

# Introduction - Bone Density

Bone density tests are used to measure the mineral density of bones. The test is done using special x-rays (called dual energy x-ray absorptiometry – DEXA) to measure the amounts of calcium and other minerals.

Low bone density, called Osteoporosis, is a condition in which there is a decreased density of bone making them fragile and more likely to fracture. Low bone density is most often associated with age and family history but can also be caused by certain medications that cause bone loss (e.g. steroids, etc.)

# **Procedure**

#### **Preparation**

If you are taking calcium supplements you will be asked to discontinue for the day of the procedure. Be sure to tell the technologist if you've had any oral contrast x-ray/CT or nuclear medicine tests recently. You will also be given a questionnaire to fill out on the day of the procedure. The information you provide will help with measuring your results against the W.H.O. (World Health Organization) guidelines for bone health.

#### **How it Works**

There are two types of devices used to measure bone density: central devices and peripheral devices. Central devices are similar to standard x-ray machines where the patient lies on a table and the x-ray unit is maneuvered over the part of the body being imaged such as the spine and hips.

Tests are typically performed on bones that are most likely to break when fragile, such as the lower region of the spine, the upper segment of the femur, hip bones, and forearm bones. The procedure is totally painless and usually takes less than 30 minutes.

#### **Benefits**

Bone density tests are one of the tools used to diagnose osteoporosis. . Early diagnosis of osteoporosis is important for starting patients on a treatment plan and minimizing the risk of fractures. The procedure is painless and quick with almost no risks involved.

## **Risks**

A very small dose of radiation is used to produce the images, approximately one-tenth the amount used in a standard chest x-ray.

## **Referrals**

A physician's written referral is required.

MSP (Medical Service Plan) will pay for one scan every 36 months, or more frequently if the patient is on glucocorticoid therapy for more than 3 months, or taking prescription osteoporosis drug therapy, as well as other minor indicators. You can discuss with your doctor if more frequent testing is required, and if you are eligible for MSP coverage or will have to self-pay.

Appointments are required. You will be contacted by the scheduling clerk with a date and time.

## Results

A radiologist, a physician specifically trained to supervise and interpret radiology examinations, will analyze the images and send a report to your referring physician, who will share the results with you.

# Language

If the patient has difficulty understanding English, an interpreter needs to accompany the patient.