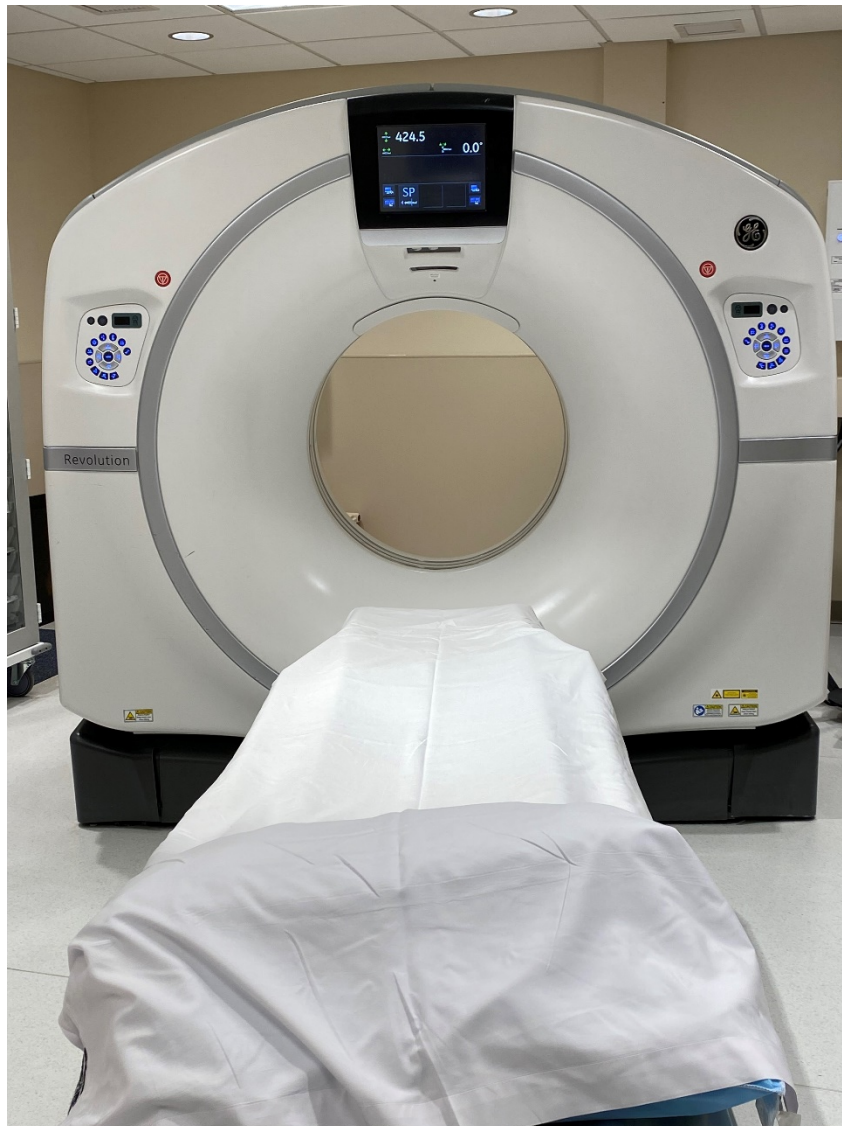


# CT Scan

## CT Scan

A computerized tomography (CT) scan combines a series of X-ray images taken from different angles around your body and uses computer processing to create cross-sectional images (slices) of the bones, blood vessels and soft tissues inside your body. CT scan images provide more-detailed information than plain X-rays.

A CT scan can be used to visualize nearly all parts of the body and is used to diagnose disease or injury as well as to plan medical, surgical or radiation treatment.



## Why it's done

Your doctor may recommend a CT scan to help:

- Diagnose muscle and bone disorders, such as bone tumors and fractures
- Pinpoint the location of a tumor, infection or blood clot
- Guide procedures such as surgery, biopsy and radiation therapy
- Detect and monitor diseases and conditions such as cancer, heart disease, lung nodules and liver masses
- Monitor the effectiveness of certain treatments, such as cancer treatment
- Detect internal injuries and internal bleeding

## Risks

- During a CT scan, you're briefly exposed to ionizing radiation. The amount of radiation is greater than you would get during a plain X-ray because the CT scan gathers more-detailed information. The low doses of radiation used in CT scans have not been shown to cause long-term harm, although at much higher doses, there may be a small increase in your potential risk of cancer. Tell your doctor if you're pregnant. Although the radiation from a CT scan is unlikely to injure your baby, your doctor may recommend another type of exam, such as ultrasound or MRI, to avoid exposing your baby to radiation. At the low doses of radiation used in CT imaging, no negative effects have been observed in humans.

## How you prepare

Depending on which part of your body is being scanned, you may be asked to:

- Take off some or all of your clothing and wear a hospital gown
- Remove metal objects, such as a belt, jewelry, dentures and eyeglasses, which might interfere with image results
- Refrain from eating or drinking for a few hours before your scan

## Contrast material

A special dye called contrast material is needed for some CT scans to help highlight the areas of your body being examined. The contrast material appears white on images, which can help emphasize blood vessels, intestines or other structures. Although rare, the contrast material can cause medical problems or allergic reactions. Most reactions are mild and result in a rash or itchiness. In rare instances, an allergic reaction can be serious, even life-threatening. Tell your doctor if you've ever had a reaction to contrast material prior to having your CT scan.

Contrast material might be given to you:

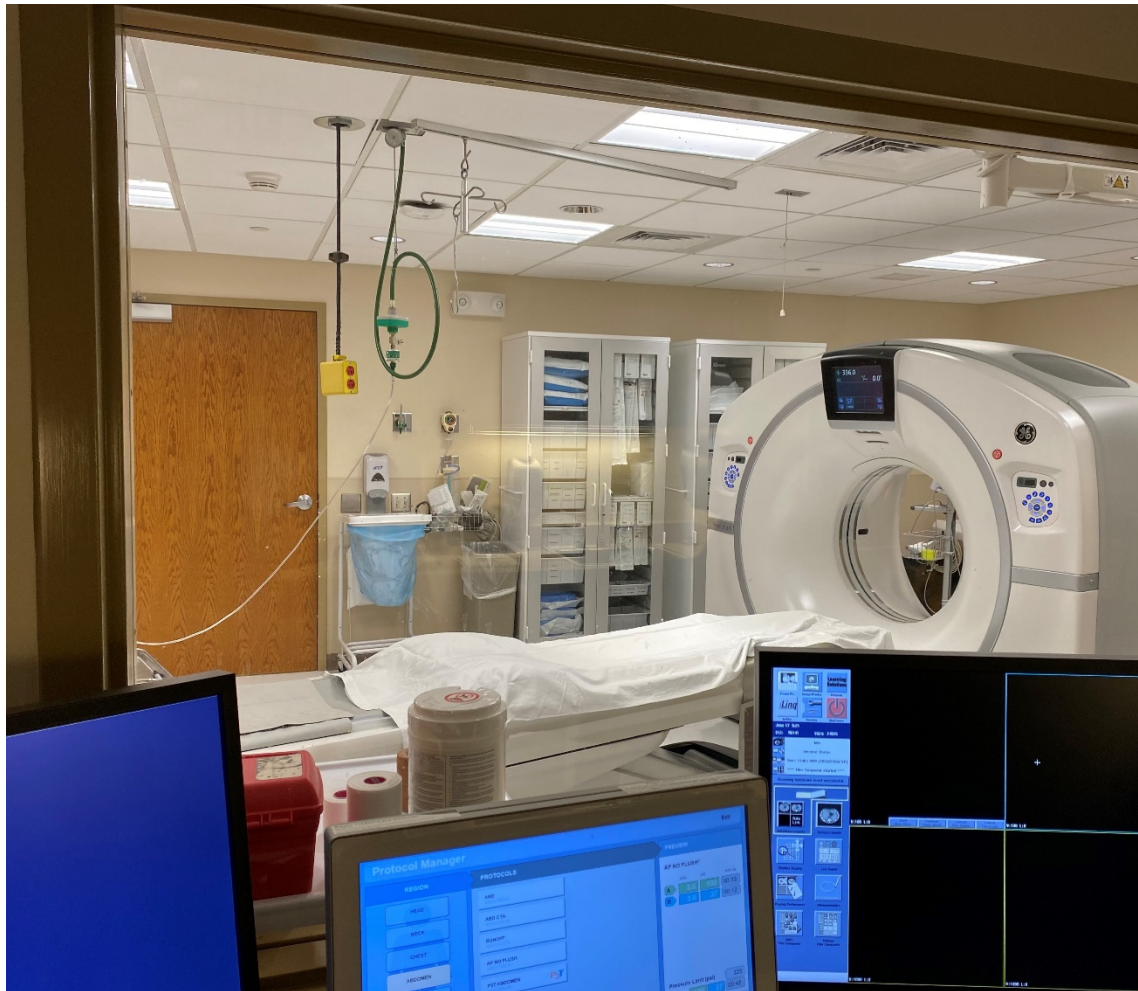
- **By mouth.** If your esophagus or stomach is being scanned, you may need to swallow a liquid that contains contrast material. This drink may taste unpleasant.
- **By injection.** Contrast agents can be injected through a vein in your arm to help your gallbladder, urinary tract, liver or blood vessels stand out on the images. You may experience a feeling of warmth during the injection or a metallic taste in your mouth.
- **By enema.** A contrast material may be inserted in your rectum to help visualize your intestines. This procedure can make you feel bloated and uncomfortable.

## What you can expect during the procedure

CT scanners are shaped like a large doughnut standing on its side. You lie on a narrow, motorized table that slides through the opening into a tunnel. Straps and pillows may be used to help you stay in position. During a head scan, the table may be fitted with a special cradle that holds your head still.

While the table moves you into the scanner, detectors and the X-ray tube rotate around you. Each rotation yields several images of thin slices of your body. You may hear buzzing and whirring noises.

A technologist in a separate room can see and hear you. You will be able to communicate with the technologist via intercom. The technologist may ask you to hold your breath at certain points to avoid blurring the images.



## After the procedure

After the exam you can return to your normal routine. If you were given contrast material, you may receive special instructions. In some cases, you may be asked to wait for a short time before leaving to ensure that you feel well after the exam. After the scan, you'll likely be told to drink lots of fluids to help your kidneys remove the contrast material from your body.

## Results

- The results of your exam should be available to your physician within 24-48 hours after the test, Monday through Friday.
- Your physician will discuss the test results with you.