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
Exp. Date: XX-XX-XXXX

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

Public reporting burden of this collection of information is estimated to average 25 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 (0920-0978).

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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

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.

- ☐ **None**
- ☐ Costovertebral angle pain or tenderness
- ☐ Dysuria
- ☐ Fever [temperature ≥ 100.4 °F (38 °C)]
- ☐ **Unknown**
- ☐ Frequency
- ☐ Suprapubic tenderness
- ☐ Urgency

Symptoms for patients ≤ 1 year of age only:

- ☐ Apnea
- ☐ Bradycardia
- ☐ Lethargy
- ☐ Vomiting

24a. WAS THE INCIDENT SPECIMEN POLYMICROBIAL?

- ☐ Yes
- ☐ No
- ☐ Unknown

24b. WHAT SCREENING/ CONFIRMATORY METHOD WAS USED FOR ESBL IDENTIFICATION?
(Check all that apply): ☐ None ☐ Unknown

24c. 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

25a. IS ANTIMICROBIAL USE (IV OR ORAL) IN THE 30 DAYS BEFORE THE DISC DOCUMENTED? ☐ Yes ☐ No ☐ Unknown

25b. IF YES, CHECK ALL ANTIMICROBIALS USED IN THE 30 DAYS BEFORE THE DISC: (Check all that apply) ☐ Unknown

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

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

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26. 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												

27a. WAS CASE FIRST IDENTIFIED THROUGH AUDIT?

☐ Yes
☐ No

27b. CRF STATUS:

☐ Complete
☐ Pending
☐ Chart unavailable after 3 requests

27c. SO INITIALS: _____

27d. DATE OF ABSTRACTION: __ __ - __ __ - __ __ __ __

27e. COMMENTS:

_____

_____

_____