

# HEAD LICE CONTROL

## IDENTIFICATION

Head lice (*Pediculus capitis*) are bloodsucking, parasitic insects that primarily feed on humans. The adults grow to be from 1-3mm long and are typically reddish-brown in color.

The female adult can lay anywhere from 50-100 eggs (nits) in her lifetime. With cement-like glue, she attaches each nit to a hair shaft, where they will hatch in 8-11 days. The hatched lice will take another 8 or 9 days to become adults, and, a day later, the female can begin laying eggs. The adults live for 9-10 days, making the entire lifespan of a louse at least 24 days.

## HABITAT

Lice are usually found on the scalp, mainly around the ears and at the nape of the neck, but can also be found on eyebrows, eyelashes and other body hairs, on hats and scarves, and on combs and brushes. Generally, they can only survive off of a host for about 2-3 days without a blood meal.

## PREVENTION

- ✂ Have children establish a no-sharing policy with their friends and classmates when it comes to commonly infested items, such as combs, brushes, hats, scarves, pillows, and blankets or mats at rest time or at home.
- ✂ If your classrooms have cubbies or coat hooks that are shared or clustered, have students place their coats and hats in sealed plastic bags to keep wandering adult lice away.
- ✂ Recommend that parents of children with long hair braid it before school and comb it out upon their arrival home.
- ✂ Inform parents as soon as you discover a child has lice so that they may begin taking preventive and control methods.

## INSPECTION

- ✂ Watch for symptoms of head lice: head scratching, sometimes leading to scalp damage; red bites on the scalp, around the ears, and at the nape of the neck; and the presence of nits in the hair.
- ✂ Periodically check students for nits whether or not he or she is showing symptoms of head lice, especially if there has been an outbreak. Viable nits will be yellowish to grey in color, darkening to a tan or coffee color as they mature, and are shaped like a tear drop. One sure way to distinguish nits from dirt, dandruff, lint, or any of the other plethora of things that manage to find their way into kids' hair, is that they will not flick or brush out.

## TREATMENT

**Nit Picking.** Nit picking takes time and patience, but no head lice chemical effectively kills all nits, so combing is always going to be necessary. It is the safest and most effective method of treating an infestation.

- ✂️ Liberally apply coconut oil to the child's head and scalp. (Any oil should work. It functions as a lubricant to make combing easier and smothers the lice.)
- ✂️ Once the hair and scalp are thoroughly coated, comb through her hair with a wide-toothed comb to remove tangles and straighten the hair.
- ✂️ Separate the hair into one-inch sections and search thoroughly, both visually and by nit combing. Be careful — because the nits are tightly cemented to the hair, the comb may pull the hair out rather than merely remove the nit.
- ✂️ Immerse any nits or lice in hot soapy water as they are pulled from the hair.
- ✂️ Pin cleaned sections of hair aside, curling it close to the head.
- ✂️ Periodically clean hair and debris out of the comb with a tissue, placing the tissue in hot, soapy water when it is soiled.
- ✂️ Once finished, wash the child's hair with hot water and blow it dry (remembering that his or her head is much more heat sensitive than yours.)
- ✂️ Recheck the entire head for stray lice and nits.
- ✂️ Clean out your nit comb, removing any stray hair and nits, and soak in 150°F water for 15 minutes before putting it away.
- ✂️ Repeat on every student or staff member showing symptoms of head lice for 12 consecutive days.
- ✂️ Continue to monitor the staff and student body while and after you are treating those infested.

**Cleaning.** Lice don't generally infest homes or schools.

- ✂️ A thorough vacuuming of all carpets, upholstery, and common space will take care of any fallen nit-carrying hairs or runaway lice.
- ✂️ Wash all towels and bedding used during nit-picking sessions and other questionable items in hot (140°F/60°C) and dry on high to take care of any potential re-infesters.
- ✂️ Place non-washables in the hot drier for 20 minutes or have them dry cleaned. (You can also store the items in a plastic bag for 14-30 days, or freeze them in temperatures of -4° F (-20°C) for 5 hours, or -5°F (-15°C) for 10 hours.)

**Where can I find a nit comb?** If your local drugstore doesn't carry metal-toothed nit combs, you can get the Licemeister® nit comb from the National Pediculosis Association, P.O. Box 610189, Newton, MA 02461, 781/449-NITS, [www.headlice.org](http://www.headlice.org); or the Derbac™ comb from Cereal Soaps Company, Division Johanson Manufacturing Corp., Box 329, Boonton, NJ 07005, 201/334-2676. A dog or cat flea comb may also be effective in a pinch.

### **Least-toxic**

It will always be necessary to nit comb, no matter what course of treatment you decide upon, but if you feel a need to do more than oil and comb, there are enzyme treatments for head lice. Molting insects produce enzymes to lift open their exoskeletons when they molt. These products work by prematurely breaking apart the outer covering of lice and loosening nits from the hair. Due to the insects' need for these enzymes, they do not appear to become resistant to them. They are advertised as non-toxic to humans, but as with any pest control product, you should be sure to obtain full disclosure of all product ingredients before use. Enzyme treatments include Lice B Gone, (Safe Effective Alternatives, Inc., 877-730-2727, [www.licebgone.com](http://www.licebgone.com)) and Lice R Gone® Shampoo (Safe Solutions, Inc., 888-443-8738, [www.licergone.com](http://www.licergone.com)).

### **PROBLEMS WITH CHEMICAL CONTROL**

☞ Lindane, the active ingredient in commonly prescribed lice shampoos like Kwell®, is readily absorbed through the skin on the scalp. It is a possible human carcinogen, and has been linked with blood disorders, and neurological and immunological effects. It has been banned for use in lice and scabies treatment in California. Nix®, contains permethrin, also a possible human carcinogen and a neurotoxin, which has been reported to cause temporary nervous disorders in the hands or face.

☞ There is widespread resistance of head lice to Lindane and permethrin, rendering these products useless in some cases.

## **SCABIES CONTROL**

### **IDENTIFICATION**

Scabies is a condition not always easily diagnosed. It is caused by a tiny mite (*Sarcoptes scabiei*) which burrows under the skin, especially around the hands, feet, and male genitalia and sometimes the neck and head area in infants. An allergic reaction to the mites causes us to itch – often worse at night – and may sometimes be characterized by a tiny red rash of raised spots, usually on the wrists.

### **TREATMENT**

If you suspect someone in your household may have scabies, it is suggested you consult a medical professional and try the least toxic treatment first such as bathing, washing or soaking in diluted Lice R Gone® Shampoo (Safe Solutions, Inc., 888-443-8738, [www.licergone.com](http://www.licergone.com)), Lice B Gone (Safe Effective Alternatives, Inc., 877-730-2727, [www.licebgone.com](http://www.licebgone.com)), or sulfur and/or borax. Itching may persist for up to two weeks until our natural defence system has broken down what is left of the mite bodies. If you are still infected, your medical professional may prescribe a pesticide lotion made from permethrin. Always follow the instruction on the bottle - very carefully.