

Urinary Tract Infections (UTIs) and Recurrent UTIs

Introduction

A **urinary tract infection (UTI)** is a bacterial or fungal (yeast) infection affecting any part of the urinary tract, including the **bladder, urethra, ureters, or kidneys**—most commonly the **bladder**.

While anyone can get a UTI, they are **more common in women**. Several factors increase the risk of UTIs:

- Sexual activity
- Use of spermicides
- High blood sugar (e.g., in diabetes)
- Pregnancy or menopause
- Kidney stones
- Urinary retention
- Enlarged prostate
- Incontinence (bladder or bowel leakage)
- Immunosuppression
- Presence or recent use of a urinary catheter

Common Symptoms of a UTI

- Pain or burning during urination
- Urgent or frequent need to urinate, even when the bladder feels empty
- Cloudy or foul-smelling urine
- Blood in the urine (hematuria)
- Lower abdominal or pelvic discomfort
- Fever or flank (low back) pain
- In older adults: sudden confusion or changes in mental status

Treatment of UTI

- ✓ **Diagnosis:** Before starting treatment, it's best to get a **urine culture** to confirm the infection and identify the causative bacteria.
- ✓ **Antibiotic Therapy:** Simple UTIs can be treated with antibiotics such as:
 - Nitrofurantoin (Macrobid)
 - Trimethoprim-sulfamethoxazole (Bactrim)**Important:** Even if symptoms improve quickly, complete the full course of antibiotics as prescribed.
- ✓ **Symptom Relief**
 - **Phenazopyridine (Pyridium, Azo):** An over-the-counter bladder pain reliever that soothes irritation but **does not treat the infection**.
 - ⚠ Provide a urine sample before taking Azo, as it can affect test results.
- ✓ **If Symptoms Persist:** Contact your health care provider if you don't feel better after finishing antibiotics—you may need a different medication or repeat testing.

Recurrent UTIs

Recurrent UTIs are defined as:

- **≥2 infections in 6 months**, or
- **≥3 infections in 12 months** (confirmed by urine culture)

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Why Do They Happen?

Causes may include:

- Persistent or recurring bacterial colonization
- Anatomical abnormalities
- Foreign bodies (e.g., mesh, stones, catheters)
- Hormonal changes or dryness

Diagnostic Evaluation

Your health care provider may recommend:

- **Urine cultures**
- **Imaging** (e.g., CT scan) to check the kidneys and urinary tract
- **Cystoscopy** to look inside the bladder if infections are persistent, caused by the same organism, or unresponsive to treatment

Preventing UTIs

You can reduce your risk of UTIs by adopting these habits:

- ✓ **General Hygiene & Bladder Habits**
 - Drink **plenty of fluids** to urinate every 2–3 hours
 - Avoid **holding urine** for long periods
 - Keep the genital area clean and dry
 - Change incontinence pads frequently
 - Wipe **front to back** after toileting
- ✓ **During Sexual Activity**
 - Urinate before and after sex
 - Use **water-soluble lubricants** to reduce friction
 - Consider **postcoital antibiotics** if UTIs are sex-related
- ✓ **For Postmenopausal Women**
 - **Vaginal estrogen therapy** (cream, tablet, or ring) to improve vaginal and urethral health
- ✓ **Additional Options**
 - **Methenamine hippurate (Hiprex)**: A bladder antiseptic that prevents bacterial growth
 - **D-mannose**: Prevents bacteria from attaching to the bladder wall
 - **Probiotics** (oral or vaginal) to restore healthy flora
 - **Cranberry supplements or juice** that contain high concentration of A-type proanthocyanidins (evidence is mixed but may help some individuals)

When to Consider Preventive Antibiotics

If preventive strategies fail, your health care provider may discuss **prophylactic antibiotics**, which may be taken:

- **Daily**
- **Every other day**
- **After sexual intercourse**

This approach is customized based on your symptoms, risk factors, and response to previous infections.