

How does it work?

You receive the tracer (called a radiopharmaceutical) in one of several ways - injection into a vein, capsules or liquid by mouth, special tubing into other parts of your body or by breathing it in. This tracer is designed to act like material the body already uses. By using special detectors to measure the radiation given off by the material, we see how your body works. These detectors do not give off any radiation.

Why do I have to wait so long?

Sometimes it takes the tracer a while to get to the parts of the body we want to see. This is why there is often a delay before we can take pictures.

Why do the pictures take so long?

Because we use such small amounts of radioactivity, very sensitive instruments are used to detect it. Even with our instruments, though, it takes a while for them to get enough information to form a good picture.



Will a nuclear Medicine scan make me permanently radioactive (or make me glow in the dark)?

No. The materials we use are given in tiny amounts, lose their radioactivity quickly (usually within hours), and pass out of the body quickly - often within twenty four hours.

What kinds of studies do you perform?

We can look at nearly every organ system in your body. There are even special studies to look for infection and certain kinds of tumors. Sometimes we work with other departments – like Cardiology – to provide even more accurate results.



Is the “tracer” used here the same thing as “X-ray Dye”?

“X-ray dye” – or iodinated contrast – is sometimes used in X-ray and CT scans. Some people have an allergic reaction to the contrast. Nuclear Medicine does **not** use “X-ray dye” in any of our studies.

Who will be performing and reading my study?

A nuclear medicine technologist will be performing the study. They are licensed and registered to

- prepare and administer the tracer
- operate the cameras and probes
- measure results, process and analyze computer information
- they are not licensed to interpret studies or give results to patients

A board-certified radiologist, trained in nuclear medicine tests, will read your study and send a report to the referring doctor.



When/How do I get my results?

The best way to get the results of your study is to make a follow-up appointment with the doctor that ordered the exam. Although a radiologist will be reading your study, it is better to get the results from your regular doctor. They are familiar with your history, medications, and other exams that you may have had performed. This means they can use all that information to help in your diagnosis. The results will be sent to your doctor in approximately three days.

What do I have to do to get ready for my test?

Often, there is very little to do – perhaps not eating that morning, or avoiding certain medications. However, there are specialized instructions for some of our studies. If you have not received instructions already from the doctor who ordered the test, or are uncertain about them, we'd be happy to answer any questions you might have.

Why do I have to answer questions about my history or body?

Because Nuclear Medicine studies show us how your body is working, your medical history is important in helping the radiologist interpret (or read) your study. The size and shape of your body can also affect both the amount of tracer you need and the way the study appears.



How do I get a copy of my report and films of this test?

Your results should be sent to the doctor who ordered the test in approximately three days. If another doctor needs a copy of the results, please have them call us; we can fax it to them at that time.

If you need to hand-carry a report or copy of your films, we will need to have you fill out a form. Please go to the window to the right of the main Medical Imaging desk to complete these forms and get what you need. As we are converting to digital imaging, it may take a few minutes to obtain a “hardcopy” of your study.

How do I contact the Nuclear Medicine Department?

We are located inside the Medical Imaging department on the first floor of Miami Valley Hospital. Routine and outpatient services are available from 7 am to 5 pm Monday through Friday; emergency services are available to inpatients at all times. Outpatients, please check in at with the main Medical Imaging desk after registering.

To schedule an exam, please call Central Scheduling at **937.208.2080**

If you have any questions or concerns about your procedure, please call **937.208.3128**.

Questions & Answers About



NUCLEAR MEDICINE

What is Nuclear Medicine?

Nuclear Medicine is the use of very small amounts of radioactive material (or tracers) to diagnose - and sometimes treat - diseases.

How much radiation will I receive?

Nuclear Medicine exams carry about the same risks as a CT scan. Only tiny amounts of short-lived radioactive material are used.

Why should I have this study? I already had an X-ray/CT scan/MRI/ultrasound?

Nuclear Medicine's strength is that it shows how parts of your body are actually working. Because of this, the results of nuclear medicine studies are often compared with other studies to provide even more specific results.