



# Bed Bugs and Head Lice Tool Kit for LTCH/RH/CLS RVH IPAC Hub

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# BED BUGS

- Bed bugs (*Cimex lectularius*) are small, flat, wingless insects that feed on the blood of people and animals. Bed bugs cannot fly or jump.
- Bed bug bites may not be noticed right away because bedbugs typically feed at night when people are asleep.
- Bed bugs prefer locations where they can hide easily and feed regularly, like sleeping areas.
- Bed bugs can live up to a year and a half without feeding. Nymphs and young bed bugs starve within two weeks to a month.
- Bed bugs are not known to spread disease and their bites do not generally require medical attention.



# LIFE CYCLE OF BED BUGS

## EGGS:

- Eggs are typically about 1mm in length and are usually laid in clusters together.
- It takes two weeks for the eggs to fully develop before the bed bugs are born.

## NYMPHS:

- There are five stages of a nymph; the bed bug will molt and grow in size.
- In order to go through a stage, a bed bug requires blood to feed on.
- Nymphs are similar to adult bed bugs except they are smaller in size.

## ADULT:

- Once a bed bug has fully matured, it is able to produce eggs. If it is regularly feeding, it will be reddish brown in colour. If it isn't fed it will be flat and brown.
- Female bed bugs can lay up to 500 eggs in a lifetime.



# HEAD LICE

- Head lice (*Pediculus humanus capitis*) is a parasitic insect that can be found on the head, eyebrows, and eyelashes of people.
- Head lice feed on human blood several times a day and live close to the human scalp.
- Head lice have three life cycles, the egg (also called a nit), the nymph, and the adult.
- Head lice move by crawling; they cannot jump or fly.
- Head lice are not known to spread disease.



# LIFE CYCLE OF LICE

## EGG/NIT:

- Nits are lice eggs laid by the adult female louse at the base of the hair shaft nearest the scalp.
- Nits are firmly attached to the hair shaft, are oval-shaped, very small and will hatch in 8-9 days.



## NYMPH:

- A nymph is an immature louse that hatches from the nit.
- To live, a nymph must feed on blood. Nymphs mature into adults about 9–12 days.



## ADULT:

- The fully grown adult louse is about the size of a sesame seed, has six legs, and is tan to grayish-white in color.
- An adult louse can live about 30 days on a person's head but will die within one or two days if it falls off a person.



# HOW TO KNOW IF YOU HAVE BED BUGS OR LICE?

## What are the signs and symptoms of bed bugs?

- One of the easiest ways to identify a bed bug infestation is by bite marks (similar to that of a mosquito or flea) on the face, neck, arms, hands, or any other body part.
- Visualizing bed bugs in the folds of mattresses and sheets or other infested surfaces.
- Rusty colored spots on infested surfaces (mattress, sheets) due to blood-filled fecal material that bedbugs excrete.

## What are the signs and symptoms of head lice?

- Tickling feeling of something moving in the hair.
- Itching, caused by an allergic reaction to the bites of the head louse.
- Irritability and difficulty sleeping; head lice are most active in the dark.
- Sores on the head caused by scratching. These sores can sometimes become infected with bacteria found on the person's skin.
- A physician or practitioner can also assess and confirm the presence of nits/lice on your head/scalp.



## TRUE OR FALSE

When bed bugs bite, they inject an anesthetic and an anticoagulant that prevents a person from realizing they are being bitten. Most people do not realize they have been bitten until bite marks appear anywhere from one to several days after the initial bite.

**TRUE**

Nits (the eggs of lice) can camouflage themselves. They contain pigment to match the hair color of the host. This protects them from threats (yep, that's you)

**TRUE**

# CRITTERS ON THE MOVE

## Bed bug transmission:

- Bed bugs are usually transferred from place to place or from room to room as people travel.
- The bed bugs travel in the seams and folds of luggage, overnight bags, clothes, bedding, furniture, and anywhere else where they can hide.
- Most people do not realize they are transferring bed bugs when they travel.

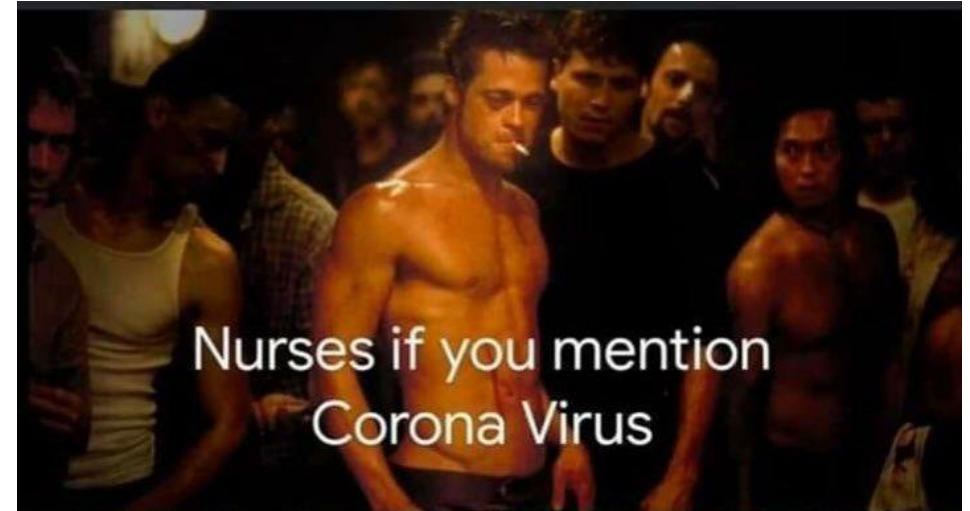
## Head lice transmission:

- Head lice are spread by **direct contact** with the hair of an infested person. Anyone who comes in head-to-head contact with someone who already has head lice is at greatest risk.
- Contact with clothing (hats, scarves, coats) or other personal items (such as combs, brushes, or towels) used by an infested person is less common to contribute to the spread of lice.
- Personal hygiene or cleanliness has **nothing to do** with getting head lice.



# PERSONAL PROTECTIVE EQUIPMENT (PPE)

- **Lice:** Contact precautions are often initiated (only gloves are required for direct contact) when admitted to a facility/setting until 24 hours after treatment and belongings are laundered or bagged to prevent transmission.
- **Bed bugs:** Contact precautions are often initiated (although not required) when admitted to a facility or setting until belongings laundered or bagged to prevent transmission. Room may also be steamed to kill any active bed bugs if visible.
- Use good routine practices with the addition of **gloves** for direct resident contact.
- As always, ensure you are conducting a point-of-care **risk assessment**, and performing **hand hygiene**.



# BED BUG AND LICE TREATMENT

## LICE:

- Treatment for head lice is recommended for persons diagnosed with an active infestation. This includes over-the-counter or prescription pediculicides (medicine that kills lice/eggs).
- Hats, scarves, pillow cases, bedding, clothing, and towels worn or used by the infested person before treatment can be machine washed and dried as lice and eggs are killed by exposure to temperatures greater than 53.5°C (128.3°F).
- Items that cannot be laundered may be dry-cleaned or sealed in a plastic bag for two weeks.

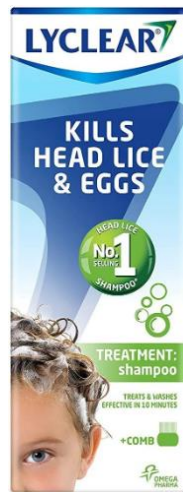
## BED BUGS:

- Bed bugs are not easy to control, it takes time and effort to manage and control an infestation. Just using pesticides will not kill all life stages of bed bugs. Bed bug prevention and control involves using pesticides, vacuuming, steaming, laundering belongings, and sealing areas and gaps where bed bugs can hide. Pesticides are meant to be used by well-trained pest management professionals.
- Any clothing or items can be laundered (bedding, sheets, stuffed animals) as exposure to extreme heat will kill bed bugs. Use caution when moving infested linen and clothing to avoid spreading bed bugs to other rooms.
- If you suspect that you have an infestation, contact your landlord or professional **pest control company** that has experience with treating bed bugs.

# TREATMENT (CONT.)

## Lice:

- Most lice treatment products are not 100% effective after the first treatment is applied and the treatment will usually need to be repeated a week later.
- A temporarily pause in joining group activities and refraining from areas where close contact can occur (i.e. dining room) is recommended for a resident who is receiving treatment for head lice until treatment is complete.



# SURVEILLANCE AND REPORTING

Lice and bed bugs are not on the list of *Diseases of Public Health Significance* and therefore are **not required to be reported** to your local health unit.



# QUESTIONS

Please contact your RVH IPAC Hub liaison.

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