



Head Lice

What are head lice?

The head louse is an insect that can infest people. These tiny insects (about 1/8" long) make their home in human hair and feed on blood. Head lice multiply rapidly, laying small greyish-colored, oval-shaped eggs (called nits) which they glue to the base of the hair, close to the scalp. Head lice are not known to spread disease.

Who can get head lice?

Anyone can get head lice. They are not a sign of being dirty. Most people don't know they are infested until they see the nits or lice. They are found throughout the world – most commonly on children.

How does a head lice infestation occur?

Head lice have no wings and do not fly or jump, but they can crawl or run through hair quickly. Most commonly, head lice are spread by direct head-to-head contact with an infested person. They may also be spread by sharing personal items such as combs, brushes, other hair-care items, towels, pillows, hats, and other head coverings. Dogs, cats, and other pets do not spread head lice.

What are the signs of a head lice infestation?

Look closely for nits along the hairline at the back of the head and neck and behind the ears. Nits should not be confused with an accumulation of hair spray, hair gels, or

dandruff, which can be easily flicked off the hair; nits cannot because they are firmly attached to individual hairs.

One telltale sign of head lice is a persistent itching of the scalp which is sometimes accompanied by infected scratch marks or what appears to be a rash.

If you have questions about the diagnosis of head lice, call your doctor.

How do you treat head lice?

The recommended treatment includes using either an over-the-counter (OTC) or prescription medicated (lice-killing) product. Effective head lice treatments include products such as:

- "Nix," a cream rinse product available OTC which contains permethrin, a synthetic insecticide
- Many brands of pyrethrin-based shampoo products ("Rid," "R&C," "Triple-X," etc.) which are also available OTC
- "Ovide," a prescription drug containing Malathion.

With all of these products, the lice are often killed with one treatment; however a second treatment seven to 10 days later is often necessary to ensure all of the nits are killed. Because of increasing numbers of reports of treatment failure with the OTC products, make sure instructions on the product label are being carefully followed and talk to your health care provider if lice persist. Additional prescription alternatives are available.

What are some examples of alternative treatments?

Many alternatives to OTC or prescription head lice control products have been suggested. Although there is little scientific information to support these methods, successful treatment has been reported using several alternative treatments when conventional treatments haven't worked, or when there is a concern about the toxicity of using head lice control products repeatedly. The Minnesota Department of Health cannot recommend these treatments without further evidence of their effectiveness. However, we feel it is important to mention some of the more commonly used methods.

The alternative treatments listed below are referred to as suffocants. When applied, the treatment may suffocate and/or create a habitat unfavorable to the head lice.

- Petroleum jelly (Vaseline®)
- Mayonnaise
- Oil (e.g. vegetable, olive, or mineral)

How should you clean up the environment?

Head lice cannot survive off the human body for more than two days. They do not reproduce off the body. They do not live on pets. Any nits that fall off the head will not hatch or reattach. While most head lice control should focus on treating infested people, some simple things can be done in the environment:

- Wash bedding in hot water (above 130° F) and dry in a hot dryer. Wash and dry recently worn clothing (including coats, caps, and scarves) in hot temperatures.
- Clean combs, brushes and similar items by heating in water of at least 130° F for 10 minutes.
- Clean floors, carpeting, and furniture by thorough vacuuming

only. The use of insecticide sprays is not recommended.

Cleaning efforts should happen on the day of the first lice treatment and whenever live lice are found on the patient's head. Focus on cleaning areas and items in which the infested person had contact 48 hours before treatment.

How do you prevent a head lice infestation?

Parents are encouraged to check their children's heads for lice on a regular basis throughout the year. Families should not depend on someone else to check a child's head – this may delay treatment. Remember, if one person in a family, camp, or school has head lice, there's a chance others will too. Check everyone, and use the same treatment if necessary. Treating people without lice or nits is not recommended.

How should schools control head lice?

Schools should encourage parents to check their children regularly for lice at home. Wide-spread head lice screening efforts by schools have not been shown to be effective.

When a case of head lice is suspected, parents should be advised at the end of the day to check their children for lice and treat them if an infestation is found. Children with head lice infestations do not need to be dismissed from school.

Minnesota Department of Health
Infectious Disease Epidemiology, Prevention, and Control
St. Paul, MN 55164
651-201-5414

*To obtain this information
in a different format, call:
651-201-5414*

HEAD LICE

Head lice infestations are a common problem for children in childcare settings and schools. Anyone can get head lice. There are two other kinds of lice that infest people, but they do not live on the head. Parents should check their child(ren) for head lice regularly. If they find lice or eggs (nits), use the information provided below.

- CAUSE** *Pediculus humanus capitis*, a louse.
- Head lice are very small (less than 1/8 inch long, about this size [---]), brownish-colored insects that live on human heads and lay their eggs (nits) close to the scalp. The eggs are tiny (about the size of the eye of a small needle) and gray or white in color. Adult lice move quickly and do not like light.
- SYMPTOMS** Itching of the head and neck. Look for: 1) crawling lice in the hair, usually few in number; 2) eggs (nits) glued to the hair, often found behind the ears and at the back of the neck; and 3) scratch marks on the head or back of the neck at the hairline.
- SPREAD** Lice are spread by head-to-head contact and by sharing personal items which are used close to the head, such as combs, sports head gear, brushes, barrettes, and hats.
- Lice do not jump or fly; they crawl and can fall off the head. Head lice do not live longer than 48 hours off the head. They only lay their eggs while on the head. Nits which are more than 1/4 inch from the scalp are dead or empty and will not hatch. The eggs do not hatch if they fall off the head. Lice do not spread to or from pets.
- INCUBATION** It takes 7 to 10 days from when the eggs are laid until they hatch.
- CONTAGIOUS PERIOD** Until treated with a lice treatment product.
- EXCLUSION** Childcare and School: None, but treatment is recommended before returning to school. “No nit” policies and exclusion from school or childcare of students with active head lice infestations is not recommended. A child with an active infestation has likely already had an infestation for over one month. The risk of further transmission is low. Children with active head lice infestations should be encouraged to avoid head-to-head contact with other children.
- TREATMENT** • Call a health care provider or pharmacist for advice. Recommended treatment includes using either an over-the-counter (OTC) or prescription medicated (lice killing) product. Use products that contain permethrin or a pyrethrin-based shampoo. Refer to the Minnesota Department of Health website (www.health.state.mn.us, then search for “head lice treatment”) for the most current head lice treatment guidelines.
- Follow the product directions carefully, especially the amount of product to use, length of time on the hair, and whether to use on dry or damp hair. Directions will vary, depending on the product used. It may take 24 hours for products to kill lice.

TREATMENT (CONTINUED)

- With certain products a second treatment is recommended 7 to 10 days later to kill any lice that may have hatched from eggs after the first treatment.
- Lice treatment products are not 100% effective in killing lice, especially nits. Removing the nits (nitpicking) is an important part of the treatment for controlling the spread of head lice. The nits are glued onto the hair shaft as they are laid and require effort to remove. To remove the nits, use a metal nit comb, cat flea comb, or your fingernails to slide eggs off the hair shafts, or use scissors to cut the hair shafts that have nits glued to them. Continue checking the head and combing hair daily for 2 weeks. If all nits within 1/4 inch of the scalp are not removed, some may hatch and the child will be infested again. **Remember: it takes at least 2 weeks to get rid of head lice.**
- Check all household members for head lice. Treat only household members with head lice, and treat all at the same time.
- Many alternatives to OTC or prescription head lice control products have been suggested. Although there is little scientific evidence to support these treatments, people often use alternative treatments when the usual treatments have not worked or when there is concern about the toxicity of repeated use of head lice control products. Some of the treatments being used include applying mayonnaise, oils (vegetable, olive, mineral, etc.), or petroleum jelly (Vaseline) to the head. These materials may suffocate and/or make it hard for the lice to move but do not kill the nits. Some of these products are difficult to remove from the hair.

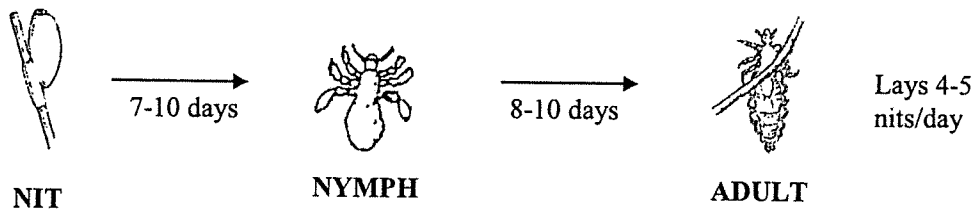
PREVENTION/CONTROL

- Encourage children to reduce head-to-head contact.
- Parents should check their child's head frequently throughout the year and if cases of head lice are found in their child's childcare, school, activities, etc.
- Do not share combs, brushes, other hair grooming items and other hair accessories (barrettes, etc.), towels, bedding, clothing, hats, and headgear, such as personal headphones and sports helmets.
- Hang coats, jackets, and hats in individual lockers or on assigned coat hooks. If this is not possible, put clothing in separate plastic bags. Bedding, when not in use for naptime, can be stored in individual plastic bags or storage boxes.
- Clean all combs, brushes, other hair grooming items and accessories (barrettes, etc.) by doing one of the following:
 - soaking in the lice treatment product for 10 minutes.
 - cleaning with hot soapy water.
 - boiling for 5 minutes.
- Vacuum carpets, upholstered furniture, mattresses, and seats in the car(s) thoroughly. **Insecticide sprays are not recommended** because this will expose household members to unnecessary pesticides and most viable lice are found on the head, not in the environment.

PREVENTION/CONTROL (CONTINUED)

- Wash clothing worn in the last 3 days (e.g., jackets, hats, scarves, pajamas), bedding, and towels in hot (130° F or higher) water and dry in a hot dryer for at least 20 minutes before using again. Clothing or backpacks that cannot be washed or dried, linens, and stuffed toys can be dry cleaned or sealed in plastic bags for 2 weeks.

HEAD LICE LIFE CYCLE



How to Remove Nits

Work in a well lit room or under a bright lamp (using a magnifying glass may help you see the nits)

- Divide the hair into 4 parts and divide each part into 1-inch sections.
- Starting at the scalp, use a metal nit comb, cat flea comb, or your fingernails to comb each hair section individually.
- Use the comb or your fingernail to slide eggs off the hair shaft or use scissors to cut hair shafts that have nits glued to them.
- Remove all nits within 1/4 inch from the scalp each time you comb the hair.
- **REMEMBER: it can take at least 2 weeks to get rid of lice.**



For more information, call Hennepin County HSPHD-Epidemiology at (612) 543-5230 or call your local health department.

More information about head lice can be found on the Minnesota Department of Health (MDH) website. Go to www.health.state.mn.us, in the search box type: "head lice".