



Texas Department of State Health Services
Health Service Region 1
Epidemiology

Head Lice Fact Sheet

What are head lice?

The head louse is a parasitic insect that can be found on the head, eyebrows, and eyelashes of people. They feed on human blood several times a day and live close to the scalp.

Where do head lice come from?

Pediculus humanus capitis, the head louse, is an insect whose only hosts are humans. The louse feeds on blood and resides close to the scalp to maintain its body temperature. The life cycle of the head louse has three stages: egg, nymph, and adult louse.

Nits are lice eggs. They are hard to see and are often confused for dandruff or hair spray droplets. The nit is laid by the female near the base of the hair shaft and usually takes about 8-9 days to hatch. Viable eggs are usually located within 6 mm of the scalp.

A nymph is an immature louse which matures into an adult in about 7-12 days after hatching. A nymph must feed on blood to survive. It looks like an adult head louse but is about the size of a pinhead.

The adult louse is about the size of a sesame seed, has 6 legs (each with claws), and is tan to grayish white in color. Females can lay up to 8 nits per day. Adult lice can live up to 30 days on a person's head. They must feed on blood several times a day to survive and will die within 1-2 days off of the host.

What are the symptoms of head lice infestation?

Symptoms include a tickling feeling of something moving in the hair, itching caused by allergic reaction to the bites, irritability, difficulty sleeping (head lice are most active at night), and sores on the head caused by scratching. These sores caused by scratching can become infected with bacteria normally found on a person's skin. Lice and nits are found almost exclusively on the scalp, particularly around and behind the ears and near the neckline at the back of the head.

How soon do symptoms appear after exposure?

Some people may not have symptoms, particularly with the first infestation or when the infestation is light. It may take 4-6 weeks for itching to appear the first time a person has head lice.

How are head lice spread?

Head lice infestation is spread most commonly by close person to person contact. Dogs, cats, and other pets do not play a role in the spread of head lice. Head to head contact with an infested person is the most common way to get head lice. It is beneficial for the sake of others to share information with school nurses, parents of classmates, and others about contact with head lice. Head lice move by crawling. They cannot hop or fly.

This fact sheet is for information only and is not intended for self-diagnosis or as a substitute for consultation. If you have any questions about the disease described above or think that you may have an infection, consult with your healthcare provider.

Spread by contact with clothing (such as hats, scarves, coats) or other personal items (such as combs, brushes or towels) used by an infested person is uncommon but may occur. Head lice and their eggs soon perish if separated from their human host. Adult lice can only live a day or so without blood for feeding and nymphs can only live for a few hours without feeding. Nits will generally die within a week away from the host and cannot hatch at temperature lower than that close to the human scalp. For these reasons it is difficult for wigs or hairpieces to spread lice unless they have been worn within the previous 48 hours by someone who is actively infested with live lice.

How is a head lice infestation diagnosed?

Diagnosis of head lice infestation is best made by finding a live nymph or adult louse on the scalp or hair. They may be difficult to find therefore a fine toothed louse comb and a magnifying glass may help identify live lice. Finding firmly attached nits within ¼ inch of the base of the hair shaft strongly suggests but does not confirm the person is infested. If no live lice or nymphs are seen and the only nits found are more than ¼ inch from the scalp the infestation is probably old and no longer active and does not need treatment. If you are not sure if a person has head lice, the diagnosis should be made by their health care provider, local health department, or other person trained to identify live head lice.

Are there long-term complications of a head lice infestation?

Head lice are not known to transmit any disease and therefore are not considered a public health hazard. They are an annoyance because their presence may cause itching and loss of sleep. Sometimes the itching can lead to excessive scratching that may increase the chance of a secondary infection.

How are head lice treated?

Treatments for head lice are available both over the counter and by prescription. Before treating young children, consult the child's doctor regarding the recommended treatment based on the child's age and weight. Retreatment may be needed in 7-9 days depending on the drug used. All household members and other close contacts should be checked and treated if evidence is found. Some experts believe prophylactic treatment is prudent for persons who share the same bed with actively infested individuals. All infested household members and close contacts and their bedmates should be treated at the same time.

To treat the infested person requires using an over the counter or prescription medication. Follow these treatment steps:

- Before applying treatments, it may be helpful to remove clothing that can become wet or stained during treatment.
- Apply the medication according to the instructions contained in the box or on the label. If the infested person has very long hair (longer than shoulder length) it may be necessary to use a second bottle. Pay special attention to the instructions regarding how long the medication should be left on the hair and how it should be washed out. Do not use combination shampoo/conditioner or conditioner before using lice medicine. Do not re-wash the hair for 1-2 days after the lice medicine is removed.
- Have the infested person put on clean clothing after treatment.
- If a few live lice are still found 8-12 hours after treatment but are moving more slowly than before, do not retreat. The medicine may take longer to kill all the lice. Comb dead and any remaining live lice out of the hair using a fine toothed nit comb.

- If after 8-12 hours of treatment no dead lice are found and lice seem as active as before, the medicine may not be working. Do not retreat until speaking with your health care provider as a different medication may be needed.
- Nit (head lice egg) combs, often included in the lice medicine package, should be used to comb nits and lice from the hair shaft. After each treatment, checking the hair and combing with a nit comb to remove nits and lice every 2-3 days may decrease the chance of self- re-infestation. Continue to check for 2-3 weeks to be sure all lice and nits are gone.
- Retreatment is meant to kill any surviving hatched lice before they produce new eggs. For some drugs, re-treatment is recommended routinely about a week after the first treatment (7-9 days, depending on the drug) and for others only if crawling lice are seen during this period.
- Supplemental measures include: machine wash and dry clothing, bed linens, and other items the infested person wore or used during the 2 days prior to treatment using hot water (130° F) laundry cycle and high heat drying cycle. Clothing and items that are not washable may be dry cleaned or sealed in a plastic bag and stored for 2 weeks. Soak combs and brushes in 130° F water for 5-10 minutes. Vacuum the floor and furniture where the infested person sat or lay. Do not use fumigant sprays; they can be toxic if inhaled or absorbed through the skin.

Who gets head lice?

Head lice are most common among pre-school children attending child care, elementary school children, and household members of infested children.

How long can a person carry head lice?

A person can continue to have head lice as long as the lice are reproducing and have not been treated. An adult louse usually only lives about 30 days on a person's head, but the female can lay up to 8 nits a day resulting in a continuous cycle of nits, nymphs, and adult lice.

How common are head lice?

Head lice are not a notifiable condition, so reliable data on how many people in the United States get head lice each year is not available. However, an estimated 6 million to 12 million infestations occur each year in US children in the 3 to 11 year age range.

How can head lice be prevented?

Avoid head to head (hair to hair) contact during play and other activities at home, school, and elsewhere (sports activities, playgrounds, slumber parties, camp). Do not share combs, brushes, or towels. Do not lie on beds, couches, pillows, carpets, or stuffed animals that have recently been in contact with an infested person.

Are there any restrictions for people with head lice?

There are no exclusion criteria from work or school for those infested with head lice, but they should be treated and taught to avoid activities that could spread the lice to others.

Where can I get more information?

More information may be found at <http://www.cdc.gov/parasites/lice/head>, your local health department, or health care provider.

Sources:

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