
Urologic Tests for Children

These are common tests done to diagnose urinary problems. Your child's healthcare provider will tell you which tests your child needs.

- **Blood tests.** Help check for signs of infection, kidney disease, or other problems. The tests are done using a blood sample taken from a vein.
- **CT scan.** Takes detailed X-ray pictures of the bones, soft tissues, and organs inside the body. The pictures help check for problems in the urinary tract. These can include kidney stones and blockages.
- **Cystoscopy.** Lets the healthcare provider look inside the urethra and bladder. It uses a long, narrow scope with a camera attached.
- **Diuretic renal scan.** Takes pictures of the kidneys. It helps check if there is a blockage in the kidneys. It also shows how well each kidney works. For the test, a small amount of radioactive material is used. A water pill (diuretic) is also given. This medicine helps move urine through the kidneys to the bladder.
- **Genitogram.** Takes X-ray pictures of the belly (abdomen) and pelvis. It's done to study reproductive structures. A tube (catheter) and special dye are used.
- **KUB (kidney, ureter, bladder).** Takes X-ray pictures of the inside of the belly and pelvis. This lets the healthcare provider check for problems in the urinary tract, such as kidney stones. Constipation can also be diagnosed with a KUB.
- **MRI.** Uses strong magnets to make detailed pictures of soft tissues and organs. The pictures help show problems, such as kidney stones and blockages. No radiation is used.
- **Radionuclide cystogram.** Creates pictures of the bladder. It helps check for reflux. This problem is when urine backs up into the kidneys. A catheter and a small amount of radioactive material are used for the test.
- **Radionuclide renal scan.** Takes pictures of the kidneys. It checks how well the kidneys work. It also checks for scarring and other problems in the kidneys. A small amount of radioactive material is used.
- **Spinal MRI.** A type of MRI that takes a detailed picture of the spine. It's most often used to help check for spina bifida. This is a problem with the spine that keeps the nerves of the bladder from working correctly.
- **Ultrasound.** Uses sound waves to create pictures. It helps find problems in the urinary tract, such as kidney stones and blockages.
- **Urinalysis.** Checks a sample of urine. It helps find problems, such as blood in the urine, infection, and kidney disease.
- **Urine culture and sensitivity.** Helps find out which germs are the cause of a urinary tract infection and which medicines are the best treatment.
- **Urodynamics study.** A series of tests done to show how well the bladder works. These tests are often used to see if your child has problems holding or passing urine. A urodynamics study can include:

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- **Uroflowmetry.** Measures the speed and amount of urine as your child urinates.
 - **Cystometry.** Measures the pressure inside the bladder as it fills and empties.
 - **Electromyography.** Measures the pressure inside the sphincter muscles as they open and close to allow the bladder to fill and empty.
 - **Pressure flow study.** Measures the pressure and flow of urine as it leaves your child's bladder.
 - **Post-void residual urine volume.** Measures how much urine is left in the bladder after urination. A catheter or ultrasound is used to measure the amount.
 - **Voiding cystourethrogram (VCUG).** Takes X-ray pictures of the bladder and urethra during urination. This lets the provider check how well the bladder works. A catheter and special dye are used for the test.

Preparing your child for these tests

- Have your child follow any directions they are given about not eating or drinking before the test.
- Tell the healthcare provider about any medicines your child takes. Your child may need to stop taking certain medicines before the test.
- Tell the provider about any allergies and health problems your child has. Be sure to mention if your child is allergic to iodine or contrast.
- For an MRI, mention if your child has any metal in their body, such as a cochlear implant.
- Ask if your child should arrive for the test with a full or empty bladder.