

HEAD LICE (Pediculus humanus capitis)

Parasitic insects found on the heads of people. Most often found on the scalp behind the ears and near the neckline at the back of the neck. The lice hold onto the hair with hook-like claws at the end of each of their six legs. Head lice are rarely found on the body, eyelashes, or eyebrows. These insects lay their sticky, white eggs on the hair shaft close to the root, while hatched lice stay mostly on the scalp. Head lice infection is very common and easily acquired by coming in close contact with someone who has head lice, infested clothing, or infested belongings. Preschool and elementary school children and their families are most often infested.



Symptoms:

1. a tickling feeling of something moving in the hair
2. itching caused by an allergic reaction to the bites

3. irritability

4. sores on the head caused by scratching.

Although lice are very small, they can be seen on the scalp when they move. The eggs (nits) are easily seen on hair shafts.

How common is head lice infestation?

Head lice infection is very common. It has been estimated that up to one in every 10 children in school acquires head lice at some time. In one study, the estimated annual cost of head lice infestations in the United States was nearly \$1 billion dollars.

Who is at risk for getting head lice?

Anyone who comes in close contact with someone who already has head lice, or even their contaminated clothing and other belongings, is at risk for acquiring head lice. Preschool and elementary-school children (3-10 years of age) and their families are infected most often. Girls contract head lice more often than boys and women contract more head lice than men. African-Americans rarely acquire head lice.

How in the world does a child get head lice?

A child can contract head lice in a number of ways.

- Contact with an already infested person. Personal contact is common during play, school, or sports activities, and at school, home, slumber parties, or camp
- Wearing infested clothing, such as hats, scarves, coats, sports uniforms, or hair ribbons
- Using infested combs, brushes, or towels
- Lying on a bed, couch, pillow, carpet, or stuffed animal that

has recently been in contact with a person with lice

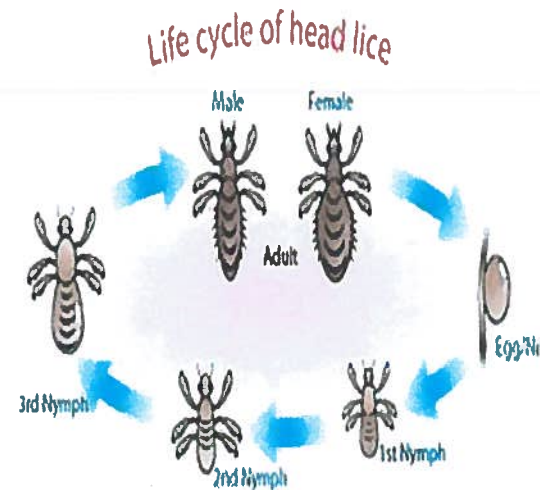
What do head lice look like?

There are three forms of lice, namely the nit, the nymph, and the adult louse.

Nit: Nits are lice eggs. Nits are hard to see and are often confused with dandruff or hair-spray droplets. Nits are found firmly attached to the hair shaft. They are oval and usually yellow to white. Nits take about a week to hatch.

Nymph: The nit hatches into a baby louse called a nymph. It looks like an adult head louse but is smaller. Nymphs mature into adults about seven days after hatching. To live, the nymph must feed on blood.

Adult: The adult louse is about the size of a sesame seed, has six legs, and is tan to grayish-white in color. In people with dark hair, the adult louse looks darker. Females lay nits; they are usually larger than males. Adult lice can live up to 30 days on a person's head. To live, adult lice need to feed on blood. If the louse falls off a person, it dies within two days.



What is the treatment for a head lice infestation (pediculosis)?

For effective elimination of head lice, the infested individual, family members that are also infested, and the home must all be treated.

Treatment of the individual and the infested family members

Over-the-counter (OTC) or prescription medications are used to treat the affected people and their families. Follow these treatment steps:

1. Remove all clothing.
2. Apply lice medicine, also called pediculicide, according to the label instructions. If your child has extra-long hair, you may need to use a second bottle. **WARNING:** Do not use a cream rinse or combination shampoo/conditioner before using lice medicine. Do not re-wash hair for one to two days after treatment.
3. Have the infested person put on clean clothing after treatment.-
4. If some live lice are still found eight to 12 hours after treatment but are moving more slowly than before, do not retreat. Comb dead and remaining live lice out of the hair. The medicine sometimes takes longer to kill the lice.
5. If, eight to 12 hours after treatment, no dead lice are found and lice seem as active as before, the medicine may not be working. See your health-care provider for a different medication and follow their treatment instructions.

6. Nit (head lice egg) combs, often found in lice medicine packages should be used to remove nits and lice from the hair shaft. Many flea combs made for cats and dogs are also effective.
7. After the initial treatment, check, comb, and remove nits and lice from hair every two to three days.
8. Re-treat in seven to 10 days.
9. Check all treated people for two to three weeks until you are sure all lice and nits are gone.

Treating the house:

Treating the whole house is a laborious but important task. Follow these steps:

1. Machine wash all washable clothing and bed linens that the infested person touched during the two days before treatment (to kill the lice and nits). Use the hot water cycle (130 degrees F; 55 degrees C) to wash clothes. Dry laundry using the hot cycle for at least 20 minutes.
2. Dry clean clothing that is not washable (coats, hats, scarves, etc.), *or* store all clothing, stuffed animals, comforters, etc., that cannot be washed or dry cleaned into a plastic bag and seal it for two weeks.
3. Soak combs and brushes for one hour in rubbing alcohol, Lysol, or wash with soap and hot (130 degrees F; 55 degrees C) water and then place in bag and leave in freezer for two days.

4. Vacuum the floor and furniture. Do not use fumigant sprays. (They can be toxic if inhaled.)

Treatment involves a combination of a topical insecticidal medication and manual removal of all nits with a lice comb or the fingers. Both medication and complete nit removal are necessary to prevent re-infestation.

All clothing, bedding, and furniture surfaces must also be washed or sprayed with insecticide.

Note that **pyrethrin-based** medications such as 1% lindane solution (brand name: **Qwell**) contain benzene, which can be toxic to the brain and has been linked to childhood leukemia. For this reason, these medications are no longer generally recommended for treatment for head lice.