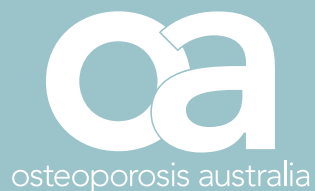
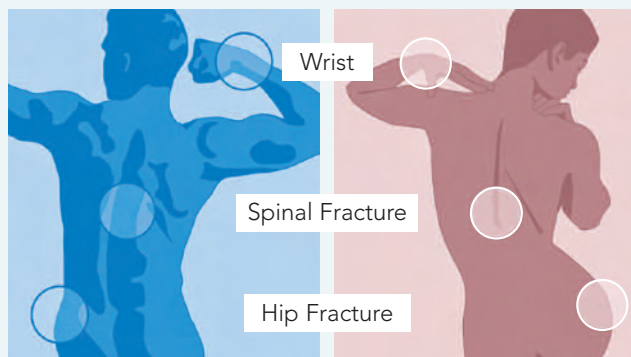


# Osteoporosis and Fractures



## Osteoporosis and Fractures

Osteoporosis is a disease where bones become weakened and can fracture easily. Any bone can be affected by osteoporosis but the most common fracture sites are the spine, hip and wrist. Osteoporotic fractures can occur after a minor bump or fall.



### Spinal fractures:

- are the most common osteoporotic fracture (46%) and are usually treated without surgery.
- can occur after everyday activities like bending forward, sneezing, turning around quickly or doing up shoes.

### Hip fractures:

- in over 90% of people, hip fracture occurs after a fall. Nearly all hip fractures require an operation, hospital stay and specialised rehabilitation.
- surgery generally involves partial or full hip replacement, or other surgery (involving screws, rods or plates) for fracture repair.

### Wrist fractures:

- fractures of the wrist are very common, particularly in women in their 50s, typically after a fall onto an outstretched arm. It can be the first sign of underlying osteoporosis.
- wrist fractures can often be treated without operation, in emergency departments. Some may require manipulation (straightening) under an anaesthetic. Serious fractures require surgery and a short hospital stay. Most fractures will require a cast.

## Commonly Asked Questions

**Can you have a fracture and not know you have osteoporosis?**

Yes. People, particularly over 50, may have a fracture after a minor fall or incident and go to hospital for treatment of the fracture. However, they may not be tested to see if osteoporosis is the underlying cause. If you have had a fracture, and are over 50, you should ask your doctor about osteoporosis.

**Can you have osteoporosis and not have a fracture?**

Yes. But having a diagnosis of osteoporosis means your risk of having a fracture increases. Thus, it is important to discuss treatment and lifestyle changes with your doctor to improve your bone health and reduce your risk of fracture.

**Can men get osteoporosis?**

Yes. Osteoporosis occurs in men and women. One in two women and one in three men over 60 will have an osteoporotic fracture.



National tollfree number

1800 242 141

[www.osteoporosis.org.au](http://www.osteoporosis.org.au)

*The Australian Government has provided funding to support this project.*

All fractures require recovery time and a rehabilitation program which should be designed to meet the individual's needs.

Fractures can take between several weeks and several months to heal. Rehabilitation after fracture repair is designed to get the patient back to their previous level of functioning in daily living.

Rehabilitation is important following all types of fractures. The types of health professionals who may be involved in your rehabilitation include the orthopaedic surgeon, physiotherapist, nurse, occupational therapist, exercise physiologist, psychologist and social worker.

Rehabilitation may take place in hospital, in a rehabilitation centre, a private practice or at home.

### Rehabilitation involves:

- **Exercises:** after a fracture, a physiotherapist will usually supervise an exercise program. Depending on the fracture, it may involve: muscle strengthening exercises; weight bearing exercises; walking; transfer and balance training; and improving posture and mobility.



- **Hydrotherapy** involves exercises in a warm water pool (usually at a temperature of 33-37°C) and is a good way to start exercising again (especially after spinal fractures). It makes slow, gentle movements easier.
- **Walking aids** such as walking frames, crutches and sticks may be used to share the load as you try to move.
- **Pain relief:** most fractures are painful and require pain relief. During rehabilitation and depending on the fracture, pain relief may include: medication, heat, massage, physiotherapy, TENS (Transcutaneous Electrical Nerve Stimulation), hydrotherapy, ultrasound, heat and cold packs, acupuncture and relaxation techniques.

### Spinal Fractures

- strengthening back extension muscles has been shown to reduce the risk of spinal fractures.
- avoid activities that involve bending forward from the waist especially whilst carrying objects because it increases the risk of compression fractures of the spine.
- hydrotherapy is a good way to start exercising again following a spinal fracture.
- initially exercise under supervision (eg physiotherapist) to reduce the risk of further injury. They can also give advice about maintaining good posture and pain relief techniques.
- the pain from spinal fractures usually lasts 6-8 weeks, and should resolve as the fracture heals. However, permanent changes to your posture can lead to chronic pain.



### Hip Fractures

- rehabilitation is essential and generally begins 1-2 days after the operation.
- exercise is crucial for rehabilitation after a hip fracture. Patients who have undergone intensive weight lifting exercise for 6-12 months following surgery have been shown to be better at getting up, walking, climbing stairs, doing household tasks, and maintaining bone and muscle mass compared to those who haven't.
- most inpatient hospital programs run from one to several weeks duration.
- rehabilitation, depending on your age and fracture type, may continue in a rehabilitation hospital, as an outpatient or at home.
- physiotherapists can advise on walking aids eg frames whilst occupational therapists (OT) can advise on practical home equipment eg handrails. An OT home assessment visit should be arranged before discharge.

### Wrist Fractures

- most wrist fractures require a cast for about 6 weeks.
- exercises are recommended for the fingers and shoulder whilst the cast is on, to prevent muscle wasting and reduced flexibility during this time. Avoid weight-lifting activity using the lower arm while the cast is on.
- after removal, a physiotherapist can advise on wrist rehabilitation exercises.

### Bone Density Test

Bone density testing is a quick, painless scan called a DXA (dual energy X-ray absorptiometry). It measures the density (strength) of your bones, usually of the hip and spine, and can help in predicting your future risk of fracture. People who have had a fracture and are over 50 years of age or have risk factors, should have a bone density test. Ask your GP or specialist for a referral.

Checklist for preventing further fractures:

- **Medications**  
People diagnosed with osteoporosis will need to discuss treatment with their doctor. Several effective medications are available which help to prevent fractures, slow bone loss and in some cases build bone.
- **Adequate daily calcium and vitamin D intake**  
It is important to ensure you get the correct daily requirements of calcium and vitamin D for bone health. If you are not getting your daily requirements, you may need supplements. Speak to your doctor or dietician for advice.
- **Physical activity and exercise**  
Exercise helps to build and maintain strong bones and prevent falls and fractures. Exercise can also play a crucial role in rehabilitation. Muscle strengthening exercises can help to rebuild bone in people who have developed osteoporosis, provide pain relief and speed the rehabilitation process. Before commencing any exercise program, people who have osteoporosis and/or fractures should see a physiotherapist, exercise physiologist or GP for an individual exercise program.
- **Falls Prevention**  
Falls are responsible for 90% of hip fractures and 50% of vertebral fractures in older people. Thus, reducing falls is an important part of preventing fractures.
- **Quit smoking**
- **Limit alcohol intake**