

What is Osteoporosis



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Osteoporosis is a condition that affects the **inside of bones**. It causes bones to become fragile, so they break easily. It is called the silent disease because there are no signs or symptoms prior to a person breaking (fracturing) bones. The effects of undiagnosed/untreated osteoporosis can be devastating, therefore the prevention and early detection of this disease is so important.

Bone is a living tissue that the body continually removes and replaces. As we get older, this process slows down, and usually more bone is lost than formed. However, some people lose bone much faster than others, when new bone formation does not keep up with the loss of old bone, it will result in osteoporosis.

It is estimated that **up to 300,000 people in Ireland** have osteoporosis. Although more common in females who have gone through the menopause, it can also affect men and even children.



Which bones are most at risk for Osteoporosis?

Osteoporosis can occur in **any bone in the body**, however some bones are more at risk to breaks than others. The most common bones to fracture are the bones in your **wrist, your hip bones, and the bones in your back**. With osteoporosis, a trip and fall can result in broken bone's. A break can also happen while carrying out everyday tasks such as bending down, standing up from a chair, even when coughing.

This is why anyone who has unexplained broken bones should be assumed to have Osteoporosis, unless they are investigated, and Osteoporosis is ruled out.

Broken bones due to bone loss are also known as low trauma fractures, osteoporotic fractures, and fragility fractures, and can have devastating consequences, especially in senior citizens. When you break a bone, you can have trouble with dressing, bathing, and even walking, which can lead to a person losing their independence. Unless your causes of bone loss are investigated and addressed, you can continue to lose bone and can end up with more broken bones.

You can reduce your risk of experiencing a break, as **most are preventable**.

Osteoporosis is treatable, and there are plenty of steps you can take to maintain healthy bones. Medications are available to treat bone loss and they can help to significantly reduce your risk of fractures, combined with healthy eating and appropriate exercise.



What is Osteopenia

Osteopenia is the early stage of bone loss and is diagnosed by having a DXA scan of your spine and hips. It is very important that your causes of bone loss are investigated and addressed, to help reduce your risk of developing Osteoporosis. Research shows that most broken bones occur in the moderate to marked Osteopenia range.



What are the risk factors for Osteoporosis?

Osteoporosis and Osteopenia risk factors outside your control include the following:

- **Gender:** Women –are more likely than men to develop this disease. This is because women have smaller bones, and changes in hormone levels, especially following the menopause cause bone loss, with some women losing excessive amounts of bone at this time.
- **Age:** The risk of developing osteoporosis increases as you get older
- **Ethnic background:** You are at greater risk if you are Caucasian or Asian
- **Family history:** If there is a history of osteoporosis in your family, then your risk of developing it is usually much higher. This is especially so, if your mother or father has suffered a broken hip (fractured hip).
- **Body frame:** Having a small-boned body frame, that is not due to an eating disorder, constant dieting, over exercising or combinations of them

The following osteoporosis risk factors relate to your lifestyle

Physical activity: If you spend most of your day sitting, then you have a higher risk of developing osteoporosis than those who are physically active.

Smoking: Not only is smoking bad for your general health, but it is also known to negatively affect bone health.

Excess alcohol: Regularly consuming more than two alcoholic drinks a day increases your chances of developing osteoporosis.

Diet: Calcium and vitamin D are essential for bone health. If you are not getting the daily recommended amounts, then you may be at increased risk of breaking bones.

Excess caffeine affects bone health.

Excess Fibre: we recommend not to take more than 30 grams of fibre a day.

Eating disorder / over-exercising or both: Please reach out for help as the secondary effects of these can cause significant bone loss, as well as affecting your overall health and fertility. Loss of periods is common with these issues.

Vegan we recommend people eat a variety of foods, not limit themselves to certain foods, especially when it can place a person at risk of bone loss. All vegans should get a DXA scan done and monitor their bone health throughout their life.



Furthermore, certain medical conditions and medications affect your bone health

- Long-term use of steroids (commonly used in conditions such as arthritis and asthma).
- Chemotherapy and radiation cause significant bone loss and all cancer patients should be treated preventatively.
- Early menopause (before 45) and those who go through the menopause after age 45
- Loss of periods not due to pregnancy
- Having an overactive thyroid or overactive parathyroid gland.
- Conditions such as Coeliac disease or Crohn's disease which affect the absorption of nutrients.
- Some medicines used in the treatment of breast cancer, prostate cancer, and epilepsy. Protein pump medication for acid reflux

Who typically gets Osteoporosis?

Women are at the highest risk of developing osteoporosis. However, **men and children** can also be affected. Furthermore, **athletes** who overtrain, those who develop eating disorders, or a combination of both can be at high risk to develop Osteoporosis when they are young and without help can end up not being able to compete due to the secondary effects of untreated Osteoporosis



Are there symptoms of Undiagnosed Osteoporosis?

While no one experiences signs or symptoms before breaking a bone, there are signs and symptoms of possible undiagnosed osteoporosis.

- **Back pain:** Many people with osteoporosis suffer broken vertebrae (broken bones in their back) without even realising it. Make sure you do not ignore back pain, get assessed to find out why you have the pain, as 75% with broken bones in their back, have intermittent back pain and only 25% of people with broken bones in their back have constant pain.
- **Loss of height or change in body shape:** Broken bones in your back can lead to loss of height and fractures (broken bones) in your mid and upper back. Over time this can lead to a stooped posture, followed by a hump developing and a pot belly, as your ribs end up resting on your hip bones, as you will see in the image below.
- **Unexplained broken bones:** People with undiagnosed osteoporosis can break bones very easily, such as simply as rolling over in bed or coughing and sneezing. If you break a bone, make sure to check to see if you have any risk factors for bone loss because if you do, you should speak to your GP about arranging for a DXA scan. These signs and symptoms do not automatically mean you have osteoporosis. However, if you have one or more of them, especially if you are over 50, osteoporosis should be ruled out by having a DXA scan, as loss of height, postural changes and a hump cannot be reversed.

