

WHEN A SNEEZE CAN BREAK YOUR BONES

THAT'S OSTEOPOROSIS

A compact guide to osteoporosis and its prevention and treatment

World**Osteoporosis**Day
October**20**

www.worldosteoporosisday.org



THAT'S OSTEOPOROSIS

- ▶ **Osteoporosis** is a disease which causes your bones to become porous, weak and fragile.
The result: a higher risk of broken bones, known as fragility fractures.
- ▶ **Osteoporosis** is 'invisible' - there are no obvious signs or symptoms, until a bone breaks. In people with osteoporosis, this can happen after a minor fall from standing height, a bump, sudden movement, or from bending or lifting.
- ▶ **Osteoporosis**-related fractures are most likely to occur in the hip, spine, wrist or upper part of the arm, but other bones can break too. One broken bone leads to another, and that's why it's important to diagnose and treat the disease as soon as possible.
- ▶ **Osteoporosis**-related fractures affect one in three women and one in five men aged 50 years or older worldwide.

NORMAL BONE

OSTEOPENIC BONE

OSTEOPOROTIC BONE



A DISEASE WITH SERIOUS CONSEQUENCES

Although osteoporosis itself is painless, the fragility fractures it causes can have serious, life-changing consequences.

HERE ARE JUST A FEW FACTS



When osteoporosis affects the bones of the spine, it **often leads to pain, height-loss and a stooped or hunched posture.**



Pain and limited mobility lead to **loss of quality of life, dependence on caregivers, inability to carry out daily tasks and activities,** and feelings of isolation or depression.



The **disability** due to osteoporosis is comparable or greater than disability caused by many common diseases. In people who are still working, fractures result in significant numbers of **work days lost**, and, especially in some professions, may make it difficult for many to continue working.



33% of hip fracture patients are totally dependent or in a nursing home in the year after a hip fracture - and up to **20-24% of patients** die in the first year following the fracture.



One fracture greatly increases the risk of further fractures, which can result in a cascade of new fractures, leading to a spiral of pain and disability.

COULD YOU BE AT RISK?

People over 60 years of age are at higher risk of osteoporosis than younger people. However, it is possible to have osteoporosis at an earlier age. In women, the menopause signals the start of rapid bone loss and that is why all women need to pay special attention to their bone health at a younger age.

As osteoporosis has no obvious symptoms, it's important to discuss bone health with your doctor if any risk factors apply to you. Common risk factors for osteoporosis and fragility fractures include:



A broken bone after the age of 50



Medications associated with osteoporosis, such as longer-term daily use of glucocorticoids (steroids)



Height loss of 4 cm or more, stooped back



Parental history of hip fracture or osteoporosis



Early menopause



Low calcium intake, sun avoidance



Being underweight (body mass index below 19)



Sedentary lifestyle (little physical activity)



Medical conditions associated with osteoporosis, such as rheumatoid arthritis, diabetes, breast or prostate cancer, or certain digestive diseases



Smoking and/or excessive drinking

OSTEOPOROSIS.RISK.CHECK ✓

To learn more about osteoporosis risk factors, and to check whether any risks apply to you, take the IOF Osteoporosis Risk Check riskcheck.iofbonehealth.org

DIAGNOSING OSTEOPOROSIS

A bone health assessment will typically include a fracture risk assessment (such as FRAX[®]) to determine whether you have risk factors. Based on your age or level of risk, your doctor may also decide that you should have a bone mineral density (BMD) test.

To determine BMD, the most commonly recommended technique is known as DXA (dual-energy X-ray absorptiometry). This fast, non-invasive low radiation scan measures bone density at the hip and spine. The results are expressed as a 'T-score', and indicate the gap (standard deviation, SD) of the tested person to the normal healthy population.

Status	BMD (Bone Mineral Density)
Normal	T-score of -1 SD or above
Osteopenia	T-score lower than -1 SD and greater than -2.5 SD
Osteoporosis	T-score of -2.5 SD or lower
Severe osteoporosis	T-score of -2.5 SD or lower, and presence of at least one fragility fracture

Osteopenia means that your bone mineral density is lower than normal, but not every person diagnosed with osteopenia will develop osteoporosis. If the results of your BMD test show either osteopenia or osteoporosis, then you are at increased risk of breaking a bone.



OSTEOPOROSIS CAN BE TREATED

For patients at high risk of fractures, drug treatments are needed to effectively reduce the risk of broken bones due to osteoporosis.

Today there is a wider variety of osteoporosis treatment options than ever before. The type of treatment you are prescribed will depend on your individual risk profile.

Treatments have been shown to **reduce the risk of hip fracture** by up to **40 %**, **vertebral fractures by 30-70 %** and, with some medications, reduce the risk for **non-vertebral fractures by 30-40 %**.

Your doctor may also prescribe **calcium and vitamin D supplements** to ensure that you are getting enough of these important nutrients. Weight-bearing and muscle-strengthening exercise may be recommended to help maintain bone, increase muscle strength, and improve balance. It is also important to consider how you can make your home safer to reduce the risk of falling.

Like all medication, osteoporosis treatments can work only if they are taken as advised. If you have any concerns, don't stop medication without discussing options with your doctor.

TIPS TO REMEMBER

- ▶ If you find you might be at risk, ask for a bone health assessment, which may include a DXA scan.
- ▶ If you've broken a bone after the age of 50 following a minor fall, this is likely to be a sign of osteoporosis. Visit your doctor!
- ▶ Treatments for osteoporosis can be very effective, helping you to maintain an active and independent life.
- ▶ Treatments are only effective if they are taken as advised. If you have any concerns, don't stop medication without discussing options with your doctor.

LEAD A BONE-HEALTHY LIFESTYLE

As well as taking drug therapy to effectively protect against fractures, people with osteoporosis (and in fact anyone of any age!) should follow these lifestyle tips in support of good bone health:

▶ **AVOID SMOKING AND EXCESSIVE ALCOHOL INTAKE**



▶ **ENSURE A NUTRITIOUS, BALANCED DIET**

which includes enough calcium and protein



▶ **PHYSICAL ACTIVITY**

- aim to exercise for 30-40 minutes, three to four times each week, with some weight-bearing and resistance exercises



▶ **SPEND MORE TIME OUTDOORS**

to ensure you are getting enough vitamin D, or take supplements if required



5 QUESTIONS TO ASK YOUR DOCTOR

1. Do I have any risk factors for osteoporosis? (*including medical conditions, or medicines, that cause bone loss*)
2. Do I need a bone mineral density (BMD) test?
3. *If you have a BMD test:* What do the results mean, and do I need medicine to protect my bones?
4. How can I get enough calcium and vitamin D?
5. What kind of exercise should I do to help strengthen my bones and muscles?



Our vision is a world without fragility fractures
in which healthy mobility is a reality for all.

LEARN MORE

Find out which resources are available to help you and your family and friends stay bone-healthy.

- ▶ Contact your local osteoporosis society. A list is available at www.iofbonehealth.org
- ▶ Reach out and join a patient-support group in your community
- ▶ Visit the IOF website www.iofbonehealth.org to learn more about osteoporosis

SHOW YOUR SUPPORT FOR GLOBAL OSTEOPOROSIS PREVENTION

- ▶ Take part in **World Osteoporosis Day** on October 20 each year
www.worldosteoporosisday.org
- ▶ Sign the **IOF Global Patient Charter** to show your support for patient rights at
www.globalpatientcharter.iofbonehealth.org/
- ▶ Join or donate to your local osteoporosis society

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