum and/or steam vacuum areas prone to bedbugs. If evidence of infestation present, place vacuum bag in a sealed plastic bag; discard the plastic bag immediately in an OUTSIDE trash bin.

- Inspect for bedbugs routinely:
  - Daily monitoring during housekeeping activities; AND
  - Periodically inspecting resident spaces specifically for bedbugs.
  - Consider using ‘sticky traps’ or pest control ‘glue boards’ placed near beds and adjacent walls to detect the presence of bedbugs. Traps should be checked frequently.

- If bedbugs are suspected or seen, refer to the Response Protocols for reporting and appropriate actions.
  - OUTPATIENT CLINICS OR EMERGENCY DEPARTMENTS (SEE PAGE 4)
  - ACUTE CARE INPATIENT, CONTINUING CARE FACILITY and CORRECTIONS SETTINGS (SEE PAGE 5)
  - PRIVATE CLIENT RESIDENCE (SEE PAGE 6)
Response Protocol OUTPATIENT CLINICS OR EMERGENCY DEPARTMENTS

- Respond promptly and sympathetically to patients and family members reporting bedbug problems. Provide education and resources available from Alberta Health Services at http://www.albertahealthservices.ca/8294.asp
- Healthcare workers should only wear personal protective equipment (PPE) as needed for Routine Practice (protection against contact with body fluids/substances during care activities). Additional PPE is not recommended (e.g. gowns and gloves for casual contact). Shoe covers and hair coverings are not recommended.
- If the client/patient has visible evidence of live bugs AND is going to be in the clinic for greater than one hour or will be disrobing, contain all patient belongings in plastic bags; double-bag and seal each bag for the duration of the visit. If possible have the client change into facility-supplied clothing (gown or scrubs) and seal the client’s clothing in a plastic bag with their other belongings.
  - Inspect room or treatment area for bedbugs following the client/patient visit.
  - Take the room/treatment bay out of service until inspected and cleaned by Environmental Services.
  - If bugs are found, collect specimens for positive identification by a qualified professional. Specimens should be placed in a sealed container in rubbing alcohol to prevent escape. Alcohol will kill adult insects. Destroy other bugs by mechanical force.
  - Inspect crevices of anything brought into the room/treatment area, including equipment, bags, shoes, and clothing, BEFORE leaving the area.
- Cleaning and disinfection (following room/treatment area inspection):
  - Remove bed linens and washable furnishings with minimal agitation. Contain in designated plastic laundry bag(s); double-bag and seal each bag.
  - If bugs are detected, close the room/area until it has been treated and cleared by a licensed pest control operator.
  - If bugs are not detected, or following treatment by the pest control operator, clean area as per usual. Additional disinfectants or pesticides are not recommended.
- Report incident to Manager, the site Environmental Services provider and to site Administration. Environmental Services will communicate when room/treatment bay is ready to return to service.
- If you believe that you are experiencing a work place related or acquired bedbug infestation of your home or belongings notify your Manager and contact Workplace Health and Safety through Workplace Incident Reporting System. If bugs are found, collect specimens for positive identification by a qualified professional. Specimens should be placed in a sealed container in rubbing alcohol to prevent escape. Alcohol will kill adult insects. Destroy other bugs by mechanical force.
Response Protocol ACUTE CARE INPATIENT, CONTINUING CARE FACILITY and CORRECTIONS SETTINGS

- Respond promptly and sympathetically to patients and family members reporting bedbug problems. Provide education and resources available from Alberta Health Services at http://www.albertahealthservices.ca/8294.asp
- Isolate patient/resident in a designated room or area.
- Report incident to Manager, the site Environmental Services provider and to site Administration.
- Take the room out of service for other patients/residents until inspected and cleaned by the site Environmental Services provider and/or a licensed pest control operator.
- Healthcare workers should only wear PPE as needed for Routine Practice (protection against contact with body fluids/substances during care activities). Additional PPE is not recommended (e.g. gowns and gloves for casual contact). Shoe covers and hair coverings are not recommended.
- Have the patient/resident change into examination gown.
- Inspect the patient/resident’s clothing to be laundered in hot water and dried on a hot setting or dry-cleaned.
- Contact the patient/resident’s family or Social Worker to assist in obtaining a clean change of clothing.
- Inspect room or area for bedbugs.
- Collect specimens for positive identification by a qualified professional. Place specimens in a sealed container containing rubbing alcohol to prevent escape. Alcohol will kill adult insects.
- Inspect crevices of articles brought into the health care setting, including equipment, bags, shoes, and clothing, BEFORE leaving the area. For specific information on inspecting personal items contact Environmental Public Health.

- If evidence of bedbugs is found in the environment:
  - Remove bed linens and washable furnishings with minimal agitation. Contain in designated plastic laundry bag(s); double-bag and seal each bag and place in laundry cart.
  - Report incident to Manager, the site Environmental Services provider and to site Administration.
  - Consult a licensed pest control operator for treating items that cannot be sent to laundry (e.g. wheelchair cushions, personal mobility aids). The consultation should be obtained by site Environmental Services or as directed by site administration.
  - Following treatment to eradicate the infestation by the pest control operator, clean the area where pesticides are applied as recommended by the pest control operator. The remainder of the room/area is to be cleaned as per usual room cleaning protocols or procedures. Additional disinfectants or pesticides are not recommended.
  - If you believe that you are experiencing a work place related or acquired bedbug infestation of your home or belongings notify your Manager and contact Workplace Health and Safety through Workplace Incident Reporting System. If bugs are found, collect specimens for positive identification by a qualified professional. Specimens should be placed in a sealed container in rubbing alcohol to prevent escape. Alcohol will kill adult insects. Destroy other bugs by mechanical force.
PRIVATE CLIENT RESIDENCE

- Respond promptly and sympathetically to clients and family members reporting bedbug problems. Provide education and resources available from Alberta Health Services at http://www.albertahealthservices.ca/8294.asp
- Reducing the risk of transmission:
  - For more information see Working in Places with Bedbugs
  - Schedule visits at the end of the day for residences with suspect or known bedbug infestation.
  - Meet with the client in settings where bedbugs are less likely to be present (e.g. kitchen area). If possible, try to avoid bedrooms and sleeping areas.
    - DO NOT bring unnecessary equipment or personal belongings into health care settings (e.g. purses, extra medical supplies).
    - Do not sit or place personal belongings on the floor or on any upholstered furnishings. When possible, choose a hard surface such as a table or kitchen chair.
    - Contain client files, extra supplies and personal belongings that must be taken into the residence in sealed plastic bags (e.g. Ziploc® bags).
    - Consider using a wire coat hanger (you may need to take one with you) and hanging your coat on a shower rod in the washroom or a similar location where it will not come into direct contact with walls or with the client’s clothing.
    - Be careful when leaning over clients/items. Bedbugs do not jump or fly, but they do crawl.
- Personal Protective Equipment:
  - Shoe covers are routinely recommended for all home visits. Shoe covers should be discarded upon exiting the residence.
  - Wear close-fitting clothing or tie clothing to body. Avoid pants with cuffs, and do not let pants touch the floor. If possible, choose clothing that can be washed and/or dried on hot settings (>45°C). Light coloured clothing is less attractive to bedbugs as a hiding place
  - If PPE is desired for very close contact with the client in a heavily infested residence*, a one-piece disposable coverall that is taped tightly around the wrists and ankles may be worn. The coveralls should be discarded when the physical exam/treatment is completed.
  - Other PPE should be worn and changed as per Routine Practice for all routine client care activities (e.g. gown and gloves for anticipated contact with body fluids/substances).
- Inspect crevices of anything you had taken into the residence, including equipment, bags, shoes, and clothing, BEFORE leaving the area.
- If you have visited a heavily infested residence*, it is recommended that you remove your clothing, including shoes, at the entrance to your home, or if not possible, then in an uncarpeted area away from your sleeping quarters (e.g. kitchen or bathroom). Clap shoes together vigorously several times outside to dislodge any bugs, followed by inspection. Place clothing items in a plastic bag to prevent bugs dropping off on the way to the dryer. Dry in dryer at least 30 minutes on the hottest dry cycle. Discard the plastic bag in an OUTSIDE trash bin.
- If you believe that you are experiencing a work place related or acquired bedbug infestation of your home or belongings notify your Manager and contact Workplace Health and Safety through Workplace Incident Reporting System. If bugs are found, collect specimens for positive identification by a qualified professional. Specimens should be placed in a sealed container in rubbing alcohol to prevent escape. Alcohol will kill adult insects. Destroy other bugs by mechanical force.

*NOTE: ‘Heavily infested residence’ is defined as a residence where actual bugs are seen moving about on the furniture/person. Bugs normally do not like light or movement and are rarely seen during the daytime/waking hours.
Referrals for private homes with infestations:

- Rental properties: Clients living in rental housing should advise the landlord that there are bedbugs. If the landlord does not take action, encourage the client to report it to Environmental Public Health (EPH). See below for phone numbers. For investigation purposes the name of the client is required, but EPH does not tell the landlord who made the complaint. In some cases, the client may need help to prepare their residence for treatment by the pest control operator.

- Privately owned residence: encourage patient/client to contact a pest management professional for inspection and advice. Private home owners may also contact EPH for additional information.

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<thead>
<tr>
<th>Zone</th>
<th>Phone Number</th>
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<tbody>
<tr>
<td>Calgary Zone</td>
<td>403-943-2295</td>
</tr>
<tr>
<td>South Zone</td>
<td>403-388-6689</td>
</tr>
<tr>
<td>Edmonton Zone</td>
<td>780-735-1800</td>
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<tr>
<td>North Zone</td>
<td>780-513-7517</td>
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<tr>
<td>Central Zone</td>
<td>403-356-6366</td>
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<tr>
<td>Or contact Health Link</td>
<td>1-866-408-5465</td>
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