

Head Lice (Pediculosis Capitis)

Head lice is the presence of a bug called a “louse” living on the scalp. It can cause itching of the scalp, which is sometimes severe. Outbreaks of head lice may occur at day-care centers and schools. The eggs of the louse, called “nits,” are often visible on the hair. Special shampoos are needed to kill the lice and nits. Using a fine-toothed comb can help remove them from your child’s hair. Washing and cleaning items like clothes and hairbrushes may be needed to eliminate lice from your home.

What are head lice?

Lice are tiny bugs that live on the human body, where they feed on blood. Although there are different types of lice (body lice, pubic lice), head lice are the main problem in children. This condition is also called *pediculosis capitis*.

Head lice are spread from person to person, or from contact with items used by a person with lice (such as brushes, combs, or towels). The lice can live for a few days on objects without being on a person. The lice themselves are hard to see, but you can see their eggs (called nits) stuck to your child’s hair.

What do they look like?

- Itching of the scalp is the most common symptom. However, many parents find out about the infestation when a note is sent home from school or day care.
- Nits (the eggs of the lice) can be seen. They are tiny white specks, stuck to the side of a hair. The nits are difficult to remove from the hair—they won’t just come off easily, like dandruff. The lice are harder to see—they are very small, gray-white bugs.
- Itching may lead to scratch marks on the scalp and neck.
- Inflammation may lead to enlarged lymph nodes (glands) in the neck and back of the head.
- Occasionally, infection with bacteria (usually “staph”) may be caused by scratching. This results in crusted, oozing sores (soreness, tenderness) of the scalp, often with visible pus.

What are some possible complications of head lice?

Although not very common, the main complication is bacterial infection, caused by scratching.

What increases your child’s risk of head lice?

- Contact with other children who have head lice, or with their personal items, is the main risk factor. Head lice are a common problem, especially in places like schools and day-care centers. Having head lice doesn’t mean your child isn’t clean—the lice spread easily from person to person.
- Lice infestations are most common in warm climates and during the summer months.

Can head lice be prevented?

Most of the time, there is no practical way to avoid head lice. The personal items of children with head lice, such as combs and hats, need to be cleaned. If there are cases of head lice in the school or community, children should not share personal items.

How are head lice diagnosed?

The diagnosis should be confirmed by finding a louse or live nits on the scalp.

- To find lice, the hair is repeatedly combed with a fine-toothed comb, looking for the bugs.
- If nits are seen within one-quarter inch of the scalp, they are probably alive. Nits seen farther up on the hair are not alive. If the diagnosis is in doubt, the doctor may look at the nit under a microscope.
- Sometimes, especially in outbreaks, nits and lice are found before any symptoms occur.

How are head lice treated?

The goal of treatment is to eliminate the lice from your child’s hair and from the home environment. Careful attention may be needed to achieve this.

Medications—Several products can be used to help eliminate head lice. Many are available at drug stores, without a prescription. These are pesticides and should be used as directed.

- One percent permethrin (Nix) is usually effective in killing lice and nits and is often recommended. Apply this product to your child’s hair and leave it there for 10 minutes before rinsing. Another application is often recommended after a week or so.
- Your doctor may recommend another product. Other over-the-counter products include RID, A200, and Kwell,

which also contain pesticides. These medications should be used as directed and not overused.

- Some patients are hard to cure and need prescription medications. Malathion (Ovide) is a lotion that is also a pesticide and is sometimes used for difficult cases. Some oral medications are sometimes used, such as trimethoprim-sulfamethoxazole (Bactrim), an antibiotic, or ivermectin (Stromectol).



- Talk to your doctor before using lice-killing products on newborns and young infants!
- Other over-the-counter products are available, but less is known about their effectiveness.

Combing—A fine-toothed comb can help in removing all nits from the hair. This can be difficult to do, because the nits produce a substance that makes them stick very closely. An equal mix of vinegar and water may help eliminate the nits, or your doctor may be able to recommend a product. Combing must be done carefully, as it is easy to overlook the tiny nits.

- Removing nits is usually done for appearance—after treatment, any remaining nits are usually dead.

Other family members should be checked for lice and live nits. Family members who sleep with a child who has head lice should probably be treated.

Careful cleaning of your home is probably a good idea to eliminate lice and nits:

- Vacuum all areas of your home carefully, including floors and furniture.
- Wash in hot water all items your child might have come into contact with, including clothes, sheets, and blankets. Hats, jackets, and other articles need to be washed or dry-cleaned as well. Items that cannot be cleaned can be placed in a sealed plastic bag for 2 weeks.
- Brushes and combs can be treated with lice-killing products and cleaned in boiling water, but it may be easier just to throw them away.

When can my child go back to school? It is reasonable to let children return to school or day care after the scalp and hair have been treated with one of the products listed earlier. However, your school board may have a different policy.



When should I call your office?

Call our office if:

- Your child has symptoms of infection (crusty, scaling rash on the scalp) or a rash on the neck, ears, or elsewhere on the body.
- You have difficulty eliminating lice or nits or if the infestation returns after treatment.