

# Hand fractures in children

This leaflet offers information about managing your / your child's hand fracture. If you have any further questions or concerns, please speak to the staff member in charge of your care.

## What is a hand fracture?

A hand fracture is a break to one of the 27 bones in your hand and wrist.

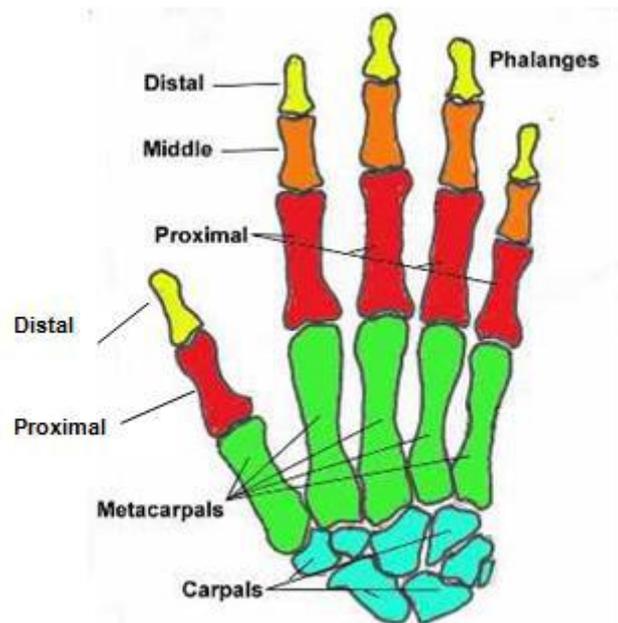
This a diagram of the right hand as viewed from the back

'Phalanges' refer to the bones of the fingers and thumb

'Carpals' refer to the bones of the wrist

'Proximal', 'middle' and 'distal' is a naming system to specify a finger bone

The bone(s) you have fractured is/are:



Fractures are very common in children and teenagers. About half of all boys and a quarter of all girls break a bone sometime before adulthood.

Children are flexible, so their bones may bend after a break. They may straighten out as they heal. This process is called remodelling. Because of remodelling, a young person's broken bone is likely to heal better and with less treatment than a similar break in an adult.

Generally, fractures take 6-8 weeks to unite and regain full strength at 12 weeks. For this reason it is important to **avoid all sporting activities for at least six weeks** after a fracture.

## What are the signs and symptoms?

Your/your child's hand may be swollen and painful when touched. The finger(s) may not be in the same position or alignment as before. It may not be possible or easy to move your hand immediately after the injury.

## Do I need any tests to confirm the diagnosis?

An x-ray may have already been performed to check the position and size of the fracture. This will help the doctor or nurse specialist decide on the best treatment for you/your child.

Further x-rays are not usually required with conservative treatment (i.e. no-operation) unless there are unexpected changes or the pain continues longer than expected.

## What treatments are available?

If the x-ray shows a fracture and the bone is in an acceptable position, you may be given a **splint or buddy straps** to keep the bone in place while it heals. Splints are usually made of thermoplastic and are moulded to the shape of the hand and secured with Velcro straps, making them easy to remove if required. This can allow gentle exercises out of the splint to be started soon after an injury. Your therapist or doctor will advise you/your child on safe exercises as needed.

### Buddy straps

Some fractures can be safely and successfully treated by strapping the affected finger to the next finger along. The doctor or therapist will show you how to put these on and for how long they need to be worn.

### Splinting

If the injury requires more support, a thermoplastic splint can be made, placing the hand in a safe position. Wear the splint as the therapist has advised, and do not get it hot or wet or try to alter it in any way.

If your splint is uncomfortable please discuss this with your therapist or contact the team by phone (contact details below).

### Wound

If surgery was needed, the wound will be left with minimal or no dressing at all to help with healing. If your stitches need to be removed, either a nurse or your therapist will do this 10-14 days after surgery. Alternatively, most stitches used are dissolvable and they should dissolve in two to three weeks.

If there is a k-wire or pin, this will normally stay in place for about three to four weeks.

To prevent infection, please keep the wound clean and dry until it has fully healed.

### Swelling

It is normal for there to be swelling (oedema) around the injured finger / hand. You can help reduce any swelling by lifting your hand above the level of your heart as much as possible when you are resting (elevation). Your therapist may discuss other ways of helping the swelling to settle.



## Exercises

Please move any part of the hand that is not in the splint to prevent the joints getting stiff. Sometimes the affected finger or area will feel stiff after a fracture. You/your child may be given hand exercises to help with this. Only do exercises if you have been advised to by the therapist or doctor.

## What happens if I do not get treatment?

Depending on the type and location of the fracture the change in direction of the bone may get worse or the fracture may not heal.

## How long will my fracture take to heal?

Hand fractures normally take six to eight weeks to mend and a further four weeks to get back to full strength. You/your child should **avoid all sport for at least six weeks** after a fracture or until your therapist says it is safe (whichever is the longer period).

It is normal for your hand to ache in cold weather or if you accidentally knock it.

## Contact us

If you have any questions or concerns about your treatment or splint, or you think your finger may not be recovering as expected, please talk to your therapist at your next appointment.

For urgent questions, contact the hand therapy team on 020 8725 1038 (answerphone, please leave a message).

Your therapist's name is \_\_\_\_\_

**For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.stgeorges.nhs.uk](http://www.stgeorges.nhs.uk)**

## Additional services

### Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (near the lift foyer).

**Tel:** 020 8725 2453 **Email:** [pals@stgeorges.nhs.uk](mailto:pals@stgeorges.nhs.uk)

### NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

**Web:** [www.nhs.uk](http://www.nhs.uk)

### NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

**Tel:** 111

