

Upper and Lower Urinary Tract Surveillance

- Individuals with SCI and neurogenic bladder are at greater risk for serious medical problems such as kidney failure, kidney and bladder stones, urinary tract infections, and vesicoureteral reflux (the abnormal flow of urine from the bladder up towards the kidneys). Your health care provider should watch you for signs of these conditions.
- Annual surveillance testing should include the following tests:
 - **Serum creatinine (blood test):** Measures the level of a waste product that is filtered out by the kidneys. A high level in the blood may mean your kidneys are not filtering well enough. To be useful, results must be monitored regularly over time to see if there are changes.
 - **Renal ultrasound:** An ultrasound is a radiation-free test to look for stones or blockages. Annual testing may find stones when they are small and easiest to treat. This test will also measure the size and shape of the kidneys to find early changes due to blockages or reflux of urine from the bladder to the kidneys under high pressure. If you have repeated stones, a special CT scan may be used instead of an ultrasound.
 - **Abdominal X-ray:** May be ordered to look for stones in the bladder, ureters, or kidneys.
- People who use an indwelling catheter for 8-10 years have been shown to have a higher rate of bladder cancer. Smoking increases the risk for bladder cancer. Watch for blood in the urine that does not go away. A cystoscopy (the urologist will look at the bladder with special scope) may be recommended by your urologist to check for evidence of cancer or trauma.
- Make an appointment with a urologist who has expertise in spinal cord injury if:
 - your bladder function changes.
 - a previously working method of bladder management is no longer working. You may need urodynamic testing to figure out the problem.
 - you have persistent blood in the urine.

Resources:

For patients:

- SCI Forum Video: Management of Urinary Problems after SCI
Retrieved from http://sci.washington.edu/info/forums/reports/urinary_problems.asp#tests

For health care providers:

Cameron AP, Rodriguez GM, Schomer KG. (2012). *Systematic Review of Urological Follow up After Spinal Cord Injury*. J Urol. 187: 391-397.

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Disclaimer: This information is not meant to replace the advice from a medical professional. You should consult your health care provider regarding specific medical concerns or treatment.

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