PEDICULOSIS CAPITIS
(HEAD LICE INFESTATION)

Definition:

Transmissible parasitic skin infection involving the head.

Few conditions seem to cause as much concern and anxiety in schools and homes as an infestation of lice in the hair of children. All socioeconomic groups are affected.

Epidemiologic studies support the following:

Females are infected more frequently than males.
The difference between infection rates for children with long hair and those with short hair are not statistically significant.
Rates are highest in children in elementary grades and special education classes.

Etiology:

Lice are parasites of the human host. There are three types of lice which infest humans; the one of most concern in the school setting is Pediculosis Capitas (head lice). Lice are 2-4 mm in length, wingless, gray-brown, hairy, flat insects, and have special mouth parts for piercing and sucking.

Lice cannot jump or fly. Adult lice and newly hatched nymphs swing from hair shaft to hair shaft rapidly as long as they have rough surface on which to travel. Lice live their lives as external human parasites. They do not survive for more than two days away from their source of food.

The life span for an adult louse is approximately one month. Adult female lice can lay eggs at a rate of eight to ten per day, producing large populations of lice within three to four weeks.

Clinical Manifestations:

Head lice generally inhabit only the hairy surface of the scalp, preferring the nape of the neck and the area behind the ears. Diagnosis is made by direct inspection of the hair and scalp for the presence of crawling lice (adults or nymphs) and/or nits (unhatched eggs). Female lice lay eggs at the junction of the scalp and the hair shaft, but in a warm environment may lay the eggs further from the scalp. Louse eggs are grayish white and oval, darkening to a tan or coffee color as they mature. They are firmly attached to the shaft of hair, usually close to the scalp, by a cement-like substance. Eggs hatch in about a week. In order to survive, the newborn nymph must feed within 24 hours. The nymph matures into an adult louse in eight to nine days at which time it is capable of reproduction.

Once hatched, the egg casing appears white and may be confused with dandruff or a particle of dried hairspray. Nits that contain air pockets or have a shrunken or indented shape will not hatch.

Pediculosis Capitis (Head Lice Infestation) (Continued)
Clinical Manifestations (Continued)

The primary clinical symptom of lice is itching of the scalp, back of the neck and behind the ears, caused by blood sucking of the louse. The itching is often accompanied by scratch marks or what appears to be a rash. Pruritis of the scalp is common. Secondary excoriations and infection accompanied by cervical lymphadenopathy frequently occur from vigorous scratching and may require antibiotic treatment.

Screening Procedures:

Diagnosis of head lice is made by direct inspection of the hair and scalp for the presence of adult lice or nits.

To examine a student for pediculosis, part the hair with wooden tongue blades or applicator sticks. Use a separate tongue blade or applicator for each student. Wearing gloves is not necessary, Watch closely for movement on or near the scalp and for nits on strands of hair.

The only definitive means of diagnosing head lice is to find live lice or nits. The person inspecting the head should look for tiny, silvery, oval eggs glued to the hair shafts near the scalp, especially at the nape of the neck and the behind the ears. Eggs may masquerade as hairspray or gel droplets or dandruff, but these may be easily dislodged and brushed away, while nits remain firmly cemented in place. Live adult lice are seldom seen. They are tiny, quick, protectively colored and relatively few in number compared to the amount of nits that may be present.

The presence of unhatched eggs indicates there has been an active infection. Finding a live louse on the head can be difficult because lice avoid light and can crawl quickly. In general, eggs found more than 1 cm. from the scalp are unlikely to be viable, although some researchers in warmer climates have found viable eggs farther from the scalp.

Mode of Transmission:

Individuals become infected by coming into direct contact with the head of an infested person. Indirect spread through contact with personal belongings of an infested individual (combs, brushes, hats) may occur rarely. For survival, head lice require frequent meals of human blood and without such a meal lice that have fallen or have been brushed off the host will die at room temperature in less than 48 hours. Thus, transmission through objects can only occur for a short period of time.

Management:

Early treatment of infected individuals coupled with environmental precautions is the key to interrupting transmission. The infected individual should be treated and personal articles should be disinfected by appropriate laundering, vacuuming, dry cleaning, or isolation.

Pediculosis Capitis (Head Lice Infestation) (Continued)
Management (Continued)

The infected student should be picked up when a case of head lice is found. Measures should be taken to assure that students with head lice are not identified to other students. If an infestation is detected, the siblings of the infected child should be checked. It is not necessary to perform screenings on the class.

The parents of the excluded child should be given information on how to treat the infestation. Measures include, but are not limited to:

Treatment of the hair and scalp with either a prescription or an over-the-counter product, which may or may not contain pediculicides. Parents may choose to use an OTC "natural" product.

Removal of nits with a fine tooth comb and/or fingernails or tweezers after treatment.

Cleaning of clothing, linens, and objects used by the student in the 24 to 48 hours prior to treatment. Items should be washed, soaked, or dried at temperatures greater than 130°F. Items that cannot be washed should be tightly bagged and placed outside for a period of 2 weeks.

Parents must be advised to re-treat hair in 7 days. Pediculicides are not 100% ovicidal, and re-treatment will kill any emerging nymphs that hatch. Parents should also be instructed to re-examine their children regularly to evaluate the effectiveness of the treatment.

School Considerations:

Once head lice infestation has been identified, the student should be isolated until appropriately treated. Communication with the parent should include an explanation of the problem, possible methods of treatment, and of the importance of examining and treating any other family members who are found to be infected.

The school nurse should act as a resource person to provide parents with information to effectively treat the infestation.

The parent should manually remove nits from the child's hair for the following reasons:

Nit removal can decrease diagnostic confusion
Nit removal can decrease the possibility of unnecessary re-treatment
Removal of nits within 1 cm of the scalp will decrease the risk of self-re-infestation

Pediculosis Capitis (Head Lice Infestation) (Continued)
School Considerations (Continued)

Nits may be removed with a fine tooth comb, and may require individual manual removal with fingers or tweezers.

After treatment, the child should be re-examined by the school nurse prior to re-admission to school. There should be no nits present that are 1 cm. or closer to the scalp. The presence of these nits would be considered as continued infection and, if present, the child should be excluded for further management. At this time, the nurse may have to instruct the parent through demonstration regarding the proper removal of nits.

The student should be re-admitted to school after treatment and nit removal have been verified. The student should be re-examined in 7 to 10 days to determine if new nits or lice have appeared. Presence of new nits would indicate that the treatment was not effective.

Parents will be alerted if a high percentage of infestation in one class is noted by the school nurse.

The school nurse will take an active role in managing children who seem to have a chronic problem with head lice. This will include frequent head checks, Management of chronic cases of head lice may include the school nurse enforcing a “no-nit” policy to avoid self-infestation.

Policy Adopted:
January 16, 1996

Policy Renumbered:
January 23, 2012

Policy Revised:
April 18, 2016

5423
Exhibit A

TO BE PLACED IN DISTRICT LETTERHEAD

Dear Parent or Guardian of _____:

In a screening examination at school, your child was found to have head lice. Head lice do not carry disease. However, to prevent further spread in the school, your child is being sent home and this condition should be treated at once. You are encouraged to consult your family health care provider and follow the recommendations below. Over the counter lice treatment does not require a prescription.

TREATMENT
Several products are available to eliminate lice and their eggs. Consult with your physician or pharmacist for the names of approved products that are effective for treatment of head lice. It will be necessary to remove the nits that remain on the hair after treatment. The removal of nits should be done with a fine tooth lice comb and/or fingernails or tweezers.

READMISSION TO SCHOOL
You must accompany your child, upon return to school, and **present proof of treatment** (i.e. rinsed empty bottle). The student will be re-admitted to school after treatment and nit removal have been verified. If treatment was not satisfactory your child will not be readmitted.

RETREATMENT
Retreatment of all initially infested persons in 7 – 10 days is recommended by the Suffolk County Health Department to insure complete elimination of the infestation. Your child will be rechecked at that time.

CONTROLLING THE SPREAD OF HEAD LICE
All persons in the household should be examined for the presence of head lice. If lice of eggs are detected, all infested persons should undergo treatment with anti-lice shampoo. Persons with head lice should not share personal articles (ex. combs, brushes, hats, coats, towels, etc.).

It is necessary to clean clothing, linens, and objects used by the student in the 24 to 48 hours prior to treatment. Items should be washed, soaked, or dried at temperatures greater than 130°F. Items that cannot be washed should be tightly bagged and placed outside for a period of two weeks.

Please contact me if you have any questions. Thank you for your cooperation.

Sincerely,

School Nurse

5423
Exhibit B

TO BE PLACED ON DISTRICT LETTERHEAD

Dear Parent or Guardian:

There have been some cases of head lice detected and reported in our school.

Parents are requested to examine their children for indications of infestations. Head scratching and intense itching of the scalp are the main indications of head lice. Their presence can be confirmed by a close visual inspection of the hair and scalp under a good light and magnifying glass. Look for tiny grayish crawling forms and/or tiny whitish oval eggs adhering to the hair shafts.

Head lice are generally transmitted from one person to another by **direct** personal contact and by sharing personal items such as combs and brushes, hats, scarves and coats. Lice can spread rapidly if preventive measures are not taken as soon as the lice or their eggs have been detected. Once detected, immediate reporting and proper treatment procedures are instituted, the problem can be quickly and easily eliminated.

Although an annoying problem, head lice infestation should not cause undue alarm...just immediate action. In most cases, all that is required is shampooing with an effective and safe prescription or non-prescription anti-lice shampoo. Consult with your physician or your pharmacist for the names of recommended products. All household members should be examined for the presence of lice and eggs. If detected all infested persons should also undergo treatment with the anti-lice shampoo. Nits (eggs) can be removed manually with the use of a fine-tooth lice comb or by finger extraction.

In addition to shampooing, all clothing and bedding should be washed in hot water (desired temperature 130ºF). Combs and brushes should be soaked at the same temperature for 5 to 10 minutes. Dry clean all clothing that cannot be washed. Vacuum carpets and mattresses thoroughly. Additionally, items can be sealed in a plastic bag for 2 weeks if laundering is not an option.

Remember, lice infestation is actually easier to control than dandruff. If head lice are successfully treated, that is usually the end of the problem. The presence of head lice does require your immediate attention and action. If you think your child may have head lice, please call the school nurse. We will check the child and provide advice and direction...

If you need any further assistance, please do not hesitate to call me at

Sincerely,

School Nurse