

Learning Objectives:

At the conclusion of this discussion, attendees will be able to:

1. Explain the epidemiology of human *Pediculosis capitis* (lice) infestations in children in the United States.
2. Articulate the options for treatment of the child with lice infestation.
3. Describe the control measures that are recommended to prevent transmission of lice infestations including the recommendation against “no-nit” policies in the school setting.

Key Points:

1. Head lice infestation is not associated with illness, disease, or poor hygiene in most-school-aged children. It is a benign condition that seems to cause notable anxiety among parents and school officials.
2. The adult head louse is the size of a sesame seed, with 6 legs, and tan to grayish white in color. The female lives for 304 weeks laying up to 10 eggs per day. Empty egg casings “nits” appear white against darker hair. Eggs incubate for 7-12 days, nymphs hatch (3 stages) taking 9-12 days and become adults. Cycle repeats every 3 weeks.
3. All socioeconomic groups are affected by lice infestations and frequency of infestations is not associated with hair length, or hair care.
4. Lice can only crawl and transmission occurs by direct contact; indirect spread through contact with brushes, combs, or hats is less likely to occur. Lice and eggs found on inanimate objects are usually injured or dead as lice are attracted to the body heat of the head. Louse survival for more than 48 hours after detachment is rare.
5. Lice control should be directed toward eliminating lice on the head of children and their household contacts who have living lice present with a pediculicide.
 - Topical pediculicides include Permethrin 1% (Nix), Pyrethrins plus Piperonyl Butoxide (RID), Malathion (Ovide), Benzyl Alcohol 5% (Ulesfia), Spinosad 0.9% suspension (Natroba), Ivermectin 0.5% (Sklice). [brand names do not imply endorsement of a product]
 - Oral agents include Ivermectin (Stromectol) and Sulfamethoxazole-Trimethoprim (Bactrim)
 - Natural products
 - Occlusive agents
 - Dessication
 - Manual removal
6. Routine classroom or schoolwide screening for nit infestation is discouraged due to an absence of evidence of efficacy. Parental checks and evaluation by a school nurse may be indicated for children who demonstrate symptoms of itching.
7. Children with an active lice infestations pose little to no risk to others and have likely had the lice present for > 1 month. Therefore, children with a lice infestation should be allowed to remain in school until the completion of the school day with communication with the child's parent or guardian that prompt treatment is indicated. Alert letters frequently create more anxiety and public relations concerns than benefit.
8. A child should not be restricted from school return because of a lice infestation as there is low risk of contagion in the classroom setting. The American Academy of Pediatrics and the National Association of School Nurses discourage “no nit” policies that exclude children from school.
9. School nurses can recheck a child's head if requested by a parent and can offer assistance to families with children who are chronically and recurrently lice infested. Parent education by school nurses can facilitate effective treatment delivery.

References:

1. American Academy of Pediatrics, Clinical Report, “Head Lice”, Pediatrics 135(5), May 2015: e1355-e1365.
2. National Association of School Nurses
<http://www.nasn.org/PolicyAdvocacy/PositionPapersandReports/NASNPositionStatementsFullView/tabid/462/smld/824/ArticleID/934/Default.aspx>