

# OSTEOPOROSIS



## BASIC INFORMATION

### DESCRIPTION

Loss of normal bone density, mass and strength, leading to increased thinning and vulnerability to fracture. It most often affects women after menopause. Twenty million Americans may have osteoporosis or be at risk for it.

### FREQUENT SIGNS AND SYMPTOMS

Early symptoms:

- Backache.
- No symptoms (often).

Late symptoms:

- Sudden back pain with a cracking sound indicating fracture.
- Deformed spinal column with humps.
- Loss of height.
- Fractures occurring with minor injury, especially of the hip or arm.

### CAUSES

Loss of bony structure and strength. Factors include:

- Prolonged lack of adequate calcium and protein in the diet.
- Low estrogen levels after menopause.
- Decreased activity with increased age.
- Smoking (possibly).
- Use of steroid (cortisone) drugs.
- Prolonged disease, including alcoholism.
- Vitamin deficiency (especially of vitamin C).
- Hyperthyroidism.
- Cancer.
- Genetic predisposition.

### RISK INCREASES WITH

- Surgery to remove the ovaries.
- Radiation treatment for ovarian cancer.
- Poor nutrition, especially inadequate calcium and protein.
- Body type. Thin women with a small frame are more susceptible.
- Family history of osteoporosis.
- Smoking.
- Heavy drinking of alcohol.
- Long-term use of cortisone drugs.
- Use of thyroid medications.

### PREVENTIVE MEASURES

- Hormonal replacement therapy starting at menopause.
- Ensure an adequate calcium intake up to 1500 mg a day with milk and milk products or calcium supplements.
- Regular exercise, such as brisk walking, which is better for preventing osteoporosis than swimming.
- Seek medical advice about taking estrogen, calcium and fluoride after menopause begins or the ovaries have been removed.
- Avoid risk factors where possible.

### EXPECTED OUTCOMES

Diet, calcium and fluoride supplements, vitamin D, exercise and estrogen can halt and may reverse bone deterioration. Fractures will heal with standard treatment.

### POSSIBLE COMPLICATIONS

- Falls that cause bone fractures, especially of the hip or spine. Sometimes a bone will break or collapse without injury or a fall.
- Severe, disabling pain.



## TREATMENT

### GENERAL MEASURES

- Medical tests include X-rays and bone density studies.
- Treatment goals are directed to relieving pain and preventing any fractures and sometimes, rebuilding bone.
- Avoid all circumstances that may lead to injury. Stay off icy streets and wet or waxed floors. Hold banisters when using stairs, and make sure banisters are sturdy.
- If estrogen is prescribed, get regular medical pelvic exams and Pap smears. Examine your breasts for lumps once a month. Report any vaginal bleeding or discharge.
- Use heat or ice in any form to ease pain.
- Sleep on a firm mattress.
- Use a back brace, if prescribed; use correct posture.
- Avoid mind altering medication, such as sedatives or tranquilizers, which may cause falls and fractures.
- Additional information available from the National Osteoporosis Foundation, 1150 17th St., Suite 500 NW, Washington, DC 20036, (800) 223-9994; web site: <http://www.nof.org>.

### MEDICATIONS

- For minor pain, you may use non-prescription drugs such as acetaminophen.
- Calcium, vitamin D supplements, hormone replacement therapy (HRT) or fluoride may be prescribed.
- Other medications that can slow bone loss or increase bone growth may be prescribed also.

### ACTIVITY

Stay active, but avoid the risk of falls. Exercise, especially weight-bearing exercise, such as walking or running, to maintain bone strength.

### DIET

Eat a normal, well-balanced diet high in protein, calcium and vitamin D or a reducing diet if you are overweight.



## NOTIFY OUR OFFICE IF

- You or a family member has symptoms of osteoporosis.
- Pain develops, especially after injury.
- New, unexplained symptoms develop, such as vaginal bleeding. Drugs used in treatment may produce side effects.