Osteoporosis

Osteoporosis weakens the bones, making them more likely to break (fracture). Osteoporosis is often called the “silent disease” because bone loss occurs without symptoms. People may not know they have osteoporosis until their bones become so weak that a sudden strain, bump, or fall causes a fracture. Osteoporosis can affect any bone in the body, but fractures occur most often in the hip, wrist, and spine. A fracture in the spine may cause severe back pain, loss of height, or spinal deformities such as stooped posture or dowager’s hump.

Who develops osteoporosis?

Some people are more likely to develop osteoporosis than others. Factors that increase the chance of developing osteoporosis are called “risk factors.”

- Risk factors for osteoporosis include:
  - Being female
  - Having a thin and/or small frame
  - Getting older
  - Having a family member with osteoporosis
  - Leading an inactive lifestyle
  - Eating a diet low in calcium and vitamin D
  - Using alcohol on a regular basis
  - Smoking tobacco
  - Going through menopause
  - Low testosterone levels in men
  - Being of Caucasian or Asian ancestry, although African Americans and Hispanic Americans are at risk as well
  - Using certain medicines, such as corticosteroids and anti-seizure medications
  - Having a medical condition which impairs calcium absorption such as disorders of the stomach and intestines, liver or kidney disease.
How Is Osteoporosis Diagnosed?
Your health care provider will ask you questions about your health and give you a complete check-up. A specialized x-ray test called bone densitometry (DEXA) can:
- Detect osteoporosis before a fracture occurs
- Predict your chances of fracturing in the future
- Determine your rate of bone loss and/or monitor the effects of treatment.
Your doctor may also order:
- A urine test to detect calcium loss or markers of bone resorption (the loss of bone through deterioration),
- Blood tests which may include calcium and vitamin D.

How Can You Prevent and Treat Osteoporosis?
Building strong bones, especially before the age of 35, can be the best defense against developing osteoporosis. A healthy lifestyle is also important for keeping bones strong. Here are hints to help prevent and treat osteoporosis.

Exercise
Exercise that forces you to work against gravity – so called weight-bearing exercises such as walking or jogging – helps prevent osteoporosis. But the benefits of exercise last only as long as you keep exercising. Talk with your health care provider or ask for a referral to a physical therapist to learn what type of exercises you can do safely not only to preserve bone, but also to strengthen your back and hips, maintain flexibility and reduce the risk of falling.

Eat a balanced diet rich in calcium and vitamin D.
Calcium is important for all age groups to help build healthy, strong, bones throughout life. To make sure that a lack of calcium is not weakening your bones, eat foods rich in calcium. These include dairy products and dark leafy and green vegetables. All adults need at least 1200 mg. of calcium and 400IU of vitamin D each day. The average American diet including dairy products contains only 600 mg. of calcium each day. Children’s requirement for calcium and vitamin D varies with age. Check with your child’s doctor for requirements.

Limit alcohol intake.
The seriousness of alcohol’s effect on osteoporosis depends on how much and how often you drink alcohol.

Stop smoking.
Smoking can lead to osteoporosis.

Use of supplements.
Take calcium and vitamin D supplements as recommended by your health care provider.

Use of medications.
If you have been diagnosed with osteoporosis, and it is too severe to rely on calcium supplements and/or diet changes, your doctor may prescribe one of the following:
- Bisphosphonates
Fosamax® (alendronate)
Actonel® (risedronate)
Didronel® (etidronate)
Aredia® (pamidronate)
Boniva® (ibandronate)
Reclast® (zoledronic acid)

- Forteo® (teriparatide)
- Prolia® (denosumab)

New medicines are continuously being developed.

Osteoporosis is a very treatable disease and your health care provider can make recommendations that will improve your bone mineral density and reduce risk of fractures.

The National Osteoporosis Foundation (NOF) is a leading resource for patients, health care professionals, and organizations seeking up-to-date, medically sound information on the causes, prevention, diagnosis, and treatment of osteoporosis. You may contact the NOF if you would like more information about osteoporosis.

National Osteoporosis Foundation
1150 17th Street, NW Suite 850 Washington, DC 20036
[p] 1 (800) 231-4222 • [f] 1 (202) 223-2237
www.nof.org

Note: This information is provided to you as an educational service of LUNG LINE® (1-800-222-LUNG). It is not meant to be a substitute for consulting with your own physician.

PTE.039