Empiric UTI Treatment

*Not intended for patients with septic shock*

At least 1 symptom* of UTI must be present

> 12 hours

(Unless signs of sepsis)

Yes | No

Obtain Urinalysis with Reflexive Culture | No urinalysis or urine culture indicated; pursue other workup

> 10 WBC or + Nitrites# | < 10 WBC and -Nitrites

Complicated UTI** | Uncomplicated UTI

Rocephin 1 gm IV Q24h x 7-10d

OR

Levofloxacin 750mg IV/PO daily x 5-7d

Nitrofurantoin 100 mg PO BID x 5d

Alternative Agents

TMP-SMX DS PO BID x 3d

Cefdinir 300 mg PO BID x 5-7d

* See page 2 for a list of symptoms for which to initiate this algorithm

# Urinalysis is invalid if >5 squamous epithelial cells/HPF and should be repeated.

** See page 2 for a list of conditions associated with a complicated UTI.

If culture negative or <100,000 cfu/mL, discontinue abx.
*Antibiotic notes*
- Nitrofurantoin should not be used if CrCl < 30 mL/min.
- Adjust TMP-SMX to SS tablet if CrCl < 30 mL/min. Not for dialysis patients.
- Decrease cefdinir to 300 mg daily if CrCl < 30 mL/min.
- Reduce Levofloxacin dose to 750 mg q 48h if CrCl < 50 mL/min.
- Consider the antibiotic rotation eliminated class when choosing antibiotics on 10N.

**Signs and Symptoms of UTI**

<table>
<thead>
<tr>
<th>Sign</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Fever &gt; 38.5°C</td>
<td>If spinal cord injury: New sensation of unease</td>
</tr>
<tr>
<td>Rigors</td>
<td>Dysreflexia</td>
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<tr>
<td>Hypotension unrelated to medications</td>
<td>Increased spasticity</td>
</tr>
<tr>
<td>Acute hematuria unrelated to injury</td>
<td></td>
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<tr>
<td>New urinary frequency</td>
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<tr>
<td>Suprapubic pain or dysuria</td>
<td></td>
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<tr>
<td>Altered mental status or lethargy</td>
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<tr>
<td>Unexplained by other causes/injury</td>
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</tbody>
</table>

^Specifically in patients with a foley

**Characteristics of Complicated UTI**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male gender</td>
<td>Suprapubic catheter</td>
</tr>
<tr>
<td>Ureteral obstruction</td>
<td>Indwelling urinary catheter^</td>
</tr>
<tr>
<td>Neurogenic bladder</td>
<td>Ureteral stent</td>
</tr>
<tr>
<td>Kidney failure</td>
<td>Nephrostomy tube</td>
</tr>
<tr>
<td>Polycystic kidneys</td>
<td>Pregnancy</td>
</tr>
<tr>
<td>Immunocompromised state</td>
<td></td>
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</tbody>
</table>

^Includes patients with UTI symptoms whose foley was removed within the last 48 hours (consider replacing foley)

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**References:**