

## Frequently Asked Questions: Catheter-Associated Urinary Tract Infection (CAUTI)

Date	Topic	Question	Answer
Jan-14	<b>Spinal cord injury, heavily sedated, or ventilated patients</b>	My location cares for patients who may not be able to verbalize or sense suprapubic tenderness or costovertebral angle pain or tenderness, e.g., patients with spinal cord injury, heavily sedated or ventilated patients. How can I report CAUTI in these patients?	<p>Surveillance criteria may not be equally sensitive for all patient populations. The UTI criteria may not be as sensitive in patient populations such as spinal cord injury patients, those with brain injuries or the heavily sedated patient. NHSN definitions, as surveillance definitions, are aimed at patient populations (rather than for individual patients) and developed to gather information that can be used broadly. They also need to be constructed in such a way to balance sensitivity and specificity along with feasibility. A set of criteria that covered every subpopulation with high specificity and sensitivity would be so complicated that it would be very difficult to employ and next to impossible to do so consistently across different facilities.</p> <p>However, mechanical ventilation or sedation does not always mean that patients will not be able to verbalize pain. Physical examination should always be performed and patients assessed for non-verbal communication of tenderness.</p> <p>NHSN recognizes that some of the populations mentioned above, may be at high risk of CAUTI and therefore has begun a targeted discussion of the CAUTI criteria and its application to various patient populations. There may be future changes to the criteria as a result, but it would be 2015 at the earliest, before any changes could be operationalized. If you have suggestions and/or are aware of research about valid indicators of UTI in certain populations, please feel free to forward it to <a href="mailto:NHSN@cdc.gov">NHSN@cdc.gov</a> for our consideration.</p>
Jan-14	<b>Funguria</b>	Why does NHSN consider patients with funguria in the urine as CAUTIs?	Candiduria is a recognized cause of CAUTI. Therefore, there is no exclusion of these organisms from the UTI criteria. However, a targeted discussion of the CAUTI criteria and its application to various patient populations has recently been implemented. There may be future changes to the criteria as a result, but it would be 2015 at the earliest, before any changes could be operationalized.
Jan-14	<b>Gap day between elements</b>	Could you please explain what you mean by a gap day between any two elements?	<p>A gap day is a day without any of the infection elements. There can be no more than one gap calendar day between any 2 adjacent elements (e.g., culture result, symptoms, fever, etc.) Adjacent elements are those that occur next to each other on a timeline, for instance, fever and positive U/A or positive U/A and urine culture in the example below:</p> <p>Day 1 - Pt admitted and Foley inserted; asymptomatic                      Day 2 - Foley still in place; asymptomatic                      Day 3 - Fever &gt; 100.4°F; no urine culture collected nor urinalysis (UA) performed                      Day 4 - Afebrile and no other UTI symptoms; no culture or urinalysis collected- This is the "gap" day                      Day 5 -Afebrile; (+) leukocyte esterase on UA;                      Day 6- Afebrile; (+) urine culture 10,000 CFU of E.coli- Meets criteria for a SUTI 2a on day 6.</p> <p>If the there were no symptoms or positive lab results on Day 5, you could not attribute the fever on day 3 to that culture because there would have been a 2-day gap (day 4 and day 5) between adjacent elements.</p>

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Jan-14	<b>Distinguishing serial reportable infections from single, unresolved infection</b>	Is there a time period following the identification of an infection during which another of the same type of infection cannot be reported?	No. At present time NHSN does not have a set time period during which only 1 infection of the same event type may be reported for the same patient. (VAE and LabID Event reporting is the exception, for which there is a 14-day window [see individual protocols for VAE and LabID Events].) Following an infection which is either present on admission (POA) or a healthcare-associated infection (HAI), clinical information must be utilized to determine that the original infection had resolved, before reporting a second infection at the same site. Information which may be useful to consider to determine if the infection has resolved includes signs and symptoms as well as completion of antimicrobial therapy. If the original infection had not resolved before subsequent positive cultures are collected from the same site, add the pathogens recovered from the subsequent cultures to those reported for the first infection, if it was an HAI. Discussions are underway regarding creating a minimum time period between infections at the same site, however no final decisions have been made and no changes would be made before 2015.
Jan-14	<b>Irrigation</b>	Should we include Foley catheters that are irrigated in our CAUTI surveillance?	Yes. Although irrigating indwelling catheters may increase the risk of UTI, these catheters are included in CAUTI surveillance.
Jan-14	<b>Leg bags/attaching urometers</b>	My facility changes Foley catheters from bed bags to leg bags so that our patients can attend physical therapy. Or: My ICU opens catheter systems to replace catheter bags with urometers. Should these be included in CAUTI surveillance since the system is not "closed"?	Yes. Both of these practices may increase the risk of UTI, but neither excludes the patient from CAUTI surveillance.
Jan-14	<b>U/A on admission</b>	My facility routinely performs urinalysis (U/A) on admission to identify urinary tract infections present or incubating on admission. When these are positive can subsequent infections be excluded from reporting to NHSN?	<p>Not entirely. NHSN no longer utilizes the term "present or incubating" in its determination of healthcare-association infection (HAI). Instead facilities must utilize the new definitions of Present on Admission (POA) and HAI (see below) to make this determination. <i>POA: If all of the elements used to meet a CDC/NHSN site-specific infection criterion are present during the two calendar days before the day of admission, the first day of admission (day 1) and/or the day after admission (day 2) and are documented in the medical record, the infection is considered POA. Infections that are POA should not be reported as HAIs. Acceptable documentation does not include patient-reported signs and/or symptoms (e.g., patient reporting having a fever prior to arrival to the hospital). Instead, symptoms must be documented in the chart by a healthcare professional during the POA time frame (e.g., nursing home documents fever prior to arrival to the hospital). Physician diagnosis can be accepted as evidence of an infection that is POA only when physician diagnosis is an element of the specific infection definition.</i></p> <p><i>HAI: An infection is considered an HAI if all elements of a CDC/NHSN site-specific infection criterion were not present during the POA time period but were all present on or after the 3rd calendar day of admission to the facility (the day of hospital admission is calendar day 1). All elements used to meet the CDC/NHSN site-specific infection criterion must occur within a timeframe that does not exceed a gap of 1 calendar day between any two adjacent elements.</i></p>

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Jan-14	<b>Mixed flora</b>	If a urine culture is positive for 1 organism >100,000 CFU/ml and also for mixed flora, does this meet one of the urine culture results required for UTI?	No. Because "mixed flora" means that at least 2 organisms are present in addition to the identified organism, such a urine culture does not meet the criteria for a positive urine culture with 2 organisms or less. Such a urine culture cannot be utilized to meet the UTI criteria.
Jan-14	<b>UrC on NICU reporting summary</b>	What does the UrC column mean on my NICU monthly reporting summary? Is this a required field?	This column is used by facilities performing off-plan monitoring for catheter-associated urinary tract infections in the neonatal intensive care unit. It is used to capture the number of indwelling urinary catheter days in the unit for the month. NOTE: Monthly reporting plans cannot include CAUTI surveillance in NICUs.
Jan-14	<b>ABUTI and CMS</b>	Are asymptomatic bacteremic urinary tract infections (ABUTIs) in patients in adult and pediatric intensive care units (ICUs) included in the reporting requirements for CMS's Hospital Inpatient Quality Reporting Program beginning January 2012?	Yes. Keep in mind that ABUTI may occur in patients with or without an indwelling urinary catheter. Therefore, if a patient in an adult or pediatric ICU has an ABUTI and an indwelling urinary catheter within the timeframe to meet the device-associated rule, this is a CAUTI and is reportable to CMS. Remember that the date of event is defined as the date when the last element used to meet the CDC/NHSN site specific criterion occurred. Only catheter-associated UTI data (both ABUTI and SUTI) are shared with CMS.
Jan-14	<b>Gram stain</b>	Do microorganisms seen as part of a urinalysis (UA) meet the component of symptomatic urinary tract infection (SUTI) criteria 1a and 2a, which states: "c. microorganisms seen on Gram stain of unspun urine"?	No. Since the UA workup does not include Gram staining of the specimen, this component of the criteria is not met.
Jan-14	<b>Patient reported fever</b>	Can I use patient reported fever to meet CDC/NHSN UTI criteria for present on admission?	No. Patient reported signs and symptoms (e.g., fever) cannot be used as an element to meet CDC/NHSN site-specific criteria unless also observed and documented by a healthcare provider. For example, a patient is transferred from a nursing home and is afebrile upon admission to the hospital. The nursing home documentation indicates that the patient had a fever the morning of admission. If the nursing home documented or reported fever is included as part of the patient's admission/facility record, then it can be used as one of the elements to meet CDC/NHSN UTI criteria.
Jan-14	<b>UTI present on admission or HAI?</b>	If a patient has a (+) urine culture > 100,000 CFU/ml on day 2 and a fever on day 3, is this an HAI?	If no further positive urine cultures were collected, no, this would not meet criteria. You can not use any culture results or symptoms from day 1 or 2 to meet an HAI criteria unless they are present again on or after day 3. (See Infection does not meet POA nor HAI definition on the MISC tab of this document) For Example: Day 1 - Pt admitted and Foley inserted Day 2 - Foley still in place; Fever > 100.4° Day 3 - Afebrile Day 4 - (+) urine culture >100000 CFU of <i>E.coli</i> ; afebrile Day 5 and Day 6 - remains afebrile The fever on day 2 cannot be used to meet an HAI criteria. The patient would have to have another fever or symptoms on day 3,4, 5, or 6 for this to be a SUTI 1a.

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Jan-14	<b>Removal and reinsertion of Foley catheter</b>	How do I count calendar days when a Foley is removed and later reinserted?	If a Foley catheter is present for any part of a calendar day, then that day contributes to the minimum catheter day requirement for CAUTI. If a full calendar day passes without the Foley, then the day count begins again for urinary catheter days, once a Foley is reinserted.