

Osteoporosis in Women

What is osteoporosis?

Osteoporosis is a disease that thins and weakens bones to the point where they break easily. This disease often affects bones in the hip, spine, and wrist.



How does it occur?

In young healthy adults, bones continue to grow, reaching their greatest strength around ages 20 to 35. After that, bones slowly become weaker as you get older.

The risk of osteoporosis increases with age. Osteoporosis usually develops in women after menopause, between the ages of 45 and 55. Women have less bone mass than men and lose bone mass sooner and faster than men. After menopause women produce much less of the hormone estrogen. Estrogen helps women's bones stay strong. For example, it helps deposit calcium in the bones. Low levels of estrogen cause a weakening of the bones.



Osteoporosis is most common in white and Asian women, especially slender women, but it can occur in women of any race. You are also at higher risk if you have a family history of osteoporosis.



In addition to aging, other causes of osteoporosis are:

- ◆ long-term use of certain medicines, such as steroids used to treat asthma or arthritis, anticonvulsants, certain cancer treatments, and aluminum-containing antacids
- ◆ chronic diseases that affect the kidneys, lungs, stomach, or intestines or alter hormone levels (examples of such diseases are diabetes, hyperthyroidism, and congestive heart failure)

- ◆ lifestyle habits such as:

smoking



having more than 1 drink of alcohol a day



too little calcium in the diet

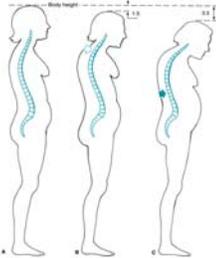


not enough weight-bearing exercise such as walking, dancing, or lifting weights



- ◆ surgical removal of the ovaries, which reduces estrogen levels
- ◆ intense exercise (such as marathon running), which reduces estrogen levels
- ◆ long periods of bed rest during serious illness
- ◆ eating disorders or too much dieting.

What are the symptoms?



You may have no symptoms until a bone breaks. Broken bones are the most common problem for people with osteoporosis. Often it's the hip, arm, or wrist that breaks.

The bones of the spine are also a common area of thinning. Often, over time, the bones of the spine (vertebrae) collapse on themselves, one at a time, causing loss of height, back pain, and a stooping posture.

How is it diagnosed?

Your health care provider may discover you have osteoporosis from an x-ray taken for some other problem. Otherwise, the diagnosis might be made from a review of your medical history and symptoms, a physical exam, x-rays, and blood tests. You may have a test to measure your bone mineral density, such as a DEXA scan.



How is it treated?

Treatment does not cure osteoporosis, but medicines can slow down the loss of bone and rebuild some bone.

The most effective treatment for osteoporosis in older women is estrogen (hormone replacement therapy, or HRT). Women begin to produce less estrogen before menopause. Without this hormone to help bones stay strong, women are more likely to have osteoporosis. Starting HRT around the time of menopause is the best way to slow calcium loss from the bones and keep the bones strong. The greatest loss of bone density occurs in the first years of menopause. For this reason your health care provider may suggest prescribing estrogen for you if you are close to menopause.

There are pros and cons for taking estrogen. Estrogen helps slow the loss of bone and may also decrease your risk of colon cancer. However, estrogen taken alone, without the hormone progesterone, may increase the risk of uterine cancer. A recent large study of women taking a form of estrogen combined with progesterone (Prempro) showed an increase in the risk of breast cancer. The same study showed an increased risk of heart attack, strokes, and blood clots. You and your health care provider need to discuss your particular situation.

Treatment also includes increasing the calcium your body gets, usually through diet and supplements. Calcium is helpful in the treatment of osteoporosis, especially if you are not taking estrogen, but it is not nearly as helpful as estrogen. Most adult women should have 1000 mg of calcium a day. Women who are pregnant or who are breast-feeding need 1200 to 1500 mg per day. Postmenopausal women who are not taking estrogen supplements also need 1200 to 1500 mg a day.

Other medicines for osteoporosis are:

- bisphosphonate medicines, such as alendronate (Fosamax) and risedronate (Actonel)
- raloxifene (Evista)
- calcitonin (Miacalcin).

These medicines are most often prescribed for women who do not take estrogen or who have already had a fracture due to osteoporosis.

Weight-bearing exercise, such as walking or stair climbing, also helps keep your bones strong. Doing this kind of physical activity every day may help stop further weakening of your bones.

How long will the effects last?

The risk of a broken bone resulting from osteoporosis increases with age. Once menopause begins, most women, especially Caucasian and Asian women, need to take precautions for the rest of their lives to prevent osteoporosis.

How can I take care of myself and help prevent osteoporosis?

Follow the treatment prescribed by your health care provider.

If you are taking medicine to treat your osteoporosis, be sure to take it as directed. For example, medicines such as alendronate must usually be taken in the morning on an empty stomach, and you must remain upright for at least a half hour after taking it.



Eat healthy foods, especially low-fat milk and dairy products, green leafy vegetables, citrus fruits, sardines, and shellfish.

Take a daily calcium supplement if your health care provider recommends it. You also need 400 to 1000 IU of vitamin D each day to help your body absorb calcium. You can get vitamin D by drinking milk, taking supplements, or spending time in sunlight.



Do weight-bearing physical activity, such as walking, regularly. Be sure to exercise your upper body also.

Stop smoking. Smokers may absorb less calcium from their diet.



Do not have more than 1 drink of alcohol a day. One drink is 1 ounce of hard liquor, one 12-oz serving of beer, or one 4-oz glass of wine.

Talk with your health care provider about hormone replacement therapy or other medicines when you reach menopause.

What can I do to reduce my risk of injury?

If you have osteoporosis, you can reduce the risk of injury and broken bones if you:

Avoid lifting heavy objects.



Avoid unusually vigorous physical activity. Build your activity level gradually.



Wear shoes that provide good support (such as running or walking shoes).

Use support for walking, such as a cane, if you need it.

Keep areas where you will be walking well lit and uncluttered.



Avoid putting throw rugs on your floors at home.



Be cautious about going outdoors when roads and sidewalks are icy.

For more information, call or write:

National Osteoporosis Foundation

1232 22nd Street NW

Washington, DC 20037-1292

800-223-9994

202-223-2226

Web site: <http://www.nof.org>

Educational materials, information specialists

Developed by McKesson Clinical Reference Systems.

This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional.