CONDITION

Tarantula spider bite

A tarantula spider bite is a puncture wound that may expose the body to venom.

WHAT IT IS
Skin puncture and venom exposure from a tarantula

BODY SYSTEM
Skin and nervous system

MAIN SYMPTOMS
Pain, redness, swelling, muscle cramps

WHAT CAUSES IT
Venom injected through fangs

HOW IT IS DIAGNOSED
Exposure history and clinical examination

MAIN TREATMENT
Wound care, pain relief, and symptom monitoring

CAN IT BE CURED?
Yes - effects usually resolve with supportive care

IS IT AN EMERGENCY?
Sometimes - breathing trouble makes it an emergency

LONG-TERM OUTLOOK
Most recover fully; eye hair injuries may persist

Overview

Tarantulas are large, hairy spiders in the Theraphosidae family. They usually bite only when trapped, threatened, or handled. Bites are uncommon, including among people who keep tarantulas as pets.

A bite creates small puncture wounds from the spider's fangs. It may also inject venom. In many cases, the main effects are pain, redness, and swelling around the bite. The fangs can also cause a deeper mechanical injury, especially from a large spider.

The effects differ by species. Bites from many tarantulas native to the Americas, often called New World tarantulas, tend to cause local symptoms. Some African, Asian, and Australian species, known collectively as Old World tarantulas, have caused more severe pain and widespread muscle cramps or spasms.

Many New World tarantulas have tiny barbed hairs called urticating hairs. The spider can release these hairs when disturbed. They may irritate the skin, airways, or eyes, but this is a hair exposure rather than a bite. Eye exposure deserves particular attention because the hairs can become embedded and cause lasting inflammation.

Most tarantula bites improve with basic wound care and symptom treatment. Serious whole-body effects are unusual, but breathing trouble, a severe allergic reaction, or intense muscle spasms require prompt medical care.

Symptoms

Pain often starts immediately after the bite. It may feel like a pinprick, bee sting, or deeper puncture. Two fang marks may be visible, although their absence does not rule out a bite.

Symptoms around the bite can include:

Some bites cause symptoms beyond the bite area. Reported effects include nausea, sweating, weakness, and muscle cramps. Severe or repeated muscle spasms have been linked especially to certain Old World tarantulas. These spasms may affect the legs, abdomen, chest, jaw, or other muscle groups.

A severe allergic reaction is possible after any venom exposure, although it is not a typical outcome. Warning signs include swelling of the tongue or throat, wheezing, difficulty breathing, widespread hives, faintness, or collapse.

Urticating hairs cause a different pattern. On the skin, they can produce itching, bumps, redness, or a burning rash. In the eye, they may cause pain, redness, tearing, sensitivity to light, or a feeling that something is stuck there. Eye symptoms can begin immediately or develop later as inflammation builds.

Tissue death is not considered a usual feature of tarantula bites. A wound that becomes increasingly hot, swollen, painful, or filled with pus needs medical assessment because infection or another cause may be present.

- Pain or burning
- Redness and swelling
- Tenderness, itching, or tingling
- Minor bleeding from the fang punctures

Causes and risk factors

A tarantula bite happens when the spider closes its fangs on the skin. The bite may inject venom, although the amount is not predictable. A bite without meaningful venom injection is sometimes called a dry bite.

Most bites occur during direct contact. Situations that increase the chance of a bite include:

The species matters. Some Old World tarantulas are fast and defensive, and their venom has been associated with more significant muscle symptoms. Many New World species are more likely to defend themselves by releasing irritating hairs.

Children and smaller adults do not necessarily develop severe poisoning, but a deep fang wound or strong symptoms may have a greater effect on them. People with a history of serious allergic reactions should also take new breathing, throat, or whole-body symptoms seriously.

- Handling a tarantula
- Reaching into its enclosure
- Trying to catch an escaped spider
- Moving a spider during cleaning or transport
- Touching a tarantula hidden in a container, shoe, or other enclosed space

Diagnosis

There is no routine blood test that confirms a tarantula bite. Diagnosis is usually based on what happened, the symptoms, and an examination of the wound.

A clinician may ask when the bite occurred, where it happened, and whether the spider was a pet or a wild species. Knowing the species can help estimate the chance of muscle cramps or urticating-hair exposure. A photograph or the spider's scientific name may be useful. Do not handle or transport a live spider to obtain identification.

The examination may include the bite site, circulation and feeling in the affected limb, muscle function, breathing, heart rate, and signs of an allergic reaction. Eye symptoms may require an examination by an eye specialist using magnification to look for tiny embedded hairs.

Tests are not always needed. Blood tests, heart monitoring, or other investigations may be used when there are severe spasms, weakness, breathing symptoms, chest symptoms, or concern about another diagnosis.

Treatment and management

Move away from the spider before providing first aid. Do not try to pick it up.

Wash the bite gently with soap and water. A cold pack wrapped in cloth can be placed over the area for short periods to reduce pain and swelling. Raising the affected arm or leg may also help. Remove rings or other tight items before swelling increases.

Do not cut the wound, apply suction, use a tourniquet, or try to squeeze out venom. These methods do not remove venom and can damage tissue. Avoid rubbing the area if urticating hairs may be present because this can drive the hairs deeper into the skin.

Nonprescription pain relief may be suitable for some people when used according to its label. A pharmacist or clinician can advise if you have other health conditions, take regular medicines, are pregnant, or are treating a child.

Medical treatment is supportive, meaning it focuses on controlling symptoms while the effects wear off. It can include stronger pain relief, wound care, medicines for nausea, fluids, or medicines to control severe muscle spasms. Breathing and heart function may be monitored when symptoms are widespread. There is no routinely available tarantula antivenom.

Antibiotics like amoxicillin or doxycycline do not treat venom and are not routinely needed. They may be prescribed if a bacterial infection develops. A clinician may also check whether your tetanus vaccination is current because a bite is a puncture wound.

If irritating hairs enter an eye, rinse the eye with clean water and avoid rubbing it. Prompt eye assessment is important. Embedded hairs may need specialist treatment and follow-up to control inflammation and protect the surface and deeper structures of the eye.

A severe allergic reaction is treated as a medical emergency, including with adrenaline when appropriate.

Complications

Most bites do not cause lasting harm. Possible complications include:

Muscle symptoms can interfere with walking, sleeping, or normal activity. In reported Old World tarantula bites, cramps have sometimes returned over several days even after the initial pain improved.

Secondary infection is possible whenever the skin is broken. Warning signs include worsening redness, warmth, swelling, pus, fever, or pain that increases instead of settling.

Eye exposure to urticating hairs can be more difficult to manage than a bite. The barbed hairs may lodge in the cornea, the clear front surface of the eye, or travel into deeper tissues.

Inflammation can continue or return over months, so follow-up may be needed even if early symptoms improve.

- Persistent pain or swelling
- Severe or recurring muscle cramps
- Infection of the puncture wound
- A serious allergic reaction
- Eye inflammation from urticating hairs

Prevention

Tarantula bites can often be prevented by avoiding direct handling. A tarantula does not need to be held to be observed or cared for.

If you keep a tarantula, use a secure enclosure designed for the species. Keep it away from young children and from anyone who does not understand the risks. Follow experienced, species-specific husbandry advice when feeding, cleaning, or moving the spider.

Use suitable tools rather than bare hands for enclosure tasks. Know whether the species is likely to release urticating hairs, and keep your face away from the enclosure when it is open. Gloves and eye protection may reduce exposure during activities that disturb loose hairs, although they do not make handling risk-free.

Do not touch an unfamiliar tarantula outdoors. Shake out footwear, clothing, or equipment if you are in an area where large spiders may shelter.

After working around a tarantula, wash your hands before touching your face or eyes. Clean contaminated surfaces carefully without sweeping hairs into the air.

Living with it and what to expect

For many people, pain and swelling remain limited to the bite area and improve over hours to several days. The puncture marks may stay tender while the skin heals.

Recovery can take longer after a bite that causes widespread cramping. Muscle pain or spasms may continue or return for several days, and activity may need to be reduced until movement is comfortable and safe. Follow-up is appropriate if symptoms are not steadily improving.

A routine medical review may be recommended to check wound healing, update tetanus

protection, or reassess continuing pain. This is different from emergency care: stable, gradually improving symptoms can usually be reviewed through ordinary health services.

Skin irritation from urticating hairs often settles after the hairs are removed or shed. Eye injuries are less predictable. Symptoms can recur because tiny hairs may remain embedded, so keeping scheduled eye appointments is important.

A past bite does not provide reliable protection from another bite. Future exposure may cause a different reaction, even from the same spider. Avoiding direct handling remains important after recovery.

When to get medical help

Call emergency services now if you develop:

Seek urgent medical care for intense or rapidly worsening pain, repeated muscle cramps, persistent vomiting, chest symptoms, or a bite involving a young child. Eye pain, redness, blurred vision, light sensitivity, or suspected urticating hairs in the eye also need prompt assessment.

Contact a poison centre or medical service if the species may be an Old World tarantula, symptoms extend beyond the bite area, or you are uncertain what bit you. If available, provide a photograph or the spider's scientific name without risking another exposure.

Routine follow-up is appropriate when redness, swelling, or tenderness does not steadily improve, or when signs of infection develop. Seek review if the wound becomes hotter or more painful, drains pus, or is accompanied by fever.

- Trouble breathing, wheezing, or throat tightness
- Swelling of the tongue, lips, face, or throat
- Fainting, collapse, confusion, or extreme weakness
- Severe, widespread muscle spasms that affect breathing or walking

Common questions

Are tarantula bites poisonous?

Tarantulas inject venom, so the correct medical term is venomous rather than poisonous. For many species, the venom mainly causes local pain and swelling. Certain Old World species can cause more significant muscle cramps and other whole-body symptoms.

Can a tarantula bite kill you?

Death is not an expected outcome from most tarantula bites, and most people recover with supportive care. Any bite can become an emergency if it causes breathing trouble, a severe allergic reaction, or symptoms that interfere with normal muscle function.

How long does a tarantula bite last?

Local pain and swelling often improve over hours to several days. Severe cramps linked to some species may continue or recur for longer. Eye inflammation caused by urticating hairs can persist for weeks or months and may require specialist follow-up.

What should I do immediately after a bite?

Move away from the spider, wash the wound with soap and water, and apply a wrapped cold pack for short periods. Remove tight jewellery near the bite. Do not cut, squeeze, or suction the wound.

Are tarantula hairs more dangerous than the bite?

They can be. On the skin, urticating hairs usually cause irritation. In the eye, they can become embedded and lead to prolonged inflammation. Eye exposure needs prompt medical assessment.

Do I need antivenom or antibiotics?

There is no routinely available tarantula antivenom. Treatment usually focuses on wound care, pain relief, and control of symptoms such as muscle spasms. Antibiotics are used only when there is evidence of bacterial infection, not simply because a bite occurred.

Sources

- U.S. National Library of Medicine. Tarantula spider bite . MedlinePlus Medical Encyclopedia.
- Merck Manual Professional Edition. Spider Bites .
- Diaz JH. The global epidemiology, syndromic classification, management, and prevention of spider bites . American Journal of Tropical Medicine and Hygiene . 2004;71(2):239-250.
- Ahmed N, Pinkham M, Warrell DA. Symptom in search of a toxin: muscle spasms following bites by Old World tarantula spiders, with review . QJM . 2009;102(12):851-857.
- Battisti A, Holm G, Fagrell B, Larsson S. Urticating hairs in arthropods: their nature and medical significance . Annual Review of Entomology . 2011;56:203-220.