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## LICE (PEDICULOSIS) PROTOCOL

### 1. Cause/Epidemiology

Head lice are caused by *Pediculus humanus capitis*. Head lice survive less than one to two days if they fall off the scalp and cannot feed. Lice found on combs are likely to be injured or dead.

Body lice are caused by *Pediculus humanus*. Body lice survive less than 2 days off a host.

Crab lice are caused by *Phthirus pubis*. Crab lice live only 1 day off a host.

Lice are communicable as long as lice or eggs remain alive on the infested individual or clothing.

### 2. Clinical Presentation

Pediculosis is an infestation of lice of the hairy parts of the body or clothing with the eggs, larvae or adults. All stages of this insect feed on human blood with the exception of the egg stage. Itching is the most common symptom of head lice infestation, but many children are asymptomatic. Itching and rash occur if the infested individual becomes sensitized to the antigenic components of the louse saliva that is injected as the louse feeds.

Head lice are usually located on the scalp although they can be found on the eyebrows or eyelashes of people. Head lice infestations are frequently found in school settings or institutions.

Crab lice are located in the pubic area and may also infect facial hair (including eyelashes in cases of heavy infestation), axillae and body surfaces. Crab lice infestations can be found among sexually active individuals.

Body lice live in seams of clothing. Body lice travel to the skin to feed and return back to the clothing. Body lice infestation can be found in people living in crowded, unsanitary conditions where clothing is infrequently changed or laundered. Any individual may become infested under suitable conditions or exposure.

Pediculosis is easily transmitted from person-to-person during direct contact. Repeated infestations may result in dermal hypersensitivity.

Usually, the first indication of an infestation is the itching or scratching in the area of the body where the lice feed. Scratching at the back of the head or around the ears should lead to an examination for head louse eggs (nits) on the hair. Itching around the genital area should lead to an examination for crab lice or their eggs. Intense scratching can result in secondary bacterial infections.

### 3. Incubation

Pediculosis occurs worldwide. The life cycle of the louse is composed of three stages, eggs, nymphs, and adults. Under optimal conditions, the eggs of lice hatch in 6 – 10 days. Head and body lice: the nymphal stage of the life cycle lasts approximately 1 week, depending on temperature and the egg-to-egg cycles averages 2 weeks.

Crab lice: Nymphal stage of the life cycle lasts approximately 2 -3 weeks. The total life cycle is on average 3-4 weeks

The first time an individual has a lice infestation, itching may not develop for four to six weeks, as it can take this amount of time for sensitivity to result.

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#### 4. Transmission

Head lice are transmitted mainly by direct head-to-head contact with hair of an infested person. Lice may also be spread by contact with clothing or belongings such as combs, brushes, hair accessories, headphones, hats, scarves, coats, stuffed toys, towels, pillows, beds or couches.<sup>[7-4]</sup> Lice are unable to hop or fly, but can crawl at a rapid pace. Body lice are transmitted by direct contact with an infested individual or indirect contact with their personal belongings, especially shared clothing.

Crab lice are usually transmitted through intimate sexual and non-sexual contact.

#### 5. Infection Prevention and Control Practices

Glove for direct patient contact until effective treatment completed (minimally until 24 hours after initiation of treatment). Follow [Routine Practices](#).

##### Head lice

- Soak all combs and brushes in hot water (at least 55°C or 130°F) for five to 10 minutes.
- Wash items in contact with the head (example: hats, pillowcases, headgear, towels) in the past 48 hours in hot water and dry in a hot dryer for at least 15 minutes.
- Dry clean or store non-washable items in an air and water-tight plastic bag for ten days. Freezing temperatures can also kill head lice and eggs but several days may be needed depending on temperature and humidity.
- **Head shaving is *strongly discouraged* and should never be done without consent, even in cases of repeated treatment failure and/or chronic infestation. Head shaving should only be considered if a person receiving care or their responsible other gives consent.**

Body Lice: As above, for all exposed clothing and bedding.

#### 6. Occupational Health

Contact Occupational and Environmental Safety and Health (OESH) for staff assessment and/or concerns.

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## 7. References

- 7.1. Canadian Guidelines on Sexually Transmitted Infections. (2013, February). Public Health Agency of Canada (PHAC). Available at: <http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-lcdcits/section-5-3-eng.php>.
- 7.2. Head Lice Public Health – Factsheet. (2014, August). Manitoba Health. Available at: <https://www.gov.mb.ca/health/publichealth/factsheets/headlice.pdf>
- 7.3. Joanne Embree. Pediculosis email. (2016, December 12). Expert opinion.
- 7.4. Parasites – Lice. Head Lice. (2013, September). Centers for Disease Control and Prevention (CDC). Available at: <http://www.cdc.gov/parasites/lice>.
- 7.5. Pediculosis Capitis (Head Lice) Communicable Disease Management Protocol. (2014, July). Manitoba Health. Available at: <https://www.gov.mb.ca/health/publichealth/cdc/protocol/pediculosis.pdf>.
- 7.6. Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care. (2012 April). Manitoba Health. Available at: <http://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/rpap.pdf>.

### **Protocol Contact**

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