

VCUG

voiding cystourethrogram

how can I help my child during the test?

Many times, just being with your child provides them the comfort and support that they need to make the test easier. In most cases, you will be able to be at the head of the table with your child during the test. You will be able to hold their hands and talk to them during the VCUG.

If your child has a special toy and/or blanket that gives them comfort, please bring it with you for your child to hold during the test. We can provide tools to help distract your child from the test. Some examples are bubbles, light-up or musical toys, books, movies and TV shows. If your child begins to feel anxious, encourage them to take deep breaths to help them relax. Another way to help your child relax is by simply talking with them about things they like. It is also normal for children to cope with the anxiety they are feeling by crying.

Children react to stressful situations in different ways. We are all dedicated to making this experience as comfortable as possible for you and your child.

what happens after the VCUG?

The results from the VCUG will be sent to your physician. You will get more information and instructions on how to care for your child after the test.

questions or concerns?

Please call the medical imaging department at 937-641-3811.



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Your child is scheduled to have a voiding cystourethrogram (VCUG) at Dayton Children's Hospital. During this test we will take pictures so the radiologist can see your child's bladder, ureters and kidneys. This brochure will help you prepare your child for what to expect during this test. If you have any questions or concerns after reading this please ask anyone on your care team.

words to know:

VCUG: A test that uses X-rays and contrast liquid to show the doctor what happens in your child's body during urination (when they pee).

Catheter: A small, flexible tube inserted into the bladder.

Contrast: A liquid that helps us see your child's bladder on X-rays.

Reflux: A condition that causes urinary problems, especially UTIs by letting bacteria and germs to reach the kidneys.

Technologist: The staff member that will take the X-rays of your child during the test. They will also place the catheter.

X-ray: A machine used to take pictures.

why does my child need a VCUG?

Some children have a condition called vesicoureteral **reflux**, or simply reflux. This test will show if your child has a normal flow of urine or if they have reflux (figure 1). Not all children with UTIs have reflux. However, it is important to know if your child has reflux because it could affect your child's treatment.

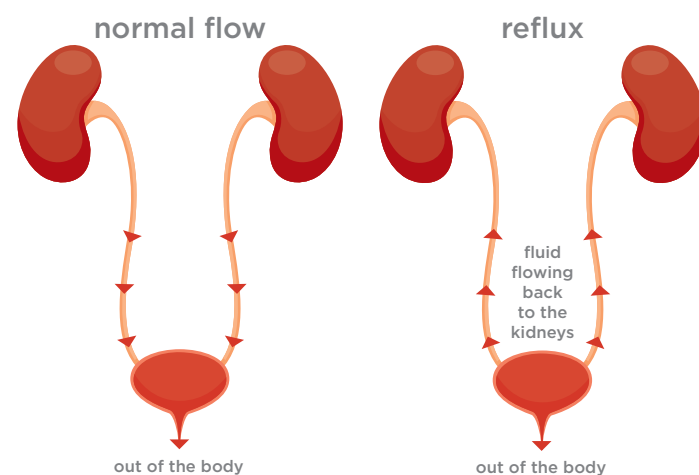


Figure 1

who can be in the room with my child during the test?

If you are pregnant you will not be able to be in the room during the test. Please make arrangements for another adult to be in the room with your child. Siblings will not be able to be in the room during the test. If other children will be coming with you, please bring another adult to stay with them during the test.

what staff will be present during the VCUG?

- **Technologist:** They will take X-rays of your child during the test. They will also place the catheter.
- **Technologist assistant:** They will help to position your child and to give supplies to the technologist.
- **Child life specialist:** When available, a child life specialist can be there to help explain to your child what will happen during the test. They will use simple terms that are easy for your child to understand. They can also be there during the test to help with distraction and comfort.

Please ask for a child life specialist when you schedule your child's test if you feel that your child:

- Will be anxious during the test
- Is having a hard time understanding what is going to happen
- Would benefit from distraction during the test

how can I help prepare my child for the test?

When and how to prepare your child for a VCUG depends on their age. Toddlers need very simple preparation just before the test begins. Older children need more detailed information in advance. Adolescents should be prepared far enough in advance to give them time to ask questions.

The biggest concern that most patients have is that the test will hurt. It is always important to be honest with your child. If your child asks if it will hurt try to stay away from using the word hurt. Instead, try saying "Your test might feel uncomfortable for a short time, but we will do everything we can to help you get through it."

If you would like more information about how to explain the test to your child, please call 937-641-3303 and ask to speak to the medical imaging child life specialist.

what happens during a VCUG?

During a VCUG a technologist will need to take images to look at your child's bladder. In order to see your child's bladder, they will use a liquid called **contrast**. Once the test has started, it should take about 30 minutes. During the entire procedure everyone in the room, other than your child, will need to wear a protective lead apron.

1. Your child will change into a hospital gown. Then, they will lay down on the **X-ray** table.
2. The **technologist** will take an X-ray of your child before the test to make sure that your child is clear to do the test.
3. Your child will then be placed into position for their VCUG. Girls will place their legs "butterfly" style (figure 2). Boys will keep their legs straight out and together.



Figure 2

4. The technologist will clean their genital area.
5. They will then insert a **catheter** into the bladder. It is inserted through the penis in boys and through the urethra in girls. Once the catheter is placed, they will use a piece of tape to keep it from coming out.
6. The catheter is then connected to a bottle of contrast liquid. The contrast liquid flows into the bladder through the catheter while the technologist takes X-rays. The contrast liquid allows the technologist to see the bladder clearly. It will not harm your child.

7. Your child will start to feel like they need to urinate. You or your child will let the staff know when they feel like they need to urinate. Your child may need to wait to urinate so the technologist can take more X-rays.
8. When the technologist has the X-rays they need of your child's bladder filling up with contrast liquid, they will remove the piece of tape that is attached to the catheter.
9. Towels will be placed around and under your child for them to urinate into. They will then ask your child to urinate while lying down on the table. When your child urinates the catheter will come out, and the technologist will take X-rays of their kidneys and bladder during urination.
10. Once your child is finished urinating, the wet towels will be removed and the technologist will take an X-ray of your child's kidneys and empty bladder.
11. Your child will go to the restroom to clean off any contrast liquid that is on them and put their clothes back on.

what will my child feel during the VCUG?

Your child will not feel the X-ray camera taking pictures. They will feel cold, wet soap as the technologist cleans the area for the catheter placement. As the catheter is inserted, your child may feel some discomfort and pressure. Some patients say that when the catheter is placed they feel like they need to urinate. Some children say this part can be uncomfortable for them. The staff will try to help the patient feel more comfortable if this is the case.

As the bladder is being filled, your child should start to feel like they need to urinate. Your child will then feel the tape coming off from the inside of their leg. Sometimes it is difficult for patients to urinate as soon as they feel the need to. If your child has a hard time urinating right away, they may start to feel some discomfort from their bladder being full. Your child may feel the catheter when it comes out during urination. But, most patients say they don't feel it at all.

