

# PUBLIC HEALTH FACT SHEET

# Head Lice (Pediculosis)

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## What are lice?

Lice (singular *louse*) are tiny, wingless insects that survive by feeding on human blood. They cannot jump or fly, and they do not burrow under the skin. Head lice are the most common type of lice and live mainly on the scalp, at the base of the neck, and in the eyebrows and eyelashes. They lay up to six eggs per day, attaching the eggs (called nits) to strands of hair close to the scalp.

## Who gets head lice?

In the United States, children (3 to 12 years old) get head lice more frequently than adults. Anyone can get head lice because they are easily spread from person to person.

Having lice is referred to as an “infestation.” An infestation with head lice does not mean someone is dirty. Head lice have special “claws” on their legs to help them cling to the hair. Washing with plain soap and water does little to disturb them.

## How are head lice spread?

Head lice are spread through direct, person-to-person contact or, less commonly, through contact with an infested person’s personal items, such as hair brushes and combs, hats, unwashed clothing, bedding or towels. Head lice are commonly spread within households. Children often spread head lice to each other during close contact while playing. Head lice can crawl from an infested person or object to a non-infested person. An infested person can continue to spread head lice to other people until s/he has successfully completed a course of treatment that kills all of the head lice and their eggs. Pets cannot spread head lice.

## What are the symptoms of head lice?

A person who has head lice may feel itching caused by a reaction to the louse’s saliva and feces, but many children have no symptoms. Head lice are not known to spread infectious diseases from person to person and should not be thought of as a medical problem. However, there is some risk of skin infection from too much scratching. Head lice are certainly a nuisance, but they are not generally considered a health hazard.

## How are head lice diagnosed?

The best way to determine if someone is infested with head lice is to find a living adult louse. However, adult head lice are rarely seen because they are fast and hide well. Identification of a head lice infestation is usually made by detecting nits attached to the hair close to the scalp. Nits are tiny, grey, oval specks that do not come off of the hair easily like a speck of dandruff would. Behind the ears and near the hairline at the base of the neck are common places to find nits. Nits found within  $\frac{1}{4}$  of an inch from the scalp usually mean the nits are alive and treatment is needed. If the nits are more than  $\frac{1}{4}$  of an inch from the scalp, you should ask your doctor if treatment is necessary.

## How do you prevent head lice?

Children should be checked regularly and treated when head lice are found. Parents should learn to recognize head lice and, as an extra precaution, teach their children not to share hats and scarves or personal hair care items, such as brushes, combs and hair ties.

## What is the treatment for head lice?

Treatment for head lice consists of shampooing the hair with a medicated shampoo or cream rinse containing one of the following chemicals: *pyrethrin*, *permethrin*, *lindane* or *malathion*. The chemicals used to kill the head lice and their nits may be toxic and should be used with care, under the supervision of a health care provider (even though some of them do not need a prescription). Be sure to follow the package or label instructions very carefully. Removal of all nits after treatment with these chemicals is not necessary to prevent further spread, although some schools and daycare centers have “no-nits” policies (see below). Check the hair daily for the next 10 days for more nits or newly hatched head lice. If these are present, an additional treatment may be necessary.

Women who are pregnant or nursing, and parents concerned about an infant with lice should contact a healthcare provider before using these chemicals.

### **Additional precautions:**

Remember, head lice do not survive for long periods of time off of the scalp. The following steps should be taken to avoid reinfestation by lice that have *recently* fallen off of the head of an infested person.

- Wash headgear, pillow cases, and towels in the washing machine in hot water and dry them in a machine dryer on the hot cycle.
- Any items that cannot be washed should be sealed in a plastic bag for 2 weeks. This leads to the death of any lice in these objects.
- Combs and brushes can be washed with one of the lice-killing shampoos or soaked in **hot** (128.3°F/53.5°C) water for 5 minutes. This should kill any lice on these items.
- Thoroughly vacuum rugs, upholstered furniture, and mattresses.
- **DO NOT USE INSECTICIDE SPRAYS TO TREAT INFESTED PEOPLE.** These chemicals can be harmful to both people and pets.

Reinfestation occurs with some regularity and can be frustrating for parents, teachers and children. Treating reinfested and newly infested cases at the same time may help to stop the cycle.

## What is a “no nits” policy?

Many school departments and child care sites require that children be free of nits before returning to school. These policies vary from school to school, and parents should be familiar with their own school’s or day care’s head lice policy. The American Academy of Pediatrics does not recommend “no nits” policies because they have not been shown to be effective in controlling head lice transmission.

## Where can I find more information?

- Your doctor, nurse, health clinic, or local board of health (listed in the phone book under “local government”)
- The Massachusetts Department of Public Health (MDPH) Division of Epidemiology and Immunization, (617) 983-6800, or the MDPH Website: <http://www.state.ma.us/dph/>
- The Harvard School of Public Health Website on head lice: <http://www.hsph.harvard.edu/headlice.html>
- The US Centers for Disease Control and Prevention: [www.cdc.gov/ncidod/dpd/parasites/lice/default.htm](http://www.cdc.gov/ncidod/dpd/parasites/lice/default.htm)