Head Lice Information and Control Measures

Head lice are found worldwide. In the United States, infestation with Head lice is most common among preschool children attending child care, elementary school children, and the household members of infested children. Control depends on prompt case finding, proper administrative handling of each case, effective treatment and prevention.

What are head lice?
Head lice are tiny, wingless insects that are particularly adapted to live and breed in human hair near the scalp. They bite like mosquitoes, causing itching and the telltale symptom of frequent head scratching. Actually, the saliva from these bites causes the allergic reaction and itching. Itching may not occur right away, it may take several weeks or months.

The insect is not known to transmit infectious organisms but secondary infections may occur as a result of the scratching. Head lice are a nuisance, not a health hazard. The female louse lays 3-5 eggs per day and may lay up to 100 in her life span. The eggs hatch within 7-10 days; then in another 7-10 days they reach maturity. Adding this all up, the life cycle of a louse is approximately 30 days. All lice need human blood to survive, and without human blood they will die within 24-48 hours.

How are they detected?
The egg cases or nits are easier to see than the lice themselves. The nits are whitish ovals usually attached to the hair shaft within a quarter inch of the scalp especially behind the ears and around the back of the neck. The nits cannot be easily combed or brushed away. A magnifying glass and a disposable examination stick will aid in detection.

How does a head lice infestation spread?
Head lice are spread by crawling from person to person primarily through direct head to head contact. They do not jump or fly. The lice prefer the warmth of the human scalp and the shelter of the hair shafts. They are not likely to leave the comfort of a human head except for the comfort of another human head. Stray lice that fall off a head are either injured or dying and incapable of causing a new infestation. Nits on shed hair are not likely to hatch because they become too cold to survive. Transmission may occur among siblings and playmates wherever children congregate, during birthday parties, sleepovers, and after-school care.

Early Preventive Measures
At the beginning of the school year and before extended breaks, the letter Lice Lessons-Head Lice Education may be sent to each parent from the school principal. This letter could be distributed in the Cobb County Information Folder given to every student. The purpose of the letter is to inform parents of their responsibility in the prevention and control of Pediculosis in the school setting.

The school nurse will serve as a resource for the school and the parent.
Case Findings-Administrative Procedure

- When a faculty member suspects the presence of lice, the student will be referred to the school nurse.

- The school nurse will confirm the presence of lice or nits on the suspected individual. If there should be difficulty in identifying the presence of lice or nits, the school nurse may then refer the student to the area consulting nurse for further evaluation.

- Students with live lice should be sent home immediately with the *NASN – Facing Head Lice Education letter* and recommendations for treatment. If additional cases of live lice (greater than 10%) are found, an additional letter noting reported cases, may be sent home.

- Once live lice has been identified, the school nurse should check his/her siblings and the infested students sent home. If siblings attend another school, that school nurse will be notified to check the siblings.

- Proof of treatment (store receipt/box top from medication) may be required on return to school. The student will be re-examined for crawling forms and evidence of a recent shampoo by the school nurse. Each student will be rechecked for the presence of head lice after 10 days. Parents must begin the process of removing all the egg cases or nits from their child’s hair. The continued presence of egg cases or nits in a student’s hair after treatment is not a sufficient ground for denying him/her readmission to school unless the numbers of nits found are not consistently decreasing over a period of 7 days. However, remaining nits may hatch even after treatment. Parents should be encouraged to continue daily nit removal and alternative methods should be offered. Therefore, all infested persons should be retreated in 7-10 days to deactivate any remaining lice that have hatched or did not die after the first treatment.

- If the student has not been satisfactorily treated for lice or nits, he/she may be refused readmission to school. Parent should be notified to take the student home and the *Pediculosis Second Letter-reported case of head lice letter* will be sent home.

- After 3 consecutive live infestations, the school nurse will notify the area consulting nurse and administrator. The consulting nurse will contact parent for conference/discussion of a dialog exploring what steps were taken to treat the head lice. The consulting nurse will then assess the need for further education and contact the school social worker if necessary.

- The school social worker will be notified if the student stays out of school for an extended period of time due to head lice or for chronic cases of head lice.
Classroom Control Measures

- To assist in the prevention of transmission, all hats and coats should be stored separately. This may be accomplished in any of several ways:
  - Assign individual lockers to students.
  - If lockers are not available, or students share lockers, students should store personal items (i.e., coats, book bags, hats, gloves, scarves, etc.) in plastic bags during the school day.
  - Assign wall hooks 12 inches or more apart to each student or store personal items in individually labeled plastic bags. Monitor the safe use of plastic bags closely especially where younger children are present.
  - In kindergarten classes where dress up clothes may be utilized, clothes should be washed according to guidelines and put away until all signs of infestation are gone.
  - In physical education classes, chances of transmission can be lessened by any of several methods that keep clothing separate. Contact sports may be limited.

- Do not allow use of common pillows.

- Principal can request the custodial staff to thoroughly vacuum the carpet and upholstered furniture in the affected classrooms on a nightly basis until there is no further evidence of infestation.

- Students should not share combs, brushes, hats, coats, towels, bedding, and other personal articles.

- Hand washing and cleaning under the nails is very important.

- Tumbling mats, other gym equipment, carpeting, headsets and other commonly used items should be cleaned thoroughly.

- Treating the classroom environment with a pesticide is not considered effective or necessary.
Treatment and Alternative Treatment Options

- There are several over the counter anti-lice agents available (i.e. Nix, RID, etc). The directions must be followed exactly in order for the agent to be effective. Most agents require retreatment in 7-10 days.
- There are several alternative treatment methods available, please consult the pharmacist or your health care provider for more information. (I.e. olive oil, Cetaphil, mayonnaise, Vaseline, etc.)
- All persons in the household and close friends of the infested child should be examined and treated if necessary.
- After shampooing the head, as directed, all nits should be removed. Put on clean clothing immediately after treatment.
- The pediculicides are used for treatment to kill rapidly crawling lice. They do not kill the nits. The nits must be removed with a nit comb or hand removed.
- Personal articles can be disinfected by machine washing in hot water and/or drying using the hot cycle of the dryer for a minimum of 20 minutes.
- Dry clean or store items in plastic bags for 10 days.
- Vacuum mattresses, pillows, stuffed animals, furniture and carpeting. Discard the contents of the vacuum in a plastic trash bag after each use.
- All clothing and bed linens the treated person has been in contact with during the 3 previous days must be washed in hot water (130 degrees for 20 minutes) and dried in a hot dryer.
- Soak combs/brushes in hot water for 10 minutes.

References

- www.cdc.gov/parasites/lice/head/epi.html. • Centers for Disease Control and Prevention, Web.