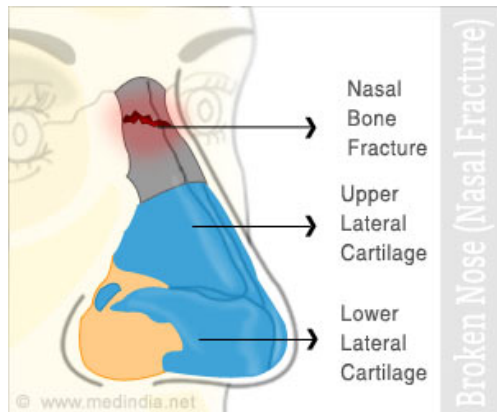


## **Broken Nose (Nasal Fracture)**



A broken nose is a fracture (crack or break) of the nasal bones. In most cases, there is also some damage to nearby nasal cartilage, particularly the nasal septum, the flexible partition that divides the left and right sides of the nose.

Because the nose has such a prominent and unprotected position in the centre of the face, it is particularly vulnerable to impacts from accidents and violence. In mild fractures, the injury causes only some mild swelling and a brief nosebleed, so you may be unaware of the break unless your nose heals with a slight deformity.

In severe fractures, however, the nose can be obviously deformed or shifted out of its normal midline position immediately after impact. There also may be a severe nosebleed, a blocked nostril or airflow problems related to a deviated septum (a shift of the nasal septum toward the left or right nostril).

In infants, the bones in the nose sometimes are fractured at the time of delivery. In older children, broken noses often are caused by a fall, a bicycle accident, contact sports or child abuse.

In general, children tend to be at lower risk of a broken nose than adults because a child's immature bones are generally less brittle and more flexible. However, a broken nose in a child is more likely to cause long-term deformities or breathing problems because a child's nasal bones and cartilage have not finished growing.

### **Symptoms**

Symptoms of a broken nose include:

- Bruising, swelling and tenderness around the nose
- Nosebleed
- A deformed, twisted or crooked nose
- Blockage of one or both nostrils
- A deviated septum
- A bruise-like discoloration under the eyes

Even if your nose is injured only mildly, the area can swell significantly within one to two hours after the impact. Until this swelling goes away, you or your doctor may not be able to accurately assess the extent of any damage.

### **Diagnosis**

After reviewing your symptoms, your doctor will ask how you injured your nose, whether you have broken or severely injured your nose before, and whether you have ever had nasal surgery.

Next, your doctor will examine your nose, looking at its shape and symmetry, the alignment of its bones, the position of the nasal septum and any obvious areas of deformity or tenderness. Using a bright light and an instrument (nasal speculum) that gently spreads open your nostril, your doctor will inspect the inside surface of each nostril and check your nasal septum for a bruise or blood clot. In many cases, no other tests are needed. X-rays are not always necessary.

Your doctor may refer you to an otolaryngologist (ear, nose and throat specialist) if your nose is deformed, the airflow through your nose is obstructed, or you have other symptoms that require specialized care. These doctors may order additional testing before treating your nasal fracture.

### **Expected Duration**

Although tenderness and swelling usually subside within one to two weeks, any deformities of the nasal bones or cartilages are permanent unless they are treated by a specialist.

### **Prevention**

You can help to prevent a broken nose by avoiding trauma to your nose. Wear a seat belt and a shoulder harness whenever you ride in a car and wear headgear to protect your face during contact sports. Wear a protective helmet if you ride a motorcycle or bicycle.

### **Treatment**

If your injured nose is deformed or misaligned and you seek emergency treatment, the doctor may attempt to realign your nose immediately. This can be done with or without surgery. For persistent bleeding, the doctor may pack the front of your nose with a hemostatic sponge or gauze. If there is a bruise or blood clot on your nasal septum (a septal hematoma), the doctor will make a small incision to allow the blood clot to drain. A septal hematoma that is not drained can lead to permanent deformity of the nose.

If your injury seems to be less severe, your doctor may wait for a few days to allow swelling to subside before assessing the situation. In many cases, the nose can be realigned within the first 10 days after injury in a nonsurgical procedure called a closed reduction. After that time, the realignment can be done surgically with a procedure called a rhinoplasty, which reshapes your nose to improve its appearance. When the nasal septum needs to be repaired as well, the procedure is called a septorhinoplasty.

### **When To Call a Professional**

Call your doctor immediately if you suffer a blow to the nose and you have any of the following symptoms:

- Your nose is deformed, crooked or shifted out of its normal midline position.
- Your nasal septum deviates to the right or left.
- You have a nosebleed that lasts for more than 15 minutes.
- You notice a small, grapelike swelling on the side of your nasal septum, inside your nostril. This may be a septal hematoma.
- You have increased trouble breathing through your nose.

### **Prognosis**

In most cases, the outlook is good, even when surgical treatment is necessary to realign or reconstruct the nose. A small number of people choose to have reconstructive surgery more than once, either for cosmetic reasons or to improve air flow.

Your doctor will talk to you about whether fixing your fractured nose is necessary, and the ideal setting if this is required. For some patients, this may be performed in the clinic under local anaesthesia. For others, a general anaesthetic may be necessary.

**Reference; American Academy of Otolaryngology — Head and Neck Surgery**  
<http://www.entnet.org/>