

# Why Would My Doctor Order a Bone Scan?



**B**one scans are a type of nuclear medicine exam where a small amount of radioactive material (called a radiopharmaceutical) is injected into a vein and travels through your bloodstream into your bones. A gamma camera detects the radiation emitted from your body. Sophisticated computer technology creates an image of your bones.

Areas that take up little or no amount of the radiopharmaceutical appear as “cold” spots, and could show a lack of blood supply to the bone. Areas which take up more radiopharmaceutical show up as “hot” spots, indicating increased blood flow, and could point to problems like arthritis, tumours, fractures, or infection.

Depending on the area of concern, a bone scan can image the entire body or pay particular attention to certain areas. It is useful in surveying areas with many small bones and joints like the spine, foot, and ankle, because the scan can provide detailed, localized information about the bone.

## Is a bone scan safe?

The radiopharmaceutical is excreted from the body through your urine and will decay within the body over the 48 hours following your exam. Keeping well hydrated and voiding frequently will help eliminate it from your body.

Overall, the radiation exposure from a bone scan is about the equivalent of exposure to the earth’s natural background radiation over two years.

In most cases, the benefits, such as the early detection of a serious illness, outweigh the small increased risk from radiation exposure.

If you are pregnant, or if there is a chance you are pregnant, we will not perform the exam. If you are breastfeeding, please inform the technologist. The exam will still be performed, but you will be advised to pump and discard breast milk, or store it for a specific period of time before using.

*Please note, this exam is covered under your Alberta Health Care Insurance Plan and must be requested by an authorized health care practitioner.*



Planar bone scan image



SPECT/CT image

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