

CT Scan

(Computerized Tomography)

What is a CT Scan?

Note: Child-friendly language in Blue.

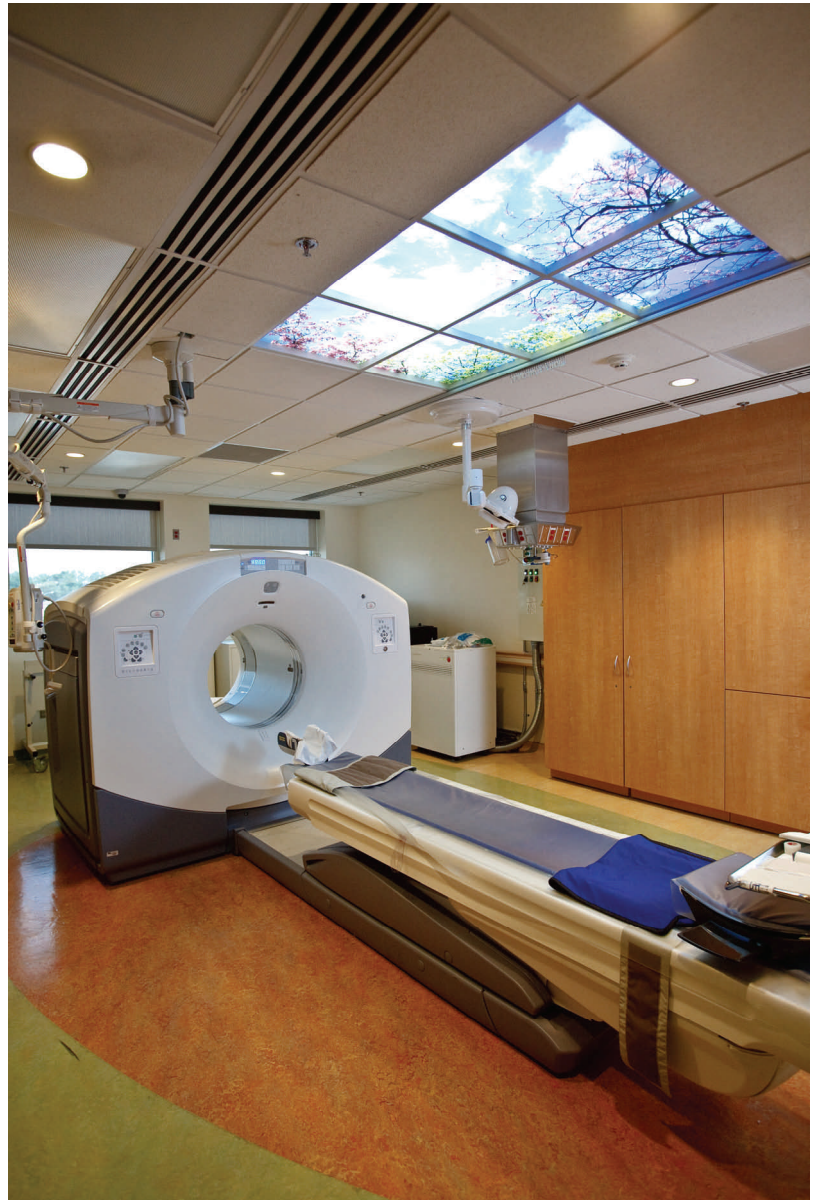
- A CT uses advanced X-ray technology to produce detailed pictures of inside your child's body.
- A CT scanner (camera) has a small tunnel with a bed that moves in and out. Some kids say it looks like a spaceship or doughnut.



Patient in CT Waiting Room

Why is it done?

- A CT scan provides very clear pictures of tissues, organs and bones.
- CT scans provide much more detail than a regular X-ray.
- A CT scan is often used to diagnose certain conditions and plan for treatments.



CT Scanner Room

What can I do to help my child?

- Parents/caregivers are strongly encouraged to stay with their child throughout the entire procedure whenever possible. Women who may be pregnant cannot be in the room during the CT scan. In these cases, another trusted adult is encouraged to stay with the child during this time.



What should I expect during the procedure?

A CT Scan is done in two stages.

The results will be sent to your doctor in 1-2 business days.

Stage One: Getting Ready

- Every CT scan is different, depending on the part of the body being studied and the type of scan needed.
- Some children may need to drink a material called contrast ([special water or juice that makes the pictures more clear](#)) before the scan.
 - * If your child needs to drink contrast they can choose from a couple of flavors (apple, lemonade, etc.)
 - * Drinking needs to take place slowly over 1-2 hours so it can pass through the bowel evenly.
 - * Encourage your child to bring items from home such as books or games to make this part easier.
- In addition, some children may need contrast through an IV ([tiny, soft straw placed into a vein using a small needle](#)). If your child needs an IV, a nurse will walk you back to a Prep Room, and gently place an IV into a vein in your child's arm or hand.
 - * Your child may feel a little discomfort, like a small quick poke, when the IV is placed.
 - * Encourage your child to hold his or her arm very still and to take deep breaths.
- Although CT scans are very quick, some children may need sedation to help them hold completely still for the pictures. If your child is scheduled with possible sedation, a nurse will call you the day before to let you know how to prepare your child.
- Even if your child is scheduled with sedation, staff routinely make a first attempt to complete CT scans without sedation whenever possible.

Stage Two: Pictures

- When your child is all ready for the pictures a nurse or technologist ([person who helps take pictures](#)) will walk them back to the Scanner ([Camera](#)) Room and help your child get on the bed.
 - * Small children will wear a seat belt ([special grey blankets](#)) to help them stay still.
 - * Let your child know that there will be a red light in the camera. This light doesn't hurt and is just there to help the camera take pictures.
 - * Let your child know that the camera will make a loud "[whirring](#)" or [buzzing](#) sound when it's taking pictures. Reassure your child that the camera and pictures will not touch or hurt.
- Next, the technologist will leave the room, and the pictures will begin. The bed will slowly move up and into the tunnel. Your child's job now is to stay very still so the pictures come out clear.
 - * A technologist can hear and see your child the entire time during the scan.
 - * You or another trusted adult may stand next to your child through the entire exam.
- If your child receives IV contrast during the exam they may feel a warm sensation throughout their body and/or experience a metallic taste in their mouth right after the contrast is given.
- The actual scan time of the CT is very short, but depending on the type of scan and whether sedation is involved, the actual procedure time can vary from a few minutes to several hours.
- When the scan is done your child is free to resume normal activity.

Tips for preparing your child for a CT Scan



Infants (0-12 months old):

- Remember you are the most important thing to your child. Your presence will help them feel as safe and secure as possible.
- Take care of yourself too. If you are prepared mentally and physically, you will be more relaxed around your child.
- Bring familiar objects that comfort your child such as a favorite blanket, toy or pacifier.
- Remember that children use many different ways to cope. Crying is a healthy and normal way to cope because it allows them to express their emotions.

Toddlers (1-3 years old):

- Begin preparing your child the day before.
- Let your child know that he or she will have pictures taken, so the doctor can learn about his or her body.
- Use simple words to describe what your child may experience.
- Reassure your child that you will be close.
- Bring comfort items with you that help your child feel safe, such as a favorite toy or blanket.
- Toddlers are learning to be independent and make their own choices; offer them realistic choices. For example, “What stuffed animal should we bring?”

Preschool (3-5 years old):

- Begin preparing your child 1-3 days in advance.
- Talk to your child about why they are having pictures taken. For example, “The doctor wants to take special pictures of inside your body to learn more about how your body works.”
- Reassure your child that you will be close, and that the big, special camera will not touch or hurt him or her.
- Let your child know that his or her job is to stay very still so that the pictures are not blurry.
- Help your child practice lying absolutely still on their bed or a table, pretending to be a statue or in a spaceship.

School Age and Up (6 years and Up):

- Prepare your child at least a few days in advance.
- Talk to your child about why the doctor wants to take special pictures of inside his or her body. For example for a younger child, “So the doctor can learn more about how your body works.” For teenagers, “So the doctor can see very detailed pictures of inside your body.”
- Explain to your child what he or she might see, hear and feel, in the order things will occur, using child-friendly and/or real terms depending on your child’s preference.
- Talk to your child about different ways to cope. Some children like to know everything that is happening during the exam, and some want to direct their attention elsewhere. Remind them that either way is okay.
- Encourage your child/teen to ask questions.



CT Nursing Staff

My questions for the Radiology staff ...

- 1.
- 2.
- 3.
- 4.
- 5.

Child Life

Children's National Medical Center Department of Radiology is staffed with two full-time Child Life Specialists at Children's National Medical Center Main Campus, and one full-time Child Life Specialist at Children's National Imaging Montgomery County Regional Outpatient Center. Child Life Specialists are trained to address the emotional and developmental needs of children and their families during healthcare experiences, and can provide procedural preparation and support before and during your child's exam.

Phone Numbers

- If you would like to speak to a Child Life Specialist before your child's Radiology appointment at Children's National Medical Center Main Campus, please call **202-476-3338**.
- If you would like to speak to a Child Life Specialist before your child's Radiology appointment at Children's National Imaging Montgomery County Regional Outpatient Center, please call **301-765-5727**.
- For more information about hospital-wide Child Life Services at Children's National Medical Center, please call **202-476-3070**.

Children's National Medical Center supports the Image Gently campaign and strives to keep radiation exposure to our patients as low as possible. For more information on this campaign, please visit www.imagegently.org

Children's National Medical Center
Division of Diagnostic Imaging and Radiology
111 Michigan Ave NW Washington DC, 20010
Appointments: 202-476-4700
Administrative Office: 202-476-5080

Children's National Imaging
Montgomery County Regional Outpatient Center
9850 Key West Avenue Rockville, MD 20850
Appointments: 301-765-5707
Administrative Office: 301-765-5702