



### What is a hand fracture?

Many people think that a broken bone is different to a fractured bone, but in actual fact they are simply two words that mean the same thing. A fracture occurs when enough force is applied to a bone to break it. These may be simple, with the bone pieces aligned and stable; or in other cases they can be unstable, and the pieces move into incorrect positions. Some fractures involve the joint surfaces, and others may even pierce the skin (“open” or “compound” fracture), and this increases the risk of infection.

Some fractures will cause an obvious deformity, and others do not. As fractures heal, there may be resultant stiffness, deformity, or loss of function. Fractures that involve the joint surface may lead to early arthritis in those joints.



### How are they treated?

Examination of the hand and X-Rays will help to determine not only if there is a fracture, but also what treatment is recommended.

A splint/cast can be used to treat a fracture that is not displaced, or to protect a fracture that has been moved into the correct position, and is healing. In some instances, wires can be inserted through the skin (without making a cut) to hold the bones in place. This is called closed reduction and internal fixation.

In other cases, the recommended surgery may involve making a cut in the skin, to access the bony fragments and put them back in place. These are then held in place with small plates and/or screws. This is called open reduction and internal fixation. Depending on the treatment used, hand therapists will be involved in your care at various times to guide you through physical rehabilitation. In general, if plates and screws are used, this rehabilitation will begin within the first week post-operatively.

### What can I expect?

Once in a stable position, a fracture will heal to the point of no longer needing a splint in around 4-6 weeks. There may be a hard lump at the fracture site, called the “fracture callus”, which will usually recede over time.

It is important to carefully follow the advice of both your hand surgeon and hand therapist, in order to achieve the best possible result. Amongst other issues, stiffness, infection, delayed healing, and displacement (shift in bone position) can occur during the healing process, and your surgeon will discuss these with you.

