

KNHSS

Kuwait National Healthcare-associated
Infections Surveillance System

Instructions for Completion of Laboratory Record of SSI Event Form.

Data Field	Instructions for Data Collection
Page 2	
Surveillance date	Write down Surveillance date using the format: mm/yyyy
Facility name	Write down the facility name
Facility code	Write down the Facility code using form A
Number of Pathogens	Write the number of isolated pathogen as recorded in page 1.
Pathogen (s)name	Write the name of the isolated microorganism(s). If the species is not given on the lab report or is not found on the KNHSS pathogen list, then select the “spp” choice for the genus.
Pathogen (S)code	Write the code of each pathogen according to Form D
MDRO	<p>Check “Yes” and write the code if the isolated organism(s) was/were MDRO of the following, otherwise check “No”.</p> <p>(MRSA): <i>S. aureus</i> cultured from any specimen that tests oxacillin-resistant (R), ceftazidime-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).</p> <p>VRE: <i>Enterococcus faecalis</i>, <i>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).</p> <p>ESBL producing Gram negative bacteria: 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., ceftiofur and cefotetan) or carbapenems (e.g., meropenem or imipenem).</p>

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 resistant (R) to imipenem, meropenem, doripenem, or ertapenem by standard susceptibility testing methods (i.e., minimum inhibitory concentrations of ≥ 4 mcg/mL for doripenem, imipenem and meropenem or ≥ 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- β -lactamase test, modified-Hodge test, Carba-NP). For ***Morganella morganii*, *Proteus spp* and *Providencia spp.*** that have intrinsic imipenem non-susceptibility, resistance to carbapenems other than imipenem is required.

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

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

Carbapenem Non-Susceptible (C-NS) *Pseudomonas aeruginosa*: *Pseudomonas aeruginosa* testing intermediate or resistant (I or R) to imipenem, meropenem or doripenem.

	<p>MDR-<i>Acinetobacter spp.</i>: Any <i>Acinetobacter spp.</i> testing <u>intermediate or resistant (I or R)</u> to at least one agent in at least 3 antimicrobial classes of the following 6 antimicrobial classes:</p> <table border="1"> <thead> <tr> <th>β-lactam/β-lactamase inhibitor combination</th> <th>Aminoglycosides</th> <th>Carbapenems</th> <th>Fluoroquinolones</th> </tr> </thead> <tbody> <tr> <td>Piperacillin Piperacillin/tazobactam</td> <td>Amikacin Gentamicin Tobramycin</td> <td>Imipenem Meropenem Doripenem</td> <td>Ciprofloxacin Levofloxacin</td> </tr> <tr> <th>Cephalosporins</th> <th>Sulbactam</th> <td></td> <td></td> </tr> <tr> <td>Cefepime Ceftazidime</td> <td>Ampicillin/sulbactam</td> <td></td> <td></td> </tr> </tbody> </table> <p>Carbapenem Non-Susceptible (C-NS) <i>Acinetobacter spp.</i>: Any <i>Acinetobacter spp.</i> testing <u>intermediate or resistant (I or R)</u> to imipenem, meropenem or doripenem.</p>	β -lactam/ β -lactamase inhibitor combination	Aminoglycosides	Carbapenems	Fluoroquinolones	Piperacillin Piperacillin/tazobactam	Amikacin Gentamicin Tobramycin	Imipenem Meropenem Doripenem	Ciprofloxacin Levofloxacin	Cephalosporins	Sulbactam			Cefepime Ceftazidime	Ampicillin/sulbactam		
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Date of sampling	Write the date of sample taken using this format: dd/mm/yyyy.																
Type of infection	Write SSI																
Type of sample	Write down the sample taken																
Antimicrobial agents and susceptibility results	<p>For each isolated organism: In front of the each antimicrobial tested write the susceptibility result either: S – Sensitive, I – Intermediate or R – Resistant Others specify: any antimicrobial other than listed can be included.</p>																