CONDITION

Nose fracture

A nose fracture is a crack or break in the bones or cartilage of the nose.

WHAT IT IS
Break in the nasal bones or cartilage

BODY SYSTEM
Face and airways

MAIN SYMPTOMS
Pain, swelling, bruising, nosebleed

WHAT CAUSES IT
Direct injury to the nose

HOW IT IS DIAGNOSED
Physical examination; CT for suspected complex facial injury

MAIN TREATMENT
Symptom care, realignment, or surgery

CAN IT BE CURED?
Yes - most fractures heal with care

IS IT AN EMERGENCY?
Sometimes - severe bleeding, blocked nostrils, or head injury signs

LONG-TERM OUTLOOK
Most heal well, sometimes with lasting shape changes

Overview

A nose fracture, sometimes called a broken nose, is a crack or break in the bone or cartilage that gives the nose its shape. It usually happens after a direct blow to the face.

The nose contains small nasal bones near the bridge and flexible cartilage closer to the tip. A fracture can affect one or both sides. The wall between the nostrils, called the nasal septum, may also be bent or injured.

Most nose fractures heal without major problems. However, swelling can hide a change in shape, and some injuries need prompt treatment before the bones begin to set. A collection of blood inside the septum, called a septal haematoma, needs urgent assessment because it can damage the cartilage.

A nose injury may occur with concussion, eye injury, dental injury, or fractures elsewhere in the

face. The symptoms beyond the nose are therefore as important as the appearance of the nose itself.

Symptoms

Pain, tenderness, and swelling usually begin soon after the injury. Swelling can make it difficult to judge whether the nose has changed shape.

Common symptoms include:

Bruising around both eyes can happen after a nose fracture, but it may also occur with more extensive facial or skull injuries. Symptoms such as confusion, repeated vomiting, loss of consciousness, vision changes, or a worsening headache may point to a head injury rather than an isolated broken nose.

A septal haematoma can cause increasing blockage, pain, or a soft purple or red swelling inside the nose. It may block one or both nostrils. This requires urgent medical treatment, even if the outside of the nose looks normal.

Clear, watery fluid leaking steadily from the nose after a significant head or facial injury is not a typical nosebleed. It can rarely be fluid from around the brain and needs emergency assessment.

- Pain when touching or moving the nose
- Swelling over the nose or nearby face
- Bruising around the nose or eyes
- A nosebleed
- A crooked, flattened, or widened appearance
- A blocked feeling in one or both nostrils
- A grating or crackling feeling when the nose moves
- Reduced sense of smell

Causes and risk factors

A nose fracture is caused by physical force. Common causes include falls, contact sports, road traffic collisions, fights, and being struck by an object.

The nose projects from the face, so it can absorb much of the force during an impact. Even an

injury that does not break the bone may damage the cartilage or septum.

The chance of a nose fracture is higher during activities where the face may be hit, particularly without suitable protective equipment. Previous nasal injuries may also leave the nose more vulnerable or make its shape harder to assess after a new injury.

Older adults may fracture the nose during a fall. In children, the nasal structures are smaller and contain more cartilage, so an injury can be less obvious. Damage to areas involved in facial growth can have effects that appear later.

Diagnosis

A healthcare professional usually diagnoses a nose fracture by asking how the injury happened and examining the face and inside of the nose. They may check the nose's shape, tenderness, stability, airflow, and any active bleeding.

The examination also looks for a septal haematoma. The eyes, teeth, jaw, cheekbones, neck, and nervous system may be checked when the impact could have caused other injuries.

Swelling can make the first examination difficult. If there are no urgent problems, the nose may be examined again after the swelling has started to settle. Photographs taken before the injury can sometimes help show whether the shape has changed.

Standard X-rays are not usually needed for a straightforward nose fracture. They may not show cartilage damage and often do not change treatment. A CT scan may be used when there are signs of more complex facial, eye-socket, or skull injuries.

Treatment and management

Early care focuses on controlling bleeding, limiting swelling, and checking for complications. Do not try to straighten or push the nose back into place yourself.

For a nosebleed, sit upright, lean forward, and firmly pinch the soft part of the nose. Leaning forward reduces the chance of swallowing blood. Seek medical help if bleeding is heavy or does not stop with firm pressure.

A wrapped cold pack held gently against the area can reduce swelling and discomfort. Keeping your head raised, including while sleeping, may also help during the first few days. Avoid blowing or picking the nose while it is healing.

Over-the-counter pain relief may be suitable for some people. Follow the product label and ask a pharmacist or healthcare professional if you take blood-thinning medicine, have another

medical condition, are pregnant, or are choosing medicine for a child.

A fracture that has not changed the nose's shape and does not block breathing may only need symptom care and follow-up. The swelling and tenderness should gradually improve.

If the nose is clearly crooked or airflow is blocked, a clinician may recommend a closed reduction. This means moving the bones back into position without making a surgical cut. It is performed with local or general anaesthesia so the area is numb or you are asleep.

Reduction is usually considered after enough swelling has settled but before the bones become fixed in their new position. This creates a limited treatment window, often within the first one to two weeks. Timing differs for children and for more complex injuries.

Surgery may be needed for severe fractures, open wounds, major septal damage, or injuries involving other facial bones. Later surgery may also be considered if healing leaves ongoing blockage or a shape change that troubles you.

A septal haematoma must be drained promptly by a trained clinician. Treating it early protects the cartilage and lowers the risk of infection and permanent deformity.

Complications

Many nose fractures heal without complications. Possible problems include:

An untreated septal haematoma can interrupt the cartilage's blood supply. This may lead to cartilage damage, infection, a hole in the septum, or collapse of the bridge of the nose. These problems are less likely when the haematoma is recognised and treated quickly.

A repaired nose can still heal with some unevenness because of the original injury, swelling, or movement during healing. Further assessment is reasonable if breathing or appearance remains a concern after recovery.

- A nose that remains crooked, flattened, or wider than before
- Persistent blockage through one or both nostrils
- A bent septum, known as a deviated septum
- Repeated nosebleeds
- Reduced sense of smell
- Infection
- Ongoing facial pain or tenderness
- Damage to nearby facial structures

Prevention

Not every nose fracture can be prevented. Falls, collisions, and unexpected impacts can still happen.

You can reduce the chance of injury by:

If you have already fractured your nose, avoid activities that could cause another facial impact until it has healed. Follow the return-to-sport advice given by the professional assessing your injury.

- Wearing suitable face protection for contact sports or hazardous work
- Using a seat belt on every car journey
- Wearing a helmet when appropriate, while recognising it may not protect the nose
- Reducing trip hazards and improving lighting at home
- Following safety rules during sports and physical activities

Living with it and what to expect

Pain and swelling are often most noticeable during the first few days. Bruising may spread under the eyes before it fades. Nasal blockage can continue while the tissues inside the nose are swollen.

Many uncomplicated fractures improve over several weeks. The bones continue to strengthen after the pain and bruising have eased, so the nose may remain vulnerable to another impact during this period.

Once swelling settles, you may notice that the nose looks slightly different. A small change may not affect health or breathing. A larger change, persistent blockage, or repeated nosebleeds can be reviewed after healing.

If realignment is needed, it is usually more straightforward before the bones set. Once the fracture has fully healed, correcting shape or airflow may require planned surgery rather than a simple reduction.

Long-term problems are not inevitable. Most people return to their usual activities, although contact sports may need to be avoided for longer than everyday activities. Recovery time is influenced by the fracture's severity and whether there are other facial injuries.

When to get medical help

Seek emergency help now after a nose or facial injury if you have:

Get urgent same-day medical assessment if the inside of the nose becomes increasingly blocked, painful, or swollen, especially if you can see a soft red or purple bulge. These may be signs of a septal haematoma.

Prompt assessment is also appropriate if the nose looks crooked, breathing through it is difficult, bleeding keeps returning, or the injury involved a strong impact. Treatment to realign the nose may be time-sensitive.

Routine follow-up is reasonable if swelling is not improving, pain continues beyond the expected recovery period, or you notice lasting changes in breathing, smell, or appearance after the nose has healed.

- Heavy bleeding that does not stop with firm pressure
- Trouble breathing that is not simply mild nasal stuffiness
- Loss of consciousness, confusion, unusual drowsiness, or a seizure
- Repeated vomiting or a severe or worsening headache
- Neck pain, weakness, numbness, or difficulty speaking or walking
- New double vision, loss of vision, or severe eye pain
- Clear, watery fluid draining from the nose
- A deep wound, exposed bone, or a major facial deformity

Common questions

How can I tell if my nose is broken or just bruised?

Both can cause pain, swelling, bruising, and bleeding. A changed shape, abnormal movement, or grating sensation makes a fracture more likely, but swelling can hide these signs. An examination is the most reliable way to assess the injury and check the septum.

Will a broken nose heal on its own?

Many nose fractures heal without an operation, particularly when the nose remains straight and breathing is not blocked. A fracture that has shifted may heal in that position unless it is realigned.

Do I need an X-ray for a broken nose?

Usually not for an isolated nose injury. Diagnosis is generally based on the examination

because standard X-rays may not change treatment. CT scanning is mainly used when a clinician suspects other facial or skull injuries.

When should a crooked nose be straightened?

It is usually assessed after some swelling has settled but before the bones become fixed. This is often within one to two weeks, with a shorter window sometimes used for children. Early assessment helps avoid missing that opportunity.

Can I sleep normally with a broken nose?

Sleeping with your head raised may reduce swelling and throbbing during the first few days. Try to avoid pressure on the nose and situations where it could be bumped.

Will my nose look the same afterward?

It may return close to its previous appearance, but some people have a lasting change in shape. Persistent concerns about appearance or breathing can be assessed after healing, when the final result is clearer.

Sources

- NHS: Broken nose
- Mayo Clinic: Broken nose - diagnosis and treatment
- Merck Manual Professional Edition: Fractures of the nose
- Royal Australian College of General Practitioners: Traumatic nasal injuries in general practice
- American Family Physician: Management of acute nasal fractures
- StatPearls: Nasal fracture reduction