# **Nuclear Medicine**



Nuclear Medicine specialists use radioactive material to access the function of organs or systems within the body. Nuclear Medicine uses small quantities of radioactive materials, called isotope, that are targeted to specific organ systems or tissues within the body. These can be introduced into the body in different ways. Depending on the type of nuclear medicine exam you are undergoing, the radiotracer is either injected into a vein, which is most common, but can also be swallowed or inhaled as a gas and eventually accumulates in the organ or area of your body being examined. A small amount of radiation is then detected with the use of a nuclear medicine gamma camera. This safe and painless technique often spots abnormalities early in a disease's progression. It also provides a way to gather information that otherwise would be unavailable or require surgery or more expensive diagnostic tests.

All Nuclear Medicine technologists at Cumberland Medical Center are American Registry of Radiologic Technologists® (ARRT) and/or Certified Nuclear Medicine Technologist (CNMT) registered.

### **Services:**

- Bone
- Gastric (NPO)
- Heart (NPO)
- Hepatobiliary (gallbladder) (NPO)
- Renal
- Thyroid
- Other general Nuclear Medicine scans

### **Nuclear Medicine helps:**

- Analyze kidney function
- Determine the presence or spread of cancer
- Evaluate bones for fractures, infection, arthritis or tumors
- Identify bleeding in the bowel
- Identify gallbladder blockages
- Locate infections
- Measure thyroid for overactive or underactive functioning

# Nuclear Medicine (cont)



## Nuclear Medicine helps (cont):

- Provide images of blood-flow and heart function
- Scan lungs for respiratory and blood-flow problems

### **Exam Information:**

- Patients are encouraged to wear comfortable clothing
- Please bring a current written list of medications
- Arrive 30 minutes prior to your scheduled appointment to register
- Always inform the technologist if you are pregnant, may be pregnant, and/or currently breastfeeding
- Some exams will require patients to be NPO (without food/drink for six hours) in order for the exam to be completed
- If you are diabetic, please contact your ordering provider to determine the safest way to prepare for your exam

Upon arrival, you will be registered and escorted to the Nuclear Medicine department where you will be asked about your medical history. A technologist will start your IV and inject the isotope for the majority of Nuclear Medicine exams.

Testing can take as little as one hour or may require a longer time depending upon the exam requested by your physician. Some tests require the patient to be scanned and then a waiting period before taking a second scan. If your physician requests copies of your exam, a CD will be provided prior to your discharge.

Please call (931) 459-7196 if you have questions regarding your exam preparation. A technologist will explain the procedure prior to the exam and help answer questions. If you have scheduling concerns, please call (931) 459-7040.

\*Results should be available within 48 hours, either through your personal patient portal or your ordering provider