

# PATIENT EDUCATION AID OSTEOPOROSIS: KNOW THE FACTS

## What is osteoporosis?

Osteoporosis is a condition where bones become **weak** and **brittle**, increasing the risk of **fractures** even from minor falls. It is a common, usually **long-term** (chronic) condition that happens slowly. Most people with osteoporosis are **unaware** of their condition, as there are few or no symptoms until a bone **breaks**, usually in the hip, spine or upper limb. These fractures can cause pain, making daily activities more difficult and reducing quality of life. Depending on the affected bone, fractures can be **serious** or life-threatening if not treated promptly.



Doctors may recommend screening tests for those at risk of osteoporosis. **Timely** diagnosis is key because you may need bone-strengthening treatments, along with changes to your diet, lifestyle, and home environment to **reduce** your risk of falls and fractures.

## Who is at risk of osteoporosis?

While women tend to lose bone **rapidly** in the first few years after **menopause**, especially if it begins before the age of 45, osteoporosis can also affect **men** and **younger women**.

You may be at a higher risk of getting osteoporosis if you:1

- · are underweight
- · do not take enough calcium
- · do not exercise regularly
- · drink or smoke heavily
- have family members with the condition
- have other long-term conditions such as rheumatoid arthritis, hyperthyroidism or diabetes
- take certain medicines such as steroids for a long time

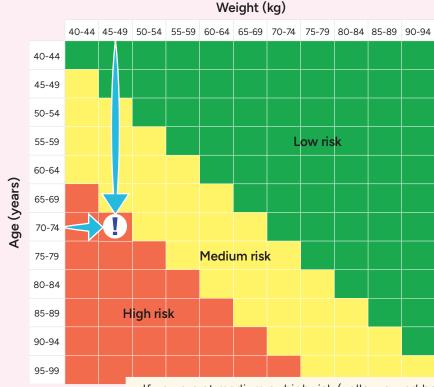
If you have any of these risk factors, talk to your **doctor** to assess your risk of osteoporosis and discuss ways to prevent it.

## Osteoporosis risk chart for women after menopause

For women who have undergone **menopause**, you can use the chart below to estimate your risk of osteoporosis based on your **weight** and **age**:<sup>2</sup>

I am 72 years old and weigh 47kg, what is my risk for osteoporosis?





If you are at medium or high risk (yellow or red boxes), discuss this with your **doctor**, who can advise you on the next steps for managing your condition.

# Myths and facts about osteoporosis



Myth

I don't need to go for a screening test for osteoporosis even though my doctor recommended it because I am active, healthy and I don't feel my bones getting weaker.

Osteoporosis is often called a "silent disease" because you can have little to no symptoms until you have a fracture. Even if you are active and feel healthy, your bones may still be losing strength.

If the bones in the spine break, the body will be unable to support itself properly, leading to a bent-forward posture (also known as having a hunched back) and long-term back pain. These changes can affect your balance, which increase your risk of falling and having another fracture.

What can you do?

It is important to go for a **screening** test for osteoporosis (bone mineral density scan), if your doctor has advised you to do so. Timely diagnosis and treatment can reduce the risk of painful fractures and long-term complications.

Myth

I may get exposed to dangerous levels of radiation during a bone mineral density scan.

Fact

A bone mineral density (BMD) scan is quick, painless, and very safe. It uses a much lower level of radiation than standard X-rays.<sup>3</sup> The results will allow your doctor to know how strong your bones are and recommend appropriate bone-strengthening treatments if needed.

What can you do?

This simple test provides valuable information to help assess your bone health. **Learn more** about BMD scans here, and speak to your doctor if you have any concerns.3





Myth

I do not need bone-strengthening medicines to treat osteoporosis because I drink milk and take calcium supplements every day. Also, these medicines might be unsafe.

Fact

Calcium from milk and supplements is important for building strong bones, but it is not enough to treat osteoporosis. Your doctor may prescribe bone-strengthening treatments that can slow bone loss or increase bone growth. These treatments are generally safe and have been shown to significantly reduce the risk of fractures in people with osteoporosis.



Talk to your doctor if you have concerns about taking medicines for osteoporosis. Your doctor will assess your age, sex, risk of fractures, medical and injury history, and treatment preferences to advise which treatment is suitable for you.

Treatments are available as **oral tablets** at subsidised rates when prescribed at your enrolled Healthier SG clinic. They are also available as injections into the fat under the skin, or slow drips into the vein.

Myth

I have heard that bone-strengthening medicines can cause unusual thigh bone fractures (atypical femur fracture) or lead to serious dental issues (osteonecrosis of the jaw), so I think I should avoid taking them.

Fact

Bone-strengthening medicines have been used safely for **many years** and **most** people take them without any problems. Serious side effects like unusual thigh fractures or dental problems are **rare** and can happen even in people **not taking** these medicines. For most people with osteoporosis, the **benefits** of preventing fractures that could lead to loss of independence and reduced quality of life are **greater** than these rare risks.<sup>4</sup>

What can you do?

Discuss any concerns about osteoporosis medicines with your **doctor**. They will explain the pros and cons and recommend a treatment that suits your health needs and preferences. While the risk of dental problems is **very low**, you can further reduce it by:

- Completing planned dental extractions or surgery **before** starting treatment
- Maintaining good dental hygiene through steps such as brushing twice daily with fluoride toothpaste, flossing daily, and going for regular dental check-ups
- Informing your dentist about your bone-strengthening medicines

Let your doctor know if you experience **sudden**, **unexpected pain** in your thigh, hip, or groin. They can check if your bone-strengthening medicines needs to be changed.

Myth

Losing bone and having fractures are just part of growing old, and I cannot prevent them. Also, I do not need to get treatment for a fracture because it will heal by itself over time.

Fact

While bone loss is a natural part of ageing, osteoporosis is treatable and fractures are preventable. For people with osteoporosis, taking **bone-strengthening** medicines as prescribed by your doctor can help slow bone loss and lower the risk of fractures.

### **REDUCE YOUR RISK OF OSTEOPOROSIS BY:**



avoiding smoking, and drinking too much alcohol



eating a healthy diet rich in calcium<sup>5</sup> and taking vitamin D supplements



doing weight-bearing and resistance **exercises** in the **morning sun**<sup>6</sup>

## AVOID FALLS AND FRACTURES BY:7







What can you do?

If you have a fall, see a doctor **immediately** to check for fractures, even if you don't feel much pain. Some fractures need **medical attention** to heal properly. Your **doctor** can advise which treatment is **suitable** for you and help manage your **pain** during the healing process.

## What are the key messages?

- Osteoporosis is a silent disease that can affect anyone.
- A BMD scan is a safe and painless screening test to determine if you have osteoporosis or
  are at risk of developing it consider having a scan if your doctor has advised you to do so.
- If you have osteoporosis, there are medicines and steps you can take to reduce your risk of falls and fractures.
- Your doctor or pharmacist can advise on proper medicine use to minimise side effects.
- If you have a fracture, see a doctor **promptly** so it can heal well with less pain.

#### Sources

- 1. ACE Clinical Guidance on Osteoporosis: diagnosis and management, 15 August 2025
- 2. Koh LK, et al. (2001). A simple tool to identify Asian women at increased risk of osteoporosis. Osteoporosis International 12: 699–705.
- 3. www.healthhub.sg/a-z/diseases-and-conditions/bones-density-test-cgh
- 4. Adler RA, et al. (2016). Managing osteoporosis patients after long-term bisphosphonate treatment. J Bone Miner Res. 2016;31(1):16-35.
- 5. www.healthhub.sg/live-healthy/calcium-for-greater-bone-strength
- 6. www.healthhub.sg/live-healthy/keeping-bones-strong
- $7.\ www.healthhub.sg/live-healthy/tips-on-fall-prevention$



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