

Bone Density (DEXA) Scan

What is a bone density test?

A dual energy X-ray absorptiometry (DEXA) scan, also called a bone density scan, determines your bone density. The test is painless, noninvasive, and uses very little radiation. A bone density test determines if you have osteoporosis, which is a disorder characterized by bones that are more fragile and more likely to break. So the bone density test calculates your risk of breaking bones by measuring calcium and other bone minerals. Your spine and hips are basically X-rayed. Under special circumstances a forearm can be used. An x-ray cannot be used in place of a bone density test because they are not able to show osteoporosis until the disease is well advanced.

Why is a bone density test performed?

Doctors use bone density testing to:

- Identify decreases in bone density before you break a bone
- Determine your risk of broken bones (fractures)
- Confirm a diagnosis of osteoporosis
- Monitor osteoporosis treatment

The higher your bone mineral content, the denser your bones are. And the denser your bones, the stronger they generally are and the less likely they are to break.

Bone density tests differ from bone scans. Bone scans require an injection beforehand and are usually used to detect fractures, cancer, infections and other abnormalities in the bone.

How do I prepare for a bone density test?

Bone density tests are easy, fast and painless. Virtually no preparation is needed. You remain fully dressed.

Be sure to tell your doctor beforehand if you've recently had a barium exam or had contrast material injected for a CT scan or nuclear medicine test. Contrast materials might interfere with your bone density test.

Avoid taking calcium supplements, Tums or multi-vitamins for at least 24 hours before your bone density test.

Wear loose, comfortable clothing and avoid wearing clothes with zippers, belts or buttons. You will need to remove all metal objects from your pockets, such as keys, money clips or change.

What should I expect during a bone density test?

Before the bone density test begins, you will be asked to lie down on a table. A small X-ray will scan your lumbar spine and both hips.

How long does a bone density test take?

A bone density scan or DEXA scan takes approximately 15 minutes.

Who should not get a bone density test?

Most central DXA machines cannot measure bone density in the hip and spine of larger patients who weigh more than 300 pounds, the physician may recommend scanning the radius bone in the forearm instead.

How will my results be communicated?

After the radiologist has reviewed and interpreted your images, a report will be sent to the ordering physician. Your physician will compare to any previous tests if possible, and explain the meaning of your test results with you and next steps for your treatment and care plan. The bone density results are reported in two numbers: a T-score and a Z-score. The T-score is your bone density compared to an average healthy person your age. The Z-score compares what's normally expected for someone your age, sex, weight, and ethnic or racial origin. The Z-score can help determine if something other than aging is causing abnormal bone loss.

How can I get a copy of my results?

Imaging results can be downloaded onto a CD for you to keep or share with other physicians. At times, electronic medical records allow other physicians to view the images if they have the same electronic system. Please allow 24 hours for film requests. Contact the imaging department for all film requests 540-785-7200. Films can be picked up at requested location. Charges may apply when requesting personal records.

Additional considerations:

It is not recommended to bring children under the age of 14 to your appointment unless accompanied by another responsible adult.

If appointments must be cancelled, please give us 24 hours' notice. If this is not possible, notify the office ASAP that you are not able to keep the appointment.

Please arrive 10-15 mins prior to appointment to allow time for the check-in process and appropriate questionnaires to be completed.