

bone densitometry test

During the test

The bone densitometer is like a large examination table. It is padded and comfortable. Your name, age, height, weight and ethnicity will be entered into the computer before your test. This information is used to compare your results to a normal reference group. You will be asked to lie on your back, remaining in your normal clothing in most cases. Belt buckles, metal or thick plastic buttons and metal jewelry will need to be removed from the region being examined. The operator will position your arms and legs for the test, which is painless and typically takes 10 minutes. You just need to lie still and breathe normally.



What can I expect during my bone densitometry test?

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What information will the test give my doctor?

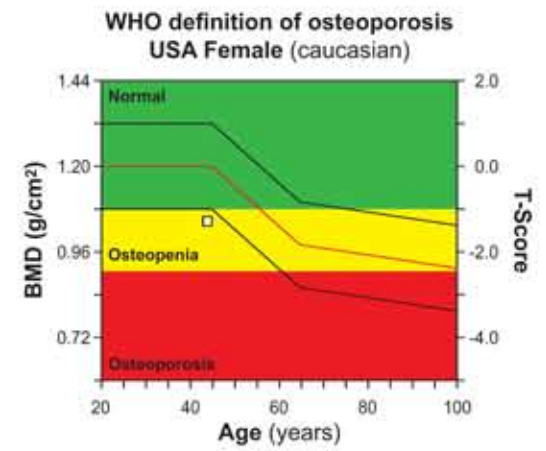
A bone densitometry test is an aid to doctors in the diagnosis of osteoporosis. The test compares your bone quality to that of a "young adult" at peak bone strength (T-score). It also compares your results to people of your same age, called "age-matched" (Z-score). This information, along with other factors, helps doctors gauge your risk of osteoporotic fracture. A T-score of -1 equals a one "standard deviation" decrease from young adult (which is about 10%). The World Health Organization (WHO) has developed categories that define the amount of bone loss:

Category	T-score
Normal	above -1
Osteopenic (low bone density)	-1 to -2.5
Osteoporosis	below -2.5

Your T-score is one factor that your doctor will consider in making a diagnosis.

WHO Definition of Osteoporosis

The bone densitometry test is also useful in following bone changes. The bone densitometer can monitor the effects of age, diet, or treatments on your bone status. Your doctor may suggest follow-up tests to detect change over time.



Are there other tests?

Ultrasound can also be used to measure the status of the bone. Biochemical tests may be used for additional information in some cases.

Where can I get more information about bone measurements and osteoporosis?

The National Osteoporosis Foundation (NOF) is one of the leading sources of information about osteoporosis and bone measurements.

Contact the NOF:

National Osteoporosis Foundation
1150 17th St. N.W., Suite 500
Washington, D.C. 20036-4603
(202) 223-2226
website: www.nof.org

Important risk factors for osteoporosis include:

- female
- caucasian
- advanced age
- history of bone fracture
- a small thin frame
- a family history of osteoporosis
- removal of the ovaries
- early menopause
- a low calcium diet
- lack of exercise
- eating disorders
- certain medicines (such as steroids or anticonvulsants)
- alcohol and tobacco use

How do I know if I have Osteoporosis?

Osteoporosis is often called the "silent disease". There are rarely signs until a lot of bone has been lost. Visible symptoms may include loss of height along with curvature of the upper back. Osteoporosis also can result in a crippling and painful fracture, occurring most often in the hip, back, or wrist.

How does the densitometer work?

A bone densitometer measures bone mineral density (BMD). The amount of bone mineral relates directly to bone density. The bone densitometer uses small amounts of x-ray to measure BMD and to produce images of the spine, hip, or even the whole body. The technical term for the method is "dual-energy x-ray absorptiometry", or DXA. The spine and hip are measured because that is where most osteoporotic fractures occur.

Is the test safe?

Even though x-rays are used, the amount absorbed by the patient is only about 1/10th of that received from a chest x-ray. The x-ray dose from the bone densitometry test is comparable to the naturally occurring radiation you are exposed to in one week.

Caution: Even though the x-ray dose from the bone densitometry test is very low, please inform the operator if you are pregnant or might be pregnant before your test!

For more information regarding densitometry testing please call
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(580)332-8900



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