

## Pediculosis Capitis (Head Lice)

### What is head lice?

Head lice are tiny insects that live only on people's scalps and hair. The adults hatch from small eggs, called nits, which are attached to the individual hairs near the scalp. Nits may be found throughout the hair, but are most often located at the back of the scalp, behind the ears and the top of the head. The eggs hatch in 7-10 days, with new lice reaching adulthood in about 10 days. The female louse can live for 21-30 days, and lays about six to eight eggs a day. The lice live by biting and sucking blood from the scalp.

The major symptom of head lice is itching caused by the bite of the louse. Persistent scratching of the head and back of the neck should be viewed with suspicion. Often red bite marks and scratch marks can be seen on the scalp and neck and a secondary bacterial infection causes discharge and crusting. Swollen neck glands can also occur.

### Who gets this disease?

Contrary to popular belief, head lice are not a sign of unclean people or homes. They can occur at any age and to either sex. Anyone who has close contact with an infested person or shares personal items can become infested.

### How is it spread?

Lice do not jump or fly. They cannot be caught from grass, trees, or animals. They are spread only by crawling from person-to-person directly or onto shared personal items, such as combs, brushes, head coverings, clothing, bedding and towels. Frequent bathing or shampooing will not prevent lice or eliminate them once they are established.

### How is it diagnosed and treated?

Lice are less than 1/8-inch long and are usually light brown in color. They avoid light, which makes it difficult to see them. Diagnosis is more often made by finding nits within 1/4-inch of the scalp. Nits are tiny, plump, pearl gray colored, oval-shaped specks attached to the hair near the scalp. The nits are firmly attached to the hair and cannot be easily moved up or down the hair (as could specks of dandruff). It helps to use a magnifying glass and natural light when searching for them. The best places to look are the hair on the back of the neck, behind the ears and the top of the head. Hatched eggs can be found further out on the hair shaft and are snowwhite and conspicuous.

Treatment is directed at getting rid of the lice from both the infested person and his/her surrounding and personal items. All household members and persons with close physical contact with the infested person

should be examined for lice and treated if infested (live lice are seen). Some healthcare providers may simultaneously treat all members of a household.

### **Treating the Infested Person**

Consult a physician before treating: (1) infants, (2) pregnant or nursing women, or (3) anyone with extensive cuts or scratches on the head or neck. For others, there are several medicines available to kill head lice. They are used like shampoo. Many head lice medications are available at your local drug store without prescription and some products are available by prescription. All of these products must be used carefully and according to direction.

There are several over-the-counter (OTC) name brand products which include A-200 Pronto, R&C, Rid and Triple X that all contain the active ingredient Pyrethrins. Pyrethrins are natural extracts from the chrysanthemum flower. Though safe and effective, pyrethrins only kill crawling lice, not unhatched nits. A second treatment is recommended in 7-10 days to kill any newly hatched lice. Treatment failures are common.

Nix is another commonly available OTC medication contains the active ingredient Permethrins. Permethrins are safe and effective and may continue to kill newly hatched lice for several days after treatment. A second treatment may be necessary in 7-10 days to kill any newly hatched lice that may have hatched after residual medication from the first treatment was no longer active. Treatment failures are common.

Prescription medications used to treat head lice include Lindane (Kwell) and Malathion (Ovide). Consult with your health care provider on the proper use of these prescription medications. For these

medications, retreat in 7-10 days ONLY if crawling bugs are found.

Although these products will kill lice, none will kill 100% of the nits. Nit removal after shampooing may be time-consuming and difficult due to their firm attachment to the hair. A solution of vinegar and water may help make removal easier. Special, fine-tooth combs can be used to aid in nit removal. Most treatments require retreatment in 7-10 days. A daily nit check for the next ten days is advisable. If there is evidence of new nits (less than 1/4-inch from the scalp) or newly hatched lice, it may be necessary to repeat treatment. (Note: Unless reinfestation occurs, more than two treatments are unnecessary and can be dangerous.)

### **Treating the Surroundings/Personal Items in the Child Care Center**

Head lice can only survive 24-48 hours if they fall off a person and cannot feed. You don't need to spend a lot of time or money on cleaning activities. Follow these steps to help avoid re-infestation by lice that have recently fallen off the hair or crawled onto clothing or furniture.

1. Machine-wash in HOT water all washable items belonging to the day care facility that may contain lice.
2. Nonwashables (e.g., furry toys, pillows) can be put in a HOT dryer for 20- minutes or dry-cleaned.
3. Things that cannot be washed, dried or dry-cleaned can be sealed in a plastic bag for two weeks, the duration of the life cycle of the louse.
4. Soak combs and brushes for 1 hour in rubbing alcohol, Lysol\*, or wash with soap and hot (130°F) water.

5. Vacuum the floor and furniture. The risk of getting re-infested from a louse that has fallen onto a carpet or sofa is very small.

6. Insecticide sprays are not recommended and can be harmful to people and animals.

### **How can the spread of this disease be prevented?**

1. General cleanliness at the center, as previously outlined, should be practiced.

2. Children should not share personal items such as clothing, brushes, combs, hats, etc.

3. Each child should have his/her own crib mat and should not switch.

4. Children's personal belongings should be stored separately.

5. Caregivers should learn to recognize nits and should help regularly check children's hair when there is a known case of head lice in the center.

6. If a case is identified, the center should follow cleaning procedures outlined above.

### **Who should be excluded?**

Routine exclusion of school-aged children with headlice is not recommended. The child's parent or guardian should be notified when headlice is identified by a care provider or teacher. The child's parent or guardian should be telephoned/emailed or a note sent home with the child at the end of the school day stating that prompt, proper treatment of this condition is in the best interest of the child and his or her classmates. A child should be allowed to return to school after proper treatment even if nits are still present. "No Nit Policies" are not effective and should be discouraged. Mass screenings are also not recommended but close contacts should be

checked ideally. Children in preschool or daycare settings who have visible live lice may need to be excluded only if direct head to head contact cannot be avoided.

### **Is Pediculosis reportable?**

No, pediculosis is not reportable by New Hampshire law. However, the Communicable Disease Control Section professionals are available for consultation.

**For specific concerns about chickenpox, call the New Hampshire Department of Health and Human Services, Communicable Disease Control Section at 603-271-4496 or 800-852-3345 x4496. For further information, refer to the Centers for Disease Control and Prevention website at [www.cdc.gov](http://www.cdc.gov) or the New Hampshire Department of Health and Human Services website at [www.dhhs.nh.gov](http://www.dhhs.nh.gov).**