

4 proven steps to prevent osteoporosis fractures



Osteoporosis and spine fractures

While it receives a lot of attention in the media, still few people understand how prevalent osteoporosis and related fractures—which bring painful disability—truly are, especially within the high risk population. In the U.S., about 8 million women and 2 million men have osteoporosis, and another 34 million Americans have low bone mass. In total, these 44 million people represent 55 percent of the people aged 50 and older in the United States. After age 50, one in every two women and one in every four men will sustain some type of osteoporosis-related fracture¹.

Osteoporosis is a condition marked by low bone mass (a thinning of the bone), which can lead to a weakening of the bone architecture and increased susceptibility to fracture (usually of the hip, wrist and/or spine). In the spine, fractures can lead to chronic pain, decreased physical function, spinal deformity (e.g. dowager's hump), social isolation, and, in rare cases, complications that can cause death. Spinal fractures from osteoporosis are quite common, with an estimated 700,000 compression fractures occurring each year².

Unlike many other common causes of back pain, osteoporosis and associated spinal fractures (also called “vertebral compression fractures” or “vertebral fractures”) are largely preventable. *This article focuses on the most important action steps for people at risk for osteoporosis, those with a diagnosis of osteopenia (low bone density, the precursor to osteoporosis), or those already diagnosed with osteoporosis:*

1. Understanding risk factors for osteoporosis
2. Getting a bone density test to assess bone mass
3. Developing an individualized plan to fight osteoporosis
4. Making lifestyle and health changes (including taking prescribed medications and actively monitoring bone health) designed to slow bone loss and build bone density

Osteoporosis risk factors

The first step in preventing osteoporosis and associated spine fractures is to determine whether you are at risk or high risk for developing the bone condition.

Risk factors for osteoporosis³ include:

- **Advanced age.** Those over 65 years of age are at particular risk.
- **Gender.** Women are at much greater risk, losing bone more rapidly than men due to menopause. However, men are also at risk and constitute 20% of the patient population with osteoporosis.
- **Family and personal history.** This includes family history of osteoporosis, history of fracture on the mother's side of the family, and a personal history of any kind of bone fracture as an adult (after age 50).
- **Race.** Caucasian and Asian women are at increased risk.
- **Body type.** At greater risk are small-boned women who weigh less than 127 pounds.

- **Menstrual history and menopause.** Normal menopause alone increases a woman's risk of osteoporosis. Early menopause or cessation of menstruation before menopause increases the risk even more.
- **(Males) Hypogonadism** (small gonads, e.g., testosterone deficiency)
- **Lifestyle.** Lifestyle behaviors that increase osteoporosis risk include: calcium and/or vitamin D deficiency; little or no exercise, especially weight-bearing exercise; alcohol abuse; cigarette smoking.
- **Chronic diseases and medications.** Certain types of medications can damage bone and lead to what is termed "secondary osteoporosis". This type of osteoporosis is estimated to occur in almost 50% of pre-menopausal women with osteoporosis and from 30% to 60% of men with osteoporosis. Also, secondary osteoporosis can cause further bone loss in postmenopausal women and older men with primary osteoporosis⁴. Included in this category are certain medications to treat endocrine disorders such as hyperthyroidism, marrow disorders, collagen disorders, gastrointestinal problems and seizure disorders. Use of glucocorticoids (steroids) to treat diseases such as asthma, rheumatoid arthritis and inflammatory bowel disease, especially the oral form of these medications (at higher doses and over longer periods of time e.g., more than 2 months), can be particularly damaging to bone. Given the serious nature of the diseases these medications treat, it is not advisable to alter or stop taking these drugs unless under a physician's advice.

People considered at especially high risk for developing osteoporosis include:

- All women over age 65.
- Women less than age 65 who are postmenopausal and have one or more of the above described risk factors for osteoporosis.
- Postmenopausal women who experience any type of bone fracture.
- Men who have a testosterone deficiency.

For those with any of the above risk factors for osteoporosis, it is advisable to get a bone density test to assess bone mass and the presence of osteoporosis. Knowledge of one's bone density is vital to developing an appropriate action plan to prevent worsening of the condition and hopefully prevent a painful osteoporosis-related fracture.