

# Urinary Tract Infection Prevention Following Spinal Cord Injury

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## Fact Sheet

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### *How common are UTIs in individuals with spinal cord injuries?*

Urinary Tract Infections (UTIs) occur on average 2.5 times per year in individuals with spinal cord injuries.<sup>1</sup> The use of catheters is associated with higher rates of UTIs. These are the most frequent form of infection within the SCI population.<sup>1</sup>

### *Why are some individuals with spinal cord injuries at an increased risk?*

Neurogenic bladder dysfunction often leads to an inability to fully empty the bladder. Many individuals thus rely on intermittent catheterization for bladder management. Catheterization without clean technique places individuals at higher risk for infection.<sup>2</sup> Prolonged time periods between catheterizations/voiding may also increase the risk of infection.

### *What might it feel like if a urinary tract infection (UTI) is present?*

UTIs may present in a variety of symptoms such as fever, nausea, fatigue, sweating, increased muscle spasms, kidney or bladder discomfort or autonomic dysreflexia (AD).<sup>2</sup> If severe and left untreated, UTIs can lead to kidney infections.

### *Bladder Management*

The key to prevention of UTIs is to develop and stay on a consistent bladder management program.<sup>2</sup> The first step may be to have urodynamics testing completed to identify the bladder pressure threshold that initiates bladder wall muscle activity.<sup>2</sup> Typically, in determining the timing for a bladder program, individuals will be informed of a pressure level just under the threshold determined in urodynamics testing.<sup>2</sup> On average, intermittent catheterization should be performed every 4-6 hours.<sup>2</sup> Staying on a consistent voiding schedule and performing catheterization with clean technique are key factors in decreasing the risk of developing UTIs.

### *Fluid intake*

If a voiding schedule and clean technique is insufficient in preventing UTIs, additional precautions may be taken. Limiting fluid intake to 2L/day is often recommended to decrease the volume burden on the neurogenic bladder.<sup>2</sup> Other recommendations may be made such as decreasing fluid intake before bedtime.

### *Is cranberry juice effective as a preventative measure for UTIs?*

Currently, the research does not support the use of cranberry products in effectively preventing or treating UTIs in individuals with neurogenic bladder after spinal cord injury.<sup>3</sup>

## References:

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3. Jepson R, Craig J, Williams G. Cranberry products and prevention of urinary tract infections. *JAMA.* 2013;310(13):1395-6.

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