

Urinary Tract Infections (UTI)

Urinary Tract Infections (UTI) occur when bacteria (such as E. Coli from the rectum) infects the skin surrounding the urethra (the hole/opening where urine leaves the body). From there the bacteria can then work their way into the bladder and up to the kidneys which can cause severe illness.

Who can get a UTI? - Anyone and Everyone! UTI's are the second most common type of infection.

1. **Women** tend to be more susceptible due to their anatomy (having a shorter urethra).
2. **Women** going through menopause/post menopausal experience a sharp drop in estrogen levels which encourage bacteria to grow near the urethra. In addition pregnancy can also increase a woman's chance of an UTI.
3. **Catheters** used for urination increase the risk of contracting a UTI.
4. Older men with **enlarged prostate** glands have a slower outflow of urine, causing the urine to pool creating the ideal setting for the bacteria to thrive.
5. **Children** learning how to use the toilet should be instructed to wipe front to back and not to hold their urine for extended periods of time.
6. **Elderly** may not feel the symptoms of UTI allowing the infection to progress and worsen. They may experience mental changes and confusion.

Symptoms: Occasionally there are no symptoms at all

- Urgency to urinate, increased frequency of urination.
- Burning or discomfort with urination.
- Blood in urine or discolored urine.
- Strong smelling urine.
- Sharp side pain (possibly radiating to upper back).
- Fever, confusion or delirium (especially in the elderly).
- Nausea and vomiting

Prevention:

- **Hydration is essential.** Keep water cups/bottles in every room of the house as a reminder to keep drinking that H2O!
- Frequent urination is essential to help prevent harmful bacteria from adhering to the bladder wall.
- Unsweetened 100% Cranberry juice can also decrease the ability of bacteria to adhere to the lining of the urethra and bladder. Drink 3 ounces of pure cranberry juice three times a day. Cranberry juice can have a high amount of sugar, cranberry extract can be taken in capsule or pill form instead (300-400 milligrams of cranberry extract twice daily). This also prevents bacteria from adhering to the urinary tract.

- Vitamin C - 500mg taken **every 4 hours** (water soluble vitamin/antioxidant). It also helps to increase the acidity of urine in the bladder, since high acidity reduces bacterial growth.
- Urinating before and directly after intercourse helps to keep bacteria out of the urethra.
- Spermicidal foams, lubes, jellies or diaphragms may increase risk of infection. Use fragrance free personal hygiene products.
- Change out of tight sweaty workout clothing as soon as possible to prevent infection.
- Change underwear daily and wear 100% cotton undergarments. Thongs may increase the risk of UTI.
- Frequent changing of incontinence pads and cleansing of the area with soap and water or wipes is crucial to preventing UTI.
- Keep good toilet habits by not holding in urine and urinating every few hours as necessary. For women, wiping from front to back (vagina to anus) is essential to preventing UTI.
- Decreasing the amount of meat/poultry in the diet and focusing on fruits and vegetables has shown to decrease incidence.

Treatment:

- It is highly recommended that a culture (sampling of the urine) be done to confirm bacterial infection, and to prescribe correct antibiotics. If the UTI is left untreated, there is the risk of spreading to the kidneys.
- **Antibiotics** are usually NECESSARY to treat UTI. The type of antibiotic dose and the length of time taking the antibiotic depends on each case. The most common antibiotics to treat a UTI are "Nitrofurantoin" (Macrobid), "Ciprofloxacin", and "TMP-SMX" (Trimethoprim-sulfamethoxazole, Bactrim). Most infections will clear within 3 to 5 days of starting treatment..*Note: Probiotic products (high dose/multi-strain) like "FLORAJEN" help to replace good bacteria that gets killed by the antibiotic. Keep the probiotic refrigerated and take it on an empty stomach.*
- **Phenazopyridine** is a pain reliever for the urinary tract. It is available OTC in a lower strength and by prescription for a higher strength. It should not be taken for more than 2 days. This drug acts as a dye and can also color (orange-brown-red) bodily fluids such as urine, sweat and permanently stain contact lenses.
- **Aspirin, Tylenol** (Acetaminophen), or other NSAIDs (Ibuprofen-Advil, Naproxen Sodium-Aleve) can be used to treat pain associated with UTI.
- Vaginal **Estrogen** is used for peri/post menopausal women seeking to prevent recurrent infections.
- Apply **Heating Pad** to the area to minimize bladder discomfort.
- Drink plenty of **Water**.
- **D-Mannose** (from cranberries) is a promising alternative that can be used to treat an uncomplicated acute infection, and possibly prevent recurrence. It cannot be used during pregnancy, and caution with diabetes as it can affect glucose levels.
- **UvaUrsi** (Bearberry Leaf) is another supplement with potential to treat UTIs. It has anti-inflammatory and antibacterial properties. Do not use it for more than 5 days.

"We (IDSA) do in fact recognize that cost plays an important role in decision making about antimicrobials, and it is one of several factors that we think should go into a decision about choice. T/S is not right for everyone due to allergy or concern about resistance; Ciprofloxacin is not right for everyone due to concerns about collateral damage; and NF, while more expensive, is effective and has very little collateral damage. Fosfomycin also has little collateral damage, but it is not as effective and is also an expensive agent."