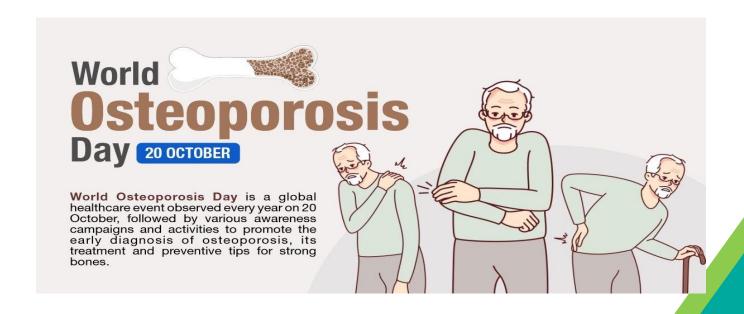


Osteoporosis is a disease that weakens your bones. It makes your bones thinner and less dense than they should be. People with osteoporosis are much more likely to experience broken bones (bone fractures). Your bones are usually dense and strong enough to support your weight and absorb most kinds of impacts. As you age, your bones naturally lose some of their density and their ability to regrow (remodel) themselves. If you have osteoporosis your bones are much more fragile than they should be and are much weaker.

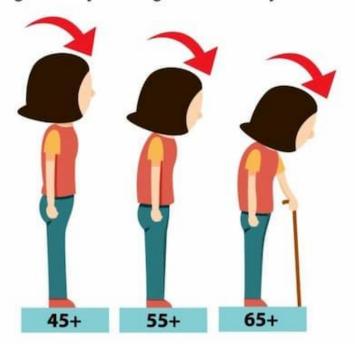
Most people don't know they have osteoporosis until it causes them to break a bone. Osteoporosis can make any of your bones more likely to break, but the most commonly affected bones include your hips, wrist, spine



# Osteoporosis symptoms

It might have no symptoms in the early stage, but here are signs of the disease gradually having weakened your bones.

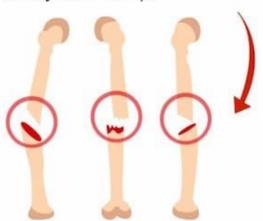
200 Million Women worldwide are affected from osteoporosis.



# Loss of height over time Because your spine has tiny fractures that're usually unnoticed and painless.

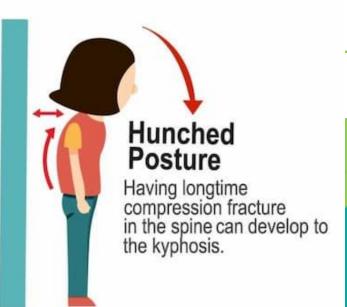
## Bone fracture

People with porous bones can get more easily injured than expected if they fall or bump.



\*Sample of broken bones





### **Causes of osteoporosis**

Osteoporosis happens as you get older, and your bones lose their ability to regrow and reform themselves. Your bones are living tissue like any other part of your body. It might not seem like it, but they're constantly replacing their own cells and tissue throughout your life. Up until about age 30, your body naturally builds more bones than you lose. After age 35, bone breakdown happens faster than your body can replace it, which causes a gradual loss of bone mass. If you have osteoporosis, you lose bone mass at a greater rate. People in post menopause lose bone mass even faster.



#### **Risk factors**

A number of factors can increase the likelihood that you'll develop osteoporosis — including your age, race, lifestyle choices, and medical conditions and treatments.

#### **Unchangeable** risks

Some risk factors for osteoporosis are out of your control, including:

- **Your sex.** Women are much more likely to develop osteoporosis than are men.
- **Age.** The older you get, the greater your risk of osteoporosis.
- **Race.** You're at greatest risk of osteoporosis if you're white or of Asian descent.
- **Family history.** Having a parent or sibling with osteoporosis puts you at greater risk, especially if your mother or father fractured a hip.

The older you are, the greater is your risk of osteoporosis.

Alerting you to the risk for osteoporosis.



• **Body frame size.** Men and women who have small body frames tend to have a higher risk because they might have less bone mass to draw from as they age.

#### Hormone levels

Osteoporosis is more common in people who have too much or too little of certain hormones in their bodies. Examples include:

- **Sex hormones.** Lowered sex hormone levels tend to weaken bone. The fall in estrogen levels in women at menopause is one of the strongest risk factors for developing osteoporosis. Treatments for prostate cancer that reduce testosterone levels in men and treatments for breast cancer that reduce estrogen levels in women are likely to accelerate bone loss.
- **Thyroid problems.** Too much thyroid hormone can cause bone loss. This can occur if your thyroid is overactive or if you take too much thyroid hormone medicine to treat an underactive thyroid.
- Other glands. Osteoporosis has also been associated with overactive parathyroid and adrenal glands.

#### **Dietary factors**

Osteoporosis is more likely to occur in people who have:

- Low calcium intake. A lifelong lack of calcium plays a role in the development of osteoporosis. Low calcium intake contributes to diminished bone density, early bone loss and an increased risk of fractures.
- Eating disorders. Severely restricting food intake and being underweight weakens bone in both men and women.
- **Gastrointestinal surgery.** Surgery to reduce the size of your stomach or to remove part of the intestine limits the amount of surface area available to absorb nutrients, including calcium. These surgeries include those to help you lose weight and for other gastrointestinal disorders.

#### Steroids and other medicines

Long-term use of oral or injected corticosteroid medicines, such as prednisone and cortisone, interferes with the bone-rebuilding process. Osteoporosis has also been associated with medications used to combat or prevent:

- Seizures.
- Gastric reflux.
- Cancer.
- Transplant rejection.

#### Medical problems

The risk of osteoporosis is higher in people who have certain medical problems, including:

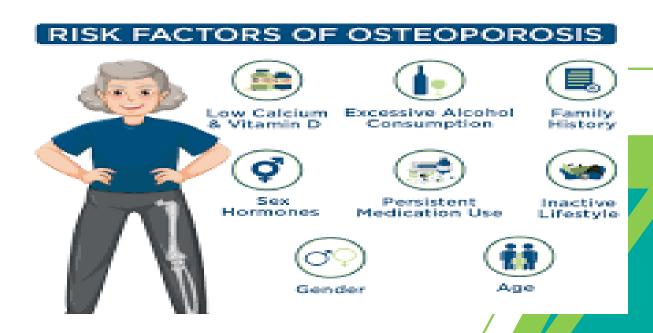
- · Celiac disease.
- Inflammatory bowel disease.
- Kidney or liver disease.
- Cancer.
- Multiple myeloma.
- Rheumatoid arthritis.

#### Lifestyle choices

Some bad habits can increase your risk of osteoporosis. Examples include:

- **Sedentary lifestyle.** People who spend a lot of time sitting have a higher risk of osteoporosis than do those who are more active. Any weight-bearing exercise and activities that promote balance and good posture are good for your bones, but walking, running, jumping, dancing and weightlifting seem particularly helpful.
- Excessive alcohol consumption. Regular consumption of more than two alcoholic drinks a day increases the risk of osteoporosis.

**Tobacco use.** The exact role tobacco plays in osteoporosis isn't clear, but it has been shown that tobacco use contributes to weak bones.



## **Complications**

Bone breaks, particularly in the spine or hip, are the most serious complications of osteoporosis. Hip fractures often are caused by a fall and can result in disability and even an increased risk of death within the first year after the injury.

In some cases, broken bones in the spine can occur even if you haven't fallen. The bones that make up your spine, called vertebrae, can weaken to the point of collapsing, which can result in back pain, lost height and a hunched-forward posture.

# COMPLICATIONS OF OSTEOPOROSIS

- 1. Kyphosis
- 2. Pneumonia
- 3. Depression
- 4. Height Loss
- 5. Limited Mobility
- 6. Infections
- 7. Safety
- 8. Bedsores







# 7 Ways To Prevent Osteoporosis

- 1 Choose Healthy Foods for Meals
- 2 Take Calcium and Vitamin D
- 3 Exercise Regularly
- 4 Get a Bone Density Test
- 5 Try to Avoid Falls
- 6 Maintain a Healthy Weight
- 7 Stop Smoking and Alchohol Drinking

