

Finger fractures

What is a finger fracture?

Your fingers are each made up of 3 bones called phalanx bones – a proximal, middle and distal phalanx. Your thumb has 2 bones – a proximal and distal phalanx. Between your wrist and fingers are the metacarpal bones. A fracture is a break of one of these bones.

What type of fracture is it?

Fractures are described in different ways. The most important definition is whether the bone is in a good position and whether it is likely to stay so. It is usually possible to tell this from the X-ray.

How will my fracture be managed?

If the finger looks swollen but the position is good, finger fractures are best dealt with without surgery. This is to preserve the fine layers which surround the bone which need to glide over each other in order for you to maintain full movement.

Your injury may cause these layers to be damaged and stick together (adhesion) leading to reduced movement. Avoiding surgery prevents further interruption and more adhesions.

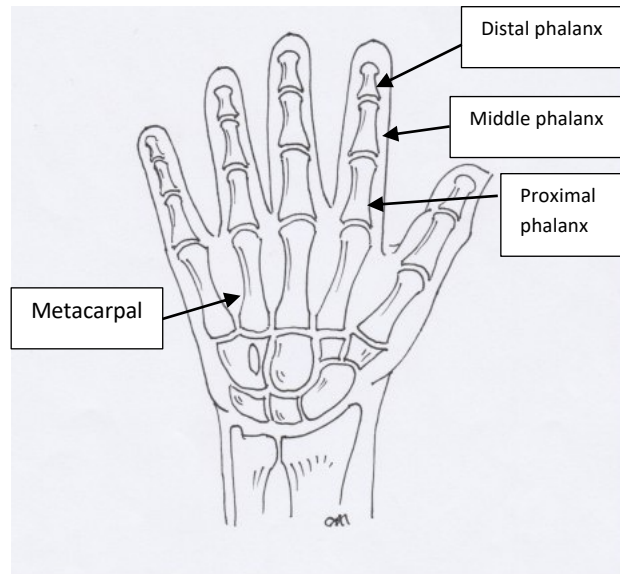
Your bone goes through different stages of healing – starting with a blood clot, then cartilage, then disorganised bone (callus) and finally back to mature bone. Although this process takes at least a year to fully complete, you don't need to wait that long to get your movement and function back.

In the blood clot stage, you need to support the bone by taping it to the neighbouring finger (Buddy taping), or wearing a splint if you have been given one. Even at this stage, as long as the bone is supported, you can try gentle movement as much as your finger allows before it is painful. Your bone is usually strong enough at 3 weeks to remove the tape/splint and allow movement using the muscles in the same arm. One way to know your bone is healing well is that it should not be painful when you press or squeeze the broken bone. You will still need to protect the bone by taping it if you are doing anything where it may get caught or knocked. At 6 weeks start to move your finger with the other hand and at 3 months you should be able to return to full activity.

How do I apply buddy taping?

Buddy taping protects your injured finger or hand while allowing you to move it to prevent stiffness. This is done by taping your finger to the adjacent one. You will be advised which fingers to tape together. Make sure you remove any rings on your fingers before taping.

The taping needs to be secure so that it keeps both fingers together as you bend and straighten them but not so tight as to cause an increase in your swelling or to cut off your circulation. If your finger starts to change colour or you get pins and needles which you did not have previously then loosen the taping.



The taping should be applied as in the picture, between the finger creases so you can bend and straighten the joints. You may need to cut your tape in half lengthways to make it narrow enough to stop it from blocking your movement. A piece of soft gauze can be placed between the fingers to absorb any sweat and to stop them from getting sore by rubbing. You can change the taping daily to freshen up your hand. Reapply the taping immediately after you have done this.



For the first 2-3 weeks wear buddy taping continuously. Once the swelling has settled and the pain subsides only use tape if there is a risk the finger might get caught (i.e. on public transport), otherwise leave the tape off and mobilize the finger.

What exercises should I be doing?

<p>Weeks 1-3: Keep the swelling down by trying to keep you hand higher than your heart as much as possible, including resting it on a pillow at night. Gentle bending and straightening the fingers in the buddy taping as pain allows.</p>	<p>Weeks 3-6: You can remove the taping and work on curling you fingers as shown above. Wear the taping protectively – if you might catch your finger, for example playing with children or manual working.</p>

If your fingers are still stiff after 6 weeks, then progress to the following exercises:

<p>Bend each of your fingers in turn towards your palm and hold for 3 seconds.</p>	<p>With the other hand, push each finger towards your palm and hold for 3 seconds.</p>	<p>Make a fist and hold for 3 seconds</p>

Things to look out for

If you have any rings on your fingers of your injured hand, these should be removed to prevent problems with blood flow to your finger. In severe cases this can lead to permanent damage or finger loss. If you are unable to remove your ring, it can be cut off in the emergency department.

If you are concerned that your finger looks more out of shape or if it is still painful after 4 weeks, please contact us to discuss. If at six weeks you are unable to lie your hand flat (palm down) on the table or make a full fist please also get in touch. Don't forget to move your shoulder and elbow to prevent stiffness of these joints. At the current time, we hope to be able to offer advice over the phone, but this depends on staffing levels. Please understand that we are unable to offer the level of service we would like due to the reallocation of staff in this Coronavirus pandemic.

How long does it take to recover?

It can take longer than might be expected. Most simple hand fractures return to normal function after a few months. The swelling can take months to settle and even in the long term, may not return to pre-injury size. Rings may need adjusting. Although most fingers return to full movement and function, it is possible that the finger may become stiff. This can be permanent, but doing the exercises above makes this much less likely.

When can I return to work?

This depends on the work that you do. For office work, it is when you are comfortable enough. You should avoid anything which makes your finger uncomfortable. For manual work requiring use of all fingers, it may be up to 6 weeks.

When can I return to driving?

You should not drive while you are in a splint or have significant pain in your finger that may distract your driving. After this you can drive when you are able to control your vehicle without distraction. This is your decision, but in most cases we would recommend no driving for at least 3 weeks. You must be safe and in control of the vehicle. The law is very clear that you have to be able to prove to the police that you are 'safe' to drive, so it is entirely your own responsibility and we cannot give you permission to drive.

When can I return to sport?

It can take 6 weeks before your hand is healed enough to return to play. You should only return to contact sport 12 weeks after your injury.

Contact information

If you require any information or advice from the Hand Therapy Team, you can contact us at the Royal Berkshire Hospital during office hours Monday to Friday via the Clinical Administration Team on: 0118 322 1885. There may be a delay in responding due to staffing levels being affected by the Coronavirus Pandemic.

Further information

More information is available on the Trust website: www.royalberkshire.nhs.uk

- www.readinghandsurgery.com
- bssh.ac.uk

Surgery

If the finger has an obvious deformity or significant injury to the joint, then one option is to perform surgery to realign the bone and stabilise it. Other options will be discussed with you before a decision is made. The bone can be stabilised in a number of ways depending on the fracture pattern. Options include wires (k-wire), an external fixator or internal (under the skin) fixation with screws and plate.

This requires an anaesthetic which can be a local (injection of local anaesthetic around the finger), regional (injection of anaesthetic to block the nerves higher in your arm) or general anaesthetic. Your Anaesthetist will discuss this with you. Please ensure you have someone with you to go home and be with you for 24 hours post-surgery.

After surgery you should keep your hand elevated higher than your heart and keep your hand clean and dry. After 2 weeks, you can start getting your hand wet and your dissolvable sutures will fall off. You can then follow the exercises given above, unless you have been given other instructions by your surgeon. Massaging your scar will also improve your mobility and settle the scar down. Don't forget to mobilise your shoulder and elbow to prevent stiffness.

Other risks of surgery include; - Bleeding, infection, scar, ongoing deformity, failure of the bone to heal, pain, reduced movement, and further surgery

If you have been advised to attend for surgery these are the details you need;

Where do I need to come to?	
Date:	
Time:	
Before surgery, when is the last time I can eat or drink anything but water?	
Before surgery, when is the last time I can drink water?	
You will need someone to collect you and be with you for 24 hours after your surgery	