

Nuclear Medicine Scan

What is a Nuclear Medicine Scan?

There are several types of nuclear medicine scans that provide images of bone, the thyroid, lungs, renal system, gallbladder, bowel, heart, and other organs. These tests can help identify a variety of health conditions. A nuclear medicine scan is a noninvasive test which provides information regarding both the anatomy and the function of the organ. Nuclear medicine scans use a small dose of radioactive material to obtain the images. Unlike conventional x-ray, the equipment does not produce radiation; rather, the radioactive source is the material which is administered to you. Depending on the type of test you're having, the radioactive material is given intravenously or orally. Then, a specialized camera (gamma camera) acquires images of the area of interest.

Why is it done?

Nuclear medicine scans can help detect and evaluate:

- Blood flow problems
- Function of the heart
- Blockages of the gallbladder
- Presence of infection
- Evaluation of bones
- Presence of cancer
- Kidney function

Patient preparation

You will be given specific instructions prior to your exam by your health care provider or the scheduling department. Let your health care provider know if you may be pregnant. Share a list of all medications you are currently taking and any recent imaging studies, and bring this information with you on the day of your exam.

What to expect

Depending on the region of your body being scanned, you may be asked to wear a hospital gown. You may also need to remove items such as dentures, jewelry, belts, wallets, etc., as these items could interfere with the images. In some cases, you may be asked to come in for the administration of the radioactive material and return later for the scan. This time allows the radioactive material to circulate through the body and localize in the area of interest. If you're not informed by your primary care provider, please do not hesitate to contact the hospital with questions regarding the length of your exam.

Risks

There is limited radiation exposure for the nuclear medicine exams performed at Atlantic General Hospital. Along with the natural decay of radioactive material, the material moves quickly through the body and is excreted in urine or stool within 72 hours.