

"Bug of the Month"

As the start of the school year is rapidly approaching, a discussion of head lice seems appropriate. Normally, our first encounter with head lice occurs at an early age. It seems somebody is always bringing these little creatures to or from school or daycare.

Lice (louse is singular) comprise a group of very specialized insects. Medical Entomologists are primarily concerned with lice in the Order Anoplura (sucking lice) because of their parasitic relationship with humans. The human body louse, *Pediculus humanus corporis*, is responsible for transmitting epidemic typhus, trench fever and relapsing fever in Europe, Asia, Africa, Mexico, Central and South America. In the United States, most of us are familiar with the head louse. While head lice are not responsible for disease transmission, they are annoying and their feeding may result in secondary infection from scratching the bite sites.

WHAT DO THEY LOOK LIKE? Head lice are tiny (1-3 mm long), elongate, soft-bodied, light colored and wingless. They are dorsoventrally (top-to-bottom) flattened, with an angular ovoid head and a round abdomen. The head has a pair of simple eyes and short antennae. Head lice have specially modified claws that enable them to grasp tightly to hair shafts, while they feed through specially modified piercing-sucking mouthparts.



WHERE ARE THEY FOUND? Head lice are found on the skin among the hairs on the head. Eggs (nits) are laid on the hair shaft near the base and attached with a strong glue-like substance. They are found most commonly behind the ears and at the nape of the neck. As long as the adults remain on the scalp, they can live for about a month.



Eggs hatch after 5-10 days and the young begin feeding immediately. In as little as 18 days, the lice mature, mate and the female is ready to lay eggs. The egg to adult cycle averages 3 weeks.

HOW TO MANAGE INFESTATIONS. There are three general steps to be followed; (1) delousing infested individuals through application of pediculicidal or cream rinses, (2) removing nits from the hair as thoroughly as possible and (3) delousing personal items (e.g. clothes, hats, combs, pillows, etc.).

(1) It is *extremely important* to treat all infested members of any group concurrently. If an infested child is the only one treated, he may be re-infested by a friend or family member who is not treated. There are several over the counter and prescription treatments available. Consult with your physician for the suggested formulation.

(2) It is also important to remove as many nits as possible for two reasons. First, reducing the number of viable eggs in the hair reduces the chance of persistent infestation and treatment failure. Second, removal of nits lessens concern about continued infestation and risk of spread to others. Specifically designed combs can be purchased to remove nits. Additionally, combing out nits is more successful if the hair is wet.

(3) Finally, efforts should be made to delouse all personal belongings of infested individuals. Wash all items and place them in the dryer for at least 30 minutes on high heat. Non-washable items should be dry-cleaned. Other personal items such as combs and brushes should be thoroughly washed in one of the pediculicidal products or soaked in hot water (130°F) for 10 minutes. Discourage the sharing of clothing articles and grooming items, such as combs, with others.

MORE QUESTIONS? Please do not hesitate to give your "Bug Docs" a call at comm.: (360) 315-4450, DSN: 322-4450 or you can e-mail us at MEI@ndvecc.navy.mil.