**IMAGING: NUCLEAR LUNG SCAN**

The purpose of this procedure is to diagnose pulmonary embolism (lung blockage) and to evaluate lung disease, such as emphysema and chronic obstructive pulmonary disease.

### What to expect

- **Before the exam:**
  There are no pre-exam instructions.

- **During the exam:**
  This is a two-part test. For the first part, the patient sits in a chair and breathes very small particles of radioactive aerosol material for about five minutes. There are no side effects while breathing this material. An initial set of pictures (images) is taken of the lungs using a special nuclear medicine camera. The camera does not produce any radiation. It simply detects and records the distribution of the radioactive material in the lungs. This part of the test takes about 15 to 20 minutes.

  For the second part of the test, the patient lies on the examination table to receive an intravenous injection (in the vein) of a tracer dose of radioactive material. The level of radioactivity is extremely low and has no side effects. Using a special nuclear medicine camera, the technologist takes pictures of the kidneys for approximately one hour. The camera does not produce any radiation; it simply detects and records the distribution of the radioactive material in the kidneys.

- **After the exam:**
  There are no post-exam instructions.

**IMAGING: NUCLEAR RENAL SCAN**

Renal scans evaluate kidney function and supply of blood, kidney failure, kidney obstruction; they also follow up kidney transplants. Renal scans may be used to screen and diagnose renovascular hypertensive disease.

### What to expect

- **Before the exam:**
  For this exam, the patient drinks 16 ounces of fluids one to two hours before the appointment. If the test is scheduled to diagnose renovascular hypertension, the patient should be off ACE inhibitor medications for at least 48 hours (with the permission of the doctor).

- **During the exam:**
  Once in the exam room, the patient lies on the imaging table and receives an intravenous injection (in the vein) of a tracer dose of radioactive material. The level of radioactivity is extremely low and has no side effects. Using a special nuclear medicine camera, the technologist takes pictures of the kidneys for approximately one hour. The camera does not produce any radiation; it simply detects and records the distribution of the radioactive material in the kidneys.

- **After the exam:**
  There are no post-exam instructions.