

LICE

What is it?

Lice are small parasitic insects that live on humans. One type infest the head and hair (*Pediculus humanus capitus*), a second type (*Pediculus humanus corporis*) the body, and a third type (*Phthirus pubis*) live on pubic hair and is known as pubic lice or “crabs.” Lice are only a few millimeters (about 1/10 inch) in size and therefore are difficult to see. Although itching is the main symptom of having lice, not everyone experiences itching and may therefore unsuspectingly pass the lice on to others.

How is it spread?

Lice are spread by close or intimate contact with another person, shared bedding, clothing, hairbrushes and combs. They cannot jump or fly, but can crawl around for as long as three days seeking a new host. Lice can be picked up in public spaces as well, such as seats on buses and planes. Hygiene and hair length do not appear to be causative factors. Head lice commonly infest small children and epidemics in grade schools are common due to close contact between children as well as shared articles of clothing, hair brushes and headphones. Household or other close contacts should be examined to eliminate ping pong infestations.

Diagnosis

Many people diagnose lice themselves by noticing localized itching and examining the itchy area. Lice themselves have small and somewhat translucent bodies and are difficult to see. Pubic lice may be seen as they are a bit larger and their bodies look brown when they have attached to the skin and fed on some blood. Pubic lice can live on almost any hairy area of the body, except the head. Rather than the louse, more often what is seen is a “nit” which is an egg sack located on the side of a hair shaft (not to be confused with the root of the hair). Lice lay eggs at the base of a hair directly at the skin or scalp line. The location of the nit on the hair shaft shows how long it has been there, the further from the root of the hair the longer it has been there. This point becomes important after treatment in determining whether new activity is still present.

A visit to a medical provider can provide an expert exam to diagnose lice. However, in the case of head and pubic lice, medication is available over the counter; so many people treat themselves if they are certain of the diagnosis. Body lice are less common and may not require medicated cream as much as decontamination of clothing and bedding since they live in the seams of material, not on the body. Body lice can live 30 days away from a host. Since body lice are more difficult to diagnose and medication used is by prescription, a medical visit is more likely needed.

Treatment

Head lice: Topical insecticides are available in a shampoo or conditioner form over the counter. These products are safe if used correctly and have a high effectiveness if one follows suggested decontamination measures. It is imperative to follow manufacturer's instructions as various products have different instructions. Products are either Permethrin based such as Nix or made with Pyrethrin and piperonyl butoxide such as Rid. General instructions for treating head lice include washing the hair with shampoo, rinsing with water and towel-drying the hair. Do not use any conditioner or shampoo with conditioner as that decreases the ability for the medication to penetrate the hair. Cream or lotion is usually left on for 10 minutes and then rinsed off, but again follow the manufacturer's instructions. Re-treatment is recommended after 7-10 days to eradicate any eggs that may have since hatched and to decrease possibility of drug resistance.

After using the medication, towels, hairbrushes, combs, bedding and clothing worn within the last three days should be washed in hot water and dried in hot dryer. If washing is not possible, clothing and linens may be wrapped up in a sealed plastic bag for 3 days until the lice die on their own.

An alternative to insecticidal products is wet combing. Hair is washed and an extra lubricant such as conditioner applied and the hair is then combed and re-combed with a fine tooth comb until the lice and nits have been removed. This procedure needs to be followed every couple days for several weeks until no lice or nits remain.

Head lice have acquired some resistance to medications mentioned here, but alternative treatments with Vaseline, hair gel, etc have no better effectiveness than the wet combing. A visit to a health care facility might yield a different diagnosis or a different treatment option if symptoms cannot be eliminated.

Pubic Lice: The medications and instructions are the same as for head lice, although an effort must be made to apply to all affected hairy areas, sparing the head hair and the mucous membranes of vulva and rectum. Occasionally these lice also infest facial hair, eyebrows and eyelashes. Medication should not be used around the eyes, and "nit picking" may be the best treatment. Thick application of an ophthalmic grade petrolatum product can help smother lice around the eyes.

Prevention of Spread and Re-infection

Scrupulous disinfecting of clothing, bedding, hair brushes and combs is critical. The mattress on the bed can be flipped over and the mattress pad washed. Vacuum rugs and furniture. Close contacts, especially recent sexual partners, should be checked or treated at the same time. Follow instructions regarding timing for medication and its re-use. Seek professional help in difficult cases, as there are some prescription medications which may be used for resistant cases.