Form approved
OMB No. 0920-0978

2024 HAIC Multi-site Gram-negative Surveillance Initiative (MuGSI) Supplemental Surveillance Officer Survey

Please answer the following questions for the year 2024, unless otherwise specified. The purpose of the survey is to verify and document current surveillance procedures, including isolate collection and testing methods at clinical laboratories. Please enter your responses into the corresponding REDCap database. If you have questions, please contact Julian Grass (hij3@cdc.gov) and Joshua Brandenburg (ode4@cdc.gov).

Site: ___ CA ___ CO ___ CT ___ GA ___ MD ___ MI___ MN ___ NM ___ NY ___ OR ___ TN
Person(s) Completing the Form: _____

Please note that the information collected in the sections below about specific MuGSI pathogens should only be completed for those sites that participate in those surveillance activities.

Surveillance Area Characteristics

1. What counties are under surveillance for MuGSI activities at your site?
    a. Carbapenem-resistant Enterobacterales (CRE) surveillance area, please specify:_____
    b. Carbapenem-resistant *Acinetobacter baumannii* (CRAB) surveillance area, please specify:_____
    c. Extended-spectrum β-lactamases-producing Enterobacterales (ESBL-E) surveillance area, please specify:_____
    d. Invasive *Escherichia coli* (iEC) surveillance area, please specify:
    _____

2. Is CRE reportable at your state/site? ___ yes ___ no

    a. If yes:
        i. Please describe your state reportable definition of CRE:_____

        ii. Where in your state is CRE reportable?

            _____ Statewide
            _____ Defined area, such as a county(ies). Please specify_____

        iii. Is isolate submission to the State Health Department Laboratory required?
            _____ yes _____ no specify _____
    b. If no:
        i. What mechanism do you have in place that allows for surveillance officers (SOs) to have access to CRE laboratory reports and medical records?
            _____ Agent of the state
            _____ State Health Department Regulation
            _____ Other, please explain: _____

        ii. Does your state/site plan to make CRE reportable? ___ yes ___ no ___ unknown
            1. If yes, when does your state/site plan to make CRE reportable?

_____

3. Is CRAB reportable at your state/site? ___ yes ___ no

    a. If yes:
        i. Please describe your state reportable definition of CRAB:_____

        ii. Where in your state is CRAB reportable?

            _____ Statewide
            _____ Defined area, such as a county(ies). Please specify_____

        iii. Is isolate submission to the State Health Department Laboratory required?
            _____ yes _____ no

    b. If no:
        i. What mechanism do you have in place that allows for SOs to have access to CRAB laboratory reports and medical records?
            _____ Agent of the state
            _____ State Health Department Regulation
            _____ Other, please explain: _____

        ii. Does your state/site plan to make CRAB reportable? ___ yes ___ no ___ unknown
            1. If yes, when does your state/site plan to make CRAB reportable?
            _____

4. Is ESBL-E reportable at your state/site? ___ yes ___ no

    a. If yes:
        i. Please describe your state reportable definition of ESBL-E:_____

        ii. Where in your state is ESBL-E reportable?
            _____ Statewide
            _____ Defined area, such as a county(ies). Please specify_____

        iii. Is isolate submission to the State Health Department Laboratory required?
            _____ yes _____ no

    b. If no:
        i. What mechanism do you have in place that allows for SOs to have access to ESBL-E laboratory reports and medical records?
            _____ Agent of the state
            _____ State Health Department Regulation
            _____ Other, please explain: _____

        ii. Does your state/site plan to make ESBL-E reportable? ___ yes ___ no ___ unknown
            1. If yes, when does your state/site plan to make ESBL-E reportable?
            _____

5. Is iEC reportable at your state/site? ___ yes ___ no

    a. If yes:
        i. Please describe your state reportable definition of iEC:_____

        ii. Where in your state is iEC reportable?
            _____ Statewide
            _____ Defined area, such as a county(ies). Please specify_____

        iii. Is isolate submission to the State Health Department Laboratory required?
            _____ yes _____ no

    b. If no:
        i. What mechanism do you have in place that allows for SOs to have access to iEC laboratory reports and medical records?
            _____ Agent of the state
            _____ State Health Department Regulation
            _____ Other, please explain: _____

        ii. Does your state/site plan to make iEC reportable? ___ yes ___ no ___ unknown
            1. If yes, when does your state/site plan to make IEC reportable?
            _____

Laboratory Participation and Isolate Testing – Part 1

1. Please describe the clinical laboratories in the MuGSI catchment area:
    a. CRE
        i. Proportion of clinical laboratories serving the MuGSI CRE surveillance area with queries installed on their automated testing instrument (ATI) or laboratory information system (LIS): _____
        ii. Numerator: Number of clinical laboratories serving the MuGSI CRE surveillance area with queries installed on their ATI or LIS: _____
        iii. Denominator: Total number of clinical laboratories that receive and process specimens from residents of the MuGSI CRE surveillance area:_____
        iv. Please describe how MuGSI CRE surveillance is conducted at laboratories where ATI/LIS queries are not installed (e.g., HL7 messages from LabCorp):
        _____

    b. CRAB
        i. Proportion of clinical laboratories serving the MuGSI CRAB surveillance area with queries installed on their ATI or LIS: _____
        ii. Numerator: Number of clinical laboratories serving the MuGSI CRAB surveillance area with queries installed on their ATI or LIS: _____
        iii. Denominator: Total number of clinical laboratories that receive and process specimens from residents of the MuGSI CRAB surveillance area: _____
        iv. Please describe how MuGSI CRAB surveillance is conducted at laboratories where ATI/LIS queries are not installed (e.g., HL7 messages from LabCorp):
        _____

    c. ESBL-E
        i. Proportion of clinical laboratories serving the MuGSI ESBL-E surveillance area with queries installed on their ATI or LIS: _____

ii. Numerator: Number of clinical laboratories serving the MuGSI ESBL-E surveillance area with queries installed on their ATI or LIS: _____
iii. Denominator: Total number of clinical laboratories that receive and process specimens from residents of the MuGSI ESBL-E surveillance area:_____
iv. Please describe how MuGSI ESBL-E surveillance is conducted at laboratories where ATI/LIS queries are not installed (e.g., HL7 messages from LabCorp):

_____

d. iEC
   i. Proportion of clinical laboratories serving the MuGSI iEC surveillance area with queries installed on their ATI or LIS: _____
   ii. Numerator: Number of clinical laboratories serving the MuGSI iEC surveillance area with queries installed on their ATI or LIS: _____
   iii. Denominator: Total number of clinical laboratories that receive and process specimens from residents of the MuGSI iEC surveillance area:_____
   iv. Please describe how MuGSI iEC surveillance is conducted at laboratories where ATI/LIS queries are not installed (e.g., HL7 messages from LabCorp):

_____

2. Did any laboratories drop out of participation in 2023? _____ yes _____ no
   a. If yes, how many? _____
   b. Why did these laboratories drop out of participation?

_____

_____

3. In 2023, did you identify additional laboratories, regardless of location, which identify MuGSI isolates from persons who are residents of the MuGSI surveillance area at your site?
   _____ yes _____ no
   a. If yes, how many? _____
   b. If yes, how many of these laboratories were added? _____
      i. If all new laboratories identified were not added, why not?

_____

_____

   c. If yes, how did you identify these new laboratories?

_____

   d. Approximately how many cases are identified at the new laboratories each year among residents of the MuGSI surveillance area? _____

4. Did your site send any MuGSI isolates to CDC for characterization in calendar year 2023?
   _____ yes _____ no
   a. If yes, please describe how your site determines which MuGSI isolates to send to CDC:
      i. CRE: _____
      ii. CRAB: _____
      iii. ESBL: _____
      iv. iEC: _____
   b. If yes, how many clinical laboratories contributed MuGSI isolates:
      i. CRE: _____
      ii. CRAB: _____

iii. ESBL: _____
iv. iEC: _____

5. How many isolates with a specimen collection date in 2023 did you expect to be able to collect from the clinical laboratories?

   _____ CRE; _____ CRAB; _____ ESBL; _____iEC

6. What was the total number of isolates with a specimen collection date in 2023 that were collected from the clinical laboratories?

   _____ CRE; _____ CRAB; _____ ESBL; _____iEC

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Laboratory Participation and Isolate Testing – Part 2

Please complete the following information for each clinical laboratory participating in MuGSI surveillance at your site in 2023:

1. Laboratory ID:_____

2. Type of laboratory:
   _____clinical laboratory
   _____public health laboratory
   _____research laboratory
   _____reference laboratory

3. MuGSI pathogen(s) under surveillance:
   _____CRE
   _____CRAB
   _____ESBL
   _____iEC

4. Method for sharing laboratory reports with your site:
   _____electronic messaging, such as HL7
   _____e-mail
   _____fax
   _____EIP staff manually generate reports on-site
   _____other, please specify_____
   _____unknown

5. Method for case identification:
   _____automated testing instrument
   _____laboratory information system
   _____medical record
   _____other, please specify_____
   _____unknown

6. Type of ATI and card:_____

7. Carbapenem confirmatory testing method

    a. *Please report the carbapenem confirmatory testing method(s) performed for each MuGSI organism separately*.

kirby bauer:	_____CRE	_____CRAB	_____ESBL	_____iEC
other, please specify:_____	_____CRE	_____CRAB	_____ESBL	_____iEC
laboratory not testing	_____CRE	_____CRAB	_____ESBL	_____iEC
unknown	_____CRE	_____CRAB	_____ESBL	_____iEC

8. Carbapenemase testing method
    a. *Please report the carbapenemase testing method(s) performed for each MuGSI organism separately.*

Non-molecular test methods

carbaNP:	_____CRE	_____CRAB	_____ESBL	_____iEC
carbapenemase inactivation method:	_____CRE	_____CRAB	_____ESBL	_____iEC
CPO detect:	_____CRE	_____CRAB	_____ESBL	_____iEC
disk diffusion/ROSCO disk e-test:	_____CRE	_____CRAB	_____ESBL	_____iEC
modified carbapenemase inactivation method:	_____CRE	_____CRAB	_____ESBL	_____iEC
modified hodge test:	_____CRE	_____CRAB	_____ESBL	_____iEC
RAPIDEC:	_____CRE	_____CRAB	_____ESBL	_____iEC
Other, please specify:_____	_____CRE	_____CRAB	_____ESBL	_____iEC
laboratory not testing:	_____CRE	_____CRAB	_____ESBL	_____iEC
unknown:	_____CRE	_____CRAB	_____ESBL	_____iEC

Molecular test methods

automated molecular assay:	_____CRE	_____CRAB	_____ESBL	_____iEC
carba-R:	_____CRE	_____CRAB	_____ESBL	_____iEC
check points:	_____CRE	_____CRAB	_____ESBL	_____iEC
MALDI-TOF MS:	_____CRE	_____CRAB	_____ESBL	_____iEC
next generation nucleic acid sequencing:	_____CRE	_____CRAB	_____ESBL	_____iEC
polymerase chain reaction:	_____CRE	_____CRAB	_____ESBL	_____iEC
streck ARM-D:	_____CRE	_____CRAB	_____ESBL	_____iEC
other, please specify:_____	_____CRE	_____CRAB	_____ESBL	_____iEC
laboratory not testing:	_____CRE	_____CRAB	_____ESBL	_____iEC
unknown:	_____CRE	_____CRAB	_____ESBL	_____iEC

9. ESBL production testing method
    a. *Please report the ESBL production testing method(s) performed for each MuGSI organism separately.*

broth microdilution – ESBL well:	_____CRE _____CRAB _____ESBL _____iEC
broth microdilution – ATI flag:	_____CRE _____CRAB _____ESBL _____iEC
broth microdilution – manual:	_____CRE _____CRAB _____ESBL _____iEC
disk diffusion:	_____CRE _____CRAB _____ESBL _____iEC
e-test:	_____CRE _____CRAB _____ESBL _____iEC
molecular test, please specify:_____	_____CRE _____CRAB _____ESBL _____iEC
other non-molecular test, please specify:_____	_____CRE _____CRAB _____ESBL _____iEC
laboratory not testing:	_____CRE _____CRAB _____ESBL _____iEC
unknown:	_____CRE _____CRAB _____ESBL _____iEC

10. Organism identification method†
    a. *Please report the organism identification method(s) performed for each MuGSI organism separately.*

MALDI-TOF:	_____CRE _____CRAB _____ESBL _____iEC
polymerase chain reaction:	_____CRE _____CRAB _____ESBL _____iEC
whole genome sequencing:	_____CRE _____CRAB _____ESBL _____iEC
DNA sequencing, please specify:_____	_____CRE _____CRAB _____ESBL _____iEC
rRNA gene sequencing, please specify:_____	_____CRE _____CRAB _____ESBL _____iEC
biochemical tests, please specify:_____	_____CRE _____CRAB _____ESBL _____iEC
immunological techniques, please specify:_____	_____CRE _____CRAB _____ESBL _____iEC
other, please specify:_____	_____CRE _____CRAB _____ESBL _____iEC
laboratory not testing:	_____CRE _____CRAB _____ESBL _____iEC
unknown:	_____CRE _____CRAB _____ESBL _____iEC

    b. Please specify the database or library for the instrument(s) selected above:_____

11. Culture-independent diagnostic test:
    _____yes, please specify the type of test_____
    If yes, is a positive test result always followed up by a culture? _____ yes _____ no _____ unknown
    _____no
    _____unknown

12. Isolate submission to state public health laboratory

_____yes
_____no
_____unknown

13. Most recent year a check-in was completed for the laboratory: _____

14. Please describe the participating laboratory's policy on maximum duration of referral for antimicrobial susceptibility testing for successive isolates of the same MuGSI organism. Successive isolates are defined as two microorganisms with similar identification that was cultured from the same patient at two different time points. Please indicate if the policy differs depending on whether successive isolates were cultured from the same specimen source or different specimen source.

_____
_____
_____

Additional information on MuGSI surveillance activities

1. Does your site complete a survey for any of the following types of facilities:
    a. Physician/Outpatient provider: _____ yes _____ no
        i. If yes, the last survey was completed in: _____
    b. LTCF: _____ yes _____ no
        i. If yes, the last survey was completed in:_____
    c. LTACH: _____ yes _____ no
        i. If yes, the last survey was completed in: _____
    d. Dialysis center: _____ yes _____ no
        i. If yes, the last survey was completed in: _____
    e. Hospital laboratory: _____ yes _____ no
        i. If yes, the last survey was completed in: _____

2. In 2023, did your site update its inventory of facilities within the MuGSI surveillance area? _____ yes _____ no
    a. If no, why not?

    _____
    _____

    b. If yes, how many facilities serve the MuGSI surveillance area? _____

c. If yes, how many facilities have you identified the clinical laboratory that serves it?_____

3. Does your site run a data edit program in addition to the CDC edit program that is sent out monthly? This could include the data edits available on the MuGSI Case Management System dashboard.

_____ yes _____ no

a. If yes, how often:

_____ Monthly
_____ Quarterly
_____ Other time frame, specify: _____
_____ Never

b. If yes, what type of edits are you running? Do you think they would be helpful to add to edits generated by CDC?

_____

4. Did your site geocode MuGSI cases in 2023? _____ yes _____ no

a. If yes, what is the most recent year of surveillance data that was geocoded? _____

b. If no, why not?

_____
_____

5. Did your site match MuGSI cases to the state vital statistics death registry in 2023? _____ yes _____ no

a. If yes, what is the most recent year of surveillance data that was matched?_____
b. If no, why not?

_____
_____

6. Did your site complete CRF re-abstractions in 2023? _____ yes _____ no

a. If yes, what was the most recent year of surveillance data with CRFs re-abstracted? _____
b. If no, why not?

_____
_____

7. What is the IRB determination for MuGSI at your site? ____Research ____Non-Research ____Other ____Unknown

8. General comments

_____

_____