# **HEAD LICE (PEDICULOSIS)**

#### Life Cycle

The head louse is one of three types of lice that infest people. These tiny insects (about 1/10 to 1/8 of an inch long) make their home in human hair and feed on human blood. Head lice multiply rapidly, laying small grayish-colored oval-shaped eggs (called nits), which they glue to the base of the hair, close to the scalp.

# Signs of Head Lice Infestation

Although head lice are hard to find, you can see the nits if you look closely. They are most often found along the hairline at the back of the head and neck, and behind the ears. Nits should not be confused with an accumulation of hair spray, hair gels, or dandruff. Dandruff can be easily flicked off the hair; nits cannot because they are firmly attached to individual hairs.

### Who Can Get Head Lice?

Anyone can get head lice. They are not a sign of being dirty. Most people don't know they are infested until they see the nits or lice. One telltale sign of head lice is a persistent itching of the scalp, which is sometimes accompanied by infected scratch marks or what appears to be a rash.

#### **How Does an Infestation Occur?**

Head lice have no wings and do not fly or jump, but they can run through hair quickly. You can "catch" head lice through:

- 1. Direct contact with an infested person;
- 2. Sharing personal items such as combs, brushes, other hair-care items, towels, and pillowcases; and
- 3. Sharing clothing, headgear (hats, scarves, football and batting helmets, etc.), ribbons, and other head coverings.

# **Treatment and Control**

If you have questions concerning diagnosis and treatment of head lice, call your doctor or public health department. The recommended treatment includes using either a prescription or over-the-counter (OTC) medicated (lice-killing) product. Effective head lice treatments include:

- "Nix," a cream rinse product available OTC which contains permethrin, a synthetic insecticide:
- 2. many brands of pyrethrin-based shampoo products ("RID," "R&C," "Triple-X," etc.) which are also available OTC; and
- 3. "Ovide," a prescription drug containing malathion. With all of these products, the lice are usually killed with one treatment; however, a second treatment 7 to 10 days later is often necessary to ensure all of the nits are killed.

Because there have been reports of treatment failure with OTC products, when re-treating make sure instructions on the product are being carefully followed or talk to your health care provider. Shampoos containing lindane ("Kwell," etc.) are no longer the first choice for head lice treatment because of the risk of neurological toxicity associated with lindane.

Dead nits do not fall off the hair after treatment. Because they are strongly cemented on, they are often difficult to remove. A nit comb or fingernails can be used to remove nits. Nits remaining in the hair after treatment should not be confused with live nits. Head lice lay their eggs very close to the scalp, and they hatch within a week – before the hair grows more than ¼ inch. Nits found any farther along on the hair shaft than ½ inch will have already hatched or been killed during treatment and their removal is not necessary.



# **HEAD LICE (PEDICULOSIS) – page 2**

#### **Alternative Treatments**

Many alternatives to OTC or prescription head lice control products have been suggested. Although there is little scientific information to support these methods, successful treatment has been reported using several alternative treatments when conventional treatments haven't worked, or when there is a concern about the toxicity of using head lice control products repeatedly.

The Minnesota Department of Health cannot recommend these treatments without further evidence of their effectiveness. However, we feel it is important to mention some of the more commonly used methods.

The alternative treatments listed below are referred to as suffocants. When applied, the treatment may suffocate and/or create a habitat unfavorable to the head lice.

- Petroleum jelly (Vaseline<sup>TM</sup>)
- Mayonnaise
- Oil (e.g., vegetable, olive, or mineral)

#### Clean Up

Head lice cannot survive off the human body for more than two days. The do not reproduce off the body. They do not live on pets. Any nits, which fall off the head, will not hatch or reattach. To keep lice from returning, you should:

- Wash bedding in hot water (130 degrees F) and dry in a hot dryer or iron with a hot iron. Wash and dry recently worn clothing (including coats, caps, and scarves) in hot temperatures. Clothing or bedding that cannot be washed may be dry cleaned or sealed in a double plastic bag for two weeks.
- Clean combs, brushes, and similar items by:
  - soaking in the medicated shampoo for 10 minutes, or
  - soaking in a 2% Lysol solution for one hour, or
  - heating in water of at least 130 degrees
    F for 10 minutes.
- Clean floors, carpeting, and furniture by thorough vacuuming only. The use of insecticide sprays is not recommended.

# **Prevention**

When it is known that head lice are present in a community, parents are encouraged to check their children's heads for lice on a regular basis throughout the year. FAMILIES SHOULD NOT DEPEND ON SOMEONE ELSE TO CHECK A CHILD'S HEAD – THIS MAY DELAY TREATMENT. Remember, if one person in a family, camp, or school has head lice, there's a chance others will too. Check everyone, and use the same treatment, if necessary.

The Minnesota Department of Health makes the following recommendations to schools concerning head lice:

- School districts should make their own policies on whether or not to do "head checks" at school. Parents should not rely on school staff to check for lice but should do this at home, whether or not the children are checked at school.
- Infested children do not need to be dismissed from school.
- When a case of head lice is found, notices should be sent home to inform parents and advise them to check for lice in their children's hair.

**Note:** The use of brand names is for identification purposes only, not for product endorsement.

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