

Frequently Asked Questions About Antibiotics for UTI

Q: What are some first-line treatments for UTI?

A: [IDSA](#) states that first-line treatments for UTI include the following:

Antibiotic	Dose and Duration	Clinical Pearls:
Nitrofurantoin	100mg PO BID x 5 days	Do not use in CrCl < 30 or dialysis patients. Not for use in pyelonephritis. Avoid in last trimester of pregnancy
Sulfamethoxazole-trimethoprim	1 DS tablet PO BID x 3 days	Reduce dosing for kidney dysfunction. Do not use in dialysis patients. Do not use if patient is allergic to sulfa

Q: Help! My patient can't take first-line agents. What should I use instead?

A: [IDSA](#) states that second-line treatments for UTI include the following:

Antibiotic	Dose and Duration	Clinical Pearls
Cephalexin	500mg PO BID x 7 days	Not as effective as 1 st line agents
Amoxicillin-clavulanic acid	875/125mg PO BID x 7 days	
Ciprofloxacin	500mg PO BID x 3 days	Reduce dosing for kidney dysfunction. Has black box warning for CNS side effects, peripheral neuropathy, and tendinopathy. Use only if all other therapies are contraindicated

Q: Why are the durations recommended for UTI so short and so varied across antibiotic classes?

A: Antibiotics that are excreted in the urine also concentrate more heavily in the urine compared to other body sites before being ultimately eliminated. This dwell-time and the high concentrations of antibiotic are the reason why some antibiotic classes are only needed for 3-5 days in UTI.

Other benefits to shorter courses, as recommended by the [IDSA](#): fewer days spent with adverse side effects such as diarrhea, fewer days in which a patient needs to remember to take a pill.

Sources:

1. [Gupta K, Hooton TM, Naber KG, Wullt B, Colgan R, Miller LG, Moran GJ, Nicolle LE, Raz R, Schaeffer AJ, Soper DE; Infectious Diseases Society of America; European Society for Microbiology and Infectious Diseases. 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. doi: 10.1093/cid/ciq257. PMID: 21292654](#)

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