Head Lice: Background and Treatment

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What are head lice?

Lice are parasites that live on the surface of the human body in head, body or pubic hair. An infestation of lice is called “pediculosis.”

Head lice (unlike body or pubic lice) are not a sign of poor hygiene or a reflection on the quality of a child care setting. There is no evidence that head lice carry disease. A single lice is called a “louse.”

Head lice are wingless, crawling insects which live on the human scalp. They do not fly or jump but they can crawl at a pace of about nine inches per minute. Live lice are hard to spot because they move so fast. The lice feed by taking tiny amounts of blood every few hours. This causes itching which may be the first sign of an infestation in a child or adult although in a first case of head lice this itching might not occur for four to six weeks. Head lice live only on human hosts and are not able to survive without a blood meal for more than 24 to 48 hours. The average life span of lice on the human host is about 30 days.

The adult louse is about 1/8 inch long (about the size of a sesame seed) and is grayish white or light brown. An adult female louse lays three to ten eggs per day, gluing them to the hair shaft very close to the scalp. The eggs are incubated by body heat, taking seven to twelve days to hatch, and another one to two weeks to mature and start laying eggs. The empty egg shells remain glued to the hair shaft.

Who gets them and how?

Lice don’t jump, fly or live on animals. Lice crawl from one person or object to another. This happens when heads touch (sleeping together, hugging, playing), or less commonly when personal items are shared (combs, brushes, hats, car seats, bedding, helmets).

Treating lice

Pesticides which kill lice are called pediculicides. According to the American Academy of Pediatrics permethrin 1% (available over the counter) is currently the recommended treatment for head lice.

Pediculicides can be useful as a first step in the treatment of lice, but none of the pediculicide preparations used for treatment today will kill ALL of the lice and eggs. Leaving the chemicals on hair longer than directed does not increase their effectiveness. Removing the nits is the most important step in the treatment of head lice.

Using a head lice treatment product will not prevent someone from getting head lice. It is very important to treat only if lice or nits are seen. Do not treat in bathtub or shower, but treat only the hair by leaning over a sink. It is only recommended for the scalp to have contact with the treatment.

Treatments that recommend covering the child’s head with a plastic bag or shower cap when the child is sleeping are not recommended; the child could suffocate.

Check with a health care provider before using chemical treatments more than recommended in the package instructions.

Only a parent should treat his or her child with a pediculicide and only a parent should cut his or her child’s hair, even if it’s only a strand or two with stubborn nits on them.

Although there is documentation of lice resistance to pediculicides in some communities, the primary reasons for treatment failure are:

- Misidentification of hair debris as “nits,” (no active infestation)
- Failing to follow label directions properly for using the medication,
- Not identifying and treating others with lice at the same time (reinfestation), and
- Incomplete removal of surviving eggs and lice after treatment.

Alternative treatments

Some parents find alternative treatments effective and preferable to pesticides. Careful “wet combing” and occlusive methods (such as petroleum jelly or Cetaphil) can also be effective at getting rid of lice. Parents might also ask their health care providers about a new product containing benzyl alcohol 5%.

Products that are marketed by health food stores are not required to meet FDA standards. New products should be evaluated for safety and effectiveness.

Getting rid of nits

Finding a live louse on the scalp provides solid proof of infestation. Identifying “nits” is a different story and many children are mistakenly thought to have nits/head lice. Nits are microscopically small, and are more easily found at the nape of the neck and behind the ears. Anything that slides along the hair shaft easily is not a nit. The further out a nit is from the scalp the less likely it is to contain a live egg, but to avoid confusion and misdiagnosis it is best to remove all nits as soon as possible.

Cleaning the environment

- Vacuum carpets, rugs, upholstered furniture (chairs, couches, etc.), car seats, car interiors, etc.
- Wash clothing, bedding, and towels that were recently worn or used in hot soapy water and dry in dryer using high heat.
- For bedding/clothing/fabric items that cannot be washed (stuffed animals, dramatic play clothes/hats, etc.), place in plastic bag for 2 weeks or place in dryer using high heat for 20 minutes.
- Lice sprays should not be used. They can be harmful to people and animals.
- Cleaning hard surfaces, such as walls, shelving, etc. is not necessary. Cleaning with bleach or household cleaners will not kill lice or nits.
- Bike helmets should not be disinfected with any chemicals. Chemicals will damage the helmet, affecting the safety of the helmet. Helmets should be cleaned by wiping the inside with wet paper towels.

Tips to prevent head lice

- Educate parents and staff on how to detect and manage head lice.
- Remember head-to-head contact is the primary cause of the spread of lice.
- Separate storage areas for each child's and staff member's personal belongings. Make sure coats and clothing don't touch each other.
- Don't share combs, brushes, towels or bedding. Store nap items separately and space mats/cots so children are not touching when they are napping.

When to exclude

It is recommended for children with head lice to be excluded at the end of the day until after first treatment is complete. "No nit" policies requiring that children be free of nits before they return to child care have not been effective in controlling head lice transmission and are not recommended.

Regardless of the program's policy, children need to be checked for new nits for 10 days after being treated to ensure successful treatment.

Need additional help?

For assistance in dealing with an outbreak or persistent reinfestation:

1. Contact the child care health consultant at your local Child Care Aware® office.
2. Call your local public health nurse.
3. If you are part of the local school system, ask the school nurse for assistance.

References:

Health & Safety Notes, Head Lice: Background and Treatment, California Childcare Health Program, August 2010.

Caring for Our Children, National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs (3rd Ed.). AAP/HRSA, 2011.

AAP (2010), Clinical Report—Head Lice online at http:// pediatrics.aappublications.org/cgi/reprint/peds.2010-1308v1

The National Pediculosis Association at www.headlice.org.

Quick Guide for Removing Head Lice, ND State Department of Health, 2002.

Head Lice Illness Sheet, California Childcare Health Program, Sept 2010.

Revised 12/13