



## Crab Lice

Authored by Theresa A. Dellinger, Diagnostician, and Eric Day, Lab Manager, Insect Identification Lab, Department of Entomology, Virginia Tech

### Description

Crab lice, *Pthirus pubis* (L.), are very small (1.5-2 mm; 0.06-0.08 inch), wingless, flattened insects with mouthparts for sucking blood. The body is about as wide as it is long with a small, narrow head (Fig. 1). Crab lice are gray to tan in color. If they have fed recently, the blood meal will be visible through the body and make them appear darker. Crab lice have a large claw at the end of the last two pairs of legs that allows them to cling securely to coarse hair on their host. The claws resemble those of an aquatic crab, hence the common name of “crab lice.” Crab lice cannot fly or jump; they can only crawl. Crab lice are different parasites than head or body lice.



Figure 1. A crab louse (Kansas Department of Agriculture, Bugwood.org).

### Life Cycle

Crab lice have an incomplete life cycle consisting of egg, nymphal, and adult stages. The oval-shaped eggs, also known as nits, are firmly glued to hair shafts close to the skin’s surface. They hatch in about a week if kept at body temperature. Empty nit shells remain firmly glued to the hair even after the nymphs have hatched. Nymphs look much like adults, but they must feed and grow through three

molts before reaching the adult stage. Crab lice complete their development from egg to adult in 25-30 days. Adult crab lice live up to a month.

### Damage

Crab lice are blood feeders and require multiple blood meals throughout their lives. A louse only ingests a small amount of blood each time it feeds, but crab lice feed frequently and the bites are a source of intense discomfort and irritation. A person may have crab lice for a week or so before developing the symptoms of itching. Scratching the bites may lead to secondary bacterial infections requiring additional medical attention. Fortunately, crab lice do not transmit disease.

### Habitat and Distribution

Crab lice and their nits may be hard to see without strong light and a magnifying glass. The nymphs and adults are fast moving, avoid light, and are very small. Crab lice are usually found on the coarse hair of the pubic area, but they can also live in armpits, chest hair, or heavy facial hair. They are sometimes found on eyelashes and eyebrows. Crab lice spread from host to host by direct, intimate human contact. Their presence on children may be an indication of sexual abuse. Crab lice do not feed on other animals and people cannot catch them from dogs or other pets. Pets do not need to be treated if crab lice are found in the household.

Someone could potentially acquire crab lice from furniture, bedding, or towels, but only if the lice were picked up very soon after they left an infested person. Crab lice die in 1-2 days if they fall off the host and have not found a new one. Picking up crab lice from a toilet is even less likely. The legs of crab lice are not built to grasp a slick surface like a toilet seat and they would likely fall off very quickly.

## Treatment

Shaving is not required for dealing with crab lice. Mechanically removing as many nits and crawling lice as possible will help eliminate the infestation faster. Comb wet hair with a fine-toothed comb or a lice comb. Kill any nits or crawling lice found by placing them in very hot water, rubbing alcohol, a commercial disinfecting solution, or medicated lice shampoo. Be sure to disinfect the comb as well when you are done.

For the fastest elimination of crab lice, use a medicated shampoo or lotion specifically labeled as a louse treatment. Usually these contain the insecticides pyrethrin or permethrin and are available over the counter in a pharmacy. Follow the label exactly for best results. Do not use more than one kind of medicated treatment at a time. Pregnant or nursing women and children under two should not use medicated shampoos without the advice of a medical doctor or healthcare provider. Seek medical advice on the treatment of crab lice around the eyes as the eyes must be protected from potential damage from the insecticide. If crawling lice are found one day after proper application of a medicated shampoo, stronger treatments may be available with a prescription from a medical doctor.

In addition to medicated treatments, all possibly infested bedding, towels, etc. should be washed in hot water and dried with high heat. Items such as comforters and pillows can be placed in a plastic storage bin with a tightly closing lid or in a heavy plastic bag that can be securely closed and left unopened for about a week. Crab lice cannot survive more than two days without feeding. Vacuum carpets and upholstered furniture to remove any hair that may have fallen out with nits attached. Treating the house with aerosol insecticides or foggers is not necessary.

If live lice are found several days after following the above suggestions, including the proper use of medicated shampoos or lotions, it may appear that the treatments have failed. While it is possible that the lice have developed resistance to the insecticide in the medicated shampoo, it is more likely that a re-infestation has occurred (from another infested person or from infested items), or that the medical treatment was not applied according to instructions.

People who do not have nits or crawling lice, but share a bed or a room with someone who does, should consider a prophylactic louse treatment. A person diagnosed as having crab lice should notify all sexual partners and encourage them to seek treatment for possible infestation. Abstain from all sexual activity until the infestation is fully eliminated from all partners to avoid re-infestation. The use of condoms will not protect against crab lice. Because crab lice are so contagious, they are often classified as a sexually transmitted disease (STD). Healthcare providers may recommend screening for additional STDs when crab lice are detected. The presence of crab lice on adolescent children may signal sexual abuse.

## Alternative Treatments

Home remedies or treatments for crab lice described as “natural” or “pesticide free” are not recommended because there is no research data to show their efficacy and safety. Such treatments may kill only the crawling lice but not the nits, in which case multiple treatments would be necessary to eliminate the lice as they hatch out. Using a medicated shampoo or cream will effectively eliminate the infestation within several days when combined with manually removing the lice with a comb, cleaning infested items, and vacuuming the home. Home remedies may require much longer periods of time than that and may not fully eliminate the lice.

## Revised

Theresa A. Dellinger, January 23, 2021.

Visit Virginia Cooperative Extension: [ext.vt.edu](http://ext.vt.edu)

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg.

2021

ENTO-144NP (ENTO-413NP)