

Cross walk - 2021 form changes

HAIC

1) MuGSI Case Report Form for Carbapenem-resistant Enterobacteriaceae (CRE) and *Acinetobacter baumannii* (CRAB)

Note: Changes for the updated 2021 CRF are highlighted in yellow.

Question on original 2021 form	Question on revised 2021 form																																																		
<p>26a. Was the incident specimen tested for carbapenemase?</p> <ul style="list-style-type: none"> • Yes • No • Laboratory not testing • Unknown 	<p>26a. Was the incident specimen tested for carbapenemase genes?</p> <ul style="list-style-type: none"> • Yes • No • Laboratory not testing • Unknown 																																																		
<p>26b. If yes, what testing method was used (check all that apply)</p> <p>Non-Molecular Tests:</p> <ul style="list-style-type: none"> • CarbaNP • Carbapenemase Inactivation Method (CIM) • Disk Diffusion/ROSCO Disk • E-test • Modified Carbapenemase Inactivation Method (mCIM) • Modified Hodge Test (MHT) • RAPIDEC • Other (specify): _____ • Unknown <p>Molecular Tests:</p> <ul style="list-style-type: none"> • Automated Molecular Assay • Carba-R • Check Points • MALDI-TOF MS • Next Generation Nucleic Acid Sequencing • PCR • Streck ARM-D • Other (specify): _____ • Unknown 	<p>26b. If yes, what testing method was used (check all that apply)</p> <p>Non-Molecular Test Methods:</p> <ul style="list-style-type: none"> • CarbaNP • Carbapenemase Inactivation Method (CIM) • Disk Diffusion/ROSCO Disk • E-test • Modified Carbapenemase Inactivation Method (mCIM) • Modified Hodge Test (MHT) • RAPIDEC • Other (specify): _____ • Unknown <p>Molecular Test Methods:</p> <ul style="list-style-type: none"> • Automated Molecular Assay • Carba-R • Check Points • MALDI-TOF MS • Next Generation Nucleic Acid Sequencing • PCR • Streck ARM-D • Other (specify): _____ • Unknown 																																																		
<p>26c. If tested, what was the testing result?</p> <p>Non-Molecular Test Results:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Indeterminate <input type="checkbox"/> Unknown <p>Molecular Test Results:</p> <table border="1" data-bbox="16 1743 792 1925"> <tr> <td><input type="checkbox"/> NDM</td> <td><input type="checkbox"/> Pos</td> <td><input type="checkbox"/> Neg</td> <td><input type="checkbox"/> Ind</td> <td><input type="checkbox"/> Unk</td> </tr> <tr> <td><input type="checkbox"/> KPC</td> <td><input type="checkbox"/> Pos</td> <td><input type="checkbox"/> Neg</td> <td><input type="checkbox"/> Ind</td> <td><input type="checkbox"/> Unk</td> </tr> <tr> <td><input type="checkbox"/> OXA</td> <td><input type="checkbox"/> Pos</td> <td><input type="checkbox"/> Neg</td> <td><input type="checkbox"/> Ind</td> <td><input type="checkbox"/> Unk</td> </tr> <tr> <td><input type="checkbox"/> OXA-48</td> <td><input type="checkbox"/> Pos</td> <td><input type="checkbox"/> Neg</td> <td><input type="checkbox"/> Ind</td> <td><input type="checkbox"/> Unk</td> </tr> <tr> <td><input type="checkbox"/> VIM</td> <td><input type="checkbox"/> Pos</td> <td><input type="checkbox"/> Neg</td> <td><input type="checkbox"/> Ind</td> <td><input type="checkbox"/> Unk</td> </tr> </table>	<input type="checkbox"/> NDM	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk	<input type="checkbox"/> KPC	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk	<input type="checkbox"/> OXA	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk	<input type="checkbox"/> OXA-48	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk	<input type="checkbox"/> VIM	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk	<p>26c. If tested, what was the testing result?</p> <p>Non-Molecular Test Results:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Indeterminate <input type="checkbox"/> Unknown <p>Molecular Test Results:</p> <table border="1" data-bbox="824 1743 1604 1925"> <tr> <td><input type="checkbox"/> NDM</td> <td><input type="checkbox"/> Pos</td> <td><input type="checkbox"/> Neg</td> <td><input type="checkbox"/> Ind</td> <td><input type="checkbox"/> Unk</td> </tr> <tr> <td><input type="checkbox"/> KPC</td> <td><input type="checkbox"/> Pos</td> <td><input type="checkbox"/> Neg</td> <td><input type="checkbox"/> Ind</td> <td><input type="checkbox"/> Unk</td> </tr> <tr> <td><input type="checkbox"/> OXA (specify): _____</td> <td><input type="checkbox"/> Pos</td> <td><input type="checkbox"/> Neg</td> <td><input type="checkbox"/> Ind</td> <td><input type="checkbox"/> Unk</td> </tr> <tr> <td><input type="checkbox"/> VIM</td> <td><input type="checkbox"/> Pos</td> <td><input type="checkbox"/> Neg</td> <td><input type="checkbox"/> Ind</td> <td><input type="checkbox"/> Unk</td> </tr> <tr> <td><input type="checkbox"/> IMP</td> <td><input type="checkbox"/> Pos</td> <td><input type="checkbox"/> Neg</td> <td><input type="checkbox"/> Ind</td> <td><input type="checkbox"/> Unk</td> </tr> </table>	<input type="checkbox"/> NDM	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk	<input type="checkbox"/> KPC	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk	<input type="checkbox"/> OXA (specify): _____	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk	<input type="checkbox"/> VIM	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk	<input type="checkbox"/> IMP	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk
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<input type="checkbox"/> IMP	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk	<input type="checkbox"/> Other carbapenemase gene (specify):_____	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk
<input type="checkbox"/> Other Specify:_____	<input type="checkbox"/> Pos	<input type="checkbox"/> Neg	<input type="checkbox"/> Ind	<input type="checkbox"/> Unk					

27a. Was the incident specimen tested for ESBL production or other beta-lactamase genes?

- Yes
- No
- Laboratory not testing
- Unknown

27b. If tested, what testing method was used? (Check all that apply)

- Broth microdilution (ATI detection)
- ESBL well
- Expert rule (ATI flag)
- Unknown
- Broth Microdilution (Manual)
- Disk Diffusion
- E-test
- Molecular test (specify)
- Gene variant (specify)
- Other non-molecular test (specify)

27c. If tested, what was the result?

- Positive
- Negative
- Indeterminate
- Unknown

<p>27. Susceptibility results</p> <p>Antibiotic</p> <p>Amikacin Amoxicillin/Clavulanate Ampicillin Ampicillin/Sulbactam Aztreonam Cefazolin Cefepime Cefiderocol Cefotaxime Cefoxitin Ceftazidime Ceftazidime/Avibactam Ceftolozane/Tazobactam Ceftriaxone Cephalothin Ciprofloxacin Colistin Doripenem Doxycycline</p>	<p>28. Susceptibility results</p> <p>Antibiotic</p> <p>Amikacin Amoxicillin/Clavulanate Ampicillin Ampicillin/Sulbactam Aztreonam Cefazolin Cefepime Cefiderocol Cefotaxime Cefoxitin Ceftazidime Ceftazidime/Avibactam Ceftolozane/Tazobactam Ceftriaxone Cephalothin Ciprofloxacin Colistin Doripenem Doxycycline</p>
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Eravacycline Ertapenem Fosfomicin Gentamicin Imipenem Imipenem-relebactam Levofloxacin Meropenem Meropenem-vaborbactam Minocycline Nitrofurantoin Omadacycline Piperacillin/Tazobactam Plazomicin Polymyxin B Rifampin Tetracycline Tigecycline Tobramycin Trimethoprim-sulfamethoxazole Data source Medical record Microscan Vitek Phoenix Sensititre Kirby-Bauer E-test	Eravacycline Ertapenem Fosfomicin Gentamicin Imipenem Imipenem-relebactam Levofloxacin Meropenem Meropenem-vaborbactam Minocycline Nitrofurantoin Omadacycline Piperacillin/Tazobactam Plazomicin Polymyxin B Rifampin Tetracycline Tigecycline Tobramycin Trimethoprim-sulfamethoxazole Data source Medical record Microscan Vitek Phoenix Sensititre Kirby-Bauer E-test
28a. Was case first identified through audit? • Yes • No	29a. Was the case first identified through an audit? • Yes • No
28b. CRF status • Complete • Pending • Chart unavailable after 3 requests	29b. CRF status • Complete • Pending • Chart unavailable after 3 requests
28c. SO initials _____	29c. SO initials _____
28d. Date of abstraction __-__-____	29d. Date of abstraction __-__-____
28e. Comments _____	29e. Comments _____

2) Multi-site Gram-Negative Surveillance Initiative (MuGSI)- Extended-Spectrum Beta-Lactamase-Producing Enterobacteriaceae (ESBL)

Note: Changes for the updated 2021 ESBL CRF are highlighted in yellow.

Question on original 2021 form	Question on revised 2021 form
	<p>26b. Was the incident specimen tested for ESBL production or other beta-lactamase genes?</p> <ul style="list-style-type: none"> • Yes • No • Laboratory not testing • Unknown
<p>26b. What screening/confirmatory method was used for ESBL identification? (Check all that apply)</p> <ul style="list-style-type: none"> • None • Unknown • Broth microdilution (ATI detection) • ESBL well • Expert rule (ATI flag) • Unknown • Broth Microdilution (Manual) • Disk Diffusion • E-test • Molecular test (specify) • Other non-molecular test (specify) 	<p>26c. If tested, what testing method was used? (Check all that apply)</p> <ul style="list-style-type: none"> • Broth microdilution (ATI detection) • ESBL well • Expert rule (ATI flag) • Unknown • Broth Microdilution (Manual) • Disk Diffusion • E-test • Molecular test (specify) • Gene variant (specify) • Other non-molecular test (specify)
<p>26c. If screening/confirmatory method was used, what was the result?</p> <ul style="list-style-type: none"> • Positive • Negative • Indeterminate • Unknown 	<p>26c. If tested, what was the result?</p> <ul style="list-style-type: none"> • Positive • Negative • Indeterminate • Unknown

3) Annual Survey of Laboratory Testing Practices for *C. difficile* Infections

Current	Proposed
Is this a new laboratory?	Was this a new laboratory in 2020?
Is this lab participating in surveillance?	Did this lab participate in surveillance in 2020?
How often do you receive line lists from this lab? <input type="radio"/> Daily <input type="radio"/> Weekly <input type="radio"/> Monthly <input type="radio"/> Annually <input type="radio"/> Never <input type="radio"/> Other	How often did you receive line lists from this lab in 2020? <input type="radio"/> Whenever there is a positive case <input type="radio"/> Daily <input type="radio"/> Weekly <input type="radio"/> Monthly <input type="radio"/> Annually <input type="radio"/> Never <input type="radio"/> Other
How do you receive line lists from this lab?	How did you receive line lists from this lab in 2020?
Do you receive specimens from this lab?	Did you receive specimens from this lab in 2020?
Types of facilities in your catchment area served by this lab (select all that apply):	Types of facilities in your catchment area served by this lab in 2020 (select all that apply):
1. Does your laboratory ever send specimens off-site for <i>Clostridioides difficile</i> testing?	1. Did your laboratory ever send specimens off-site for <i>Clostridioides difficile</i> testing in 2020?
2. What type and order of testing is routinely used by your laboratory in standard testing for <i>C. difficile</i> ?	2. What type and order of testing was routinely used by your laboratory in standard testing for <i>C. difficile</i> on December 31, 2020?
2a. Which specimens are used during your 2 nd line of testing?	2a. Which specimens were used during your 2 nd line of testing?
2b. Which specimens are used during your 3 rd line of testing?	2b. Which specimens were used during your 3 rd line of testing?
2c. Does your laboratory perform any onsite testing for <i>C. difficile</i> outside of your normal testing algorithm?	2c. Did your laboratory perform any onsite testing for <i>C. difficile</i> outside of your normal testing algorithm in 2020?
3a. Which EIA test kit is currently used by your laboratory?	3a. Which EIA test kit was used by your laboratory in 2020?
3b. Which Nucleic Acid Amplification test is currently used by your laboratory?	3b. Which Nucleic Acid Amplification test was used by your laboratory in 2020?
4a. If your laboratory uses a multiplexed molecular diagnostic (e.g., Biofire Filmarray GI Panel, Luminex xTAG GPP) to test for several GI pathogens, does your laboratory suppress the <i>C. diff</i> result so that clinicians cannot see it? <input type="checkbox"/> Yes, always	4a. If your laboratory used a multiplexed molecular diagnostic (e.g., Biofire Filmarray GI Panel, Luminex xTAG GPP) to test for several GI pathogens in 2020, did your laboratory suppress the <i>C. difficile</i> result so that clinicians could not see it?

<ul style="list-style-type: none"> <input type="checkbox"/> Yes, at clinician request <input type="checkbox"/> Yes, but will release the result upon clinician request <input type="checkbox"/> Yes, sometimes Specify: _____ <input type="checkbox"/> No, clinicians always see <i>C. diff</i> result <input type="checkbox"/> N/A (Do not use multiplexed molecular diagnostic) 	<ul style="list-style-type: none"> <input type="checkbox"/> Yes, <i>C. difficile</i> result is always suppressed <input type="checkbox"/> Yes, <i>C. difficile</i> result is suppressed at clinician request <input type="checkbox"/> Yes, <i>C. difficile</i> result is suppressed but laboratory will release the result upon clinician request <input type="checkbox"/> Yes, <i>C. difficile</i> result is suppressed in certain situations Specify: _____ <input type="checkbox"/> No, clinicians always see <i>C. difficile</i> result <input type="checkbox"/> N/A (Do not use multiplexed molecular diagnostic)
<p>4b. If your laboratory uses a multiplexed diagnostic and the result is suppressed, where does the suppression occur?</p> <ul style="list-style-type: none"> <input type="checkbox"/> At the multiplexed molecular diagnostic instrument level (the result is not entered into the laboratory information management system (LIMS)) <input type="checkbox"/> At the laboratory information management system (LIMS) level <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> N/A (Do not use multiplexed molecular diagnostic or the result is never suppressed) 	<p>4b. If your laboratory used a multiplexed diagnostic in 2020 and the result was suppressed, where does the suppression occur?</p> <ul style="list-style-type: none"> <input type="checkbox"/> <i>C. difficile</i> result is suppressed at the multiplexed molecular diagnostic instrument level (the result is not entered into the laboratory information management system (LIMS)) <input type="checkbox"/> <i>C. difficile</i> result is suppressed at the laboratory information management system (LIMS) level <input type="checkbox"/> <i>C. difficile</i> result is suppressed somewhere else Specify: _____ <input type="checkbox"/> N/A (Do not use multiplexed molecular diagnostic or the result is never suppressed)
<p>[question did not exist]</p>	<p>5a. If your laboratory used a nucleic acid amplification test (NAAT) (e.g., Cepheid Xpert <i>C. difficile</i>) as <u>first line testing</u> followed by a toxin EIA test (whenever NAAT result is positive) in 2020, did your laboratory suppress the positive NAAT result so that clinicians could not see it?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Yes, NAAT result is always suppressed when NAAT result is positive and confirmatory toxin EIA result is negative <input type="checkbox"/> Yes, NAAT result is always suppressed but laboratory will release the positive NAAT result upon clinician request <input type="checkbox"/> Yes, NAAT result is suppressed in certain situations Specify: _____

	<ul style="list-style-type: none"> <input type="checkbox"/> No, clinicians always see the positive NAAT result <input type="checkbox"/> N/A (Do not use this type of multistep algorithm testing)
[question did not exist]	<p>5b. If your laboratory used NAAT as first line testing <i>followed</i> by confirmatory toxin EIA testing in 2020, and <u>both</u> the NAAT and toxin EIA results were released to the clinician, did your laboratory provide any comments to help the clinician interpret the test results (e.g., NAAT-positive only result might represent colonization, etc.)?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Yes, laboratory provides comments to accompany the test results <ul style="list-style-type: none"> <input type="radio"/> If yes, please specify the comments your laboratory uses to accompany the test results: _____ <input type="checkbox"/> No, laboratory does not provide comments to accompany the test results <input type="checkbox"/> The laboratory provides comments to accompany the test results in certain situations <ul style="list-style-type: none"> <input type="radio"/> If yes, please specify the situations in which your laboratory provides comments and the comments your laboratory uses to accompany the test results: _____ <input type="checkbox"/> N/A (Do not use this type of multistep algorithm testing or NAAT test result is always suppressed)
5. What are the LOINC or internal testing codes associated with the tests your lab currently uses (e.g. LOINC codes 13957-6, 34713-8, or 54067-4)?	6. What are the LOINC or internal testing codes associated with the tests your lab used in 2020 (e.g. LOINC codes 13957-6, 34713-8, or 54067-4)?
[question did not exist]	<p>7a. In 2020, did your laboratory experience any shortages in supplies, reagents, and/or test kits for performing <i>C. difficile</i> testing (e.g., NAAT or EIA reagents, swabs)?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Yes <ul style="list-style-type: none"> <input type="radio"/> If yes, please specify the dates during which the supply shortage occurred (provide approximate

	<p>dates if the exact dates are not known): _____</p> <ul style="list-style-type: none"> <input type="checkbox"/> No <input type="checkbox"/> N/A (<i>C. difficile</i> testing was not routinely performed on onsite)
[question did not exist]	<p>7b. If your laboratory experienced a supply shortage for <i>C. difficile</i> testing in 2020, how did the shortage affect your laboratory's ability to perform <i>C. difficile</i> testing? (<i>Check all that apply</i>)</p> <ul style="list-style-type: none"> <input type="checkbox"/> We had to decrease the frequency of <i>C. difficile</i> testing during the shortage <input type="checkbox"/> We had to switch to an alternative method to test for <i>C. difficile</i> during the shortage <input type="checkbox"/> We were not able to perform any type of <i>C. difficile</i> testing during the shortage <input type="checkbox"/> We had to send all <i>C. difficile</i> testing offsite to another laboratory <input type="checkbox"/> The shortage did not affect our ability to perform <i>C. difficile</i> testing <input type="checkbox"/> Other, specify: _____ <input type="checkbox"/> N/A (<i>C. difficile</i> testing was not routinely performed onsite)
[question did not exist]	<p>7c. In 2020, did your laboratory experience a high demand for COVID-19 testing that limited the availability of staff (e.g., reduced staffing or work time) or the use of equipment to perform <i>C. difficile</i> testing?</p> <ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (<i>C. difficile</i> testing and/or COVID-19 testing was not routinely performed onsite)
6. Has your lab testing algorithm for <i>C. difficile</i> changed since January 1, 2020?	8. Did your lab testing algorithm for <i>C. difficile</i> change between January 1, 2020 and December 31, 2020?
6a. (<i>If yes</i>) What was your previous type and order of testing?	8a. (<i>If yes</i>) What was the previous type and order of testing performed by your lab in 2020 <u>before</u> it changed its testing algorithm?
6b. Which specimens were used during your 2 nd line of testing?	8b. Which specimens were used during your 2 nd line of testing?

6c. Which specimens were used during your 3 rd line of testing?	8c. Which specimens were used during your 3 rd line of testing?
7. Does your lab have a policy to reject stool specimens for <i>C. difficile</i> testing?	9. Did your lab have a policy to reject stool specimens for <i>C. difficile</i> testing in 2020?
7a. Has your rejection policy for stool specimens changed since January 1, 2020?	9a. Did your rejection policy for stool specimens change between January 1, 2020 and December 31, 2020?
8. How many stool samples did you test for <i>C. diff</i> each month in 2020?	10. How many stool samples did you test for <i>C. difficile</i> each month in 2020?