

Head Lice

What are head lice?

Head lice (scientific name: *Pediculus humanus capitis*) are small insects that live in the hair on people's heads and feed on human blood. Most often, head lice are found close to the scalp. Head lice are not known to spread any diseases.

What do head lice look like?

Head lice have three life stages: egg (nit), nymph, and adult. Nits are small, oval eggs that are yellow or white in color, and are usually found on parts of the hair closest to the scalp. Nits take 8-9 days to hatch into the next life stage when they become nymphs.

Nymphs look like tiny adult head lice and must feed on blood to survive. Nymphs shed their skin (molt) three times and become adults about 9-12 days after hatching.

Adult head lice are tan or grayish-white in color, have six legs, and are about the size of a sesame seed. Adult head lice must feed on blood to survive and will die within 1-2 days if removed from a person's head.

Where are head lice found?

Head lice are usually found infesting a person's scalp, particularly behind the ears and near the neckline. Sometimes head lice are found on the eyelashes and eyebrows. Adult female head lice lay nits on the hair, and nits less than ¼ inch from the scalp usually contain lice that will eventually hatch. Nits located further from the scalp usually are empty (meaning the nymphs have already hatched) or are dead.

Usually, lice found on clothing or bedding are body lice, not head lice. Lice that have a round, crab-like appearance and are found in pubic hair or other coarse body hair (armpit, chest, and facial hair) are called pubic lice.

What are the signs and symptoms of head lice infestation?

The most common symptoms of head lice infestation (also called "pediculosis") include:

- A feeling of something moving in the hair
- An itchy feeling on the scalp, which is caused by an allergic reaction to the bites of head lice
- Irritability and difficulty sleeping, as head lice are most active at night
- Intense scratching, which can cause sores that may lead to bacterial infections

Signs that a person has head lice include:

- Nits stuck on the hair, especially near the scalp (not to be confused with flakes, dirt, or dandruff that can easily be brushed away)
- Lice crawling in the hair

Head lice are very small, move quickly, and avoid the light, so they may be hard to find in someone's hair. Combing the hair with a metal nit comb may help find head lice and nits. If you're not sure if you or a child has head lice, talk to a doctor or nurse.

How do head lice spread?

Head lice usually spread from head-to-head (or hair-to-hair) contact with a person that is already infested with head lice. Head-to-head contact can happen in different activities or situations, including:

- Family gatherings
- Play dates
- Sports
- Sleepovers or slumber parties
- Camp
- Taking selfies

Head lice may also spread by sharing combs, hats, clothing, hair ties or clips, scarves, or other personal items that come in contact with a person's head. Head lice are more likely to spread among children at home, daycare, or at a friend's house than at school.

Who can get head lice?

Head lice are most common among school-aged children. Having head lice is not a sign of poor hygiene or uncleanliness – anyone can get head lice.

How do you get rid of head lice?

Over-the-counter products and medications prescribed by a healthcare provider are available for the treatment of head lice. To learn more about treatment options, visit the [U.S. Centers for Disease Control and Prevention head lice webpage](https://www.cdc.gov/parasites/lice/head/treatment.html) (<https://www.cdc.gov/parasites/lice/head/treatment.html>).

Only people with active lice (crawling lice in the hair and nits less than ¼ inch from the scalp) should be treated. Family members and other close contacts should be checked, and if lice are found, treated as well. All infested people in the same household and close contacts should be treated at the same time so that lice do not continue to spread.

It is important to follow the instructions on the product label or the directions given by a healthcare provider. Some head lice treatments or medicines used to kill lice (called pediculicides), may not kill the nits, so a second or third treatment may be required. Always check the product label for instructions. Retreatment is only recommended if active, crawling lice are found 7-9 days after the last treatment.

Nit combing is also essential when dealing with a head lice infestation. The hair should be combed every 2-3 days with a nit comb for two weeks or until nits are no longer found. Nit combs should be metal and have long teeth – several brands are available at your local pharmacy. Metal flea combs from pet stores may also be used.

What if the treatment for head lice did not work?

There are several reasons why treatment for head lice may not have worked:

- 1) Too little medicine for treatment was used, or the instructions for treatment were not followed correctly.
 - a. Example: Hair was shampooed too soon – do not rewash hair for 1 to 2 days after the lice medicine is removed.
 - b. Example: Hair conditioner was used prior to head lice treatment. Conditioners can act as barriers that prevent head lice medicine from sticking to the hair, therefore reducing the effectiveness of the medicine.
- 2) Lice may be resistant to some available medications. If you think this is the case, contact your healthcare provider for additional treatment options.
- 3) The problem was not head lice (nits may look like dandruff or drops of hair styling product).
- 4) The person got head lice again.

Remember that after treatment head lice might not all die right away because not all treatments kill nits. If a person is treated for head lice, the live lice may die, but the nits may hatch later and then need to be treated again.

I don't want to use medication on myself or my child. Are there alternative treatment options for head lice?

Devices that blow heated air at high flow towards the scalp and hair have been shown to kill both nits and lice. Treatments require at least 30 minutes and specialized training for use.

There is no scientific evidence to support the use of products containing vinegar, isopropyl alcohol, enzyme-based compounds, tea tree oil, or similar products to kill or remove nits from the scalp. Mayonnaise, olive oil, melted butter, petroleum jelly, and other products have not been shown to “suffocate” nits or kill lice. Natural products (such as herbal products) are not regulated for safety by the U.S. Food and Drug Administration.

Should I treat or clean my home if someone in my home has head lice?

Clothing, bedding, and towels worn or used by an infested person two days prior to treatment should be washed in hot water and then placed in a clothes dryer on the hot cycle. Clothing and other items that cannot be washed or dry-cleaned can be placed in a sealed plastic bag for two weeks. Combs, brushes, hair bands, and hair clips should be soaked in hot water (>130°F) for 5-10 minutes. Carpet and furniture, where the infested person has sat or laid down, can be vacuumed; fumigation of the home is not necessary.

How can head lice infestations be prevented?

The following steps can be taken to prevent the spread of head lice:

- Avoid head-to-head contact with someone that has head lice, including while

playing or taking part in other activities at home, school, or elsewhere (such as at slumber parties or camp).

- Do not share hats, scarves, coats, sweaters, hair ties, hair ribbons, barrettes combs, brushes, headphones, or towels.
- Do not lie down on beds, couches, pillows, carpets, or stuffed animals that have recently been in contact with someone who has head lice.

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