



**2025 Multi-site Gram-Negative Surveillance Initiative (MuGSI)
Healthcare-Associated Infections Community Interface (HAIC) Case Report**

Form Approved
OMB No. 0920-XXXX

NOTE: Enter all dates as mm/dd/yyyy

PATIENT'S NAME: _____		PHONE NO.: _____	
ADDRESS: _____			MRN: _____
ADDRESS TYPE: _____		HOSPITAL: _____	
----Patient Identifier information is not transmitted to CDC----			
DEMOGRAPHICS			
1. STATE: _____	2a. COUNTY: _____	2b. PLANNING REGION: _____	3. STATE ID: _____
4a. LABORATORY ID WHERE INCIDENT SPECIMEN IDENTIFIED: _____		4b. FACILITY ID WHERE PATIENT TREATED: _____	
5. DATE OF BIRTH: _____	7. SEX AT BIRTH: Male Female Unknown Check if transgender _____	8. RACE AND/OR ETHNICITY: (Check all that apply) American Indian or Alaska Native Asian Black or African American Hispanic or Latino Middle Eastern or North African Native Hawaiian or Pacific Islander White Unknown	
6. AGE: _____ Days Mos Yrs			
9a. DATE OF INCIDENT SPECIMEN COLLECTION (DISC): _____	10. ORGANISM: Carbapenem-Resistant <i>Enterobacteriales</i> (CRE) <i>Escherichia coli</i> <i>Klebsiella pneumoniae</i> <i>Klebsiella oxytoca</i> <i>Klebsiella aerogenes</i> <i>Enterobacter cloacae</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)		
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?	
OUTPATIENT Facility ID: _____ Emergency room Clinic/Doctor's office Dialysis center Surgery Observational/ Clinical decision unit Other outpatient	INPATIENT Facility ID: _____ ICU OR Radiology Other inpatient	LTCF Facility ID: _____ LTACH Facility ID: _____ Autopsy Other Unknown	Private residence LTCF Facility ID: _____ Hospital inpatient Facility ID: _____ Was the patient transferred from this hospital? Yes No Unknown LTACH Facility ID: _____ Homeless Correctional or detention facility Drug/alcohol rehabilitation Not born yet Other Unknown
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 28 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 30329; ATTN: PRA (0920-XXXX).			

16. PATIENT OUTCOME:

Survived
Died
Hospitalized >1 year
Unknown

DATE OF DISCHARGE: _____ OR
Date unknown
Left against medical advice (AMA)

DATE OF DEATH: _____ OR Date unknown

IF SURVIVED, DISCHARGED TO:

Private residence
LTCF, Facility ID: _____
LTACH, Facility ID: _____
Homeless
Correctional or detention facility
Drug/alcohol rehabilitation
Other
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)
Bursitis	Epidural abscess	Septic arthritis	Other (specify): _____
Catheter site infection (CVC)	Meningitis	Septic emboli	
Cellulitis	Osteomyelitis	Septic shock	
Chronic ulcer/wound (not decubitus)	Peritonitis	Skin abscess	
	Pneumonia (CRAB cases, complete Q23c)	Surgical incision infection	

17b. RECURRENT UTI:

Yes No Unknown

17c. WAS THE PATIENT TREATED FOR THE MUGSI ORGANISM?

Yes No Unknown

18. UNDERLYING CONDITIONS: (Check all that apply)

None Unknown

CHRONIC LUNG DISEASE

Cystic fibrosis
Chronic pulmonary disease

CHRONIC METABOLIC DISEASE

Diabetes mellitus
With chronic complications

CARDIOVASCULAR DISEASE

CVA/Stroke/TIA
Congenital heart disease
Congestive heart failure
Myocardial infarction
Peripheral vascular disease (PVD)

GASTROINTESTINAL DISEASE

Diverticular disease
Inflammatory bowel disease
Peptic ulcer disease
Short gut syndrome

IMMUNOCOMPROMISED CONDITION

HIV infection
AIDS/CD4 count < 200
Primary immunodeficiency
Transplant, hematopoietic stem cell
Transplant, solid organ: _____

LIVER DISEASE

Chronic liver disease
Ascites
Cirrhosis
Hepatic encephalopathy
Variceal bleeding

Hepatitis C

Treated, in SVR
Current, chronic

MALIGNANCY

Malignancy, hematologic
Malignancy, solid organ (non-metastatic)
Malignancy, solid organ (metastatic)

NEUROLOGIC CONDITION

Cerebral palsy
Chronic cognitive deficit
Dementia
Epilepsy/seizure/seizure disorder
Multiple sclerosis
Neuropathy
Paresis
Parkinson's disease
Spinal cord injury

PLEGIAS/PARALYSIS

Hemiplegia
Paraplegia
Quadriplegia

RENAL DISEASE

Chronic kidney disease
Lowest serum creatinine: _____ mg/DL
Unknown or not done

SKIN CONDITION

Blistering disease
Burn
Decubitus/pressure ulcer
Eczema
Psoriasis
Surgical wound
Other chronic ulcer or chronic wound

OTHER

Connective tissue disease
Obesity or morbid obesity
Pregnant

MUGSI CONDITIONS

Urinary tract problems/abnormalities
Premature birth
Spina bifida

19. SUBSTANCE USE**SMOKING:** (Check all that apply)

None documented Tobacco Marijuana
Unknown E-nicotine delivery system

ALCOHOL ABUSE:

Yes
None documented
Unknown

OTHER SUBSTANCES: (Check all that apply)

Opioid use disorder Injection drug use None documented Unknown

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 ≥ 100.4 °F (38 °C)]	Symptoms for patients ≤ 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: (Check all that apply)

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)

Molecular Test Methods:

Non-Molecular Test Methods:

CarbaNP	Modified Carbapenemase Inactivation Method (mCIM)
Carbapenemase Inactivation Method (CIM)	Modified Hodge Test (MHT)
CPO Detect	RAPIDEC
Disk Diffusion/ROSCO Disk	Other (specify):
E-test	_____
	Unknown

Automated Molecular Assay	PCR
Carba-R	Streck ARM-D
CARBA-5	Other (specify):
Check Points	_____
MALDI-TOF MS	Unknown
Next Generation Nucleic Acid Sequencing	

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

Non-Molecular Test Results:

Molecular Test Results:

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? (Check all that apply):

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: