

Bone Scan

What is a Bone Scan?

Note: Child-friendly language in green.

- A Bone Scan is a nuclear medicine study of the bones in your child's body.
- This scan will create pictures of your child's bones, including detailed information about cellular activity.
- In nuclear medicine studies, patients are given a very small amount of radioisotopes (**picture medicine**), which travel to the part of the body the doctors want to see.
- In this study, these radioisotopes are used by a large gamma camera to create pictures of your child's bones.



Patient and Nuclear Medicine Technologist



Patient underneath camera during Bone Scan

Why is it done?

- A bone scan is used to diagnose causes of bone pain, including fractures, infections, or other bone problems.

What can I do to help my child?

- Parents/caregivers are strongly encouraged to stay with their child throughout the entire procedure whenever possible. You are the most important thing to your child. Your presence and reassurance will help them feel more safe and secure.

What should I expect during the procedure?

The entire test takes about 2-3 hours, and is done in three stages. Results will be sent to your doctor in 1-2 business days.

Stage 1: Getting Ready

- For a bone scan, your child will be given an injection of a small amount of radioisotopes (picture medicine) through a vein.
- First, your child will lie down on the camera bed, and a nurse or technologist (person who will help take the pictures) will then look for the best place to give the injection and wash this area with a cool sponge.
 - * Infants and young children may be wrapped in blankets to help them lie still during the injection and/or pictures.
 - * Let your child know that their job is to hold their arm very still.
- Next, a technologist will place a small needle into a vein in your child's arm or hand to inject the isotope (picture medicine). Once the radioisotope is injected, the needle is removed.
 - * Your child may feel a little discomfort, like a small quick poke, when the needle is placed.
 - * Counting, singing a favorite song, and/or taking deep breaths can help.

Stage 2: First Set of Pictures

- After the injection is given, the first set of pictures is taken, typically lasting about 5 minutes. The camera positioned very close above your child's body. After a few minutes the bed will begin to move very slowly out from under the camera.
 - * Let your child know the camera will come very close to them, but will not touch him or her.
- Next, you and your child will be asked to come back 1.5 hours after the injection for a longer set of pictures.
 - * Encourage your child to bring their favorite toy or game to help with the long wait time.

Stage 3: Second Set of Pictures

- When it is time for the second set of pictures, your child will need to lie still on the camera bed the same way as before for about 30 minutes to an hour (or more).
 - * You may sit or stand by your child's head to provide support and distraction.
 - * To help make this part easier, many children like to watch a movie (we can provide DVDs and portable DVD players), listen to a story read by a parent, or simply relax and/or take a nap.
 - * Sedation is an option for those unable to hold still for the pictures. If your child is scheduled for possible sedation, a nurse will call you the day before to let you know how to prepare your child.



Patient in Nuclear Medicine room after injection

Tips for preparing your child for a Bone 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 for children 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 special 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?”

Preschoolers (3-5 years old):

- Begin preparing your child about 1-3 days in advance.
- Talk to your child about why they are having pictures taken. For example, “The doctors will be taking special pictures of inside your body to learn more about how your body works.”
- Let your child know that he or she will be getting special medicine first, which helps the pictures be bright and clear. Talk about ways to help make this “quick poke” part easier such as pretending to blow out birthday candles or counting.
- Tell your child that it is his or her big job to hold very still during the pictures, so that the pictures don’t turn out blurry.
- Remind your child that the special big camera doesn’t touch or hurt kids.

School Age and Up (6 years old 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 an older child, “So the doctor can learn more detailed information about your bones.”
- 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 age/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.

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. 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**.
- 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