

## Antimicrobial Resistant Phenotype Definitions

### NHSN Analysis Output Options for HAI data

Phenotype Name	Phenotype Code	Phenotype Definition
Methicillin-resistant <i>Staphylococcus aureus</i>	MRSA_HAI	<i>Staphylococcus aureus</i> that has tested Resistant (R) to at least 1 of the following: methicillin, oxacillin, or ceftazidime
Carbapenem-resistant Enterobacteriaceae	CREall_HAI	Any <i>Escherichia coli</i> , <i>Klebsiella oxytoca</i> , <i>Klebsiella pneumoniae</i> , or <i>Enterobacter</i> spp. that has tested Resistant (R) to at least 1 of the following: imipenem, meropenem, doripenem, or ertapenem
Carbapenem-resistant <i>E.coli</i>	CREecoli_HAI	Any <i>Escherichia coli</i> that has tested Resistant (R) to at least 1 of the following: imipenem, meropenem, doripenem, or ertapenem
Carbapenem-resistant <i>Enterobacter</i> spp.	CREenterobacter_HAI	Any <i>Enterobacter</i> spp. that has tested Resistant (R) to at least 1 of the following: imipenem, meropenem, doripenem, or ertapenem
Carbapenem-resistant <i>Klebsiella pneumoniae/oxytoca</i>	CREklebsiella_HAI	Any <i>Klebsiella oxytoca</i> or <i>Klebsiella pneumoniae</i> that has tested Resistant (R) to at least 1 of the following: imipenem, meropenem, doripenem, or ertapenem
Carbapenem-non-susceptible <i>Pseudomonas aeruginosa</i>	carbNS_PA_HAI	<i>Pseudomonas aeruginosa</i> that has tested either Intermediate (I) or Resistant (R) to at least 1 of the following: imipenem, meropenem, or doripenem
Multidrug-resistant <i>Pseudomonas aeruginosa</i>	MDR_PA_HAI	<p><i>Pseudomonas aeruginosa</i> that has tested either Intermediate (I) or Resistant (R) to at least 1 drug in at least 3 of the following 5 categories:</p> <ol style="list-style-type: none"> <li>1. Extended-spectrum cephalosporin (cefepime, ceftazidime)</li> <li>2. Fluoroquinolones (ciprofloxacin, levofloxacin)</li> <li>3. Aminoglycosides (amikacin, gentamicin, tobramycin)</li> <li>4. Carbapenems (imipenem, meropenem, doripenem)</li> <li>5. PIP/PIPTAZ (piperacillin, piperacillin/tazobactam)</li> </ol>
Carbapenem-non-susceptible <i>Acinetobacter</i> spp.	carbNS_Acine_HAI	Any <i>Acinetobacter</i> spp. that has tested either Intermediate (I) or Resistant (R) to at least 1 of the following: imipenem, meropenem, or doripenem

Phenotype Name	Phenotype Code	Phenotype Definition
Multidrug-resistant <i>Acinetobacter</i> spp.	MDR_Acine_HAI	Any <i>Acinetobacter</i> spp. that has tested either Intermediate (I) or Resistant (R) to at least 1 drug in at least 3 of the following 6 categories:  1. Extended-spectrum cephalosporin (cefepime, ceftazidime, ceftriaxone, cefotaxime) 2. Fluoroquinolones (ciprofloxacin, levofloxacin) 3. Aminoglycosides (amikacin, gentamicin, tobramycin) 4. Carbapenems (imipenem, meropenem, doripenem) 5. PIP/PIPTAZ (piperacillin, piperacillin/tazobactam) 6. Ampicillin/sulbactam
Vancomycin-resistant <i>Enterococcus faecalis</i>	VREfaecalis_HAI	<i>Enterococcus faecalis</i> that has tested Resistant (R) to vancomycin
Vancomycin-resistant <i>Enterococcus faecium</i>	VREfaecium_HAI	<i>Enterococcus faecium</i> that has tested Resistant (R) to vancomycin