

A CAT (computed axial tomography) Scan is a noninvasive medical test that uses special x-ray equipment to produce multiple images or pictures of the inside of the body and a computer to join them together in cross-sectional views of the area being studied.

CT scans of internal organs, bone, soft tissue and blood vessels provide greater clarity than conventional x-ray exams.

How to Schedule CT Scan

A prescription from a physician is required for an CT exam. You may need pre-authorization from your insurance company. Consult with your physician before scheduling your appointment. Call your preferred location to schedule an appointment.

CT Scans are performed in the following locations; please contact us for more information or to schedule an appointment:

St. Joseph's Regional Medical Center, Paterson: 973.754.4343

St. Joseph's Wayne Hospital, Wayne: 973.956.3312

St. Joseph's Ambulatory Imaging Center, Clifton: 973.569.6300

St. Joseph's Ambulatory Imaging Center at Carlstadt ☐ 201.372.1020

Common Uses

CT scanning is commonly used to diagnose problems such as cancers, cardiovascular disease, infectious disease, inflammatory processes, trauma and musculoskeletal disorders.

Safety

CT examinations improve health care and are an essential part of diagnosis and treatment planning. However, there are some risks associated with the level of radiation exposure during a CT and therefore the medical benefit of conducting the exam should always outweigh any risks involved. No direct data have shown that CT examinations are associated with an increased risk of cancer; extrapolations from studies of radiation exposure suggest there is a very small incremental risk.

The risk for pediatric patients is likely to be greater than that for adults, and dedicated CT protocols are in place at St. Joseph's to minimize their exposure. The state-of-the-art CT scanner at St. Joseph's Ambulatory Imaging Center in Clifton utilizes a dose modulation technique to minimize the dose for all patients. Other strategies for minimizing radiation dose from CT for all patients include avoiding unnecessary CT examinations, utilizing alternate imaging modalities when appropriate, such as Ultrasound or MRI and using state-of-the-art CT radiation dose reduction technologies.

What should I expect BEFORE my CT Scan?

Medications

It is important for you to keep to your regular medication schedule. Please take all the medications that have been prescribed to you by your doctor. Just inform our staff of the medications you have taken prior to your test.

Food and drink

You should not eat solid foods for four hours prior to your test if you require IV contrast. You may, however, drink plenty of fluids, such as water, broth, clear soups, juice, or black decaffeinated coffee or tea. We encourage you to drink plenty of fluids before your arrival to our center.

What to wear

You should dress in comfortable clothing. It might be necessary for you to change into a hospital gown if there is metal in your clothing, such as a bra or zipper, within the area of interest of your study. If you are wearing jewelry or anything else that might interfere with your scan, we will ask you to remove it. The CT scan is conducted in a very secure environment. It is best, however, if you leave valuable items at home.

Diabetic conditions

If you are an insulin-dependent diabetic, please continue to take your insulin as prescribed, but remember to drink extra fruit juices to make up for the fasting of solid foods for the period that your stomach is empty. Patients who are taking diabetic medications should take the prescribed dose as normally done on that day, but discontinue the next doses for 48 hours AFTER their CT exam. Patients should notify their Primary Care Physician (PCP) that they were instructed to discontinue their medication for 48 hours. If you need a substitute medication, please consult your doctor.

Intravenous preparation

Many patients receive a contrast agent intravenously (IV) during their CT test. If your doctor or the radiologist has determined that this procedure will enhance your CT scan results, the technologist will place an IV in your arm or hand prior to going into the test. (Please see the

section on "Contrast Medium".)

What will I experience DURING my CT Scan?

Scanning

Your CT technologist will bring you into the CT scan room where you will lie down on the patient table. The technologist positions your body so that the area you are having scanned is in the middle of the large doughnut-shaped scanner ring which holds the x-ray tube and an electronic detector. The technologist leaves the room, but can see and hear you at all times. The scanner does not touch you, nor do you feel the x-rays. It does make some noise and the table you are lying on will move slightly during the image acquisition. It is important for you to lie very still and at some points, you may be asked to briefly hold your breath as the picture is taken. During the scan, a thin beam of x-ray is focused on a specific part of your body. The x-ray tube moves very rapidly around this area, enabling multiple images to be made from different angles to create a cross-sectional picture. The x-ray beam information goes to the electronic detector and then into a computer, which analyzes the information and constructs an image for the radiologist to interpret.

Length of scan

Each CT scan is individualized and tailored to each patient's needs. In general, the actual image-taking is only about one minute and most examinations last approximately 15 minutes in total.

Contrast medium

Contrast mediums, or contrast agents, highlight your organs and blood vessels and help the radiologist see them better. In the past, most contrast agents contained higher levels of iodine. The new contrast agents available today have lower iodine content, which greatly reduces the chance of an allergic reaction and most of the discomforts associated with the injection. The advantage of our state of the art scanners is that they maximize the efficiency of the contrast

medium, which tends to dilute fairly quickly into your bloodstream. Since our scanners are so quick, it is possible to take all pictures while the contrast medium is still in a high concentration, which produces better images. You will probably experience a warm feeling and a medicine-like taste during the injection, but these sensations subside quickly.

What should I expect AFTER my CT Scan?

You have no restrictions after having a CT scan and can go about your normal activities. To help eliminate the contrast medium from your body, drink plenty of decaffeinated or non-alcoholic beverages. Water and juices also work well.

Cardiac CT

Cardiac CT, CTA and Coronary Artery Calcium Scoring, are specialty exams available to St. Joseph's outpatients at our Clifton location only.

CT Scan Results

All CT exams are read by our specially trained radiologists. After the scan has been read, the results are sent to your physician, who will discuss them with you.

Additional Information and Resources

Please [click here](#) for further information on CT Scans.

[CT \(CAT\) Scans and Radiation Risk Information](#)