

## Assessing Your Bone Fracture Risk *By Trinh Doan, MD*

**B**y definition, osteoporosis is a skeletal disorder characterized by reduced bone strength leading to increased fracture risk. The name literally means ‘porous bones’ and occurs when the level of bone absorption is greater than the amount of new bone formed within the body. It results in a weakening of the bones which can then more easily break from a minor fall or even every day actions like bumping into furniture.

According to the National Osteoporosis Foundation, about 10 million people in the U.S. have this disease, with 8 million of those being female. These numbers are expected to increase to 14 million in the year 2020. The reason women are at higher risk than men is that men have more bone mass compared to women. Once a woman enters her thirties, she starts losing bone mass at the rate of 0.5-1% per year then 1%-2% per year during menopause and for approximately five years afterward.

In addition to being female, those at greatest risk are older adults. While the incidence of fractures peaks between the ages of 15-25 primarily due to trauma, incidence again peaks after age 45 – this time due to the fragility of bones. Other risk factors include low body weight, medications such as steroids, smoking, alcohol intake, immobility, race, family history and certain medical conditions such as hyperthyroidism, hyperparathyroidism and celiac disease.

The key to addressing osteoporosis is early diagnosis. Unlike other common ailments, there are few signs or symptoms that will drive someone to the doctor. That’s why we recommend screening for: all postmenopausal women, or those 65 years and older; individuals with low bone mass or vertebral fracture findings on x-rays; those who are taking high risk medications; and individuals with certain medical conditions.

The gold standard test for assessing your bone mass and fracture risk is called Central DXA, also commonly referred to as a dexta scan. It uses x-ray beams to evaluate two sites – usually the hips and spine areas. DXA uses minimal radiation and calculates your bone mineral density (BMD). An individual T-score is derived and provides the diagnosis. A T-score of 0 to -1.0 is normal, -1.0 to -2.5 is defined as osteopenia and -2.5 and below is osteoporosis.

Although there is no cure for osteoporosis, once we have your test results, your healthcare provider will work closely with you to create a care plan. Based on the type and severity of the disease there are steps you can take to slow, or sometime even reverse, bone loss. Your doctor will discuss scheduling a screening based on your age or any risk factors. Do let him/her know if you have a family history of this disorder.



### Holiday Closures

All Thunderbird Internal Medicine offices will be closed on Christmas Day and New Year’s Day. We will be closing on Christmas Eve at 3 pm, but will be open normal hours on New Year’s Eve.

Best wishes for a happy, happy holiday season to our wonderful patients and their loved ones. Please keep your health in mind and wash your hands frequently as you celebrate the season around those who may be experiencing winter colds and flus!



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