

Mosquito bites

Mosquitos have a long mouthpart (proboscis) that extends far beyond their heads. It looks like a tiny needle. When a mosquito bites you, it can use this mouthpart to pierce your skin, suck blood and secrete saliva into your bloodstream.

What are mosquito bites?

Most mosquito bites often appear as firm, red bumps, but may also appear white and puffy, depending on how long it's been since the bite. A mosquito bite may also feel hard and itchy. There may also be some swelling around the bite. Most symptoms of mosquito bites go away within three to four days.

What is a mosquito?

Mosquitoes are long-legged two-winged flies (classified in the order Diptera, family Culicidae). They are easily recognised by their long mouthpart (proboscis) and scaly wings and legs. More than 3,500 species inhabit the warm (temperate) and tropical areas of the world.

Why do mosquitos bite?

The females of many mosquito species suck blood. All male mosquitoes and many other females feed only on nectar, fruit juices and fluids secreted by plants. Blood-sucking female mosquitoes bite and suck blood for reproduction. The females need the protein in blood to develop eggs.

Warm-blooded animals are a common source of blood, but many mosquito species also attack cold-blooded animals such as snakes, turtles, toads, frogs and other insects.

Mosquito bite symptoms

After a female mosquito bites you, a small, raised bump forms. The raised bump may change colours, and you can sometimes see a small, dark spot in the centre. That dark spot is where the bite occurred.

What do mosquito bites look like?

The symptoms of a mosquito bite can vary. If the mosquito has a disease or an allergic reaction occurs, the symptoms may be more severe. The common symptoms of mosquito bites include:

- A puffy and reddish bump appearing a few minutes after the bite.
- A hard, itchy, reddish-brown bump, or multiple bumps appearing a day or so after the bite or bites.
- Small blisters instead of hard bumps.
- Dark spots that look like bruises.

More severe reactions can occur, particularly in children and people with a weakened immune system. The symptoms of more severe reactions to mosquito bites may include:

- A large area of swelling and redness.
- [A slightly raised temperature \(fever\).](#)
- [Hives \(also called urticaria or nettle rash\)](#), with itchy red or white bumps on the skin.
- [Swollen glands \(lymph nodes\).](#)

Why do mosquito bites itch?

When a mosquito secretes saliva into your bloodstream, the saliva can cause an allergic reaction and a chemical called histamine accumulates around the area of the bite. It is the histamine that causes mosquito bites to itch and swell. Most people make an allergic response to a mosquito bite but some people react much more badly than others.

Treatment for mosquito bites

Mosquito bites usually don't need treatment and they just get better on their own.

However, you should see a healthcare professional if more severe symptoms develop after a bite (severe allergic reaction, fever, headache, body aches or feeling generally very unwell).

Also, see a healthcare professional if you experience symptoms and have recently visited a place where mosquito-spread infections are common (see below). Treatment will vary depending on the type and severity of the infection.

General advice

Gently wash the area with soap and water.

Don't scratch mosquito bites. You risk breaking your skin and an infection may then develop. If you accidentally break your skin, keep the area clean by washing it with soap and water and covering your mosquito bites with a bandage. Talk to a healthcare professional if you have an infected mosquito bite.

Ice can help to reduce inflammation, pain, swelling and itchiness. Apply an ice pack covered in a light towel over the area for at least 10 minutes for mosquito bite relief.

There are many over-the-counter products that can stop mosquito bites from itching. These topical creams can relieve itchy skin and discomfort.

Antihistamines

Histamine is a chemical created by your immune system. It is histamine that causes a reaction to mosquito bites that makes them swell and itch. You can take an antihistamine as a tablet, or you can apply it directly to your mosquito bite as a cream or ointment. Histamine tablets are much more effective than creams or ointments.

Hydrocortisone cream or ointment

Hydrocortisone is a corticosteroid. It relieves itching and swelling. You can apply it directly to your mosquito bite.

Other treatments

There are numerous home remedies that are used and examples include:

- Apply a mixture of baking soda and water, which can help reduce the itch response. Mix one tablespoon baking soda with just enough water to create a paste. Apply the paste to the mosquito bite. Wait 10 minutes and then wash off the paste.
- Aloe vera can relieve itching and pain. You can apply aloe vera gel directly to the mosquito bites.
- Honey can also be used to relieve itching and pain. Put on enough honey to lightly cover the mosquito bites. It may be worth covering the area with a bandage as honey can be very messy.

How long do mosquito bites last?

Itching and redness from a mosquito bite typically last no longer than 3–4 days, though the bump may last up to a week. If symptoms of a bug bite worsen after the first 24 hours or persist longer than four days, it could be infected and you should contact a healthcare professional.

Complications of mosquito bites

Mosquitoes spread disease through their bites. Mosquitoes are vectors (living things that carry diseases between animals and humans). Vectors often carry infections through blood. Other vectors include ticks, fleas and sandflies.

When a mosquito bites and saliva enters your blood, there is an exchange of fluids between the mosquito and your bloodstream. If a mosquito has fed from a person or animal with an infection, it can then pass that infection on to you when it bites.

What types of diseases can be spread by mosquito bites?

Because mosquitos may carry infections that can be very serious for humans, there is a greater risk than for most other [insect bites](#). Mosquito borne diseases include:

- **Chikungunya.** See the leaflet on [Chikungunya Fever](#) for more information.
- **Zika.** See the leaflet on [Zika Virus](#) for more information.
- **Dengue.** See the leaflet on [Dengue](#) for more information.

- **West Nile virus:** Found in Africa, North America, West Asia, Europe and the Middle East, West Nile virus is transmitted by the Culex mosquito. West Nile virus can be fatal. Symptoms of the most severe version of the virus can include headache, fever, a stiff neck, confusion, coma, convulsions and weakness of the muscles.
- **Malaria.** See the leaflet on [Malaria](#) for more information.
- **Yellow fever:** Found in Africa and Latin America, yellow fever is a virus transmitted by the Aedes aegypti mosquito. Symptoms of yellow fever can include fever, headache, muscle and back pain, lack of appetite and vomiting. Yellow fever can be fatal.

When to worry about mosquito bites

You should see a healthcare professional if you experience an allergic reaction to a mosquito bite or develop symptoms of a disease carried by mosquitoes.

If you've visited a region with active mosquito-transmitted diseases and develop symptoms, see your healthcare professional as soon as possible.

Mosquito bites are itchy, especially when the weather is hot. Contact a healthcare professional if your bites last longer than a few days, continue to grow in number or if you develop a severe allergic reaction.

How to prevent mosquito bites

You can prevent mosquito bites in several ways. These include:

General advice

- Eliminate any standing water.
- Cover up by wearing long sleeves, long trousers, and socks when outdoors. Mosquitoes may bite through thin clothes, so spray thin clothes with repellent spray.
- Use screens over windows and doors.
- Stay indoors during the highest point of mosquito activity (dusk and dawn).
- Sleep under protective mosquito netting.

Sprays

Use an insect repellent spray registered with the Environmental Protection Agency (typically containing DEET).

Treat clothing, tents and net coverings with chemicals that repel mosquitoes.

Protection against disease

If you plan to travel, get information about the areas you will be going to. Find out whether there is a risk of diseases from mosquitoes, and if so, whether there is a vaccine or medicine to prevent those diseases. See a health care provider familiar with travel medicine, ideally 4 to 6 weeks before your trip.

The advice you will be given will depend on where you intend to travel. When visiting an area with an active mosquito-carried disease, it's important to follow safety guidelines. This may include taking medicines (such as to protect against malaria) or a vaccine (such as to protect against yellow fever).

See also the leaflets on [Health Advice for Travel Abroad](#) and [Travel Vaccinations](#).

Further reading

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Originally Published: 19/11/2023		Document ID: doc_32464

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