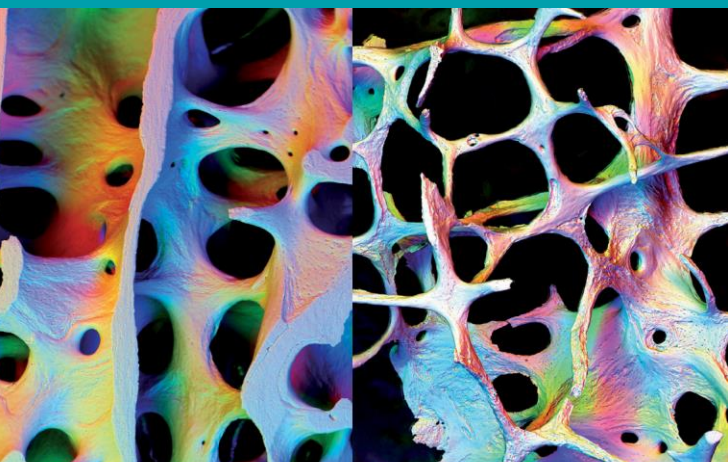


What is osteoporosis?

Osteoporosis occurs when the struts which make up the mesh-like structure within bones become thin, causing them to become fragile and break easily after a minor bump or fall. These broken bones are often referred to as fragility fractures. The terms 'fracture' and 'broken bone' mean the same thing. Although they can occur in different parts of the body, the wrists, hips and spine are most commonly affected.

It is these broken bones or fractures that can lead to the pain associated with osteoporosis. Spinal fractures can also cause loss of height and curvature of the spine.

Fragile osteoporotic bone. Strong dense bone



There are many factors that can increase your risk of osteoporosis and broken bones. These include:

Genes Bone health is dependent on inherited genes from our parents.

Age As we get older bones become more fragile and more likely to break.

Race People who are of Afro-Caribbean origin are at lower risk than those of Caucasian or Asian origin.

Gender Women are at greater risk than men because they have smaller bones and experience increased bone loss around the time of menopause.

Low body weight If you have a low BMI (body mass index) below 19kg/m² you are at greater risk of developing osteoporosis and fractures.

The practice nurse at your doctor's surgery will be able to advise you about this.

Smoking Current smokers are more likely to break bones.

Alcohol Excessive alcohol consumption appears to be a significant risk factor for osteoporosis and fractures. The current daily recommended limit, as suggested by the Food Standards Agency is two to three units for women and three to four units for men. (A unit equals one small glass (125ml) of wine or half a pint (300ml) of beer or cider).

Some medical conditions:

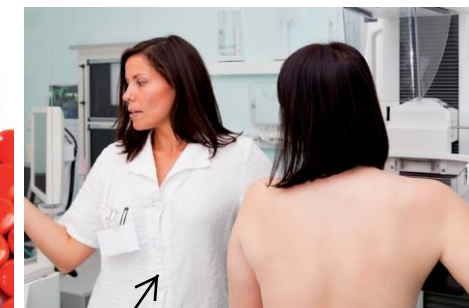
- Rheumatoid arthritis.
- Low levels of the sex hormone oestrogen in women due to:
 - Anorexia nervosa
 - Early hysterectomy (before 45)
 - Turner syndrome
 - Excessive exercise.

- Low levels of the sex hormone testosterone in men can occur for a number of reasons including the effects of surgery for some cancers. Some rare conditions that men are born with (such as Klinefelter's disease or Kallman's syndrome) also lowers testosterone levels.

- Hyperthyroidism, when levels of thyroid hormone are abnormally high.
- Parathyroid disease, when levels of parathyroid hormone are abnormally high.
- Conditions that affect the absorption of food such as Crohn's or coeliac disease.
- Conditions that cause long periods of immobility such as stroke.

Other conditions may be associated with osteoporosis such as diabetes and HIV (AIDS). Organ transplant recipients and people with some respiratory diseases may also be at more risk. People who have undergone gender re-assignment may also be at increased risk.

Adapted with the kind permission of the National Osteoporosis Society. Errors have been added for the purpose of the exercise.



Some medicines increase your risk:

- Taking corticosteroid tablets, e.g. prednisolone, for longer than three months for other medical conditions.
- Anti-epileptic drugs e.g. phenytoin.
- Breast cancer drugs such as aromatase inhibitors, e.g. anastrozole.
- Prostate cancer drugs that either affect the production of the male hormone testosterone e.g. goserelin, or the way it works in the body.

Other medicines may increase risk, although more research is needed

- Drugs to reduce inflammation of the stomach and oesophagus called proton pump inhibitors (PPI's).
- Diabetic drugs in the glitazone group (including rosiglitazone and pioglitazone).
- Injectable progestogen contraceptives (including medroxyprogesterone acetate, known as Depo Provera).
- Some drugs used for mental health problems including depression acetate, known as Depo Provera).