

Head lice facts

- Lice infestation is not rare. Six to 12 million persons 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 get lice from direct, head-to-head contact with other children who have lice, usually their close friends.
- Lice don't 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. So cutting your child's hair is unnecessary.
- Lice have no wings, so they can't fly from one head to another, and they don't hop. They can scurry, however. Infested children are not likely to have great swarms of lice in their hair; many have only one or two.
- 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, make an appointment for your child at the office so that we can prescribe treatment for any infection.

Checking for lice

To look for lice, especially if you've heard of lice infestations among your child's friends or at school, use a fine-toothed comb under a strong light. 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. Eggs or nits are not always a sign of active infestation. But some schools will not allow children to attend until the nits are gone, and nits may indicate that lice are, or have recently been, living on your child's scalp.

Treating for lice

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 (called pediculocides) that you can buy at the pharmacy without a prescription, such as Nix creme rinse, RID shampoo, A-200, Pronto, but we prefer Nix. These products will kill virtually all the adult lice on your child's scalp and most of the eggs. Prescription anti-lice shampoos such as Kwell are more dangerous, but not more effective than those available without prescription. When you use lice shampoos or creme rinses, follow these guidelines:

- If you choose to use 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.
- If you choose a pyrethrin-PB shampoo (RID and others) apply 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; using these products will not reduce the effectiveness of the pediculicide, and may help.
- After treatment, comb hair thoroughly to remove lice eggs. This takes time (hours), 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.
- Inspect the scalp 24 to 48 hours after the treatment to see if any lice remain. There are reports of lice developing resistance to certain pediculicides, and that may be the problem. If you find any recurrent lice, we recommend using Nix creme under a shower cap overnight.
- Repeat the treatment in four to seven days to make sure all the eggs have been killed.
- Do not use pediculicides as a preventive measure to protect other family members. There is no evidence that they work this way, and over-use may create resistance.
- Lice don't live long away from the scalp. However, it may be beneficial to sterilize the infested child's clothes or possessions. Put washable clothing and bedding through a high-heat dryer cycle first, then the washing machine. You can dry-clean anything that isn't washable, or seal items in plastic bags for two weeks.

How to Use the Cetaphil Smothering Head Lice Treatment

Cetaphil is an inexpensive nonprescription skin cleanser available at all pharmacies. Please note that the use of this technique to kill head lice has NOT been approved by the manufacturer of Cetaphil, or by the US Food and Drug Administration, and is used 'off-label'

Each treatment application has three main steps.

1. Apply the wet lotion throughout the scalp.
2. Comb out as much excess lotion as possible.
3. Use a blow dryer to dry your child's hair. This dries the lotion on the scalp, and coats any lice in a shrink-wrap-like layer. The dry lotion must remain on the hair and scalp for at least 8 hours. Usually parents leave it in place until the child's usual bath or shower the next day.

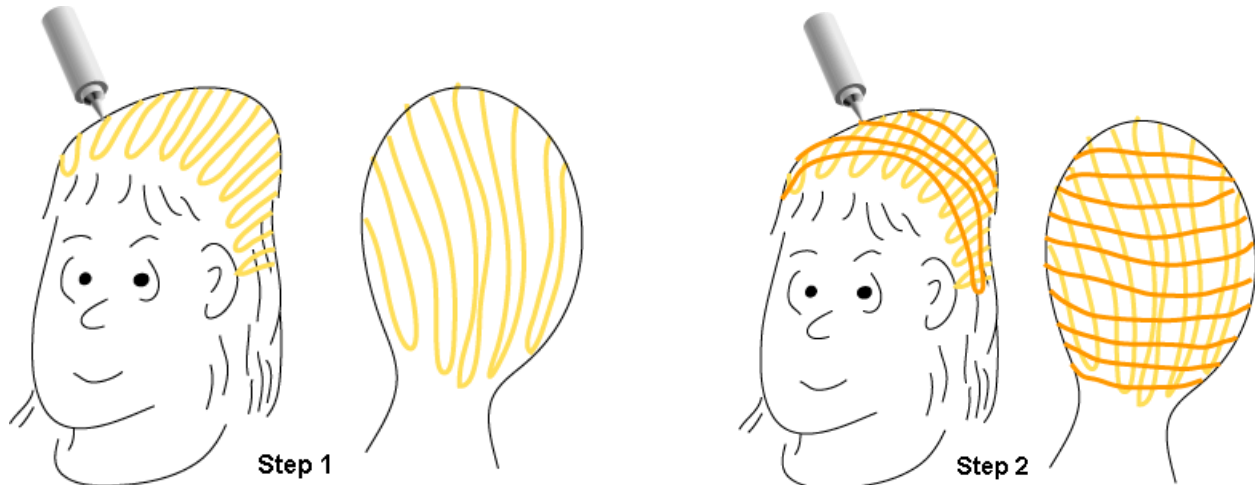
The course of treatment consists of 3 applications done at one week intervals.

What you will need for one application.

- A large bath towel
- Cetaphil® Gentle Skin Cleanser (8 oz for short hair, 12 oz for shoulder-length or longer hair)
- A new 8 oz condiment dispenser or squeeze bottle.
- A regular pocket comb such as this one
- If your child has long hair, you should also get a wide-toothed detangler comb
- If you want to remove nits, a nit comb

How to apply the lotion-- detailed instructions.

Cover your child's shoulders with a big dry bath towel to catch the lotion which will drip from the scalp. To boost your cure rate you must cover all the lice with lotion. We advise you to apply so much lotion that it literally overflows the totally soaked scalp and drips off onto the towel. Pour 8 oz of Cetaphil into the condiment dispenser or similar squeeze bottle. Cetaphil Cleanser is a translucent pearly liquid which is not visible once dried on scalp.



- Step 1.** Begin with dry hair. Start at the left of the scalp. Make sure the nozzle is always touching the skin. Apply the lotion zigzag back and forth from front to back and then back to front. Apply to the entire scalp as you move forward until you reach the front of the scalp. Use 1/4 of the bottle.
- Step 2.** Now start at the back of the scalp. Again make sure the nozzle is always touching the skin. Change the direction of your zigzagging application now to "criss cross" the first pattern. Move zigzag front to back then back to front as you move from the right side to the left side of the scalp. Use again 1/4 of a bottle always touching the scalp with the bottle nozzle. You must achieve a uniform coverage of the entire scalp to be effective. It is important to be touching the scalp with the nozzle the entire time you apply the lotion.
- Step 3.** Use your fingers to thoroughly massage the lotion throughout the scalp and hair.
- Step 4.** Redo steps 1, 2, and 3. Use up another 1/2 bottle of lotion. You now have used a whole bottle of the lotion.
- Step 5.** Does your child have long hair that reaches to the upper back? Then apply another 1/2 bottle of lotion to that large amount of hair from roots to tips and massage in thoroughly with your fingers.
- Step 6.** Wait 2 minutes for lotion to act.
- Step 7.** Comb out the lotion. You should seek to comb out as much excess Cetaphil lotion as possible. You are done when you can't get out any more lotion. The more you get out, the quicker will be the blow drying step which comes next. You may choose to first use a "detangler comb" if the hair is long or thick. Otherwise you can just start with the plain comb.
- Step 8.** If you need to remove nits to comply with your school's "no nit policy," then use the nit comb to carefully go through the entire scalp. It will remove many nits. If your child's school does not have such a policy, then skip this step. It adds 70% more work and is unnecessary to cure children of head lice.
- Step 9.** Blow dry the hair thoroughly, so that the scalp skin, hair roots, and full length of the hair are totally dry. You may use a detangler comb and/or your fingers to make the drying process easier. Anticipate that this will take 3 times longer than drying hair that is just wet with water. You must dry the scalp so that it is totally dry. The lotion works by drying onto the louse and plugging up its breathing holes. If you leave the scalp and hair partly wet then the lotion can be accidentally rubbed off when your child changes his shirt, lies down on his pillow, rubs his hair, or lies on the carpet or couch. By thoroughly drying the lotion in the scalp, the lotion adheres to the lice and kills them.
- Step 10.** You may style the hair now with a sterilized comb and/or brush. Please do not apply any styling gel, mousse, hair spray, or other cosmetic products to the hair while the dried Cetaphil lotion is on the hair.
- Step 11.** Leave the dried lotion on the child's head for at least 8 hours, preferably overnight.
- Step 12.** To remove the lotion at the end of the treatment phase, you just shampoo with your usual shampoo, cream rinses, etc.
- You must use the treatment in three applications done at one-week intervals. The dried lotion kills lice and disrupts their life cycle. If you wait too long for the next application, then baby lice can grow into adults and lay eggs and continue the cycle.

Recommended household clean-up

- Sterilize all the family's combs and brushes. You can choose one of two methods. You may soak the combs and brushes in isopropyl (rubbing) alcohol for 10 minutes or you may put them in the dishwasher on the full hot cleaning cycle.
- Treat all bedding at the time of each lotion application. Take all sheets, pillow cases, blankets, comforters, and bedspreads from the beds in your house and run them in the dryer for 10 minutes on high temperature. Then put the bedding back on beds. You do not have to wash it.
- Patients should change to new fresh clothes after each treatment. Put dirty clothes in the laundry hamper for later laundering.