

# Non-complex fractures

Information for the public

Published: 17 February 2016

[www.nice.org.uk](http://www.nice.org.uk)

## About this information

NICE guidelines provide advice on the care and support that should be offered to people who use health and care services.

This information is for people who have non-complex fractures. A fracture is a broken bone. There are many different types of broken bone and so many options for treatment. A non-complex fracture is usually managed in a local hospital rather than a specialist centre. The NICE guideline offers advice about how non-complex fractures should be managed. It does not cover every type of non-complex fracture or every aspect of care. But it does provide advice where this is needed. It does not cover dislocations, complex fractures (complicated fractures which usually need to be managed in a specialist centre), skull fractures, hip fractures and spinal injuries. For information about the advice we have produced in these areas, see [other NICE guidance](#).

## Your care team

A range of professionals who specialise in different areas of treatment or support may be involved in your care. These could include emergency doctors, surgeons, specialist nurses,

people who take X-rays and scans (radiographers), people who advise on exercise and movement (physiotherapists) and people who help patients to regain their independence (occupational therapists).

## Working with you

Your care team should talk with you about your injury. They should explain any tests, treatments or support you should be offered so that you can decide together what is best for you. Your family or carer can be involved in helping to make decisions, but only if you agree. Your parent or carer may be involved in helping to make decisions depending on your age. There is a [list of questions](#) to help you talk with your care team.

NICE has also produced information for the public on [what adults should be able to expect when they use the NHS](#). We also have more information on the NICE website about [using health and social care services](#).

**Some treatments or care described here may not be suitable for you. If you think that your treatment does not match this advice, talk to your care team.**

## Pain relief

If you have a broken bone, healthcare professionals should help you decide what type of painkiller might be best for you. You should have regular checks to make sure that your pain relief is still adequate and that you're still comfortable.

### Adults (16 or over)

If you're 16 or over and healthcare professionals think you have broken a large bone in your leg or arm, you should be offered:

- paracetamol for mild pain
- paracetamol and codeine for moderate pain
- paracetamol by injection or a drip (directly into a vein through a tube and needle), with morphine, as needed, for severe pain.

You may also be given a type of painkiller called a non-steroidal anti-inflammatory drug

(for example, ibuprofen). However, these are not suitable for everyone; frail people or older people have a higher risk of developing problems (such as stomach ulcers and kidney problems) with non-steroidal anti-inflammatory drugs. Healthcare professionals should also be careful when giving morphine to these people because of concerns about side effects such as constipation, confusion and drowsiness.

## Children (under 16s)

If healthcare professionals think that children (under 16s) have broken a large bone in their leg or arm, they should offer:

- either paracetamol or ibuprofen, or both, for mild to moderate pain, or
- a stronger painkiller called an opioid (for example, morphine) for moderate to severe pain; this is usually given by injection or a drip, but it may also be given as a spray up the nose.

If it is thought that a child might have broken a thigh bone (femur), they may have their thigh numbed (with a local anaesthetic) in the emergency department.

## Splints

If healthcare professionals suspect you may have broken one of the large bones in your leg (called a long bone), you may be given a 'splint' to keep the damaged leg stable while you are taken to hospital. If the bone is broken above the knee, your other leg (adjacent leg) may be used as a splint.

## Finding out if you have broken a bone

X-rays and scans are often needed to find out if and where a bone is broken and how much damage there is.

## X-rays

X-rays are generally taken to help to find out what is wrong and to draw up a possible treatment plan. If healthcare professionals think that you have broken your knee or ankle, they should follow a set of rules (known as the Ottawa rules) to decide if you need an

X-ray.

It's important that all healthcare professionals involved in your care have the final report of any X-rays to help with diagnosis and treatment. For this reason, NICE has said that before you leave the emergency department a written report of your X-rays should be available for healthcare professionals involved in your care.

## MRI

A scaphoid fracture is a break in a small bone on the thumb side of the wrist. It usually causes pain and swelling at the bottom of the thumb. Scaphoid fractures can be easily missed and if untreated can cause long-term problems such as osteoarthritis. If healthcare professionals think that you might have a scaphoid fracture, they may offer you a type of scan called an MRI scan.

# Assessment and treatment

## Forearm fractures (distal radius fractures)

Distal radius fractures are breaks in a bone in the forearm (the radius) next to the wrist. If you have this type of fracture, you might have to have the bone put back into place; this is known as reduction. This may be done in the emergency department and you'll need stronger pain relief than gas and air. Adults (16 or over) may have an injection to numb the arm during the procedure.

The broken bone may be pulled back into place manually and held there with a plaster cast. Children may have a plaster cast below the elbow. When a cast cannot hold the broken bone in position, an operation may be needed to place a wire in the bone.

If you need an operation for a distal radius fracture, you should have it within 72 hours if the break involves a joint and within 7 days if a joint isn't involved. How the break is fixed depends on where it is and whether you need an operation for reduction.

## Upper arm fractures in adults (proximal humerus fractures)

Usually you won't need surgery for a fracture of the upper arm bone close to the shoulder joint (proximal humerus) caused by a fall. Sometimes an operation is needed for certain fractures.

## Torus fractures in children

Torus fractures (also known as buckle fractures) are partial breaks of the long bones (large bones in the arms and legs) in children. NICE has said that children with torus fractures of a bone in the forearm called the distal radius should not have rigid casts. Children should be discharged from hospital after a torus fracture has been assessed and their parents and carers should be told that they won't usually need another appointment. This is because this type of fracture usually heals on its own.

## Ankle fractures

If you have fractured your ankle, you might need an operation. This may be done on the same day of the injury or the next. Sometimes you won't need an operation and you should be advised to put as much weight on your ankle as you can bear. If healthcare professionals aren't sure that the broken bone is stable, they should arrange for you to have a check-up within 2 weeks. If you are still having problems with your ankle after 6 weeks, you should return to hospital for another check-up.

## Thigh bone fractures (femoral fractures) in children

Children who have broken a bone in their thigh should be admitted to hospital. How the fracture is treated will depend on the child's age and weight. Treatment for small children may be a type of 'traction' (pulling on the leg using a weight and a pulley). This can help to pull the bone back into place and ease the pain. Plates and rods are used to fix thigh bone fractures in bigger children (weighing more than 25 kilograms).

Healthcare professionals treating broken thigh bones in children should consider whether the injury might be non-accidental.

## Moving about after surgery for a thigh bone fracture

If you've had an operation for a type of thigh bone fracture (distal femoral fracture) you may be advised to start putting your weight on the injured leg straightaway.

## Information and support

### At the hospital

When you arrive at hospital you should be asked if you'd like a family member, carer or friend with you.

The hospital staff should explain:

- what your injuries are
- the possible tests and treatments, and when these are likely to be done.

### Children and adults who may need extra support

If the person who is injured is a child or adult who might need extra support (for example, because they have a learning disability or dementia), a member of the hospital staff should be assigned to look after them and to contact their families or carers. If possible, parents and carers should be able to stay where the person who is injured can see them. Staff should work with family members and carers to explain injuries and treatment in a way that the person who is injured can understand. Brothers and sisters of any children who are injured should also be included when support is offered to the family.

### Support during treatment

Once a treatment plan has been agreed, hospital staff should explain and give you some written information about:

- how long they think it might take for you to recover from your injuries

- when you're likely to be able to return to your normal activities, and
- whether you will recover fully.

They should also give you information about:

- how much weight you should put on the injured bone
- things you can do to help yourself recover (including who to contact for more advice about this), and
- any help you might be able to have in your home.

They should ask if you have any questions and answer these honestly. Staff should make sure that they know what information you've already been given to avoid any confusion.

You should have the opportunity to see any pictures of your injury taken before and after treatment if you want to.

Some treatments for broken bones are often done while a person is awake with parts of the body being numbed by anaesthetic. If you have this done, healthcare staff should reassure you during the procedure.

## When moving to another hospital

If you move to another hospital, the name and contact details of the person who was responsible for your care at the first hospital should be written down for you.

You should be told where you are going, why you are being moved and who will be responsible for your care at the new hospital (including their contact details). This should also be written down for you.

## Your hospital records

If you are transferred to a ward or another hospital, staff should send all your hospital records, including any photos of your wounds, with you.

Hospital staff should write a short and clear description of your injuries, plans for treatment and how they expect you to recover. They should send this to your GP. The

information should include a short summary that you and your family can understand.

## Questions to ask about non-complex fractures

These questions may help you discuss your injuries or the tests and treatments you have been given with your healthcare team.

### Finding out whether you have a broken bone

- Do I need a scan to find out whether my bone is broken?
- What will the scan involve?
- How long will I have to wait for the results of the scan?
- Will I be able to see a picture of my injury?

### Information and support

- Can you tell me more about broken bones?
- Who can support me if my movement is restricted because of my injury?
- Can you provide any information for my family/carers?

### Treatments

- Can you tell me why you have decided to offer me this particular type of treatment?
- What are the pros and cons of this treatment?
- What will it involve?
- How will it help me? What sort of improvements might I expect?
- How long will the bone take to heal? When will I be back to normal?
- Are there any risks associated with this treatment?



- Are there treatments other than the one you have offered me?
- Is there some other information (like a leaflet, DVD or a website I can go to) about the treatment?
- Will I need to have an operation?

## For family members, friends or carers

- What can I/we do to help and support the person with a fracture?
- Is there any additional support that I/we as carer(s) might benefit from or be entitled to?

## Following up on your treatment

- When should I start to return to normal and what should I do if I don't start to feel better by then?
- Are there different treatments that I could try?

## Sources of advice and support

- St John Ambulance  
[www.sja.org.uk](http://www.sja.org.uk)
- British Red Cross  
[www.redcross.org.uk](http://www.redcross.org.uk)
- National Osteoporosis Society, 0808 800 0035  
<http://stopatone.nos.org.uk/>

You can also go to [NHS Choices](#) for more information.

NICE is not responsible for the quality or accuracy of any information or advice provided by these organisations.

## Other NICE guidance

- [Fractures \(complex\): assessment and management](#) (2016) NICE guideline NG37
- [Major trauma: assessment and initial management](#) (2016) NICE guideline NG39
- [Spinal injury: assessment and initial management](#) (2016) NICE guideline NG41
- [Head injury: assessment and early management](#) (2014) NICE guideline CG176
- [Hip fracture: management](#) (2011) NICE guideline CG124

ISBN: 978-1-4731-1679-5

## Accreditation

