

What is a Bone Density Scan?

PATIENT/FAMILY INFORMATION SHEET

What is a Bone Density Scan or DEXA Scan?

A bone density scan is the most accurate method available to measure the density of your bones, to diagnose osteoporosis and to evaluate for the risk of fracture.

Osteoporosis is a common bone disease that causes bone to become weak. This weakness can lead to fractures of the spine, hip, ankle, and wrist from simple falls which might not have resulted in a fracture in someone with normal bones.

Doctors use an enhanced form of x-ray technology called dual-energy x-ray absorptiometry (DEXA) to detect osteoporosis. DEXA is today's established method for measuring bone mineral density (BMD). DEXA is a quick, painless procedure for measuring bone mineral density. Measurement of the lower spine and hips is performed.

Are there any contradictions to having a Bone Density Scan?

You should not have this exam if you are pregnant or think you might be pregnant.

How do I prepare for my Bone Density Scan?

Please bring any prior bone density scans and reports with you. It is important to have the scan done in the same position so that an accurate comparison can be made.

There are no food restrictions. However, do not take calcium supplements for at least 24 hours prior to your exam.

If you have been injected with contrast for a recent CT scan, have had a recent nuclear medicine scan, or if you have recently had a Barium study, you may have to wait 10-14 days before having your Bone Density scan. This is because CT contrast, nuclear medicine tracers, and barium can all interfere with the bone density scan, possibly giving inaccurate results.

How is the Scan performed?

- The scan takes about 30 minutes and is painless.
- You will be asked to undress and put on a hospital gown.
- You will be asked to lie on an x-ray table and the technologist will position your legs with a sponge support, so that your pelvis and lower spine are aligned properly.
- Your hip will be rotated inward and a brace or a weight will be used to keep it in place. It is important that you stay as still as possible during the exam to ensure a clear, useful image.
- The x-ray tube will pass over your body taking measurements.

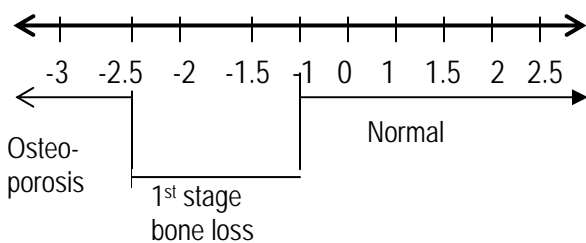
What are the limitations of a Bone Density Scan?

Bone density scanning is of limited use for people with a spinal deformity such as scoliosis or for patients that have had previous spinal surgery or bilateral hip replacements. Vertebral compression fractures or osteoarthritis may interfere with the accuracy of the test.

Who interprets the results and when are they available?

A radiologist will interpret the results of your scan. A written report will be sent to your doctor, usually within a few days. Your results will be in the form of two scores:

1) T score- this number shows the amount of bone you have compared to an adult of the same sex with peak bone mass.



Score: A score above -1 is considered normal. A score between -1 and -2.5 is considered the first stage of bone loss. A score below -2.5 is defined as osteoporosis

2) Z score- this number shows the amount of bone you have compared to other people of the same age, size, and sex.

Your doctor will discuss with you if any further testing or treatment is needed based on your results.

Source: Greenwich Hospital Diagnostic Imaging Center
The Patient Education Institute @ www.X-Plain.com. Retrieved 3.05

For more Patient Fact Sheets, see the Greenwich Hospital web site at www.greenhosp.org and Click on Patients & Visitors, then Patient Education

REV.4/05, 9/05, 1/07