



Urinary Tract Infection

SUSPECTED URINARY TRACT INFECTION (UTI)

NO indwelling catheter:

- » Acute dysuria

OR

- » Fever (oral $>37.9^{\circ}\text{C}$ [100°F] or 1.5°C [2.4°F] increase above baseline temperature) and at least one of the following:

New or worsening:

- Urgency
- Frequency
- Suprapubic pain
- Gross hematuria
- Costovertebral angle (CVA) tenderness
- Urinary incontinence

WITH indwelling catheter (Foley or suprapubic):

- » At least one of the following:
 - Fever (oral $>37.9^{\circ}\text{C}$ [100°F] or 1.5°C [2.4°F] increase above baseline temperature)
 - New CVA tenderness
 - Rigors
 - New onset of delirium
 - Acute hematuria
 - Malaise or lethargy with no other cause

- Foul smelling or cloudy urine is not a valid indication for initiating antibiotics.
- Asymptomatic bacteriuria should not be treated with antibiotics.

Reference

Loeb M, Bentley DW, Bradley S, Crossley K, Garibaldi R, Gantz N, McGeer A, Muder RR, Mylotte J, Nicolle LE, Nurse B, Paton S, Simor AE, Smith P, Strausbaugh L. Development of minimum criteria for the initiation of antibiotics in residents of long-term-care facilities: results of a consensus conference. *Infect Control Hosp Epidemiol.* 2001 Feb;22(2):120-4. doi: 10.1086/501875. PMID: 11232875. January 2023

TREATMENT

Clinical Presentation	Risk factors	Preferred therapy	Alternative
Uncomplicated UTI <ul style="list-style-type: none"> Bladder infection in afebrile men and women 	No history of urinary multidrug-resistant organism isolated within last 6 months	Nitrofurantoin PO 100mg BID X 5 days (CrCl > 30 ml/min only) OR TMP-SMX* PO DS 1 tab BID X 3 days OR Fosfomycin PO 3g X 1 dose	Cefpodoxime* PO 400mg BID X 5 days
	History of urinary multidrug-resistant organism isolated within last 6 months	Obtain urinalysis with urine culture. Use previous cultures within last 6 months to guide empiric therapy.	
Complicated UTI <ul style="list-style-type: none"> Febrile UTI Pyelonephritis (flank pain, CVA tenderness) Cather-associated UTI 	Obtain urinalysis with urine culture to tailor therapy. If Foley catheter present, change prior to obtaining urine specimen.	TMP-SMX* PO DS 1 tab BID Directed therapy duration: <ul style="list-style-type: none"> Beta-lactam or TMP-SMX X 7 days Fluoroquinolone X 5 days If severe (i.e. hypotension and fever), transfer to the ED for further evaluation. Obstruction or urologic abnormality may require 10-14 days.	Cefpodoxime* 400mg PO BID X 7 days

*Renal adjustment required

Reference

Gupta K, Hooton TM, Naber KG, et al. International clinical practice guidelines for the treatment of acute uncomplicated cystitis and pyelonephritis in women: A 2010 update by the Infectious Diseases Society of America and the European Society for Microbiology and Infectious Diseases. *Clin Infect Dis.* 2011 Mar 1;52(5):e103-20.

Hooton TM, Bradley SF, Cardenas DD, et al. Diagnosis, prevention, and treatment of catheter associated urinary tract infection in adults: 2009 international clinical practice guidelines from the Infectious Diseases Society of America. *Clin Infect Dis.* 2010 Mar;50(5):625-63. PMID: 20175247.

Trautner BW, Cortés-Penfield NW, Gupta K, Hirsch EB, Horstman M, Moran GJ, Colgan R, O'Horo JC, Ashraf MS, Connolly S, Drekonja D, Grigoryan L, Huttner A, Lazenby GB, Nicolle L, Schaeffer A, Yawetz S, Lavergne V. Clinical Practice Guideline by Infectious Diseases Society of America (IDSA): 2025 Guideline on Management and Treatment of Complicated Urinary Tract Infections: Duration of Antibiotics for Complicated UTI. *Clin Infect Dis.* 2025 Dec 20;ciaf462. doi: 10.1093/cid/ciaf462. Epub ahead of print. PMID: 41419448.