

# Head Lice 101

## An Overview for School Nurses

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Head lice (*Pediculus humanus capitis*) are a common community problem. An estimated 6 to 12 million lice infestations occur each year in the United States, most commonly among children ages 3 to 11 years old. Live lice feed on human blood and live close to the human scalp. They are not dangerous and do not transmit disease, but they do spread easily.<sup>1</sup>

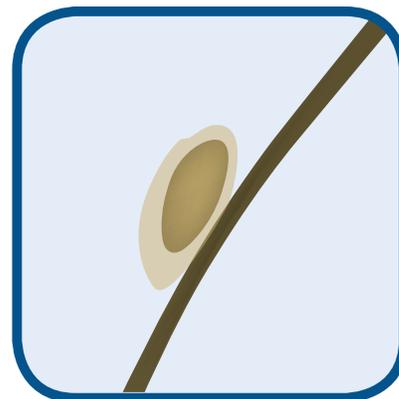
### Signs & Symptoms of Infestation

Signs and symptoms of infestation include<sup>1</sup>:

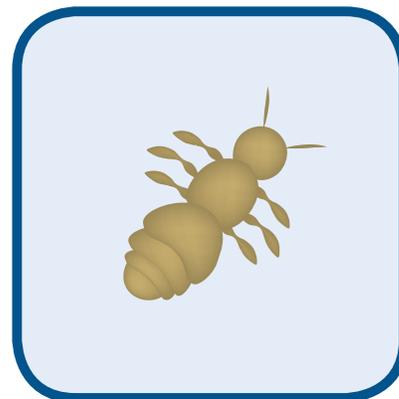
- **Tickling** feeling on the scalp or in the hair
- **Itching** (caused by the bites of the louse)
- **Irritability and difficulty sleeping** (lice are more active in the dark)
- **Sores on the head** (caused by scratching, which can sometimes become infected)

When checking a student for head lice, you may see several forms: the egg, the nymph and the adult louse. The eggs, also called nits, are tiny, teardrop-shaped eggs that attach to the hair shaft. Nits often appear yellowish or white, and can look like dandruff but cannot be removed or brushed off. The nymph, or baby louse, is smaller and grows to adult size in one to two weeks. The adult louse is the size of a sesame seed and appears tan to grayish-white.<sup>1</sup>

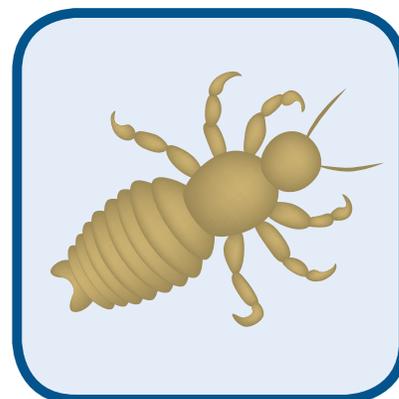
Finding a live nymph or adult louse on the scalp or in the hair – most commonly behind the ears and near the neckline at the back of the head – is an indication of an active infestation.<sup>2</sup>



NIT



Nymph



Full-Grown Louse

### Fast Facts

- An estimated 6 to 12 million infestations occur each year among U.S. children 3 to 11 years of age<sup>1</sup>
- Head lice are most common among children attending child care or elementary school, and the household members of infested children<sup>1</sup>
- Head lice move by crawling; they cannot jump or fly<sup>1</sup>
- Head lice do not transmit disease, but they do spread easily<sup>1</sup>

### Risk Factors & Transmission

Head lice often infest people with good hygiene and grooming habits.<sup>3,4</sup> Children attending preschool or elementary school, and those who live with them, are the most commonly affected.<sup>1</sup>

Head lice are wingless insects that cannot jump or fly. They move by crawling, and are most often spread by direct head-to-head contact. It is also possible, but uncommon, to spread head lice by contact with clothing (such as hats, scarves, coats) or other personal items (such as combs, brushes or towels).<sup>1</sup>

## Treatment

If you suspect a child has head lice, it's important to encourage consultation with a pediatrician or family physician for proper care as soon as possible. Key treatment considerations include:

- Parents should closely follow treatment instructions. Using extra amounts or multiple applications of the same medication is not recommended, unless directed by a healthcare professional.<sup>5</sup>
- Resistance to some over-the-counter (OTC) head lice treatments has been reported, but the prevalence of resistance is not known.<sup>6,7</sup>
- There are new prescription treatment options available that are safe and do not require nit combing. You may want to remove nits for aesthetic reasons.
- There is no scientific evidence that home remedies are effective treatments.<sup>8</sup>
- Family bed linens and recently used clothes, hats and towels should be washed in very hot water.<sup>5</sup>
- Personal articles such as combs, brushes and hair clips should also be washed in hot soapy water or thrown away.<sup>5</sup>

All household members and other close contacts should be checked, and anyone with evidence of an active infestation should be treated. All persons with active head lice should be treated at the same time.<sup>5</sup>

## Communicating with Families

- Head lice infestations can have a considerable psychological impact on children and parents, who may feel stigmatized and ostracized.<sup>9,10</sup>
- School nurses can help by establishing supportive relationships, prevent stigmatization in the community, maintain privacy and confidentiality, and provide ongoing support and reassurance.<sup>11,12,13,14</sup>
- Head lice education and resources are essential to helping correct misinformation and misperceptions. Such information can educate parents on all available treatment options, both OTC and prescription products.

## References

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- <sup>2</sup> Centers for Disease Control and Prevention (CDC). Parasites: Lice: Head Lice: Diagnosis. <http://www.cdc.gov/parasites/lice/head/diagnosis.html>. Accessed November 20, 2013.
- <sup>3</sup> Meinking T, Taplin D, Vicaria M. Infestations. In: Schachner LA, Hansen RC, eds. *Pediatric Dermatology*, 4th ed. Mosby Elsevier; 2011:1525-1583.
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- <sup>5</sup> Centers for Disease Control and Prevention (CDC). Parasites: Lice: Head lice: Treatment. <http://www.cdc.gov/parasites/lice/head/treatment.html>. Accessed November 20, 2013.
- <sup>6</sup> Burkhart CG. Relationship of treatment resistant head lice to the safety and efficacy of pediculicides. *Mayo Clin Proc*. 2004;79(5):661– 666.
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- <sup>13</sup> Schoessler SZ. Treating and managing head lice: the school nurse perspective. *Am J Manag Care*. 2004;10(suppl 9):S273-S276.
- <sup>14</sup> Frankowski BL, Bocchini JA, Jr, Council on School Health and Committee on Infectious Diseases, American Academy of Pediatrics. Clinical report – head lice. *Pediatrics*. 2010;126(2):392-403.