

A black and white photograph of two bed bugs on a leaf. The bed bugs are light-colored with dark spots. One is on the left, facing right, and the other is on the right, facing left. They are both on a dark, textured leaf with prominent veins. The text "Toronto Community Housing Integrated Pest Management Program" is overlaid in white, centered on the image.

# Toronto Community Housing Integrated Pest Management Program



# Introductions

- Richard Grotsch, Manager, Integrated Pest Management, Community Health Unit, Toronto Community Housing





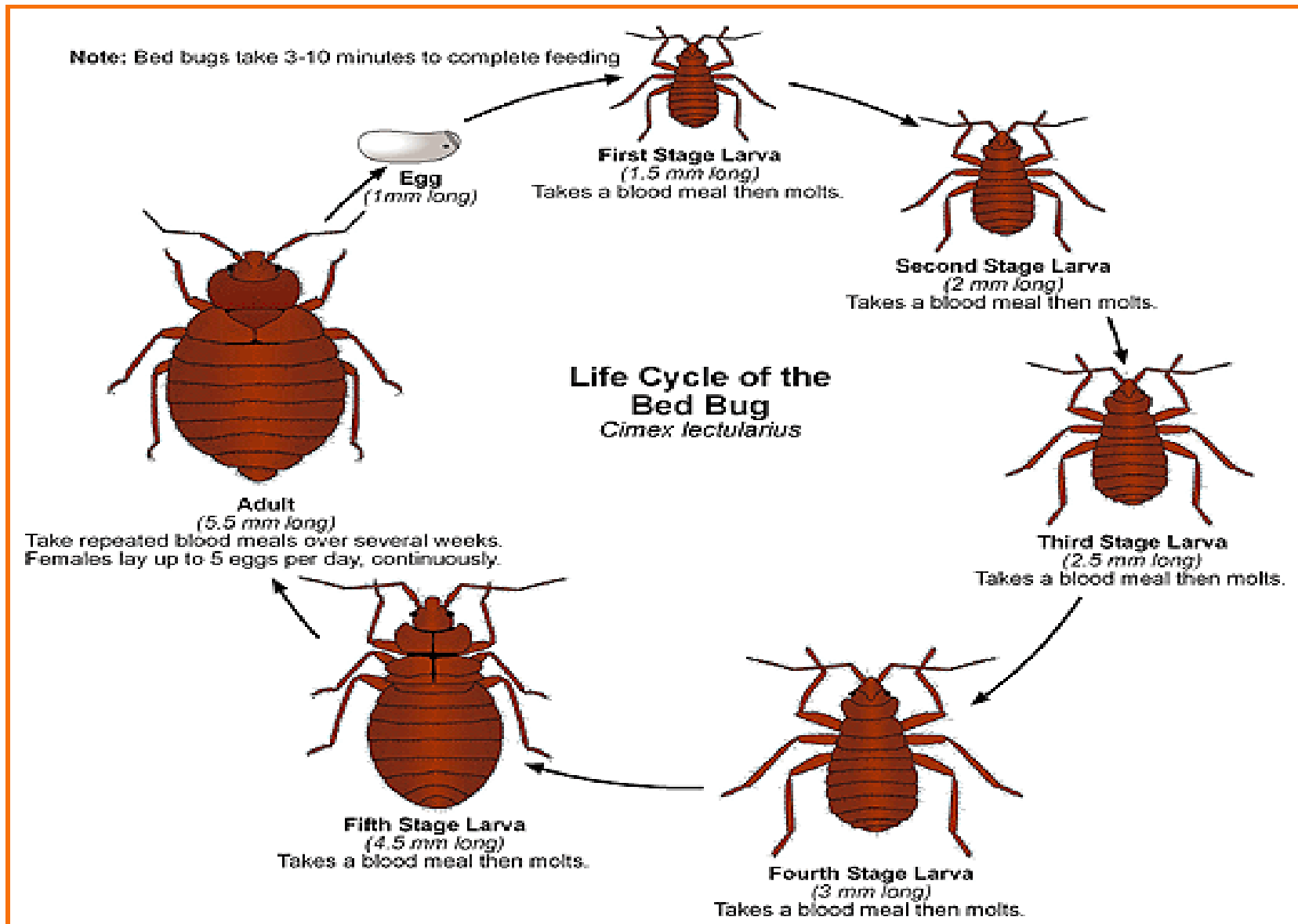
# BED BUGS





# What is a Bed Bug

- **Bed bugs are small wingless insects that feed solely upon the blood of warm-blooded animals. Bed bugs and their relatives have evolved as nest parasites. Certain kinds inhabit bird nests and bat roosts and await the return of their hosts; others have adapted well to living in the 'nests' (homes) of people.**
- **Their colour ranges from nearly white (just after molting) or a light tan to a deep brown or burnt orange. The host's blood may appear as a dark red or black mass within the bug's body.**
- **When disturbed, bed bugs actively seek shelter in dark cracks and crevices, Cast skins of bed bugs are sometimes discovered.**
- **There are three main stages of life. First stage is the egg. Eggs are whitish, pear-shaped and about the size of a pinhead. Clusters of 10-50 eggs can be found in cracks and crevices. . (See next Slide)**
- **Second stage is broken down into five sub-stages, known as the juvenile or "Nymph" stage. This stage the bugs are generally 1mm to 4.5 mm in size. They start out very pale in colour and get darker as they fed.**
- **The final is adult and can be as long as 8mm when fully fed.**





# MYTHS & FACTS

**Myth:** Bed bugs are too small to see.

**Fact:** Although they may be difficult to find because they hide well, bed bugs are big enough to be seen with the naked eye. Bed bugs look similar to an apple seed in size and appearance.

**Myth:** Walking into a room that has bed bugs means you will get bed bugs.

**Fact:** Bed bugs do not jump. They spend 90% of their time hiding and are usually active at night. Bed bugs avoid light and do not like to be disturbed.

**Myth:** Bed bugs are only found in shelters; only poor people or dirty people get them.

**Fact:** Bed bugs can be found in hotels, motels, dormitories, apartments, condos, private homes, and even in some public places, such as businesses and offices. Anyone can get bed bugs.



# MYTHS & FACTS

**Myth:** Chemicals/pesticides will kill bed bugs.

**Fact:** Pesticide application alone will not kill bed bugs at all stages. Successful treatment depends on an Integrated Pest Management approach to bed bug control which involves, vacuuming, and steaming, laundering belongings, sealing areas and gaps where bed bugs can hide. Do not use over the counter pest control products or home remedies such as kerosene

**Myth:** Bed bugs cause disease.

**Fact:** Bed bugs are not considered a health hazard and do not transmit disease. Bed bug bites, however, can cause allergic reaction in some people similar to a mosquito bite. Frequent scratching of the bite marks or picking the scabs can cause infections. And people with severe and/or repeated infestations can feel anxious, worried or ashamed



# How Big Is The Issue?

- **In 2011, close to 15 million Americans were effected by Bed Bug infestation - National Geographic**
- **A survey of 76 American Pest Control Providers advise that Bed Bug infestations are the most difficult to control. - BedBugger.com**
- **A unprepared unit has less then a 15% chance of success in controlling infestation.**
- **Bed Bug infestations continue to grow at alarming rates around the world. Many believe infestation rates are growing at as much as 20% annually - D.Miller**
- **A Major GTA Pest control provider states that requests for Bed Bug treatment has grown over 30% since 2009, and continues to grow yearly.**
- **A Major GTA Pest Control Providers state that Bed Bug service make up almost 65% over their overall work.**
- **Bed Bug infestations will continue t grow and become increasingly more difficult to control - M.Potter**





# Some Food For Thought





# PEST MANAGEMENT STRATEGY



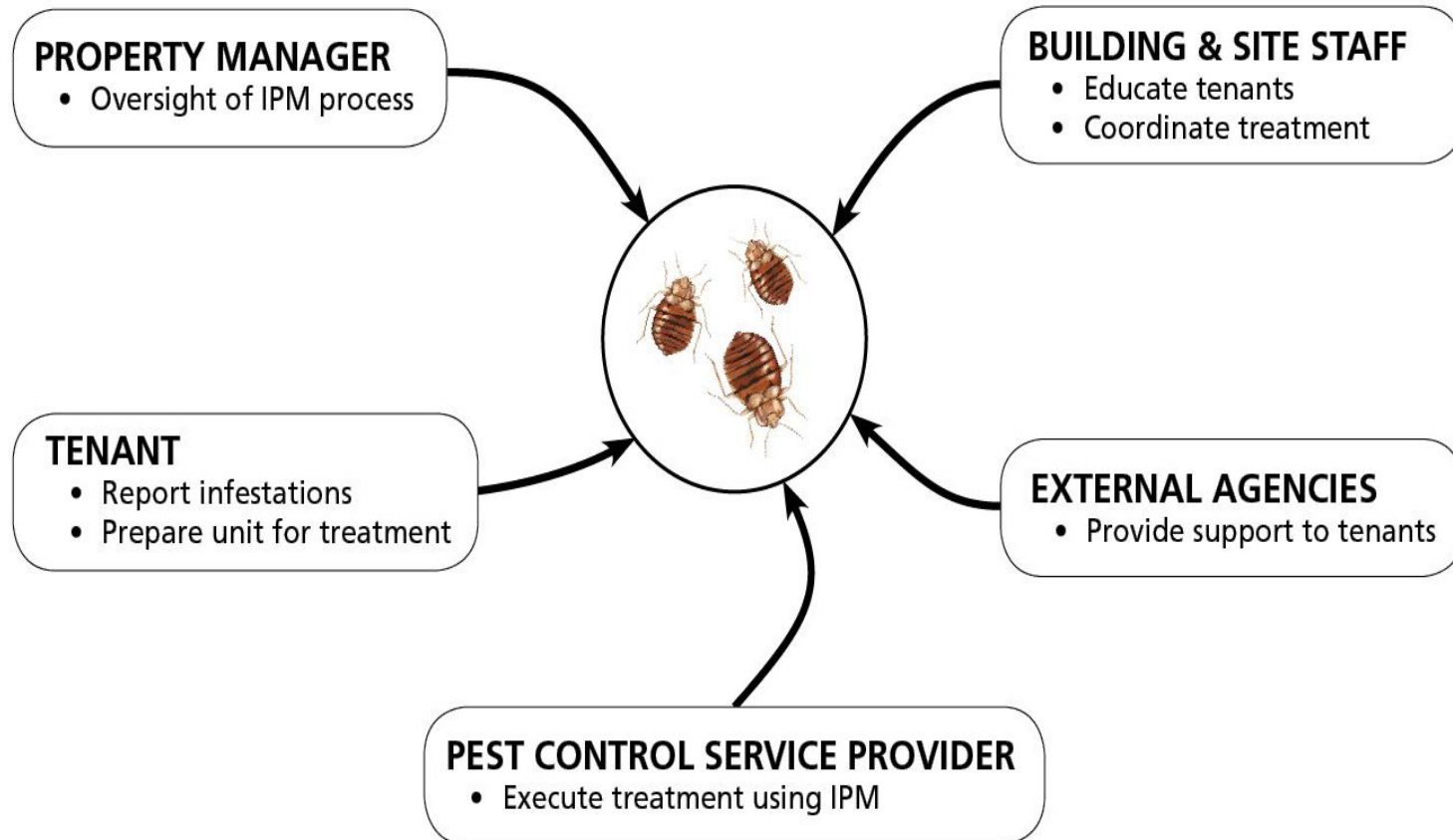


# INTEGRATED PEST MANAGEMENT

The most effective program for eliminating bed bugs is one that utilizes Integrated Pest Management (IPM). IPM is the use of all possible methods in a logical combination that minimizes risk of pesticide exposure, safeguards the environment, and maximizes effectiveness. IPM is designed to empower owners and managers to make the best and most cost effective decisions about managing and eliminating pest, and to establish accountabilities and responsibilities for owners, staff and residents



## INTEGRATED PEST MANAGEMENT STAKEHOLDERS





# Key Components

- Development of Policies and Procedures
- Data collection and analysis
- Education and co-operation of all stakeholders
- Prevention
- Preparation for treatment
- Follow Best Practices
- On-going process





# Early Detection Is Key





# Education Is Worth The Time





# Educating Staff

- Identification
- Timely/Effective Complaint Response
- Raise Awareness
- Compassionate screening of new Clients
- Documentation and Follow Up





# How To Protect Yourself

- Assume bed, furniture, sofa's, curtains, rugs etc. are infested
- Avoid leaning against or sitting on potentially infested furniture and minimize direct contact with any potentially infested materials
- Places any bags in an open area away from walls and furniture.
- Only take essential items into the site or have dedicated equipment
- Store dedicated equipment in tight storage containers within your vehicle
- Take off clothes as soon as possible, remove clothing over non-carpeted flooring wherever possible.
- Launder clothing in hot water as soon as possible.
- Whites coveralls or tyvac suites with gloves may be needed in heavy infestations or while helping a client prepare the unit.



# Developing a Battle Plan





# What Doesn't Work

- Abandoning the Room
- Bug Bombs and Aerosols
- Disposal of Beds and Furniture
- Laundry Alone



# Inspections

- Mattress
- Bed Frame
- Baseboard
- Radiant Heating
- Windows and curtains
- Ventilation
- Specialized Equipment



# Bed Frames and Mattress





# Ventilation







# Radiant Heating





# Baseboards





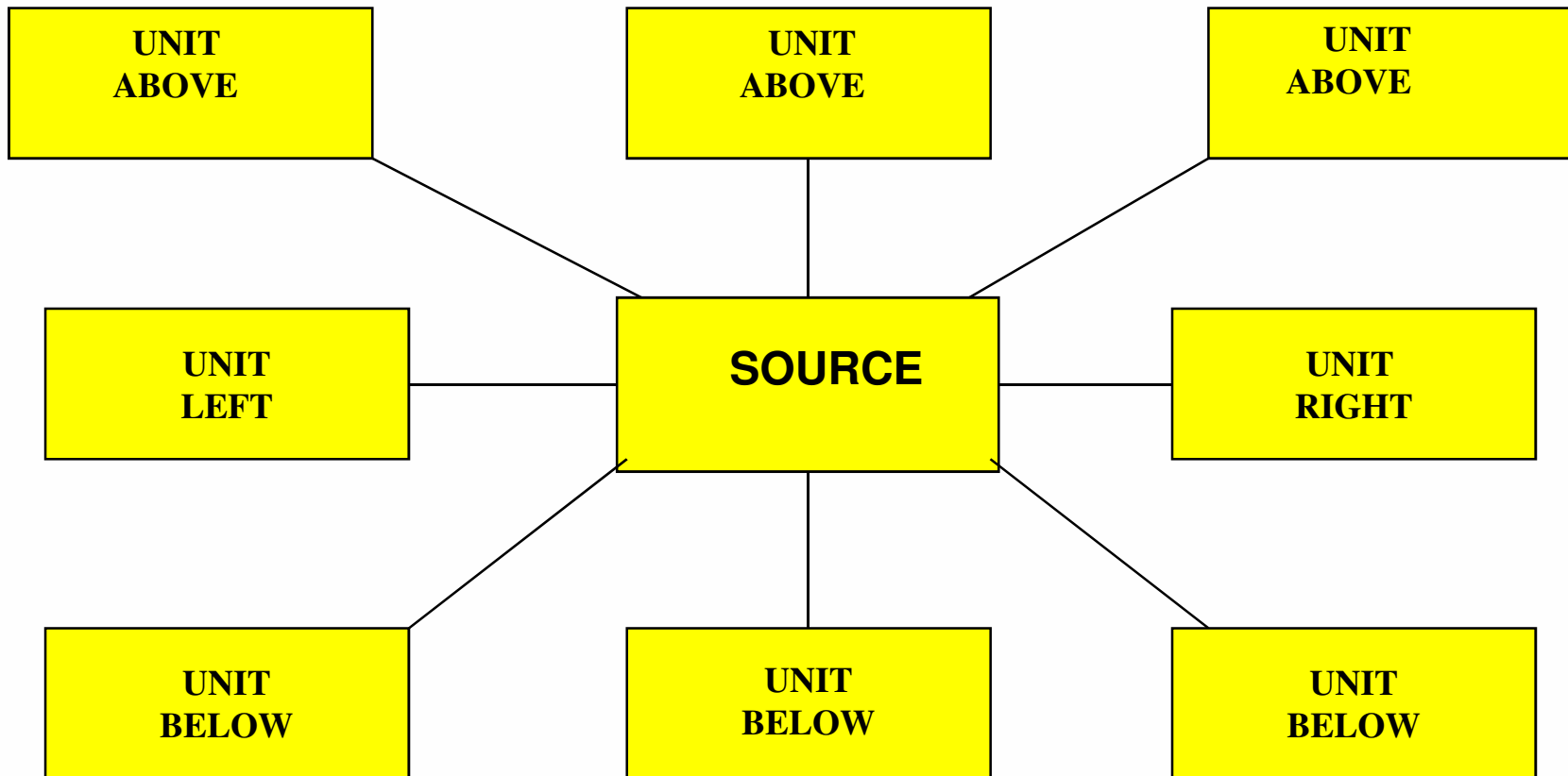


# Curtain Rods





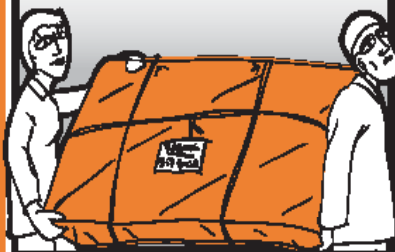
# BLOCK INSPECTIONS / TREATMENTS





## Disposal

Furniture or other items that must be thrown out should be securely wrapped in plastic or a tarp before disposal to ensure that no bugs or eggs fall off on the way out of your home.



Always label your disposed items clearly so they will not be reused.



## REMEMBER!

If you have a fish tank, turn off the air pump and cover the top so pesticides do not get into the water.

All residents and pets should stay out of the home during the pesticide treatment and for a minimum of 3-4 hours afterward.

Do not vacuum baseboards or in corners for three weeks after your home has been treated.

Leave clean laundry sealed in bags until after the second treatment by a pest control company.

**For more information  
speak to your superintendent  
call 416 981 5500  
or visit [www.torontohousing.ca/bedbugs](http://www.torontohousing.ca/bedbugs)**

Toronto Community Housing



# Bed Bugs



## Preparing Your Home for Treatment

Your home is going to be treated for bed bugs. A home must be prepared before each and every treatment for pest control to be effective. A second pest control treatment should take place within 2 weeks of the first. Please use the following steps to prepare your home for treatment.

## Cleaning

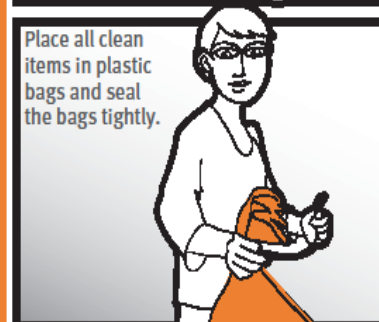
Bed bugs love to hide in clutter. Get rid of unnecessary clothes, toys, books and other unneeded household items.



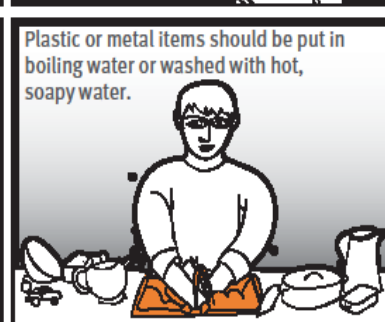
Empty all bookshelves, cabinets, closets and drawers so the pesticide can get into every nook and cranny.



Place all clean items in plastic bags and seal the bags tightly.



Plastic or metal items should be put in boiling water or washed with hot, soapy water.



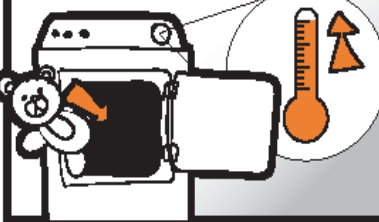


## Laundry

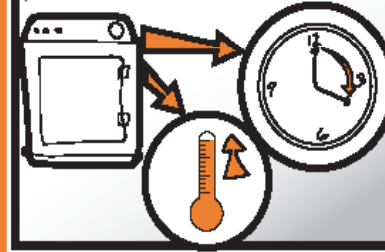
All clothing, bedding and washable belongings should be put in plastic bags and then emptied directly into the washing machine



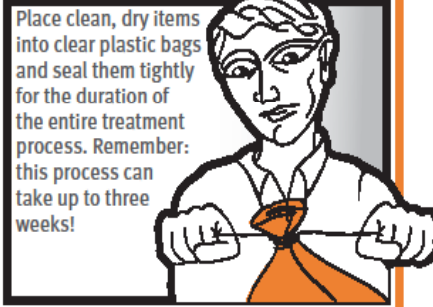
Items that cannot be washed can go straight into the dryer (i.e., pillows, shoes, stuffed animals).



Dry items on the HOTTEST cycle possible for at least 20 minutes.

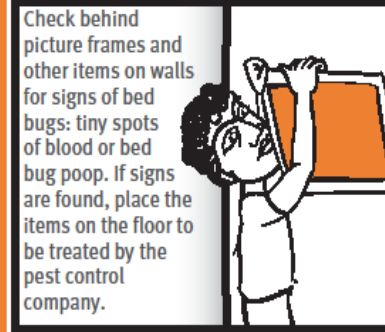


Place clean, dry items into clear plastic bags and seal them tightly for the duration of the entire treatment process. Remember: this process can take up to three weeks!

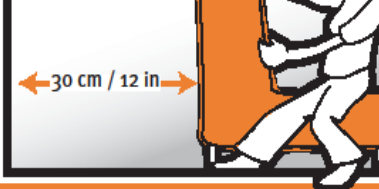


## Furniture

Check behind picture frames and other items on walls for signs of bed bugs: tiny spots of blood or bed bug poop. If signs are found, place the items on the floor to be treated by the pest control company.



Move couches, chairs, beds, lamps and other furniture 30 cm or 12 inches away from the walls to let the pesticides get into the baseboards and the corners.



## Vacuuming

Vacuum floors, carpets, rugs and baseboards.



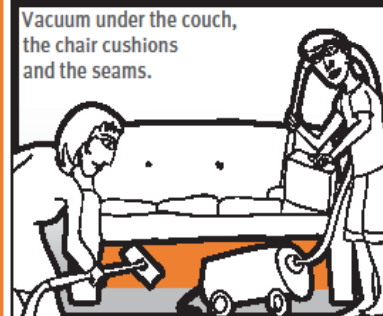
Vacuum mattress seams, box spring and bed frame.



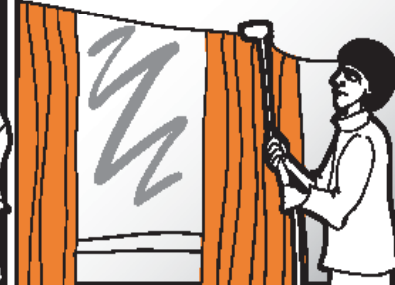
Vacuum inside drawers.



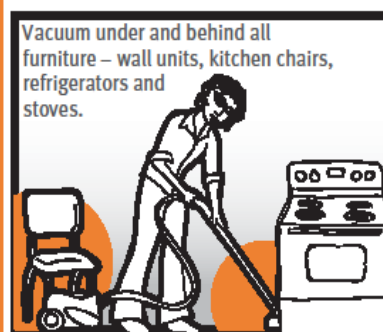
Vacuum under the couch, the chair cushions and the seams.



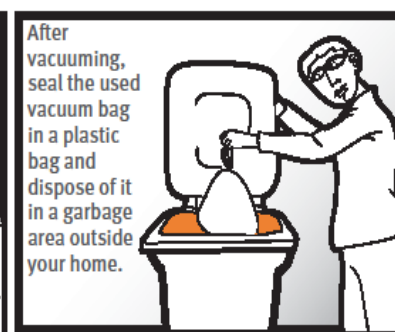
Vacuum curtains and blinds.



Vacuum under and behind all furniture – wall units, kitchen chairs, refrigerators and stoves.



After vacuuming, seal the used vacuum bag in a plastic bag and dispose of it in a garbage area outside your home.





# BARRIERS TO TREATMENT

- **Lack of Preparation of Unit**
- **Clutter**
- **Hoarding**
- **Physical Challenges**
- **Mental Health Issues**
- **Access to Unit**
- **Lack of Compliance by Resident**
- **Misinformed Resident**



# Pest Management Provider

- Licensed Class 2 Exterminator
- Insured
- Member of a Professional Organisation (SPMAO)
- Extensive experience in Bed Bug management
- Provide pre inspections and Scope
- Practice Principles of IPM



# TREATMENTS

## A peek at how it works





# Treatment Essentials

- Dusting agents in wall voids, cracks, and crevices ONLY
- Block room to be inspected and dusted
- Vacuum/steaming of all harbourage
- Residual Treatment on baseboards
- Follow up treatment – 14 days
- Follow up inspections





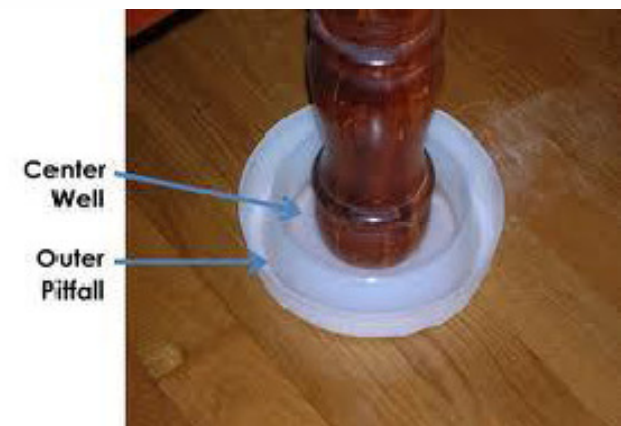
# Consider Bug Resistant Furniture

- Metal Bed Frames
- NO Head Board
- Metal Or Plastic Chairs
- Couches With Cushions That Fit A Dryer
- Vinyl Mattresses
- Mattress Encasements (certified)



# PREVENTION AND MONITORING

## WHAT TOOLS ARE AVAILABLE





## Additional Materials:

ONPHA's Bed Bug Resources

[www.onpha.on.ca/BedBugs](http://www.onpha.on.ca/BedBugs)

Toronto Public Health

[www.toronto.ca/health/bedbugs](http://www.toronto.ca/health/bedbugs)

Government of Ontario

[www.bedbugsinfo.ca](http://www.bedbugsinfo.ca)

Structural Pest Management Association

[www.spmao.ca](http://www.spmao.ca)



# Questions?

## Contact Richard Grotsch

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