

# Urine Culture Common Isolates and Interpretive Guidelines

URINE CULTURE - COMMON ISOLATES	
<p><b>Common Pathogens – routinely worked up</b> Gram negative bacilli <i>Enterococcus</i> <i>Staphylococcus aureus</i> <i>Staphylococcus saprophyticus</i> Beta <i>Streptococcus</i>, group B</p> <p><b>Uncommon Pathogens—only work up if &gt;50,000</b> <i>Staphylococcus</i>, <i>coag neg</i>, <i>not Staph sap</i>. Yeast</p> <p><b>Rare pathogens—only work up if &gt;100,000</b> <i>Aerococcus</i> <i>Gardnerella vaginalis</i> <i>Corynebacterium urealyticum</i> and some other species Beta <i>Streptococcus</i> Group A, C or G</p>	<p style="text-align: center;"><b><u>Probable Contaminants</u></b></p> <p><i>Lactobacillus</i> Some <i>Corynebacterium</i> species Alpha and gamma streptococci Microaerophilic streptococci Saprophytic <i>Neisseria</i> Gram positive cocci, not Staph or Strep Beta Streptococcus, not Group A, B, C or G</p>

URINE CULTURE INTERPRETIVE GUIDELINES (Continued on Page 2)			
Quantitation (col/mL)	Organism	Ident Level/Susceptibilities (ID/S) URINE CULTURE	Ident Level/Susceptibilities (ID/S) URINE CULTURE, ADDITIONAL WORKUP
<10,000	Common Pathogens	<b>Void:</b> Multiple organisms <b>Cath:</b> Descriptive ID, except Staph in mixed culture	<b>Pure:</b> ID and S <b>Mixed:</b> Void – Multiple organisms Cath – Descriptive ID, except Staph in mixed culture.
	Contaminants	<b>Void:</b> Multiple organisms <b>Cath:</b> Multiple organisms; probable contaminants	<b>Void:</b> Multiple organisms <b>Cath:</b> Multiple organisms; probable contaminants.

# Urine Culture Common Isolates and Interpretive Guidelines

URINE CULTURE INTERPRETIVE GUIDELINES (Continued from page 1)			
<b>1-2 Organisms <math>\geq 10,000</math></b>			
10-50,000	Common Pathogens	<p>If <math>\geq 50,000</math> contaminant, descriptive ID of pathogen.</p> <p><b>Void:</b> ID <b>Cath:</b> ID and S (see Staph below)</p> <p><b>Staphylococcus:</b> <b>Void:</b> Pure – <i>S. saprophyticus</i>: ID* <i>S. aureus</i>: ID Mixed – Multiple organisms; probable contaminants <b>Cath:</b> Pure or with another pathogen: <i>S. saprophyticus</i>: ID* <i>S. aureus</i>: ID and S Mixed with contaminant: Multiple organisms; probable contaminants.</p>	<p>If <math>\geq 50,000</math> contaminant, descriptive ID of pathogen.</p> <p><b>ID and S</b></p> <p><b>Coag neg Staph:</b> <b>Void:</b> Pure - <i>S. saprophyticus</i>: ID* Other coag neg Staph: ID/S Mixed- Multiple organisms; probable contaminants <b>Cath:</b> <i>S. saprophyticus</i>: ID* Coag neg Staph: ID/S</p>
	Contaminants	Multiple organisms; probable contaminants	<p><b>Pure:</b> Descriptive ID <b>Mixed:</b> Multiple organisms; probable contaminants.</p>
50 - 100,000 >100,000	Pathogens	ID and S <i>S. saprophyticus</i> : ID*	ID and S <i>S. saprophyticus</i> : ID* Other coag neg Staph: ID/ S*
	Contaminants & Uncommon/ Rare pathogens	<p><b>Staph, coag neg, not Staph sap:</b> Pure or with &lt;10,000: ID &amp; S Mixed (with <math>\geq 10,000</math> others): ID only <b>Yeast:</b> Void/cath: Identify <i>Candida albicans</i>. Report others as "yeast, not <i>C. albicans</i>". &gt;100,000 ID Uncommon/Rare pathogens</p>	<p><b>Pure:</b> Descriptive ID <b>Mixed:</b> Rule out Uncommon/rare pathogens. Others: Multiple organisms; probable contaminants.</p>
<b>3 Organisms <math>\geq 10,000</math></b>			
	Common Pathogens	<p>If one pathogen clearly predominates, ID and S.</p> <p><b>Void:</b> Descriptive ID. "Specimen appears contaminated; no further workup pending" <b>Cath:</b> Descriptive ID. "May represent colonization; no further workup pending"</p>	<p>ID and S (<i>S. saprophyticus</i>: ID* Other coag neg Staph: ID)</p> <p><b>If contaminants = or &gt; than pathogens, descriptive ID, with comment:</b> <b>Void:</b> "Specimen appears contaminated; no further workup pending" <b>Cath:</b> "May represent colonization; no further workup pending"</p>
	Contaminants	Multiple organisms; probable contaminants	Multiple organisms; probable contaminants

\* *Staphylococcus saprophyticus* typically responds to urine concentrations of agents commonly used to treat acute uncomplicated UTIs (nitrofurantoin, trimeth plus or minus sulfa, or a fluoroquinolone). Routine susceptibility testing is not recommended.