

What are head lice?

Head lice are blood-sucking insects that can live in the hair, eyebrows, and eyelashes. They can't reproduce without the warmth of the human head, nor can they survive without the blood provided by the scalp. They are about the size of a sesame seed, and while they can crawl, they can't jump or fly. Head lice should not be confused with body lice or crab lice. They are found only on humans and not on dogs, cats, or other pets.

What are the symptoms of head lice?

Infestation is defined as harboring any nits, nymphs, or adult head lice. Excessive scratching of the head is often the first obvious sign of head lice infestation. Lice eggs, usually called nits, are found by close examination of the hair. Actual lice are seen infrequently as they move quickly through the hair. In cases of severe infestation, head lice may also infest the eyebrows and eyelashes. The scalp may appear red, and have oozing, crusting or tender areas due to scratching. These inflamed areas can lead to secondary bacterial infections such as impetigo. Impetigo may be caused by Staphylococcus or by group A Streptococcus bacteria. Impetigo infections may become serious if not treated promptly. Head lice have not been associated with the transmission of any communicable disease.

How are head lice spread?

Lice are spread through direct or indirect contact with infested objects or people. When combs or brushes are shared, lice can be transported from one head to another. This is also true for the sharing of hats and other personal items, or clothing that is used or worn on the head. As long as lice or their eggs are living, they can be moved from person to person and cause infestation.

How soon after exposure to lice would an infestation be noticed?

It might take two to three weeks to notice the itching associated with infestation, but nits can be seen before the itching begins. Nits look like white or dark ovals, and are most noticeable on the back of the neck and around the ears at the very base of the hair shaft (close to the scalp).

What is the treatment for head lice?

1. Consult with a nurse, pharmacist, or physician and purchase treatment.
2. Read enclosed product directions before initiating treatment.
3. There are products called "pediculocides" which can be bought over the counter or with a prescription from a health care provider. Pediculocides contain chemicals that kill lice. These products should be used carefully after reading the directions thoroughly. It is important to remember that **NO PEDICULOCIDE TREATMENT IS 100% EFFECTIVE**. Repeat treatments may be necessary.
4. It is important to remove all lice and nits by hand. You can do this using a lice comb, a comb with very fine teeth. Check all household members at the same time, so that everyone needing it can be treated **AT THE SAME TIME**.
5. The home environment, such as bedding, clothing, etc., must also be treated at the same time.

Tips for Nit Removal

1. Nits may be loosened from hair shaft by wrapping the hair in a towel soaked with white vinegar (3% - 5% acetic acid) for at least 30 minutes. The vinegar does not kill lice or nits, but helps to loosen the "cement", which attaches the nits to the hair, making nit removal easier.
2. While hair is wet, separate into sections.
3. Comb through each section of hair, and remove all nits with a lice comb or fingernails.
4. Rinse hair and scalp with running water. Allow hair to air dry.
5. Once hair is dry, recheck entire head and remove any remaining nits.
6. Allow the child to put on clean clothes.

How can head lice infestation be prevented?

- Teach children not to share clothing, hats, brushes, or combs with other children.
- Make head checks part of routine hygiene. Check children's heads once a week to find lice early. The earlier lice are found, the easier they are to treat.
- Teach children to hang coats and other personal belongings so that they don't touch the coats or personal belongings of other students.
- Work with schools as necessary to eliminate head lice.

Follow Up of Cases

1. Do daily head checks for the next 10 days, and remove any nits or lice found.
2. If no nits or lice are found on days 7-10, a second treatment with a lice-killing product is not necessary. If any lice or nits are still present on or after day 7, a second treatment should be performed following the steps outlined in the "Treatment" and "Nit Removal" sections. Continue with daily head checks for the next 10 days.
3. After the child is free of lice and nits for 10 days, continue head checks as a part of routine hygiene.

Treatment Precautions

1. Gasoline, kerosene, or any other petroleum-based products which could be flammable must not be used for head lice treatment or nit removal.
2. Petroleum jelly (e.g. Vaseline) must not be used for head lice treatment or nit removal.
3. Products containing insecticides that are not labeled for use on humans must not be used for head lice treatment or nit removal. Some examples of products which must not be used on people are pet shampoos, dog and cat flea dip, and lawn and garden insecticides or pesticides.
4. Only use licensed and approved products for treatment of head lice. Home remedies such as mayonnaise, vaseline, and tea tree oil are not consistently proven to be effective for the treatment of head lice. **Tea tree oil is not to be used daily and is toxic to the liver in high doses. Pure tea tree oil can be irritating to the skin and can provoke an allergic reaction in some individuals.** For more information on treatment options visit the Acute Disease Service website at: <http://ads.health.ok.gov>. Or, the National Pediculosis Association at: <http://www.headlice.org>
5. The treatment times of over-the-counter lice shampoos and rinses must not be extended beyond the package insert recommendations.
6. The over-the-counter lice shampoos or creams must not be applied too frequently.

Treating the Environment

1. At the same time medicated shampooing and nit removal are performed, machine wash on the hot cycle (130°F or hotter) all bed linens and clothing that have been in contact with the infested person within the last three days. Also, wash the soft toys and stuffed animals that accompany the child to bed.
2. Use a hot dryer setting for at least 20 minutes to dry clothes, linens, and soft/stuffed animals after washing.
3. All of the child's brushes, combs, and hair implements (barrettes, ponytail holders, and headbands) must be treated as well. The following methods are suggested:
 - A) Soak items in a mild bleach solution (one tablespoon of bleach per quart of cool water), rubbing alcohol, or Lysol for one hour, or
 - B) Scrub items with soap and hot (130°F) water.
4. Non-washables can be vacuumed or dry-cleaned.
5. If there are **items which cannot be washed, vacuumed or dry cleaned**, items can be "bagged" and sealed in plastic garbage bags for a period of two (2) weeks. **"Bagging" objects that can't be washed, dry cleaned or vacuumed should be done with care and under parental supervision.** These bags can suffocate small children who are trying to get to their belongings. Lice and nits cannot survive off the human body for this length of time without a blood meal.
6. Vacuum carpet, upholstered furniture, mattresses, box springs, and car seats.
7. The use of lice sprays, house "bombs", exterminator services, or treatment of household pets are also necessary and could be harmful.

How can head lice be prevented in school settings?

The Oklahoma State Department of Health does not advocate exclusion of children from school, but rather supports a cooperative effort between parents, the schools, local health care providers and public health personnel, local state human services agencies, and local child care advocacy groups to prevent and control pediculosis. Children should not be excluded from school, but should be sent home with educational materials for prompt treatment and nit removal. Head lice control policies may differ from one school district to another. Contact the school Administrator or nurse to learn more about your child's school head lice policies.

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Acute Disease Service

Oklahoma State
Department of Health

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