

Multidrug-Resistant Organism (MDRO) Definitions

Type	Definition Source	Definition
Methicillin-resistant <i>Staphylococcus aureus</i>	CDC, NHSN†	Includes <i>S. aureus</i> cultured from any specimen that tests oxacillin-resistant, ceoxitin-resistant, or methicillin-resistant by standard susceptibility testing methods, or by a laboratory test that is FDA-approved for MRSA detection from isolated colonies; these methods may also include a positive result by any FDA-approved test for MRSA detection from specific sources.
Vancomycin-resistant <i>Enterococcus</i> spp.	CDC, NHSN†	Any <i>Enterococcus</i> spp. (regardless of whether identified to the species level), that is resistant to vancomycin, by standard susceptibility testing methods or by results from any FDA-approved test for VRE detection from specific specimen sources.
CRE	Oregon§	Any <i>Enterobacteriaceae</i> spp. testing resistant to any carbapenem including doripenem, ertapenem, imipenem or meropenem using the current CLSI breakpoints; or by a positive result for any method FDA approved for carapenemase detection.
MDR- <i>Acinetobacter</i>	CDC, NHSN†	Non-susceptibility (i.e., resistant or intermediate) to at least one agent in at least <u>3 antimicrobial classes</u> of the following <u>6 classes</u> : <ul style="list-style-type: none"> • Ampicillin/sulbactam • Cephalosporins (cefepime, ceftazidime) • β-lactam/β-lactam β-lactamase inhibitor combination (piperacillin, piperacillin/tazobactam) • Carbapenems (imipenem, meropenem, doripenem) • Fluoroquinolones (ciprofloxacin or levofloxacin) • Aminoglycosides (gentamicin, tobramycin, or amikacin)
MDR- <i>Pseudomonas</i>	CDC, NHSN‡	Non-susceptibility (i.e., resistant or intermediate) to at least one agent in at least <u>3 antimicrobial classes</u> of the following <u>5 classes</u> : <ul style="list-style-type: none"> • Cephalosporins (cefepime, ceftazidime) • β-lactam/β-lactam β-lactamase inhibitor combination (piperacillin, piperacillin/tazobactam) • Carbapenems (imipenem, meropenem, doripenem) • Fluoroquinolones (ciprofloxacin or levofloxacin) • Aminoglycosides (gentamicin, tobramycin, or amikacin)
Extended-spectrum beta-lactamase Gram negatives	CDC, NHSN†	<ul style="list-style-type: none"> • <i>Enterobacteriaceae</i> spp. non-susceptible (i.e., resistant or intermediate) to ceftazidime, cefepime, ceftriaxone, or cefotaxime. • <i>Pseudomonas aeruginosa</i> non-susceptible (i.e., resistant or intermediate) to ceftazidime or cefepime.
<i>Clostridium difficile</i>	CDC, NHSN†	A positive laboratory test result for <i>C. difficile</i> toxin A or B, (includes molecular assays [PCR] or toxin assays) OR A toxin-producing <i>C. difficile</i> organism detected by culture or other laboratory means performed on a stool sample.
Drug-resistant <i>Streptococcus pneumoniae</i>	CDC, Emerging Infections Program	<i>S. pneumoniae</i> isolated from a sterile site and nonsusceptible to "at least one antimicrobial agent currently approved for use in treating pneumococcal infection." (NO LONGER INCLUDED IN LIST)

†CDC. Multidrug-Resistant Organism & *Clostridium difficile* Infection (MDRO/CDI) Module. January 2014.

http://www.cdc.gov/nhsn/PDFs/pscManual/12pscMDRO_CDADcurrent.pdf

§Oregon Public Health Division, OAR 333-019-0015

‡ Sievert DM et al. Antimicrobial-Resistant Pathogens Associated with Healthcare-Associated Infections: Summary of Data Reported to the National Healthcare Safety Network at the Centers for Disease Control and Prevention, 2009–2010. *ICHE* 2013;34:1–14.