



What is a BMD?

A Bone Mineral Densitometry or Dual Energy X-Ray Absorptiometry (DEXA) is a safe, fast and accurate test to assess your bone mineral density. It is used to diagnose osteoporosis and assess your fracture risk. It is also used to monitor your bone density, especially if you are on treatment for osteoporosis.

In general bone tissue is constantly being broken down and reformed. After the age of 35 the body tends to break down more bone tissue than it forms. This loss of bone density is particularly accelerated in women after menopause. The loss of bone density causes the bones to become porous and brittle and may result in the bones fracturing, leading to loss of mobility and independence.

Why do we have BMD?

Osteoporosis is one of the most prevalent diseases affecting Australians, particularly in old age. It has been estimated that 60% of women and 30% of men over 60 years of age are affected.

Who is at a high risk of Osteoporosis?

- A person with a parent who has broken a hip after a minor bump or fall
- A person that has personally broken a bone after a minor bump or fall
- A female who has undergone menopause before the age of 45
- A female who has ceased menstruation for >12 months (other than pregnancy)
- A person who has taken corticosteroid tablets for more than 6 months
- A person who has lost more than 3cm in height

How does BMD work?

This scanner works by measuring the amount of x-rays that are absorbed by the bones. The two x-ray energies allow the machine to differentiate between bone and soft tissue, giving a very accurate estimation of bone density.

Who does my BMD and report?

A Radiographer who is university-trained and accredited by the Australian Institute of Radiography (AIR) will perform the examination. The person who views and interprets the BMD images is a doctor specialising in Radiology, known as a Radiologist. The Radiologist will prepare a report for your Health Care Professional.

What should I expect when I have my BMD?

You will be asked to lie still on a scan table, for several minutes where a scanner will pass over one area of the skeleton: spine or hip. A dual energy beam of very low dose x-rays passes through that area of the body and is measured by a detector. You will not feel anything during the examination. The scan is usually repeated for a second skeletal area.



Are there any risks or side effects from my BMD?

Even though x-rays are used, the amount absorbed by the patient is only about 10% of that received from a chest x-ray. The radiation dose from the bone densitometry test is comparable to the naturally occurring radiation individuals are exposed to in one week. Your doctor has sent you for this test knowing that the information provided by the scan is more beneficial than the very low risk associated with it. The skill of the operator and the design of the machine ensure you receive the lowest radiation dose possible. Female patients who are pregnant or think they may be pregnant must advise the Radiographer before the examination, a BMD is usually not performed during pregnancy unless it is an absolute medical necessity to do so.

How do I prepare for my BMD?

- You will need to phone one of our friendly reception staff to book an appointment.
- Where possible, please wear clothing with no metallic object such as zips or metal buttons as these can affect the scan. If required, we can provide you with a gown before scanning.
- This examination is only covered by Medicare for specific conditions, so you will be asked to complete a questionnaire to ensure you are eligible for a Medicare rebate.

Things to bring along to my appointment:

- Previous films for my area of clinical interest.
- Medicare or Department of Veteran Affairs card (as we bulk bill all eligible Medicare services).
- Referral (this is a legal requirement).

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