



# CT Scan of the Spine

*How to prepare for your procedure*

**A CT scan uses a special kind of X-ray machine to take detailed pictures of the body. A spinal CT details the spine. Read this handout to learn about how the scan works, how to prepare for your scan, how the scan is performed, what to expect during the scan, and how to get your results.**

## What is a CT scan of the spine?

CT (computed tomography, or CAT scan) uses a special X-ray machine to take detailed pictures of the spine. CT scanners create cross-sectional (slices) pictures of the spine. CT pictures are far more detailed than those obtained by standard X-ray. CT is unique because it can show many different types of tissue in the same region (bone, muscle, soft tissue, and blood vessels).

## How does the scan work?

In CT scanning, a source of X-rays and a set of X-ray detectors rotate around the patient. The data gathered by the detectors creates cross-sectional pictures (slices) that show the inside of the body. A single slice is captured in only a few seconds. Thicker tissues such as bone appear white, and less dense tissues, such as the spinal cord, appear in shades of gray. The spinal canal, which contains cerebrospinal fluid, appears dark gray.

Spiral CT units produce high-quality pictures in a short time, making it a convenient tool for children and patients who are critically ill. Large areas of the body such as the spinal column can be imaged in just minutes.

## How should I prepare for the CT scan?

- Dress comfortably. You will be given a gown to wear during the scan.
- Metal objects, such as jewelry, glasses, dentures, and hairpins, may affect the CT pictures and should be removed.
- Eat your regular diet until 6 hours before your scan.

- Drink clear liquids such as water, juices, or tea until your scan. Drinking water helps to protect your kidneys. It is important to drink often, both before and after your scan.
- Take your regular medicines as prescribed by your doctor.
- Tell the doctor and CT technologist if you have a history of allergic reactions – especially to iodine, which is often present in contrast material.
- Tell them if you have a history of heart disease, asthma, diabetes, or thyroid problems. Any of these conditions may increase your risk of an allergic reaction.
- Tell your doctor or the CT technologist if there is any chance you may be pregnant.

### **How is the CT scan performed?**

1. You will lie on your back during the scan. The CT technologist will make sure that you are properly placed, and may use pillows to help you maintain a correct posture during the study.
2. The table will first move quickly through the scanner to set the correct starting placement.
3. The table moves more slowly through the tunnel in the scanner for the rest of the exam.
4. As needed, contrast material will be injected into your arm vein during the scan to sharpen the pictures. A scan of the lower spine may also be done after sending contrast material into the spinal canal during a lumbar puncture. A lower-spine CT helps detect tumors or locate areas of swelling or nerve compression.
5. The scanning takes a very short time, and a complete exam, including set-up time, takes from 5 to 30 minutes.
6. When the exam is done, you may be asked to wait a short time while the radiologist checks the images for quality. A few more scans will be done as needed. Holding still during the scan results in the best CT pictures.

## Questions?

Call 206-598-6200

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC Clinic staff are also available to help at any time.

Imaging Services:  
206-598-6200

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## What will I feel during the scan?

- CT is painless, though you may feel some discomfort from staying still.
- If contrast injection is needed, you may feel discomfort at the injection site.
- You may notice a warm, flushed sensation during the injection of contrast material. You may also notice a metallic taste in your mouth that lasts for about 2 minutes. These reactions are normal, and go away within 1 to 2 minutes.
- Once in a while, a patient will develop itching and hives for up to a few hours after the injection. This can be relieved with medication. Light-headedness or shortness of breath may be due to a more severe allergic reaction – a doctor or nurse will be nearby during the exam to help you, if needed.
- Because CT uses X-rays, you may not have a family member or friend in the CT room during the exam.

## Who interprets the results and how do I get them?

A radiologist skilled in CT scanning will review and interpret the CT findings. The radiologist will send a detailed report to your primary care or referring doctor, who will give you the results. The radiologist will not discuss the results with you.

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