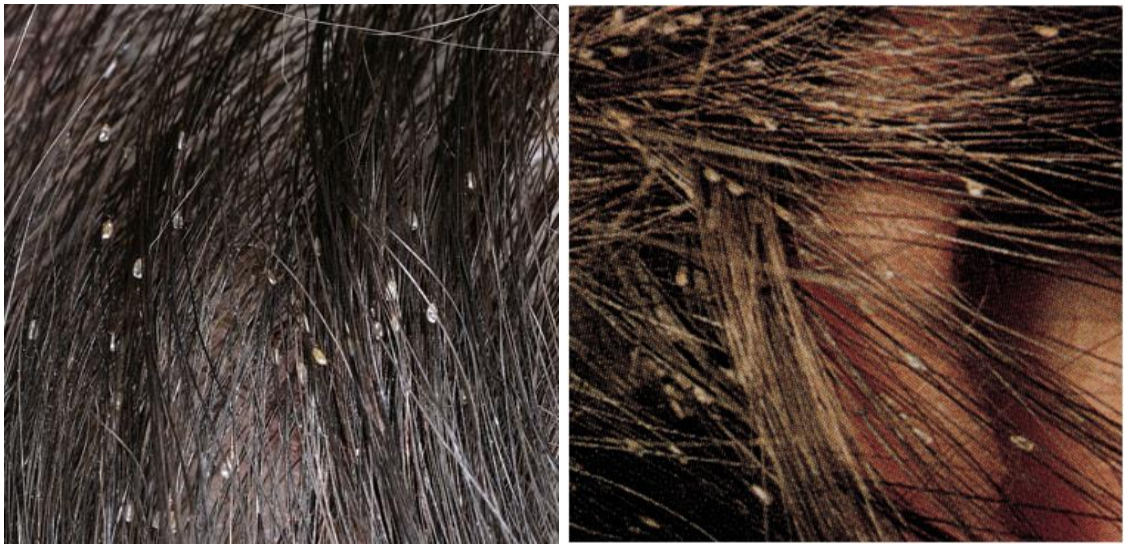
Head Lice Infestation (*Pediculus humanus capitis*)

Infestation with *Pediculus humanus capitis* or head lice is a common health problem that most commonly involved children between 5 and 13 years old, and is one of the most common parasitic infections of children. Despite worldwide distribution, this infestation more commonly occurs in crowded living conditions and developing countries. Although most infestations are asymptomatic, pediculosis capitis may result in considerable discomfort, parental anxiety, and embarrassment to the child, unnecessary absence from school and work also has adverse effects on the schoolchildren's academic performance. It is more common in girl's hair length, and head-to-head contact is by far the most common route of lice. They may also be transmitted by inanimate objects such as clothes, hats, scarves, combs, towels, beddings, hair brushes and upholstered furniture or carpets. Hundreds of millions of head louse infestations affect children every year, and this number is on the rise, in part because of increased resistance to insecticides.

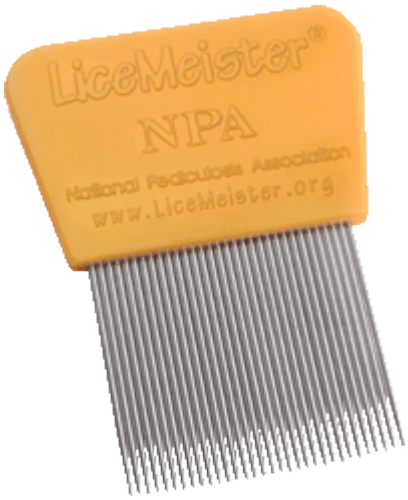
The lice bite the skin and inject saliva during feeding, causing severe pruritus. Scratching causes excoriation and secondary infection. Each day, female lice lay eggs (nits), which cement themselves to the base of the hair shaft in the head and pubic forms. These eggs hatch in 8 days. Itching, excoriation, and secondary infection of bite lesions are common signs. Grayish white nits may also be observed at the base of hair shafts, as can the lice themselves.

Head lice (*P. humanus capitis*) live on the skin among the hairs on the patient's head. Their life span is about 1 month if they are not removed from the body, and the life cycle from egg to adult takes about 3 weeks. Washing the hair reduces the number of nymphs and adult *P. capitis,* and combing with a finely toothed comb removes most of the eggs; combing should be done when the hair is damp. During the washing process, the lice feces are also removed; they can also serve as an irritant during the infestation. It is important to remember that if one person in the family has head lice, the entire family should be treated, since others in the family may be infested but may not be aware of it. Most of the products designed for louse removal are effective, provided that directions are followed. Anti-infective shampoos, creams, lotions, and ophthalmic solutions to kill lice and nits– must be used again about 8 to 10 days after initial treatment to kill remaining hatching nits. In refugee camp situations where body lice can multiply and spread quickly and easily, DDT dust can be applied to clothing; however, resistance to DDT has arisen, and other insecticides may be required for control.

It is important to remember that hair casts (pseudonits), due to dandruff, can be easily confused with head lice. Examination of the hair shafts using the microscope can help distinguish between the vital nits of an active infestation and hatched empty eggs, as well as actual nit eggs versus pseudonits. Nit combs to comb out nits; elimination of body lice from clothing and bedding by washing, boiling, and steaming; elimination of lice from combs and brushes by boiling; vacuuming of carpets and upholstered furniture; cutting fingernails short and using gloves to prevent damage by scratching; prevention by instituting sanitary conditions, encouraging children not to share combs, brushes, caps, scarves, and other articles of clothing; school and community prevention and early detection programs.



Top, Head lice, *Pediculus humanus capitis;* Below, Louse egg cases (nits) on hair shafts.



Lice Comb