

## Nuclear Medicine Exam Information Nuclear Bone Scan

Exam Duration: Varies (see descriptions below) IV Required? Yes

Exam Preparation: No preparation required.

Other nuclear exams performed within 2-3 days may interfere.

Patients are encouraged to be well-hydrated the day of the exam so long

as it does not interfere with any other exams.

Nuclear Medicine bone scans are used to help diagnose various pathologies within the skeletal system including fractures, infection, metastatic disease, bone disorders, painful prostheses, and more. There are a few different types of bone scans, each best suited for certain pathologies. All nuclear bone scans require 2 separate visits to the nuclear medicine department.

Whole-Body Bone Scan: The whole-body scan is a common form of the bone scan; it is used to survey the entire skeleton for bone pathologies. As a patient, you will first visit the department to meet with a technologist and go over your relevant medical history. You will then receive an injection of a radioactive tracer in a vein in your arm or hand. This injection has no side effects and you will be able to leave immediately after. You will need to return to the department 3 hours later for scanning—at this time, you will be position on an imaging table and cameras will acquire images of your entire skeleton. This portion of the exam generally requires 30-45 minutes.

**Three-Phase Bone Scan:** This type of bone scan is usually done over a single part of the body, checking for bone infection or evaluating a prosthetic, though there are other pathologies that can be detected. This study differs from the whole-body scan in that images are acquired of the affected area during at the same time that the radiopharmaceutical is injected. The first appointment generally requires 15-30 minutes; the delayed imaging may take anywhere from 10-30 minutes.

**Limited Bone Scan:** This scan is identical to the whole-body scan, but images are only acquired of a specific area of the body. Imaging time for the limited scan may range from 10-45 minutes.

**Bone SPECT:** SPECT is a type of 3-D imaging performed in the nuclear medicine department. SPECT may be used to pinpoint small fractures or other pathologies that may not be seen with traditional imaging. The initial appointment is similar to the whole-body and limited bone scan, but delay imaging may take anywhere from 30 minutes to over an hour.

**Notes:** Wear comfortable clothing to your appointment. As the exam requires IV access, it is best to wear a shirt that allows easy access to the arms. You will not be required to change into a gown for this exam. Objects that may interfere with the area to be scanned will need to be removed—this includes keys, wallets, phones, change, belts, etc. These items can be kept in the scanning room with you.