PROCEDURE

# Tick removal

Tick removal is the careful physical removal of an attached tick from the skin.

**PURPOSE**
Remove an attached tick promptly and limit further exposure

**PROCEDURE TYPE**
Therapeutic bedside removal with fine-tipped tweezers

**WHERE IT IS DONE**
At home, outpatient clinic, or bedside

**ANAESTHESIA**
None for routine removal

**HOW LONG IT TAKES**
About one to five minutes

**PREPARATION**
Fine-tipped tweezers, good lighting, no fasting

**RECOVERY**
Immediate; no driving restriction

**MAIN RISKS**
Retained mouthparts, skin injury, local infection

**RESULTS**
Tick removal known immediately; monitoring continues for weeks

## Overview

Tick removal is a simple procedure used to detach a tick that has bitten into the skin. Most attached ticks can be removed safely at home with fine-tipped tweezers.

Prompt removal matters because some ticks can transmit infections while feeding. Removing the tick reduces further exposure, although it cannot tell you whether an infection has already been transmitted.

The aim is to grasp the tick close to the skin and pull it out with steady pressure. Burning, crushing, twisting, or coating the tick with chemicals is not recommended.

## Why the procedure is performed

An attached tick should be removed as soon as it can be done safely. There is no benefit to waiting for the tick to fall off by itself.

Removal stops the tick from continuing to feed. For some tick-borne infections, the chance of transmission increases with feeding time. However, transmission time differs between infections, and it may be difficult to know how long a tick was attached.

Tick removal may also prevent local irritation caused by the tick's mouthparts. It does not treat a tick-borne infection once one has developed.

## Who should and should not have it

Anyone with an attached tick generally needs prompt removal. Pregnancy, childhood, older age, and most long-term health conditions are not reasons to leave a tick attached.

Home removal may not be the right choice if:

A healthcare professional can remove a tick when access is difficult. Occasionally, local anaesthetic is used if a small skin procedure is needed to remove deeply embedded material.

If you have a known tick allergy, follow your allergy action plan and local specialist advice. Disturbing a tick can trigger a reaction in some people with severe tick allergy.

Do not delay straightforward removal solely to arrange an appointment. Do not attempt to remove a tick from the surface of the eye yourself.

- The tick is attached near the eye or inside the ear
- You cannot reach or clearly see it
- You cannot grasp it close to the skin
- Movement could make the procedure unsafe
- Repeated attempts have injured the skin
- You have previously had a severe allergic reaction to ticks

## How to prepare

The treating facility's own instructions take priority if removal is being done in a clinic or hospital.

For routine removal, you do not need to fast, change your medicines, or arrange sedation. Gather:

Do not apply petroleum jelly, nail polish, essential oils, alcohol, or other substances to make the tick detach. Do not use a flame or heated object. These approaches delay removal and may burn or irritate the skin.

- Clean, fine-tipped tweezers or an appropriate tick-removal tool
- Bright lighting and, if useful, a mirror
- Gloves or a tissue for handling the tick
- Soap and water or skin antiseptic for afterward
- A sealed container or tape if you plan to keep the tick

## What happens during the procedure

Expose the bite area and identify where the tick enters the skin.

Using fine-tipped tweezers, grasp the tick as close to the skin's surface as possible. Avoid gripping its swollen body.

Pull upward with steady, even pressure. Do not jerk or twist. Twisting can cause the mouthparts to break off in the skin.

After removal, check the area. A tiny dark spot may be a mouthpart fragment. If it can be grasped easily with clean tweezers, it may be removed in the same way. If it cannot be removed easily, stop digging into the skin. The skin will often push the fragment out as it heals.

Clean the bite area and your hands with soap and water or an appropriate antiseptic. Do not crush the tick with bare fingers. It can be placed in a sealed bag or container, wrapped securely in tape, or disposed of according to local public health advice.

Consider taking a clear photograph of the tick and recording the date and likely location of the bite. This information may be useful if symptoms develop.

## Recovery and what to expect afterward

Pain: Removal may cause a brief pulling feeling or small sting. Mild tenderness, itching, or a small area of redness can remain afterward. The area should gradually settle rather than become more painful.

Eating: You can eat and drink normally immediately after routine removal.

Activity: Normal activity can usually continue. Avoid scratching the bite, since broken skin is more likely to become irritated or infected.

Driving: There is no driving restriction after routine tick removal without sedation. If a clinic used sedation for another reason, follow its driving instructions.

Work: Most people can return to work or school immediately. You may need to protect the area from friction if clothing or equipment rubs against it.

## Risks and possible complications

The main risks are minor skin injury, bleeding, irritation, and local infection. Digging for a small retained mouthpart can cause more damage than leaving it to work out naturally.

A small bump or limited redness immediately after a bite can be a local skin reaction. Redness that expands over several days, especially if it becomes ring-shaped or target-like, needs medical assessment.

Tick removal does not completely remove the possibility of a tick-borne infection. Possible illnesses differ by region and tick species. Symptoms can include fever, headache, unusual tiredness, muscle or joint pain, rash, facial weakness, or swollen joints.

Severe allergic reactions and tick paralysis are uncommon but require urgent care. Tick paralysis causes increasing weakness because of a toxin in the tick's saliva.

## Results and follow up

You will know immediately whether the tick is no longer attached. It is not always possible to tell whether every mouthpart has been removed, and this usually does not affect the risk of a tick-borne infection.

Routine medical follow-up is generally unnecessary if you remain well and the skin settles. Monitor the bite and your general health over the next several weeks.

Testing a removed tick cannot reliably show whether an infection was transmitted to you. Some public health programs accept ticks for identification or surveillance, but you should not delay healthcare while waiting for a tick result.

Antibiotics like amoxicillin or doxycycline are not routinely needed after every bite. Preventive treatment may be considered after certain higher-risk bites, particularly from an engorged blacklegged tick in an area where Lyme disease is common. This decision is time-sensitive, so contact a healthcare professional promptly if that description may apply.

## Alternatives

Physical removal is the only way to stop an attached tick from continuing to feed.

Fine-tipped tweezers are the standard option. A commercial tick hook or removal card may be easier for some ticks, but it must be used according to its instructions. Some tools use a different movement from tweezers.

Professional removal is reasonable for a tick in a difficult location or when home removal has failed. This provides better lighting and access but may involve travel and delay.

Waiting for the tick to detach is not a safe substitute for removal because feeding continues. Heat, petroleum jelly, nail polish, oils, and chemicals are also not suitable alternatives. Antibiotics may sometimes reduce the risk of Lyme disease after a qualifying bite, but they do not replace removal.

## When to call your healthcare team

Seek emergency help now if you develop:

Contact a healthcare professional promptly if you develop an expanding rash, fever, severe headache, facial weakness, unusual muscle or joint pain, or a swollen joint in the days or weeks after a bite.

Also seek advice if the bite becomes increasingly painful, hot, swollen, or begins draining pus. These may be signs of a skin infection.

Routine advice is appropriate if a mouthpart fragment remains, the tick was very swollen with blood, you do not know how long it was attached, or you want to discuss whether preventive treatment is appropriate.

- Trouble breathing or swallowing
- Swelling of the tongue or throat
- Fainting, collapse, or widespread hives
- New or rapidly worsening weakness, difficulty walking, or breathing problems

## Common questions

Will I be asleep?

No. Routine tick removal does not need sedation or anaesthesia. A clinician may numb the skin in the unusual situation that a small incision is required.

Can I drive home?

Yes. Tick removal itself does not affect driving. Follow separate restrictions only if you received sedation for another procedure.

How painful is it?

Most people feel brief pulling, pinching, or stinging. Ongoing or increasing pain is not expected and should be assessed.

When will I know if it worked?

You will know immediately when the tick is no longer attached. You still need to watch for skin changes or other symptoms over the following weeks.

What if the tick's head stays in my skin?

What remains is usually part of the mouthparts, not the whole head. Remove it only if it comes out easily with clean tweezers. Otherwise, let the skin heal and seek advice if irritation continues.

Should I save the tick?

A photograph is often sufficient. Local public health services may accept ticks for identification or surveillance. Tick testing should not be used by itself to decide whether you need medical care.

## Sources

- Centers for Disease Control and Prevention. What to Do After a Tick Bite
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- National Health Service. Lyme disease
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- Australasian Society of Clinical Immunology and Allergy. Tick Allergy