



URINARY TRACT INFECTION (UTI)

SUTI – Symptomatic Urinary Tract Infection

DEFINITION: A symptomatic urinary tract infection must meet at least **ONE** ☐ of the following criteria:

☐ Criterion 1: *(Last updated June, 2008)*

- Patient has an indwelling urinary catheter in place at the time of specimen collection

AND

- Patient has at least **ONE** ☐ of the following signs or symptoms with no other recognized cause:

- ☐ fever ($>38^{\circ}\text{C}$)
- ☐ suprapubic tenderness
- ☐ costovertebral angle pain or tenderness

AND

- Patient has a positive urine culture of $\geq 10^5$ colony-forming units per cc of urine with no more than 2 species of microorganisms

☐ Criterion 2: *(Last updated June, 2008)*

- Patient has at least **TWO** ☐ of the following signs or symptoms with no other recognized cause:

- ☐ fever ($>38^{\circ}\text{C}$)
- ☐ urgency
- ☐ frequency
- ☐ dysuria
- ☐ suprapubic tenderness

AND

- Patient has at least **ONE** ☐ of the following:

- ☐ positive dipstick for leukocyte esterase and/or nitrite
- ☐ pyuria (urine specimen with ≥ 10 white blood cells $[\text{WBC}]/\text{mm}^3$ or ≥ 3 WBC/high power field of unspun urine)
- ☐ organisms seen on Gram stain of unspun urine
- ☐ at least 2 urine cultures with repeated isolation of same uropathogen (gram-negative bacteria or *Staphylococcus saprophyticus*) with $\geq 10^5$ colonies/mL in non-voided specimens
- ☐ $\leq 10^5$ colonies/mL of a single uropathogen (gram-negative bacteria or *S. saprophyticus*) in a patient being treated with an effective antimicrobial agent for a urinary tract infection

URINARY TRACT INFECTION (UTI)

- △ physician diagnosis of a urinary tract infection
- △ physician institutes appropriate therapy for a urinary tract infection

□ Criterion 3: *(Last updated June, 2008)*

- Patient ≤1 year of age has at least **ONE** △ of the following signs or symptoms with no other recognized cause:
 - △ fever (>38°C rectal)
 - △ hypothermia (<37°C rectal)
 - △ apnea
 - △ bradycardia
 - △ dysuria
 - △ lethargy
 - △ vomiting
- AND**
- A positive urine culture, that is, $\geq 10^5$ microorganisms per cc of urine with no more than 2 species of microorganisms

□ Criterion 4: *(Last updated June, 2008)*

- Patient ≤1 year old has at least **ONE** △ of the following signs or symptoms with no other recognized cause:
 - △ fever (>38°C)
 - △ hypothermia (<37°C)
 - △ apnea
 - △ bradycardia
 - △ dysuria
 - △ lethargy
 - △ vomiting
- AND**
- Patient has at least **ONE** △ of the following:
 - △ positive dipstick for leukocyte esterase and/or nitrite
 - △ pyuria (urine specimen with ≥ 10 WBC/mm³ or ≥ 3 WBC/high power field of unspun urine)
 - △ organisms seen on Gram stain of unspun urine
 - △ at least 2 urine cultures with repeated isolation of same uropathogen (gram-negative bacteria or *S saprophyticus*) with $\geq 10^5$ colonies/mL in non-voided specimens



URINARY TRACT INFECTION (UTI)

- △ $\leq 10^5$ colonies/mL of a single uropathogen (gram-negative bacteria or *S. saprophyticus*) in a patient being treated with an effective antimicrobial agent for a urinary tract infection
- △ physician diagnosis of a urinary tract infection
- △ physician institutes appropriate therapy for a urinary tract infection

ASB – Asymptomatic Bacteriuria

DEFINITION: An asymptomatic bacteriuria must meet at least 1 of the following criteria:

□ Criterion 1: *(Last updated June, 2008)*

- Patient has had an indwelling urinary catheter within 7 days before the culture

AND

- Patient has a positive urine culture, that is, $\geq 10^5$ microorganisms per cc of urine with no more than 2 species of uropathogen microorganisms

AND

- Patient has no fever ($>38^\circ\text{C}$), urgency, frequency, dysuria, or suprapubic tenderness

□ Criterion 2: *(Last updated June, 2008)*

- Patient has **not** had an indwelling urinary catheter within 7 days before the first positive culture

AND

- Patient has at least 2 positive urine cultures, that is, $\geq 10^5$ microorganisms per cc of urine with repeated isolation of the same microorganism and no more than 2 species of microorganisms

AND

- Patient has no fever ($>38^\circ\text{C}$), urgency, frequency, dysuria, or suprapubic tenderness

COMMENTS: *(Last updated June, 2008)*

- A positive culture of a urinary catheter tip is *not* an acceptable laboratory test to diagnose a urinary tract infection.
- Urine cultures must be obtained using appropriate technique, such as clean catch collection or catheterization.
- In infants, urine cultures should be obtained by bladder catheterization or suprapubic aspiration; a positive urine culture from a bag specimen is unreliable and should be confirmed by specimens aseptically obtained by catheterization or suprapubic aspiration.



URINARY TRACT INFECTION (UTI)

OUTI – Other Infections of the Urinary Tract (Kidney, Ureter, Bladder, Urethra, or Tissue Surrounding the Retroperitoneal or Perinephric Space)

DEFINITION: Other infections of the urinary tract must meet at least **ONE** ☐ of the following criteria:

☐ Criterion 1: *(Last updated June, 2008)*

- Patient has organisms isolated from **ONE** ☐ of the following:

- ☐ culture of fluid (other than urine)
- ☐ tissue from affected site

☐ Criterion 2: *(Last updated June, 2008)*

- Patient has **ONE** ☐ of the following:

- ☐ an abscess seen during **ONE** ☐ of the following:

- ☐ direct examination
- ☐ surgical operation
- ☐ histopathologic examination

- ☐ other evidence of infection seen during **ONE** ☐ of the following:

- ☐ direct examination
- ☐ surgical operation
- ☐ histopathologic examination

☐ Criterion 3: *(Last updated June, 2008)*

- Patient has at least **TWO** ☐ of the following signs or symptoms with no other recognized cause:














- ☐ fever ($>38^{\circ}\text{C}$)
- ☐ localized pain
- ☐ localized tenderness at the involved site

AND

- Patient has at least **ONE** ☐ of the following:

- ☐ purulent drainage from affected site
- ☐ organisms cultured from blood that are compatible with suspected site of infection
- ☐ radiographic evidence of infection (e.g., abnormal ultrasound, computerized tomography [CT] scan, magnetic resonance imaging [MRI], or radiolabel scan [gallium, technetium], etc.)
- ☐ physician diagnosis of infection of the kidney, ureter, bladder, urethra, or tissues surrounding the retroperitoneal or perinephric space
- ☐ physician institutes appropriate therapy for an infection of the kidney, ureter, bladder, urethra, or tissues surrounding the retroperitoneal or perinephric space

URINARY TRACT INFECTION (UTI)**□ Criterion 4:** *(Last updated June, 2008)*

- Patient ≤1 year of age has at least **ONE**  of the following signs or symptoms with no other recognized cause:
 -  fever ($>38^{\circ}\text{C}$ core)
 -  hypothermia ($<36^{\circ}\text{C}$ core)
 -  apnea
 -  bradycardia
 -  lethargy
 -  vomiting
- AND**
- Patient has at least **ONE**  of the following:
 -  purulent drainage from affected site
 -  organisms cultured from blood that are compatible with suspected site of infection
 -  radiographic evidence of infection (e.g. abnormal ultrasound, CT scan, MRI, or radiolabel scan [gallium, technetium])
 -  physician diagnosis of infection of the kidney, ureter, bladder, urethra, or tissues surrounding the retroperitoneal or perinephric space
 -  physician institutes appropriate therapy for an infection of the kidney, ureter, bladder, urethra, or tissues surrounding the retroperitoneal or perinephric space

COMMENTS: *(Last updated June, 2008)*

- Report infections following circumcision in newborns as SST-CIRC.