CONDITION

# Toe fracture

A toe fracture is a crack or break in one of the small bones of a toe.

**WHAT IT IS**
A break in one or more toe bones

**BODY SYSTEM**
Bones and joints

**MAIN SYMPTOMS**
Pain, swelling, bruising, difficulty walking

**WHAT CAUSES IT**
Direct impact, crushing, or forceful bending

**HOW IT IS DIAGNOSED**
Toe X-rays; repeat imaging for some stress fractures

**MAIN TREATMENT**
Protection, supportive footwear, pain relief, sometimes realignment

**CAN IT BE CURED?**
Yes - most heal as bone repairs

**IS IT AN EMERGENCY?**
Sometimes - with exposed bone or poor blood flow

**LONG-TERM OUTLOOK**
Most heal well within several weeks

## Overview

A toe fracture is a crack or complete break in a toe bone. The medical term for a toe bone is a phalanx . Most toes have three of these small bones. The big toe has two.

Toe fractures often happen after a heavy object falls on the foot or the toe strikes furniture, a step, or sports equipment. Repeated stress can also cause a small crack over time.

Many uncomplicated fractures heal with protection, supportive footwear, and gradual return to activity. However, the position of the broken bone matters. A fracture that leaves the toe crooked, breaks the skin, or affects a joint may need more treatment.

The big toe needs particular attention because it helps you balance and push forward while walking. A poorly aligned big-toe fracture can affect movement more than a similar fracture in a smaller toe.

## Symptoms

Symptoms usually begin soon after an injury. A stress fracture caused by repeated strain may develop more gradually.

Common symptoms include:

The toe may look bent, shortened, or turned to one side if the bones have moved out of position. Do not try to force a deformed toe straight yourself.

Bleeding under the toenail can create a dark patch called a subungual hematoma . Pressure beneath the nail may cause throbbing pain. The nail may loosen or fall off later, but it usually grows back slowly.

A sprain, dislocation, severe bruise, and fracture can cause similar symptoms. Being able to move or walk on the toe does not rule out a fracture.

- Pain and tenderness at one point on the toe
- Swelling and bruising
- Pain when standing, walking, or pushing off the foot
- Reduced toe movement
- Difficulty wearing a normal shoe

## Causes and risk factors

Most toe fractures result from a sudden injury. Common causes include kicking a hard object, dropping something on the foot, stubbing the toe, or trapping it during a fall.

Sports can cause fractures through direct contact or sudden bending. Barefoot activities and sports that involve running, jumping, or rapid changes in direction can increase exposure to these injuries.

A stress fracture is a small crack caused by repeated loading rather than one major accident. It may follow a rapid increase in running, dancing, marching, or another weight-bearing activity.

Factors that may make a fracture more likely include:

Children can fracture areas near a growth plate, where bone is still developing. These injuries may require closer assessment to make sure growth is not affected.

- Footwear that does not protect the toes
- Previous injury or altered foot movement

- Reduced bone strength, including osteoporosis
- Repeated high-impact activity without enough recovery
- Reduced feeling in the feet, which can make injuries harder to notice

## Diagnosis

A healthcare professional will ask how the injury happened and examine the toe. They may check its shape, skin, nail, tenderness, movement, sensation, and blood flow. They may also look for injuries elsewhere in the foot.

X-rays can show the location and pattern of a fracture. Different views may be needed because the toe bones overlap on a single image.

Not every minor injury to a smaller toe needs an X-ray if the result would not change treatment. Imaging is more likely when the big toe is injured, the toe is deformed, a joint may be involved, or symptoms are severe or not improving.

A new stress fracture may not appear clearly on the first X-ray. If symptoms continue, repeat X-rays or another type of scan may be considered.

## Treatment and management

Treatment aims to keep the toe in a safe position, control discomfort, and protect it while the bone heals. The best approach is influenced by which toe is broken, whether the bone has moved, and whether a joint, nail, or skin wound is involved.

For a stable fracture of a smaller toe, management may include:

This taping is often called buddy taping . Padding is placed between the toes to reduce rubbing. Taping should not be so tight that the toe becomes numb, cold, pale, or blue.

Do not buddy-tape a toe that is badly deformed or has an open wound without medical assessment. If you have diabetes, reduced circulation, reduced feeling in your feet, or fragile skin, get advice before managing the injury yourself.

Pain-relieving medicines may help. Follow the product label and ask a pharmacist or healthcare professional if you are unsure whether a medicine is suitable for you.

If the bones have moved out of place, a trained professional may need to realign them. This is called a reduction . Local anaesthetic may be used to numb the area.

Big-toe fractures may need a walking boot, cast, or other firm support. Fractures that enter a

joint, remain unstable, or cannot be lined up properly may need specialist follow-up. Surgery is uncommon but may be considered for severe, open, unstable, or joint-involving fractures.

- Reducing activities that increase pain
- Elevating the foot to limit swelling
- Using wrapped ice for short periods during the first few days
- Wearing a firm-soled, wide, protective shoe
- Taping the injured toe to the toe beside it for support

## Complications

Most toe fractures heal without lasting problems. Complications are more likely after severe injuries, delayed treatment of a displaced fracture, or a fracture involving a joint.

Possible complications include:

A damaged toenail may grow back with ridges or a changed shape. Nail growth is slow, so the final appearance may not be clear for months.

Persistent pain does not always mean the bone has failed to heal. Joint stiffness, altered walking, or irritation from footwear can also cause symptoms and should be assessed if they continue.

- The bone healing in a poor position, called malunion
- Ongoing stiffness, pain, or swelling
- Arthritis in a damaged toe joint
- Pressure from footwear over a changed toe shape
- Infection after an open fracture
- Delayed healing or failure of the bone to join

## Prevention

Not every toe fracture can be prevented. Accidents such as dropping an object or catching a toe on furniture can happen despite reasonable care.

You may reduce risk by wearing protective, well-fitting shoes during work, sport, lifting, and other activities where the toes could be struck. Keep walking areas clear and use adequate lighting, especially around stairs and furniture.

Increase running, dancing, or other repetitive weight-bearing activity gradually. Allow time for recovery and replace footwear that no longer provides suitable support or protection.

Bone health also matters. Regular weight-bearing activity and adequate nutrition help maintain bone strength. If you have osteoporosis or another condition that weakens bone, follow the management plan given for that condition.

## Living with it and what to expect

Pain and swelling often begin to settle during the first several days, but the toe may remain tender for longer. Many uncomplicated fractures heal over several weeks. Big-toe, displaced, joint-related, and stress fractures may take longer.

Some swelling can continue after the bone has joined, especially after a long day on your feet. Shoes may feel tight during this period. A wide toe box can reduce pressure.

Walking is usually increased according to comfort and the support recommended for the injury. A mild limp early on is common, but repeatedly walking in a way that causes significant pain can delay a comfortable return to normal movement.

Return to running, jumping, or contact sport is usually gradual. The toe should be able to tolerate normal walking and sport-specific movement without significant pain. Returning too early may cause another injury or prolong symptoms.

Routine follow-up may be needed for a big-toe fracture, a fracture involving a joint, a childhood growth plate injury, or a bone that was realigned. Follow-up can check that the toe remains in a suitable position.

Most people return to their usual daily activities. A small number have lasting stiffness, altered toe shape, or discomfort in certain shoes. Persistent symptoms deserve reassessment rather than simply being accepted as part of healing.

## When to get medical help

Go to an emergency department if:

These signs can indicate an open fracture, reduced blood flow, nerve injury, or significant soft-tissue damage.

Seek urgent medical assessment if the toe is clearly bent or rotated, the big toe may be broken, pain is severe despite basic measures, or there is a large painful collection of blood beneath the nail. Do not try to drain blood from under the nail yourself.

Prompt advice is also sensible if you have diabetes, poor circulation, reduced feeling in your feet, a weakened immune system, or fragile skin. These conditions can affect wound healing and make complications harder to notice.

Arrange routine follow-up if pain and swelling are not starting to improve, walking remains difficult, the toe repeatedly rubs against footwear, or symptoms return as activity increases. Ongoing pain after the expected healing period may need another examination or further imaging.

- Bone is visible or there is a deep wound over the suspected fracture
- The toe is cold, pale, blue, or losing feeling
- Bleeding is heavy or does not stop with firm pressure
- A severe crushing injury has damaged a large area of the foot

## Common questions

How can I tell whether my toe is broken or just bruised?

Both can cause pain, swelling, and bruising, so symptoms alone may not provide a definite answer. A toe that looks crooked, is very tender over one bone, or remains painful may be fractured. An X-ray can confirm many fractures when confirmation would affect treatment.

Can I walk on a broken toe?

Some people can put weight on a stable fracture, especially with a supportive, firm-soled shoe. Walking should not cause marked or increasing pain. Big-toe fractures and more severe injuries may require a boot, cast, or temporary reduction in weight-bearing.

Is buddy taping always enough?

No. Buddy taping can support many uncomplicated fractures of the smaller toes. It may not be suitable for an open, deformed, unstable, or big-toe fracture. Stop and seek advice if taping causes numbness, skin damage, colour change, or worsening pain.

How long does a broken toe take to heal?

Many heal within several weeks, but recovery is not identical for everyone. The injured toe, fracture position, joint involvement, general bone health, and activity level all affect healing. Swelling and shoe sensitivity can outlast the initial bone healing.

Will a broken toe heal if it looks crooked?

It may heal, but it could remain crooked if the bones are not properly aligned. This can cause shoe pressure, stiffness, or altered movement. A visibly bent or rotated toe should be

assessed promptly rather than forced straight at home.

Will my black toenail fall off?

It may. Blood beneath the nail can loosen it after an injury. A replacement nail usually grows slowly, and its appearance may change if the nail-growing tissue was damaged. Increasing redness, warmth, drainage, or worsening pain should be assessed.

## Sources

- American Academy of Orthopaedic Surgeons. Toe and Forefoot Fractures . OrthoInfo.
- Bica D, Sprouse RA, Armen J. Diagnosis and Management of Common Foot Fractures . American Family Physician. 2016;93(3):183-191.
- Hatch RL, Hacking S. Evaluation and Management of Toe Fractures . American Family Physician. 2003;68(12):2413-2418.
- Merck Manual Consumer Version. Fractures of the Toes .
- National Health Service. Broken toe . NHS Conditions.