

## Head Lice

Scratch. Scratch. Scratch. Your child's head is feeling really itchy. Is it head lice?

### What are Lice?

According to the Centers for Disease Control, head lice are parasitic wingless insects. They live on people's heads and feed on their blood.

An adult is called a louse and is about the size of a sesame seed. It is brownish tan. Nymphs are smaller and become adult lice about seven days after hatching. Lice feed on blood about every 4 to 6 hours, but can survive up to three days off the scalp.

The eggs, called nits, are even smaller – about 1/32 inch. Lice lay nits on hair shafts close to the skin's surface, where the temperature is perfect for keeping warm until they hatch. Nits look sort of like dandruff, only they can't be removed by brushing or shaking them off.

### Signs of Head Lice

- Tickling feeling in the hair
- Frequent itching
- Sores from scratching



### How Can You Check for Head Lice?

Lice and nits are easiest to detect at the neckline and behind the ears. Part your child's hair into small sections and check for lice and nits on the scalp, behind the ears, and around the nape of the neck. A magnifying glass and bright light helps.

A simple way to check for lice is to have the child hold their head over a light colored towel.

Brush the hair and scalp vigorously toward the towel. Dislodged lice will be found on the towel.

### How Do You Get Lice?

Head lice are found in children of all socioeconomic classes. They are very contagious and spread easily. Close contact or sharing personal belongings, such as hats, combs, and headphones puts people at risk. Children ages 3-11 and their families get head lice most often. *It has nothing to do with cleanliness and does not reflect poorly on you as a parent.* There is no reason to panic (head lice do not carry serious diseases), but take action quickly to prevent the infestation of other family members. Remain calm because you will need the cooperation of your child to successfully treat this problem.

### What if You Suspect Your Child Has Head Lice?

Don't keep it a secret. If you suspect your child is infected with head lice, inform your day care, preschool, or school. Local public health departments and your family physician should also be contacted. Every family member must be checked.

### Treatment Options

The following treatment options described below are from the Nebraska Cooperative Extension publication on removing head lice.

**Insecticidal Treatments**—To reduce the number of live lice on your child's head, you may want to use an insecticidal product labeled for head lice control. Ordinary shampoo won't kill lice.

**\*\*Pyrethrins (permethrin):** Pyrethrin products, with a natural insecticide are NIX®, RID®, A-200®, Clear® and store brands. When used correctly, these over-the-counter products are fairly safe. However, research in the U.S. has shown lice are resistant to pyrethrin/pyrethroid products, making these products less and less effective.

**\*\*Malathion:** A product reintroduced to the U.S. market several years ago is Ovide®. It has been used in Europe for many years. Lice resistant to pyrethrin products may be better controlled with this product. This prescription product has an unpleasant odor and is flammable. But, the biggest drawback to using this product is the way it is to be used. Instructions say to soak the child's hair with Ovide® and leave it on for 8 to 12 hours.

**\*\*Kwell®:** Another shampoo product available only by prescription is Kwell®. It has been used in the U.S. for lice for about 50 years. Head lice resistance to lindane, the active ingredient in Kwell®, has been reported in many parts of the world. This product is less effective than many other head lice treatments. Kwell® should be used with extreme caution--neurotoxic reactions, carcinogenicity in lab animals and blood disorders have been reported. We don't recommend Kwell®.

**\*\*Hair-Clean-1-2-3®:** This is a non-traditional treatment with some independent research showing it has similar or greater effectiveness to Nix®. It was studied at the Miami School of Medicine and in Israel at Hebrew University-Hadassah Medical School. Hair-Clean-1-2-3® is a mixture of anise oil (flavoring in black licorice), coconut oil and ylang ylang oil in an isopropyl alcohol carrier. It has a very strong licorice smell and it should be used with caution because the alcohol makes it flammable. Spray dry hair thoroughly and leave it 15 minutes. Remove lice and nits with a metal nit comb. Like other products, a second application is needed 7-10 days after the first. This product is most likely to be found in health food stores.

This document can be made available in alternative formats, such as large print, Braille, or audio tape, by contacting your county Extension office. (TTY 1-800-947-3529)

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## Treating Lice with Plant Based Oils

UW-Extension Entomology Specialist, Phil Pellitteri, indicates that insecticide shampoos often don't work. He does not recommend use of any insecticide product because of resistance issues. He also advises caution with the anise product as it can burn. Pellitteri says, "I get a lot of feedback from public health nurses that olive oil does work and very often is more effective than the insecticide shampoos." Leave olive oil on hair for 8 hours. Other natural plant based oils also work, says Pellitteri, but he does not recommend the use of any petroleum based oils such as petroleum jelly or wd40.

**Combing**—Even the most effective product may not be 100 percent effective. Using a lice comb is important. Combing is the oldest and safest method of lice control. It takes time and requires patience on the part of parent and child. You can completely avoid insecticide shampoos/rinses if you comb the hair to remove lice and nits, but you must be diligent.

View the video, Removing Head Lice Safely, at <http://lanaster.unl.edu/pest/lice/video.shtml>.

## Preventing Re-Infestations

Wash bedding, towels and recently worn clothing in hot, soapy water in a washing machine. Dry at 140 degree F. in dryer. Vacuum carpets, pillows, mattresses and overstuffed furniture. Vacuum car seats.

Items that are not washable (stuffed animals and pillows) can be stored in tightly sealed plastic bags for two weeks. Lice and their eggs will be killed if they freeze so some items can be placed in a freezer overnight.

### Sources:

- Homeier, B. (Ed.) (2005). *Head lice*. Retrieved June 11, 2008 from <http://kidshealth.org/parent/infections/common/lice.html>
- Centers for Disease Control and Prevention. (2007, November 21). *Head lice*. Retrieved June 11, 2008 from <http://www.nlm.nih.gov/medlineplus/headlice.html>
- Ogg, B., & Cochran, S. (2006). *Managing head lice safely*. Nebraska Cooperative Extension Service. Retrieved June 23, 2008 from <http://lanaster.unl.edu/pest/lice/headlice018.shtml>.

Mention of brand name does not imply endorsement or discrimination.

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