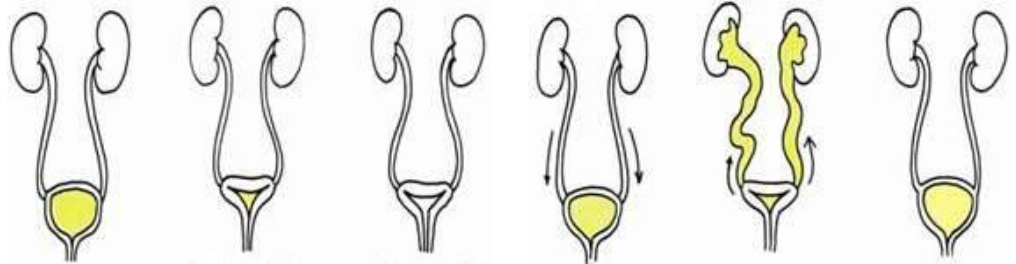


Urinary Reflux

What is urinary reflux?

- Pee (urine) is made by the kidneys and travels down a tube called the ureter to be stored in the bladder.
- Normally, the urine flows 1 way (down).
- If your child has reflux, urine can flow back up from the bladder into the kidneys.



Normal urinary function: urine flowing from the bladder out of the body.

Urinary reflux: Urine flowing back up from the bladder to the kidneys, then back to the bladder.

How serious is reflux?

- By itself, reflux is not harmful to the kidneys.
- It can become a problem if there is an infection in the urinary tract. That is because bacteria in the bladder can travel up and infect your child's kidneys. Kidney infections can scar the kidneys.
- Reflux is graded on a scale of 1 to 5. Grade 1 reflux is the mildest, and grade 5 is the most serious. Reflux can occur in 1 or both kidneys.

How is reflux treated?

- Initially your child will be monitored every few months for a period of time. During this time the urologist will decide when further radiology testing is needed.
- Some children may need a low dose of daily antibiotics to keep them from getting infections. Your urologist will tell you if your child needs antibiotics. If your child is taking a daily dose of **antibiotic, it is very important for them to take it every day**. Bedtime is the best time to give it to your child.
- In some cases, children may need surgery to fix urinary reflux. However, many children outgrow it.

To Learn More

- Urology Clinic
206-987-2509 (weekdays)
206-987-2000 (evenings / weekends - ask for Urologist on call)
- Ask your child's healthcare provider
- seattlechildrens.org

Free Interpreter Services

- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.



There are 2 kinds of possible infections to watch for.

Signs of a bladder or urinary tract infection

If your child has any of the symptoms below, they may have a urinary tract infection. **Have your child evaluated right away either by your primary care provider, at an urgent care center or the emergency room.**

- Persistent high fever of 101.5° F (38.6° C) or higher
- Irritability or feeling cranky
- Urine that smells bad
- New or increased urine accidents
- Pain when peeing

Signs of a kidney infection

Kidney infections should be treated immediately. Call your child's primary care doctor right away if your child has any of these symptoms:

- Persistent high fever of 101.5° F (38.6° C) or higher
- Nausea or throwing up (vomiting)
- Side (flank) pain

What kind of follow-up care does my child need?

- Your child's urology provider will monitor your child as your child grows with radiologic testing. This may include:
 - A kidney (renal) ultrasound to check for kidney growth and changes
 - A radiology test called a VCUG (voiding cystourethrogram) to find out the grade of reflux
 - An ultrasound test called a CeVUS (contrast-enhanced voiding urosonography) to find out if your child has reflux
 - A radiology test called DMSA that looks at the kidneys differently to evaluate function and scarring
- Your child's primary care provider should monitor your child with routine urine tests if your child is ill. If your child is on a daily antibiotic, they may need blood work checked every 6 months.

Where can I learn more?

For more information, read our handouts:

- "Hydronephrosis"
seattlechildrens.org/pdf/PE1320.pdf
- "Ultrasound"
seattlechildrens.org/pdf/PE667.pdf
- "Voiding Cystourethrogram (VCUG)"
seattlechildrens.org/pdf/PE021.pdf
- "What to Expect When You Come for your CEVUS at Seattle Children's"
seattlechildrens.org/pdf/PE3666.pdf
- "DMSA Kidney Scan"
seattlechildrens.org/pdf/PE1057.pdf