

Lice (Pediculosis)

For the purposes of this document, the word patient will be used for patients, residents, and clients.

Site Applicability

All PHC Acute, Long Term Care, and Assisted Living Sites.

Practice Level

Basic: Physicians, NPs, Nursing, Clinical Nurse Leader, Clinical Site Coordinator, Bed Placement Coordinator

Standards

In addition to Routine Practices, [Contact Precautions](#) will be initiated for patients with known or suspected lice. Individuals usually require two pediculicide treatments for effective eradication and will remain on Contact Precautions until 24 hours after the second treatment is complete.

Description of the Condition

Lice are tiny, parasitic insects (ectoparasites) that can be found on people's heads and bodies, including the pubic area, as well as in clothing. They cause infestation rather than infection. Human lice survive by feeding on human blood and keep warm by staying close to the body. Eggs (nits), juveniles (nymphs) and adults are all visible to the naked eye. Unhatched eggs are pearly white. Eggs that have hatched appear translucent and the cap is missing from the shell. Lice move by crawling; they cannot hop or fly.

A human louse has a 1 to 3-month lifespan when on a host but can also survive away from the human host for up to 10 days, after which time they die of starvation. Female lice can lay up to 300 eggs (nits) in a lifecycle. Nits hatch in 6 to 10 days giving rise to nymphs which become adults in 10 days after (see [Appendix A](#)). The egg-to-egg cycle on average takes 3 weeks under optimal conditions (close to a warm body).

There is no limit to the number of times a person can become infested with lice, and anyone can be infested if exposed regardless of their cleanliness.

Lice serve as a marker for the presence of other possible infections (e.g. sexually transmitted infections) and lice can transmit some infections as well (e.g. rickettsia, bartonella, borrelia)

Three species of lice infest humans (see [Appendix A](#)):

- *Pediculus humanus capitis* (head louse)

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- *Pediculus humanus corporis* (body louse, clothes louse)
- *Phthirus pubis* ("crab" louse, pubic louse)

Signs & Symptoms

Itching ("pruritus") is the most common symptom of a lice infestation and is caused by an allergic reaction to louse bites/saliva. It may take 4–6 weeks for itching to appear the first time a person has lice but less time for subsequent infections.

Other signs and symptoms may include the following:

- A tickling feeling or a sensation of something moving in the hair
- Irritability and sleeplessness
- Sores on the head/body caused by scratching, which can sometimes become infected with bacteria normally found on a person's skin.

Incubation Period

Eggs will generally hatch within 6 to 10 days, and nymphs take around 7 days to mature to adults.

Period of Communicability

Patients are considered capable of spreading lice until effective treatment has been provided to kill lice and ova and the patient is observed to be free of lice.

Routes of Transmission

Lice are most commonly spread by close/direct person-to-person contact. Less commonly, lice may be spread through contact with personal items of an individual infested with lice (e.g., hats, helmets, brushes, combs, towels, clothing, jackets, or bedding).

Populations at Risk

Anyone who comes in in direct contact with someone who has lice infestation is at risk of getting lice, and the general cleanliness of hair does not factor into the likelihood of becoming infested. Sharing personal items (combs, towels, etc.) with a patient with lice infestation can also increase risk.

Assessment and Intervention

If lice infestation is suspected, inspect the hair and clothing for evidence of lice or eggs per instructions below. Inspection may need to be repeated for newly symptomatic patients or weekly for close contacts if there is evidence of lice transmission within the unit/facility until there is confirmation of eradication.

- Head lice are usually found on the fine hairs of the head, particularly around the ears and at the nape of the neck. They are roughly the size of a sesame seed. Eggs are found attached to the base of the hair shaft and are pearly white.
- Body lice resemble, yet are a little larger than, head lice. They live in clothing, often laying their eggs along the seams - so inspect the inside seams of clothing.



- Pubic lice are rounded, stubby, translucent and difficult to see unless filled with blood from a recent meal. They commonly affect the hairs in the pubic area, but they may be found on any of the coarse short hairs of the body, including the eyelashes.

For all types of lice, use the following containment actions:

- To prevent transmission to other patients or staff contain all clothing (including hats, scarves, pillow cases, bedding, and towels, etc.) and personal hair care items (e.g. brush/comb) in plastic bags with the tops tied tight. For clothing that can be washed, use the hot water cycle with usual laundry detergent and hot dry cycle.
- For items that can not be washed, dry clean or seal in a plastic bag for 2 weeks.
- Items such as hats, grooming aids, and towels that come in contact with the hair of an infested person should not be shared.
- Vacuuming furniture and floors can remove an infested person's hairs that might have viable nits attached (at a minimum, perform after each treatment).
- After consent is obtained, staff should provide appropriate treatment per instructions in the [Treatment section](#).

Infection Control Precautions

- **Additional Precautions:** In addition to Routine Practices, [Contact Precautions](#) will be initiated for patients with known or suspected lice (head, body, or pubic) infestation until 24 hours after the second administration of effective treatment.

The most responsible nurse will ensure Contact Precautions are ordered in Cerner (or site specific ordering system) and post the appropriate sign on the door (i.e., Contact).

- **Hand Hygiene:** Hands should be cleaned before and after every patient contact, as well as after touching potentially contaminated items in the environment per Routine Practice. Using an alcohol based hand rub solution is preferred if hands are not visibly soiled. Encourage and assist the patient to perform hand hygiene.
- **Patient Placement:** Patients with lice may be placed/remain in any available bed provided they are able to physically distance/avoid contact with others. The room door may remain open. A shared bathroom can be used, but personal items should not be shared. Patients with lice should remain in their room until treatment has been provided and 24 hours has elapsed since treatment (i.e., not to participate in group activities, communal dining, wander halls, etc.).
- **Equipment:** Dedicate equipment whenever possible. Clean and disinfect shared patient equipment routinely and between different patients. Clean commodes regularly and wipe touchable surfaces (armrest, seat and back) with disinfectant wipes between patients.
- **Environment:** All high-touch surfaces in the patient's room must be cleaned and disinfected at least daily as per standard cleaning schedule. Following discharge, the room should have a terminal clean carried out prior to the next admission.



- **Visitors:** Instruct family/friends/visitors to conduct a self-inspection for lice if they had close, direct contact with the patient and see their family physician or pharmacy to obtain pediculicide treatment if lice infestation is discovered.
- **Intra-Facility Transport:** When the patient is required to leave the room for diagnostic purposes, notify receiving department prior to transport of the precautions in place.
- **Management of Close Contacts:** For optimum control, the close contacts of all patients diagnosed with lice should be inspected for lice infestation weekly (or if/when symptoms develop) until there is confirmation of eradication, and if lice are observed, pediculicide treatment should be provided.

Treatment

- There is no clinical indication to shave off the hair of a person with lice.
- Appropriate pediculicide treatment for patients will be ordered and managed by the most responsible physician or site pharmacist if applicable/appropriate. Treatment options often include topical permethrin or pyrethrin lotion/shampoo. These medications kill nymphs and adult lice, but not eggs. As a result, a second treatment is usually required 7 days following the initial treatment to kill newly hatched lice. If topical treatment failure occurs, oral ivermectin may be indicated. Body lice may not require treatment if lice are not observed in body hair, but the patient/resident should be offered a shower and then provided with a clean gown/clothing.

Procedure for application of topical pediculicide:

1. Perform hand hygiene.
2. Apply Personal Protective Equipment for Contact Precautions (i.e., gloves and gown).
3. Apply pediculicide product per instructions provided on label. Ensure instructions are followed exactly to ensure proper application and treatment time. The most common reason for treatment failure is inadequate initial application.
4. Remove all eggs and lice with a fine-tooth comb. Daily use of a fine-toothed comb to remove eggs will help to prevent the re-establishment of an infestation.
5. Repeat the treatment in five to seven days (depending on product used) to ensure newly hatched nymphs/lice are killed.
6. If live lice persist or if you find eggs close to the base of the hair, you may apply the treatment a third time depending on the product used, or consider the need for alternate pediculicide such as oral ivermectin.

Note: Topical pediculicides should not be used near the eyes. Eyelash involvement requires an alternate approach, such as mechanically dislodging the lice and nits after twice daily application of topical petrolatum or an occlusive ophthalmic ointment.

Transfer/Discharge Planning

- Notify the receiving facility, hospital, nursing home or community agency involved in the patient's care of their status.

Documentation

- Ensure order for Contact Precautions is in patient's Cerner chart, and discontinue order once 24 hours of effective pediculicide therapy is complete.
- Document administration/application of pediculicide medication and effectiveness of treatment.

Patient and Family Education

HealthLinkBC Files:

- [Head Lice](#)

Related Documents

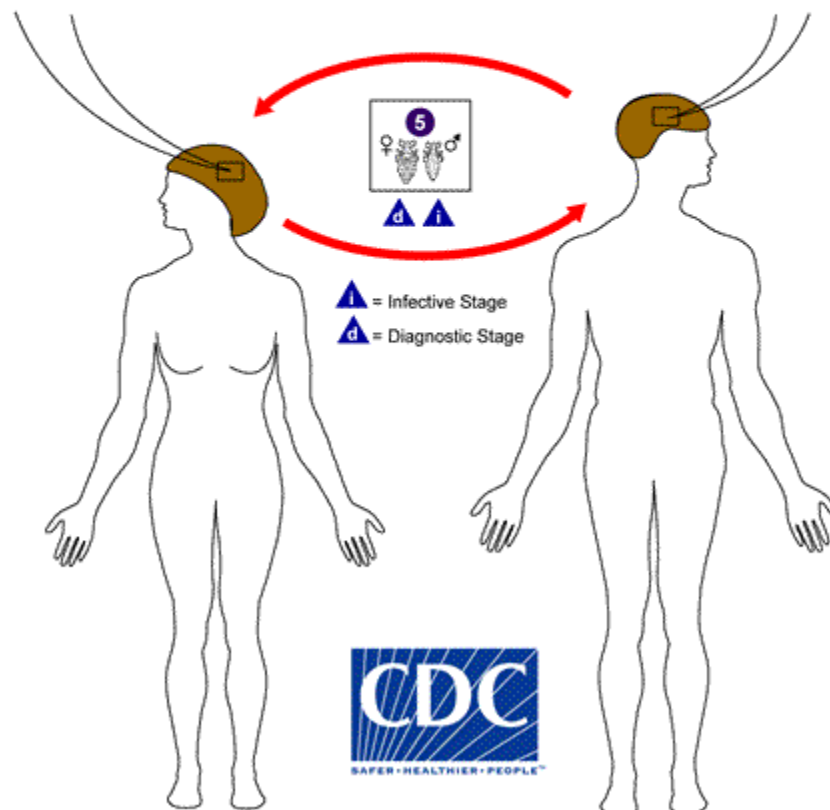
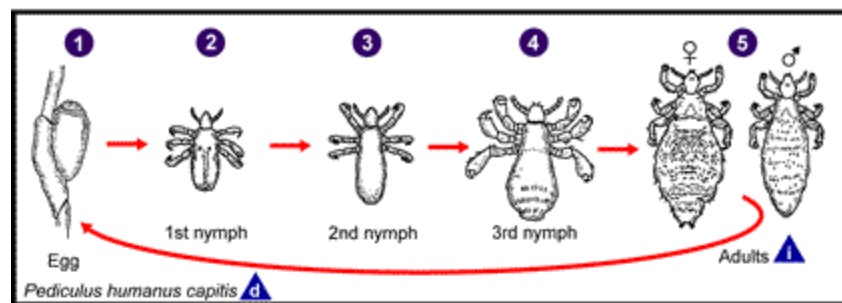
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Appendix A: Types of Lice and Lifecycle





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