



**2027 Multi-site Gram-Negative Surveillance Initiative (MuGSI)
Healthcare-Associated Infections Community Interface (HAIC) Case Report**

NOTE: Enter all dates as mm/dd/yyyy

Form Approved

OMB No. 0920-0978

Expiration Date: XX/XX/XXXX

PATIENT'S NAME: _____	PHONE NO.: _____
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ADDRESS: _____	MRN: _____
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ADDRESS TYPE: _____	HOSPITAL: _____
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----Patient Identifier information is not transmitted to CDC----

DEMOGRAPHICS

1. STATE: _____	2a. COUNTY: _____	2b. PLANNING REGION: _____	3. STATE ID: _____
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4a. LABORATORY ID WHERE INCIDENT SPECIMEN IDENTIFIED: _____	4b. FACILITY ID WHERE PATIENT TREATED: _____
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5. DATE OF BIRTH: _____	7. PATIENT SEX: Male Female Missing value	8. RACE AND/OR ETHNICITY: (Check all that apply) <table style="width:100%; border: none;"> <tr> <td style="width:33%;">American Indian or Alaska Native</td> <td>Middle Eastern or North African</td> </tr> <tr> <td>Asian</td> <td>Native Hawaiian or Pacific Islander</td> </tr> <tr> <td>Black or African American</td> <td>White</td> </tr> <tr> <td>Hispanic or Latino</td> <td>Unknown</td> </tr> </table>	American Indian or Alaska Native	Middle Eastern or North African	Asian	Native Hawaiian or Pacific Islander	Black or African American	White	Hispanic or Latino	Unknown
American Indian or Alaska Native	Middle Eastern or North African									
Asian	Native Hawaiian or Pacific Islander									
Black or African American	White									
Hispanic or Latino	Unknown									
6. AGE: _____ Days Mos Yrs										

9a. DATE OF INCIDENT SPECIMEN COLLECTION (DISC): _____	10. ORGANISM: <table style="width:100%; border: none;"> <tr> <td style="width:33%;">Carbapenem-Resistant <i>Enterobacteriales</i> (CRE) <i>Escherichia coli</i> <i>Klebsiella pneumoniae</i></td> <td style="width:33%;">Extended-Spectrum Beta-Lactamase-producing <i>Enterobacteriales</i> (ESBL-E) <i>Escherichia coli</i> <i>Klebsiella pneumoniae</i> <i>Klebsiella oxytoca</i></td> <td style="width:33%;">Carbapenem-Resistant <i>A. baumannii</i> (CRAB) Invasive <i>Escherichia coli</i> (iEC) (not CRE or ESBL-E)</td> </tr> </table>	Carbapenem-Resistant <i>Enterobacteriales</i> (CRE) <i>Escherichia coli</i> <i>Klebsiella pneumoniae</i>	Extended-Spectrum Beta-Lactamase-producing <i>Enterobacteriales</i> (ESBL-E) <i>Escherichia coli</i> <i>Klebsiella pneumoniae</i> <i>Klebsiella oxytoca</i>	Carbapenem-Resistant <i>A. baumannii</i> (CRAB) Invasive <i>Escherichia coli</i> (iEC) (not CRE or ESBL-E)
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9b. TIME OF DISC: _____				

11. SPECIMEN COLLECTION SITE(S):		
Blood Bone Bronchoalveolar lavage (CRAB only, complete Q23c) CSF Internal body site (specify): _____	Muscle Peritoneal fluid Pericardial fluid Pleural fluid Joint/synovial fluid Sputum (CRAB only, complete Q23c) Tracheal aspirate (CRAB only, complete Q23c)	Urine (complete 22a–22c) Wound (specify): _____ (CRAB only) Other LRT site (specify): _____ (CRAB only, complete Q23c) Other normally sterile site (specify): _____

12. LOCATION OF SPECIMEN COLLECTION:	13. WHERE WAS THE PATIENT LOCATED ON THE 3RD CALENDAR DAY BEFORE THE DISC?																																								
<table style="width:100%; border: none;"> <tr> <td style="width:33%;">OUTPATIENT</td> <td style="width:33%;">INPATIENT</td> <td style="width:33%;">LTCF</td> </tr> <tr> <td>Facility ID: _____</td> <td>Facility ID: _____</td> <td>Facility ID: _____</td> </tr> <tr> <td>Emergency room</td> <td>ICU</td> <td>LTACH</td> </tr> <tr> <td>Clinic/Doctor's office</td> <td>OR</td> <td>Facility ID: _____</td> </tr> <tr> <td>Dialysis center</td> <td>Radiology</td> <td></td> </tr> <tr> <td>Surgery</td> <td>Other inpatient</td> <td>Autopsy</td> </tr> <tr> <td>Observational/ Clinical decision unit</td> <td></td> <td>Other</td> </tr> <tr> <td>Other outpatient</td> <td></td> <td>Unknown</td> </tr> </table>	OUTPATIENT	INPATIENT	LTCF	Facility ID: _____	Facility ID: _____	Facility ID: _____	Emergency room	ICU	LTACH	Clinic/Doctor's office	OR	Facility ID: _____	Dialysis center	Radiology		Surgery	Other inpatient	Autopsy	Observational/ Clinical decision unit		Other	Other outpatient		Unknown	<table style="width:100%; border: none;"> <tr> <td>Private residence</td> <td>LTACH</td> </tr> <tr> <td>LTCF</td> <td>Facility ID: _____</td> </tr> <tr> <td>Facility ID: _____</td> <td>Homeless</td> </tr> <tr> <td>Hospital inpatient</td> <td>Correctional or detention facility</td> </tr> <tr> <td>Facility ID: _____</td> <td>Drug/alcohol rehabilitation</td> </tr> <tr> <td>Was the patient transferred from this hospital?</td> <td>Not born yet</td> </tr> <tr> <td>Yes No Unknown</td> <td>Other</td> </tr> <tr> <td></td> <td>Unknown</td> </tr> </table>	Private residence	LTACH	LTCF	Facility ID: _____	Facility ID: _____	Homeless	Hospital inpatient	Correctional or detention facility	Facility ID: _____	Drug/alcohol rehabilitation	Was the patient transferred from this hospital?	Not born yet	Yes No Unknown	Other		Unknown
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14. WAS THE PATIENT HOSPITALIZED ON THE DAY OF OR IN THE 29 CALENDAR DAYS AFTER THE DISC?	Yes	No	Unknown
IF YES, DATE OF ADMISSION: _____			

15a. WAS THE PATIENT IN AN ICU IN THE 7 DAYS BEFORE THE DISC?	Yes	No	Unknown
IF YES, DATE OF ICU ADMISSION: _____ OR Date unknown			

15b. WAS THE PATIENT IN AN ICU ON THE DAY OF INCIDENT SPECIMEN COLLECTION OR IN THE 6 DAYS AFTER THE DISC?
Yes No Unknown
IF YES, DATE OF ICU ADMISSION: _____ OR Date unknown

Public reporting burden of this collection of information is estimated to average 29 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-0978).

16. PATIENT OUTCOME:		IF SURVIVED, DISCHARGED TO:	
Survived	DATE OF DISCHARGE: _____ OR	Private residence	
Died	Date unknown	LTCF, Facility ID: _____	Correctional or detention facility
Hospitalized >1 year	Left against medical advice (AMA)	LTACH, Facility ID: _____	Drug/alcohol rehabilitation
Unknown		Homeless	Other
DATE OF DEATH: _____ OR	Date unknown		Unknown

17a. TYPES OF INFECTION ASSOCIATED WITH CULTURE(S): (Check all that apply)			
	None	Colonized	Unknown
Abscess, not skin	Decubitus/pressure ulcer	Pyelonephritis	Surgical site infection (internal)
AV fistula/graft infection	Empyema	Sepsis	Traumatic wound
Bacteremia	Endocarditis	Urosepsis	Urinary tract infection (complete 22a–22c)
Biliary tract infection	Epidural abscess	Septic shock	Other (specify): _____
Bursitis	Meningitis	Septic arthritis	
Catheter site infection (CVC)	Osteomyelitis	Septic emboli	
Cellulitis	Peritonitis	Skin abscess	
Chronic ulcer/wound (not decubitus)	Pneumonia (CRAB cases, complete Q23c)	Surgical incision infection	

17b. RECURRENT UTI:			17c. WAS THE PATIENT TREATED FOR THE MUGSI ORGANISM?		
Yes	No	Unknown	Yes	No	Unknown

18. UNDERLYING CONDITIONS: (Check all that apply)			
	None	Unknown	
CHRONIC LUNG DISEASE	IMMUNOCOMPROMISED CONDITION	NEUROLOGIC CONDITION	SKIN CONDITION
Cystic fibrosis	HIV infection	Cerebral palsy	Blistering disease
Chronic pulmonary disease	AIDS/CD4 count < 200	Chronic cognitive deficit	Burn
CHRONIC METABOLIC DISEASE	Primary immunodeficiency	Dementia	Decubitus/pressure ulcer
Diabetes mellitus	Transplant, hematopoietic stem cell	Epilepsy/seizure/seizure disorder	Eczema
With chronic complications	Transplant, solid organ: _____	Multiple sclerosis	Psoriasis
CARDIOVASCULAR DISEASE	LIVER DISEASE	Neuropathy	Surgical wound
CVA/Stroke/TIA	Chronic liver disease	Paresis	Other chronic ulcer or chronic wound
Congenital heart disease	Ascites	Parkinson's disease	OTHER
Congestive heart failure	Cirrhosis	Spinal cord injury	Connective tissue disease
Myocardial infarction	Hepatic encephalopathy	PLEGIAS/PARALYSIS	Obesity or morbid obesity
Peripheral vascular disease (PVD)	Variceal bleeding	Hemiplegia	Pregnant
GASTROINTESTINAL DISEASE	Hepatitis C	Paraplegia	MUGSI CONDITIONS
Diverticular disease	Treated, in SVR	Quadriplegia	Urinary tract problems/abnormalities
Inflammatory bowel disease	Current, chronic	RENAL DISEASE	Premature birth
Peptic ulcer disease	MALIGNANCY	Chronic kidney disease	Spina bifida
Short gut syndrome	Malignancy, hematologic	Lowest serum creatinine: _____ mg/DL	
	Malignancy, solid organ (non-metastatic)	Unknown or not done	
	Malignancy, solid organ (metastatic)		

19. SUBSTANCE USE			ALCOHOL ABUSE:		
SMOKING: (Check all that apply)	None documented	Tobacco	Yes	None documented	Unknown
	Unknown	E-nicotine delivery system			

OTHER SUBSTANCES:	Yes	None documented	Unknown	<i>If yes, check all that apply:</i>	Marijuana	Opioid use disorder	Injection drug use
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20. RISK FACTORS: (Check all that apply)			
	None	Unknown	
WAS INCIDENT SPECIMEN COLLECTED 3 OR MORE CALENDAR DAYS AFTER HOSPITAL ADMISSION?	Yes	No	
PREVIOUS HOSPITALIZATION IN THE YEAR BEFORE DISC	Yes	No	Unknown
IF YES, DATE OF DISCHARGE CLOSEST TO DISC: _____ OR, DATE UNKNOWN			Facility ID: _____
OVERNIGHT STAY IN LTCF IN THE YEAR BEFORE DISC:	Yes	No	Unknown Facility ID: _____
OVERNIGHT STAY IN LTACH IN THE YEAR BEFORE DISC:	Yes	No	Unknown Facility ID: _____
SURGERY IN THE YEAR BEFORE DISC:	Yes	No	Unknown

INVASIVE OR DIAGNOSTIC UROLOGIC PROCEDURE IN THE YEAR BEFORE DISC:	Yes	No	Unknown
IF YES, CHECK ALL THAT APPLY: Prostate procedure Cystoscopy Other			
<hr/>			
CURRENT CHRONIC DIALYSIS:	Yes	No	Unknown
IF YES, TYPE: Hemodialysis Peritoneal Unknown			
IF HEMODIALYSIS, TYPE OF VASCULAR ACCESS: AV fistula/graft Hemodialysis central line Unknown			
<hr/>			
CENTRAL LINE IN PLACE ON THE DISC (UP TO THE TIME OF COLLECTION), OR AT ANY TIME IN THE 2 CALENDAR DAYS BEFORE DISC:	Yes	No	Unknown
Check here if central line in place for > 2 calendar days			
<hr/>			
URINARY CATHETER IN PLACE ON THE DISC (UP TO THE TIME OF COLLECTION), OR AT ANY TIME IN THE 2 CALENDAR DAYS BEFORE DISC:	Yes	No	Unknown
IF YES, CHECK ALL THAT APPLY:			
Indwelling Urethral Catheter Condom Catheter			
Suprapubic Catheter Other (specify): _____			
<hr/>			
ANY OTHER INDWELLING DEVICE IN PLACE ON THE DISC UP TO THE TIME OF COLLECTION), OR AT ANY TIME IN THE 2 CALENDAR DAYS BEFORE DISC:	Yes	No	Unknown
IF YES, CHECK ALL THAT APPLY:			
ET/NT Tube NG Tube Nephrostomy Tube			
Gastrostomy Tube Tracheostomy Other (specify): _____			
<hr/>			
PATIENT TRAVELED INTERNATIONALLY IN THE YEAR BEFORE DISC:	Yes	No	Unknown
COUNTRY(IES): _____			
PATIENT HOSPITALIZED WHILE VISITING COUNTRY(IES) ABOVE:	Yes	No	Unknown
<hr/>			
21a. WEIGHT:	21b. HEIGHT:		21c. BMI:
_____ lbs. _____ oz. OR _____ kg Unknown	_____ ft. _____ in. OR _____ cm Unknown		_____ Unknown
<hr/>			
Complete questions 22a-22c for all MuGSI cases from urine cultures or where UTI is marked in question 17a:			
22a. WAS THE URINE COLLECTED THROUGH AN INDWELLING URETHRAL CATHETER?	Yes	No	Unknown
<hr/>			
22b. RECORD THE COLONY COUNT: _____			
<hr/>			
22c. ASSOCIATED SIGNS AND SYMPTOMS:			
Please indicate if any of the following symptoms were reported during the 5 day time period including the 2 calendar days before through the 2 calendar days after the DISC.			
None	Fever [temperature \geq 100.4 °F (38 °C)]	Symptoms for patients \leq 1 year of age only:	
Unknown	Frequency	Apnea	Lethargy
Costovertebral angle pain or tenderness	Suprapubic tenderness	Bradycardia	Vomiting
Dysuria	Urgency		
<hr/>			
Complete questions 23a-23b ONLY for A. BAUMANNII cases:			
23a. DID THE PATIENT HAVE A SPUTUM CULTURE POSITIVE FOR CRAB IN THE 30 DAYS BEFORE THE DISC?	Yes	No	Unknown N/A
<hr/>			
23b. RISK FACTORS PRIOR TO CRAB DISC: (Check all that apply)			
Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC			
Nebulizer treatment at any time in the 7 calendar days before the DISC			
Mechanical ventilation at any time in the 7 calendar days before the DISC			
Visited a wound care clinic at any time in the year before the DISC			
None of the above			
<hr/>			
Complete question 23c ONLY for A. BAUMANNII cases from LRT site cultures or for non-LRT cultures where pneumonia is marked in question 17a.			
23c. CHEST RADIOLOGY FINDINGS: (Check all that apply)			
Not done	Ground glass opacities/infiltrates	Consolidation	Nodules
No report available	Bronchopneumonia/pneumonia	Infiltrate	No evidence of pneumonia
Acute respiratory distress syndrome (ARDS)	Cannot rule out pneumonia	Pleural effusion	
Air space density/opacity	Cavitation		
<hr/>			
24a. IS ANTIMICROBIAL USE (IV OR ORAL) IN THE 30 DAYS BEFORE THE DISC DOCUMENTED?	Yes	No	Unknown

24b. IF YES, CHECK ALL ANTIMICROBIALS USED IN THE 30 DAYS BEFORE THE DISC: <i>(Check all that apply)</i>			Unknown
Amikacin	Ceftazidime	Gentamicin	Telavancin
Amoxicillin	Ceftazidime/avibactam	Imipenem/cilastatin	Tigecycline
Amoxicillin/clavulanic acid	Ceftolozane/tazobactam	Levofloxacin	Tobramycin
Ampicillin	Ceftriaxone	Linezolid	Trimethoprim
Ampicillin/sulbactam	Cefuroxime	Meropenem	Trimethoprim/sulfamethoxazole
Azithromycin	Cephalexin	Meropenem/vaborbactam	Vancomycin
Aztreonam	Ciprofloxacin	Metronidazole	IV
Cefadroxil	Clarithromycin	Moxifloxacin	PO
Cefazolin	Clindamycin	Nitrofurantoin	Other (specify): _____
Cefdinir	Dalbavancin	Omadacycline	_____
Cefepime	Daptomycin	Oritavancin	Other (specify): _____
Cefiderocol	Delafloxacin	Penicillin	_____
Cefixime	Doxycycline	Piperacillin/tazobactam	
Cefotaxime	Eravacycline	Polymyxin B	REMINDER: Any prior antimicrobial use that is not noted above should be documented in the other (specify) field.
Cefoxitin	Ertapenem	Polymyxin E (colistin)	
Cefpodoxime	Fidaxomicin	Rifaximin	
Ceftaroline	Fosfomycin	Tedizolid	

25. WAS THE INCIDENT SPECIMEN POLYMICROBIAL? Yes No Unknown

26a. WAS THE INCIDENT SPECIMEN TESTED FOR CARBAPENEMASE GENES? Yes No Laboratory not testing Unknown

26b. IF YES, WHAT TESTING METHOD WAS USED? *(Check all that apply)*

<u>Non-Molecular Test Methods:</u>	<u>Molecular Test Methods:</u>
CarbaNP	Automated Molecular Assay
Modified Carbapenemase Inactivation Method (mCIM)	Carba-R
Carbapenemase Inactivation Method (CIM)	PCR
Modified Hodge Test (MHT)	CARBA-5
RAPIDEC	Check Points
CPO Detect	MALDI-TOF MS
Disk Diffusion/ROSCO Disk	Next Generation Nucleic Acid Sequencing
E-test	Other (specify): _____
Other (specify): _____	Unknown
Unknown	

26c. IF TESTED, WHAT WAS THE TESTING RESULT?

<u>Non-Molecular Test Results:</u>	<u>Molecular Test Results:</u>	Pos	Neg	Ind	Unk
Positive	NDM	Pos	Neg	Ind	Unk
Indeterminate	KPC	Pos	Neg	Ind	Unk
Negative	OXA (specify): _____	Pos	Neg	Ind	Unk
Unknown	_____				
	VIM	Pos	Neg	Ind	Unk
	IMP	Pos	Neg	Ind	Unk
	Other carbapenemase gene (specify): _____	Pos	Neg	Ind	Unk

27a. WAS THE INCIDENT SPECIMEN TESTED FOR ESBL PRODUCTION OR OTHER BETA-LACTAMASE GENES?

Yes	Laboratory not testing
No	Unknown

27b. IF TESTED, WHAT TESTING METHOD WAS USED? <i>(Check all that apply):</i>	27c. IF TESTED, WHAT WAS THE RESULT?			
Broth Microdilution (ATI detection)				
ESBL well	Pos	Neg	Ind	Unk
Expert rule (ATI flag)	Pos	Neg	Ind	Unk
Unknown	Pos	Neg	Ind	Unk
Broth Microdilution (Manual)	Pos	Neg	Ind	Unk
Disk Diffusion	Pos	Neg	Ind	Unk
E-test	Pos	Neg	Ind	Unk
Molecular test (specify): _____	Pos	Neg	Ind	Unk
Gene variant (specify): _____				
Other non-molecular test (specify): _____	Pos	Neg	Ind	Unk

28. SUSCEPTIBILITY RESULTS:

Please complete the table below based on the information found in the indicated data source.

Antibiotic	Data source:	Data source:	Data source:	Data source:	Data source:	Data source:
	MIC or zone diameter	Interpretation	MIC or zone diameter	Interpretation	MIC or zone diameter	Interpretation
Amikacin						
Amoxicillin/Clavulanate						
Ampicillin						
Ampicillin/Sulbactam						
Aztreonam						
Cefazolin						
Cefepime						
Cefiderocol						
Cefotaxime						
Cefoxitin						
Ceftazidime						
Ceftazidime/Avibactam						
Ceftolozane/Tazobactam						
Ceftriaxone						
Cephalothin						
Ciprofloxacin						
Colistin						
Doripenem						
Doxycycline						
Eravacycline						
Ertapenem						
Fosfomycin						
Gentamicin						
Imipenem						
Imipenem-relebactam						
Levofloxacin						
Meropenem						
Meropenem-vaborbactam						
Minocycline						
Moxifloxacin						
Nitrofurantoin						
Omadacycline						
Piperacillin/Tazobactam						
Plazomicin						
Polymyxin B						
Rifampin						
Sulbactam/Durlobactam						
Tetracycline						
Tigecycline						
Tobramycin						
Trimethoprim-sulfamethoxazole						

29a. WAS THE CASE FIRST IDENTIFIED THROUGH AN AUDIT?

Yes
No

29b. CRF STATUS:

Complete
Pending
Chart unavailable after 3 requests
Complete – pending data

29c. SO INITIALS:

29d. DATE OF ABSTRACTION:

29e. COMMENTS: