Data Field	Instructions for Data Collection		
	Page 1		
Surveillance Date	Write down surveillance date in form of month/year using the format: mm/yyyy.		
Facility Name	Write down the facility name		
Facility Code	Write down facility code using <b>form A</b>		
Patient information			
Patient ID	Write patient civil ID number		
File Number	Write patient hospital file number		
Patient Name	Write first, middle and the last name of the patient.		
Nationality	Check Kuwaiti or non Kuwaiti to indicate nationality of the patient.		
Gender	Check Male or Female to indicate the gender of the patient.		
Date of Birth	Record the date of the patient birth using this format: dd/mm/yyyy.		
Date Admitted to Facility	Enter date patient admitted to an inpatient location using this format: dd/mm/yyyy.		
	• When determining a patient's admission dates to both the facility and specific inpatient location, take into account all such days, including any days spent in an inpatient location as an "observation" patient before being officially admitted as an inpatient to the facility, as these days contribute to exposure risk. Therefore, all such days are included in the counts of admissions and patient days for the facility and specific location, and facility and admission dates must be moved back to the first day spent in the inpatient location.		
	• When reporting a UTI which occurs on the day of or day after discharge use the previous date of admission as admission date.		
Location	Enter the inpatient location to which the patient was assigned on the date of the UTI event. If the date of UTI occurs on the day of transfer or discharge from a		

## Instructions for Completion of the Urinary Tract Infection (UTI) Form

	location or the next day, indicate the transferring/discharging location, not the current location of the patient, in accordance with the Transfer Rule. Write location as specified in patient file. eg. ward 2, adult medical.	
Location Code	Refer to <b>form G</b> to identify the code of the location.	
Date of Event	The date when the first element used to meet the UTI infection criterion occurred for the first time during the infection window period. Enter date of this event using this format: dd/mm/yyyy.	
	<ul> <li>NOTE:</li> <li>If a device has been pulled on the first day of the month in a location where there are no other device days in that month, and a device-associated infection develops after the device is pulled, use the last day of the previous month as the Date of Event.</li> </ul>	
Post-procedure UTI	Check "Yes" if this event occurred after an NHSN defined procedure (under any category from the <b>form C</b> or OTH) but before discharge from the facility, otherwise check "No".	
Date of Procedure	If the answer in post-procedure UTI = "Yes", record the date of the procedure using this format: dd/mm/yyyy. Otherwise, don't answer this question.	
Procedure Name	If the answer in post-procedure UTI = "Yes", write the procedure name as written in operation sheet. eg. Lt sided popliteal bypass with graft. Otherwise, don't answer this question.	
NHSN Procedure Category Name	If the answer in post-procedure UTI = "Yes", enter the appropriate NHSN procedure category name according to <b>form C</b> eg. Lt sided popliteal bypass with graft will be written as PVBY. Otherwise, don't answer this question.	
KNHSS Procedure Category Code	If the answer in post-procedure UTI = "Yes", enter the appropriate KNHSS procedure category code according to <b>form C</b> . e.g. PVBY code will be 31. OTH will be coded as OTH. Otherwise, don't answer this question.	

MDRO infection surveillance		
MDRO Infection Surveillance	Do not fill this part now – This part is for the future plan	
Risk factors		
Urinary Catheter Status on the Date of Event	<ul> <li>Check one of the following:</li> <li>INPLACE: If a urinary catheter that had been in place &gt; 2 days on date of event was present for the <u>entire</u> day or <u>part</u> of the day on the date of event (CAUTI)</li> </ul>	
	<ul> <li>REMOVED: If a Urinary catheter that had been in place &gt;2 days on date of event was removed the day before the date of event (CAUTI)</li> </ul>	
	<ul> <li>NEITHER: If</li> <li>Patient has/had an indwelling urinary catheter but it has/had not been in place &gt;2 calendar days on the date of event</li> <li>OR</li> <li>Patient did not have a urinary catheter in place on the day of</li> </ul>	
	event or the day before the date of event.	
	<ul> <li>NOTES:</li> <li>Date of insertion = Day 1.</li> <li>Urinary System Infection (USI) cannot be catheter associated.</li> <li>"NEITHER" is only accepted when reporting SUTI 1b, Non-CAUTI SUTI 2, Non -catheter associated ABUTI and USI.</li> </ul>	
NICU patient	Check "Yes" if the patient is in the NICU. Check "No" if the patient is not in the NICU.	
Birth Weight	If the answer to NICU patient = "Yes", record patient's weight at the time of birth in grams, <b>not</b> the weight on the date of event. Otherwise, don't answer this question.	
Location of Device Insertion	<ul> <li>Enter the patient location where the indwelling urethral catheter was inserted.</li> <li>NOTE:</li> <li>Location of catheter insertion is not necessarily the same as patient location recorded above.</li> <li>Location of catheter insertion is not necessarily an inpatient</li> </ul>	

	<ul> <li>location.</li> <li>If device was inserted in a hospital (government, private or abroad) other than your facility, write the location name as "Others" and specify the name of the hospital in text.</li> </ul>	
Location Code of Device Insertion	<ul> <li>Write the patient location code where the indwelling urethral catheter was inserted. Refer to form G.</li> <li>NOTE: <ul> <li>If device was inserted in a hospital (government, private or abroad) other than your facility, write the location code as "106"</li> </ul> </li> </ul>	
Date of Device Insertion	Enter the date of the indwelling urethral catheter was inserted using the format: dd/mm/yyyy. Enter the date of removal of this catheter (if applicable) If the patient's catheter is reinserted/replaced, enter the dates of reinsertion and removal using the format: dd/mm/yyyy.	
Event details		
Specific Event: UTI	Check Symptomatic UTI (SUTI), Asymptomatic Bacteremic UTI (ABUTI), or Urinary System Infection (USI), for the specific event type you are reporting.	
Specify Criteria Used	Check each of the elements of the criteria that were used to identify the specific type of UTI being reported. Write the dates that each element was first detected using the format: dd/mm/yyyy.	
Laboratory and Diagnostic Testing	Check each of the diagnostic tests performed that were used to identify the specific type of UTI being reported.	
Pathogen(s) Identified	<ul> <li>Check "Yes" if pathogen identified otherwise check "No".</li> <li>NOTE:</li> <li>Urinary System Infection (USI) is the only specific event type where the answer "No" is accepted.</li> </ul>	
If yes, specify pathogen(s)	Specify pathogen(s) and antimicrobial susceptibility results on page 2	
Number of Pathogens	Write the number of isolated pathogen(s) up to 3 pathogens may be reported). <b>NOTE:</b>	

	<ul> <li>According to KNHSS rules, <u>only two organisms</u> can be entered However, if yes is selected for the secondary BSI field, the third pathogen can be entered.</li> </ul>
Pathogen(s) code(s)	<ul> <li>Write the code of each pathogen according to Form D.</li> <li>If multiple pathogens are identified, enter the pathogen judged to be the most important cause of infection as #1, the next most as #2 and the least as #3(usually this order will be indicated on the laboratory report).</li> </ul>
	• If secondary BSI pathogens are entered, they should be entered only after site-specific pathogens are entered.
	• If the species is not given on the lab report or is not found on the KNHSS list (form D), then select the "spp" choice for the genus.
MDRO	Check "Yes" and write the code if the isolated organism(s) was/were MDRO of the following, otherwise check "No".
	<b>(MRSA):</b> <i>S. aureus</i> cultured from any specimen that tests oxacillin- resistant (R), cefoxitin-resistant, or methicillin-resistant by standard susceptibility testing methods, or any laboratory finding of MRSA (includes but not limited to PCR or other molecular based detection methods). If present: check "MRSA".
	<b>VRE</b> : <i>Enterococcus faecalis, Enterococcus faecium,</i> or <u>any <i>Enterococcus</i></u> species that is <u>resistant (R)</u> to vancomycin, by standard susceptibility testing methods or a laboratory finding of VRE (includes but not limited to PCR or other molecular based detection methods). If present: check "VRE".
	<b>ESBL producing Gram negative bacteria</b> : Gram negative spp. producing ESBLs enzymes that mediate resistance to extended-spectrum (third generation) cephalosporins (e.g., ceftazidime, cefotaxime, and ceftriaxone) and monobactams (e.g., aztreonam) but do not affect cephamycins (e.g., cefoxitin and cefotetan) or carbapenems (e.g., meropenem or imipenem). If present: check "ESBL".
	CRE: Escherichia coli, Klebsiella oxytoca, Klebsiella pneumoniae, Klebsiella aerogenes, Enterobacter spp. or any Enterobacteriaceae spp.



(see table 1 of the "Updated KNHSS MDRO definitions 2020" document for a partial list of *Enterobacteriaceae spp.*) testing <u>resistant (R)</u> to imipenem, meropenem, doripenem, or ertapenem by standard susceptibility testing methods (i.e., minimum inhibitory concentrations of  $\geq$ 4 mcg/mL for doripenem, imipenem and meropenem or  $\geq$ 2 mcg/mL for ertapenem) OR by production of a carbapenemase (specifically, KPC, NDM, VIM, IMP, OXA-48) demonstrated using a recognized test (e.g., polymerase chain reaction, metallo- $\beta$ -lactamase test, modified-Hodge test, Carba-NP). For <u>Morganella morganii, Proteus spp and Providencia</u> <u>spp.</u> that have intrinsic imipenem non-susceptibility, <u>resistance to</u> <u>carbapenems other than imipenem is required.</u> If present: check "CRE".

**MDR-***Pseudomonas aeruginosa*: Tested <u>intermediate or resistant (I or R)</u> for at least one agent in at least 3 of the following 5 classes:

β-lactam/β-lactam β- lactamase inhibitor combination	Aminoglycosides	Carbapenems	Fluoroquinolones
Piperacillin Piperacillin/tazobactam	Amikacin Gentamicin Tobramycin	lmipenem Meropenem Doripenem	Ciprofloxacin Levofloxacin
Cephalosporins			
Cefepime Ceftazidime			

If present: check "MDR-PA".

**Carbapenem Non-Susceptible (C-NS)** *Pseudomonas aeruginosa*: *Pseudomonas aeruginosa* testing <u>intermediate or resistant (I or R)</u> to imipenem, meropenem or doripenem. If present: check "C-NS-PA".

	of the following 6 anti	imicrobial classes:		
	β-lactam/β-lactam β- lactamase inhibitor combination	Aminoglycosides	Carbapenems	Fluoroquinolone
	Piperacillin Piperacillin/tazobactam	Amikacin Gentamicin Tobramycin	Imipenem Meropenem Doripenem	Ciprofloxacin Levofloxacin
	Cephalosporins	Sulbactam		
	Cefepime Ceftazidime	Ampicillin/sulbactam		
	If present: check "MD	R A.spp".		L
econdary BSI	Carbapenem Non-S Acinetobacter spp. tes meropenem or doripe Check "Yes" if there and a related UTI, oth	enem. If present: che	<u>r resistant (I o</u> eck "C-NS-A.sp	<u>r R)</u> to imipener pp".
econdary BSI	Acinetobacter spp. tes meropenem or doripe Check "Yes" if there	sting <u>intermediate o</u> enem. If present: che is a culture-confirm erwise check "No". tions on identifyin ry BSI, refer to the Se	r resistant (I o eck "C-NS-A.sp ed bloodstrea g whether th	<u>r R)</u> to imipener pp". Im infection (BS
Secondary BSI	Acinetobacter spp. tes meropenem or doripe Check "Yes" if there and a related UTI, oth (For detailed instruct represents a secondar of the KNHSS BSI proto NOTE • When the sp <u>answered as "</u> • If the patient after submissi attribution per	sting <u>intermediate o</u> enem. If present: che is a culture-confirm erwise check "No". tions on identifyin by BSI, refer to the Se ocol).	<u>r resistant (I o</u> cck "C-NS-A.sp ed bloodstrea g whether th condary BSI G <u>UTI, seconda</u> ary BSI (for S but within tl	<u>r R)</u> to imipenen pp". Im infection (BS the blood cultur Guide (Appendix SUTI or USI only the secondary B
Secondary BSI	Acinetobacter spp. tes meropenem or doripe Check "Yes" if there and a related UTI, oth (For detailed instruct represents a secondar of the KNHSS BSI proto NOTE • When the sp <u>answered as "</u> • If the patient after submissi	sting <u>intermediate o</u> enem. If present: che is a culture-confirm erwise check "No". tions on identifyin ty BSI, refer to the Se ocol). <u>eecific event is AB</u> <u>Yes."</u> develops a second on of the UTI form riod, fill out and sub	<u>r resistant (I o</u> eck "C-NS-A.sp ed bloodstrea g whether th econdary BSI G UTI, seconda ary BSI (for S but within tl mit the HAI su	<u>r R)</u> to imipenen pp". Im infection (BS the blood cultur Guide (Appendix SUTI or USI only the secondary B Irveillance follov

	<ul> <li>NOTE:</li> <li>If the patient is still hospitalized and not discharged at the time of submission of the UTI form, leave this question unanswered and submit the form without completing this field.</li> <li>However, the record is incomplete until data are entered either died or not (i.e. If the patient died during the current hospitalization, but after submission of the UTI form, fill out and submit the HAI surveillance follow-up form.</li> </ul>
If Died; UTI Contributed to Death	If patient died, check "Yes" if the UTI contributed to death (verified from his/her hospital death report), otherwise check "No". If the patient did not die, do not answer this question.
Discharge/Death Date	Write the date patient discharged from facility or died using this format: dd/mm/yyyy.