CONDITION

Body lice

Learn how body lice spread, what symptoms they cause, how clothing and bedding are treated, and when itching or fever needs medical care.

WHAT IT IS
Infestation by blood-feeding parasitic insects

BODY SYSTEM
Skin

MAIN SYMPTOMS
Intense itching, red bumps or rash, scratch sores, thickened or darker skin

WHAT CAUSES IT
Parasitic lice spread through close contact

HOW IT IS DIAGNOSED
Finding live lice or eggs in clothing

MAIN TREATMENT
Bathing, clean clothes and effective laundering

CAN IT BE CURED?
Yes - laundering removes lice and eggs

IS IT AN EMERGENCY?
Sometimes - confusion or severe breathing difficulty

LONG-TERM OUTLOOK
Usually clears with hygiene but can recur

Overview

Body lice are small parasitic insects that feed on human blood. Unlike head lice, body lice usually live and lay their eggs in the seams and folds of clothing or bedding. They crawl onto the skin to feed, often several times a day.

Body lice are a different form of human louse from head lice and pubic lice. They do not live on pets, and pets do not spread them. Having body lice is not a sign of a person's worth or character. Infestations are closely linked to limited access to regular bathing, clean clothes, and laundry facilities.

Body lice matter for two main reasons. Their bites can cause intense itching, irritated skin, and sores from scratching. They can also carry certain bacterial infections, including epidemic typhus, trench fever, and louse-borne relapsing fever. These infections are uncommon in many

countries, but they can occur where body lice are widespread, especially during crowding, displacement, war, or disrupted access to hygiene.

Treatment focuses on removing lice and eggs from clothing and bedding while providing regular access to bathing and clean clothes. Medicine applied to the body is not always needed.

Symptoms

Some people notice itching before they see any lice. The itching is caused by a reaction to louse bites and may become more noticeable after repeated exposure.

Body lice symptoms may include:

Adult body lice are small, flat, and usually grayish-white to brown. They may look darker after feeding. Their eggs, called nits, are firmly attached to clothing fibers and are commonly found along seams, waistbands, cuffs, and other folded areas. Nits are not the same as loose flakes of skin or lint.

Frequent scratching can damage the skin. Increasing pain, warmth, swelling, pus, or spreading redness may indicate a bacterial skin infection and should be assessed by a healthcare professional.

Fever is not a usual symptom of the lice themselves. Fever, severe headache, marked tiredness, muscle pain, or a new widespread rash may point to a separate infection, particularly after living or sleeping in crowded conditions where body lice are present. These symptoms need prompt medical advice.

- Moderate to intense itching, often beneath areas where clothing fits closely
- Small red bumps, bite marks, or a rash
- Scratch marks, scabs, or open sores
- Irritation around the waist, groin, upper thighs, armpits, shoulders, or neck
- Tiny insects or eggs in the seams and folds of clothing
- Thickened or darker skin after a long-lasting, heavy infestation

Causes and risk factors

Body lice spread mainly through direct contact with a person who has them or through contact with infested clothing, blankets, towels, or bedding. Because lice crawl rather than jump or fly, transmission usually requires close contact or shared fabric items.

The insects thrive when the same clothing is worn for long periods without being washed and dried effectively. Risk is therefore higher when people do not have reliable access to bathing, clean clothes, or laundry facilities.

Situations associated with greater risk include:

Anyone can get body lice if the conditions allow them to spread. Ordinary brief contact in a workplace, store, or classroom is less likely to cause transmission than prolonged close contact or sharing infested fabric items.

Body lice do not spread because a home has pets. They are adapted to humans and cannot establish an infestation on dogs, cats, or other household animals.

- Experiencing homelessness or unstable housing
- Living in crowded shelters, camps, institutions, or temporary housing
- Displacement related to conflict or natural disaster
- Sharing unwashed clothing, blankets, sleeping bags, or bedding
- Infrequent access to hot-water laundry and machine drying
- Close contact with someone who has an active infestation

Diagnosis

Body lice are usually diagnosed by finding live lice or eggs in clothing. A healthcare professional may inspect the seams of underwear, shirts, trousers, coats, bedding, or other items worn close to the skin. Lice may occasionally be seen crawling on the body, but they usually return to clothing after feeding.

A diagnosis may be harder if clothes have recently been changed or discarded. If infestation is still suspected, a clinician may ask about itching, sleeping arrangements, access to laundry, shared clothing, and whether other people in the same setting have similar symptoms.

Several conditions can also cause itching or bite-like marks. These include scabies, bedbug bites, eczema, allergic contact dermatitis, and bacterial or fungal skin infections. Finding lice or viable eggs helps distinguish body lice from these other problems.

Routine blood tests are not usually needed to diagnose an uncomplicated infestation. However, a clinician may order tests if there is fever or another concern for a louse-borne infection. The choice of testing depends on symptoms, travel or housing history, local outbreaks, and possible exposure. The presence of body lice alone does not mean that a person has one of these infections.

Treatment and management

The most important treatment is access to bathing, clean clothes, and effective laundering. In many cases, these steps remove the infestation without medicine.

The person should bathe and change into freshly washed clothing. Clothing, towels, and bedding used during the infestation should be machine-washed in water at least 130°F, or 54°C, and dried using a high-heat cycle. Items that cannot be washed may be dry-cleaned. Another option is to seal them in a plastic bag for two weeks, following public health instructions.

Clean clothing should be provided regularly. If the person continues wearing infested clothes, lice can return to the skin even after bathing. Coats, uniforms, sleeping bags, and other less frequently washed items should not be overlooked.

A healthcare professional or public health worker may help organize treatment in a shelter, camp, residential facility, or household where several people are affected. People who share bedding or clothing may need inspection and access to laundering. Management should protect privacy and avoid blame or stigma.

Insect-killing skin treatments, called pediculicides, are not routinely necessary when bathing and laundry measures can be completed. A clinician may recommend one in some circumstances, such as a persistent infestation or an outbreak where exposure continues. These products should be used exactly as directed. They should not be applied more often than instructed or combined unless a qualified professional advises it.

Do not use household insect sprays, agricultural pesticides, kerosene, gasoline, or pet flea products on the body or clothing. These products may cause poisoning, burns, breathing problems, or skin injury. Widespread spraying or fumigation of living areas is generally not the central treatment because body lice mainly remain in clothing and bedding.

Itching may continue for a while after the lice are removed because the skin reaction does not stop immediately. Gentle skin care and avoiding scratching can help. A clinician or pharmacist can discuss appropriate ways to manage itching based on a person's age, health, and other medicines.

Open sores should be kept clean. A healthcare professional should examine areas that become increasingly painful, warm, swollen, or draining. Antibiotics like amoxicillin or doxycycline treat bacterial infection when it is present; they do not remove lice.

Complications

The most common complications come from repeated scratching. Broken skin can develop bacterial infections such as impetigo or cellulitis. Impetigo causes crusted or weeping sores. Cellulitis causes spreading redness, warmth, swelling, and tenderness in deeper skin tissues.

Long-lasting infestation may lead to thick, rough, or darker skin in areas where lice repeatedly feed. Sleep can also be disrupted by persistent itching.

Body lice can transmit several infections. Epidemic typhus is caused by Rickettsia prowazekii . Trench fever is caused by Bartonella quintana . Louse-borne relapsing fever is caused by Borrelia recurrentis . Transmission may happen when infected louse material is rubbed into damaged skin or reaches the eyes or other moist surfaces.

These illnesses are not caused by every infestation. Risk depends on whether infected lice are circulating in a community. Public health teams may become involved when body lice are found alongside unexplained fever, an outbreak, or conditions that make widespread transmission possible.

Seek prompt medical care for fever, severe headache, significant muscle pain, unusual weakness, or a widespread rash during or after a body lice infestation. Tell the clinician about the lice and any recent time spent in shelters, camps, crowded housing, or regions where louse-borne illness has been reported.

Call emergency services for confusion, fainting, severe breathing difficulty, inability to stay awake, or other rapidly worsening symptoms. These are not routine effects of body lice and may indicate a serious illness requiring immediate assessment.

Follow up

Routine follow-up should confirm that the person has clean clothing and bedding and that live lice are no longer being found. Clothing seams should be checked again after laundering, especially if itching continues. Ongoing access to bathing and at least weekly changes of properly laundered clothes helps prevent recurrence.

Persistent itching does not always mean treatment failed. Skin irritation can last after the insects are gone. However, finding live lice suggests that infested clothing or bedding remains in use, laundering was not effective, or exposure is continuing.

Arrange a routine medical appointment if the diagnosis is uncertain, itching is not improving, skin changes are extensive, or lice keep returning despite complete clothing and bedding measures. A clinician can check for another cause of itching and decide whether a lice treatment is appropriate.

Seek more urgent medical advice for spreading redness, increasing pain, pus, fever, or other

signs of skin infection. Fever with severe headache, marked weakness, muscle pain, or a new widespread rash also needs prompt assessment because of the possibility of a louse-borne or unrelated infection.

In group settings, follow-up may involve shelter staff, outreach teams, infection-control staff, or local public health services. Lasting control often depends on practical support with showers, clean replacement clothing, laundry, and safe storage rather than repeated medicine alone.

Sources

- Centers for Disease Control and Prevention. About Body Lice . Lice.
- Centers for Disease Control and Prevention. Treatment of Body Lice . Lice.
- Centers for Disease Control and Prevention. Clinical Care of Body Lice . Lice.
- Centers for Disease Control and Prevention. DPDx: Pediculosis . Laboratory Identification of Parasites of Public Health Concern.
- Centers for Disease Control and Prevention. About Epidemic Typhus . Typhus Fevers.
- Bonilla DL, Durden LA, Eremeeva ME, Dasch GA. The biology and taxonomy of head and body lice-implications for louse-borne disease prevention . PLoS Pathogens . 2013;9(11):e1003724.