CONDITION

Lice

Lice are small parasitic insects that live on human hair, skin, or clothing and feed on blood.

WHAT IT IS
Infestation by small blood-feeding insects

BODY SYSTEM
Skin and hair

MAIN SYMPTOMS
Itching, crawling sensation, bite marks, visible lice or eggs

WHAT CAUSES IT
Close contact or shared infested items

HOW IT IS DIAGNOSED
Finding live lice on hair, skin, or clothing

MAIN TREATMENT
Lice-killing products, combing, and clothing hygiene

CAN IT BE CURED?
Yes - treatment can clear the infestation

IS IT AN EMERGENCY?
Sometimes - breathing trouble after treatment needs emergency care

LONG-TERM OUTLOOK
Usually clears, though reinfestation can occur

Overview

Lice are tiny insects that live on people and feed on small amounts of blood. Having lice is called an infestation. It is not a sign of poor personal hygiene, and anyone can get them.

Three types of lice affect humans:

Head lice are especially easy to pass during close hair-to-hair contact. They do not fly or jump. They crawl.

Lice can cause itching, disturbed sleep, and irritated skin. Repeated scratching may lead to a bacterial skin infection. Head and pubic lice are not known to spread disease. Body lice can carry certain infections, but this is mainly a concern where people cannot regularly wash themselves or change and clean their clothing.

- Head lice live mainly on the scalp, especially behind the ears and near the back of the neck.

- Body lice live and lay eggs in clothing or bedding, then move to the skin to feed.
- Pubic lice , sometimes called crabs, usually live in coarse hair around the genitals. They can also affect armpit, chest, beard, or eyelash hair.

Symptoms

Itching is the most common symptom, but it may not begin immediately. The body can take several weeks to react to lice saliva during a first infestation. Some people have few or no symptoms.

Possible symptoms include:

Head lice are small, fast-moving, and difficult to see. Their eggs, called nits , are firmly attached close to the base of a hair. Dandruff and hair-product residue usually brush away more easily.

Finding nits does not always mean there is a current infestation. Eggs far from the scalp may be empty or dead. Finding a live crawling louse is the clearest sign of active head lice.

Body lice may cause itching around the waist, groin, upper thighs, or armpits, where clothing seams touch the skin. Lice and eggs are often easier to find in clothing seams than on the body.

Pubic lice commonly cause itching in the genital area. Small spots of blood or dark specks may be visible in underwear. Lice on the eyelashes can cause itching, crusting, or eye irritation.

- Itching of the scalp, body, or genital area
- A tickling or crawling feeling
- Small red bumps or bite marks
- Scratches, crusts, or sores from repeated rubbing
- Trouble sleeping because lice are often more active in darkness
- Live lice or eggs attached to hair or clothing

Causes and risk factors

Lice are caused by contact with human lice. Pets do not spread human head, body, or pubic lice.

Head lice usually spread through direct hair-to-hair contact. This can happen during play, sports, sleepovers, or close contact at home. Spread through hats, brushes, pillows, or other objects is possible but is thought to be less common. Head lice survive poorly once away from

a person.

Children in preschool or primary school and people who live with them are more likely to encounter head lice because of frequent close contact. Hair length and cleanliness do not determine who gets lice.

Body lice are linked to clothing or bedding that cannot be washed and changed regularly. Risk is higher in crowded living conditions or when access to bathing and laundry facilities is limited.

Pubic lice are most often spread through intimate or sexual contact. Less commonly, they may spread through recently used clothing, towels, or bedding. Condoms do not fully prevent pubic lice because lice can live on hair and skin outside the area covered.

Diagnosis

Diagnosis involves finding live lice. A healthcare professional may inspect the hair, skin, clothing seams, or affected body hair under good lighting. A magnifying lens or fine-toothed lice comb can help.

For suspected head lice, wet hair may be divided into small sections and combed from the scalp to the ends. The comb is checked after each pass. Nits alone can be mistaken for dandruff, dried hair products, scabs, or other debris.

Body lice are usually confirmed by finding lice or eggs in clothing seams or bedding. Bite marks by themselves are not enough because many skin conditions and insects can produce similar marks.

Pubic lice may be seen attached to coarse hair. Lice or nits on the eyelashes should be assessed by a healthcare professional because treatment near the eyes requires special care.

Persistent itching after treatment does not automatically mean lice are still present. Skin irritation can continue for a while, and some lice treatments can also irritate the skin. Checking for live crawling lice is more useful than judging treatment only by itching.

Treatment and management

Treatment depends on the type of lice, the person's age, where the lice are located, and which products are approved in your country.

Head lice can be treated with an approved non-prescription or prescription lice-killing product. Common treatments affect live lice, but some do not kill every egg. A second application may therefore be needed at the time stated on the product label.

Use only one lice treatment at a time. Follow the instructions exactly, including how much to use, how long to leave it on, and whether hair products should be avoided before or after treatment. Using extra product or repeating it too soon can cause harm without improving the result.

Fine-toothed combing can remove lice and nits. Wet combing may also be used as a non-medicine approach, but it needs careful, repeated sessions over several weeks. Check close household contacts and people who share a bed. Treat those with confirmed lice at the same time to reduce reinfestation.

Do not use household insect sprays, foggers, petrol, kerosene, or pesticides intended for animals. These can be dangerous. Evidence does not support relying on products such as mayonnaise or essential oils to clear lice.

For body lice, regular bathing and access to clean clothes are central to treatment. Clothing, towels, and bedding should be laundered and dried using heat that is safe for the fabric. A lice-killing medicine is not always needed, although it may be recommended in some situations.

Pubic lice are treated with a product approved for that area. Recent sexual partners should be told, checked, and treated when appropriate. Avoid sexual contact until treatment is complete and both you and your partner have been assessed or treated. Testing for other sexually transmitted infections may also be recommended.

Ask a pharmacist or healthcare professional before using a lice medicine on a young child, during pregnancy or breastfeeding, on broken or infected skin, or near the eyes. Never apply an ordinary head-lice product to the eyelashes.

After treatment, wash recently used clothing, towels, pillowcases, and bedding as directed by public health guidance and the product label. Items that cannot be washed can usually be sealed away for a period long enough for lice to die. Extensive cleaning of walls, furniture, or the whole home is not needed.

Complications

Scratching can break the skin and allow bacteria to enter. Signs of a skin infection include increasing pain, warmth, swelling, pus, spreading redness, or fever.

Some lice products can cause burning, redness, or itching. Rarely, a serious allergic reaction may occur. Using too much product or combining treatments increases the chance of harmful effects.

Treatment may appear to fail because it was not used correctly, a repeat treatment was

missed, eggs survived, lice were acquired again from an untreated contact, or local lice are resistant to the product. A healthcare professional or pharmacist can help distinguish treatment failure from reinfestation.

Body lice can spread infections such as epidemic typhus, trench fever, and louse-borne relapsing fever. These infections are uncommon in places with regular access to clean clothing and washing facilities, but outbreaks can occur in crowded or unstable living conditions.

Prevention

There is no guaranteed way to prevent lice.

To reduce the spread of head lice, avoid direct hair-to-hair contact when an infestation is known. Do not share combs, brushes, hats, hair accessories, towels, or pillows until treatment has started and shared items have been cleaned.

Routine pesticide treatment of people without lice is not recommended. Regular whole-school or household spraying is also unnecessary. Children should not be blamed or shamed for having lice.

Body lice prevention depends on regular access to bathing, clean clothing, and laundry facilities. People who lack these resources may need practical support with clothing, bedding, washing, and safe housing rather than medicine alone.

Avoiding sexual or intimate contact with someone who has untreated pubic lice lowers the chance of transmission. Washing recently shared bedding, towels, and clothing also helps.

Living with it and what to expect

Most lice infestations clear with correctly used treatment and follow-up checking. Itching may last for days after successful treatment because irritated skin needs time to settle. The presence or absence of live lice is a better measure of progress.

Head lice do not live permanently in the home, damage the hair, or cause lasting health problems. In many settings, children can return to school after appropriate treatment has begun. Local school or childcare policies may differ, but policies that require every nit to be removed can keep children away unnecessarily.

Reinfestation is possible, especially when close contacts have not been checked or treated. It does not necessarily mean the original treatment failed. Repeated infestations can be frustrating, but they are manageable.

Body lice usually improve when a person can bathe and regularly change into clean, heat-laundered clothing. If access to these resources remains limited, infestations may continue or return.

Pubic lice should clear after treatment and management of close contacts. Avoid intimate contact until no live lice remain and treatment steps are complete. If lice continue after correctly following the instructions, seek advice rather than repeatedly applying the same product.

When to get medical help

Arrange routine medical or pharmacy advice if:

Seek prompt medical care for spreading redness, warmth, swelling, increasing pain, pus, or fever. These may indicate a skin infection.

Get emergency help if a treatment causes trouble breathing, faintness, widespread hives, or swelling of the face, lips, tongue, or throat. Rinse off the product if this can be done safely, and do not use it again unless a healthcare professional advises otherwise.

If a child has suspected pubic lice, arrange medical assessment. Pubic lice can occasionally spread without sexual contact, but the child's safety and possible routes of transmission need careful evaluation.

- You are unsure whether you have found live lice
- Treatment was used correctly but live lice remain
- Lice keep returning
- The affected person is a young child
- You are pregnant or breastfeeding and need treatment advice
- You have pubic lice or may need testing for other sexually transmitted infections
- Lice or nits are attached to the eyelashes or eyebrows

Common questions

Can lice jump or fly?

No. Human lice have no wings and cannot jump. They crawl from one person or item to another. Close contact is the main way head lice spread.

Does having lice mean my hair or home is dirty?

No. Head lice can live in clean or unwashed hair. They feed on blood, not dirt. Body lice are different because limited access to clean clothing and laundry makes it easier for them to survive.

Are nits the same as live lice?

No. Nits are eggs attached to hair or clothing fibres. Some may be empty or dead. A live crawling louse is the best evidence of an active infestation.

Do I need to treat everyone in the house?

Check household members and close contacts, especially anyone who shares a bed. Treat people with confirmed live lice. Treating everyone automatically can expose people to medicine they do not need.

Why do I still itch after treatment?

The skin may remain irritated after the lice are gone. Treatment products can also cause temporary itching. Recheck carefully for live lice rather than assuming that itching alone means treatment failed.

Can my dog or cat catch or spread my lice?

No. Human lice are adapted to live on people. Household pets do not need lice treatment because a person has head, body, or pubic lice.

Sources

- Centers for Disease Control and Prevention. About Head Lice
- Centers for Disease Control and Prevention. Treatment of Head Lice
- Centers for Disease Control and Prevention. About Body Lice
- Centers for Disease Control and Prevention. About Pubic "Crab" Lice
- National Health Service. Head lice and nits
- Cummings C, Finlay JC, MacDonald NE. Head lice infestations: A clinical update . Paediatrics & Child Health. 2018;23(1):e18-e24.
- Nolt D, Moore S, Yan AC, Melnick L. Head Lice . Pediatrics. 2022;150(4):e2022059282.