

## Causes

Head lice are wingless insects that live on the human scalp, especially the scalps of young children. They do not carry disease, but they can be unsightly, itchy, and upsetting. Any child can get lice, and it is not a reason for panic or embarrassment. When teachers or school nurses find signs of lice or lice eggs, they usually send a child home with instructions not to return until signs of the infestation are gone.

Few childhood ailments have accumulated as much lore as lice infestation, some of it true and much of it fantasy. Here are the facts:

- Lice infestation is common. Six to 12 million people in the United States get lice every year, and most of them are school children.
- Children do not get head lice because they are dirty, neglected, or poor, and meticulous hygiene will not prevent an infestation. They rarely pick up lice by sharing combs or hats. They do get lice from direct, head-to-head contact with other children who have lice, usually their close friends.
- Lice do not prefer children with long hair, although they do seem to prefer girls, probably because girls are more likely than boys to play close to their best friends.
- Lice are more common in white than in black children. This is probably because it is easier for lice to cling to the round hair shafts of white children than to the oval hair shafts typical of black children.
- Lice have no wings, so they cannot fly from one head to another, and they do not hop.
- Infested children are not likely to have great swarms of lice in their hair. Many have only one or two.

## Signs & Symptoms

Many children have no symptoms. Children with lice may have itchy scalps, but about half of them do not. Sometimes, when children scratch louse bites vigorously, the sites get infected. If you see redness or swelling on your child's scalp, or notice swollen lymph glands in the neck, bring your child to the office so that we can check for infection.

Lice, nits and eggs are easiest to find in hair that has been shampooed, conditioned, and is still wet. To look for lice use a strong light, a fine-toothed comb and, if necessary, a magnifying glass. Lice are not easy to find. When you shine a light or start combing the child's hair, they hide. Adult females are about as big as a sesame seed and either black or reddish-brown. Eggs and nits are also hard to find. Eggs are small, translucent, and firmly glued to the hair shaft very close to the scalp, often behind the ears or at the back of the neck. Nits, which are the empty shells of hatched eggs, are a little easier to see because they reflect light and are found farther out on the hair shaft.

Nits that are farther than ¼ inch from the scalp contain no live lice. Their removal is not necessary to control lice. A child who is adequately treated for lice but has nits that are farther than ¼ inch from the scalp does not need to be retreated. School entry should be allowed for children who are adequately treated, and children should not be sent home for random nits found after adequate treatment.

**For instructions on how to get rid of nits and lice, see the back of this handout.**

The following are only suggestions. Read all medicine labels before applying any medicine. Call the office with any questions. Children with ragweed allergies should not use pyrethrin shampoos.

If you or the school nurse find lice or nits on your child's head, you can treat the child at home with shampoos or rinses that you can buy at the pharmacy without a prescription. These products will kill virtually all the adult lice on your child's scalp and most of the eggs. Call our office if you would like us to verify the diagnosis or recommend a particular remedy.

When you use lice shampoos or creme rinses, follow these guidelines:

- We first recommend trying a permethrin creme rinse (**Nix**), start by giving the child a regular shampoo, rinse the hair, and towel dry. Then apply enough creme rinse to saturate the hair and scalp. Leave it on for ten minutes, and rinse with water.
- We recommend pyrethrin-PB shampoos (**RID, A-200, Pronto, and R&C Shampoo**) as a second treatment. Because they are derived from plants, some people with pollen allergies react badly to them. Apply them to **dry** hair. Saturate the hair completely and massage into the scalp. Wait ten minutes, then add water to form lather, shampoo, and rinse thoroughly. Hair may be difficult to comb after treatment. You can use a regular shampoo and conditioner after the treatment to help get the tangles out without reducing the effectiveness of the medicine. Children with ragweed allergies should not use pyrethrin shampoos.
- Some studies have found that oils or ointments will suffocate the lice, but they are hard to get out of the hair. Commonly, people use a vegetable oil that is applied thickly to the scalp and hair overnight, saturating the area. It must be covered with a plastic shower cap, but it will leak out. In the morning, it is shampooed out. The process is repeated for several nights until no more lice are seen.
- After treatment, comb hair thoroughly with a "nit comb" to remove lice eggs. This takes time, especially with long thick hair, but it's a crucial step. If any eggs are left behind, they may hatch and begin a new infestation. The glue that holds the eggs to the hair shaft can be loosened by soaking the scalp with white vinegar for 30 to 60 minutes. Most parents do this by saturating a towel with vinegar and applying it to the scalp.
- Inspect the scalp 24 to 48 hours after the treatment to see if any lice remain. If you find any, call our office. We may suggest using a different medicine.
- Repeat the treatment in seven to 10 days to make sure all the eggs have been killed.
- If your child complains of itching even after the lice are gone, call us. The itching is most likely an allergic response to the dead lice and eggs and not a new infestation.
- Sterilizing the infested child's clothes or possessions is not necessary. Lice do not live long away from the scalp. Put washable clothing and bedding through a high-heat dryer cycle first, then the washing machine. You can dry clean anything that is not washable, or seal items in plastic bags for two weeks.
- Do not use medicated shampoos as a preventive measure to protect other family members. There is no evidence that they work this way, and overuse will create resistance.
- Disinfecting furniture and carpet is not necessary. I do not recommend environmental insecticide sprays. Vacuuming carpet and bedding is okay, but has not been shown to be necessary.