Frequently Asked Questions

Calls made through the IOS Charity helpline

Q 1: What is Osteoporosis?

Answer: Osteoporosis is a silent disease that affects the strength/thickness of bones, which makes the bones more fragile and is often not diagnosed until a fracture (broken bone) or multiple fractures have occurred.

It is not normal as an adult to break a bone, from a trip and fall from a standing position or less, even if on ice or cement.

Q2: What is osteopenia?

Answer: Osteopenia is the early stage of Osteoporosis. Having osteopenia places a person at risk of developing Osteoporosis. A diagnosis of osteopenia is a warning that you must start taking care of your bones and that prevention methods need to be put in place. The risk factors for developing osteopenia are the same as for Osteoporosis.

Q 3: How can a person know if they have Osteoporosis? What are the signs or symptoms?

Answer: A person will never know if they have Osteoporosis unless they have a DXA scan of their spine and hips. The following are signs or symptoms that persons may have undiagnosed Osteoporosis:

- A fragility fracture (broken bone) from a trip and fall, from a standing position or less. Other examples: a fragility fracture from a sneeze, cough, turning over in bed.
- Loss of height – more than 2cm.
- A hump developing on upper back usually associated with loss of height.
- Undiagnosed, sudden severe upper, middle or low back pain, especially if associated with loss of height.
- A change in body shape and size, example: Hump developing, head protruding forward.
- A pot belly can occur when the stomach contents are pushed outwards due to the collapse of vertebrae. This is usually associated with loss of height.

You should fill out our risk assessment form, if you have one or more signs or symptoms you should speak to your doctor or an Osteoporosis specialist regarding getting a DXA scan.

Q4: I was diagnosed with Osteoporosis from an x-ray. Do I need a DXA scan?

Answer: Yes, unless you are bed bound or unable to lie still for approximately 10 minutes. If you do not get a DXA scan you will not know if your bones are improving or your response to the treatment. People usually are scanned every two years, if access is available and preferably on the same machine. In the majority of cases, a change will not be seen in one year.

Signs and Symptoms

Q5: My sister and I were both told that getting shorter is normal when you age. Both of us have lost several inches in height and I am developing what appears to be a hump on my upper back. Could I have Osteoporosis?

Answer: It is considered normal by many people to lose up to 2cm, due to wear and tear of the bones and discs in the spine. However sudden loss of height and / or more than 2cm in height should be investigated. Both of you should fill out our risk factor questionnaire, have your height measured and speak to your doctors regarding your concerns. A DXA scan would be recommended in your situation. When a person develops a hump on their back, a DXA with an LVA (Lateral Vertebral Assessment), if available, is recommended. If not available on the DXA machine, a lateral thoracic X-ray of your spine should be done, to rule out fractures in your spine.

Q6: My boyfriend is 34 and is under a huge amount of stress at work, he has been complaining of back pain and appears to be losing height. He has also lost interest in the bedroom. Could this be Osteoporosis? If yes, can he be helped?

Answer:

- Psychological stress can affect levels of sex hormones, which can affect a person's libido and can also affect bone.
- Undiagnosed, back pain should be investigated.
- Sudden loss of height should be investigated by a DXA with an LVA.
- He should fill out our risk-factor questionnaire and speak to his doctor regarding investigating the problems he is having.
- Stress, back pain, loss of height and loss of libido are risk factors for Osteoporosis, so he may want to speak to his doctor about ruling it out. Osteoporosis is treatable in the majority of cases.
- A DXA scan would be recommended.

Q 7: My father is 62 and is getting shorter and complaining of severe pain in his upper back. He was told that it is normal as you age and that nothing can be done. Could it be Osteoporosis and if so, can anything be done?

Answer:

- He should fill out our risk assessment form.
- He should speak to his doctor regarding a DXA scan to rule out Osteoporosis.
- Since he is losing height he should try to get a DXA with an LVA (Lateral Vertebral Assessment) which scans the upper back or a lateral X-ray of his upper back.
- Osteoporosis is treatable, however it is essential that the cause/s be found and addressed as well as the disease itself.

Q 8: I am 54 and I have always lived a healthy lifestyle, however over the last year I have developed a "pot belly" and my clothes do not fit the way they used to. I feel my shape is changing and my trousers seem to be longer, even though I have worn the same length for the last 40 years. I am eating the same amount of food and doing the same amount of exercise. Could I be at risk of having Osteoporosis?

Answer: The fact that you have noticed a change in your body shape and possible loss of height, it would be wise to fill out a risk factor assessment form, have your height measured and speak to your doctor about getting a DXA scan. A DXA scan with an LVA (Lateral Vertebral Assessment) is usually done if loss of height or a hump on the back has developed or a lateral X-ray of your thoracic and lumbar spine if an LVA is not available. If the DXA scan is negative, you should speak to your doctor about investigating the cause/s of the problem.

Q 9: My mum has broken five bones from falls over the last two years but has never been tested for Osteoporosis.

Answer: She should fill out a risk assessment form and bring it to her doctor and request a DXA scan. The risk factor assessment is to help to figure out the cause/s of why her bones have broken so easily. It is not considered normal for an adult to break multiple bones from trips and falls from a standing position or less.

Diagnosis of Osteoporosis

Q 10: How is Osteoporosis diagnosed?

Answer:

- A bone density scan of the spine and hips called a Dual Energy X-ray Absorptiometry (DXA /DEXA) scan, is the recommended gold standard for the diagnosis of Osteoporosis.
- It is used to measure the density (thickness) of bones. It is a painless test, that usually takes between 10-15 minutes. It is not claustrophobic.
- The Irish Osteoporosis Society (IOS) highly recommends that a risk factor questionnaire is filled out, to help find the cause/s of the Osteoporosis, as these should be found and addressed.

***The Irish Osteoporosis Society does not recommend ANY TYPE OF heel scan for the diagnosis of Osteoporosis.**

***The Irish Osteoporosis Society does not recommend a person who is pregnant having a DXA scan, due to the possible affects to the unborn child.**

Please see the list of DXA scanners throughout the country.

Monitoring of your Osteoporosis

Q 11: I had a DXA scan three years ago and was told that I did not have to get rescanned. How do I know I am improving if I do not get re-scanned?

Answer: When possible you should be re-scanned every two years, to monitor your response to treatment and your results should not decline. If your results decline it is essential that this is investigated.

Myths

Q 12: Is it true that only old women get Osteoporosis?

Answer: No, it is not true. More women are affected than men because their bones are smaller and they also go through the menopause. However 1 in 4 men over 50 will get Osteoporosis and children can also be affected.

Q 13: Is Osteoporosis preventable?

Answer: Yes, it is preventable in the majority of cases.

Q 14: My mum is 84 and has just been diagnosed with Osteoporosis, but the nursing home she is in say that it is old age and not treatable. Is Osteoporosis treatable?

Answer: It is treatable and we have had 94 year olds who have improved their bones and reduced their risk of a fracture, or further fractures. A person is never too young or too old to be diagnosed and treated.

Q 15: My local chemist is advertising that they do "bone density" testing. My friend got one done, they only did her heel and told her that their machine was just as accurate as the DXA test for the spine and hips, is this true?

Answer:

The heel is NOT one of the most common areas to be affected, the spine, hip and forearm are the most common areas to be affected first. We do not recommend any type of heel scan for the diagnosis of Osteoporosis. Most of these machines are ultra sound machines which **cannot** measure bone density.

The majority of heel scanners use an ultrasound machine which measures the speed at which the sound waves travel. If a person has flat feet (as many women over 40 do) they are usually told they have good bone density.

NOTE: A heel scan is NOT as accurate as a DXA scan. A DXA scan is the World standard for diagnosing Osteoporosis.

The IOS does not recommend ANY TYPE OF heel scan testing for the diagnosing of Osteoporosis.

Q16: I have heard that there are no treatments for Osteoporosis. Is this true?

Answer: No, this is not true. Particularly in the last few years more new treatments have become available. Adults, who have been diagnosed with Osteoporosis, should be put on an Osteoporosis medication, plus calcium, vitamin D3 and appropriate weight bearing / strengthening exercise.

The cause/s of the person's Osteoporosis should be identified and addressed. Treatment plans for children under 21 and women in childbearing years, are usually dealt with differently to those who are in the older age group. Children with Osteopenia and/or Osteoporosis should see a paediatrician interested in Osteoporosis and also seek advice from a dietician (www.indi.ie).

Q 17: My sisters and I were told that we could not get a DXA scan before the age of 50. Our mother and father both had severe Osteoporosis before they were diagnosed. We do not want to end up like our parents, who both were in severe pain and whose quality of life suffered significantly as a result. How can we prevent it or check if we have it?

Answer: You can get a DXA scan at any age and if it runs in your family, research indicates that genetics is one of the strongest links. You should both fill out our risk assessment form, to see if you have any other risk factors and speak to your doctor about your risk of a fracture. If he still refuses, please contact the Charity and we will assist you in organising a DXA scan.

Please note, that if you are under 21 years of age, the machine must have additional software especially for that age group.

Q 18: I have been told that I have Osteoporosis, but I am only twenty-five years of age. I have always eaten healthily and exercised. I do not know how I got it and always thought it was an old woman's disease?

Answer: Osteoporosis can affect men, women and children of all ages and due to the increase in Osteoporosis awareness, more people from all age groups are being diagnosed.

If you fill out our risk assessment form and bring it to your doctor or Osteoporosis specialist, they should be able to help figure out why you developed it, as it is essential that the cause/s be found and addressed.

Q19: I had an Osteoporosis heel test done in a mobile unit. I was told that I was fine and that I would not get Osteoporosis till I was in my 80's. How can they know this?

Answer: No one can make this claim, as no one can know this. Anyone can develop Osteoporosis at any point in their lifetime. A person can develop a disease/risk factor, or be put on medication/treatment that affects bone, after a "normal" heel scan, well before they turn 80.

The IOS does not recommend ANY TYPE OF heel scan testing for diagnosing Osteoporosis.

The heel is **NOT** one of the main areas to be affected and you may still have Osteoporosis in your hips or spine. We do not recommend any type of heel scan for the diagnosis of Osteoporosis. Most of these machines are ultra sound machines which **cannot** measure bone density. Most heel scanners are an ultrasound machine which measures the speed at which the sound waves travel. If a person has flat feet (as many women over 40 do) they are usually told they have good bone density.

If you think you are at risk from Osteoporosis, fill out our risk assessment form and speak to your Doctor regarding getting a DXA scan of your spine and hips.

Q 20: I had a heel scan done recently in a mobile unit and I was told my bones were in great condition. However I broke my arm two years ago and my hip last year both were from minor falls. I am 50 years old.

Answer: The Irish Osteoporosis Society does not recommend **ANY TYPE OF** heel scan for the diagnosis of Osteoporosis. A broken bone from a trip and fall, is usually considered Osteoporosis unless otherwise diagnosed. 90% of hip fractures are due to Osteoporosis. You should fill out our risk assessment form and speak to your doctor regarding getting a DXA scan of your spine and hips.

Prevention of Osteoporosis

Q21: What can I do to help prevent Osteoporosis?

Answer: Bones require their owner to eat healthy foods containing adequate calories, calcium, vitamin D3, proteins. Normal levels of sex hormones along with weight bearing / strengthening exercise are also important.

Fill out our risk factor questionnaire to check to see if you have any risk factors. Children and teenagers should be encouraged to eat a healthy diet and to play sport, which can decrease their risk of Osteoporosis in later life. Adults of all age groups should do daily appropriate weight bearing / strengthening exercise. Senior citizens should be encouraged to eat healthy meals and do appropriate weight bearing / strengthening exercise daily. They should speak to their doctor if they have any concerns regarding being unsteady on their feet or if they have had falls in the past.

Broken bones due to Osteoporosis

Q. 22: I am 19 and I jumped up and down on a trampoline on holidays and broke both my ankles. I have had a problem with anorexia for the last four years. Should I be concerned about having Osteoporosis?

Answer: You should talk to your doctor about the problem you are having with eating as not only can it affect your bones but also your overall health. A fragility fracture (low impact fracture) can occur as a result of Osteoporosis, as Osteoporosis causes the bones to be less dense. You should fill out our risk assessment form and then speak to your doctor about arranging a DXA scan of your spine and hips to rule out Osteoporosis. You should also get your hormone levels checked.

Q. 23:My mum had a coughing fit, followed by severe pain in her rib area; she was then diagnosed with fractured ribs. How can this happen as she did not have a fall?

Answer: Your mother has suffered what is termed as 'fragility fractures' (low trauma fractures) which are one of the few signs for Osteoporosis. As bones become less dense due to Osteoporosis, a sneeze or even a cough can cause them to fracture.

Your mother should speak to her doctor about having a DXA scan of her spine and hips. If she is positive for Osteoporosis, she will be prescribed an Osteoporosis medication to help prevent future fractures, as well as calcium and vitamin D3 and weight bearing / strengthening exercises when appropriate.

The cause/s of the Osteoporosis should be found and addressed. The DXA scan is necessary so that her response to treatment can be monitored. You should also fill out our risk assessment form and speak to your doctor regarding your risk of developing it, as genetics is one of the strongest links especially if combined with a second risk factor.

Asthma

Q. 24: I have just been diagnosed with osteopenia of my hips and Osteoporosis of my spine. I grew up on a farm, ate dairy, walked and played sports. The only medication I am on is an inhaler for Asthma. How can I have Osteoporosis?

Answer: Some inhalers for asthma are steroid based which can affect bone. Any person, young or old who is on steroid based inhaler should have a DXA scan as soon as possible, as the disease is silent but preventable and treatable in the majority of cases. Early detection is the key for best results. You should fill out our risk factor questionnaire to see if you have any other risk factors and speak to your doctor about the possibility of getting a DXA scan

Medications

Q. 25: Which medication is the best for treating Osteoporosis?

Answer: There are many medications for treating Osteoporosis. The medication that suits you best should be based on the following:

Your risk of fracturing a bone (breaking a bone) or re-fracturing.
The cause/s of why you developed Osteoporosis .

Your DXA results of both hips and your vertebrae in your spine.

Your medical history

Your age

DXA results have not improved

Q. 26: I was diagnosed with Osteoporosis four years ago and have been taking the recommended treatments but my last scan showed my bones had declined. What could be wrong?

Answer: There could be many reasons why this happened, several of the most common are:

• If the cause/s of your Osteoporosis has not been found, they need to be identified and addressed, as this could be the problem. Example: Malabsorption problem such as undiagnosed Coeliac disease. Ireland has one of the highest rates of Coeliac disease in Europe.

If you had stopped taken your Osteoporosis medication. If you have not taken your medication correctly.

If you have not taken the daily recommended amounts of calcium and vitamin D3.

If you have not done the recommended daily amount of appropriate weight bearing /strengthening exercise.

If you were not scanned on the same machine that your last DXA scan was done on.

You may have developed another condition that could affect bone that has not been diagnosed. Example: thyroid problem or low Vitamin D levels. • If you have been put on a new treatment for another condition such as Polymyalgia, the treatment such as Corticosteroids will affect bone.

Q. 27: I have been taking my treatment regularly but on occasion I have had coffee with milk directly after I have taken the treatment. Will this really affect the treatment?

Answer: Yes it can, depending on the treatment. You need to take all medications whether for Osteoporosis or any other condition, exactly how it is explained on the packaging. If you are unsure please check with your pharmacist or doctor. It could affect the amount of the medication you will actually absorb.

Q. 28: I was diagnosed with Osteoporosis a year ago and was recommended to take an Osteoporosis medication. I did not take the medicine, as I don't like to take pills. I have increased

my calcium and vitamin D intake and I do weight bearing exercise every day. Is this enough to prevent it from getting worse?

Answer: No, It is very important that you take your Osteoporosis medication, along with calcium, vitamin D3 and weight-bearing /strengthening exercise and that you get re-scanned every two years.

It is the combination of all three that can help prevent your Osteoporosis from declining. You were put on the medication because you needed to protect your bones. • When you get re-scanned, do not be surprised if your bones have declined further.

Only 15% of people with Osteoporosis are diagnosed in the first place and 70% of these stop taking their medications within one year.

We assume it is because they do not realise the importance of taking the medication in the prevention of osteoporotic fractures. • Undiagnosed Osteoporosis or not taking your Osteoporosis medication can lead to multiple fractures wheelchair bound and possible premature death, which can occur due to the secondary effects of untreated Osteoporosis. Example: A person develops a blood clot, pneumonia or an infection while they are bed bound due to a hip fracture.

Side effects of medication

Q. 29: I am worried about taking the Osteoporosis medication after reading the side effects listed on it. Are there any alternative medications?

Answer: All medications have possible side effects but it is usually rare for people to develop them.

If you develop any side effects whether it is from an Osteoporosis medication or medication for another condition, you should always contact your doctor. Your risk of multiple fractures in the majority of cases, far out ways your risk of developing side effects.

AT THIS TIME THERE ARE NO ALTERNATIVE OR NON-DRUG THERAPY TREATMENTS THAT THE IOS RECOMMENDS INSTEAD OF AN OSTEOPOROSIS MEDICATION TO TREAT OSTEOPOROSIS

DXA scan results

Q. 30: What is a T score result?

Answer: A T-score compares the patient's results with the mean peak bone mass (thickness of bones) of a large number of normal females and males between the ages of 20-40. • The result

should include the T scores of your four lumbar vertebrae (L1, L2, L3, L4) (not just the average of all four vertebrae) and both areas of your hips.

Your T scores, the answers to your risk factor questionnaire, your medical history, your risk of fracture or re-fracture and the possible cause/s of your osteopenia and/or Osteoporosis should be used to determine which is the most appropriate treatment for you.

Q. 31: What is a Z score result?

Answer: A Z score compares the patient's score with their own age group; this is usually only used in the diagnosis of the spine in children and adolescents. Their bone age should also be compared to their chronological age by an x –ray, usually of the bones of the non-dominant hand.

Q. 32: Can you explain the T-score reading?

Answer: The IOS has broken up the scores in the Osteopenia range to make it easier for people to know exactly where they are on the scale.

Normal bone density is a T-score between +1 and -1, for example 0.6 or 0.1 or +1.2

Mild Osteopenia T-score = -1 to -1.49
Moderate Osteopenia T-score = -1.5 to -1.9
Marked Osteopenia T-score = -2 to -2.5

Osteoporosis T-score = Greater than -2.5, (e.g. -3.2 or -4.0)

OR

A fragility fracture (low trauma fracture), for example a broken bone from a trip and fall from a standing position or less, or an unexplained fracture, is usually considered to be Osteoporosis unless proven otherwise.

Research shows that most fractures (broken bones) occur within a T score of -1.5 to -2.5, which is the moderate to marked Osteopenia range.

Contraindications to having a DXA scan

Q. 33: When can you not have a DXA scan?

Answer:

You should not have a scan:

• if you are pregnant

• if you have had a barium meal in the last week, you need to wait one week.

• If you have had a barium enema in the last week, you need to wait one week.

Before you have a DXA scan.

• If you have metal in an under wire bra or belt you will be asked to remove it.

• If you have a replacement hip, your other hip can be scanned. If you have metal in both hips, your spine can be scanned. If you have metal in both hips and the spine, your forearm can be scanned.

Unusual DXA Results

Q. 34: I had a DXA scan of my spine and hips and I was told that I did not have Osteoporosis. However, I have a hump on my upper back and I am getting shorter.

Answer: If a person has developed a hump due to Osteoporosis, a DXA scan will typically show that the person also has Osteoporosis in their lower spine. If a hump on the back is present, a DXA scan with an LVA (Lateral Vertebral Assessment) of the thoracic spine (the area where hump is) is usually recommended if available. If not available, a lateral x-ray of your thoracic and lumbar spine is advised. This will show if the shape of the bones in this area are compressed due to an Osteoporosis fracture.

A person may have arthritic osteophytes or extra bony spurs (excess bone that the body develops to protect an area) of their lumbar spine which can give a false higher bone density reading.

A DXA scan measures the lumbar vertebrae (lower back = L1, L2, L3 and L4) and your hips. It is not typical but a person can have Osteoporosis in their upper back and not in their lower back.

You should get a Copy of your entire DXA report including the images and make an appointment to see a Consultant who deals with Osteoporosis.

Heel scans for Osteoporosis

The Irish Osteoporosis Society does not recommend ANY TYPE OF heel scan testing for diagnosing Osteoporosis. It is essential that a person get a DXA scan of their spine and hips to find out if they have Osteoporosis.

Diagnosis of Osteoporosis and Osteopenia

Q. 35: I was diagnosed with osteopenia of my hips and Osteoporosis of my spine. How can I have both?

Answer: A person can be diagnosed with osteopenia of their hips and Osteoporosis of their spine or the other way around or just one or the other. What it basically means is that your hips are in better shape than your spine at this time. Both areas need to be addressed when a treatment plan is put in place. Research shows that most people fracture in the moderate to marked osteopenia range.

Eating disorders / over- exercising

Q. 36: I had anorexia in my teens, I am now 29 would I be at risk of Osteoporosis?

Answer: Yes, you should speak to your doctor about getting a DXA scan as soon as possible. Anyone with a past or present eating disorder is at extremely high risk to develop Osteoporosis at a very young age.

There are nineteen year olds, with the bones of eighty year olds, with fractured vertebrae (broken bones in spine), secondary to undiagnosed Osteoporosis. Osteoporosis is treatable but the earlier you get diagnosed, the better the results.

Q. 37: My 19 year old daughter had a DXA scan and was told she had the bones of an 74 year old women, how can that be? She looks thin, exercises several times a day but is not bent over or on any medication that affects bone. She did admit to me but not to her doctor that she has not had a period in 3 years.

Answer: If your daughter fills out our questionnaire she will see that no periods, other than pregnancy is a risk factor for Osteoporosis. For her doctor to help her, she needs to let him know about her missing periods. The cause of this needs to be found and addressed, as it could also affect her chances of having children.

Over exercising is a sign that she may have an issue with her weight. It is very common for people with eating disorders (anorexia and/or bulimia) to be very good at hiding this problem. It is also not unusual to be diagnosed with Osteoporosis at a young age when an eating disorder is undiagnosed.

However as long as the possible eating issue/missing periods are addressed as well as the Osteoporosis, she should be able to improve her bone strength. The fact that she is upright and has not broken any bones, it is essential to have this problem sorted, sooner rather than later.

Q. 38: My daughter, who is 11 years of age, appears to have become preoccupied with how much she weighs. She has lost a lot of weight and is exercising 2 - 3 hours a day. I have also caught her vomiting in the bathroom. Could she be at risk of Osteoporosis?

Answer: Anyone at any age who over exercises and/or does not eat a healthy balanced diet and/or vomits up food, will be at risk of developing Osteoporosis. The teenage years are the critical period for forming bone and will not only determine her risk of developing an osteoporotic fracture now, but also in later life. You should speak to your daughter's doctor regarding this issue.

Menopause

Q. 39: I had an ovary removed when I was in my thirties. Am I at risk for Osteoporosis?

Answer: Removal of an ovary or ovaries can place a person at a higher risk of developing Osteoporosis. You should fill out our risk assessment form and speak to your doctor about organising a DXA scan of your spine and hips.

Q. 40: I had an early menopause when I was in my mid-forties. Am I at risk for Osteoporosis?

Answer: Yes, an early menopause which is considered under 45 years of age, can place a person at a higher risk of developing Osteoporosis. You should fill out our risk assessment form and speak to your doctor about organising a DXA scan of your spine and hips.

Q. 41: I am only 35 and appear to be having the symptoms of going through the menopause such as hot flushes, sweats etc. I thought women only went through this in their 50's.

Answer: It is rare however it can happen. You should speak to your doctor about getting this investigated. You should ask about getting a DXA scan and a referral to see a specialist who deals with the menopause, as your hormone levels should be checked.

Q. 42: I had a hysterectomy several years ago and have not experienced any problems secondary to it. I have just read an article, which stated that, people who have had hysterectomies, are at risk of developing Osteoporosis. How can I find out if I am risk?

Answer: Yes a hysterectomy will place you at risk of bone loss. Osteoporosis is a silent disease; you should fill out our risk assessment form and speak to your doctor about having a DXA scan of your spine and hips. This is the most accurate and reliable means of assessing the strength of your bones and your risk of breaking a bone. In the first few years of a woman going through the menopause, a woman could lose up to 30% of their overall bone.

Q. 43: I am 56 going through the menopause and having hot flushes sweats and I am very irritable. My doctor has recommended HRT but I am very anxious as I have heard it causes breast cancer. I am having trouble concentrating in work and my husband says I am becoming unbearable to live with. What can I do?

Answer: There has been a lot of controversy over HRT. For many years HRT was the only treatment for Osteoporosis. However now it is mainly used for the menopausal symptoms to improve a person's quality of life.

• It is usually not recommended for people who have a family history of breast cancer.

Your risk of multiple fractures is three fold by not protecting your bones.

1 in 12 women will get breast cancer however 1 in 2 women over 50 will break bones due to Osteoporosis.

When you are on HRT regular mammograms are done. If bones are not protected, women can lose up to 30% of their overall bone while going through the menopause.

Seek eek advice at a menopause clinic.

Family History

Q. 44: Two of my sisters and both my younger brothers have been diagnosed with osteopenia and/or Osteoporosis; we range from 23 to 37 years of age. Our father started to lose height before he passed away but was never diagnosed with Osteoporosis. Is it normal the fact that both my siblings and I are all on different treatments? My brother who is 23 has the worst result of all of us, how can this be?

Answer:

All of you should fill out our Risk Factor questionnaire to see if you have additional risk factors besides from genetics, which is one of the strongest links for Osteoporosis. It is not unusual for siblings to be on different treatments, your treatment depends on your risk of fracture / re-fracture, your age, cause/s of why you developed it, medical history and DXA results of spine and hips.

There are Irish families with children under 18 with Osteoporosis with no other risk factors other than genetics.

There is no age limit on what age a person can be affected by Osteoporosis. If your brother did less weight bearing activities, was a smoker or took less Calcium and vitamin D3 than you, it could be the reason why his results are lower than yours.

Q. 45: My sister has been diagnosed with Osteoporosis and she is only 38. Should I get myself checked, I am 31 years of age?

Answer: Your sister needs to find out why she developed it. If she does not know, it is essential for a person to improve that all cause/s are found and addressed. You both should go through our risk assessment form and speak to your doctor. It is much cheaper to get a DXA scan if in doubt, than not to have one and possibly end up with fractures.

Q. 46: My Brother who is only 27 has been diagnosed with Osteoporosis and the cause has not been found. Should I be concerned?

Answer: If your brother filled out an risk assessment form and did not tick any boxes, a more thorough investigation by an Osteoporosis specialist would be advised. It is important that the cause/s are found and addressed. You should fill out the risk assessment yourself and speak to your doctor. As Osteoporosis is silent, you will not know if you already have it and genetics is one of the strongest links. If either of your parents or grandparents fractured a hip, lost height or developed a hump, or have broken a bone from a trip or fall (or less) they may have had undiagnosed Osteoporosis.

Q. 47: My uncle who is 47 is suddenly getting shorter and bent over. Could this be Osteoporosis? If so, can it be treated?

Answer: Loss of height and forward posture is a sign that a person may have Osteoporosis and if he has it, he can be helped. He should speak to his doctor regarding having a DXA scan if possible with an LVA (Lateral Vertebral Assessment). If the DXA machine does not do LVAs, a lateral thoracic X-ray of the upper back is recommended.

As we get older, it is considered normal to lose up to 2cm in height due to wear and tear in the vertebrae and discs. However, if someone suddenly starts to shorten and especially if a hump develops there is a high chance that it could be Osteoporosis. It is usually never too late to treat Osteoporosis.

Q. 48: My mum, grandmother and two of my aunts all have severe Osteoporosis. They were told that their children should be scanned including the sons. Can men get Osteoporosis?

Answer: Yes they can, 1 in 4 men will get Osteoporosis. Since the disease is silent and it appears there may be a genetic link, you should all fill out a risk assessment form and speak to your doctor. If you are tested and you are negative you can then put preventative measures in place to prevent it.

Senior citizens and Osteoporosis

Q. 49: My mother was 81, lived independently until she broke her hip and passed away several months later. I heard that it could be linked to Osteoporosis, is this true?

Answer: Approximately 90% of fractured hips in senior citizens are due to Osteoporosis. It is not normal for an adult of any age to break a bone from a trip and fall from a standing position. If a person's bones were healthy they would not break easily. If she fractured it from being in a car accident, it is not unusual for a person to break a bone. If your mother broke her hip from a trip and fall, she may have had undiagnosed Osteoporosis.

20 % of people aged 60+ who fracture a hip pass away within 6-12 months from the secondary complications of Osteoporosis.

50% of people aged 60+ who fracture a hip become dependent on others. They are unable to dress, bath or walk across a room independently.

Only 30% of people aged 60+ who fracture a hip regain their independence. The secondary complications are a blood clot, pneumonia or an infection. They usually develop after a person has been bed-bound as a result of a fracture. You should go through our questionnaire to see if you have any risk factors, as genetics is one of the strongest links for Osteoporosis.

Q. 50 Why are senior citizens more at risk of Osteoporosis?

Answer: There are many reasons why they are more at risk than younger people.

Senior citizens tend to be thin and frail which means if they have a fall, they are more likely to fracture. They usually have lower levels of sex hormones which can also affect bone.

Many do not have a well-balanced diet with sufficient calories including calcium and vitamin D3. They also tend not to eat healthy daily meals. Example: sandwiches in place of meals are very common, as they are easier to make.

Many do not take adequate weight bearing / strengthening exercise and often have many other medical problems that will increase the risk of Osteoporosis, such as medications they are taking. Example: Heparin, Warfarin. As people get older they tend not to be as active as they used to. This can place a person at a higher risk of falling due to decreased muscle strength and decreased endurance, which can affect their balance.

A person's balance, strength and endurance in the majority of cases can be improved no matter what age they are. We recommend whenever possible that a chartered physiotherapist, assess a person with osteopenia and/or Osteoporosis, before they begin an exercise programme, especially if they have had fractures.

Q. 51: My mother is 74 and has recently been diagnosed with Osteoporosis. What exercises should she do to improve her bone strength?

Answer: The IOS recommends 30 minutes of weight bearing /strengthening exercise per day. The type of exercise should be appropriate and based on:

- Risk of fracture or re-fracture
- The person's age
- Medical history
- DXA results of spine and hips
- Overall health

We recommend that whenever possible a person with osteopenia and/or Osteoporosis do the following:

Get a copy of your entire DXA report which should include the T-score for the vertebrae and hips and the graphs. Your doctor or where you got the DXA scan done will have copies.

Contact a chartered physiotherapist and ask them to assess you for:

A personalised exercise programme for you in your home, especially for rainy days.

Or

What classes and/or exercises are appropriate for you.

Or

What equipment and exercises in the gym are safe for you to do.

Children and Osteoporosis

Q. 52: My son who is 17 was in hospital for one week and was diagnosed with transient Osteoporosis. He was playing sports daily until several months ago. He has pain in his hip and difficulty walking, just for the last two months. His foot is also cold and blue to touch.

What is transient Osteoporosis? Can he improve his bones? Is his hip/trouble walking connected with his Osteoporosis? He is sweating so much at night; he has to change his clothes several times, could this be connected to the Osteoporosis?

I brought him back to the emergency department because his foot was cold and blue; they said there was nothing wrong with it. Could it be connected to the Osteoporosis?

Answer:

Transient Osteoporosis is usually only seen in pregnant woman or middle aged men. If diagnosed correctly and all causes are found and addressed, Osteoporosis is treatable. Your son should be assessed by an Osteoporosis specialist. If your son has not had a DXA scan of his spine and hips, one should be done. I would ask the Osteoporosis specialist if the hip problem is connected to the Osteoporosis.

Night sweats are not associated with Osteoporosis and should be investigated immediately.

TB is still around and there have been outbreaks in certain areas of Ireland. His foot problem should be investigated immediately. It is not normal and you should contact his doctor immediately.

Q. 53: I have been told that my child who is 14 has Osteoporosis. I thought children could not get Osteoporosis?

Answer: The good news is that majority of children can improve their bone density. However the cause/s must be found and addressed, as well as the Osteoporosis being treated.

Children and adolescents can be affected by a variety conditions such as:

Chromosome abnormalities:

Turner's syndrome in girls and Klienfelter's in boys•

Genetics

Metabolic disorders that require a special diet e.g.Homcystinuria etc)

Family history, especially with 2nd risk factor

Still's disease, juvenile rheumatoid arthritis•

Collagen disorders

Marfan's Syndrome etc.

Osteogenesis Imperfecta (Brittle bone disease)

Idiopathic juvenile Osteoporosis (IJO)

Eating disorders: anorexia, bulimia and / or binge eating

Malabsorption: Coeliac disease, Crohn's disease, Ulcerative colitis. Cystic Fibrosis• Kidney disease: nephrotic syndrome etc.

Endocrine disorders: Cushing's disease.

Bechet's Syndrome

Severe eczema• Asthma - oral steroids and some inhalers have steroids in them which affect bone•

Chemotherapy and radiation for transplants or cancer

Mobility impairment (walking limited or wheelchair or bed bound for six weeks or longer) especially in pre-puberty and teenage years e.g. Muscular dystrophy, Cerebral palsy

Obesity: if a child eats unhealthy food and does not participate in sports, they will not develop their bones to be healthy and strong.

Hip and knee replacements

Q. 54: I am scheduled to get a hip replacement. Could this be due to Osteoporosis?

Answer: Joint replacements are usually due to arthritis. However, if you also have undiagnosed Osteoporosis, the success rate of this surgery is usually significantly reduced.

A pin in any bone that has untreated or undiagnosed Osteoporosis, usually will not hold long term, as there is very little bone for it to secure to.

20% of people aged 60+ who fracture a hip, pass away due to the secondary complications of Osteoporosis such as a blood clot, pneumonia or an infection.

50% aged 60+ who fracture a hip are unable to wash, dress or walk across a room unaided.

Only 30% aged 60+ who fracture a hip regain their independence.

Any person who is having an elective surgery(surgery is scheduled, not from a car accident) for any type of pinning or joint replacement should fill out a risk factor assessment form and then talk to their surgeon regarding getting a DXA scan prior to surgery. This way if the person has Osteoporosis they can build up their bones prior to surgery.

Immobility and Osteoporosis

Q. 55: My daughter who is 23 has cerebral palsy and is able to walk but not walk quickly or play sports. Would she be at risk?

Answer:

She should fill out the risk factor list and bring it to her doctor and discuss if she needs to get a DXA scan of her spine and hips. She should go through the nutrition section to ensure she is getting her daily amounts of calcium, vitamin D3, proteins and adequate calories etc. (speak to a dietician if you are not sure).

Weight bearing exercise should be encouraged at all ages and a chartered physiotherapist could assess her for a daily weight bearing / strengthening exercise programme that is suitable for her.

Vegan or vegetarians

Q. 56: I don't eat meat or dairy products, as I am a vegan. How can I prevent myself from getting Osteoporosis?

Answer: A Vegan diet tends to contain very high fibre content, this may have an adverse effect on your hormones, which can result in low oestrogen levels.

It may result in you having difficulty absorbing adequate protein, calcium and vitamin D3, putting you at risk of developing Osteoporosis. If you cannot get the recommended amounts in your daily diet, you should also eat protein, which can be found in lentils and tofu, as too little protein can affect the collagen content of bone. Calcium, vitamin D3 and protein supplements are available.

Excessive fibre in the diet can affect your hormones and in turn increase your risk of Osteoporosis. You should consider seeing a dietician to ensure you are getting the daily amounts to protect your bones. Please see nutrition section.

Q. 57: My mum, who has always eaten healthy and exercised, has been diagnosed with Osteoporosis. One of my brothers has broken multiple bones but has not had a DXA scan. I have been a vegetarian for six years and I was shocked that my DXA results were worse than my mum's. I eat a healthy diet and exercise most days. Should my brother also be scanned?

Answer:

The cause of your mother's Osteoporosis needs to be found and addressed. If a cause cannot be found, it could be genetics. Even though you believe you were eating healthy, were you actually getting the daily amounts of calcium, vitamin D3 and protein?

Vegetarians and vegans need to ensure that they are getting the daily amount of calcium, vitamin D3 and protein, which if low in food intake, supplements are available. The fact that it appears there may be a genetic link is a very strong risk factor. If your brother has broken multiple bones due to low trauma, he should get a DXA scan as the disease is silent. It is not normal at any age to break a bone from a trip and fall. Both of you should fill out our risk factor questionnaire.

Calcium and Vitamin D

Q. 58: Is calcium the only treatment for Osteoporosis?

Answer: No, Calcium is only one part of the treatment of Osteoporosis and vitamin D3 is essential to absorb the calcium.

Q. 59: How much vitamin D3 do I need daily?

Answer: According to the Food Safety Authority of Ireland, the following are the recommended daily allowances of vitamin D:

Babies 0-12 months breast fed or formula fed per day = 5µ /200 IU

Children 1-18 years =10µ/400 IU per day

Women and men 19-49 years = 10-20µ/400-800 per day IU

Women and men 50+ years = 20-30µ / 800-1000 IU

Sources: * HSE /NOF USA *** AAP

You can also get vitamin D from margarine, oily fish, egg yolks and fortified foods. Your body can get vitamin D from exposure to sunlight. 15 minutes without sun block to your face and arms will be sufficient, but not any longer as skin can get burned. If you are not getting your daily amount, calcium and vitamin D3 supplements are available.

Q. 60: How much calcium do I need daily?

Answer:

0-12 months = 525 mg per day (Non breast fed infants only)*

1-3 years = 500 mg per day ***

4-8 years = 800 mg per day**

9-18 years = 1300 mg per day**

Pregnant/or breastfeeding women 18 years & under = 1300mg per day**

Women and men 19-49 years = 1000mg per day **

Pregnant and breastfeeding women 19 years + = 1000 mg per day**

Women 50+years = 1200mg per day **

Men between 50 and 70 years = 1000 mg per day

Men 71+ years = 1200 mg per day

Irish Osteoporosis Society / US National Osteoporosis Foundation (NOF		
Current recommended daily intake of Calciun		
	Age	Cal
Women	<50 years	
	>50 years	
Men	50 - 70 years	
	71+ years	

* US National Osteoporosis Foundation. Clinician's Guide to Preventio
Osteoporosis. Washington, DC: National Osteoporosis Foundation; 20

* Teenagers and pregnant/breastfeeding mothers may need to increase to 1500 mg of calcium per day if they have osteopenia and/or Osteoporosis.