

About Osteoporosis

Osteoporosis, which literally means ‘porous bone’, is a disease of progressive bone loss and skeletal deterioration in which bones become fragile and are more likely to fracture (i.e. broken bones). The disease often develops unnoticed over many years, with no symptoms or pain, until a fracture occurs.

- Fractures in people with weakened bones often occur after a fall from standing height. However, they can also occur as a result of a minor bump and bending over during normal daily activities.
- Any bone can be affected, but the most common fractures occur at the wrist, spine and hip. Fractures of the spine are known as vertebral fractures.
- Fractures often lead to chronic pain, disability and reduced quality of life. Hip fractures in particular almost always require hospitalization and major surgery and are even associated with a greater risk of death.

The good news is that osteoporosis is now a largely treatable condition and, with a combination of lifestyle changes and appropriate medical treatment, the risk of fractures can be reduced.

Defining osteoporosis / osteopenia

Osteoporosis is defined by the World Health Organization (WHO) as a bone mineral density (BMD) that is 2.5 standard deviations or more below the mean peak bone mass of the average of young, healthy adults, as measured by Dual-Energy X-ray Absorptiometry (DXA or DEXA).

Osteopenia is considered a precursor to osteoporosis, whereby bone mineral density is lower than normal, with a T-score between -1.0 and -2.5. Not every person diagnosed with osteopenia will develop osteoporosis.

Today, in the course of a clinical check-up, doctors also assess their patient’s risk factors for fracture rather than relying on BMD values alone to decide whether a person should be referred for treatment. By using calculators such as the WHO Fracture Risk Assessment Tool (FRAX®) (www.shef.ac.uk/FRAX/) they can calculate the likelihood that a person will experience a fracture in the next ten years.

How common is osteoporosis?

Osteoporosis can affect people of all ages, but it is far more common in older men and women. Nearly 75% of hip, spine and wrist fractures occur among people who are 65 years old or over. Women are more likely to have osteoporosis because they lose bone density faster as their estrogen levels decrease in the years following menopause.

Up to one in two women and one in five men over the age of 50 will suffer an osteoporotic fracture in their remaining lifetimes. Worldwide, an osteoporotic fracture is estimated to occur every 3 seconds, a vertebral fracture every 22 seconds. The incidence of fractures varies from country to country and within population groups.

Read more about osteoporosis at www.iofbonehealth.org