## **Cross walk - 2021 form changes**

### **ABCs**

### 1) 2021 ABCs Neonatal Infection Expanded Tracking Form

Current Form	Proposed changes
3C. Gestational age determined by:	3C. Gestational age determined by:
1=Dates	1=Dates
2=Physical Exam	2=Physical Exam
3=Ultrasound	3=Ultrasound
9=Unknown	4=Assisted Reproductive Technology
	9=Unknown

## **FoodNet**

### 2) FoodNet Active Surveillance Data Elements List

Refer to Attachment #4 - Excel Spreadsheet - Changes are highlighted in Yellow

### 3) FoodNet Diagnostic Laboratory Practices and Volume Data Elements

Refer to Attachment #5 - Excel Spreadsheet - Changes are highlighted in Yellow

### **FluSurv-Net**

### 1) FluSurv-NET Influenza Surveillance Project Case Report Form

Question on 2019-20 Form	Question on 2020-21 Form	
(N/A)	COVID-NET Case ID	
(N/A)	RSV-NET Case ID	
(N/A)	CDC Track	
C14. Where did patient reside at the time of	C15. Where did patient reside at the time of	
hospitalization? (Indicate type of residence)	hospitalization? (Indicate type of residence)	
<ul><li>Private residence</li></ul>	<ul> <li>Private residence</li> </ul>	
<ul><li>Home with services</li></ul>	<ul> <li>Private residence services</li> </ul>	
<ul><li>Homeless/shelter</li></ul>	<ul><li>Homeless/shelter</li></ul>	
<ul> <li>Nursing home/Skilled nursing facility</li> </ul>	<ul> <li>Nursing home/Skilled nursing facility</li> </ul>	
<ul> <li>Alcohol/Drug Abuse Treatment</li> </ul>	<ul> <li>Alcohol/Drug Abuse Treatment</li> </ul>	
<ul> <li>Hospitalized at birth</li> </ul>	<ul><li>Hospitalized at birth</li></ul>	
<ul> <li>Rehabilitation facility</li> </ul>	<ul><li>Rehabilitation facility</li></ul>	
<ul><li>Corrections facility</li></ul>	<ul><li>Corrections facility</li></ul>	

Question on 2019-20 Form	Question on 2020-21 Form
<ul> <li>Hospice</li> <li>Assisted living/Residential care</li> <li>LTACH</li> <li>Group/Retirement home</li> <li>Psychiatric facility</li> <li>Other long term care facility</li> <li>Unknown</li> <li>Other, specify</li> </ul> (N/A)	<ul> <li>Hospice</li> <li>Assisted living/Residential care</li> <li>LTACH</li> <li>Group/Retirement home</li> <li>Psychiatric facility</li> <li>Other long term care facility</li> <li>Unknown</li> <li>Other, specify</li> <li>E2. BiPAP or CPAP use?</li> <li>Yes</li> <li>No</li> <li>Unknown</li> </ul>
(N/A)	E3. High flow nasal cannula (e.g., Vapotherm)?  Yes No Unknown
(NA	E6. Vasopressor use?  Yes No Unknown
(NA)	E7. Renal Replacement Therapy (RRT) or Dialysis?  ■ Yes ■ No ■ Unknown
K2a. If patient discharged alive, please indicate to where:	F2. If patient discharged alive, please indicate to where:
<ul> <li>Private residence</li> <li>Home with services</li> <li>Homeless/shelter</li> <li>Nursing home/Skilled nursing facility</li> <li>Alcohol/Drug Abuse Treatment</li> <li>Rehabilitation facility</li> <li>Corrections facility</li> <li>Hospice</li> <li>Assisted living/Residential care</li> <li>LTACH</li> <li>Group/Retirement home</li> <li>Psychiatric facility</li> <li>Other long term care facility</li> <li>Unknown</li> <li>Other, specify</li> </ul>	where: Private residence Home with services Homeless/shelter Nursing home/Skilled nursing facility Alcohol/Drug Abuse Treatment Hospitalized at birth Rehabilitation facility Corrections facility Hospice Assisted living/Residential care LTACH Group/Retirement home Psychiatric facility Other long term care facility Against medical advice Discharged to another hospital Unknown Other, specify
E7. Alcohol abuse	(Deleted question)

Question on 2019-20 Form	Question on 2020-21 Form
■ Current ■ Former ■ No/Unknown  E8. Substance abuse ■ Current ■ Former ■ No/Unknown	(Deleted question)
E8a. Substance Abuse Type (Current use only) check all that apply  IVDU Opioids Cocaine Methamphetamines Marijuana (ingested or unknown route) Unknown Other, specify	(Deleted question)
E9. Current Non-Tobacco Smoker  ■ Yes ■ No/Unknown	(Deleted question)
E9. Current Non-Tobacco Smoker Type  Marijuana E-nicotine delivery system (ENDS) Other	(Deleted question)
(N/A)	I1o. Hypertension  Yes No/Unknown
E10f. Neuromuscular disorder  ■ Amyotrophic lateral sclerosis (ALS)  ■ Mitochondrial disorder (see list)  ■ Multiple sclerosis (MS)  ■ Muscular dystrophy (see list)  ■ Myasthenia gravis (MG)  ■ Parkinson's disease  ■ Scoliosis/Kyphoscoliosis  ■ Other, specify  E10g. Neurologic disorder	I1f. Neurologic Disorder  Amyotrophic lateral sclerosis (ALS) Cerebral palsy Cognitive dysfunction Dementia/Alzheimer's disease Developmental delay Down syndrome/Trisomy 21 Edward's syndrome/Trisomy 18 Epilepsy/seizure/seizure disorder Mitochondrial disorder (See list) Multiple sclerosis (MS) Muscular dystrophy (See list)

Question on 2019-20 Form	Question on 2020-21 Form
<ul> <li>Cerebral palsy</li> <li>Cognitive dysfunction</li> <li>Dementia/Alzheimer's disease</li> <li>Developmental delay</li> <li>Down syndrome/Trisomy 21</li> <li>Edwards Syndrome/Trisomy 18</li> <li>Epilepsy/Seizure/Seizure disorder</li> <li>Neuropathy</li> <li>Neural tube defects/Spina bifida (See list)</li> <li>Plegias/Paralysis/Quadriplegia</li> <li>Traumatic brain injury (TBI)</li> <li>Other, Specify</li> </ul>	<ul> <li>Myasthenia gravis (MG)</li> <li>Neural tube defects/Spina bifida (See list)</li> <li>Neuropathy</li> <li>Parkinson's disease</li> <li>Plegias/Paralysis/Quadriplegia</li> <li>Scoliosis/Kyphoscoliosis</li> <li>Traumatic brain injury (TBI), history of</li> <li>Other, specifiy</li> </ul>
E10m. Total # of pregnancies to date	(Deleted question)
E10m. Total # of pregnancies to date that resulted in a live birth	(Deleted question)
E10m. Specify total # of fetuses for current	(Deleted question)
pregnancy	
• 1	
• 2	
■ 3	
■ >3	
■ Unknown	
E10m. Specify gestational age in weeks	(Deleted question)
E10m. If gestation age in weeks unknown, specify	(Deleted question)
trimester of pregnancy	
■ 1 <sup>st</sup> (0 to 13 weeks 6/7 days)	
■ 2 <sup>nd</sup> (14 weeks 0/7 days to 27 weeks 6/7	
days)	
■ 3 <sup>rd</sup> (28 weeks 0/7 days to end)	
■ Unknown	
G1. Were any bacterial culture tests performed	(Deleted question)
with a collection date within three days of	' ' '
admission?	
■ Yes	
	1

Question on 2019-20 Form	Question on 2020-21 Form
■ No	
<ul><li>Unknown</li></ul>	
G2. If yes was there a positive culture for a	(Deleted question)
bacterial pathogen?	
■ Yes	
■ No	
■ Unknown	
G3a. If yes, specify Pathogen 1	(Deleted question)
Gb. Date of culture	(Deleted question)
G3c. Site where pathogen identified	(Deleted question)
■ Blood	
<ul><li>Bronchoalveolar lavage (BAL)</li></ul>	
<ul><li>Pleural fluid</li></ul>	
<ul><li>Cerebrospinal fluid (CSF)</li></ul>	
<ul><li>Sputum</li></ul>	
<ul><li>Endotracheal aspirate</li></ul>	
Other, specify	
G3d. If Staphylococcus aureus, specify	(Deleted question)
<ul><li>Methicillin resistant (MRSA)</li></ul>	
<ul><li>Methicillin sensitive (MMSA)</li></ul>	
Sensitivity unknown	
H1b. Adenovirus	(Deleted question)
<ul><li>Yes, positive</li></ul>	
<ul><li>Yes, negative,</li></ul>	
■ Not tested/Unknown	
H1b. Parainfluenza 1	(Deleted question)
• Yes, positive	
• Yes, negative,	
<ul> <li>Not tested/Unknown</li> </ul>	
■ Date	
H1b. Parainfluenza 2	(Deleted question)
<ul><li>Yes, positive</li></ul>	
<ul><li>Yes, negative,</li></ul>	
■ Not tested/Unknown	
■ Date	
H1b. Parainfluenza 3	(Deleted question)
<ul><li>Yes, positive</li></ul>	
<ul><li>Yes, negative,</li></ul>	
■ Not tested/Unknown	
■ Date	
H1b. Parainfluenza 4	(Deleted question)

Question on 2019-20 Form	Question on 2020-21 Form
<ul><li>Yes, positive</li></ul>	
<ul><li>Yes, negative,</li></ul>	
■ Not tested/Unknown	
■ Date	
H1b. Human metapneumovirus	(Deleted question)
<ul><li>Yes, positive</li></ul>	
<ul><li>Yes, negative,</li></ul>	
■ Not tested/Unknown	
■ Date	
H1b. Rhinovirus/Entervirus	(Deleted question)
<ul><li>Yes, positive</li></ul>	
<ul><li>Yes, negative,</li></ul>	
■ Not tested/Unknown	
■ Date	
H1b. Coronavirus type	(Deleted question)
<ul><li>Yes, positive</li></ul>	
<ul><li>Yes, negative,</li></ul>	
■ Not tested/Unknown	
■ Date	
(N/A)	K1c. Coronavirus SARS-CoV-2
	<ul><li>Yes, positive</li></ul>
	<ul><li>Yes, negative</li></ul>
	■ Not tested/Unknown
	■ Date
2c. Total Duration (days)	(Deleted question)
M1. Was a chest x-ray taken within 3 days of	(Deleted question)
hospitalization?	(beleted question)
• Yes	
■ No	
■ Unknown	
M2. Were any of these chest x-rays abnormal?	(Deleted question)
• Yes	(2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
■ No	
■ Unknown	
M2a. Date of first abnormal chest x-ray	(Deleted question)
M2b. For first abnormal chest x-ray, please check	(Deleted question)
all that apply	
<ul><li>Report not available</li></ul>	
<ul> <li>Air space density</li> </ul>	
<ul><li>Air space opacity</li></ul>	
<ul> <li>Bronchopneumonia/pneumonia</li> </ul>	

Question on 2019-20 Form	Question on 2020-21 Form
<ul><li>Cannot rule our pneumonia</li></ul>	
<ul><li>Consolidation</li></ul>	
<ul><li>Cavitation</li></ul>	
<ul> <li>ARDS( acute respiratory distress syndrome)</li> </ul>	
<ul><li>Lung infiltrate</li></ul>	
<ul> <li>Interstitial infiltrate</li> </ul>	
<ul><li>Lobar infiltrate</li></ul>	
<ul><li>Pleural effusion/empyema</li></ul>	
■ Other	
K1. Did the patient have any of the following new	N1. Did the patient have any of the following new
diagnoses at discharge? (check all that apply)	diagnoses at discharge? (check all that apply)
<ul> <li>Acute encephalopathy/encephalitis</li> </ul>	<ul> <li>Acute encephalopathy/encephalitis</li> </ul>
<ul> <li>Acute myocardial infarction</li> </ul>	<ul><li>Acute liver failure</li></ul>
<ul><li>Acute myocarditis</li></ul>	<ul> <li>Acute myocardial infarction</li> </ul>
<ul> <li>Acute renal failure/acute kidney injury</li> </ul>	<ul><li>Acute myocarditis</li></ul>
<ul> <li>Acute respiratory distress syndrome (ARDS)</li> </ul>	<ul> <li>Acute renal failure/acute kidney injury</li> </ul>
<ul> <li>Acute respiratory failure</li> </ul>	<ul> <li>Acute respiratory distress syndrome (ARDS)</li> </ul>
<ul><li>Asthma exacerbation</li></ul>	<ul> <li>Acute respiratory failure</li> </ul>
<ul><li>Bacteremia</li></ul>	<ul><li>Asthma exacerbation</li></ul>
<ul><li>Bronchiolitis</li></ul>	<ul><li>Bacteremia</li></ul>
<ul> <li>Congestive heart failure</li> </ul>	<ul><li>Bronchiolitis</li></ul>
<ul><li>COPD exacerbation</li></ul>	<ul><li>Bronchitis</li></ul>
<ul><li>Diabetic ketoacidosis</li></ul>	<ul> <li>Chronic lung disease of prematuriy/BPD</li> </ul>
<ul><li>Guillain-Barre syndrome</li></ul>	<ul> <li>Congestive heart failure</li> </ul>
<ul><li>Hemophagocytic syndrome</li></ul>	<ul><li>COPD exacerbation</li></ul>
<ul><li>Invasive pulmonary aspergillosis</li></ul>	<ul><li>Diabetic ketoacidosis</li></ul>
<ul><li>Reyes syndrome</li></ul>	<ul> <li>Disseminated intravascular coagulation (DIC)</li> </ul>
<ul><li>Rhabdomyolysis</li></ul>	<ul><li>Guillain-Barre syndrome</li></ul>
<ul><li>Pneumonia</li></ul>	<ul><li>Hemophagocytic syndrome</li></ul>
<ul><li>Sepsis</li></ul>	<ul><li>Invasive pulmonary aspergillosis</li></ul>
<ul><li>Seizsures</li></ul>	<ul><li>Kawasaki disease</li></ul>
■ Stroke (CVA)	<ul> <li>Multisystem inflammatory syndrome in</li> </ul>
	children (MIS-C)
	<ul> <li>Other thrombosis/embolism/coagulopathy</li> </ul>
	<ul><li>Pneumonia</li></ul>
	<ul><li>Pulmonary embolism (PE)</li></ul>
	<ul> <li>Reyes syndrome</li> </ul>
	<ul> <li>Rhabdomyolysis</li> </ul>
	■ Sepsis
	• Seizures
	■ Stroke (CVA)
	<ul><li>Toxic shock syndrome (TSS)</li></ul>

### 2) FluSurv-NET/RSV Laboratory Survey

### Question on 2019-20 form

# 5a. Select kit name(s) (manufacturer) for all molecular assays performed at the laboratory: (Check all that apply)

(https://www.cdc.gov/flu/professionals/diagnosis/table-nucleic-acid-detection.html)

- ID Now<sup>™</sup> Influenza A&B (CLIA Waived), (Abbott)†
- Accula Flu A/Flu B (Mesa Biotech, Inc.)†
- ARIES® Flu A/B & RSV Assay, (Luminex)
- CDC Human Influenza Virus Real-Time RT-PCR Diagnostic Panel (Influenza A/B Typing Kit4), (CDC Influenza Division)
- CDC Human Influenza Virus Real-Time RT-PCR Detection and Characterization Panel, (CDC Influenza Division)
- CDC Influenza A/H5 (Asian Lineage) Virus Real-Time RT-PCR Primer and Probe Set, (CDC Influenza Division)
- CDC Influenza 2009 A(H1N1)pdm Real-Time RT-PCR Panel, (CDC Influenza Division) Cepheid Xpert Flu Assay, (Cepheid)
- Cepheid Xpert Flu/RSV XC Assay, (Cepheid)
- Cepheid Xpert Express Flu Assay, (Cepheid)
- Cepheid Xpert Express Flu/RSV Assay, (Cepheid)
- Cobas Liat Influenza A/B, (Roche Diagnostics)†
- Cobas Liat Influenza A/B & RSV, (Roche Diagnostics)†
- ePlex Respiratory Pathogen Panel (GenMark Diagnostices)\*
- eSensor® Respiratory Viral Panel (RVP), (GenMark Diagnostics)\*
- FilmArray® Respiratory Panel, (BioFire Diagnostics, LLC)\*
- FilmArray® Respiratory Panel, EZ (BioFire Diagnostics, LLC)\*
- Idylla Respiratory IFV-RSV Panel, (Biocartis)\*
- IMDx Flu A/B and RSV for Abbott m2000, (IMDx)
- Lyra Influenza A+B Assay, (Quidel)

### Question on 2020-21 form

5a. Select kit name(s) (manufacturer) for all molecular assays performed at the laboratory: (Check all that apply)

(https://www.cdc.gov/flu/professionals/diagnosis/tablenucleic-acid-detection.html) Multiplex Assays Authorized for Simultaneous Detectiong of Influenza Viruses and SARS-CoV-2 by FDA:

(https://www.cdc.gov/flu/professionals/diagnosis/table-flu-covid19-detection.html)

- ID Now<sup>™</sup> Influenza A&B (CLIA Waived), (Abbott)†
- Accula Flu A/Flu B (Mesa Biotech, Inc.)†
- ARIES® Flu A/B & RSV Assay, (Luminex)
- BioFire Respiratory Panel 2.1 (RP2.1) (BioFire Diagnostics, LLC)‡\*
- CDC Human Influenza Virus Real-Time RT-PCR Diagnostic Panel (Influenza A/B Typing Kit4), (CDC Influenza Division)
- CDC Human Influenza Virus Real-Time RT-PCR Detection and Characterization Panel, (CDC Influenza Division)
- CDC Influenza A/H5 (Asian Lineage) Virus Real-Time RT-PCR Primer and Probe Set, (CDC Influenza Division)
- CDC Influenza 2009 A(H1N1)pdm Real-Time RT-PCR Panel, (CDC Influenza Division)
- CDC Influenza SARS-CoV-2 (Flu SC2) Multiplex Assay (CDC Influenza Division)
- Cepheid Xpert Flu Assay, (Cepheid)
- Cepheid Xpert Flu/RSV XC Assay, (Cepheid)
- Cepheid Xpert Express Flu Assay, (Cepheid)
- Cepheid Xpert Express Flu/RSV Assay, (Cepheid)
- Cobas Liat Influenza A/B, (Roche Diagnostics)†
- Cobas Liat Influenza A/B & RSV, (Roche Diagnostics)†
- ePlex Respiratory Pathogen Panel (GenMark Diagnostices)\*
- eSensor® Respiratory Viral Panel (RVP), (GenMark Diagnostics)\*
- FilmArray® Respiratory Panel, (BioFire Diagnostics, LLC)\*
- FilmArray® Respiratory Panel, EZ (BioFire Diagnostics, LLC)\*

- Nx-TAG Respiratory Pathogen Panel, (Luminex Molecular Diagnostics Inc)\*
- Panther Fusion® Flu A/B RSV, (Assay Hologic)
- Prodesse PROFLU™, (GenProbe/Hologic)
- Prodesse ProFAST™, (GenProbe/Hologic)\*
- Silaris Infuenza A & Btg, (Sekisui Diagnostic)†
- Solana Influenza A+B Assay, (Quidel)
   Simplexa™
- Flu A/B & RSV, (Focus Diagnostics, 3M)
   Simplexa™
- Flu A/B & RSV Direct, (Focus Diagnostics, 3M)
- Simplexa<sup>™</sup> Influenza A H1N1 (2009), (Focus Diagnostics, 3M) Verigene<sup>®</sup>
- Respiratory Virus Nucleic Acid Test, (Nanosphere, Inc)
- Verigene® Respiratory Virus Plus Nucleic Acid Test (RV+), (Luminex)
- Verigene® Respiratory Pathogen Nucleic Acid Test (RP Flex)\*, (Luminex)
- x-TAG® Respiratory Viral Panel Fast (RVP FAST)\*, (Luminex Molecular Diagnostics Inc)
- In-house developed PCR assay
- Other, specify
- 5b. If more than one kit is selected above, please select the <u>one kit</u> that is (or will be) used most frequently for molecular assay at the laboratory during the current influenza season.
  - ID Now<sup>™</sup> Influenza A&B (CLIA Waived), (Abbott)†
  - Accula Flu A/Flu B (Mesa Biotech, Inc.)†
  - ARIES® Flu A/B & RSV Assay, (Luminex)
  - CDC Human Influenza Virus Real-Time RT-PCR Diagnostic Panel (Influenza A/B Typing Kit4), (CDC Influenza Division)
  - CDC Human Influenza Virus Real-Time RT-PCR Detection and Characterization Panel, (CDC Influenza Division)
  - CDC Influenza A/H5 (Asian Lineage) Virus Real-Time RT-PCR Primer and Probe Set, (CDC Influenza Division)
  - CDC Influenza 2009 A(H1N1)pdm Real-Time RT-PCR Panel, (CDC Influenza Division) Cepheid Xpert Flu Assay, (Cepheid)

- Idylla Respiratory IFV-RSV Panel, (Biocartis)\*
- IMDx Flu A/B and RSV for Abbott *m*2000, (IMDx)
- Lyra Influenza A+B Assay, (Quidel)
- Nx-TAG Respiratory Pathogen Panel, (Luminex Molecular Diagnostics Inc)\*
- Panther Fusion® Flu A/B RSV, (Assay Hologic)
- Prodesse PROFLU™, (GenProbe/Hologic)
- Prodesse ProFAST™, (GenProbe/Hologic)\*
- QIAstat-Dx Respiratory SARS-CoV-2 Panel (QIAGEN)‡\*
- Silaris Infuenza A & Btg, (Sekisui Diagnostic)†
- Solana Influenza A+B Assay, (Quidel)
- Simplexa<sup>™</sup> Flu A/B & RSV, (Focus Diagnostics, 3M)
- Simplexa<sup>™</sup> Flu A/B & RSV Direct, (Focus Diagnostics, 3M)
- Simplexa™ Influenza A H1N1 (2009), (Focus Diagnostics, 3M)
- Verigene® Respiratory Virus Nucleic Acid Test, (Nanosphere, Inc)
- Verigene® Respiratory Virus Plus Nucleic Acid Test (RV+), (Luminex)
- Verigene® Respiratory Pathogen Nucleic Acid Test (RP Flex)\*, (Luminex)
- x-TAG® Respiratory Viral Panel Fast (RVP FAST)\*, (Luminex Molecular Diagnostics Inc)
- In-house developed PCR assay
- Other, specify
- 5b. If more than one kit is selected above, please select the <u>one kit</u> that is (or will be) used most frequently for molecular assay at the laboratory during the current influenza season.
  - ID Now<sup>™</sup> Influenza A&B (CLIA Waived), (Abbott)†
  - Accula Flu A/Flu B (Mesa Biotech, Inc.)†
  - ARIES® Flu A/B & RSV Assay, (Luminex)
  - BioFire Respiratory Panel 2.1 (RP2.1) (BioFire Diagnostics, LLC)‡\*
  - CDC Human Influenza Virus Real-Time RT-PCR Diagnostic Panel (Influenza A/B Typing Kit4), (CDC Influenza Division)
  - CDC Human Influenza Virus Real-Time RT-PCR Detection and Characterization Panel, (CDC Influenza Division)
  - CDC Influenza A/H5 (Asian Lineage) Virus Real-Time RT-PCR Primer and Probe Set, (CDC Influenza Division)
  - CDC Influenza 2009 A(H1N1)pdm Real-Time RT-PCR Panel, (CDC Influenza Division)

- Cepheid Xpert Flu/RSV XC Assay, (Cepheid)
- Cepheid Xpert Express Flu Assay, (Cepheid)
- Cepheid Xpert Express Flu/RSV Assay, (Cepheid)
- Cobas Liat Influenza A/B, (Roche Diagnostics)†
- Cobas Liat Influenza A/B & RSV, (Roche Diagnostics)†
- ePlex Respiratory Pathogen Panel (GenMark Diagnostices)\*
- eSensor® Respiratory Viral Panel (RVP), (GenMark Diagnostics)\*
- FilmArray® Respiratory Panel, (BioFire Diagnostics, LLC)\*
- FilmArray® Respiratory Panel, EZ (BioFire Diagnostics, LLC)\*
- Idylla Respiratory IFV-RSV Panel, (Biocartis)\*
- IMDx Flu A/B and RSV for Abbott m2000, (IMDx)
- Lyra Influenza A+B Assay, (Quidel)
- Nx-TAG Respiratory Pathogen Panel, (Luminex Molecular Diagnostics Inc)\*
- Panther Fusion® Flu A/B RSV, (Assay Hologic)
- Prodesse PROFLU™, (GenProbe/Hologic)
- Prodesse ProFAST™, (GenProbe/Hologic)\*
- Silaris Infuenza A & Btg, (Sekisui Diagnostic)†
- Solana Influenza A+B Assay, (Quidel)
   Simplexa™
- Flu A/B & RSV, (Focus Diagnostics, 3M)
   Simplexa™
- Flu A/B & RSV Direct, (Focus Diagnostics, 3M)
- Simplexa<sup>™</sup> Influenza A H1N1 (2009), (Focus Diagnostics, 3M) Verigene<sup>®</sup>
- Respiratory Virus Nucleic Acid Test, (Nanosphere, Inc)
- Verigene® Respiratory Virus Plus Nucleic Acid Test (RV+), (Luminex)
- Verigene® Respiratory Pathogen Nucleic Acid Test (RP Flex)\*, (Luminex)
- x-TAG® Respiratory Viral Panel Fast (RVP FAST)\*, (Luminex Molecular Diagnostics Inc)
- In-house developed PCR assay
- Other, specify

- CDC Influenza SARS-CoV-2 (Flu SC2) Multiplex Assay (CDC Influenza Division)
- Cepheid Xpert Flu Assay, (Cepheid)
- Cepheid Xpert Flu/RSV XC Assay, (Cepheid)
- Cepheid Xpert Express Flu Assay, (Cepheid)
- Cepheid Xpert Express Flu/RSV Assay, (Cepheid)
- Cobas Liat Influenza A/B, (Roche Diagnostics)†
- Cobas Liat Influenza A/B & RSV, (Roche Diagnostics)†
- ePlex Respiratory Pathogen Panel (GenMark Diagnostices)\*
- eSensor® Respiratory Viral Panel (RVP), (GenMark Diagnostics)\*
- FilmArray® Respiratory Panel, (BioFire Diagnostics, LLC)\*
- FilmArray® Respiratory Panel, EZ (BioFire Diagnostics, LLC)\*
- Idylla Respiratory IFV-RSV Panel, (Biocartis)\*
- IMDx Flu A/B and RSV for Abbott *m*2000, (IMDx)
- Lyra Influenza A+B Assay, (Quidel)
- Nx-TAG Respiratory Pathogen Panel, (Luminex Molecular Diagnostics Inc)\*
- Panther Fusion® Flu A/B RSV, (Assay Hologic)
- Prodesse PROFLU™, (GenProbe/Hologic)
- Prodesse ProFAST™, (GenProbe/Hologic)\*
- QIAstat-Dx Respiratory SARS-CoV-2 Panel (QIAGEN)‡\*
- Silaris Infuenza A & Btg, (Sekisui Diagnostic)†
- Solana Influenza A+B Assay, (Quidel)
- Simplexa<sup>™</sup> Flu A/B & RSV, (Focus Diagnostics, 3M)
- Simplexa<sup>™</sup> Flu A/B & RSV Direct, (Focus Diagnostics, 3M)
- Simplexa™ Influenza A H1N1 (2009), (Focus Diagnostics, 3M)
- Verigene® Respiratory Virus Nucleic Acid Test, (Nanosphere, Inc)
- Verigene® Respiratory Virus Plus Nucleic Acid Test (RV+), (Luminex)
- Verigene® Respiratory Pathogen Nucleic Acid Test (RP Flex)\*, (Luminex)
- x-TAG® Respiratory Viral Panel Fast (RVP FAST)\*, (Luminex Molecular Diagnostics Inc)
- In-house developed PCR assay Other, specify

5d. What testing kit does the testing facility use

5d. What testing kit does the testing facility use (or will

## (or will use) most often to perform influenza A sub-typing during the current influenza season?

- ePlex Respiratory Pathogen Panel (GenMark Diagnostics)
- eSensor® Respiratory Viral Panel (RVP), (GenMark Diagnostics)
- FilmArray Respiratory Panel, (BioFire Diagnostics, LLC)
- Idylla Respiratory IFV-RSV Panel, (Biocartis)
- Nx-TAG Respiratory Pathogen Panel (Luminex Molecular Diagnostics Inc)
- Prodesse ProFAST™, (GenProbe/Hologic)
- Verigene® Respiratory Pathogen Nucleic Acid Test (RP Flex), (Nanosphere, Inc)
- x-TAG® Respiratory Viral Panel Fast (RVP FAST), (Luminex Molecular Diagnostics Inc)
- In-house developed PCR assay
- Other, specify

# 8. Based on tests that were performed during the 2018-2019 influenza season, approximately what percent of the time are each of these test types used to test for flu overall?

- \_\_% Viral culture
- \_\_% Indirect fluorescent antibody stain (IFA)/direct fluorescent antibody stain (DFA)
- \_\_% Rapid influenza diagnostic test (rapid test, RIDT)
- \_\_% Rapid Molecular Assay
- \_\_% Standard Molecular Assay singleplex or dualplex
- \_\_% Standard Molecular Assay multiplex /respiratory viral panel

## 13a. Select kit name(s) (manufacturer) for all molecular assays used at the laboratory

- ARIES® Flu A/B & RSV Assay (Luminex)
- Alere<sup>™</sup> i RSV (Alere)
- Cepheid Xpert Flu/RSV XC Assay (Cepheid)
- Cepheid Xpert Xpress Flu/RSV Assay (Cepheid)
- Cobas® Liat® Influenza A/B and RSV Assay (Roche Molecular Systems, Inc.)
- eSensor® Respiratory Viral Panel (RVP) (GenMark Diagnostics)
- FilmArray Respiratory Panel (BioFire Diagnostics LLC)
- FilmArray Respiratory Panel EZ (BioFire

## use) most often to perform influenza A sub-typing during the current influenza season?

- BioFire Respiratory Panel 2.1 (RP2.1) (BioFire Diagnostics, LL)
- ePlex Respiratory Pathogen Panel (GenMark Diagnostices)\*
- eSensor® Respiratory Viral Panel (RVP), (GenMark Diagnostics)
- FilmArray Respiratory Panel, (BioFire Diagnostics, LLC)
- Idylla Respiratory IFV-RSV Panel, (Biocartis)
- Nx-TAG Respiratory Pathogen Panel (Luminex Molecular Diagnostics Inc)
- QIAstat-Dx Respiratory SARS-CoV-2 Panel (QIAGEN)
- Verigene® Respiratory Pathogen Nucleic Acid Test (RP Flex), (Nanosphere, Inc)
- x-TAG® Respiratory Viral Panel Fast (RVP FAST), (Luminex Molecular Diagnostics Inc)
- In-house developed PCR assay
- Other, specify

# 8. Based on tests that were performed during the 2019-2020 influenza season, approximately what percent of the time are each of these test types used to test for flu overall?

- \_\_% Viral culture
- \_\_% Indirect fluorescent antibody stain
   (IFA)/direct fluorescent antibody stain (DFA)
- \_\_% Rapid influenza diagnostic test (rapid test, RIDT)
- \_\_% Rapid Molecular Assay
- \_\_% Standard Molecular Assay singleplex or dualplex
- \_\_% Standard Molecular Assay multiplex /respiratory viral panel

## 13a. Select kit name(s) (manufacturer) for all molecular assays used at the laboratory

- ARIES® Flu A/B & RSV Assay (Luminex)
- Alere<sup>™</sup> I RSV (Alere)
- Cepheid GeneXpert® Infinity-48 System (Cepheid)
- Cepheid Xpert Flu/RSV XC Assay (Cepheid)
- Cepheid Xpert Xpress Flu/RSV Assay (Cepheid)
- Cobas® Liat® Influenza A/B and RSV Assay (Roche Molecular Systems, Inc.)
- ePlex® Respiratory Pathogen Panel (GenMark Diagnostics)
- eSensor® Respiratory Viral Panel (RVP)

- Diagnostics LLC)
- IMDx Flu A/B and RSV for Abbott m2000 (IMDx)
- Prodesse PROFLU™+ (GenProbe/Hologic)
- Simplexa<sup>™</sup> Flu A/B & RSV (Focus Diagnostics, 3M)
- Simplexa™ Flu A/B & RSV Direct (Focus Diagnostics, 3M)
- Verigene® Respiratory Virus Nucleic Acid Test (Luminex)
- Verigene® Respiratory Virus Plus Nucleic Acid Test (RV+) (Luminex)
- Verigene® Respiratory Pathogen Nucleic Acid Test (RP Flex) (Luminex)
- x-TAG® Respiratory Viral Panel Fast (RVP FAST) (Luminex Molecular Diagnostics Inc)
- In-house developed PCR assay
- CDC Respiratory Syncytial Virus Real-Time RT-PCR Assay
- Other, specify

- (GenMark Diagnostics)
- FilmArray Respiratory Panel (BioFire Diagnostics LLC)
- FilmArray Respiratory Panel EZ (BioFire Diagnostics LLC)
- IMDx Flu A/B and RSV for Abbott m2000 (IMDx)
   NxTAG® Respiratory Pathogen Panel (Luminex Molecular Diagnostics Inc.)
- Panther Fusion™ Flu A/B RSV (Hologic)
- Prodesse PROFLU™+ (GenProbe/Hologic)
- Simplexa™ Flu A/B & RSV (Focus Diagnostics, 3M)
- Simplexa<sup>™</sup> Flu A/B & RSV Direct (Focus Diagnostics, 3M)
- Verigene® Respiratory Virus Nucleic Acid Test (Luminex)
- Verigene® Respiratory Virus Plus Nucleic Acid Test (RV+) (Luminex)
- Verigene® Respiratory Pathogen Nucleic Acid
   Test (RP Flex) (Luminex)
- xTAG® Respiratory Viral Panel (RVP or RVP FAST or RVP Fast v2) (Luminex Corporation)
- In-house developed PCR assay
- CDC Respiratory Syncytial Virus Real-Time RT-PCR Assay
- Other, specify

# 13b. If more than one kit is selected above, please select the <u>one kit</u> that is (or will be) used most frequently for molecular assays at the laboratory during the current RSV season (select one)

- ARIES® Flu A/B & RSV Assay (Luminex)
- Alere™ i RSV (Alere)
- Cepheid Xpert Flu/RSV XC Assay (Cepheid)
- Cepheid Xpert Xpress Flu/RSV Assay (Cepheid)
- Cobas® Liat® Influenza A/B and RSV Assay (Roche Molecular Systems, Inc.)
- eSensor® Respiratory Viral Panel (RVP) (GenMark Diagnostics)
- FilmArray Respiratory Panel (BioFire Diagnostics LLC)
- FilmArray Respiratory Panel EZ (BioFire Diagnostics LLC)
- IMDx Flu A/B and RSV for Abbott *m*2000

13b. If more than one kit is selected above, please select the <u>one kit</u> that is (or will be) used most frequently for molecular assays at the laboratory during the current RSV season (select one)

- ARIES® Flu A/B & RSV Assay (Luminex)
- Alere™ I RSV (Alere)
- Cepheid GeneXpert® Infinity-48 System (Cepheid)
- Cepheid Xpert Flu/RSV XC Assay (Cepheid)
- Cepheid Xpert Xpress Flu/RSV Assay (Cepheid)
- Cobas® Liat® Influenza A/B and RSV Assay (Roche Molecular Systems, Inc.)
- ePlex® Respiratory Pathogen Panel (GenMark Diagnostics)
- eSensor® Respiratory Viral Panel (RVP) (GenMark Diagnostics)
- FilmArray Respiratory Panel (BioFire Diagnostics)

### (IMDx)

- Prodesse PROFLU™+ (GenProbe/Hologic)
- Simplexa<sup>™</sup> Flu A/B & RSV (Focus Diagnostics, 3M)
- Simplexa™ Flu A/B & RSV Direct (Focus Diagnostics, 3M)
- Verigene® Respiratory Virus Nucleic Acid Test (Luminex)
- Verigene® Respiratory Virus Plus Nucleic Acid Test (RV+) (Luminex)
- Verigene® Respiratory Pathogen Nucleic Acid Test (RP Flex) (Luminex)
- x-TAG® Respiratory Viral Panel Fast (RVP FAST) (Luminex Molecular Diagnostics Inc)
- In-house developed PCR assay
- CDC Respiratory Syncytial Virus Real-Time RT-PCR Assav
- Other, specify

### LLC)

- FilmArray Respiratory Panel EZ (BioFire Diagnostics LLC)
- IMDx Flu A/B and RSV for Abbott m2000 (IMDx)
   NxTAG® Respiratory Pathogen Panel (Luminex Molecular Diagnostics Inc.)
- Panther Fusion™ Flu A/B RSV (Hologic)
- Prodesse PROFLU™+ (GenProbe/Hologic)
- Simplexa<sup>™</sup> Flu A/B & RSV (Focus Diagnostics, 3M)
- Simplexa<sup>™</sup> Flu A/B & RSV Direct (Focus Diagnostics, 3M)
- Verigene® Respiratory Virus Nucleic Acid Test (Luminex)
- Verigene® Respiratory Virus Plus Nucleic Acid Test (RV+) (Luminex)
- Verigene® Respiratory Pathogen Nucleic Acid Test (RP Flex) (Luminex)
- xTAG® Respiratory Viral Panel (RVP or RVP FAST or RVP Fast v2) (Luminex Corporation)
- In-house developed PCR assay
- CDC Respiratory Syncytial Virus Real-Time RT-PCR Assay

### Other, specify

- 18. Based on tests that were performed during the 2018-2019 RSV season, approximately what percent of the time are each of these test types used to test for RSV in pediatric patients (aged 0–17) years?
  - % Viral culture
  - \_\_% Indirect fluorescent antibody stain (IFA)/direct fluorescent antibody stain (DFA)
  - % Serology (IgG or IgM)
  - \_\_% Rapid antigen diagnostic test (rapid test, RADT)
  - \_\_% Molecular Assay singleplex (RSV only)
  - \_\_% Molecular Assay dualplex (RSV/influenza)
  - \_\_% Molecular Assay multiplex /respiratory viral panel (RVP)
  - Not applicable (no pediatric testing)

- 18. Based on tests that were performed during the 2019-2020 RSV season, approximately what percent of the time are each of these test types used to test for RSV in pediatric patients (aged 0-17) years?
  - \_\_% Viral culture
  - \_\_% Indirect fluorescent antibody stain
     (IFA)/direct fluorescent antibody stain (DFA)
  - \_\_% Serology (IgG or IgM)
  - \_\_% Rapid antigen diagnostic test (rapid test, RADT)
  - \_\_% Molecular Assay singleplex (RSV only)
  - \_\_% Molecular Assay dualplex (RSV/influenza)
  - \_\_% Molecular Assay multiplex /respiratory viral panel (RVP)
  - Not applicable (no pediatric testing)

- 19. Based on tests that were performed during
- 19. Based on tests that were performed during the

# the 2018-2019 RSV season, approximately what percent of the time are each of these test types used to test for RSV in <u>adult patients (aged ≥18</u> years)?

- \_\_% Viral culture
- \_\_% Indirect fluorescent antibody stain (IFA)/direct fluorescent antibody stain (DFA)
- \_\_% Serology (IgG or IgM)
- \_\_% Rapid antigen diagnostic test (rapid test, RADT)
- \_\_% Molecular Assay singleplex (RSV only)
- \_\_% Molecular Assay dualplex (RSV/influenza)
- \_\_% Molecular Assay multiplex /respiratory viral panel (RVP)
- Not applicable (no adult testing)

# 2019-2020 RSV season, approximately what percent of the time are each of these test types used to test for RSV in adult patients (aged ≥18 years)?

- % Viral culture
- \_\_% Indirect fluorescent antibody stain
   (IFA)/direct fluorescent antibody stain (DFA)
- \_\_\_% Serology (IgG or IgM)
- \_\_% Rapid antigen diagnostic test (rapid test, RADT)
- \_\_\_% Molecular Assay singleplex (RSV only)
- \_\_% Molecular Assay dualplex (RSV/influenza)
- \_\_% Molecular Assay multiplex /respiratory viral panel (RVP)
- Not applicable (no adult testing)

## **HAIC**

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

Note: Changes on the 2021 CRF are highlighted in yellow.

Question on 2020 form	Question on 2021 form				
Title: 2020 Carbapenem Resistant Enterobacteriaceae (CRE)/	Title: 2021 Carbapenem Resistant Enterobacteriaceae (CRE)/				
Carbapenem Resistant A. baumannii (CRAB) Multi-site Gram-	Carbapenem Resistant A. baumannii (CRAB) Multi-site Gram-				
Negative Surveillance Initiative (MuGSI) Healthcare Associated	Negative Surveillance Initiative (MuGSI) Healthcare Associated				
Infection Community Interface (HAIC) Case Report	Infection Community Interface (HAIC) Case Report				
11. Incident specimen collection site	11. Incident specimen collection site				
• Blood	• Blood				
• Bone	• Bone				
• CSF	<ul> <li>Bronchoalveolar lavage (CRAB only, complete Q23c)</li> </ul>				
• Internal body site (specify):	• CSF				
Joint/synovial fluid	• Internal body site (specify):				
Muscle	Joint/synovial fluid				
Peritoneal fluid	• Muscle				
Pericardial fluid	Peritoneal fluid				
Pleural fluid	Pericardial fluid				
• Urine	Pleural fluid				
Other normally sterile site (specify):	• Sputum (CRAB only, complete Q23c)				
	<ul><li>Tracheal aspirate (CRAB only, complete Q23c)</li></ul>				
	• Urine				
	<ul><li>Wound (specify): (CRAB only)</li></ul>				
	• Other LRT site (specify):				
	(CRAB only, complete Q23c)				
	Other normally sterile site (specify):				
11. Incident specimen collection site	11. Incident specimen collection site				
Abscess, not skin	• Abscess, not skin				
AV fistula/graft infection	AV fistula/graft infection				
Bacteremia	Bacteremia				
Bursitis	Bursitis				
Catheter site infection (CVC)	Catheter site infection (CVC)				
Cellulitis	• Cellulitis				
Chronic ulcer/wound (not decubitus)	Chronic ulcer/wound (not decubitus)				
Empyema	• Empyema				
Endocarditis	Endocarditis				
Epidural abscess	Epidural abscess				
Meningitis	Meningitis				
Osteomyelitis	Osteomyelitis				
Peritonitis	Peritonitis				
Pneumonia	• Pneumonia (CRAB cases, complete Q23c)				
Pyelonephritis	Pyelonephritis				
Septic arthritis	Septic arthritis				
Septic emboli	Septic emboli				
Septic shock	Septic shock				
• Skin abscess	• Skin abscess				

Surgical incision infection	Surgical incision infection
• Surgical site infection (internal)	Surgical site infection (internal)
Traumatic wound	Traumatic wound
Urinary tract infection	Urinary tract infection
• Other (specify):	• Other (specify):
· · · // <del></del>	, , , , <u> </u>
22d. Urine culture only: Was a blood culture positive in the 3	
calendar days before through the 3 calendar days after the DISC	
for the same MuGSI organism?	
• Yes	
• No	
• Unknown	
25. Was the same organism (Q10) cultured from a different sterile	
site or urine in the 30 days after the DISC?	
• Yes	
• No	
• Unknown	
If yes, source (check all that apply):	
• Blood	
• Bone	
• CSF	
Internal body site (specify):	
• Joint/synovial fluid	
• Muscle	
Peritoneal fluid	
Pericardial fluid	
Pleural fluid	
• Urine	
Other normally sterile site (specify):	
26. Enterobacteriaceae only: Were cultures of sterile site(s) or	
urine positive for a different organism (Q10) in the 30 days before	
the DISC?	
• Yes	
• No	
• Unknown	
• N/A	
If yes, source (check all that apply):	
• Blood	
• Bone	
• CSF	
• Internal body site (specify):	
Joint/synovial fluid	
• Muscle	
Peritoneal fluid	
Pericardial fluid	
Pleural fluid	
• Urine	
Other normally sterile site (specify):	
If yes, indicate organism and associated state ID for the incident	

<ul> <li>Enterobacter cloacae</li> <li>Klebsiella aerogenes</li> <li>Klebsiella pneumoniae</li> <li>Klebsiella oxytoca</li> <li>27a. A. baumannii cultures only: Was cultures of other sterile site(s) or urine positive for another A. baumannii in in the 30 days after the DISC?</li> <li>Yes</li> <li>No</li> </ul>		
Enterobacter claacae     **(klebsiella parcumoniae     **(klebsiella parcumonial parc	closest to the DISC:	
Klebsiella proumoniae     Klebsiella proumonia     Kleb	• Escherichia coli	
• (Rebsiella pneumoniae • (Rebsiella oxytoca 27a. A baumannii cultures only: Was cultures of other sterile site(s) or urine positive for another A. baumannii in in the 30 days after the DISC? • Yes • Yes • No • Uhknown • N/A  If yes, source (check all that apply): • Blood • Bone • CSF • Internal body site (specify): • Joint/synovial fluid • Wrine • Perticardial fluid • Pericardial fluid • Pericardial fluid • Urine • Other normally sterile site (specify): • If yes, state ID for the incident case closest to the DISC:  27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC? • Yes • No • Unknown • N/A  27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC • Non-invasive positive pressure ventilation (CPAP or BIPAP) at any time in the 7 calendar days before the DISC • Neboulizer treatment at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 cal	• Enterobacter cloacae	
* Kiebsiella oxytoca 27a. A. baumannii cultures only: Was cultures of other sterile site(s) or urine positive for another A. baumannii in in the 30 days after the DISC?  * Yes  * No  * No  * Unknown  * N/A  * Blood  * Bone  * CSF  * Internal body site (specify):  * Joint/synovial fluid  * Pericardial fluid  * Pericardial fluid  * Pleural fluid  * No report available  * Acute respiratory distress syndrome (ARDS)  * A spate mental syndrome in the 7 calendar days before  * No report available  *	Klebsiella aerogenes	
27a. A. boumannii cultures only: Was cultures of other sterile site(s) or urine positive for another A. baumannii in in the 30 days after the DISC?  • Yes • No • Unknown • N/A  I Spone • CSF • Internal body site (specify):  • Joint/synovial fluid • Muscle • Pericardial fluid • Pericardial fluid • Pericardial fluid • Urine • Other normally sterile site (specify):  I Yes, State ID for the incident case closest to the DISC:  27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  • Yes • No • Unknown • N/A  27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC • 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 • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the	Klebsiella pneumoniae	
site(s) or urine positive for another A. baumannii in in the 30 days after the DISC?  • Yes  • No  • NoNA  • N/A  • If yes, source (check all that apply): • Iblood  • Bone • CSF • Internal body site (specify): • Ioinit/synovial fluid • Pericardial fluid • Pericordial fluid • Pericordial fluid • Pericordial fluid • Pericordial fluid • O'ther normally sterile site (specify):  • If yes, state ID for the incident case closest to the DISC:  27b. A. bournannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  • Yes • No • No • Unknown • N/A  27c. A. bournannii cultures only: Risk factors in the 7 days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation	Klebsiella oxytoca	
after the DISC?  *Yes  *No  *Unknown  *N/A  If yes, source (check all that apply):  *Blood  *Bone  *CSF  *Internal body site (specify):  *Joint/synovial fluid  *Unuscle  *Pericardial fluid  *Pericardial fluid  *Periardial fluid  *Periardial fluid  *Urine  *Other normally sterile site (specify):  *Iyes, state ID for the incident case closest to the DISC:  *27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  *Yes  *No  *Unknown  *N/A  *27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC  *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  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in the 7 calendar days before the DISC  *Nebulizer treatment at any time in	27a. A. baumannii cultures only: Was cultures of other sterile	
• Yes • No • Unknown • N/A  If yes, source (check all that apply): • Blood • Bone • CSF • Internal body site (specify): • Joint/synovial fluid • Muscle • Peritoneal fluid • Pelevarial fluid • Pleural fluid • Virine • Other normally sterile site (specify):  If yes, state ID for the incident case closest to the DISC:  * Yes • Yes • Yes • Yes • Yes • No • Unknown • N/A • N/A • Unknown • N/A • Non-invasive positive for CRAB in the 30 days before the DISC? • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC • 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 • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before the DISC • Nechanical ventilation at any time in the 7 calendar days before t	site(s) or urine positive for another A. baumannii in in the 30 days	
No Unknown  N/A  If yes, source (check all that apply):  Other normally sterile site (specify):  Joint/synovial fluid  Pericardial fluid  Pericar	after the DISC?	
Unknown  Unknown  Unknown  Shone  CSF  Internal body site (specify):  Joint/synovial fluid  Muscle  Peritoneal fluid  Pericardial fluid  Pericard	• Yes	
• N/A  If yes, source (check all that apply):  • Blood  • Bone • CSF  • Internal body site (specify):  • Joint/synovial fluid  • Pericardial fluid  • Pericardial fluid  • Pericardial fluid  • Pericardial fluid  • Urine  • Other normally sterile site (specify):  • If yes, state ID for the incident case closest to the DISC:  27b. A baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  • Yes  • No  • Unknown  • N/A  27c. A baumannii cultures only: Risk factors in the 7 days before the DISC  • 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  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DIS	• No	
If yes, source (check all that apply):	• Unknown	
If yes, source (check all that apply):	• N/A	
Blood Bone CSF Internal body site (specify): Joint/synovial fluid Muscle Peritoneal fluid Pelcural fluid Pelcural fluid Pelcural fluid Other normally sterile site (specify): If yes, state ID for the incident case closest to the DISC: 27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC? Yes No Unknown N/A 27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC Non-invasive positive pressure ventilation at any time in the 7 calendar days before the DISC Non-invasive positive pressure ventilation at any time in the 7 calendar days before the DISC Non-invasive positive pressure ventilation at any time in the 7 calendar days before the DISC Non-invasive positive pressure ventilation at any time in the 7 calendar days before the DISC Non-invasive positive pressure ventilation at any time in the 7 calendar days before the DISC Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC Non-invasive positive pressure ventilation at any time in the 7 calendar days before the DISC Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC Non-invasive positive pressure ventilation at any time in the 7 calendar days before the DISC Complete question 23c ONLY for A. baumannii cultures where pneumonia is marked in question 17a.  23c. Chest Radiology Findings (check all that apply): Not done No report available Acute respiratory distress syndrome (ARDS) Air Space density/opacty		
Bone CSF Internal body site (specify): Joint/synovial fluid Muscle Peritoneal fluid Pericardial fluid		
• CSF • Internal body site (specify):		
• Internal body site (specify):  • Joint/synovial fluid  • Muscle  • Peritoneal fluid  • Pericardial fluid  • Pericardial fluid  • Urine  • Other normally sterile site (specify):  If yes, state ID for the incident case closest to the DISC:  27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  • Yes  • No  • Unknown  • N/A  27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC  • 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  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days bef		
<ul> <li>Joint/synovial fluid</li> <li>Muscle</li> <li>Peritoneal fluid</li> <li>Pericardial fluid</li> <li>Pleural fluid</li> <li>Urine</li> <li>Other normally sterile site (specify):  If yes, state ID for the incident case closest to the DISC:  27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  Yes  No  Unknown  N/A  27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC  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</li> <li>Nechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days</li></ul>		
<ul> <li>Muscle</li> <li>Peritoneal fluid</li> <li>Peritoneal fluid</li> <li>Peritoneal fluid</li> <li>Pleural fluid</li> <li>Urine</li> <li>Other normally sterile site (specify):  If yes, state ID for the incident case closest to the DISC:  27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  • Yes  • No  • Unknown  • N/A  27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC  • 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</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Complete question 23c ONLY for A. baumannii cultures where pneumonia is marked in question 17a.</li> <li>23c. Chest Radiology Findings (check all that apply):  Not done  No report available  Acuter respiratory distress syndrome (ARDS)  Air Space density/opacity</li> </ul>		
<ul> <li>Peritoneal fluid</li> <li>Pericardial fluid</li> <li>Pericardial fluid</li> <li>Pleural fluid</li> <li>Urine</li> <li>Other normally sterile site (specify):  If yes, state ID for the incident case closest to the DISC:  27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  Yes  No  Unknown  N/A  27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC  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</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the</li></ul>	•	
<ul> <li>Pericardial fluid</li> <li>Pleural fluid</li> <li>Other normally sterile site (specify):  If yes, state ID for the incident case closest to the DISC:  27b. A. bourmannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  Yes  No  Unknown  N/A  27c. A. bourmannii cultures only: Risk factors in the 7 days before the DISC  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  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Complete question 23c ONLY for A. baumannii cases from LRT site cultures or for non-LRT cultures where pneumonia is marked in question 17a.</li> <li>23c. Chest Radiology Findings (check all that apply):  Not done  No report available  Acute respiratory distress syndrome (ARDS)  Air Space density/opacity</li> </ul>		
<ul> <li>Pleural fluid</li> <li>Urine</li> <li>Other normally sterile site (specify):</li></ul>		
<ul> <li>Urine</li> <li>Other normally sterile site (specify): If yes, state ID for the incident case closest to the DISC: 27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?</li> <li>Yes</li> <li>No</li> <li>Unknown</li> <li>N/A</li> <li>27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC</li> <li>Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC</li> <li>Nebulizer treatment at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Complete question 23c ONLY for A. baumannii cases from LRT site cultures or for non-LRT cultures where pneumonia is marked in question 17a.</li> <li>23c. Chest Radiology Findings (check all that apply):  Not done  No report available  Acute respiratory distress syndrome (ARDS)  Air Space density/opacity</li> </ul>		
• Other normally sterile site (specify):		
If yes, state ID for the incident case closest to the DISC:  27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  • Yes • No • Unknown • N/A  27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC • 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 • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • 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 • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any time in the 7 calendar days before the DISC • Nebulizer treatment at any t		
27b. A. baumannii cultures only: Did the patient have a sputum culture positive for CRAB in the 30 days before the DISC?  • Yes  • No  • Unknown  • N/A  27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC  • 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  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical		
culture positive for CRAB in the 30 days before the DISC?  • Yes • No • Unknown • N/A 27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC • 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 • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at any time in the 7 calendar days before the DISC • Mechanical ventilation at		23a A haumannii cultures only: Did the natient have a sputum
<ul> <li>Yes</li> <li>No</li> <li>Unknown</li> <li>N/A</li> <li>27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC</li> <li>Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC</li> <li>Nebulizer treatment at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Complete question 23c ONLY for A. baumannii cultures where pneumonia is marked in question 17a.</li> <li>23c. Chest Radiology Findings (check all that apply):         <ul> <li>No report available</li> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul> </li> </ul>	· · · · · · · · · · · · · · · · · · ·	
<ul> <li>No</li> <li>Unknown</li> <li>N/A</li> <li>27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC</li> <li>Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC</li> <li>Nebulizer treatment at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Complete question 23c ONLY for A. baumannii cases from LRT site cultures or for non-LRT cultures where pneumonia is marked in question 17a.</li> <li>23c. Chest Radiology Findings (check all that apply):         <ul> <li>Not done</li> <li>No report available</li> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul> </li> </ul>		
<ul> <li>Unknown</li> <li>N/A</li> <li>27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC</li> <li>Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC</li> <li>Nebulizer treatment at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 ca</li></ul>		
<ul> <li>N/A</li> <li>27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC</li> <li>Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC</li> <li>Nebulizer treatment at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Complete question 23c ONLY for A. baumannii cases from LRT site cultures or for non-LRT cultures where pneumonia is marked in question 17a.</li> <li>23c. Chest Radiology Findings (check all that apply):         <ul> <li>Not done</li> <li>No report available</li> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul> </li> </ul>		
27c. A. baumannii cultures only: Risk factors in the 7 days before the DISC  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  Nechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days bef		
the DISC  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  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  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  Mechanical ventilation at any time in the 7 calendar days before the DISC  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  No report available  Acute respiratory distress syndrome (ARDS)  Air Space density/opacity		
<ul> <li>Non-invasive positive pressure ventilation (CPAP or BiPAP) at any time in the 7 calendar days before the DISC</li> <li>Nebulizer treatment at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Omplete question 23c ONLY for A. baumannii cases from LRT site cultures or for non-LRT cultures where pneumonia is marked in question 17a.</li> <li>23c. Chest Radiology Findings (check all that apply):         <ul> <li>No report available</li> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul> </li> </ul>		
any time in the 7 calendar days before the DISC  • Nebulizer treatment 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  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC		
<ul> <li>Nebulizer treatment at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Complete question 23c ONLY for A. baumannii cases from LRT site cultures or for non-LRT cultures where pneumonia is marked in question 17a.</li> <li>23c. Chest Radiology Findings (check all that apply):         <ul> <li>No report available</li> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul> </li> </ul>		· · · · · · · · · · · · · · · · · · ·
the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  • Mechanical ventilation at any time in the 7 calendar days before the DISC  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  • No report available  • Acute respiratory distress syndrome (ARDS)  • Air Space density/opacity		· · · · · · · · · · · · · · · · · · ·
<ul> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Mechanical ventilation at any time in the 7 calendar days before the DISC</li> <li>Complete question 23c ONLY for A. baumannii cases from LRT site cultures or for non-LRT cultures where pneumonia is marked in question 17a.</li> <li>23c. Chest Radiology Findings (check all that apply):         <ul> <li>Not done</li> <li>No report available</li> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul> </li> </ul>		
the DISC  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  No report available  Acute respiratory distress syndrome (ARDS)  Air Space density/opacity		
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  No report available  Acute respiratory distress syndrome (ARDS)  Air Space density/opacity		
cultures or for non-LRT cultures where pneumonia is marked in question 17a.  23c. Chest Radiology Findings (check all that apply):  Not done  No report available  Acute respiratory distress syndrome (ARDS)  Air Space density/opacity	the Disc	
question 17a.  23c. Chest Radiology Findings (check all that apply):  Not done  No report available  Acute respiratory distress syndrome (ARDS)  Air Space density/opacity		
<ul> <li>23c. Chest Radiology Findings (check all that apply):</li> <li>Not done</li> <li>No report available</li> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul>		The state of the s
<ul> <li>Not done</li> <li>No report available</li> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul>		question 1/a.
<ul> <li>Not done</li> <li>No report available</li> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul>		22c Choct Padiology Findings (chack all that apply)
<ul> <li>No report available</li> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul>		
<ul> <li>Acute respiratory distress syndrome (ARDS)</li> <li>Air Space density/opacity</li> </ul>		
<ul> <li>Air Space density/opacity</li> </ul>		
▼ Ground glass opacities/infiltrates		
		- Ground glass opacities/Illittrates

			<ul> <li>Bronchopneumonia/pneu</li> <li>Cannot rule out pneumon</li> <li>Cavitation</li> <li>Consolidation</li> <li>Infiltrate</li> <li>Pleural effusion</li> <li>Nodules</li> </ul>		
28a. Was the patient positive before the DISC?  • Yes  • No  • Unknown	ve for the same orgar	iism in the year			
28b. If yes, specify date of consitive culture in the year Date of culture:/_/State ID:	before: -				
<ul><li>29a. Enterobacteriaceae on MuGSI Enterobacteriaceae</li><li>Yes</li><li>No</li><li>Unknown</li></ul>					
29b. If yes, specify organism first positive Enterobacteria DISC: • Escherichia coli • Enterobacter cloacae • Klebsiella aerogenes • Klebsiella pneumoniae • Klebsiella oxytoca					
Date of culture:// State ID:	-				
30a. 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		<ul> <li>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?</li> <li>Yes</li> <li>No</li> <li>Unknown</li> </ul>			
30b. If yes, complete table below		24b. If yes, complete table below			
FIRST positive test for SARS-Cov-2 on or before the DISC:	Specimen Collection date// Unknown	Test Type  □ Molecular assay □ Serology □ Unknown □ Other (specify)	FIRST positive test for SARS-Cov-2 on or before the DISC:	Specimen Collection date// □ Unknown	Test Type  □ Molecular assay □ Antigen □ Serology □ Unknown □ Other

MOST RECENT positive	//	□ Molecular			(specify)
test for SARS-Cov-2 on	□ Unknown	assay	MOST RECENT positive	_/_/	□ Molecular
or before the DISC:		□ Serology	test for SARS-Cov-2 on	□ Unknown	assay
		□ Unknown	or before the DISC:		□ Antigen
		□ Other			□ Serology
		(specify)			□ Unknown
		, , , , , ,			□ Other
					(specify)
30c. COVID-NET Case ID:			24c. COVID-NET Case ID:		(-1//
30d. NNDSS IDs (Please pro	ovide at least one o	f the following	24d. NNDSS IDs (Please pro	ovide at least one o	of the following
when applicable):		J	when applicable):		Ü
Local Case ID:			Local Case ID:		
Local Record ID:			Local Record ID:		
State Case Identifier:			State Case Identifier:		
Legacy Case Identifier:			Legacy Case Identifier:		
· .			CDC 2019-nCOV ID:		
23. Was the incident speci	men polymicrobial?	)	25. Was the incident speci	men polymicrobial	?
Yes			• Yes		
No			• No		
Unknown			• Unknown		
24a. Was the incident spec	imen tested for car	bapenemase?	26a. Was the incident spec	imen tested for ca	rbapenemase?
Yes			• Yes		
No			• No		
Laboratory not testing			• Laboratory not testing		
Unknown			Unknown		
24b. If yes, what testing m	ethod was used (ch	eck all that apply)	26b. If yes, what testing m	ethod was used (cl	neck all that apply)
Non-Molecular Tests:			Non-Molecular Tests:		
• CarbaNP			CarbaNP		
Carbapenemase Inactivat	tion Method (CIM)		Carbapenemase Inactivation	tion Method (CIM)	
Disk Diffusion/ROSCO Dis	sk		Disk Diffusion/ROSCO Dis	sk	
E-test			• E-test		
Modified Carbapenemas	e Inactivation Meth	od (mCIM)	Modified Carbapenemas	e Inactivation Metl	nod (mCIM)
• Modified Hodge Test (MI	HT)		Modified Hodge Test (Mi	HT)	
RAPIDEC			RAPIDEC		
Other (specify):			Other (specify):		
Unknown			Unknown		
Molecular Tests:			Molecular Tests:		
<ul><li>Automated Molecular As</li></ul>	say		Automated Molecular Assay		
Carba-R			• Carba-R		
Check Points			• Check Points		
MALDI-TOF MS			MALDI-TOF MS		
Next Generation Nucleic Acid Sequencing			Next Generation Nucleic Acid Sequencing		
PCR			• PCR		
Streck ARM-D			<ul><li>Streck ARM-D</li></ul>		
Other (specify):			Other (specify):		
Unknown			• Unknown		
24c. IF TESTED, WHAT WAS THE TESTING RESULT?			26c. IF TESTED, WHAT WAS THE TESTING RESULT?		
Non-Molecular Test Results:			Non-Molecular Test Results:		
□ Positive			□ Positive		
□ Negative			□ Negative		

□ Unknown Molecular Test Results: □ NDM □ Pos □ Neg □ Ind □ Unk □ KPC □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ CXA □ Pos □ Neg □ Ind □ Unk □ MP □ Pos □										
Molecular Test Results:	□ Indeterminate					□ Indeterminate				
DNDM	□ Unknown					□ Unknown				
□ KPC         □ Pos         □ Neg         □ Ind         □ Unk           □ OXA-48         □ Pos         □ Neg         □ Ind         □ Unk           □ OXA-48         □ Pos         □ Neg         □ Ind         □ Unk           □ VIM         □ Pos         □ Neg         □ Ind         □ Unk           □ IMP         □ Pos         □ Neg         □ Ind         □ Unk           □ Other         □ Pos         □ Neg         □ Ind         □ Unk           □ Other         □ Pos         □ Neg         □ Ind         □ Unk           Specify:         □ Pos         □ Neg         □ Ind         □ Unk           Specify:         □ Pos         □ Neg         □ Ind         □ Unk           Specify:         □ Pos         □ Neg         □ Ind         □ Unk           Specify:         □ Pos         □ Neg         □ Ind         □ Unk           Where the specify:         □ VIM         □ Pos         □ Neg         □ Ind         □ Unk           Where the specify:         □ Neg         □ Ind         □ Unk         □ VIM         □ Pos         □ Neg         □ Ind         □ Unk           Where the specify:         □ Antilotic         □ Antilotic         □ Antilotic	Molecular Test Results:					Molecular Test Results:				
□ OXA	□NDM	□ Pos	□ Neg	□ Ind	□ Unk	□NDM	□ Pos	□ Neg	□ Ind	□ Unk
□ OXA-48         □ Pos         □ Neg         □ Ind         □ Unk         □ VIM         □ Pos         □ Neg         □ Ind         □ Unk         □ VIM         □ Pos         □ Neg         □ Ind         □ Unk         □ VIM         □ Pos         □ Neg         □ Ind         □ Unk         □ VIM         □ Pos         □ Neg         □ Ind         □ Unk         □ IMP         □ Pos         □ Neg         □ Ind         □ Unk         □ IMP         □ Pos         □ Neg         □ Ind         □ Unk         □ IMP         □ Pos         □ Neg         □ Ind         □ Unk         □ IMP         □ Pos         □ Neg         □ Ind         □ Unk	□ KPC	□ Pos	□ Neg	□ Ind	□ Unk	□ KPC	□ Pos	□ Neg	□ Ind	□ Unk
□ VIM □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP □ IMP □ Pos □ Neg □ Ind □ Unk □ IMP	□ OXA	□ Pos	□ Neg	□ Ind	□ Unk	□ OXA	□ Pos	□ Neg	□ Ind	□ Unk
□ IMP □ Pos □ Neg □ Ind □ Unk □ Other □ Pos □ Neg □ Ind □ Unk □ Other □ Specify: □ Pos □ Neg □ Ind □ Unk □ Other □ Pos □ Neg □ Ind □ Unk □ Neg □ Ind Ind □ Ind Ind □ Ind	□ OXA-48	□ Pos	□ Neg	□ Ind	□ Unk	□ OXA-48	□ Pos	□ Neg	□ Ind	□ Unk
□ Other Specify: □ Pos □ Neg □ Ind □ Unk Specify: □ Pos □ Neg □ Ind □ Unk Specify: □ Pos □ Neg □ Ind □ Unk Specify: □ Pos □ Neg □ Ind □ Unk Specify: □ Pos □ Neg □ Ind □ Unk Specify: □ Pos □ Neg □ Ind □ Unk Specify: □ Pos □ Neg □ Ind □ Unk Specify: □ Neg □ Ind □ I	□VIM	□ Pos	□ Neg	□ Ind	□ Unk	□VIM	□ Pos	□ Neg	□ Ind	□ Unk
Specify:    Specify:	□IMP	□ Pos	□ Neg	□ Ind	□ Unk	□IMP	□ Pos	□ Neg	□ Ind	□ Unk
31. Susceptibility results  Antibiotic Amikacin Amoxicillin/Clavulanate Ampicillin Ampicillin/Sulbactam Aztreonam Cefazolin Cefazolin Cefazolin Cefazolin Cefazolin Cefotaxime Cefotaxime Cefotaxime Cefotaxime Cefotaidine Cefoxitin Ceftazidine Ceftolozane/Tazobactam Doxycycline Eravacycline Imipenem-relebactam Levofloxacin Imipenem Imipenem-relebactam Levofloxacin Meropenem-vaborbactam Meropenem-vaborbactam Meropenem-vaborbactam Meropenem-vaborbactam Meropenem-vaborbactam Minocycline Nitrofurantoin Meropenem-vaborbactam Minocycline Nitrofurantoin Omadacycline Rifampin Refranpin Peracillin/Tazobactam Piperacillin/Tazobactam	□ Other	□ Pos	□ Neg	□ Ind	□ Unk	□ Other	□ Pos	□ Neg	□ Ind	□ Unk
Antibiotic Amikacin Amoxicillin/Clavulanate Ampicillin Amoxicillin/Sulbactam Aztreonam Ampicillin/Azobactam Ampicillin/Azobactam Ampicillin/Azobactam Almoxycline	Specify:					Specify:				
Antibiotic Amikacin Amoxicillin/Clavulanate Ampicillin Amoxicillin/Sulbactam Aztreonam Ampicillin/Azobactam Ampicillin/Azobactam Ampicillin/Azobactam Almoxycline										
Amikacin Amoxicillin/Clavulanate Amoxicillin/Clavulanate Ampicillin Cefazolin Cefazolin Cefazolin Cefazolin Cefazolin Cefepime Cefoxitin Cefepime Cefoxitin Cefoxitin Cefoxitin Ceftazidime Ceftazidime Ceftazidime Ceftazidime Ceftazidime Ceftazidime Ceftolozane/Tazobactam Ceftolozane/Tazobactam Ceftriaxone Cephalothin Ceftriaxone Cephalothin Ceftriaxone Cephalothin Ceftriaxone Ciprofloxacin Colistin Doripenem Colistin Doxycycline Erapenem Doxycycline Erapenem Fosfomycin Erapenem Fosfomycin Eravecyline Erapenem Fosfomycin Imipenem-relebactam Levofloxacin Imipenem-relebactam Levofloxacin Minocycline Meropenem-waborbactam Meropenem-waborbactam Meropenem-vaborbactam Meropenem-vaborbactam Minocycline Nitrofurantoin Minocycline Nitrofurantoin Polymyxin B Mifampin Tetracycline Plazomicin	31. Susceptibility results					27. Susceptibility results				
Amoxicillin/ClavulanateAmoxicillin/ClavulanateAmpicillinAmpicillinAmpicillin/SulbactamAmpicillin/SulbactamAztreonamAztreonamCefazolinCefazolinCefepimeCefepimeCefotaximeCefiderocolCefoxitinCefoxitinCeftazidime/AvibactamCefazidimeCeftazidime/AvibactamCefazidime/AvibactamCeftazione/TazobactamCeftazidime/AvibactamCephalothinCeftriaxoneCephalothinCeftriaxoneCojordloxacinCephalothinColistinCiprofloxacinDoripenemColistinDorycyclineDoripenemErtapenemDoxycyclineFosfomycinEravacyclineEravacyclineEravacyclineImipenemFosfomycinImipenemGentamicinImipenem-relebactamImipenem-relebactamLevofloxacinImipenem-relebactamMeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMirocyclineMeropenem-vaborbactamMirocyclineMeropenem-vaborbactamPiperacillin/TazobactamMirocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamPlazomicinPlazomicin	Antibiotic					Antibiotic				
AmpicillinAmpicillin/SulbactamAmpicillin/SulbactamAmpicillin/SulbactamAztreonamCefazolinCefazolinCefazolinCefejimeCefepimeCefotaximeCefodraximeCefoxitinCefoxitinCeftazidime/AvibactamCefazidimeCeftazidime/AvibactamCeftazidime/AvibactamCeftolozane/TazobactamCeftazidime/AvibactamCeftriaxoneCeftriaxoneCephalothinCeftriaxoneCiprofloxacinCephalothinColistinCiprofloxacinDoripenemColistinDoripenemColistinDoxycyclineDoripenemFosfomycinEravacyclineFosfomycinEravacyclineGentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenem-relebactamMeropenemImipenem-relebactamMeropenemLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamFlazomicinPiperacillin/TazobactamFlazomicinPiperacillin/TazobactamFlazomicinPiperacillin/Tazobactam	Amikacin									
Ampicillin/Sulbactam Aztreonam Aztreonam Aztreonam Cefazolin Cefepime Cefotaxime Cefotaxime Cefotaxime Cefotaxime Cefotazidime Ceftazidime Ceftazidime Ceftazidime/Avibactam Ceftazidime/Avibactam Ceftazidime/Avibactam Ceftolozane/Tazobactam Ceftolozane/Tazobactam Ceftolozane/Tazobactam Ceftolozane/Tazobactam Ceftolozane/Tazobactam Ceftolozane/Tazobactam Ceftolozane/Tazobactam Cophalothin Colistin Colistin Coripenem Doripenem Doripenem Doripenem Doxycycline Ertapenem Fosfomycin Gentamicin Imipenem-relebactam Levofloxacin Imipenem-relebactam Levofloxacin Meropenem Meropenem Meropenem Meropenem-vaborbactam Meropenem-vaborbactam Minocycline Piperacillin/Tazobactam Piperacillin/Tazobactam Plazomicin						,				
Aztreonam Cefazolin Cefazolin Cefapime Cefotaxime Cefiderocol Cefoxitin Ceftazidime Ceftazidime Ceftazidime/Avibactam Ceftazidime/Avibactam Ceftazidime/Avibactam Ceftazidime/Avibactam Ceftazidime/Avibactam Ceftazidime/Avibactam Ceftazidime/Avibactam Ceftolozane/Tazobactam Ceftolozane/Tazobactam Ceftolozane/Tazobactam Ceftolozane/Tazobactam Ceftolozane/Tazobactam Ceftriaxone Cephalothin Ciprofloxacin Ciprofloxacin Ciprofloxacin Colistin Doripenem Colistin Doripenem Colistin Doripenem Doxycycline Ertapenem Fosfomycin Ertapenem Fosfomycin Ertapenem Fosfomycin Imipenem Imipenem Imipenem-relebactam Levofloxacin Levofloxacin Meropenem Meropenem Meropenem Meropenem Minocycline Meropenem Minocycline Nitrofurantoin Minocycline Nitrofurantoin Piperacillin/Tazobactam Minocycline Nitrofurantoin Polymyxin B Omadacycline Rifampin Tetracycline Plazomicin Plazomicin Plazomicin Plazomicin Plazomicin Plazomicin Plazomicin	•					· •				
Cefazolin       Cefazolin         Cefepime       Cefepime         Cefotaxime       Cefiderocol         Cefoxitin       Cefotaxime         Ceftazidime       Cefoxitin         Ceftazidime/Avibactam       Ceftazidime         Ceftolozane/Tazobactam       Ceftazidime/Avibactam         Ceftriaxone       Ceftolozane/Tazobactam         Cephalothin       Ceftriaxone         Ciprofloxacin       Cephalothin         Colistin       Ciprofloxacin         Doripenem       Colistin         Doxycycline       Doripenem         Erapenem       Doxycycline         Fosfomycin       Eraveycline         Gentamicin       Ertapenem         Imipenem       Fosfomycin         Imipenem       Gentamicin         Imipenem       Imipenem         Meropenem       Imipenem         Meropenem       Imipenem         Meropenem       Meropenem         Mitrofurantoin       Meropenem         Nitrofurantoin       Meropenem-vaborbactam         Piperacillin/Tazobactam       Minocycline         Ploymyxin B       Omadacycline         Rifampin       Piperacillin/Tazobactam         Plazomicin       <	•					1 '				
Cefepime       Cefepime         Cefotaxime       Cefiderocol         Cefoxitin       Cefotaxime         Ceftazidime       Cefoxitin         Ceftazidime/Avibactam       Ceftazidime         Ceftolozane/Tazobactam       Ceftazidime/Avibactam         Cetriaxone       Ceftolozane/Tazobactam         Cephalothin       Ceftriaxone         Ciprofloxacin       Cephalothin         Colistin       Ciprofloxacin         Colistin       Doripenem         Doxycycline       Doripenem         Ertapenem       Doxycycline         Fosfomycin       Eravacycline         Gentamicin       Eravacycline         Imipenem       Fosfomycin         Imipenem       Gentamicin         Levofloxacin       Imipenem         Meropenem       Imipenem         Meropenem       Imipenem         Meropenem       Meropenem         Nitrofurantoin       Meropenem-vaborbactam         Nitrofurantoin       Meropenem-vaborbactam         Nitrofurantoin       Meropenem-vaborbactam         Nitrofurantoin       Meropenem-vaborbactam         Nitrofurantoin       Meropenem-vaborbactam         Nitrofurantoin       Meropenem-vaborbactam <td></td>										
Cefotaxime     Cefiderocol       Cefoxitin     Cefotaxime       Ceftazidime     Cefoxitin       Ceftazidime/Avibactam     Ceftazidime/Avibactam       Ceftolozane/Tazobactam     Ceftazidime/Avibactam       Ceptalothin     Ceftolozane/Tazobactam       Cephalothin     Cephalothin       Colistin     Ciprofloxacin       Colistin     Colistin       Doxycycline     Doripenem       Ertapenem     Doxycycline       Fosfomycin     Eravacycline       Gentamicin     Ertapenem       Imipenem     Fosfomycin       Imipenem-relebactam     Gentamicin       Levofloxacin     Imipenem       Meropenem     Imipenem       Meropenem     Imipenem-relebactam       Meropenem     Levofloxacin       Minocycline     Meropenem       Nitrofurantoin     Meropenem       Nitrofurantoin     Meropenem-vaborbactam       Piperacillin/Tazobactam     Nitrofurantoin       Polymyxin B     Omadacycline       Rifampin     Piperacillin/Tazobactam       Pilazomicin     Piperacillin/Tazobactam										
CefoxitinCefotaximeCeftazidimeCefoxitinCeftazidime/AvibactamCeftazidime/AvibactamCeftolozane/TazobactamCeftazidime/AvibactamCeftriaxoneCeftolozane/TazobactamCephalothinCeftriaxoneCiprofloxacinCephalothinColistinCiprofloxacinDoripenemColistinDoxycyclineDoripenemErtapenemDoxycyclineFosfomycinEravacyclineGentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenem-vaborbactamLevofloxacinMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclineNitrofurantoinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin	-									
CeftazidimeCefoxitinCeftazidime/AvibactamCeftazidimeCeftolozane/TazobactamCeftazidime/AvibactamCeftriaxoneCeftolozane/TazobactamCephalothinCeftriaxoneCiprofloxacinCephalothinColistinCiprofloxacinDoripenemColistinDoxycyclineDoripenemErtapenemDoxycyclineFosfomycinEravacyclineGentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenemMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicinPolymyxin BPiperacillin/TazobactamTetracyclinePlazomicin										
Ceftazidime/Avibactam       Ceftazidime         Ceftolozane/Tazobactam       Ceftolozane/Tazobactam         Cephalothin       Ceftriaxone         Ciprofloxacin       Cephalothin         Colistin       Ciprofloxacin         Doripenem       Colistin         Doxycycline       Doripenem         Ertapenem       Doxycycline         Fosfomycin       Eravacycline         Gentamicin       Ertapenem         Imipenem       Fosfomycin         Imipenem-relebactam       Gentamicin         Levofloxacin       Imipenem         Meropenem       Imipenem-relebactam         Meropenem-vaborbactam       Levofloxacin         Minocycline       Meropenem         Nitrofurantoin       Meropenem-vaborbactam         Piperacillin/Tazobactam       Minocycline         Plazomicin       Nitrofurantoin         Polymyxin B       Omadacycline         Rifampin       Piperacillin/Tazobactam         Plazomicin       Plazomicin										
Ceftolozane/TazobactamCeftazidime/AvibactamCeftriaxoneCeftolozane/TazobactamCephalothinCeftriaxoneCiprofloxacinCephalothinColistinCiprofloxacinDoripenemColistinDoxycyclineDoripenemErtapenemDoxycyclineFosfomycinEravacyclineGentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamPiperacillin/TazobactamPiperacillin/TazobactamPiperacillin/TazobactamPiperacillin/TazobactamPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamPiperacillin/TazobactamPiperacillin/Tazobactam										
CeftriaxoneCeftolozane/TazobactamCephalothinCeftriaxoneCiprofloxacinCiprofloxacinColistinCiprofloxacinDoripenemColistinDoxycyclineDoripenemErtapenemDoxycyclineFosfomycinEravacyclineGentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenemMeropenemImipenem-relebactamMeropenemLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenemPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin										
CephalothinCeftriaxoneCiprofloxacinCephalothinColistinCiprofloxacinDoripenemColistinDoxycyclineDoripenemErtapenemDoxycyclineFosfomycinEravacyclineGentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenem-relebactamMeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin	· ·					· ·				
CiprofloxacinCephalothinColistinCiprofloxacinDoripenemColistinDoxycyclineDoripenemErtapenemDoxycyclineFosfomycinEravacyclineGentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin						· ·				
ColistinCiprofloxacinDoripenemColistinDoxycyclineDoripenemErtapenemDoxycyclineFosfomycinEravacyclineGentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenem-relebactamMeropenemImipenem-relebactamMeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin	-									
DoripenemColistinDoxycyclineDoripenemErtapenemDoxycyclineFosfomycinEravacyclineGentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin	•					1				
DoxycyclineDoripenemErtapenemDoxycyclineFosfomycinEravacyclineGentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin						· •				
Ertapenem Doxycycline Fosfomycin Eravacycline Gentamicin Ertapenem Imipenem Fosfomycin Imipenem-relebactam Fosfomycin Levofloxacin Imipenem Meropenem Imipenem-relebactam Meropenem-vaborbactam Levofloxacin Minocycline Meropenem Nitrofurantoin Meropenem Nitrofurantoin Meropenem-vaborbactam Piperacillin/Tazobactam Minocycline Plazomicin Polymyxin B Rifampin Omadacycline Rifarocycline Piperacillin/Tazobactam	-									
Fosfomycin Gentamicin Imipenem Imipenem Imipenem-relebactam Levofloxacin Meropenem Meropenem-vaborbactam Meropenem-vaborbactam Minocycline Nitrofurantoin Piperacillin/Tazobactam Plazomicin Nitrofurantoin Polymyxin B Rifampin Tetracycline  Eravacycline Frayacycline Gentamicin Fosfomycin Gentamicin Imipenem Fosfomycin Gentamicin Imipenem Fosfomycin Imipenem Fosfomycin Imipenem Fosfomycin Imipenem Imipenem Imipenem-relebactam Imipenem-relebactam Imipenem-relebactam Imipenem-relebactam Imipenem-relebactam Imipenem-relebactam Imipenem-relebactam Imipenem-relebactam Imipenem Imi	• •					1				
GentamicinErtapenemImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin	-									
ImipenemFosfomycinImipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin	-									
Imipenem-relebactamGentamicinLevofloxacinImipenemMeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin										
Levofloxacin Meropenem Meropenem-vaborbactam Meropenem-vaborbactam Minocycline Nitrofurantoin Piperacillin/Tazobactam Plazomicin Polymyxin B Rifampin Tetracycline  Imipenem Imipenem-relebactam Meropenem-vaborbactam Meropenem Meropenem-vaborbactam Minocycline Nitrofurantoin Omadacycline Piperacillin/Tazobactam Piperacillin/Tazobactam Piperacillin/Tazobactam Piperacillin/Tazobactam Piperacillin/Tazobactam Plazomicin						-				
MeropenemImipenem-relebactamMeropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin	-									
Meropenem-vaborbactamLevofloxacinMinocyclineMeropenemNitrofurantoinMeropenem-vaborbactamPiperacillin/TazobactamMinocyclinePlazomicinNitrofurantoinPolymyxin BOmadacyclineRifampinPiperacillin/TazobactamTetracyclinePlazomicin						1				
Minocycline Nitrofurantoin Piperacillin/Tazobactam Minocycline Plazomicin Polymyxin B Rifampin Tetracycline Meropenem Meropenem-vaborbactam Minocycline Nitrofurantoin Omadacycline Piperacillin/Tazobactam Plazomicin	•					1				
Nitrofurantoin Piperacillin/Tazobactam Minocycline Plazomicin Polymyxin B Rifampin Tetracycline Nitrofurantoin Omadacycline Piperacillin/Tazobactam Piperacillin/Tazobactam Plazomicin	•									
Piperacillin/Tazobactam  Plazomicin  Polymyxin B  Rifampin  Tetracycline  Minocycline  Nitrofurantoin  Omadacycline  Piperacillin/Tazobactam  Plazomicin	-					1				
Plazomicin Polymyxin B Rifampin Petracycline Nitrofurantoin Omadacycline Piperacillin/Tazobactam Plazomicin						1				
Polymyxin B Rifampin Piperacillin/Tazobactam Plazomicin  Omadacycline Piperacillin/Tazobactam Plazomicin						1				
Rifampin Piperacillin/Tazobactam Tetracycline Plazomicin										
Tetracycline Plazomicin						·				
						1 -				
Tigecycline Polymyxin B	Tigecycline					Polymyxin B				
	<u> </u>					, ,				

Tobramycin	Rifampin	
Trimethoprim-sulfamethoxazole	Tetracycline	
	Tigecycline	
Data source	Tobramycin	
Medical record	Trimethoprim-sulfamethoxazole	
Microscan		
Vitek	Data source	
Phoenix	Medical record	
Kirby-Bauer	Microscan	
E-test	Vitek	
	Phoenix	
	Sensititre	
	Kirby-Bauer	
	E-test	
32a. Was case first identified through audit?	28a. Was case first identified through audit?	
• Yes	• Yes	
• No	• No	
32b. CRF status	28b. CRF status	
Complete	Complete	
Pending	Pending	
Chart unavailable after 3 requests	Chart unavailable after 3 requests	
28c. SO Initials:	28c. SO Initials:	
31d. Date of abstraction:	28d. Date of abstraction:	
31e. Comments:	28e. Comments:	
	1 · · · · · · · · · · · · · · · · · · ·	

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

Note: Changes on the 2021 CRF are highlighted in yellow.

Question on 2020 form	Question on 2021 form
Title: 2020 Carbapenem Resistant Enterobacteriaceae (CRE)/	Title: 2021 Extended-Spectrum Beta-Lactamase (ESBL)-Producing
Carbapenem Resistant A. baumannii (CRAB) Multi-site Gram-	Enterobacteriaceae Multi-site Gram-Negative Surveillance
Negative Surveillance Initiative (MuGSI) Healthcare Associated	Initiative (MuGSI) Healthcare Associated Infection Community
Infection Community Interface (HAIC) Case Report	Interface (HAIC) Case Report
26a. Is antimicrobial use (IV or oral) in the 30 days before the	24a. Is antimicrobial use (IV or oral) in the 30 days before the
DISC documented?	DISC documented?
• Yes	• Yes
• No	• No
Unknown	Unknown
26b. If yes, check all antimicrobials used in the 30 days before the	24b. If yes, check all antimicrobials used in the 30 days before the
DISC	DISC
□ Amikacin	□ Amikacin
□ Amoxicillin	□ Amoxicillin
□ Amoxicillin/clavulanic acid	□ Amoxicillin/clavulanic acid

□ Ampicillin	□ Ampicillin
□ Ampicillin/sulbactam	□ Ampicillin/sulbactam
□ Azithromycin	□ Azithromycin
□ Aztreonam	□ Aztreonam
□ Cefazolin	□ Cefazolin
□ Cefdinir	□ Cefdinir
□ Cefepime	□ Cefepime
□ Cefixime	□ <mark>Cefiderocol</mark>
□ Cefotaxime	□ Cefixime
□ Cefoxitin	□ Cefotaxime
□ Cefpodoxime	□ Cefoxitin
□ Ceftaroline	□ Cefpodoxime
□ Ceftazidime	□ Ceftaroline
□ Ceftazidime/avibactam	□ Ceftazidime
□ Ceftizoxime	□ Ceftazidime/avibactam
□ Ceftolozane/tazobactam	□ Ceftizoxime
□ Ceftriaxone	□ Ceftolozane/tazobactam
□ Cefuroxime	□ Ceftriaxone
□ Cephalexin	□ Cefuroxime
□ Ciprofloxacin	□ Cephalexin
□ Clarithromycin	□ Ciprofloxacin
□ Clindamycin	□ Clarithromycin
Dalbavancin	Clindamycin
□ Daptomycin	□ Dalbavancin
□ Delafloxacin	□ Daptomycin
□ Doripenem	□ Delafloxacin
	□ Doripenem
□ Ertapenem	□ Doxycycline
	□ Ertapenem
□ Fosfomycin	□ Eravacycline
□ Gentamicin	□ Fidaxomicin
□ Imipenem/cilastatin	□ Fosfomycin
□ Levofloxacin	□ Gentamicin
□ Linezolid	□ Imipenem/cilastatin
□ Meropenem	□ Levofloxacin
□ Meropenem/vaborbactam	□ Linezolid
□ Metronidazole	□ Meropenem
□ Moxifloxacin	□ Meropenem/vaborbactam
□ Nitrofurantoin	□ Metronidazole
□ Oritavancin	□ Moxifloxacin
□ Penicillin	□ Nitrofurantoin
□ Piperacillin/tazobactam	□ <mark>Omadacycline</mark>
□ Polymyxin B	□ Oritavancin
□ Polymyxin E (colistin)	□ Penicillin
□ Rifaximin	□ Piperacillin/tazobactam
□ Tedizolid	□ Polymyxin B
□ Telavancin	□ Polymyxin E (colistin)
□ Tigecycline	□ Rifaximin
□ Tobramycin	□ Tedizolid
□ Trimethoprim	□ Telavancin

□ Trimethoprim/sulfamethoxazole			□ Tigecycline				
□ Vancomycin IV PO			□ Tobramycin				
□ Other (specify):			□ Trimethoprim				
□ Other (specify):			☐ Trimethoprim/sulfameth	oxazole			
			□ Vancomycin IV PO				
			☐ Other (specify):				
			□ Other (specify):				
24a. Did the patient have a	positive test(s) for	SARS-Cov-2	25a. Did the patient have a		SARS-Cov-2		
(molecular assay, serology	•		(molecular assay, serology	•			
before the DISC?		,,	before the DISC?	7. 9.			
• Yes			• Yes				
• No			• No				
• Unknown			• Unknown				
24b. If yes, complete table	helow		25b. If yes, complete table	helow			
2-b. If yes, complete table	SCIOW		230. If yes, complete table	below			
	Specimen	Test Type		Specimen	Test Type		
	Collection date	,,		Collection date	,,		
FIRST positive test for	_/_/	□ Molecular	FIRST positive test for	_/_/	□ Molecular		
SARS-Cov-2 on or before	□ Unknown	assay	SARS-Cov-2 on or before	□ Unknown	assay		
the DISC:	- Chikhowh	□ Serology	the DISC:		□ Antigen		
the bise.		□ Unknown	the bise.		□ Serology		
		□ Other			□ Unknown		
		(specify)			□ Other		
MOST DECENT positive	/ /	□ Molecular	-		(specify)		
MOST RECENT positive test for SARS-Cov-2 on	// □ Unknown		MOST DECENT positive	/ /	□ Molecular		
		assay	MOST RECENT positive	// □ Unknown			
or before the DISC:		□ Serology	test for SARS-Cov-2 on	Unknown	assay		
		□ Unknown	or before the DISC:		□ Antigen		
		□ Other			□ Serology		
		(specify)	J		□ Unknown		
					□ Other		
04 - COVID NET C ID			OF COMPANY COMP		(specify)		
24c. COVID-NET Case ID:			25c. COVID-NET Case ID:	• 1 1 1 1			
24d. NNDSS IDs (Please pro	vide at least one of	the following	25d. NNDSS IDs (Please pro	vide at least one of	r the following		
when applicable):			when applicable):				
Local Case ID:			Local Case ID:				
Local Record ID:			Local Record ID:				
State Case Identifier:			State Case Identifier:				
Legacy Case Identifier:	<del></del>		Legacy Case Identifier:				
05 - Martha in sident an ai		2	CDC 2019-nCOV ID:				
25a. Was the incident speci	men polymicrobiai	<b>:</b>	26a. Was the incident specimen polymicrobial?				
• Yes				• Yes			
• No			• No				
• Unknown			• Unknown				
25b. What screening/confirmatory method was used for ESBL		26b. What screening/confirmatory method was used for ESBL					
identification?			identification?				
• None			• None				
• Unknown			• Unknown				
Broth microdilution (ATI detection)			Broth microdilution (ATI detection)				
• ESBL well			• ESBL well				
Expert rule (ATI flag)			Expert rule (ATI flag)				

• Unknown	Unknown		
Broth Microdilution (Manual)	Broth Microdilution (Manual)		
Disk Diffusion	Disk Diffusion		
• E-test	• E-test		
Molecular test (specify)	Molecular test (specify)		
Other non-molecular test (specify)	Other non-molecular test (specify)		
25c. If screening/confirmatory method was used, what was the	26c. If screening/confirmatory method was used, what was the		
result?	result?		
• Positive	• Positive		
Negative	Negative		
Indeterminate	Indeterminate		
Unknown	Unknown		
27. Susceptibility results	27. Susceptibility results		
	· · ·		
Antibiotic	Antibiotic		
Amikacin	Amikacin		
Amoxicillin/Clavulanate	Amoxicillin/Clavulanate		
Ampicillin	Ampicillin		
Ampicillin/Sulbactam	Ampicillin/Sulbactam		
Aztreonam	Aztreonam		
Cefazolin	Cefazolin		
Cefepime	Cefepime		
Cefotaxime	Cefiderocol		
Cefoxitin	Cefotaxime		
Ceftazidime	Cefoxitin		
Ceftazidime/Avibactam	Ceftazidime		
Ceftolozane/Tazobactam	Ceftazidime/Avibactam		
Ceftriaxone	Ceftolozane/Tazobactam		
Cephalothin	Ceftriaxone		
Ciprofloxacin	Cephalothin		
Colistin	Ciprofloxacin		
Doripenem	Colistin		
Doxycycline	Doripenem		
Ertapenem	Doxycycline		
Fosfomycin	Eravacycline Eravacycline		
Gentamicin	Ertapenem		
Imipenem	Fosfomycin		
Imipenem-relebactam	Gentamicin		
Levofloxacin	Imipenem		
Meropenem	Imipenem-relebactam		
Meropenem-vaborbactam	Levofloxacin		
Minocycline	Meropenem		
Nitrofurantoin	Meropenem-vaborbactam		
Piperacillin/Tazobactam	Minocycline		
Plazomicin	, Nitrofurantoin		
Polymyxin B	Omadacycline Omadacycline		
Rifampin	Piperacillin/Tazobactam		
Tetracycline	Plazomicin		
Tigecycline	Polymyxin B		

Tobramycin	Rifampin
Trimethoprim-sulfamethoxazole	Tetracycline
	Tigecycline
Data source	Tobramycin
Medical record	Trimethoprim-sulfamethoxazole
Microscan	
Vitek	Data source
Phoenix	Medical record
Kirby-Bauer	Microscan
E-test	Vitek
	Phoenix
	<mark>Sensititre</mark>
	Kirby-Bauer
	E-test

## 3) Invasive MRSA Infection Case Report Form

2020 Paper CRF Question	Changes to the 2020 Paper CRF Question
34a. NNDSS IDs (please provide at least one of the	34a. NNDSS IDs (please provide at least one of the
following when applicable):	following when applicable):
Local case ID:	CDC 2019 NCOV ID: (new data collection)
Local record ID:	Local case ID:
State case Identifier:	Local record ID:
Legacy case identifier:	State case Identifier:
	Legacy case identifier:

## 4) Invasive MSSA Infections Case Report Form

2020 Paper CRF Question	Changes to the 2020 Paper CRF Question
34a. NNDSS IDs (please provide at least one of the	34a. NNDSS IDs (please provide at least one of the
following when applicable):	following when applicable):
Local case ID:	CDC 2019 NCOV ID: (new data collection)
Local record ID:	Local case ID:
State case Identifier:	Local record ID:
Legacy case identifier:	State case Identifier:
	Legacy case identifier:

## 5) CDI Case Report Form and Treatment Form

2020 CRF	2021 CRF
9. Positive diagnostic assay for <i>C.diff</i>	9. Diagnostic assay for <i>C.diff</i>
	(Reworded question. Change was noted on last year's
	application but mistakenly not changed on the CRF.
	Response options remain the same)

40a. FIRST positive test for SARS-CoV-2 on or before the	40a. FIRST positive test for SARS-CoV-2 on or before the	
DISC - Test type	DISC - Test type	
<ul><li>Molecular assay</li></ul>	<ul><li>Antigen</li></ul>	
<ul><li>Serology</li></ul>	<ul><li>Molecular assay</li></ul>	
<ul><li>Unknown</li></ul>	<ul><li>Serology</li></ul>	
<ul><li>Other, specify</li></ul>	<ul><li>Unknown</li></ul>	
	<ul><li>Other, specify</li></ul>	
	(Added antigen as a response option, previously	
	captured as "other")	
40a. Most recent positive test for SARS-CoV-2 on or	40a. Most recent positive test for SARS-CoV-2 on or	
before the DISC - Test type	before the DISC - Test type	
<ul><li>Molecular assay</li></ul>	■ Antigen	
<ul><li>Serology</li></ul>	<ul> <li>Molecular assay</li> </ul>	
<ul><li>Unknown</li></ul>	■ Serology	
<ul><li>Other, specify</li></ul>	■ Unknown	
, ,	<ul><li>Other, specify</li></ul>	
	(Added antigen as a response option, previously	
	captured as "other")	
41b. NNDSS IDs (please provide at least one of the	41b. NNDSS IDs (please provide at least one of the	
following when applicable):	following when applicable):	
Local Case ID:	Local Case ID:	
Local Record ID:	Local Record ID:	
State case identifier:	State case identifier:	
Legacy case identifier:	Legacy case identifier:	
	CDC 2019-nCOV ID:	
	(Added one more NNDSS ID)	

## 6) Annual Survey of Laboratory Testing Practices for C. difficile Infections

Existing question	Modified question
[Section 1] Was this lab audited in 2019?	[Section 1] Was this lab audited in 2020?
	(changed year to 2020 to reflect change in survey
	year)
[Section 2] 5. What are the testing codes	[Section 2] 5. What are the LOINC or internal
associated with the tests your lab currently uses?	testing codes associated with the tests your lab
	currently uses (e.g. LOINC codes 13957-6, 34713-
	8, or 54067-4)?
	(Clarified that we're asking for LOINC or internal
	testing codes; added examples of LOINC codes)
[Section 2] 6. Has your lab testing algorithm for <i>C</i> .	[Section 2] 6. Has your lab testing algorithm for <i>C</i> .
difficile changed since January 1, 2019?	difficile changed since January 1, 2020?
	(changed year to 2020 to reflect change in survey
	year)
[Section 2] 7a. Has your rejection policy for stool	[Section 2] 7a. Has your rejection policy for stool
specimens changed since January 1, 2019?	specimens changed since January 1, 2020?
	(changed year to 2020 to reflect change in survey
	year)

	S S SDSDD I R	R_NS_NINI_NDND	
7) HAIC Candidemia	Case Report	R_NS_NINI_NDND	
2020 CRF Q	uestion	R NS NINI 1000	CRF Question
CANDIDEMIA 2020 CASE REP	ORT FORM SPEDGED I R	PCANDIDEMIA 2022 C	CASE REPORT FORM (header)
	S S 50 <b>5</b> 00	RICHASSENTATIOND	_
Version: Short Form 2020, La (footnotes)	st_Updated: 07/9/2019	Version: Short Form	2021, Last Updated:
(lootilotes)			
25. Antifungal	S S SDSDD I R	REPUBLICATION OF THE REPUBLICA	25. Antifungal susceptibility
susceptibility testing	S S SDSDD I R	R_NS_NINI_NDND	testing (check here 🗌 if no
(check here  if no testing done/no test reports available):	SSSSDSDD IR	R_NS_NINI_NDND	testing done/no test reports available):
-	S S SDSDD I R	R_NS_NINI_NDND	(removed "NS" as an option)
	S S SDSDD I R	R_NS_NINI_NDND	
26. Additional non-Candida o	S S SDSDD R	R NS NINI NOND 29. Additional non-C	Candida organisms isolated
blood cultures on the day of the DISC:	or in the 6 days before SDSDD	from blood cultures days before the DIS	on the day of or in the 6 C:
	<del></del>	R_NS_NINI_NDND	
1 □Yes 0 □No 9 □Unkno	wh ss555550	R NS NI NI NDND	Unknown
		Renanged question hur	mber)
26a. If yes, additional organisms pathogens):	,,	pathogens):	organisms ( <i>Enter up to 3</i>
	S S SDSDD I R	R NS NINI NEND	
		(changed question nur	mber)
27. Infection with <i>Clostridioid</i> days before or 30 days after			lostridioides difficile on the lays before or 29 days after
1 Yes 0 No 9 Unk	known	1 □Yes 0 □No	9Unknown
		(changed question nur	mber and updated wording)
27a. If yes, date of first <i>C. diff</i> di	agnosis:	30a. If yes, date of firs	t <i>C. diff</i> diagnosis:
	Unknown		Unknown
		(changed quesiton nur	mber)
28. Any subsequent positive	Candida blood cultures	26. Any subsequent	positive Candida blood

Interpretation

in the 29 days after, not including the DISC?	cultures in the 29 days after, not including the DISC?
	Disc:
1 Yes 0 No 9 Unknown	1 □Yes 0 □No 9 □Unknown
	(changed question number)
28a. If yes, provide dates of all subsequent positive Candida blood cultures and select the species:	26a. If yes, provide dates of all subsequent positive Candida blood cultures and select the species:
	(changed question number)
29. Documented negative Candida blood culture on the day of or in the 29 days after the DISC?  1 Yes 0 No 9 Unknown	27. Documented negative <i>Candida</i> blood culture on the day of or in the 29 days after the DISC (in which no blood cultures after this negative culture were positive in the 29 days after the DISC)?
	1 □Yes 0 □No 9 □Unknown
	(changed question number and updated the wording)
29a. If yes, date of negative blood culture:	27a. If yes, date of negative blood culture:
	(changed question number)
New question for 2021	28. On the day of or in the 6 days before the DISC, was the patient known to be colonized with or being managed as if they were colonized with a multi-drug resistant organism (MDRO) (e.g., on contact precautions)? MDROs include CRE, CRPA, CRAB, MRSA, and VRE.  1 Yes 0 No 9 Unknown
	(new data collection)
New question for 2021	28a. If yes, specify organisms (Enter up to 3 pathogens):
	(new data collection)
30. Did the patient have any of the following types of infection/colonization related to their <i>Candida</i> infection?	31. Did the patient have any of the following types of infection/colonization related to their Candida infection?
(check all that apply): None Unknown	(check all that apply): None Unknown

Abscess	Abdominal (new data collection)
Splenic	Hepatobiliary or pancreatic (new data collection)
Liver	GI tract (new data collection)
Pulmonary	Abscess (specify): (new data collection)
Other (specify):	Peritonitis/peritoneal fluid (new data collection)
Candiduria	Splenic (new data collection)
CNS involvement (meningitis, brain abscess)	Candiduria
Eyes (endophthalmitis or chorioretinitis)	Esophagitis (new data collection)
Endocarditis	Oral/thrush (new data collection)
Peritonitis	Osteomyelitis
Respiratory specimen with Candida	Skin lesions/wounds
Septic emboli	Pulmonary (new data collection)
Lungs	Abscess (new data collection)
Brain	Respiratory specimen with Candida (new data
Osteomyelitis	collection)
Skin lesions	CNS involvement (meningitis, brain abscess)
Other (specify):	Eyes (endophthalmitis or chorioretinitis)
	Endocarditis
	Septic emboli (specify location): (new data collection)
	Other (specify):
	(changed question number, reorganized response options, removed some response options, new data collection for some response options)
31. Was the patient hospitalized on the day of or in the 6 days after the DISC?	32. Was the patient hospitalized on the day of or in the 6 days after the DISC?
the o days after the bisc:	in the o days after the bisc:
1 □Yes 0 □No 9 □Unknown	1 Yes 0 No 9 Unknown
	(changed question number)
31a. If yes,	32a. If yes,
Date of first admission:	Date of first admission:

Unknown	Unknown
Hospital ID: Unknown	Hospital ID: Unknown
31b. Was the patient transferred during this hospitalization? 1 ☐Yes 0 ☐No 9 ☐Unknown	(changed question number)  32b. Was the patient transferred during this hospitalization?  1  Yes 0 No 9 Unknown
If yes, enter up to two transfers:  Date of transfer: Unknown  Hospital ID: Unknown	If yes, enter up to two transfers:  Date of transfer: Unknown  Hospital ID: Unknown
Date of second transfer: Unknown  Hospital ID: Unknown	Date of second transfer:     Unknown
32. Where was the patient located prior to admission?  1 Private residence	(changed question number)  32c. Where was the patient located prior to admission or, if not hospitalized, where was the patient located on the 3rd calendar day before the DISC? (Check one)
3 LTCF  Facility ID:  4 LTACH Facility ID:	1 Private residence 2 Hospital inpatient (new option) Facility ID: 3 LTCF
5 Homeless 6 Incarcerated 7 Other (specify): 9 Unknown	Facility ID:  4 LTACH Facility ID:  5 Homeless
	6 Incarcerated 7 Other (specify): 9 Unknown
40. Underlying conditions (Check all that apply):	(changed question number, clarified the wording of the question and added a new location option)  40. Underlying conditions (Check all that apply):
Chronic Lung Disease	Chronic Lung Disease

Cystic Fibrosis	Cystic Fibrosis
Chronic Pulmonary disease	Chronic Pulmonary disease
Chronic Metabolic Disease	Chronic Metabolic Disease
Diabetes Mellitus	☐Diabetes Mellitus
With Chronic Complications	With Chronic Complications
Cardiovascular Disease	Cardiovascular Disease
CVA/Stroke/TIA	CVA/Stroke/TIA
Congenital Heart disease	Congenital Heart disease
Congestive Heart Failure	☐Congestive Heart Failure
Myocardial infarction	Myocardial infarction
Peripheral Vascular Disease (PVD)	Peripheral Vascular Disease (PVD)
Gastrointestinal Disease	Gastrointestinal Disease
Diverticular disease	Diverticular disease
☐Inflammatory Bowel Disease	☐Inflammatory Bowel Disease
Peptic Ulcer Disease	Peptic Ulcer Disease
Short gut syndrome	Short gut syndrome
Immunocompromised Condition	Immunocompromised Condition
HIV infection	HIV infection
AIDS/CD4 count <200	AIDS/CD4 count <200
Primary Immunodeficiency	Primary Immunodeficiency
Transplant, Hematopoietic Stem Cell	Transplant, Hematopoietic Stem Cell
Transplant, Solid Organ	Transplant, Solid Organ
Liver Disease	Liver Disease
Chronic Liver Disease	Chronic Liver Disease
Ascites	Ascites
Cirrhosis	Cirrhosis
Hepatic Encephalopathy	Hepatic Encephalopathy
☐Variceal Bleeding	Variceal Bleeding
☐Hepatitis C	Hepatitis B, chronic (new option)
Treated, in SVR	☐ Hepatitis C
Current, chronic	Treated, in SVR
Malignancy	Current, chronic
Melianensu Henertelenia	Hepatitis B, acute (new option)
Malignancy, Hematologic	nepatitis B, dedte (new option)

Malignancy, Solid Organ (metastatic)	Malignancy, Hematologic
Neurologic Condition	Malignancy, Solid Organ (non-metastatic)
Cerebral palsy	☐Malignancy, Solid Organ (metastatic)
Chronic Cognitive Deficit	Neurologic Condition
Dementia	☐Cerebral palsy
Epilepsy/seizure/seizure disorder	Chronic Cognitive Deficit
Multiple sclerosis	Dementia
Neuropathy	Epilepsy/seizure/seizure disorder
Parkinson's disease	Multiple sclerosis
Other (specify):	☐ Neuropathy
Plegias/Paralysis	Parkinson's disease
Hemiplegia	Other (specify):
☐ Paraplegia	Plegias/Paralysis
Quadriplegia Quadriplegia	Hemiplegia
Renal Disease	Paraplegia Paraplegia
Chronic Kidney Disease	Quadriplegia
Lowest serum creatinine:mg/DL	Renal Disease
Unknown or not done	☐Chronic Kidney Disease
Skin Condition	Lowest serum creatinine:mg/DL
□Burn	Unknown or not done
Decubitus/Pressure Ulcer	Skin Condition
Surgical Wound	□Burn
Other chronic ulcer or chronic wound	Decubitus/Pressure Ulcer
Other (specify):	Surgical Wound
Other	Other chronic ulcer or chronic wound
Connective tissue disease	Other (specify):
Obesity or morbid obesity	Other
☐ Pregnant	Connective tissue disease
	Obesity or morbid obesity
	☐ Pregnant
	(added 2 new options for hepatitis indication under 'liver disease')
47. Surgeries on the day of or in the 89 <u>days before</u> the DISC:	47. Surgeries in the <u>90 days before</u> , not including the DISC:

Abdominal surgery	Abdominal surgery (specify):
Non-abdominal surgery (specify):	lf yes: 1 ⊡Open abdomen
No surgery	0Laparoscopic
	9Unknown
	Non-abdominal surgery (specify):
	No surgery
	(changed the question wording, added specification for "Abdominal surgery" and check box options under "Abdominal surgery" which is a new data collection)
48. Pancreatitis on the day of or in the <u>89 days</u> <u>before</u> the DISC:	48. Pancreatitis in the <u>90 days before</u> , not including the DISC:
1	1
0 No	0 No
9 Unknown	9 Unknown
	(changed the question wording)
49a. If yes, did the patient have any urinary tract procedures on the day of or in the <u>89 days before</u> the DISC?	49a. If yes, did the patient have any urinary tract procedures in the 90 days before, not including the DISC?
1 Yes 0 No 9 Unknown	1 □Yes 0 □No 9 □Unknown
	(changed the question wording)
53. Did the patient have any of the following indwelling devices present in the 2 calendar days before, not including the DISC?	53. Did the patient have any of the following indwelling devices or other devices present in the 2 calendar days before, not including the DISC?
None	
Unknown	None
Urinary Catheter/Device	Unknown
	Urinary Catheter/Device
Indwelling urethral	Indwelling urethral
Suprapubic	Suprapubic
Respiratory	Respiratory

ET/NT	ET/NT
Tracheostomy	Tracheostomy
Gastrointestinal	Invasive mechanical ventilation (new data collection)
Abdominal drain (specify):	Gastrointestinal
Gastrostomy	Abdominal drain (specify):
	Gastrostomy
	(changed question wording, added a check box for this question)
New question for 2021	55. Did the patient receive any systemic steroids in the 30 days before, not including the DISC?
	1 _Yes 0 _No 9 _Unknown
	(new question)
55. Did the patient receive total parenteral nutrition (TPN) in the 14 days before, not including the DISC?	56. Did the patient receive total parenteral nutrition (TPN) in the 14 days before, not including the DISC?
1 Yes 0 No 9 Unknown	1 Yes 0 No 9 Unknown
	(changed the question number)
1 Yes 0 No 9 Unknown  56. Did the patient receive systemic antifungal medication on the day of or in the 13 days before the DISC?	
56. Did the patient receive systemic antifungal medication	(changed the question number)  57. Did the patient receive systemic antifungal medication on the day of or in the 13 days before the
56. Did the patient receive systemic antifungal medication on the day of or in the 13 days before the DISC?	(changed the question number)  57. Did the patient receive systemic antifungal medication on the day of or in the 13 days before the DISC?
56. Did the patient receive systemic antifungal medication on the day of or in the 13 days before the DISC?	(changed the question number)  57. Did the patient receive systemic antifungal medication on the day of or in the 13 days before the DISC?  1  Yes (if Yes, fill out question 60) 0 No 9 Unknown
56. Did the patient receive systemic antifungal medication on the day of or in the 13 days before the DISC?  1 Yes (if Yes, fill out question 59) 0 No 9 Unknown	(changed the question number)  57. Did the patient receive systemic antifungal medication on the day of or in the 13 days before the DISC?  1 Yes (if Yes, fill out question 60) 0 No 9 Unknown (changed the question number)  58. Was the patient administered systemic antifungal
56. Did the patient receive systemic antifungal medication on the day of or in the 13 days before the DISC?  1 Yes (if Yes, fill out question 59) 0 No 9 Unknown  57. Was the patient administered systemic antifungal medication after, not including the DISC?	(changed the question number)  57. Did the patient receive systemic antifungal medication on the day of or in the 13 days before the DISC?  1 Yes (if Yes, fill out question 60) 0 No 9 Unknown  (changed the question number)  58. Was the patient administered systemic antifungal medication after, not including the DISC?

Patient died before culture result available to clinicians	
2 Comfort care only measures were instituted	1 Patient died before culture result available to
3 Patient discharged before culture result available to clinician	clinicians  2 Comfort care only measures were instituted
4 $\square$ Medical records indicated culture result not clinically significant	3 Patient discharged before culture result available to clinician
5 Other reason documented in medical records, specify:	4 Medical records indicated culture result not clinically significant or contaminated
6 Patient refused treatment against medical advice	5 Other reason documented in medical records, specify:
9 Unknown	
	6 Patient refused treatment against medical advice
	9 Unknown
	(changed question number, added additional clarification to one response)
59. ANTIFUNGAL MEDICATION	60. ANTIFUNGAL MEDICATION
	(changed question number)
New question for 2021	61. Does the chart indicate that the incident specimen was considered a contaminant or was considered to not be indicative of true of
	infection?
	infection?  1 Yes 0 No 9 Unknown
New question for 2021	1 □Yes 0 □No 9 □Unknown
New question for 2021	1 Yes 0 No 9 Unknown  (new question)  62. Was the patient under the care of an infectious disease physician on the day of the
New question for 2021	1 Yes 0 No 9 Unknown  (new question)  62. Was the patient under the care of an infectious disease physician on the day of the DISC or within the 6 days after the DISC?
New question for 2021  New question for 2021	1 Yes 0 No 9 Unknown  (new question)  62. Was the patient under the care of an infectious disease physician on the day of the DISC or within the 6 days after the DISC?  1 Yes 0 No 9 Unknown

	(new question)
New question for 2021	1a. If yes, date of specimen collection for initial positive SARS-CoV-2 test:
	Date: 9 🗌 Date Unknown
	(new question)
New question for 2021	1b. If yes, EIP COVID-NET Case ID:
	9 Unknown Out of EIP COVID-NET catchment area
	(new question)
New question for 2021	2. Did the patient receive invasive mechanical ventilation in the 30 days before the DISC, not including the DISC?
	1 □Yes 0 □No 9 □Unknown
	(new question)
	2
New question for 2021	3. Did the patient receive dialysis or renal replacement therapy (RRT) in the 30 days before the DISC, not including the DISC?
New question for 2021	replacement therapy (RRT) in the 30 days before
New question for 2021	replacement therapy (RRT) in the 30 days before the DISC, not including the DISC?
New question for 2021  New question for 2021	replacement therapy (RRT) in the 30 days before the DISC, not including the DISC?  1 Yes 0 No 9 Unknown
	replacement therapy (RRT) in the 30 days before the DISC, not including the DISC?  1 Yes 0 No 9 Unknown  (new question)  4. If patient received any systemic steroids in the 30 days before the DISC, not including the DISC (question 55), are any of the following
	replacement therapy (RRT) in the 30 days before the DISC, not including the DISC?  1 Yes 0 No 9 Unknown  (new question)  4. If patient received any systemic steroids in the 30 days before the DISC, not including the DISC (question 55), are any of the following scenarios true? (check all that apply)
	replacement therapy (RRT) in the 30 days before the DISC, not including the DISC?  1 Yes 0 No 9 Unknown  (new question)  4. If patient received any systemic steroids in the 30 days before the DISC, not including the DISC (question 55), are any of the following scenarios true? (check all that apply)  Steroid(s) given as an outpatient medication  Steroid(s) given during hospitalization
	replacement therapy (RRT) in the 30 days before the DISC, not including the DISC?  1 Yes 0 No 9 Unknown  (new question)  4. If patient received any systemic steroids in the 30 days before the DISC, not including the DISC (question 55), are any of the following scenarios true? (check all that apply)  Steroid(s) given as an outpatient medication Steroid(s) given during hospitalization associated  with candidemia episode prior to Candida

	(new question)
New question for 2021	5. Did the patient receive any of the following immunomodulatory drugs in the 30 days before the DISC, not including the DISC? (check all that apply)
	☐None ☐Tocilizumab ☐Sarilumab ☐Baricitinib ☐Unknown
	(new question)
New question for 2021	5a. If yes (and patient had a positive SARS-CoV-2 test), were any of the immunomodulatory drugs given as part of treatment/management for COVID-19?
	1 _Yes 0 _No 9 _Unknown  (new question)

## 8) Laboratory Testing Practices for Candidemia Questionnaire

2020 CRF Question	2021 CRF Question
2020 LABORATORY TESTING PRACTICES FOR CANDIDEMIA QUESTIONNAIRE (header)	2021 LABORATORY TESTING PRACTICES FOR CANDIDEMIA QUESTIONNAIRE (header)
	(changed year)
New Question	7) Does this laboratory offer yeast identification either onsite or sent to another laboratory?  Yes  No ( If No, SKIP TO QUESTION 15)  Unknown (is there another laboratory staff member who can assist with the questionnaire?)
	(new data collection)
New Question	8) Where is yeast identification done? (check the most applicable)  On-site, in the laboratory

New Instructions	Sent to commercial lab  Sent to affiliated hospital lab  Sent to other local/regional, non-affiliated reference or public health laboratory  Other  Unknown  (new data collection)  Answer the following questions for the lab selected in question 8.
7) How does your lab identify yeast? (check all	9) How does this lab identify yeast? (check all
that apply)	that apply)
	MALDI-TOF Bruker (Biotyper)
MALDI-TOF Bruker (Biotyper)	MALDI-TOF bioMerieux (VITEK MS)
MALDI-TOF bioMerieux (VITEK MS)	VITEK 2
VITEK 2	API 20C
API 20C	
DNA sequencing	DNA sequencing
PNA-FISH	PNA-FISH
BactiCard Candida	BactiCard Candida
	BD Phoenix
BD Phoenix	MicroScan
MicroScan	RapID Plus
RapID Plus	Other (specify)
Other (specify)	Unknown
Unknown	GIIKIOWII
	(changed question number, updated question wording)
8) Does your laboratory routinely use Chromagar	10) Does this laboratory routinely use Chromagar for the identification or differentiation of
for the identification or differentiation of Candida isolates?	Candida isolates?
isulates:	Yes
Yes	No
No	Unknown
Unknown	

	(changed question number, updated question wording)
9) Species-level identification is performed for Candida spp. isolated from which of the	11) Species-level identification is performed for Candida spp. isolated from which of the
following?	following?
a. Blood isolates  Yes, reflexively Yes, with clinician order No Unknown  b. Other normally sterile body site isolates Yes, reflexively Yes, with clinician order No Unknown	g. Blood isolates  Yes, reflexively  Yes, with clinician order  No Unknown  h. Other normally sterile body site isolates  Yes, reflexively  Yes, with clinician order  No Unknown
c. Abdominal isolates  Yes, reflexively  Yes, with clinician order  No  Unknown	Yes, reflexively Yes, with clinician order No Unknown
d. Respiratory isolates  Yes, reflexively  Yes, with clinician order  No Unknown e. Urine isolates  Yes, reflexively  Yes, with clinician order  No	j. Respiratory isolates  Yes, reflexively Yes, with clinician order No Unknown k. Urine isolates Yes, reflexively Yes, with clinician order No
Unknown  f. Other (specify)  Yes, reflexively  Yes, with clinician order  No Unknown	Unknown  I. Other (specify)  Yes, reflexively  Yes, with clinician order  No  Unknown
	(changed question number)
10) Does your laboratory employ the T2Candida Panel to identify Candida from blood specimens?  Yes (go to 10a)  No (go to 11)  Unknown	12) Does this laboratory employ the T2Candida Panel to identify Candida from blood specimens?  Yes (go to 12a)  No (go to 13)  Unknown
	Officiowif

a. If Yes, when did this lab first start using T2Candida Panel? Date (mm/dd/yyyy):/ b. If Yes, does this lab culture blood if you get a positive result on T2Candida Panel? Yes, reflexively Yes, with a clinical order No Unknown	c. If Yes, when did this lab first start using T2Candida Panel? Date (mm/dd/yyyy):/  d. If Yes, does this lab culture blood if you get a positive result on T2Candida Panel?  Yes, reflexively  Yes, with a clinical order  No  Unknown  (changed question number, updated question wording, updated question numbers for proper skip logic in response options)
11) Does your laboratory employ the BioFire	13) Does this laboratory employ the BioFire
(FilmArray) to identify <i>Candida</i> from blood	(FilmArray) to identify <i>Candida</i> from blood culture?
culture?	Yes (go to 13a)
Yes (go to 11a)	No (go to 14)
No (go to 12)	Unknown
Unknown	
a 16 Voo subon did this lab first start using	<ul> <li>a. If Yes, when did this lab first start using BioFire? Date (mm/dd/yyyy):</li> </ul>
a. If Yes, when did this lab first start using BioFire? Date (mm/dd/yyyy):	
//	
b. If yes, does this lab reflexively culture	
blood if you get a positive result on BiorFire?	(Deleted 11b)
Yes, reflexively	
Yes, with a clinical order	(changed question number, updated question wording, updated question numbers for proper skip logic in
No	response options, removed sub-question 11b)
Unknown	
12) If No for both Question 10 and 11, does this	14) If No for both Question 12 and 13, does this
laboratory have plans to employ culture-	laboratory have plans to employ culture- independent diagnostics for <i>Candida</i>
independent diagnostics for Candida identification	identification in the near future (e.g.
in the near future (e.g. T2Candida Panel, BioFire)?	T2Candida Panel, BioFire)?
Yes	Yes
No	☐ No
Unknown	Unknown
CHRIOWII	Not applicable

Not applicable (Yes to Q17 or Q18)	
	(changed question number, updated question wording, updated response wording for 'not applicable')
13) Does your laboratory offer any antifungal susceptibility testing for Candida?  Yes (Continue onto Page 2)  No ( If No, QUESTIONNAIRE COMPLETE)  Unknown (is there another laboratory staff member who can assist with the questionnaire?)	15) Does this laboratory offer any antifungal susceptibility testing for Candida either onsite or sent to another laboratory?  Yes  No ( If No, QUESTIONNAIRE COMPLETE)  Unknown (is there another laboratory staff member who can assist with the questionnaire?)  (changed question number, updated question wording, updated response wording for 'yes')
14) Where is antifungal susceptibility testing (AFST) done? (check all that apply)  On-site, in the laboratory  Sent to commercial lab  Sent to affiliated hospital lab  Other  Unknown	16) Where is antifungal susceptibility testing (AFST) done? (check the most applicable)  On-site, in the laboratory  Sent to commercial lab  Sent to affiliated hospital lab  Sent to other local/regional, non-affiliated reference or public health laboratory (new collection)  Other  Unknown
	(changed question number, updated question wording, added additional response option)
New Instructions	Answer the following questions for the lab selected in question 16.
15) Is antifungal susceptibility testing available for any of the following antifungal drugs (check all that apply):  Fluconazole  Voriconazole	17) Is antifungal susceptibility testing available for any of the following antifungal drugs (check all that apply):  Fluconazole  Voriconazole  Itraconazole

Itraconazole	Posaconazole
Posaconazole	Micafungin
Micafungin	Anidulafungin
Anidulafungin	Caspofungin
Caspofungin	Amphotericin B
Amphotericin B	Flucytosine
Flucytosine	Other (specify)
Other (specify)	Unknown
Unknown	
	(changed question number)
16) What methods are used for AFST? (check all that apply)  Non-commercial broth microdilution  YeastOne  E test  Vitek  Other  Unknown  a. If you use Vitek for AFST, what Candida species do you test with it? (check all that apply)  C. albicans  C. parapsilosis  C. glabrata  Other Candida spp.	18) What methods are used for AFST? (check all that apply)  Non-commercial broth microdilution  YeastOne  E test  Vitek  Other  Unknown  b. If you use Vitek for AFST, what Candida species do you test with it? (check all that apply)  C. albicans  C. parapsilosis  C. glabrata  Other Candida spp.
	(changed question number)
17) How are results of AFST reported? (select one)	19) How are results of AFST reported? (select one)
Categorical interpretation only (susceptible, resistant, etc.)	Categorical interpretation only (susceptible, resistant, etc.)
MIC only	MIC only
Bothcategorical interpretation PLUS MIC	Bothcategorical interpretation PLUS MIC
Unknown	b. If categorical interpretation only, how

a. If categorical interpretation only, how do you determine the categorical interpretation? (check all that apply)  CLSI M27 S4  CLSI M27 S3  From manufacturer of MIC test  Apply epidemiologic breakpoints  Other  Other  18) For what type of Candida isolates is antifungal susceptibility testing (AFST) performed automatically/reflexively? (check all that apply)  Blood isolates  Other normally sterile body site isolates  Other (specify)  No AFST performed automatically (requires order from a clinician)	do you determine the categorical interpretation? (check all that apply)  CLSI M27 S4  CLSI M27 S3  From manufacturer of MIC test  Apply epidemiologic breakpoints  Other  (changed question number)  20) For what type of Candida isolates is antifungal susceptibility testing (AFST) performed automatically/reflexively? (check all that apply)  Blood isolates  Other normally sterile body site isolates  Other (specify)  No AFST performed automatically (requires
Unknown	order from a clinician)  Unknown  (changed question number)
19) How is AFST performed for the following Candida spp.?  a. C. albicans Performed automatically/reflexively (Go to 19ai) Performed with a clinician's order Not performed  i. Drugs for which AFST is performed automatically/reflexively on C. abicans (check all that apply): Micafungin Anidulafungin Caspofungin Fluconazole	21) How is AFST performed for the following  Candida spp.?  a. C. albicans  Performed automatically/reflexively  (Go to 21ai)  Performed with a clinician's order  (Go to 21ai)  Not performed  m. Drugs for which AFST is performed on  C. abicans (check all that apply):  Micafungin  Anidulafungin  Caspofungin  Fluconazole

Voriconazole	Voriconazole
Amphotericin B	Amphotericin B
Other	Other
Unknown	Unknown
<ul><li>b. <u>C. glabrata</u></li><li>Performed automatically/reflexively</li></ul>	b. <u>C. glabrata</u> Performed automatically/reflexively
(Go to 19bi)	(Go to 21bi)
Performed with a clinician's order	Performed with a clinician's order
Not performed	(Go to 21bi)
j. Drugs for which AFST is performed	Not performed
automatically/reflexively on <i>C. glabrata</i> (check all that apply):  Micafungin	n. Drugs for which AFST is performed on C. glabrata (check all that apply):  Micafungin
Anidulafungin	Anidulafungin
Caspofungin	Caspofungin
Fluconazole	Fluconazole
Voriconazole	Voriconazole
Amphotericin B	Amphotericin B
Other	Other
Unknown	Unknown
c. <u>C. parapsilosis</u> Performed automatically/reflexively	c. <u>C. parapsilosis</u> Performed automatically/reflexively
(Go to 19ci)	(Go to 21ci)
Performed with a clinician's order	Performed with a clinician's order
Not performed	(Go to 21ci)
<ul> <li>k. Drugs for which AFST is performed automatically/reflexively on C.</li> </ul>	Not performed
parapsilosis (check all that apply):  Micafungin	o. Drugs for which AFST is performed on C. parapsilosis (check all that apply):
Anidulafungin	Micafungin
Caspofungin	Anidulafungin
Fluconazole	Caspofungin
Voriconazole	Fluconazole

Amphotericin B	Voriconazole
Other	Amphotericin B
Unknown	Other
d. Other Candida spp.  Performed automatically/reflexively	Unknown
(Go to 19di)	<ul> <li>d. Other Candida spp.</li> <li>Performed automatically/reflexively</li> </ul>
Performed with a clinician's order	(Go to 21di)
Not performed	Performed with a clinician's order
I. Drugs for which AFST is performed	(Go to 21di)
automatically/reflexively on other Candida spp.(check all that apply):	Not performed
Micafungin Anidulafungin Caspofungin Fluconazole Voriconazole Amphotericin B Other Unknown	p. Drugs for which AFST is performed on other Candida spp.(check all that apply):  Micafungin  Anidulafungin  Caspofungin  Fluconazole  Voriconazole  Amphotericin B  Other  Unknown
	(changed question number, changed skip logic question numbers in response options, updated question wording)

# 9) Invasive *Staphylococcus aureus* (iSA) Laboratory Survey: Use of Nucleic Acid Amplification Testing (NAAT)

2020 Survey Question	Proposed Changes Survey Question
1. Do you set up culture for sterile sites (blood, CSF,	1. Do you routinely set up culture for sterile sites
bone, etc.) for Staphylococcus aureus on site (in-	(blood, CSF, bone, etc.) on site (in-house at your
house at your laboratory?	laboratory?
☐ Yes - GO TO Q2 ☐ No	☐ Yes - GO TO Q2 ☐ No - GO TO Q3
	(updated question wording and skip pattern)

1a. [if no] To which laboratory do you send sterile	1a. [if no] To which laboratory do you send sterile
specimens for <i>Staphylococcus aureus</i> culture?	specimens for culture/identification?
	(updated question wording)
	2. Is <i>S. aureus</i> or MRSA routinely identified via culture-based methods on site (in-house) at your
	laboratory? ☐ Yes - GO TO Q3 ☐ No
	(added question)
	2a. [if no] To which laboratory do you send cultures for <i>S. aureus</i> identification?
	(added question)
2. Do you run any culture independent diagnostic tests (CIDT) for detection of <i>S. aureus</i> or MRSA either directly from a sterile source (CSF, Blood, etc.) or from a positive blood culture?   □ Yes  □ No - GO TO Q2d	3. Do you routinely run any culture independent diagnostic tests (CIDT) on site or at another lab for detection of <i>S. aureus</i> or MRSA either directly from a sterile source (CSF, Blood, etc.) or from a positive blood culture?
2 16 30 10 424	☐ Yes ☐ No - GO TO Q3d
	(updated question number, wording, and skip pattern)
2a. [If yes] Do you run the CIDT on site or send out to	3a. [If yes] Where is CIDT testing completed?
another lab?  □ On-site □ Send out, please specify lab	□ On-site □ Send out, please specify lab GO TO Q3c
	(updated question number, wording, and skip pattern)
2b. Which CIDTs do you use (sterile site sources only, i.e. blood, CSF, pleural fluid, bone, etc.)? Please check all that apply.	3b. Which CIDTs do you use (sterile site sources only, i.e. blood, CSF, pleural fluid, bone, etc.)? Please check all that apply.
☐ FilmArray® Blood Culture Identification PanelDate started	☐ FilmArray® Blood Culture Identification PanelDate started
☐ Verigene® Gram-Positive Blood Culture TestDate started	☐ Verigene® Gram-Positive Blood Culture TestDate started
☐ Verigene® Staphylococcus Blood Culture TestDate started	☐ Verigene® Staphylococcus Blood Culture TestDate started
☐ Cepheid Xpert® MRSA/SA BCDate started	☐ Cepheid Xpert® MRSA/SA BCDate started
☐ BD Geneohm® StaphSRDate started	☐ BD Geneohm® StaphSRDate started
☐ AdvanDx Staphylococcus QuickFISH blood culture kit  Date started	☐ AdvanDx Staphylococcus QuickFISH blood culture kit  Date started
☐ AdvanDx S. aureus/CNS PNA FISHDate started	☐ AdvanDx S. aureus/CNS PNA FISHDate started
☐ Alere BinaxNOW® Staphylococcus aureus testDate started	☐ Alere BinaxNOW® Staphylococcus aureus testDate started
☐ Great Basin Staph ID/R blood culture panelDate started	☐ Great Basin Staph ID/R blood culture panelDate started
☐ T2Bacteria® PanelDate started	☐ T2Bacteria® PanelDate started
☐ Accelerate PhenoTest™ BC kitDate started	☐ Accelerate PhenoTest™ BC kitDate started

☐ mecA XpressFISH®Date started	☐ mecA XpressFISH®Date started
☐ Micacom hemoFISH Masterpanel Date started	☐ Micacom hemoFISH Masterpanel Date started
□ ePlex BCID-GP Panel Date started	□ ePlex BCID-GP Panel Date started
☐ Other, Lab Developed Test (detects MRSA or SA) Date started	☐ Other, Lab Developed Test (detects MRSA or SA) Date started
☐ Other commercial test, SpecifyDate started	☐ Other commercial test, SpecifyDate started(updated question number)
2c. [If using any of the above tests on sterile site specimens] Do you still obtain an isolate for <i>S. aureus</i> or MRSA?   No - GO to Q3	3c. [If using any of the above tests on sterile site specimens] Do you still obtain an isolate for <i>S. aureus</i> or MRSA?   Yes  No - GO to Q4 (updated question number and skip pattern)
2d. [If no] Do you plan to start offering any CIDTs for <i>S. aureus</i> or MRSA within the next year?	3d. [If no] Do you plan to start offering any CIDTs for <i>S. aureus</i> or MRSA within the next year?
☐ Yes ☐ No - END SURVEY	☐ Yes ☐ No - END SURVEY
	(updated question number)
2e. When do you plan to start offering culture	3e. When do you plan to start offering CIDTs?
independent diagnostic tests?	Month/Year:/
Month/Year:/	(updated question number and wording)
	3f. Where do you plan to have CIDT tested?
	□ On-site □ Send out, please specify lab END SURVEY
	(added question)
3. How does your lab use the CIDT for detection of <i>S. aureus</i> or MRSA? (select one)	4. How does your lab use the CIDT for detection of <i>S. aureus</i> or MRSA? (select one)
☐ Test concurrently with culture	☐ Test concurrently with culture
☐ Reflex to culture after positive by CIDT panel	☐ Reflex to culture after positive by CIDT panel
☐ Only run CIDT panel, no additional testing is done	☐ Only run CIDT panel, no additional testing is done
□ Other, specify	□ Other, specify
	(updated question number)
	Comments
	(added comments field)