Standardized Antimicrobial Administration Ratio (SAAR)

Adult and Pediatric Categories, Locations, and NHSN Type Names 2023 NHSN Re-baseline

What is SAAR?

The SAAR is a risk ratio intended to provide a national benchmark for the QUANTITY of antimicrobials used by a facility. The SAAR does NOT provide information about the appropriateness of antimicrobials used by a facility.

How is SAAR calculated?

SAAR = Observed Antimicrobial Use (DOTs) ÷ Predicted Antimicrobial Use (DOTs)

What Is Observed Antimicrobial Use?

Observed antimicrobial use (DOTs) is the antimicrobial use reported by facilities.

What Is Predicted Antimicrobial Use?

Predicted antimicrobial use (DOTs) is calculated using models developed by CDC based on national aggregated antimicrobial use reported to CDC in 2023.

Facility features and length of stay data are used to calculate predicted antimicrobial use. Patient level data such as hospital infection burden, case mix index or antimicrobial use indications are not used in the 2023 baseline models.

Adult and Pediatric SAARs: 2023 Baseline

The tables below provide the SAAR antimicrobial categories, locations, and NHSN SAAR type names used in the 2023 NHSN re-baseline.

Source: CDC NHSN Patient Safety Component Manual

Adult SAAR

SAAR Antimicrobial Category	SAAR Location	SAAR Type in NHSN
All antibacterial agents Includes all except: • Amikacin Liposome • Aztreonam/avibactam • Cefepime/Enmetazobactam • Gepotidacin • Sulopenem/Probenecid	All Adult SAAR Locations	Adult_All-Antibacterial_All_2023
BSHO Broad spectrum antibacterial agents predominantly used for hospital onset infections • Amikacin (IV only) • Aztreonam (IV only) • Cefepime • Ceftazidime	Adult Med, Med-Surg, Surg ICUs	Adult_BSHO_GeneralICU_2023
	Adult Burn ICUs	Adult_BSHO_BurnICU_2023
	Adult Medical Cardiac ICUs	Adult_BSHO_MedCardICU_2023
	Adult Surgical Cardiothoracic ICUs	Adult_BSHO_SurgCardICU_2023
	Adult Neurologic ICUs	Adult_BSHO_NeuroICU_2023
	Adult Neurosurgical ICUs	Adult_BSHO_NeuroSurgICU_2023
	Adult Trauma ICUs	Adult_BSHO_TraumaICU_2023

• Gentamicin (IV only) • Imipenem/Cilastatin • Meropenem • Piperacillin/Tazobactam • Tobramycin (IV only)	Adult Med, Med-Surg, Surg Wards	Adult_BSHO_GeneralWard_2023
	Adult Burn Wards	Adult_BSHO_BurnWard_2023
	Adult Neurology Wards	Adult_BSHO_NeuroWard_2023
	Adult Neurosurgical Wards	Adult_BSHO_NeuroSurgWard_2023
	Adult Pulmonary Wards	Adult_BSHO_PulmWard_2023
	Adult Lab/Del, Labor, Delivery, Recovery, Postpartum Suite, Postpartum Wards	Adult_BSHO_OB_2023
	Adult Orthopedic, Ortho Trauma Wards	Adult_BSHO_ORTHO_2023
	Adult Mixed Acuity Units	Adult_BSHO_MixedAcuity_2023
	Adult Step-Down Units	Adult_BSHO_Step_2023
	Adult Solid Organ Transplant Specialty Care Areas	Adult_BSHO_SOTP_2023
	Adult General Hematology-Oncology, Hematopoietic Stem Cell TrPL Wards	Adult_BSHO_ONC_2023
BSCA Broad spectrum antibacterial agents predominantly used for community acquired infections: • Cefaclor • Cefdinir • Cefixime • Cefotaxime • Cefpodoxime • Cefprozil • Ceftriaxone • Cefuroxime • Ciprofloxacin • Delafloxacin • Ertapenem • Levofloxacin • Moxifloxacin • Pivmecillinam	Adult Med, Med-Surg, Surg ICUs	Adult_BSCA_GeneralICU_2023
	Adult Burn ICUs	Adult_BSCA_BurnICU_2023
	Adult Medical Cardiac ICUs	Adult_BSCA_MedCardICU_2023
	Adult Surgical Cardiothoracic ICUs	Adult_BSCA_SurgCardICU_2023
	Adult Neurologic ICUs	Adult_BSCA_NeuroICU_2023
	Adult Neurosurgical ICUs	Adult_BSCA_NeuroSurgICU_2023
	Adult Trauma ICUs	Adult_BSCA_TraumaICU_2023
	Adult Med, Med-Surg, Surg Wards	Adult_BSCA_GeneralWard_2023
	Adult Burn Wards	Adult_BSCA_BurnWard_2023
	Adult Neurology Wards	Adult_BSCA_NeuroWard_2023
	Adult Neurosurgical Wards	Adult_BSCA_NeuroSurgWard_2023
	Adult Pulmonary Wards	Adult_BSCA_PulmWard_2023
	Adult Lab/Del, Labor, Delivery, Recovery, Postpartum Suite, Postpartum Wards	Adult_BSCA_OB_2023
	Adult Orthopedic, Ortho Trauma Wards	Adult_BSCA_ORTHO_2023
	Adult Mixed Acuity Units	Adult_BSCA_MixedAcuity_2023
	Adult Step-Down Units	Adult_BSCA_Step_2023

	Adult Solid Organ Transplant Specialty Care Areas	Adult_BSCA_SOTP_2023
	Adult General Hematology-Oncology, Hematopoietic Stem Cell TrPL Wards	Adult_BSCA_ONC_2023
GramPos Antibacterial agents predominantly used for resistant gram-positive infections • Ceftaroline • Ceftobiprole Medocaril • Dalbavancin • Daptomycin • Linezolid • Oritavancin • Tedizolid • Telavancin • Vancomycin (IV only)	Adult Med, Med-Surg, Surg ICUs	Adult_GramPos_GeneralICU_2023
	Adult Burn ICUs	Adult_GramPos_BurnICU_2023
	Adult Medical Cardiac ICUs	Adult_GramPos_MedCardICU_2023
	Adult Surgical Cardiothoracic ICUs	Adult_GramPos_SurgCardICU_2023
	Adult Neurologic ICUs	Adult_GramPos_NeuroICU_2023
	Adult Neurosurgical ICUs	Adult_GramPos_NeuroSurgICU_2023
	Adult Trauma ICUs	Adult_GramPos_TraumaICU_2023
	Adult Med, Med-Surg, Surg Wards	Adult_GramPos_GeneralWard_2023
	Adult Burn Wards	Adult_GramPos_BurnWard_2023
	Adult Neurology Wards	Adult_GramPos_NeuroWard_2023
	Adult Neurosurgical Wards	Adult_GramPos_NeuroSurgWard_2023
	Adult Pulmonary Wards	Adult_GramPos_PulmWard_2023
	Adult Lab/Del, Labor, Delivery, Recovery, Postpartum Suite, Postpartum Wards	Adult_GramPos_OB_2023
	Adult Orthopedic, Ortho Trauma Wards	Adult_GramPos_ORTHO_2023
	Adult Mixed Acuity Units	Adult_GramPos_MixedAcuity_2023
	Adult Step-Down Units	Adult_GramPos_Step_2023
	Adult Solid Organ Transplant Specialty Care Areas	Adult_GramPos_SOTP_2023
	Adult General Hematology-Oncology, Hematopoietic Stem Cell TrPL Wards	Adult_GramPos_ONC_2023
NSBL Narrow spectrum beta-lactam agents • Amoxicillin • Amoxicillin/Clavulanate • Ampicillin • Ampicillin/Sulbactam • Cefadroxil • Cefazolin	Adult Med, Med-Surg, Surg ICUs	Adult_NSBL_GeneralICU_2023
	Adult Burn ICUs	Adult_NSBL_BurnICU_2023
	Adult Medical Cardiac ICUs	Adult_NSBL_MedCardICU_2023
	Adult Surgical Cardiothoracic ICUs	Adult_NSBL_SurgCardICU_2023
	Adult Neurologic ICUs	Adult_NSBL_NeuroICU_2023
	Adult Neurosurgical ICUs	Adult_NSBL_NeuroSurgICU_2023
	Adult Trauma ICUs	Adult_NSBL_TraumaICU_2023

• Cefotetan • Cefoxitin • Cephalexin • Dicloxacillin • Nafcillin • Oxacillin • Penicillin G • Penicillin V	Adult Med, Med-Surg, Surg Wards	Adult_NSBL_GeneralWard_2023
	Adult Burn Wards	Adult_NSBL_BurnWard_2023
	Adult Neurology Wards	Adult_NSBL_NeuroWard_2023
	Adult Neurosurgical Wards	Adult_NSBL_NeuroSurgWard_2023
	Adult Pulmonary Wards	Adult_NSBL_PulmWard_2023
	Adult Lab/Del, Labor, Delivery, Recovery, Postpartum Suite, Postpartum Wards	Adult_NSBL_OB_2023
	Adult Orthopedic, Ortho Trauma Wards	Adult_NSBL_ORTHO_2023
	Adult Mixed Acuity Units	Adult_NSBL_MixedAcuity_2023
	Adult Step-Down Units	Adult_NSBL_Step_2023
	Adult Solid Organ Transplant Specialty Care Areas	Adult_NSBL_SOTP_2023
	Adult General Hematology-Oncology, Hematopoietic Stem Cell TrPL Wards	Adult_NSBL_ONC_2023
CDI Antibacterial agents posing the highest risk for *C. difficile* infection • Cefaclor • Cefdinir • Cefepime • Cefixime • Cefotaxime • Cefotetan • Cefoxitin • Cefpodoxime • Cefprozil • Ceftazidime • Ceftazidime/Avibactam • Ceftriaxone • Cefuroxime • Ciprofloxacin • Clindamycin • Delafloxacin • Ertapenem • Imipenem/Cilastatin • Imipenem/Cilastatin/Releb	Adult Med, Med-Surg, Surg ICUs	Adult_CDI_GeneralICU_2023
	Adult Burn ICUs	Adult_CDI_BurnICU_2023
	Adult Medical Cardiac ICUs	Adult_CDI_MedCardICU_2023
	Adult Surgical Cardiothoracic ICUs	Adult_CDI_SurgCardICU_2023
	Adult Neurologic ICUs	Adult_CDI_NeuroICU_2023
	Adult Neurosurgical ICUs	Adult_CDI_NeuroSurgICU_2023
	Adult Trauma ICUs	Adult_CDI_TraumaICU_2023
	Adult Med, Med-Surg, Surg Wards	Adult_CDI_GeneralWard_2023
	Adult Burn Wards	Adult_CDI_BurnWard_2023
	Adult Neurology Wards	Adult_CDI_NeuroWard_2023
	Adult Neurosurgical Wards	Adult_CDI_NeuroSurgWard_2023
	Adult Pulmonary Wards	Adult_CDI_PulmWard_2023
	Adult Lab/Del, Labor, Delivery, Recovery, Postpartum Suite, Postpartum Wards	Adult_CDI_OB_2023

• Levofloxacin • Meropenem • Meropenem/Vaborbactam • Moxifloxacin	Adult Orthopedic, Ortho Trauma Wards	Adult_CDI_ORTHO_2023
	Adult Mixed Acuity Units	Adult_CDI_MixedAcuity_2023
	Adult Step-Down Units	Adult_CDI_Step_2023
	Adult Solid Organ Transplant Specialty Care Areas	Adult_CDI_SOTP_2023
	Adult General Hematology-Oncology, Hematopoietic Stem Cell TrPL Wards	Adult_CDI_ONC_2023
Antifungal Antifungal agents are predominantly used for invasive candidiasis • Anidulafungin • Caspofungin • Fluconazole • Micafungin • Rezafungin	Adult Med, Med-Surg, Surg ICUs	Adult_Antifungal_GeneralICU_2023
	Adult Burn ICUs	Adult_Antifungal_BurnICU_2023
	Adult Medical Cardiac ICUs	Adult_Antifungal_MedCardICU_2023
	Adult Surgical Cardiothoracic ICUs	Adult_Antifungal_SurgCardICU_2023
	Adult Neurologic ICUs	Adult_Antifungal_NeuroICU_2023
	Adult Neurosurgical ICUs	Adult_Antifungal_NeuroSurgICU_2023
	Adult Trauma ICUs	Adult_Antifungal_TraumaICU_2023
	Adult Med, Med-Surg, Surg Wards	Adult_Antifungal_GeneralWard_2023
	Adult Burn Wards	Adult_Antifungal_BurnWard_2023
	Adult Neurology Wards	Adult_Antifungal_NeuroWard_2023
	Adult Neurosurgical Wards	Adult_Antifungal_NeuroSurgWard_2023
	Adult Pulmonary Wards	Adult_Antifungal_PulmWard_2023
	Adult Lab/Del, Labor, Delivery, Recovery, Postpartum Suite, Postpartum Wards	Adult_Antifungal_OB_2023
	Adult Orthopedic, Ortho Trauma Wards	Adult_Antifungal_ORTHO_2023
	Adult Mixed Acuity Units	Adult_Antifungal_MixedAcuity_2023
	Adult Step-Down Units	Adult_Antifungal_Step_2023
	Adult Solid Organ Transplant Specialty Care Areas	Adult_Antifungal_SOTP_2023
	Adult General Hematology-Oncology, Hematopoietic Stem Cell TrPL Wards	Adult_Antifungal_ONC_2023

Pediatric SAAR

SAAR Antimicrobial Category	SAAR Location	SAAR Type in NHSN
All Antibacterials All antibacterial agents except: • Amikacin Liposome • Aztreonam/avibactam • Cefepime/Enmetazobactam • Gepotidacin • Sulopenem/Probenecid	All Pediatric locations	Ped_All-Antibacterial_2023
BSHO Broad spectrum antibacterial agents predominantly used for hospital onset infections • Amikacin (IV only) • Aztreonam (IV only) • Cefepime • Ceftazidime • Ciprofloxacin • Delafloxacin • Ertapenem • Imipenem/Cilastatin • Levofloxacin • Meropenem • Moxifloxacin • Piperacillin/Tazobactam • Tobramycin (IV only)	Pediatric Medical and Medical-Surgical ICUs	Ped_BSHO_GeneralICU_2023
	Pediatric Surgical Cardiothoracic ICUs	Ped_BSHO_SurgCardICU_2023
	Pediatric Medical, Medical-Surgical, Surgical Wards	Ped_BSHO_GeneralWard_2023
	Pediatric Step-Down Units	Ped_BSHO_Step_2023
	Pediatric General Hematology-Oncology, Hematopoietic Stem Cell Transplant Wards	Ped_BSHO_ONC_2023
BSCA Broad spectrum antibacterial agents predominantly used for community acquired infections • Amoxicillin/Clavulanate • Ampicillin/Sulbactam • Cefaclor • Cefdinir • Cefixime • Cefotaxime • Cefpodoxime • Cefprozil • Ceftriaxone • Cefuroxime	Pediatric Medical and Medical-Surgical ICUs	Ped_BSCA_GeneralICU_2023
	Pediatric Surgical Cardiothoracic ICUs	Ped_BSCA_SurgCardICU_2023
	Pediatric Medical, Medical-Surgical, Surgical Wards	Ped_BSCA_GeneralWard_2023
	Pediatric Step-Down Units	Ped_BSCA_Step_2023
	Pediatric General Hematology-Oncology,	Ped_BSCA_ONC_2023

• Pivmecillinam		
GramPos Antibacterial agents predominantly used for resistant gram-positive infections • Ceftaroline • Ceftobiprole Medocaril • Clindamycin • Dalbavancin • Daptomycin • Linezolid • Oritavancin • Tedizolid • Telavancin • Vancomycin (IV only)	Pediatric Medical and Medical-Surgical ICUs	Ped_GramPos_GeneralICU_2023
	Pediatric Surgical Cardiothoracic ICUs	Ped_GramPos_SurgCardICU_2023
	Pediatric Medical, Medical-Surgical, Surgical Wards	Ped_GramPos_GeneralWard_2023
	Pediatric Step-Down Units	Ped_GramPos_Step_2023
	Pediatric General Hematology-Oncology,	Ped_GramPos_ONC_2023
NSBL Narrow spectrum beta-lactam agents • Amoxicillin • Ampicillin • Cefadroxil • Cefazolin • Cefotetan • Cefoxitin • Cephalexin • Dicloxacillin • Nafcillin • Oxacillin • Penicillin G • Penicillin	Pediatric Medical and Medical-Surgical ICUs	Ped_NSBL_General ICU_2023
	Pediatric Surgical Cardiothoracic ICUs	Ped_NSBL_SurgCardICU_2023
	Pediatric Medical, Medical-Surgical, Surgical Wards	Ped_NSBL_GeneralWard_2023
	Pediatric Step-Down Units	Ped_NSBL_Step_2023
	Pediatric General Hematology-Oncology,	Ped_NSBL_ONC_2023
Azithromycin • Azithromycin	Pediatric Medical and Medical-Surgical ICUs	Ped_Azith_ICU_2023
	Pediatric Surgical Cardiothoracic ICUs	Ped_Azith_SurgCardICU_2023
	Pediatric Medical, Medical-Surgical, Surgical Wards	Ped_Azith_GeneralWard_2023
	Pediatric Step-Down Units	Ped_Azith_Step_2023
	Pediatric General Hematology-Oncology,	Ped_Azith_ONC_2023

CDI Antibacterial agents posing the highest risk for *C. difficile* infection • Cefaclor • Cefdinir • Cefepime • Cefixime • Cefotaxime • Cefotetan • Cefoxitin • Cefpodoxime • Cefprozil • Ceftazidime • Ceftazidime/Avibactam • Ceftriaxone • Cefuroxime • Ciprofloxacin • Clindamycin • Delafloxacin • Ertapenem • Imipenem/Cilastatin • Imipenem/Cilastatin/Releb • Levofloxacin • Meropenem • Meropenem/Vaborbactam • Moxifloxacin	Pediatric Medical and Medical-Surgical ICUs	Ped_CDI_ICU_2023
	Pediatric Surgical Cardiothoracic ICUs	Ped_CDI_SurgCardICU_2023
	Pediatric Medical, Medical-Surgical, Surgical Wards	Ped_CDI_GeneralWard_2023
	Pediatric Step-Down Units	Ped_CDI_Step_2023
	Pediatric General Hematology-Oncology,	Ped_CDI_ONC_2023
Antifungal Antifungal agents are predominantly used for invasive candidiasis • Anidulafungin • Caspofungin • Fluconazole • Micafungin • Rezafungin	Pediatric Medical and Medical-Surgical ICUs	Ped_Antifungal_ICU_2023
	Pediatric Surgical Cardiothoracic ICUs	Ped_Antifungal_SurgCardICU_2023
	Pediatric Medical, Medical-Surgical, Surgical Wards	Ped_Antifungal_GeneralWard_2023
	Pediatric Step-Down Units	Ped_Antifungal_GeneralWard_2023
	Pediatric General Hematology-Oncology,	Ped_Antifungal_ONC_2023