

OSTEOPOROSIS

FAST FACTS

What is osteoporosis?

Osteoporosis, or porous bone, is a disease characterized by low bone mass and structural deterioration of bone tissue, leading to bone fragility and increased susceptibility to fractures of the hip, spine and wrist.

Who is at risk?

- More than 44 million Americans.
- 80% of those affected by osteoporosis are women.
- 8 million women and 2 million men have osteoporosis. Millions more have low bone density.
- While osteoporosis is often thought of as an older person's disease, it can occur at any age.
- One in two women and one in eight men over age 50 will have an osteoporosis-related fracture in their lifetime.
- Significant risk has been reported in people of all ethnic backgrounds.
- Postmenopausal women are at risk. They can lose up to 20% of their bone mass in the 5-7 years following menopause, making them more susceptible to osteoporosis.

How much does it cost?

The estimated national direct expenditures (hospitals and nursing homes) for osteoporotic and associated fractures was \$13.8 billion in 1995. That's \$38 million per day and the cost is rising.

What are the symptoms?

Osteoporosis is often called the "silent disease" because bone loss often occurs without symptoms. People may not know that they have osteoporosis until their bones become so weak that a sudden strain, bump, or fall causes a fracture or a vertebra to collapse.

You may be at risk if you . . .

- Are female
- Are thin or have a small frame
- Have had a fracture as an adult
- Are over 50 years old
- Have a family history of osteoporosis
- Have anorexia nervosa or bulimia
- Eat a diet low in calcium
- Use certain medications, such as corticosteroids and anti-convulsants
- Are not physically active
- Smoke cigarettes
- Drink alcohol excessively
- Are a female and do not have menstrual periods (amenorrhea)
- Are a female and have gone through menopause
- Are a male with low testosterone levels

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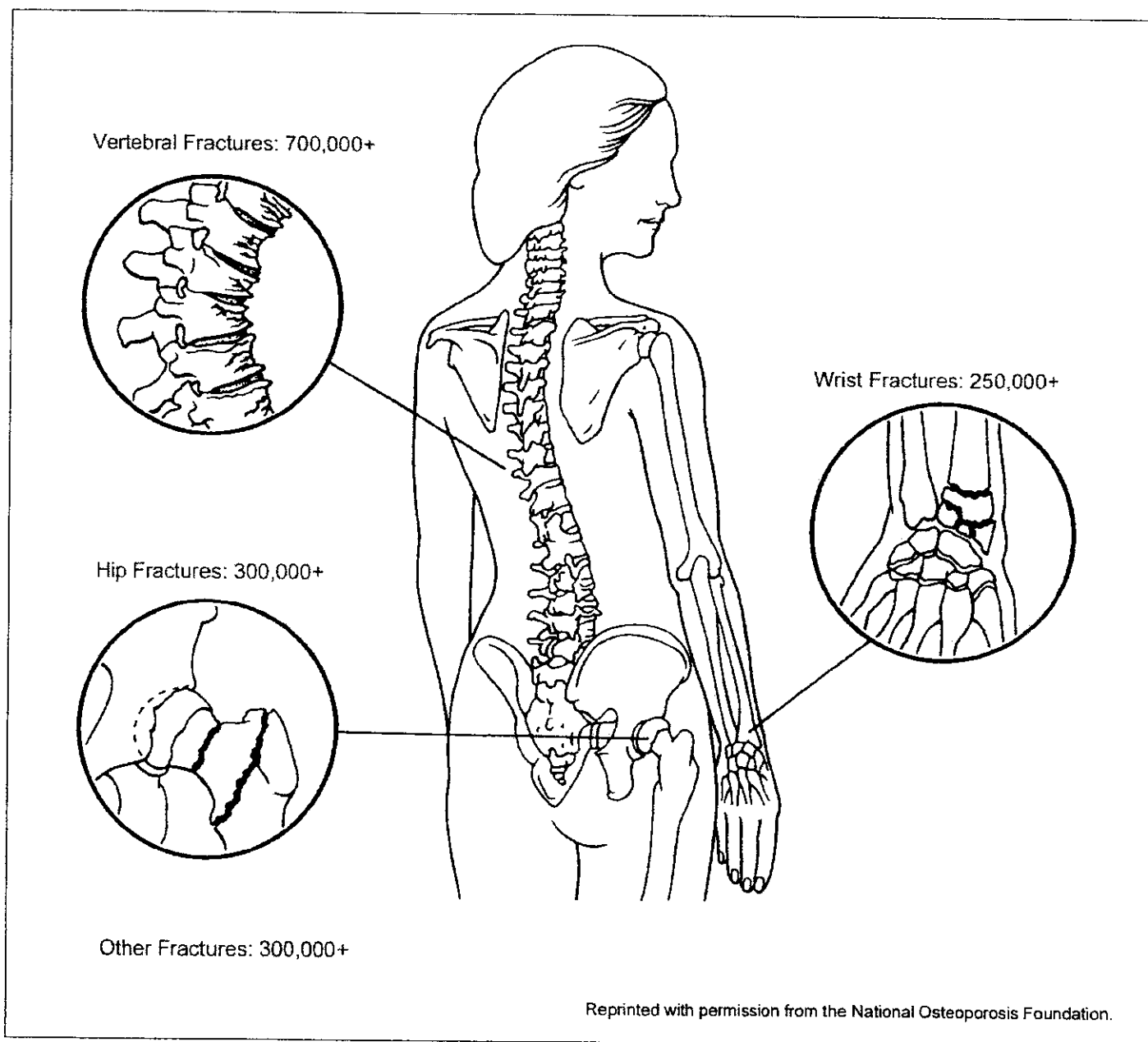
Which bones break with osteoporosis?

Osteoporosis weakens the bones, making them more likely to break or fracture. Osteoporosis-related fractures can happen in any bone in the body, but they occur most often in the:

- Hip
- Spine
- Wrist

Osteoporosis is responsible for more than 1.5 million fractures every year, including:

- 300,000 hip fractures
- 700,000 vertebral fractures
- 250,000 wrist fractures
- 300,000 fractures at other sites

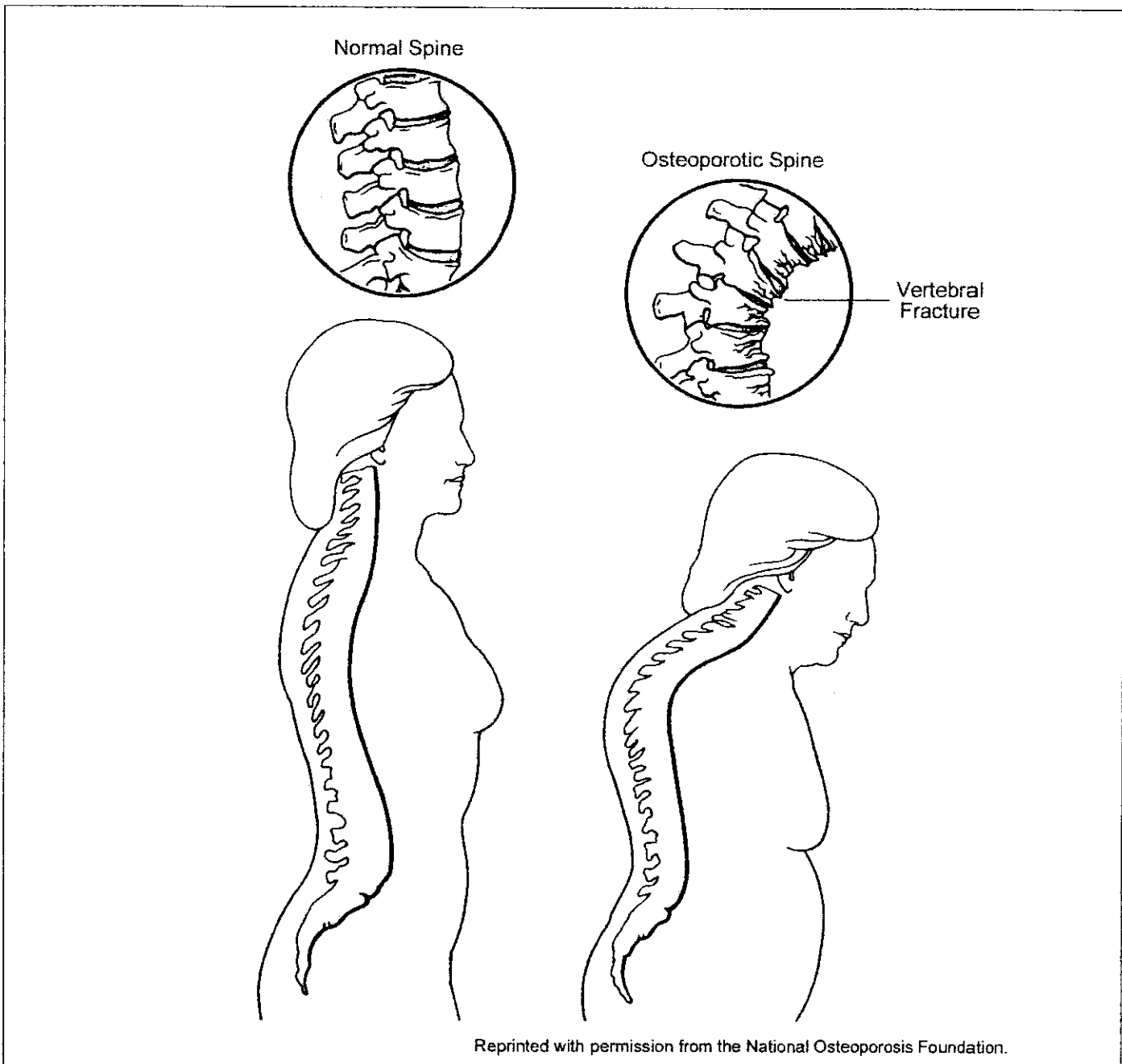


What causes the stooped posture and loss of height we see in people with osteoporosis?

The spine is made up of a series of small connected bones called vertebrae. While vertebral fractures do heal, the bones do not go back to their original shape. Healed vertebral fractures become compressed (flattened) or may even mend in a wedge shape.

Even one compression fracture weakens the spine. Over time, compression fractures can cause the spine to begin collapsing. Multiple fractures of the spine result in:

- Stooped posture
- Loss of height
- Continual pain
- Loss of spine strength
- Shortness of breath



Is there a test for osteoporosis?

Bone density tests can measure bone density in various sites of the body. A bone density test can:

- Find low bone density.
- Identify osteoporosis before a fracture happens.
- Predict your chance of fractures in the future.
- Measure your rate of bone loss and follow the effects of treatment if the tests are done at least one year apart.

How can I prevent osteoporosis?

Peak bone mass is reached in late adolescence. Building strong bones during childhood and the teen years is the best way to prevent osteoporosis.

- Eat a balanced diet rich in calcium and vitamin D.
- Do weight-bearing exercises.
- Don't smoke.
- Limit alcohol intake.
- Have your bone density tested if you have risk factors.
- Take medication when prescribed.

What are the effects of a hip fracture?

Each year, osteoporosis leads to 1.5 million fractures. About 300,000 are hip fractures.

- Hip fractures happen about three times more often in women than in men.
- More than 90% of all hip fractures are associated with osteoporosis.
- 50% of hip fracture patients lose their ability to walk independently.
- 66% of hip fracture patients do not regain their pre-fracture level of ordinary daily activities.
- 25% to 39% of hip fracture patients need care in a long-term care facility.
- 24% of hip fracture patients die in the first year following a hip fracture.

What medications are used to treat or prevent osteoporosis?

There is no cure for osteoporosis. However, the following medications are approved by the Food and Drug Administration for postmenopausal women to prevent and/or treat osteoporosis:

- **Estrogens** (brand names such as Premarin®, Ogen®, Estrace®, Estraderm®, Estratab®, Prempro® and others)
- **Alendronate** (brand name Fosamax®) This bisphosphonate is also approved as a treatment for:
 - Men
 - Steroid-induced (glucocorticoid) osteoporosis in men and women
- **Calcitonin** (brand name Miacalcin®)
- **Raloxifene** (brand name Evista®) This is a selective estrogen receptor modulator (SERM)
- **Risedronate** (brand name Actonel®) Also approved as a treatment for glucocorticoid-induced osteoporosis in men and women

Treatments under investigation include:

- Parathyroid hormone
- Sodium fluoride
- Vitamin D metabolites
- Other bisphosphonates
- Other SERMS