

HEAD LICE: GUIDELINES FOR TREATMENT

(Includes excerpt from Colorado Department of Health and Environment)

General Information

Although lice are a communicable condition, they are not known to transmit disease or pose any hazard to you or your child's health. Head lice are most common among pre-school children attending child care, elementary school children and household members of infested children. Lice are tiny insects the size of a sesame seed and feed on small amounts of blood. Lice lay oval-shaped eggs (called nits) that are firmly attached to hair close to the scalp often found near the ears and neck line at the back of the head. The tiny eggs can look like flakes of dandruff on the hair, however instead of flaking off the scalp, they stay firmly attached to the hair shaft.

Fast facts

- Personal hygiene and cleanliness are not factors in getting head lice. Head lice, often infest people with good hygiene.
- Head lice do not transmit disease, but do spread easily.
- Lice are most common in children ages 3 to 11 in all socioeconomic groups.
- Female head lice typically live for one month and lay 7 to 10 eggs (nits) per day.
- Head lice can live for up to 30 days in the hair. Their eggs can live for more than 2 weeks.
- Head lice only live and breed on the human head, and do not live on pets.

What are the signs and symptoms of head lice infestation?

- Tickling feeling of something moving in the hair.
- Itching caused by an allergic reaction to the bites of the head louse (approximately 50% of those affected do not present with this symptom and in some cases no symptoms are present).
- Irritability and difficulty sleeping; head lice are most active in the dark.
- Sores on the head caused by scratching. These sores can sometimes become infected with bacteria found on the person's skin.
- Detection of live lice on the hair.

How are lice spread?

- Head lice move by crawling and cannot jump or fly.
- Head lice are mostly spread by direct head-to-head contact – for example, during play at home or school, slumber parties, sports activities or camp.
- It is possible, but not common, to spread lice by contact with items that have been in contact with a person with head lice, such as clothing, hats, scarves or coats, or other personal items, such as combs, brushes or towels.
- Head lice can be transmitted as long as the lice remain alive on an infected person.

Treatment

- Be sure to shampoo all affected family members at the same time! Always check **all** family members and household contacts even if no itching is noted. Anyone with nits (egg) in the hair or with an itchy scalp should be treated.
- Head lice treatment can be bought from the drugstore or Lice Clinics of America (see table with “Treatment Options”). **Be sure to follow the instructions on the product label.** Do not use remedies or products that are not labeled for controlling lice as these may not work and they may even be harmful. Some head lice products are covered by a prescription from your doctor.
- Resistance to some over-the-counter lice treatments has been reported. The prevalence of resistance is not known. For this reason, only the removal of all nits will ensure that surviving nits will not hatch and begin the infestation again.
- Before using a head lice product, the hair must be clean and dry. **Do not use a combination shampoo/conditioner, or conditioner before using lice medicine.** Do not rewash hair for 1-2 days after the lice medicine is removed.
- **All live insects must be killed and nits continually removed until the cycle is broken and all nits are gone.**
- Some products can be harmful if used too often or incorrectly. Discuss the use of lice shampoo with your doctor if there is a chance of pregnancy and in usage with young children. Most products recommend waiting at least one week before re-treatment.
- Apply the lice treatment product over the sink or tub to avoid getting chemicals on other parts of the body.
- Check the hair and comb with a nit comb to remove nits and lice every 2-3 days for at least 10 days.
- If live (crawling) head lice are discovered a day after treatment, then you should speak with your doctor about other kinds of pediculicides that are available by prescription.
Retreatment is recommended 7 to 9 days after the first treatment depending on the product used. Retreatment is meant to kill any surviving hatched lice before they produce new eggs (see page 4).

Removal of nits (eggs)

Removing the nits (eggs) is the most important step in treating head lice. Some of the eggs will survive the shampoo treatment. The nits need to be removed by hand. It may take several hours to remove all nits.

- Metal combs with very fine teeth are stronger and more effective than plastic nit combs. Many flea combs made for cats and dogs are also effective.
- Towel dry hair. Make sure hair remains slightly damp while removing nits.
- Part hair into 4 sections. Work on one section at a time.
- Look closely for very tiny eggs next to the scalp.
- Lift a 1 to 2 inch strand of hair. Comb in firm, even motions beginning at the top of the head as close to the scalp as possible and comb away from the scalp to the end of the hair.
- Use clips to pin back each strand of hair after you combed out the nits.
- Clean the comb completely as you go. Wipe the nits from the comb with a tissue and throw away the tissue in a sealed plastic bag.
- Any remaining nits may be removed using your fingernails by sliding it down to the end and off the hair shaft.
- Check for nits daily for at least ten days following treatment.

Household areas and items needing to be cleaned

- Soak combs, brushes, hair picks, and other hair accessories in hot water (almost boiling) for 10 minutes or place items in a baggie or plastic bag in the freezer for 3 days.
- Wash all dirty clothing, pillow cases, sheets, mattress pads, blankets, towels and clothing worn in the past three days (including jacket and hats). Use hot soapy water and dry in a dryer on high heat. If washing is not an option; items may be placed in the dryer for 30 to 40 minutes on high heat.
- Place items that cannot be washed or dry cleaned (stuffed animals, comforters, etc.) in plastic bags or trash bags and seal for one to two weeks.
- Vacuum chairs, couches, inside vehicles, and other furniture where the children sit, sleep, or play to pick up loose nits or lice.
- Do not use insecticide sprays. They are not necessary and can be toxic if inhaled or absorbed through the skin.

Returning to school

- A student with head lice should not miss school. Shampooing and combing of nits can be done daily after school.
- A student identified as having lice will be inspected in the Health Office for live lice and nits upon returning to school and again in 7 to 10 days.
- Close household and school contacts of affected students may also be inspected for head lice.

To see the research or for more information:

- Centers for Disease Control
<https://www.cdc.gov/parasites/lice/head/treatment.html>
- Colorado Department of Health and Environment
<http://cory.dpsk12.org/wp-content/uploads/2015/05/CDPHE-GUIDELINES-FOR-SCHOOL-SETTINGS-HEAD-LICE-REVISED-2014.pdf>
- United State National Library of Medicine Med Line Plus
<https://medlineplus.gov/ency/article/000840.htm>

Checklist for Treatment

All of the steps below need to be completed on the same day in order to completely get rid of lice.

- ___ 1. Check **all** household members and apply the treatment as explained below, to everyone who has lice or nits (eggs). Young children and/or any family member who is pregnant needs to discuss treatment with their doctor.
- ___ 2. Use a special shampoo to kill the lice and eggs, following the directions on the package. Always do this over the sink or tub to avoid having the chemicals on other body parts.
- ___ 3. Remove all of the eggs. With your fingernail, remove the egg by sliding it down to the end and off the hair shaft. You may also try to use a fine-toothed metal comb made especially for removing nits. Place the nits, or hair with nits attached, into a plastic bag, seal it and dispose of immediately.
- ___ 4. Wash all bedding, towels, mattress pads, and clothing worn in the past 72 hours, including jackets, hats, caps or cloth toys in hot, soapy water and dry in dryer.
- ___ 5. Place pillow in a plastic bag for two weeks or tumble in dryer on high heat of 20 minutes depending on the material.
- ___ 6. For any other items that can not be washed or dry cleaned (stuffed animals, comforters), place in plastic bags or trash bags and seal for 1 to 2 weeks.
- ___ 7. Gently iron, air out, or vacuum mattresses. Do not leave the iron on the mattress an extended period of time to avoid fires.
- ___ 8. Vacuum inside vehicles and vacuum or wash furniture, rugs, and curtains depending on material. Clean floors (vacuum or scrub).
- ___ 9. Do not share combs, brushes, hats, caps, etc. Soak personal combs, brushes, and other hair accessories in hot water (almost boiling-above 130 degrees Fahrenheit) for 10 minutes or place in plastic bags in the freezer for 3 days.
- ___ 10. After treatment, **check daily for nits** and remove as needed.
- ___ 11. Depending on lice shampoo used, **a second treatment in 7-10 days may** be required to kill newly hatched lice. Shampoos containing insecticide should not be repeated before 7 days. Check with pharmacist if you have questions.
- ___ 12. Retreatment is generally recommended for most prescription and non-prescription (over the counter) products on day 9 to kill any surviving hatched lice before they produce new eggs.
- ___ 13. At any time, we recommend contacting your doctor for evaluation.
- ___ 14. Contact your School Nurse or Health Aid at your school if you have questions or need assistance in getting the shampoo.