

CHICKEN POX

A disease caused by infection with the varicella zoster virus, which causes fever and an itchy rash.

Symptoms

A skin rash of blister-like lesions, covering the body but usually more concentrated on the face, scalp, and trunk. Most, but not all, infected individuals have fever, which develops just before or when the rash appears. If exposed, persons who have been vaccinated against the disease may get a milder illness, with less severe rash (sometimes involving only a few red bumps that look similar to insect bites) and mild or no fever.

Complications

Bacterial infection of the skin, swelling of the brain, and pneumonia. Adolescents and adults are more at risk for severe disease.

Transmission

Spread by coughing and sneezing (highly contagious), by direct contact, and by aerosolization of virus from skin lesions.

Vaccine

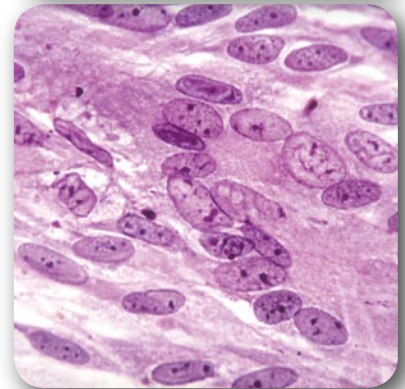
Varicella vaccine can prevent this disease. Currently, two doses of vaccine are recommended for children, adolescents, and adults.

Who Needs to be Vaccinated?

All children and adults without evidence of immunity to varicella need the vaccine. Evidence of immunity includes any of the following:

- Documentation of two doses of varicella vaccine
- Blood tests that show you are immune to varicella or laboratory confirmation of prior disease
- Born in the United States before 1980, excluding health-care workers, pregnant women, and immunocompromised persons. These individuals need to meet one of the other criteria for evidence of immunity
- Receipt from a healthcare provider of a) a diagnosis of chickenpox or b) verification of a history of chickenpox
- Receipt from a healthcare provider of a) a diagnosis of herpes zoster (shingles), or b) verification of a history of herpes zoster (shingles).

You do NOT need the chickenpox vaccine, if you meet any of the above criteria for evidence of immunity.



HEAD LICE

Lice are parasitic insects that can be found on people's heads, and bodies, including the pubic area.

Human lice survive by feeding on human blood. Lice found on each area of the body are different from each other. The three types of lice that live on humans are:

- *Pediculus humanus capitis* (head louse),
- *Pediculus humanus corporis* (body louse, clothes louse), and
- *Phthirus pubis* ("crab" louse, pubic louse).

Only the body louse is known to spread disease.

Lice infestations (pediculosis and phthiriasis) are spread most commonly by close person-to-person

contact. Dogs, cats, and other pets do not play a role in the transmission of human lice. Lice move by crawling; they cannot hop or fly. Both over-the-counter and prescription medications are available for treatment of lice infestations.

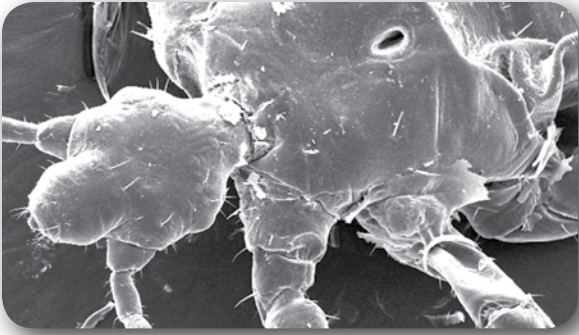
Diagnosis

Close examination of the hair and scalp is necessary to determine head lice infestation. (CDC Photo)

Misdiagnosis of head lice infestation is common. The diagnosis of head lice infestation is best made by finding a live nymph or adult louse on the scalp or hair of a person.

continued on back





eggs are killed by exposure for 5 minutes to temperatures greater than 53.5°C (128.3°F). Items that cannot be laundered may be dry-cleaned or sealed in a plastic bag for two weeks. Items such as hats, grooming aids, and towels that come in contact with the hair of an infested person should not be shared. Vacuuming furniture and floors can remove an infested person's hairs that might have viable nits attached.

Retreatment generally is recommended for most prescription and non-prescription (over-the-counter) drugs after 9-10 days in order to kill any surviving hatched lice before they produce new eggs. However, if using the prescription drug malathion, retreatment is recommended after 7-9 days ONLY if crawling bugs are found. Click here for instructions on how to use malathion to treat head lice.

Because adult and nymph lice are very small, move quickly, and avoid light, they may be difficult to find. Use of a fine-toothed louse comb may facilitate identification of live lice.

If crawling lice are not seen, finding nits attached firmly within 1/4 inch of the base of hair shafts suggests, but does not confirm, the person is infested. Nits frequently are seen on hair behind the ears and near the back of the neck. Nits that are attached more than 1/4 inch from the base of the hair shaft are almost always non-viable (hatched or dead). Head lice and nits can be visible with the naked eye, although use of a magnifying lens may be necessary to find crawling lice or to identify a developing nymph inside a viable nit. Nits are often confused with other particles found in hair such as dandruff, hair spray droplets, and dirt particles.

If no nymphs or adults are seen, and the only nits found are more than 1/4 inch from the scalp, then the infestation is probably old and no longer active and does not need to be treated.

General Guidelines

Treatment for head lice is recommended for persons diagnosed with an active infestation. All household members and other close contacts should be checked; those persons with evidence of an active infestation should be treated. Some experts believe prophylactic treatment is prudent for persons who share the same bed with actively-infested individuals. All infested persons (household members and close contacts) and their bedmates should be treated at the same time.

Retreatment of head lice usually is recommended because no approved pediculicide (peh-DICK-you-luh-side) is completely ovicidal. To be most effective, retreatment should occur after all eggs have hatched but before new eggs are produced. The retreatment schedule can vary depending on the pediculicide used.

When treating head lice, supplemental measures can be combined with recommended medicine (pharmacologic treatment); however, such additional (non-pharmacologic) measures generally are not required to eliminate a head lice infestation. For example, hats, scarves, pillow cases, bedding, clothing, and towels worn or used by the infested person in the 2-day period just before treatment is started can be machine washed and dried using the hot water and hot air cycles because lice and

Treat the infested person(s)

Requires using an over-the-counter (OTC) or prescription medication. Follow these treatment steps:

Before applying treatment, it may be helpful to remove clothing that can become wet or stained during treatment.

Apply lice medicine, also called pediculicide, according to the instructions contained in the box or printed on the label. If the infested person has very long hair (longer than shoulder length), it may be necessary to use a second bottle. Pay special attention to instructions on the label or in the box regarding how long the medication should be left on the hair and how it should be washed off.

WARNING:

Do not use a creme rinse, combination shampoo/conditioner, or condition before using lice medicine. Do not re-wash the hair for 1-2 days after the lice medicine is removed.

Have the infested person put on clean clothing after treatment.

If a few live lice are still found 8-12 hours after treatment, but are moving more slowly than before, do not retreat. The medicine may take longer to kill all the lice. Comb dead and any remaining live lice out of the hair using a fine-toothed nit comb.

If, after 8-12 hours of treatment, no dead lice are found and lice seem as active as before, the medicine may not be working. Do not retreat until speaking with your health care provider; a different lice medicine (pediculicide) may be necessary. If your health care provider recommends a different pediculicide, carefully follow the treatment instructions contained in the box or printed on the label.

Nit (head lice egg) combs, often found in lice medicine packages, should be used to comb nits and lice from the hair shaft. Many flea combs made for cats and dogs are also effective.

After each treatment, checking the hair and combing with a nit comb to remove nits and lice every 2-3 days may decrease the chance of self-reinfestation. Continue to check for 2-3 weeks to be sure all lice and nits are gone.

Supplemental Measures:

Head lice do not survive long if they fall off a person and cannot feed. You don't need to spend a lot of time or money on housecleaning activities. Follow these steps to help avoid re-infestation by lice that have recently fallen off the hair or crawled onto clothing or furniture.

Machine wash and dry clothing, bed linens, and other items that the infested person wore or used during the 2 days before treatment using the hot water (130°F) laundry cycle and the high heat drying cycle. Clothing and items that are not washable can be dry-cleaned or sealed in a plastic bag and stored for 2 weeks.

Soak combs and brushes in hot water (at least 130°F) for 5-10 minutes.

Vacuum the floor and furniture, particularly where the infested person sat or lay. However, the risk of getting infested by a louse that has fallen onto a rug or carpet or furniture is very small. Head lice survive less than 1-2 days if they fall off a person and cannot feed; nits cannot hatch and usually die within a week if they are not kept at the same temperature as that found close to the human scalp. Spending much time and money on housecleaning activities is not necessary to avoid reinfestation by lice or nits that may have fallen off the head or crawled onto furniture or clothing.

Do not use fumigant sprays; they can be toxic if inhaled or absorbed through the skin.

Prevent Reinfestation:

- Avoid head-to-head (hair-to-hair) contact during play and other activities at home, school, and elsewhere (sports activities, playground, slumber parties, camp). Lice are spread most commonly by direct head-to-head (hair-to-hair) contact and much less frequently by sharing clothing or belongings onto which lice or nits may have crawled or fallen.
- Do not share clothing such as hats, scarves, coats, sports uniforms, hair ribbons, or barrettes.
- Do not share infested combs, brushes, or towels.
- Do not lie on beds, couches, pillows, rugs, carpets, or stuffed animals that have recently been in contact with an infested person.
- To help control a head lice outbreak in a community, school, or camp, children can be taught to avoid activities that may spread head lice.

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