PATIENT ID: __ __ __ __ __ __ __ __ __ __

DATE REPORTED TO EIP SITE: __ __ - __ __ - __ __ __ __

2020 Extended-Spectrum Beta-Lactamase (ESBL)-Producing Enterobacteriaceae
Multi-site Gram-Negative Surveillance Initiative (MuGSI)
Healthcare-Associated Infections Community Interface (HAIC) Case Report

Form Approved
OMB No. 0920-0978

Patient's Name:		Phone no. ( )	
Address:			MRN:
City:	State	ZIP:	Hospital:

----Patient Identifier information is not transmitted to CDC----

DEMOGRAPHICS

1. STATE:	2. COUNTY:	3. STATE ID:	4a. LABORATORY ID WHERE INCIDENT SPECIMEN IDENTIFIED:	4b. FACILITY ID WHERE PATIENT TREATED:
__ __	_____	__ __ __ __ __ __ __ __ __ __	_____	_____

5. DATE OF BIRTH:
__ __ - __ __ - __ __ __ __

6. AGE: __ __ __
☐ Days ☐ Mos. ☐ Yrs.

7. SEX AT BIRTH:
☐ MALE ☐ FEMALE
☐ Unknown
☐ Check if transgender

8a. ETHNIC ORIGIN:
☐ Hispanic or Latino
☐ Not Hispanic or Latino
☐ Unknown

8b. RACE: (Check all that Apply)
☐ American Indian or Alaska Native
☐ Asian
☐ Black or African American
☐ Native Hawaiian or Other Pacific Islander
☐ White
☐ Unknown

9. DATE OF INCIDENT SPECIMEN COLLECTION (DISC):
__ __ - __ __ - __ __ __ __

10. ORGANISM:
Extended-Spectrum Cephalosporin-resistant:
☐ *Escherichia coli*
☐ *Klebsiella pneumoniae*
☐ *Klebsiella oxytoca*

11. INCIDENT SPECIMEN COLLECTION SITE:
☐ Blood ☐ Bone ☐ CSF ☐ Internal body site (specify):_____ ☐ Joint/synovial fluid ☐ Muscle
☐ Peritoneal fluid ☐ Pericardial fluid ☐ Pleural fluid ☐ Urine ☐ Other normally sterile site (specify): _____

12. LOCATION OF SPECIMEN COLLECTION:

☐ **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 (specify):** _____

☐ **Unknown**

13. WHERE WAS THE PATIENT LOCATED ON THE 3RD CALENDAR DAY BEFORE THE DISC?
☐ Private residence
☐ LTCF
Facility ID: _____
☐ Hospital inpatient
Facility ID: _____
Was the patient transferred from this hospital?
☐ Yes ☐ No ☐ Unknown
☐ LTACH
Facility ID: _____
☐ Homeless
☐ Incarcerated
☐ Other (specify):_____
☐ 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

16. PATIENT OUTCOME: ☐ Survived ☐ Died ☐ Unknown

DATE OF DISCHARGE: __ __ - __ __ - __ __ __ __ OR
☐ Date unknown ☐ Left against medical advice (AMA)

IF SURVIVED, DISCHARGED TO:
☐ Private residence ☐ LTCF Facility ID:_____ ☐ LTACH Facility ID: _____
☐ Other (specify): _____ ☐ Unknown

DATE OF DEATH: __ __ - __ __ - __ __ __ __ OR ☐ Date unknown

ON THE DAY OF OR IN THE 6 CALENDAR DAYS BEFORE DEATH, WAS THE PATHOGEN OF INTEREST ISOLATED FROM A SITE THAT MEETS THE CASE DEFINITION?
☐ Yes ☐ No ☐ Unknown

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17a. TYPES OF INFECTION ASSOCIATED WITH CULTURE(S): (Check all that apply) ☐ None ☐ Unknown ☐ Colonized

- ☐ Abscess, not skin
- ☐ AV fistula/graft infection
- ☐ Bacteremia
- ☐ Bursitis
- ☐ Catheter site infection (CVC)
- ☐ Cellulitis
- ☐ Chronic ulcer/wound (not decubitus)
- ☐ Decubitus/pressure ulcer
- ☐ Empyema
- ☐ Endocarditis
- ☐ Epidural Abscess
- ☐ Meningitis
- ☐ Osteomyelitis
- ☐ Peritonitis
- ☐ Pneumonia
- ☐ Pyelonephritis
- ☐ Septic arthritis
- ☐ Septic emboli
- ☐ Septic shock
- ☐ Skin abscess
- ☐ Surgical incision infection
- ☐ Surgical site infection (internal)
- ☐ Traumatic wound
- ☐ Urinary tract infection
- ☐ Other (specify): _____

17b. RECURRENT UTI

- ☐ 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
- ☐ Parkinson's disease
- ☐ Other (specify): _____

PLEGIAS/PARALYSIS
- ☐ Hemiplegia
- ☐ Paraplegia
- ☐ Quadriplegia

RENAL DISEASE
- ☐ Chronic kidney disease
  Lowest serum creatinine: _____mg/DL
  - ☐ Unknown or not done

SKIN CONDITION
- ☐ Burn
- ☐ Decubitus/pressure ulcer
- ☐ Surgical wound
- ☐ Other chronic ulcer or chronic wound
- ☐ Other (specify):_____

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 ☐ Unknown
- ☐ Tobacco
- ☐ E-nicotine delivery system
- ☐ Marijuana

ALCOHOL ABUSE:
- ☐ Yes
- ☐ No
- ☐ Unknown

OTHER SUBSTANCES: (Check all that apply) ☐ None ☐ Unknown

	DOCUMENTED USE DISORDER (DUD)/ABUSE:	MODE OF DELIVERY: (Check all that apply)
☐ Marijuana, cannabinoid (other than smoking)	☐ DUD or abuse	☐ IDU ☐ Skin popping ☐ Non-IDU ☐ Unknown
☐ Opioid, DEA schedule I (e.g., heroin)	☐ DUD or abuse	☐ IDU ☐ Skin popping ☐ Non-IDU ☐ Unknown
☐ Opioid, DEA schedule II-IV (e.g., methadone, oxycodone)	☐ DUD or abuse	☐ IDU ☐ Skin popping ☐ Non-IDU ☐ Unknown
☐ Opioid, NOS	☐ DUD or abuse	☐ IDU ☐ Skin popping ☐ Non-IDU ☐ Unknown
☐ Cocaine	☐ DUD or abuse	☐ IDU ☐ Skin popping ☐ Non-IDU ☐ Unknown
☐ Methamphetamine	☐ DUD or abuse	☐ IDU ☐ Skin popping ☐ Non-IDU ☐ Unknown
☐ Other (specify): _____	☐ DUD or abuse	☐ IDU ☐ Skin popping ☐ Non-IDU ☐ Unknown
☐ Unknown substance	☐ DUD or abuse	☐ IDU ☐ Skin popping ☐ Non-IDU ☐ Unknown

DURING THE CURRENT HOSPITALIZATION, DID THE PATIENT RECEIVE MEDICATION ASSISTED TREATMENT (MAT) FOR OPIOID USE DISORDER? ☐ Yes ☐ No ☐ N/A (patient not hospitalized or did not have DUD)

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

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

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: ☐

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 ☐ Suprapubic Catheter

☐ Condom Catheter ☐ Other (specify):_____

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 ☐ Gastrostomy Tube ☐ NG Tube

☐ Tracheostomy ☐ Nephrostomy Tube ☐ Other (specify):

_____

PATIENT TRAVELED INTERNATIONALLY IN THE YEAR BEFORE DISC: ☐ Yes ☐ No ☐ Unknown

COUNTRY: _____, _____, _____

PATIENT HOSPITALIZED WHILE VISITING COUNTRY(IES) ABOVE: ☐ Yes ☐ No ☐ Unknown

21a. WEIGHT:
_____lbs. _____ oz. OR
_____kg ☐ Unknown

21b. HEIGHT:
_____ft. _____ in. OR
_____cm ☐ Unknown

21c. BMI:
_____
☐ Unknown

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URINE CULTURES ONLY: 22. RECORD THE COLONY COUNT:

____

URINE CULTURES ONLY:
23. SIGNS AND SYMPTOMS ASSOCIATED WITH URINE CULTURE.
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.

		Symptoms for patients ≤ 1 year of age only:
☐ **None**	☐ **Unknown**	
☐ Costovertebral angle pain or tenderness	☐ Frequency	☐ Apnea
☐ Dysuria	☐ Suprapubic tenderness	☐ Bradycardia
☐ Fever [temperature ≥ 100.4 °F (38 °C)]	☐ Urgency	☐ Lethargy
		☐ Vomiting

24a. DID THE PATIENT HAVE A POSITIVE TEST(S) FOR SARS-CoV-2 (MOLECULAR ASSAY, SEROLOGY OR OTHER CONFIRMATORY TEST) ON OR BEFORE THE DISC?

☐ Yes
☐ No
☐ Unknown

24b. IF YES, COMPLETE TABLE BELOW:

	Specimen collection date	Test type
FIRST positive test for SARS-CoV-2 on or before the DISC:	__ __/__ __/__ __ __ __ ☐ Unknown	☐ Molecular assay ☐ Serology ☐ Unknown ☐ Other *(specify)*: ______________
MOST RECENT positive test for SARS-CoV-2 on or before the DISC:	__ __/__ __/__ __ __ __ ☐ Unknown	☐ Molecular assay ☐ Serology ☐ Unknown ☐ Other *(specify)*: ______________

24c. COVID-NET CASE ID:

____

24d. NNDSS IDs (PLEASE PROVIDE AT LEAST ONE OF THE FOLLOWING WHEN APPLICABLE):

Local Case ID: ______________________________
Local Record ID: ______________________________
State case identifier: ______________________________
Legacy case identifier: ______________________________

25a. WAS THE INCIDENT SPECIMEN POLYMICROBIAL?

☐ Yes
☐ No
☐ Unknown

25b. WHAT SCREENING/ CONFIRMATORY METHOD WAS USED FOR ESBL IDENTIFICATION?
(Check all that apply): ☐ None ☐ Unknown

25c. IF SCREENING/ CONFIRMATORY METHOD WAS USED, WHAT WAS THE RESULT?

Method	Result			
☐ Broth Microdilution (ATI detection)				
☐ ESBL well	☐ Positive	☐ Negative	☐ Indeterminate	☐ Unknown
☐ Expert rule (ATI flag)	☐ Positive	☐ Negative	☐ Indeterminate	☐ Unknown
☐ Unknown	☐ Positive	☐ Negative	☐ Indeterminate	☐ Unknown
☐ Broth Microdilution (Manual)	☐ Positive	☐ Negative	☐ Indeterminate	☐ Unknown
☐ Disk Diffusion	☐ Positive	☐ Negative	☐ Indeterminate	☐ Unknown
☐ E-test	☐ Positive	☐ Negative	☐ Indeterminate	☐ Unknown
☐ Molecular test (specify):____________	☐ Positive	☐ Negative	☐ Indeterminate	☐ Unknown
☐ Other non-molecular test (specify):_______	☐ Positive	☐ Negative	☐ Indeterminate	☐ Unknown

26a. IS ANTIMICROBIAL USE (IV OR ORAL) IN THE 30 DAYS BEFORE THE DISC DOCUMENTED? ☐ Yes ☐ No ☐ Unknown

26b. IF YES, CHECK ALL ANTIMICROBIALS USED IN THE 30 DAYS BEFORE THE DISC: (Check all that apply) ☐ Unknown

☐ Amikacin	☐ Ceftazidime	☐ Ertapenem	☐ Polymyxin B
☐ Amoxicillin	☐ Ceftazidime/avibactam	☐ Fidaxomicin	☐ Polymyxin E (colistin)
☐ Amoxicillin/clavulanic acid	☐ Ceftizoxime	☐ Fosfomycin	☐ Rifaximin
☐ Ampicillin	☐ Ceftolozane/tazobactam	☐ Gentamicin	☐ Tedizolid
☐ Ampicillin/sulbactam	☐ Ceftriaxone	☐ Imipenem/cilastatin	☐ Telavancin
☐ Azithromycin	☐ Cefuroxime	☐ Levofloxacin	☐ Tigecycline
☐ Aztreonam	☐ Cephalexin	☐ Linezolid	☐ Tobramycin
☐ Cefazolin	☐ Ciprofloxacin	☐ Meropenem	☐ Trimethoprim
☐ Cefdinir	☐ Clarithromycin	☐ Meropenem/vaborbactam	☐ Trimethoprim/sulfamethoxazole
☐ Cefepime	☐ Clindamycin	☐ Metronidazole	☐ Vancomycin
☐ Cefixime	☐ Dalbavancin	☐ Moxifloxacin	☐ IV
☐ Cefotaxime	☐ Daptomycin	☐ Nitrofurantoin	☐ PO
☐ Cefoxitin	☐ Delafloxacin	☐ Oritavancin	☐ Other (specify): ______________
☐ Cefpodoxime	☐ Doripenem	☐ Penicillin	☐ Other (specify): ______________
☐ Ceftaroline	☐ Doxycycline	☐ Piperacillin/tazobactam	

REMINDER: Any prior antimicrobial use that is not noted above should be documented in the other (specify) field.

27. SUSCEPTIBILITY RESULTS:

Please complete the table below based on the information found in the indicated data source. Shaded antibiotics are required to have the MIC entered into the MuGSI-CM system, if available.

Data Source	Medical Record		Microscan		Vitek		Phoenix		Kirby-Bauer		E-test	
Antibiotic	**MIC**	**Interp**	**MIC**	**Interp**	**MIC**	**Interp**	**MIC**	**Interp**	**Zone Diam**	**Interp**	**MIC**	**Interp**
Amikacin												
Amoxicillin/Clavulanate												
Ampicillin												
Ampicillin/Sulbactam												
Aztreonam												
Cefazolin												
CEFEPIME												
CEFOTAXIME												
CEFTAZIDIME												
Ceftazidime/Avibactam												
Ceftolozane/Tazobactam												
CEFTRIAXONE												
Cephalothin												
Ciprofloxacin												
COLISTIN												
DORIPENEM												
Doxycycline												
ERTAPENEM												
Fosfomycin												
Gentamicin												
IMIPENEM												
Imipenem-relebactam												
Levofloxacin												
MEROPENEM												
Meropenem-vaborbactam												
Minocycline												
Moxifloxacin												
Nitrofurantoin												
Piperacillin/Tazobactam												
Plazomicin												
POLYMYXIN B												
Rifampin												
Tetracycline												
TIGECYCLINE												
Tobramycin												
Trimethoprim-sulfamethoxazole												

28a. WAS CASE FIRST IDENTIFIED THROUGH AUDIT?

☐ Yes
☐ No

28b. CRF STATUS:

☐ Complete
☐ Pending
☐ Chart unavailable after 3 requests

28c. SO INITIALS:

_____

28d. DATE OF ABSTRACTION:

__ __ - __ __ - __ __ __ __

28e. COMMENTS:

_____

_____

_____