

<b>Cause</b>	<p><i>Pediculus humanus capitis</i>, a louse. The life cycle of the louse is divided into three phases:</p> <ol style="list-style-type: none"><li>1. nits: eggs laid by adult females and are cemented at the base of the hair shaft nearest to the scalp, usually within 6 mm. Takes 1 week to hatch. Difficult to see but are oval and usually yellow to white.</li><li>2. nymph: hatched egg; resembles an adult but much smaller; matures in 9 - 12 days. Must feed on blood to survive.</li><li>3. adult: louse grows to about the size of a sesame seed, has 6 clawed legs, and is tan to grayish-white. It can live up to 30 days on the infested head and needs to feed on blood several times per day; it will die within 1-2 days off the host.</li></ol> <p>Lice infestation is most common in children 3 to 12 years of age. Girls get head lice more often than boys, women more often than men. They are found most commonly on the scalp behind the ears, at the nape of the neck. They are rarely found on the body, eyelashes, or eyebrows.</p>
<b>Symptoms</b>	<p>Itching of the scalp and neck. Look for:</p> <ul style="list-style-type: none"><li>• Crawling lice in the hair, usually few in number</li><li>• Eggs (nits) glued to the hair, often found at the back of the neck</li><li>• Scratch marks on the scalp or back of neck at hairline</li></ul>
<b>Spread</b>	<p>By direct contact with the head of another infested person. Indirect spread through contact with personal belongings of an infested person (as, combs, brushes, hats, scarves, bedding) is less likely but can occur. Transmission most often occurs among household members because of the close proximity of living conditions.</p> <p>Lice do not jump or fly; they crawl and can fall off the head. Lice do not live longer than 48 hours off the head. They lay their eggs only while on the head. Nits which are more than 1/4" from the scalp are dead or empty and will not hatch. Also, eggs do not hatch if they have fallen off. Lice do not spread to or from pets as they do not become infested. However, pets may carry the lice from one person to another. Avoid close contact with pets and refrain from permitting animals to sleep with household members during an infestation. Do not treat animals with medicines for humans.</p>
<b>Incubation Period</b>	Eggs (nits) hatch in 7 – 10 days
<b>Period of Communicability</b>	Until treated with lice – killing medication. Crawling forms of the louse are communicable; the nits are not.
<b>Diagnosis</b>	Head lice infestation is confirmed by inspecting the scalp and hair for the presence of nits, nymphs or live adult lice. Finding a nymph or an adult louse may be difficult because there are few of them and they move very quickly. If nits are visible farther than 6 mm from the scalp and no nymphs or adult lice are seen, the infestation is a past infestation and does not require treatment. If nits are discovered in the hair, but live lice are not seen, they can be re-inspected periodically for live lice. Adequate lighting should be used for the inspection as well as disposable sticks used to adequately separate the hair. A thorough examination may take several minutes.

## Treatment

Pediculicides, either lice-killing shampoo or lotion, either purchased over-the-counter or by prescription (from a physician). Instructions must be followed carefully. Shampooing should be rinsed off over a sink rather than in a shower or tub, and with cool rather than warm water, to reduce skin absorption of the pediculicides. Do not use crème rinse before doing the treatment.

If live lice are seen after treatment, try a different brand.

For some medications, a second treatment is needed 7 – 10 days later to kill nits that have survived the first treatment.

Remove nits from the hair with a fine-toothed comb.

Wait 1-2 days before shampooing the hair but then shampoo at least twice a week for 2 weeks. Vigorously combing out the wet hair seems to slow down the lice.

Avoid over-use of pediculicides to avoid toxic exposure.

## Prevention/Control

1. Avoid sharing hair care items, towels, bedding, clothing, hats, and headgear.
2. Hang clothing in individual lockers or on assigned coat hooks. Hooks should be spaced at least 12 inches apart so that clothing does not touch.
3. Clean items such as clothing, furniture or carpeting that have come in contact with the head of the infested person in the 24 to 48 hours before treatment. Wash, soak or dry items at temperatures  $\geq 130^{\circ}$  F to kill stray lice or nits. Furniture, carpeting, car seats, etc., may be vacuumed. Items that cannot be washed can be dry cleaned or bagged in plastic for 2 weeks, by which time any nits that may have survived would have hatched and nymphs would be without food source. Pediculicide spray should not be used because the chemical exposure cannot be controlled. Nits are unlikely to incubate and hatch at room temperatures. Major cleaning measures are unnecessary.

## Exclusion

### Not necessary

Lice infestation poses little risk to others and does not have a resulting health problem for the infested person. The person should be discouraged from having close direct head contact with others until the problem has resolved. Mass screenings, blanket notification to others of the situation, restricting use of safety helmets are not justified responses.

A parent/guardian/person should be notified of the situation at the end of the day and that prompt, proper treatment of the condition is in the best interest of the child and of his/her classmates/housemates and/or family. The person may return to the activities after the treatment is complete. The person's head should be re-inspected by staff 7-10 days later; if there is evidence of live lice or additional nits, the process of exclusion and treatment should be repeated. If the problem persists after the second treatment, a different product should be used. If the problem continues after the new product treatment, then a physician should be consulted for further advice.