

Mater Dei School Head Lice Fact Sheet

This fact sheet will answer some frequently asked questions regarding head lice and its treatment.

What are head lice?

The head louse, or *Pediculus humanus capitis*, is a parasitic insect that can be found on the head, eyebrows, and eyelashes of people. Head lice feed on human blood several times a day and live close to the human scalp. Head lice are not known to spread disease.

Who is at risk for getting head lice?

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. Although reliable data on how many people in the United States get head lice each year are not available, an estimated 6 million to 12 million infestations occur each year in the United States among children 3 to 11 years of age.

Head lice move by crawling; they cannot hop or fly. Head lice are spread by direct contact with the hair of an infested person. Anyone who comes in head-to-head contact with someone who already has head lice is at greatest risk. Spread by contact with clothing (such as hats, scarves, coats) or other personal items (such as combs, brushes, or towels) used by an infested person is uncommon. Personal hygiene or cleanliness in the home or school has nothing to do with getting head lice.

What do head lice look like?

Head lice have three forms: the egg (also called a nit), the nymph, and the adult.



Illustration of egg on a hair shaft. (CDC Photo)

Egg/Nit: Nits are lice eggs laid by the adult female head louse at the base of the hair shaft nearest the scalp. Nits are firmly attached to the hair shaft and are oval-shaped and very small (about the size of a knot in thread) and hard to see. Nits often appear yellow or white although live nits sometimes appear to be the same color as the hair of the infested person. Nits are often confused with dandruff, scabs, or hair spray droplets. Head lice nits usually take about 8-9 days to hatch. Eggs that are likely to hatch are usually located no more than $\frac{1}{4}$ inch from the base of the hair shaft. Nits located further than $\frac{1}{4}$ inch from the base of hair shaft may very well be already hatched, non-viable nits, or empty nits or casings. This is difficult to distinguish with the naked eye.



Nymph form. (CDC Photo)

Nymph: A nymph is an immature louse that hatches from the nit. A nymph looks like an adult head louse, but is smaller. To live, a nymph must feed on blood. Nymphs mature into adults about 9-12 days after hatching from the nit.

Adult: The fully grown and developed adult louse is about the size of a sesame seed, has six legs, and is tan to grayish-white in color. Adult head lice may look darker in persons with dark hair than in persons with light hair. To survive, adult head lice must feed on blood. An adult head louse can live about 30 days on a person's head but will die within one or two days if it falls off a person. Adult female head lice are usually larger than males and can lay about six eggs each day.



Adult louse claws. (CDC Photo)

Where are head lice most commonly found?

Head lice and head lice nits are found almost exclusively on the scalp, particularly around and behind the ears and near the neckline at the back of the head. Head lice or head lice nits sometimes are found on the eyelashes or eyebrows but this is uncommon. Head lice hold tightly to hair with hook-like claws at the end of each of their six legs. Head lice nits are cemented firmly to the hair shaft and can be difficult to remove even after the nymphs hatch and empty casings remain.

What are the signs and symptoms of head lice infestation?

- Tickling feeling of something moving in the hair.
 - Itching, caused by an allergic reaction to the bites of the head louse.
 - Irritability and difficulty sleeping; head lice are most active in the dark.
 - Sores on the head caused by scratching. These sores can sometimes become infected with bacteria found on the person's skin.
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How did my child get head lice?

Head-to-head contact with an already infested person is the most common way to get head lice. Head-to-head contact is common during play at school, at home, and elsewhere (sports activities, playground, slumber parties, camp).

Although uncommon, head lice can be spread by sharing clothing or belongings. This happens when lice crawl, or nits attached to shed hair hatch, and get on the shared clothing or belongings. Examples include:

- sharing clothing (hats, scarves, coats, sports uniforms) or articles (hair ribbons, barrettes, combs, brushes, towels, stuffed animals) recently worn or used by an infested person;
 - or lying on a bed, couch, pillow, or carpet that has recently been in contact with an infested person.
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Dogs, cats, and other pets do not play a role in the spread of head lice.

How is head lice infestation diagnosed?

The diagnosis of a head lice infestation is best made by finding a live nymph or adult louse on the scalp or hair of a person. Because nymphs and adult lice are very small, move quickly, and avoid light, they can be difficult to find. Use of a magnifying lens and a fine-

toothed comb may be helpful to find live lice. If crawling lice are not seen, finding nits firmly attached within a ¼ inch of base of the hair shafts strongly suggests, but does not confirm, that a person is infested and should be treated. Nits that are attached more than ¼ inch from the base of the hair shaft are almost always dead or already hatched. Nits are often confused with other things found in the hair such as dandruff, hair spray droplets, and dirt particles. If no live nymphs or adult lice are seen, and the only nits found are more than ¼-inch from the scalp, the infestation is probably old and no longer active and does not need to be treated.

Do head lice spread disease?

Head lice should not be considered as a medical or public health hazard. Head lice are not known to spread disease. Head lice can be an annoyance because their presence may cause itching and loss of sleep. Sometimes the itching can lead to excessive scratching that can sometimes increase the chance of a secondary skin infection.

Can head lice be spread by sharing sports helmets or headphones?

Head lice are spread most commonly by direct contact with the hair of an infested person. Spread by contact with inanimate objects and personal belongings may occur but is very uncommon. Head lice feet are specially adapted for holding onto human hair. Head lice would have difficulty attaching firmly to smooth or slippery surfaces like plastic, metal, polished synthetic leathers, and other similar materials.

Treatment

Pediculosis (headlice). Each student infested with lice shall be excluded from school, child care facility, or family day care home until treatment with an antiparasitic drug is *initiated*. (Kansas Department of Health and Environment).

General Guidelines

Treatment for head lice is recommended for persons diagnosed with an active infestation. All household members and other close contacts should be checked; those persons with evidence of an active infestation should be treated. Some experts believe prophylactic treatment is prudent for persons who share the same bed with actively-infested individuals. All infested persons (household members

and close contacts) and their bedmates should be treated at the same time.

Retreatment of head lice usually is recommended because no approved pediculicide is completely ovicidal. To be most effective, retreatment should occur after all eggs have hatched but before new eggs are produced. The retreatment schedule can vary depending on whether the pediculicide used is ovicidal (whether it can kill lice eggs).

When treating head lice, supplemental measures can be combined with recommended medicine (pharmacologic treatment); however, such additional (non-pharmacologic) measures generally are not required to eliminate a head lice infestation. For example, hats, scarves, pillow cases, bedding, clothing, and towels worn or used by the infested person in the 2-day period just before treatment is started can be machine washed and dried using the hot water and hot air cycles because lice and eggs are killed by exposure for 5 minutes to temperatures greater than 53.5°C (128.3°F). Items that cannot be laundered may be dry-cleaned or sealed in a plastic bag for two weeks. Items such as hats, grooming aids, and towels that come in contact with the hair of an infested person should not be shared. Vacuuming furniture and floors can remove an infested person's hairs that might have viable nits attached.

HEAD LICE TREATMENT CHECKLIST

(Please read all of this information prior to beginning the checklist.)

Hair Treatment

When using an over-the-counter or prescription medication, follow these treatment steps:

- 1. Apply lice medication according to label instructions. If your child has extra long hair, you may need to use a second bottle. **WARNING:** Do not use a crème rinse or combination shampoo/conditioner before using lice medication. Do not re-wash hair for 1-2 days after treatment.
- 2. Remove all bugs and eggs (nits) from hair after lice treatment is done. Using a nit comb with long metal teeth, such as “The Lice Meister” works best. However, you can choose to pull them out with your fingers, or by using tweezers. This should be done by dividing the hair into small sections and combing one section at a time. Pin clean sections of hair out of the way. Since the nits are hard to see, it is important to have a bright light and possibly a magnifying glass to help you inspect the hair.
- 3. Have the infested person put on clean clothing after the treatment.
- 4. Comb through the hair with a nit comb daily for the next week.
- 5. After 7 days, no sooner, if any live bugs are seen, repeat lice treatment (only one more time).

Alternative Hair Treatments

Some lice treatment medications are toxic and not recommended for use in some situations. Any product containing Lindane is discouraged and should not be used on children under 2 years of age, by pregnant women, or nursing mothers. Optional, non-pharmacological treatments include the use of olive, baby, vegetable, or corn oil or natural enzyme products such as *Lice R Gone*, *Lice B Gone*, and *Not Nice To Lice*. When using oil, saturate the hair so much that it is literally dripping. Place a plastic cap or towel on the head and leave the oil on the hair for at least 8 hours. Comb through the hair with a nit comb to remove all bugs and eggs (nits). Wash the hair, and comb through the hair once more. When using a natural enzyme product, follow the manufacturer’s directions. Regardless of treatment method, follow all of the directions on this checklist.

Cleaning Your Surroundings

Follow these steps to avoid re-infestation of head lice. Begin immediately after treating hair.

- 1. Soak combs, brushes, barrettes, hair ornaments, etc. for 20-30 minutes in hot (130° F) water.
- 2. Machine wash all washable clothing and bed linens that the infested person used 2 days before treatment. Use the hot water (130° F) cycle. Dry laundry using high heat for at least 30 minutes. Make sure to include the following:
 - clothing, hats, coats, scarves, and mittens;
 - towels and washcloths;
 - bed sheets, pillow cases, and blankets; and
 - pony tail holders and headbands.
- 3. Dry clean clothing that is not washable OR
- 4. Store clothing, stuffed animals, comforters, etc., that cannot be washed or dry cleaned, in a tightly sealed plastic bag for 2 weeks. After the 2 week period, open the bag outdoors and shake out the items vigorously.
- 5. Vacuum all carpeted areas, upholstered furniture, mattress, and stuffed animals. Discard vacuum cleaner bag after vacuuming, or set vacuum in a room separate from living quarters.
- 6. Repeat vacuuming every day for at least one week.
- 7. Wipe down counter tops and mop floors.
- 8. Clean and vacuum motor vehicles.
- 9. Inform school, parents and others that have been in contact with the infested person.
- 10. Incorporate a head check every three days as part of normal grooming activity with your child.

Images to assist with the identification of head lice and their eggs.

