



About Your PSMA PET Exam

Positron Emission Tomography (PET) is a nuclear medicine procedure that produces pictures of the metabolism, or chemical activity, within your body. While imaging procedures such as Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) take pictures of organs and structures within your body, PET scans can detect abnormal changes before a CT or MRI scan can “see” them. This is important because functional changes are often present before structural changes in tissues. A prostate-specific membrane antigen (PSMA) PET scan uses a radioactive tracer that targets prostate-specific membrane antigens that are found in prostate cancer.

Before the exam: There are no eating or drinking restrictions for this exam, so you are encouraged to drink water prior to and leading up to your exam time. You may take any prescribed medications on the day of your exam unless you are told not to do so by your physician or provider. Please wear comfortable clothes, arrive on time, and leave all valuables at home. If you are claustrophobic, please call Scheduling Services at 308-630-2700, option one, for more information. **Please remember to bring your ID or insurance forms.**

The radioactive tracers used for PET exams are created specifically for each patient. Because these drugs expire within hours, please arrive at your scheduled time to allow for registration, consultation, glucose reading, and radioactive tracer injection. If you miss your appointment for any reason other than an emergency or illness, you will be billed for the cost of the radioactive tracer. **Please call Scheduling Services at least one day in advance to either cancel or reschedule your exam.**

During the exam: First, you will be injected with a radioactive tracer. The amount of radiation in this tracer is small, so your risk of negative radiation effects is low. This tracer is a compound of prostate-specific membrane antigens (PSMA) labeled with a short-lived radioisotope. You will rest for approximately 60 minutes while the radioactive compound travels throughout your body.

The technologist will ask you to lie on the scanner table, which will slowly pass through the scanner. The PET scanner looks similar to an MRI scanner, but it is quiet and does not use magnets. The PET scanner detects and records the signals the radioactive tracers emit. The signals are then reassembled into computerized images. Most patients can expect their exam to last at least an hour and a half.

After the exam: A radiologist will interpret the images from your scan. These results are not immediately available. The radiologist will contact your physician or provider to share information from the scan. **Your referring physician or provider will reach out with test results, or they may be viewed in your MyChart account if you are a registered user.**

The following conditions may exclude you from having a PET exam. Please call Scheduling Services if any of these apply to you or if you have any questions:

- Weight over 500 pounds
- Claustrophobic
- Recent radiation therapy