# Chapter 13

# **HEAD LICE - Pediculosis Capitis**

- Head Lice Symptoms, Transmission, Treatment
- Controlling a Classroom Outbreak
- Chronic Lice Procedure
- Head Lice/Nit Plan of Action Display/Print Chart
- Cleaning the Environment
- Additional Head Lice Information for Parents/Guardians
- Common Treatment Problems and Solutions

# **HEAD LICE (Pediculosis Capitis)**



#### Signs and Symptoms

- Tickling feeling or something moving in the hair.
- Itching, caused by an allergic reaction to the bites.
- Visible lice crawling on scalp and hair.
- Irritability.
- Sores on the head caused by scratching that may become infected.

<u>**Cause</u>** - Pediculus humanus capitis, the head louse. Adult lice or eggs (nits) are found in the hair, often behind the ears or near the nape of the neck.</u>

There are three forms of lice: the nit, the nymph, and the adult.

**<u>Nit</u>:** Nits are head lice eggs. They are hard to see and are often mistaken for dandruff or hair spray droplets. Nits are found firmly attached to the hair shaft. They are oval and usually yellow to white in color. Nits take about 1 week to hatch.

**Nymph:** The nit hatches into a baby louse called a nymph. It looks like an adult head louse, but is smaller. Nymphs mature into adults about 7 days after hatching. To live, the nymph must feed on blood.

**Adult:** The adult louse is about the size of a sesame seed, has six legs, and is tan to grayish-white. In persons with dark hair, the adult louse will look darker. Adult lice can live up to 30 days on a person's head. To live, adult lice need to feed on blood. A louse can only survive 1-2 days away from the scalp.

#### Incubation Period

From laying of eggs to hatching of nymph is 6-10 days. These nymphs reach maturity capable of reproducing in 2 weeks.

#### **Transmission**

- Contact with an infested person. Contact is common during play (slumber parties, sports activities, at camp, on a playground).
- Sharing infested clothing, such as hats, scarves, coats, sports uniforms or hair ribbons.
- Using infested combs, brushes or towels.
- Lying on a bed, couch, pillow, carpet or stuffed animal that has recently been in contact with an infested person.
- Head lice can survive only 1 to 2 days away from the scalp.

#### <u>Treatment</u>

- 1. Treatment is only effective if the product label instructions are followed *carefully*. Failure to do so can cause reinfestation and increase resistance to the product.
- 2. Use a fine-toothed comb to remove all nits from hair and scalp.
- 3. Wash clothing and linens in hot water; dry-clean non-washable items or place in sealed plastic bags for two weeks. Soak combs, brushes, etc. in hot water (130° F) for 10 minutes. Vacuum all carpets, pillows, mattresses and upholstered furniture including car seats.

# **CONTROLLING A CLASSROOM OUTBREAK**

There are measures you can take to reduce the number of outbreaks in your classroom.

- 1. Encourage children not to share clothing and hair accessories.
- 2. If possible provide individual lockers or separate hooks for clothing.
- 3. Wipe headphones after each use if shared.
- 4. Encourage children with long hair to keep it tied or braided.
- 5. Carpeted areas should be vacuumed as frequently as possible. Head lice are seeking new hosts, not hiding places. **Use of insecticide sprays is not recommended**. (Head lice can only survive 1-2 days away from the scalp.)
- 6. Reinforce these messages before vacations and holidays.
- 7. Watch for telltale scratching that might indicate head lice. If you suspect that a child has head lice, contact the school health aide.
- 8. Invite the school RN for a head lice prevention lesson in your class

## **CHRONIC LICE PROCEDURE**

If head lice continue to be a recurring problem, the following procedures should be followed:

- Chronic lice is defined as a child having live lice three times in a school year; <u>and</u> the child has been **absent** for **10 or more days** in a school year due to lice.\*
- When a case of **chronic lice** occurs refer to school guidance counselor.
- Prior to returning to class, the student must be checked for lice and rechecked again in 10-days.
- Check all other students in the class for lice on a case by case basis.

## HEAD LICE TREATMENT & NIT REMOVAL PLAN

When one family member has head lice it is important to check all members of the household and close contacts. Treat <u>only</u> the infested family members. Follow the plan below:

- Treatment: If you aren't sure which medicine to use or how to use a particular medicine, always ask your physician, pharmacist, or other health care provider. We cannot make recommendations about specific products. When using a medicine, always carefully follow the instructions contained in the package or written on the label, unless the physician and pharmacist direct otherwise.
- Before applying treatment, cover the child's eyes with a towel or washcloth. Do not treat in the shower or bathtub. Instruct the child to lean over the sink and only apply the product to the head area. This prevents absorption through other skin areas.
- Apply lice product according to the label instructions. If your child has extra long or thick hair, you may need to use a second bottle to assure complete coverage.
- Wash the hair according to label instructions. Once applied, allow the lice killing product to continue working by using only regular shampoo for two weeks after treatment because cream rinses and conditioning shampoos coat the hair and protect lice from the lice killing product.
- Following treatment, use a <u>fine-toothed metal comb</u> to remove lice and nits from the hair shaft. Metal lice combs are preferred because they have finer teeth for nit removal, are less likely to break or bend when combing through the hair, and can be boiled or sterilized. Any remaining nits need to be removed by sliding the nit down the hair shaft with your fingernails.
- Recheck the hair daily for lice or new nits laid close to the scalp. Continue to comb out nits with the fine-toothed metal comb. Removing all nits will help to prevent a new infestation.
- Retreat according to the instructions on the lice-killing product (pediculicide).
- Continue to check all treated and untreated persons in the same household for 2-3 weeks even after they appear to be nit and lice free.

#### <u>Alternative Treatments:</u>

The effectiveness of non-pesticide treatments such as those found on the internet and in some stores, or olive oil, mayonnaise and petroleum jelly has not been proven through research.

#### ALERT

The use of kerosene, gasoline, paint thinners, turpentine, flea products, or industrial/garden pesticides is dangerous to your child.

## **CLEANING THE ENVIRONMENT:**

- 1. To live, adult lice need to feed on blood. Lice die within 1-2 days when away from the blood source. Therefore, excessive cleaning measures are not necessary, however, routine cleaning is recommended as follows: the same day as the head treatment, clothing and bed linen should be washed in hot water and dried in a dryer; carpets and upholstered furniture need to be vacuumed thoroughly; pillows and stuffed animals should go into a hot dryer for at least 10 minutes or be placed in a sealed plastic bag for 2 weeks and combs, brushes and hair accessories should be soaked in hot water (at least 130 degrees) for at least 10 minutes.
- 2. Spraying of furniture, rugs, carpets, car seats, and pets with a pesticide is <u>not</u> recommended.

# ADDITIONAL HEAD LICE INFORMATION FOR PARENTS/GUARDIANS

#### What are head lice?

Also called Pediculosis humanus Capitis, head lice are parasitic insects found on the human head and scalp. Having head lice is very common, however, there is no reliable data on how many people get head lice in the United States each year.

#### Who is at risk for getting head lice?

Anyone who comes in close contact with someone who has head lice, or contact with their clothing or other personal items (such as brushes or towels). Preschool and elementary-age children, 3-10, and their families are infested most often. Head lice are more common in females than in males.

#### What do head lice look like?

There are three forms of lice: the nit, the nymph, and the adult.



**Nit:** Nits are head lice eggs. They are hard to see and are often mistaken for dandruff or hair spray droplets. Nits are found firmly attached to the hair shaft. They are oval and usually yellow to white in color. Nits take about 1 week to hatch.



**Nymph:** The nit hatches into a baby louse called a nymph. It looks like an adult head louse, but is smaller. Nymphs mature into adults about 7 days after hatching. To live, the nymph must feed on blood.



**Adult:** The adult louse is about the size of a sesame seed, has six legs, and is tan to grayish-white. In persons with dark hair, the adult louse will look darker. Adult lice can live up to 30 days on a person's head. To live, adult lice need to feed on blood. A louse can only survive 1-2 days away from the scalp.

#### Where are head lice most commonly found?

They are most commonly found on the scalp, behind the ears and near the neckline. Head lice hold on to hair with hook-like claws found at the end of each of their six legs. Head lice are rarely found on the body, eyelashes, or eyebrows.

What are the signs and symptoms of head lice infestation?

Tickling feeling or something moving in the hair.

Itching, caused by an allergic reaction to the bites.

Visible lice crawling on scalp and hair.

Irritability.

Sores on the head caused by scratching. These sores can sometimes become infected.

How did my child get head lice?

Contact with an infested person. Contact is common during play (slumber parties, sports activities, at camp, on a playground). Sharing infested clothing, such as hats, scarves, coats, sports uniforms, or hair ribbons.

Using infested combs, brushes, or towels.

Lying on a bed, couch, pillow, carpet, or stuffed animal that has recently been in contact with an infested person.

Note: This Information was obtained from the Centers for Disease Control.

# HEAD LICE: COMMON TREATMENT PROBLEMS AND SOLUTIONS:

- 1. Making the hair too wet with water before applying the lice shampoo. This makes the shampoo less effective.
- 2. Using a crème rinse or conditioner shampoo before applying a lice shampoo. This interferes with the medication in the lice shampoo.
- 3. Failing to leave the lice shampoo on long enough. Follow the label instructions.
- 4. Re-shampooing the hair again immediately after applying the lice shampoo. Don't rewash hair for 1-2 days after treatment.
- 5. Inadequate amount of medication. Extra long hair may require two bottles of lice shampoo to fully wet the hair.
- 6. Not combing the hair. Using lice shampoo alone may not be enough to cure a head lice infestation. Comb dead and any remaining live lice out of the hair following treatment. It is essential to remove nits (lice eggs) by combing and/or picking them out with your fingernails. The medication in the lice shampoo does not penetrate the nit shell.

Source: Centers for Disease Control http://www.cdc.gov/parasites/lice/head/parents.html