

## Pubic or Crab Lice Infestation (*Pthirus pubis*)

Adult pubic lice are dark gray to brown and have a typical “crab” shape. This louse has a smaller body of 1.2 x 0.8 mm, may be lighter in color, not as mobile and therefore harder to see to the naked eye. *P. pubis* occurs on the hair in the pubic and perianal areas of the human body and occasionally the axillae, eyebrows, and beard. The incidence of this infestation has been on the increase, and some think that it may be the most contagious sexually transmitted disease.

Infestation with *Pthirus pubis* is usually associated with poor hygiene in an overcrowded environment. It has been recommended that within two to three days of the start of treatment, clothing, towels, and bedding used by the patient should be mechanically washed (with water at least 55°C) and dried on the hot cycle for 5-10 minutes. Items that cannot be washed should be dry cleaned or stored in a sealed plastic bag for at least two weeks. *Pthirus pubis* in adults is frequently transmitted sexually, so a screen for other sexually transmitted infections should also be done.

Transmission can occur by sleeping in the same bed as another infested individual. In patients with an infestation of *P. pubis*, there tend to be blue or slate-gray macules on the skin (maculae caeruleae); these are thought to be either altered patient blood pigments or possibly substances occurring in the salivary glands of the lice. Once these lice have left the host, their survival time is relatively short, with death occurring in less than 48 h at 15°C. If infestation occurs on the eyelids, there may be inflammation of the eyelids. These lice live only on humans, require human blood for survival, and do not infest rooms, carpets, beds, or pets. Because the lice tend to die fairly quickly once they are off the host, it is not necessary to use insecticidal sprays or fogs in the home, work, or school environment.

Pthiriasis palpebrarum is an ectoparasitosis in which *Pthirus pubis* infest the eyelashes. It is rare and it can easily be misdiagnosed as blepharitis. Pediatric pthiriasis palpebrarum can represent child abuse, and the origins of this infection need to be carefully determined. A thorough history can provide information to assess whether further action is needed and, if in doubt, social services should be contacted to ensure child safety. This condition is now grouped under sexually transmitted diseases. It provides a useful tool in forensic medicine in cases of rape and sexual abuse; the host DNA can be identified from the blood meal of the louse via PCR and Gene sequencing. This lice infestation is commonly misdiagnosed as bacterial, viral or allergic conjunctivitis or seborrhoeic dermatitis. Proper history taking and careful examination is a must for correct diagnosis and appropriate treatment.

Head lice and pubic lice are quite different, although they are "cousins." Pubic lice are small, parasitic insects similar to head lice, except that they tend to live in the pubic area, although pubic lice can spread to the chest hair, underarms or scalp.





Upper Row: Left, *Phthirus pubis* adult female (note the developing egg within the center of the female); Middle, *Phthirus pubis* adult male; Right, composite image of adult and lice and nits on the hair shafts; Bottom Row: Left, pubic lice on the eyelashes (uncommon); Right, composite image with the head louse on the left and the pubic louse on the right (note size/shape differences).