

# Head Lice



James R. Ginder, MS,NREMT,PI,CHES,NCEE  
Health Education Specialist  
Hamilton County Health Department  
[www.hamiltoncounty.in.gov](http://www.hamiltoncounty.in.gov)

Reviewed By:  
Kelly Mullen, R.N., BSN  
Nursing Supervisor  
Hamilton Southeastern Schools

# The Learner Will Be Able To..

- Identify the various stages of head lice
- Recall three signs and symptoms of head lice
- Describe two ways head lice are transmitted
- List two treatment opportunities



# Public Health Problem..

Lice Are Not A Public Health Problem

While Head Lice Are A Nuisance,  
They DO NOT Spread Disease

Source: Centers For Disease Control &  
Dr. Richard Pollack  
Harvard School Of Public Health

# Public Health Problem..

- **The greatest harm associated with head lice results from the well-intentioned but misguided use of caustic or toxic substances to eliminate the lice. (Pollack)**



# What Are Head Lice?

- Head lice (*Pediculus capitis*) are small insects that can live on the scalp and neck hair of a human host
- Approximately 6 to 12 million children are infected with head lice per year (CDC)
- Head lice are **not a health hazard or a sign of uncleanliness** and are **NOT** responsible for the spread of **ANY** diseases
- All groups of people can develop head lice



# Head Lice Information..

- In the United States, infestation with head lice is most common among preschool children attending child care, elementary schoolchildren, and the household members of infested children
- One should expect about one infested child in a school group of 100 children in the kindergarten through 4th grades (Pollack)
- African Americans have fewer cases of head lice due to oval-shaped hair shafts which are harder for lice to grasp



# Head Lice Information..

- Lice seem to prefer red or brown hair over blonde or black hair
- Lice development has no connection with the length of hair or the frequency of brushing or shampooing



# Nits/Eggs..

- Nits are lice eggs laid by the adult female head louse at the base of the hair shaft nearest the scalp.
- Nits are firmly attached to the hair shaft and are oval-shaped and very small (about the size of a knot in thread) and hard to see
- Nits often appear yellow or white although live nits sometimes appear to be the same color as the hair of the infested person
- Nits are often confused with dandruff, scabs, or hair spray droplets



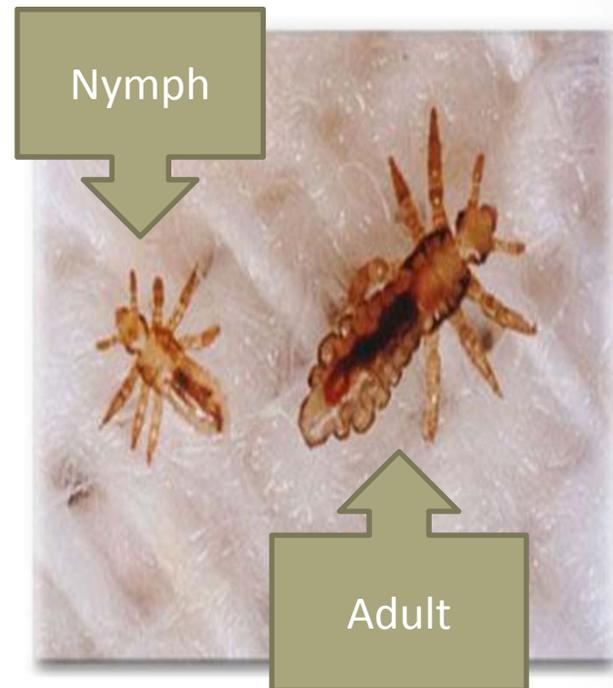
# Nits/Eggs..

- Nits usually take about 8-9 days to hatch
- Eggs that are likely to hatch are usually located no more than  $\frac{1}{4}$  inch from the base of the hair shaft
- After hatching, the remaining shell looks white or clear and continues to be firmly attached to the hair shaft
- This is the stage when it's easiest to spot them, as the hair is growing longer and the egg shell is moving further away from the scalp



# Nymph..

- A nymph is an immature louse that hatches from the nit
- A nymph looks like an adult head louse, but is smaller
- To live, a nymph must feed on blood
- Nymphs mature into adults about 9-12 days after hatching from the nit



# Adult..

- The fully grown and developed adult louse is about the size of a sesame seed, has six legs, and is tan to grayish-white in color
- Adult head lice may look darker in persons with dark hair than in persons with light hair
- To survive, adult head lice must feed on blood
- An adult head louse can live about 30 days on a person's head but will die within one or two days if it falls off a person
- Adult female head lice are usually larger than males and can lay about six eggs each day



# Head Lice Transmission..

- Head lice move by crawling; they cannot hop or fly
- Head lice are spread by direct contact with the hair of an infested person
- **Anyone** who comes in head-to-head contact with someone who already has head lice is at greatest risk
- Sharing clothing, bed linens, combs, brushes, and hats can also help pass them along
- **Personal hygiene or cleanliness in the home or school has nothing to do with getting head lice**



# Where Are Head Lice Found?

- Head lice and head lice nits are found almost exclusively on the scalp, particularly around and behind the ears and near the neckline at the back of the head
- Head lice or nits sometimes are found on the eyelashes or eyebrows but this is uncommon
- Head lice hold tightly to hair with hook-like claws at the end of each of their six legs.
- Nits are cemented firmly to the hair shaft and can be difficult to remove even after the nymphs hatch and empty casings remain.



# What Are They Symptoms?

- Tickling feeling of something moving in the hair
- Itching, caused by an allergic reaction to the bites of the head louse
- 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



# Diagnosis Of Head Lice..

- The diagnosis of a head lice infestation is best made by finding a live nymph or adult louse on the scalp or hair of a person
- Because nymphs and adult lice are very small, move quickly, and avoid light, they can be difficult to find
- Use of a magnifying lens and a fine-toothed comb may be helpful to find live lice
- If crawling lice are not seen, finding nits firmly attached within a  $\frac{1}{4}$  inch of base of the hair shafts **strongly suggests, but does not confirm**, that a person is infested and should be treated.



# Diagnosis Of Head Lice..

- Nits that are attached more than  $\frac{1}{4}$  inch from the base of the hair shaft are almost always dead or already hatched
- Nits are often confused with other things found in the hair such as dandruff, hair spray droplets, and dirt particles
- If no live nymphs or adult lice are seen, and the only nits found are more than  $\frac{1}{4}$ -inch from the scalp, the infestation is probably old and no longer active and does not need to be treated



Dandruff

# Treatment Of Head Lice...

- Treatment for head lice is recommended for persons diagnosed with an active infestation
- **All household members** and other close contacts should be checked **two-three days**; those persons with evidence of an active infestation should be treated
- Retreatment of head lice usually is recommended



# Examples Of Treatments..

- Insecticides
- Mechanical Removal
- Enzyme Treatments
- Antibiotics
- Suffocation Agents
- Heat/Cold Treatments
- Haircut



Before **ANY** treatment contact a pharmacist or your  
healthcare provider

# At Home...

- Hats, scarves, pillow cases, bedding, clothing, and towels worn or used by the infested person in the **2-day** period just before treatment is started can be **machine washed** and dried using the **hot water** and **hot air** cycles because lice and eggs are killed by exposure for 5 minutes to temperatures greater than 53.5°C (128.3°F)
- Items that cannot be laundered may be **dry-cleaned** or **sealed in a plastic bag for two weeks**



# At Home

- Items such as hats, grooming aids, and towels that come in contact with the hair of an infested person **SHOULD NOT** be shared
- Vacuuming furniture and floors can remove an infested person's hairs that might have viable nits attached
- Pets can **NOT** transmit lice and **SHOULD NOT** be treated



# National Association Of School Nurses..

- It is the position of the National Association of School Nurses that the management of pediculosis should **NOT** disrupt the education process
- **Children found with live head lice should remain in class, but be discouraged from close direct head contact with others**
- The school nurse should contact the parents to discuss treating the child at the conclusion of the school day
- **Classroom-wide or school-wide screening is not merited**

# Prevention..

- **AVOID** head-to-head contact during play at school and at home
- **DO NOT** share clothing, such as hats, scarves, coats, sports uniforms and hair ribbons
- **DO NOT** share infested combs, brushes or towels
- **DO NOT** lie on beds, couches, pillows, carpets or stuffed animals that have been in contact with an infected person
- Talk with your child about not sharing clothing with anyone



# Lice And Schools..

- No-nit policies developed by school systems were established in response to the **stigma and unclear transmission** of lice
- The National Association of School Nurses (NASN) states that children who have been treated for lice **SHOULD NOT** be excluded from school because of the existence of residual nits (NASN)
- According to the **American Academy of Pediatrics**, no-nit policies in schools are a detrimental cause of lost time in the classroom



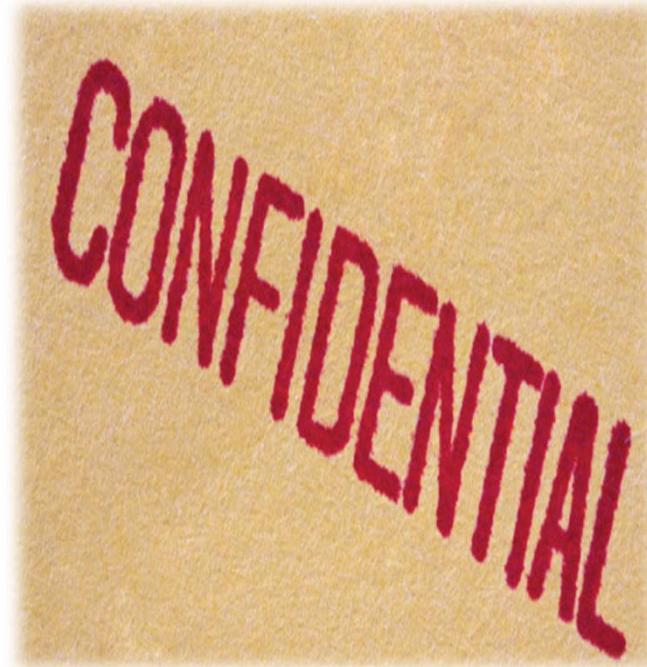
# Lice And Schools..

- Children with an active head lice infestation are likely to have had the infestation for at least a **month** by the time it is discovered
- A child with active head lice have **NO immediate risk to others** and **SHOULD** be allowed to remain in school for the day.
- Lice transmission in school is **LOW**, due to close head-to-head contact which is **LOW** and generally does not happen in the school setting



# Lice And Schools..

- Case of head lice be brought to the school's attention, the school nurse will **MAINTAIN confidentiality** of the student's identity (FERPA)
- Screening entire classrooms is an **unjustified** response (Pollack)
- Parents of students found to have **LIVE** lice should be contacted by the school nurse and advised of treatment options
- Children **SHOULD NOT** be sent home for head lice



# Lice And Schools..

- **NO** notification needs to be sent home to classmates parents
- Insecticides in the school are not warranted and provide unnecessary chemical exposure



Questions..



# Source..

- Centers For Disease Control and Prevention
- HeadLice.org
- Kids Health
- Mayo Clinic
- Medline Plus
- National Association Of School Nurses
- Pollack, Richard., Harvard School Of Public Health

