

## What is osteoporosis?

Osteoporosis is a condition that affects the strength and quality of bones, resulting in them becoming weaker and more likely to break.

About 1 in 16 Australian men aged over 50 has osteoporosis. Of those, [1 in 4 will break a bone](#) because of osteoporosis.

## Symptoms of osteoporosis

About half of Australian men with osteoporosis [don't know they have the disease](#). This is because osteoporosis usually has no symptoms, unless [it's severe and causes a fracture](#) (broken bone).

If the changes in your vertebral (spinal) bone structure that cause osteoporosis are severe enough, there can be a noticeable [curve in your spine or reductions in your height](#).

## Causes of osteoporosis

Osteoporosis is caused by changes in the structure of your bones, which makes them weaker, increasing the chance of a fracture.

Normal healthy bones are constantly regenerating, with old bone removed and new bone added. During childhood, bones become stronger and denser because new bone forms faster than old bone is removed.

Bone mineral density in males increases during puberty because testosterone stimulates bone growth and increases the amount of calcium added to bones. Bone mineral density in males reaches a peak in their early 20s, and then [slowly declines with age](#).

If your peak bone mineral density in your 20s is low, you have a medical condition or take medication that affects your bone health, your risk of getting osteoporosis is higher than normal. In older adults, bone formation slows and bone may be lost faster than it's made.

In half of men with osteoporosis, the disease occurs because of other health conditions, including:

- Low testosterone levels
- Poor absorption of calcium from food
- Excessive alcohol consumption
- Diabetes.

It can also be caused by medicines used to treat health conditions, including:

- Prednisolone for inflammatory conditions
- Some medications to treat epilepsy
- Some treatments for prostate cancer.

In men without these risk factors, osteoporosis is due to the gradual decline in bone mineral density that occurs with age (in men over 70), or for unknown reasons (in men under 70), probably related to [undiagnosed causes](#).

Osteoporosis can run in the family.

## Diagnosis of osteoporosis

Osteoporosis is diagnosed by performing a DEXA (dual-energy X-ray absorptiometry) scan to measure your bone mineral density. It may also be first picked up on an X-ray if you have back pain or break a bone from [only a minor trauma](#).

Your doctor might ask about your [diet and activity](#), review your medications or order blood tests to help them understand the reason for your osteoporosis.

Your doctor can use your bone mineral density measurement and other details about your health to calculate your risk of breaking a bone. If your risk is high enough, they may suggest treatment.

## Treatment of osteoporosis

If you don't already have a balanced diet with enough protein and calcium, or if you drink too much alcohol or smoke, making changes will help with managing your osteoporosis.

Regular physical activity will also help. Your doctor might refer you to a physiotherapist or exercise physiologist to help you strengthen your bones and muscles and improve your balance.

If you have osteoporosis and your calcium intake and vitamin D levels are low, taking calcium or vitamin D supplements can reduce your risk of breaking a bone. Always chat to your doctor before taking any supplements because calcium supplements are not necessary if your [diet is adequate](#).

There are a few different types of drugs that are used to treat osteoporosis. Your doctor will advise which is most suitable for you.

If your osteoporosis is due to another health condition, treating the other disease may be beneficial for your bone health.

If you have osteoporosis, you might need to make changes to your home or alter your daily activities to reduce your risk of falling and avoid breaking bones.

## Health effects of osteoporosis

Osteoporosis can have a significant effect on your health and wellbeing.

In men who break a bone because of osteoporosis, around [1 in 10 die before they get out of hospital](#), and [up to 2 in 5 will die within a year](#).

Some treatments for osteoporosis can have side effects that require regular monitoring of your health. Your doctor might recommend taking a break from taking your medication to minimise the likelihood of some unwanted side effects.

## What to do about osteoporosis

There are a number of things you can do to lower your risk of osteoporosis and improve your bone health, including:

- Eating a balanced diet with enough calcium and vitamin D
- Exercising regularly
- Avoiding smoking and drinking too much alcohol.

If you have osteoporosis, it's important to follow your doctor's advice and take your medications as prescribed.

You should also speak to them about the types of activity and exercises that can be useful for managing your osteoporosis.

## Questions to ask your doctor about osteoporosis

- What do you think is the cause of my osteoporosis?
- How can I change my diet and lifestyle to help manage my osteoporosis?
- What types of activities would be suitable for me to help manage my osteoporosis?
- What do you think will be the best type of treatment for me?
- What are the possible complications I could have from osteoporosis and its management?

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