

# EXTENSION

Institute of Food and Agricultural Sciences

## Body Lice and Pubic Lice<sup>1</sup>

C. W. Scherer and P. G. Koehler<sup>2</sup>

Body lice and pubic lice (or crab lice) are two of the three types of lice species affecting humans. The head louse, the third species, possesses unique behavior, is most commonly a pest of school children, and is the topic of fact sheet, ENY-296. Body lice and pubic lice are found only on humans. Presence of the body louse is of great concern because it is the vector of several human diseases. Epidemic typhus, trench fever, and epidemic relapsing fever (louse-borne typhus) are all transmitted by the body louse. Fortunately, body lice are not common in the United States.

The pubic louse is of much less medical importance but remains a significant nuisance. It is estimated that over 12 million people in the United States contract pubic lice each year.

#### Biology

The body louse (*Pediculus humanus C.*) and pubic louse (*Phthirus pubis*) are blood sucking insects. These insects bite into the skin of an unlucky human host and take a blood meal much like fleas and mosquitoes. A louse cannot survive off the host longer than 48 hours.

The body louse (Figure 1) usually resides within the clothing of its host (most commonly an adult) and only comes into contact with the skin to feed. The female body louse lays its eggs in the seams of clothing. These eggs (nits) will then hatch within about a week to ten days. The young body lice (nymphs) will grow and molt three times over another week or so before becoming mature adults (approximately 1/8 inch in length). A mature body louse might live up to 10 days. A female body louse might lay over 200 eggs during this period. The eggs of lice are very small (less than 1/16 inch long) and are typically white to yellowish-brown.



Figure 1. Adult body louse.

The Institute of Food and Agricultural Sciences is an equal opportunity/affirmative action employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap, or national origin. For information on obtaining other extension publications, contact your county Cooperative Extension Service office. Florida Cooperative Extension Service/Institute of Food and Agricultural Sciences/University of Florida/Christine Taylor Waddill, Dean.

**ENY-208** 

This document is ENY-208, one of a series of the Entomology and Nematology Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Revised: January 2001. Please visit the EDIS Website at http://edis.ifas.ufl.edu. Additional information on these organisms, including many color photographs, is available at the Entomology and Nematology Department WWW site located at http://www.ifas.ufl.edu/~entweb/entomolo.htm.

C. W. Scherer, graduate assistant and P. G. Koehler, professor/extension entomologist, Entomology & Nematology Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

#### Body Lice and Pubic Lice

The pubic louse (Figure 2) is most often associated with the pubic region of its host where it clings to pubic hairs with highly modified claws. The female pubic louse lays its eggs attached to pubic hairs near the skin surface. A pubic louse egg will hatch within 6 - 8 days. After 15 - 16 days and three molts, an adult pubic louse will emerge. A female pubic louse may lay up to 90 eggs during its lifetime which lasts about 12 days.



Figure 2. Crab louse.

#### How You Get Lice

Body lice are associated with, but not restricted to, unclean people who do not change clothing often. Once infested, a person can transmit individual body lice through direct contact or by sharing infested clothes or bedding.

Transmission of pubic lice is usually associated with close sexual contact. During this type of close personal contact pubic lice may be transferred from one person to another directly. It is possible for pubic lice to be transmitted from undergarments, bedding, and toilet seats but this indirect transmission is very uncommon.

#### Symptoms/Detection

The first symptom associated with body and pubic lice is itching. This itching is usually followed by the infected person scratching these areas. The scratching can lead to further skin irritation due to infection, especially if lice feces are present. Lice are very small, so close, careful inspection is necessary in order to determine their presence.

#### **Treatment and Control**

Body lice are usually associated with destitute adults who regularly sleep in their clothes. Because body lice live within clothing, the easiest method of treating them is to wash all clothing. These clothes should be washed in hot soapy water and dried using a clothes dryer on the "high heat" cycle. This will kill all eggs, nymphs and adults of lice. An individual should then bathe and wash their entire body thoroughly with soapy water. Because some adult body lice may have fallen off the host, steps should be taken to inspect all bedding material or other close personal belongings of the infested person. Any of these materials should be washed and dried in a similar fashion as clothing.

Because pubic lice live on the host among pubic hairs, treatment is not as simple. If phthiriasis (the condition associated with a pubic louse infestation) is diagnosed, treatment should be sought immediately. Products for treatment will be marketed as shampoos or cream rinses and some are available over-the-counter, while others are prescription products. Careful attention should be employed while following all directions on product labels. An infested person's bedding and clothing should be washed in hot soapy water and dried in a clothes dryer on the "high heat" cycle. It is important to alert one's sexual partner as to the presence of pubic lice because he/she may require treatment as well.

### Body Lice and Pubic Lice

#### Table 1. Pesticides Available

Trade Name (Formulation)		Common Name - %		
Site(s)	Pest(s)	Re-Entry Time	Preharvest Time	Retreatment Interval
A-200 Pediculicide Lice Killing Shampoo (Ready-to-Use Liquid)		Pyrethrum, PBO - 0.33, 4.0%		
Humans	Body Lice	None	None	7 days
Add sufficient water to form a lather and shampoo as usual. Rinse thoroughly. A second treatment must be done in 7-10 days to kill any newly hatched lice.				
Nix Lice Treatment (Ready-to-Use Liquid)		Permethrin - 1.00%		
Humans	Body Lice	None	None	None
Use this product after hair has been washed with regular shampoo, rinsed with water and towel dried. A sufficient amount should be applied to saturate hair and scalp. Leave on hair for 10 minutes but no longer. Rinse with water. A single application is usually sufficient. If lice are observed 7 days or more after the first application of this product, a second treatment should be given.				