

## Antimicrobial Use and Resistance (AUR): Microbiology Laboratory Data Monthly Electronic Upload Specification Tables

These data will be collected in an aggregate monthly electronic file transfer from the facility to NHSN via Clinical Document Architecture (CDA).

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| Table 1. CDA File Descriptors  |                                                                       |                                                                                                   | These data elements will be transmitted with each month's report. |                                                                   |
|--------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|
| Variable Name                  | Description of Variable                                               |                                                                                                   |                                                                   |                                                                   |
| orgid                          | NHSN Facility ID number                                               |                                                                                                   |                                                                   |                                                                   |
| location                       | NHSN location code                                                    |                                                                                                   |                                                                   |                                                                   |
| month                          | Denominator month                                                     |                                                                                                   |                                                                   |                                                                   |
| year                           | Denominator year                                                      |                                                                                                   |                                                                   |                                                                   |
| Application OID                | Vendor software ID number                                             |                                                                                                   |                                                                   |                                                                   |
| SDS validation ID              | ID provided by NHSN Team confirming vendor software passed validation |                                                                                                   |                                                                   |                                                                   |
| Table 2. Isolate Event Details |                                                                       |                                                                                                   |                                                                   | These data elements will be transmitted with each month's report. |
| Variable Name                  | Description of Variable                                               | Examples                                                                                          |                                                                   |                                                                   |
| eventID                        | Event ID number                                                       |                                                                                                   |                                                                   |                                                                   |
| specimenDate                   | Date specimen collected                                               |                                                                                                   |                                                                   |                                                                   |
| specimenSource                 | Specimen Source                                                       | Blood, lower respiratory, urine, cerebral spinal fluid, skin, soft tissue, wound, musculoskeletal |                                                                   |                                                                   |
| isolateID                      | Isolate identifier                                                    |                                                                                                   |                                                                   |                                                                   |
| facilityAdmitDate              | Date admitted to facility                                             |                                                                                                   |                                                                   |                                                                   |
| admitStatus                    | Was patient admitted to an inpatient location                         | Y/N                                                                                               |                                                                   |                                                                   |
| specimenLoc                    | Location of specimen collection                                       |                                                                                                   |                                                                   |                                                                   |
| pathogen                       | Identified pathogen                                                   |                                                                                                   |                                                                   |                                                                   |
| PtDOB                          | Patient date of birth                                                 |                                                                                                   |                                                                   |                                                                   |
| PtGender                       | Patient gender                                                        |                                                                                                   |                                                                   |                                                                   |
| PtID                           | Patient ID number                                                     |                                                                                                   |                                                                   |                                                                   |
| PtRace                         | Patient race                                                          |                                                                                                   |                                                                   |                                                                   |
|                                | Select all that apply):                                               |                                                                                                   |                                                                   |                                                                   |
|                                | American Indian or Alaska Native                                      |                                                                                                   |                                                                   |                                                                   |
|                                | Asian                                                                 |                                                                                                   |                                                                   |                                                                   |
|                                | Black or African American                                             |                                                                                                   |                                                                   |                                                                   |
|                                | Middle Eastern or North African                                       |                                                                                                   |                                                                   |                                                                   |
|                                | Native Hawaiian or Pacific Islander                                   |                                                                                                   |                                                                   |                                                                   |
|                                | White                                                                 |                                                                                                   |                                                                   |                                                                   |
| Unknown                        |                                                                       |                                                                                                   |                                                                   |                                                                   |
| PtRace                         | Declined to respond                                                   |                                                                                                   |                                                                   |                                                                   |
| PtEthnicity                    | Patient ethnicity                                                     |                                                                                                   |                                                                   |                                                                   |
|                                | Hispanic or Latino                                                    |                                                                                                   |                                                                   |                                                                   |
|                                | Not Hispanic or Latino                                                |                                                                                                   |                                                                   |                                                                   |
|                                | Unknown                                                               |                                                                                                   |                                                                   |                                                                   |
| PtEthnicity                    | Declined to respond                                                   |                                                                                                   |                                                                   |                                                                   |
| PtSexatBirth                   | Patient sex at birth F M Unknown                                      |                                                                                                   |                                                                   |                                                                   |
| PtGenderIdentity               | Patient gender identity                                               |                                                                                                   |                                                                   |                                                                   |
|                                | Male                                                                  |                                                                                                   |                                                                   |                                                                   |
|                                | Female                                                                |                                                                                                   |                                                                   |                                                                   |
|                                | Male-to-female transgender                                            |                                                                                                   |                                                                   |                                                                   |
|                                | Female-to-male transgender                                            |                                                                                                   |                                                                   |                                                                   |
|                                | Identifies as non-conforming                                          |                                                                                                   |                                                                   |                                                                   |
|                                | Other                                                                 |                                                                                                   |                                                                   |                                                                   |
|                                | PtGenderIdentity                                                      | Asked but unknown                                                                                 |                                                                   |                                                                   |
| PtLanguage                     | Patient language                                                      |                                                                                                   |                                                                   |                                                                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            |                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PtInterpreterNeeded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Patient interpreter needed |                                                                                                                                                                                      |
| PtInterpreterUsed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Patient interpreter used   |                                                                                                                                                                                      |
| <b>Table 2a. List of Eligible Pathogens</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            | <i>This is the list of pathogens that will be accepted into NHSN as part of the antimicrobial resistance reporting. Complete list of accepted is found in the NHSN IDM Workbook.</i> |
| Acinetobacter species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            | Morganella morganii                                                                                                                                                                  |
| Candida species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            | Proteus species                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Enterobacter species       |                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Enterococcus faecalis      |                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Enterococcus faecium       | Pseudomonas aeruginosa                                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Enterococcus species       | Serratia marcescens                                                                                                                                                                  |
| Citrobacter species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Escherichia coli           | Staphylococcus aureus                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Klebsiella species         | Stenotrophomonas maltophilia                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            | Streptococcus agalactiae                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            | Streptococcus pneumoniae                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            | Streptococcus pyogenes                                                                                                                                                               |
| <p><b>Assurance of Confidentiality:</b> The voluntarily provided information obtained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not otherwise be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306 and 308(d) of the Public Health Service Act (42 USC 242b, 242k, and 242m(d)).</p> <p>Public reporting burden of this collection of information is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering, and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC, Reports Clearance Officer, 1600 Clifton Rd., MS H21-8, Atlanta, GA 30333, ATTN: PRA (0920-0666).</p> |                            |                                                                                                                                                                                      |
| CDC 57.123 v10, 13.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                            |                                                                                                                                                                                      |

## Antimicrobial Use and Resistance (AUR): Microbiology Laboratory Data Monthly Electronic Upload Specification Tables

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**Table 3. Antimicrobial Susceptibility Details** *These data elements will be transmitted with each month's report.*

| Variable Name       | Description of Variable                                                      | Examples |
|---------------------|------------------------------------------------------------------------------|----------|
| drug test           | Antimicrobial used for susceptibility test                                   |          |
| PBP2a-agglutination | PBP2a-agglutination                                                          |          |
| PCRMec-gene         | PCR mec-gene                                                                 |          |
| EtestSign           | Etest sign                                                                   | >, <, =  |
| EtestValue          | Etest value                                                                  |          |
| EtestInterp         | Interpretation of Etest                                                      |          |
| MICsign             | MIC sign                                                                     |          |
| MICinterp           | Interpretation of the MIC test                                               |          |
| MICvalue            | MIC value                                                                    |          |
| ZoneSign            | Zone sign                                                                    |          |
| ZoneInterp          | Interpretation of zone test                                                  |          |
| ZoneValue           | Zone value                                                                   |          |
| MolecularTest       | Rapid molecular detection of antimicrobial resistance markers                |          |
| MolecularTestResult | Result of rapid molecular detection of antimicrobial resistance markers test |          |
| FinIntrep           | Final interpretation result                                                  |          |

**Table 3a. List of Antimicrobials used for Susceptibility Testing** *This is the list of antimicrobials that will be accepted into NHSN as part of the antimicrobial resistance reporting.*

|                             |                        |                                     |                               |
|-----------------------------|------------------------|-------------------------------------|-------------------------------|
| Amikacin                    | Cefoxitin              | Meropenem                           | Rezafungin                    |
| Amoxicillin                 | Ceftaroline            | Doxycycline                         | Meropenem-vaborbactam         |
| Amoxicillin-clavulanic acid | Ceftazidime            | Ertapenem                           | Rifampin                      |
| Amphotericin B              | Ceftazidime/Avibactam  | Micafungin                          | Streptomycin                  |
| Ampicillin                  | Ceftibuten             | Minocycline                         | Streptomycin – high level     |
| Ampicillin-sulbactam        | Ceftolozane/Tazobactam | Moxifloxacin                        | Sulbactam/Durlobactam         |
| Anidulafungin               | Ceftriaxone            | Nitrofurantoin                      |                               |
| Azithromycin                | Cefuroxime             | Oritavancin                         | Tedizolid                     |
| Aztreonam                   |                        | Oxacillin                           | Telavancin                    |
| Caspofungin                 | Ciprofloxacin          | Penicillin G                        | Tetracycline                  |
| Cefazolin                   | Clarithromycin         | Penicillin V                        |                               |
| Cefepime                    | Clindamycin            | Imipenem-cilastatin                 | Trimethoprim-sulfamethoxazole |
| Cefiderocol                 | Colistin               | Imipenem-relebactam with cilastatin |                               |
| Cefotaxime                  | Dalbavancin            | Lefamulin                           | Vancomycin                    |
| Cefotetan                   | Daptomycin             | Levofloxacin                        | Voriconazole                  |
|                             |                        | Linezolid                           |                               |
|                             |                        | Posaconazole                        |                               |

**Table 4. Denominator Data** *These data elements will be transmitted with each month's report.*

| Variable Name | Description of Variable         |
|---------------|---------------------------------|
| numAdmissions | Number of admissions            |
| numPtDays     | Number of inpatient days        |
| numEncounters | Number of outpatient encounters |
| noAREvent     | No AR Events were identified    |