

## URINARY TRACT INFECTIONS (UTI'S)

**Asymptomatic UTI:** Asymptomatic bacteriuria (ASB) refers to the presence of bacteria in the urine without symptoms of UTI.

Pregnancy:	Screening and treatment for ASB in pregnancy is recommended to reduce the risk of pyelonephritis, preterm birth, and low birth weight.
Non-pregnant women:	Generally, treatment is not recommended except in specific cases (e.g., prior to urological procedures, before implanting devices).
Elderly:	Treatment is generally not recommended unless there are signs of systemic infection or urological symptoms.

**Screening:** Perform urine culture in pregnant women at their first prenatal visit and treat if positive.

Consider Indications: Treat ASB in non-pregnant patients with:

Recent urinary tract instrumentation.	Planned invasive urologic procedures.	Solid organ transplantation.	Neutropenia or prior to immunosuppressive therapy.
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**Treatment:** Preferred agents: Nitrofurantoin or cephalexin for 3-7 days.

**Follow-up:** Repeat urine culture post-treatment to ensure eradication, especially in pregnant women.

### Symptomatic UTI:

Dysuria	Frequency	Urgency	Suprapubic pain	Hematuria
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*Treatment Goals: Alleviate symptoms, eradicate infection, and prevent complications such as pyelonephritis or sepsis.*

### Diagnosis:

1. Perform urinalysis (UA) for <u>leukocyte esterase and nitrites</u> (indicative of bacterial infection).	2. Confirm with urine culture if UA suggests infection.
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### Treatment:

<b>First-line:</b> Nitrofurantoin (Macrobid) 100 mg BID for 5 days (female) or for 7 days (male)
Trimethoprim-sulfamethoxazole (TMP-SMX) 160/800 mg BID for 3 days (if local resistance rates are low)
<i>Alternative:</i> Fosfomycin single dose (3 g sachet).

Complicated UTI (including pregnancy and men): Tailor treatment based on culture and sensitivity results.

**Avoid TMP-SMX in the first trimester due to potential teratogenicity.**

### Follow-up:

Reassess symptoms within 48-72 hours post-treatment.	Repeat urine culture 1-2 weeks post-treatment in complicated cases or if symptoms persist.
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### Special Considerations:

<b>Pregnancy:</b> Treat promptly to prevent complications such as pyelonephritis and preterm labor. Use safe antibiotics (e.g., nitrofurantoin, amoxicillin, cephalosporins) based on trimester.	<b>Men and Children:</b> Consider underlying causes (e.g., anatomical abnormalities, obstruction) and appropriate investigations.	<b>Recurrent UTI:</b> Consider prophylactic antibiotics, behavioral modifications, or urological evaluation if recurrent.
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