Emerging Infections Program
Healthcare-Associated Infections Community Interface Report
Invasive *Staphylococcus aureus*, 2024

Last Updated: June 23, 2026

Surveillance Catchment Areas

Methicillin-resistant *Staphylococcus aureus* (MRSA): California (3 county San Francisco Bay area); Connecticut (statewide); Georgia (8 county Atlanta area); Maryland (Baltimore City and County); Minnesota (2 county Minneapolis–Saint Paul area); New York (1 Rochester county); Tennessee (1 Nashville county).

Methicillin-sensitive *Staphylococcus aureus* (MSSA): California (3 county San Francisco Bay area); Connecticut (Naugatuck Valley and South Central Connecticut planning regions); Georgia (1 Atlanta county); Maryland (Baltimore City and County); Minnesota (2 county Minneapolis–Saint Paul area); New York (1 Rochester county); Tennessee (1 Nashville county).

Population

The MRSA surveillance areas represent 16,365,292 persons. The MSSA surveillance areas represent 10,496,237 persons.

Source: U.S. Census Bureau, Population Division, Vintage 2024 Special Tabulation; U.S. Census Bureau, Population Division.

Case Definition

Invasive *Staphylococcus aureus* (SA) infection: isolation of SA from a normally sterile site in a resident of the surveillance area in 2024. Cases of infection are classified into one of three epidemiologic classifications.

A case is classified as

- hospital-onset (HO) if the SA culture was obtained on or after the third calendar day of hospitalization, where admission is hospital day 0[a];
- healthcare-associated community-onset (HACO) if the culture was obtained in an outpatient setting or before the third[a] calendar day of hospitalization and had one or more of the following:
    1. a history of hospitalization, surgery, dialysis, or residence in a long-term care facility in the previous year, or
    2. the presence of a central vascular catheter (CVC) within 2 days prior to SA culture;

- community-associated (CA) if none of the previously mentioned criteria are met.
- Healthcare-associated (HCA) is a grouping that includes both HO and HACO.

Cases were classified as MRSA or MSSA based on results from local clinical microbiology laboratory testing.

[a] Compared to annual summaries from 2005–2017, this case definition represents an update in nomenclature from previous years but not a change to the case definition

Methods

Case finding was active, laboratory-based, and population-based. Emerging Infections Program (EIP) personnel routinely contacted microbiology laboratories serving healthcare facilities in their area to identify cases. Laboratories serving the surveillance catchment areas were routinely audited to ensure complete case ascertainment.

A standardized case report form was completed for each incident case through review of medical records. Medical records were reviewed for information on demographic characteristics, clinical syndrome, and outcome of illness.

Convenience samples of MSSA and MRSA isolates were collected and sent to CDC for routine testing, including antimicrobial susceptibility testing using reference broth microdilution and, beginning with 2017 isolates, whole genome sequencing (WGS) to perform staphylococcal cassette chromosome (SCC*mec*) typing, *spa* typing, multilocus sequence typing (MLST), clonal complex assignment, and inferred pulsed-field gel electrophoresis (PFGE) typing. Pulsed field type is inferred from WGS based on phylogenetic relatedness, MLST clonal complex, and molecular characteristics of the isolates[1]. Isolates belonging to clonal complex 8 are sub-typed using a single-nucleotide polymorphism (SNP) assay that has been modified for use with WGS data, allowing confirmation of isolates identified as USA300[2]. The use of PFGE for all isolates was discontinued in 2008; up until 2012, PFGE was inferred using a validated algorithm based on the following isolate microbiologic characteristics: SCC*mec* type, presence of Panton-Valentine leukocidin and toxic shock syndrome toxin genes, and antimicrobial susceptibility results[3]. From 2012–2016, *spa* typing was included in routine laboratory testing and MLST clonal complexes were inferred based on *spa* type, allowing for the identification of PFGE types based on MLST clonal complex and molecular characteristics of the isolates[1], with 2016 isolates identified as USA300 confirmed using a SNP assay[2]. In 2024, MRSA and MSSA isolates were collected in five sites (California, Georgia, Minnesota, New York, and Tennessee). Characterization of 2024 isolates is in process as of the date of this report.

Rates of invasive SA infection among all patients were calculated using population estimates for 2024 except when population estimates for Connecticut counties were needed for continuous catchment area calculations or use of dialysis denominators (Table 8, Figures 2-5). Census estimates for Connecticut after 2021 use planning regions instead of county. To obtain the 2024 population estimate for New Haven County for the MSSA surveillance area and for New Haven, Hartford, and Fairfield counties for the MRSA surveillance area, 2021 population estimates were used.

Bayesian Improved Surname Geocoding (BISG) was used to impute missing race/ethnicity[4]. BISG uses surname and geocoded home address to estimate a patient's probability of membership in each of five racial/ethnic groups: Hispanic or Latino (any race), non-Hispanic Asian and/or Native Hawaiian/Pacific Islander, non-Hispanic Black or African American, non-Hispanic White, and non-Hispanic other (including American Indian/Alaska Native and multiracial. Race/ethnicity was considered missing if a patient had unknown ethnicity (regardless of reported race) or if a patient had unknown race and was not Hispanic or

Latino. Probabilities for patients with known race/ethnicity were set to 1 for reported race/ethnicity and 0 for all other racial/ethnic groups. Race/ethnicity-stratified case counts were then calculated by summing the probabilities for each racial/ethnic group. Case rates were calculated using race/ethnicity-stratified U.S. Census population estimates for 2023. The U.S. census categorizes individuals reported as both non-Hispanic Asian and Native Hawaiian/Pacific Islander as "non-Hispanic multiracial"[5], whereas the BISG method does not distinguish between these two racial/ethnic groups and categorizes these individuals as "non-Hispanic Asian and/or Native Hawaiian/Pacific Islander". Therefore, a small proportion of patients with missing race/ethnicity who were multiracial may have been imputed as non-Hispanic Asian and/or Native Hawaiian/Pacific Islander using the BISG method.

Rates of invasive SA infection among patients who were undergoing chronic dialysis treatment were calculated using December 31, 2023, point prevalence counts of patients on dialysis from the United States Renal Data System (USRDS) (https://www.niddk.nih.gov/about-niddk/strategic-plans-reports/usrds). The figures depicting the overall incidence by epidemiologic class and incidence among persons on dialysis, 2009–2024, are restricted to the continuous catchment areas for invasive MRSA and MSSA for comparison of trends over time.

Invasive SA surveillance data undergo regular data cleaning to ensure accuracy and completeness. Patients with complete case report form data as of June 18, 2026, were included in this analysis. Because data can be updated as needed, analyses of datasets generated on a different date may yield slightly different results.

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[a] Inferred Identification of Pulsed Field Types based on MLST clonal complex (CC) (https://archive.cdc.gov/#/details?url=https://www.cdc.gov/hai/settings/lab/ccalgorithm.html)

[2] Improved Subtyping of *Staphylococcus aureus* Clonal Complex 8 Strains Based on Whole-Genome Phylogenetic Analysis [PDF - 15 pages] (https://msphere.asm.org/content/msph/3/3/e00464-17.full.pdf)

[3] Use of an Inferred PFGE Algorithm, Emerging Infections Program/Active Bacterial Core (ABCs) Surveillance Invasive MRSA Project (https://archive.cdc.gov/#/details?url=https://www.cdc.gov/hai/settings/lab/inferred-pfge-algorithm.htm

[4] Using the Census Bureau's Surname List to Improve Estimates of Race/ethnicity and Associated Disparities (https://thecre.com/insurance/wp-content/uploads/2010/06/CFPB-Paper.pdf)

[5] Population Estimates Categorical Variables 2023 (https://www.census.gov/data/developers/data-sets/popest-popproj/popest/popest-vars/2023.html)

Results

Table 1. MSSA (N=3686) and MRSA (N=3404) Cases by Race/Ethnicity (Reported and BISG-imputed), Emerging Infections Program, 2024

Race/Ethnicity[a]	MSSA (N = 3686[b])		MRSA (N = 3404[b])	
	No. (%)	Rate[c]	No. (%)	Rate[c]
Hispanic or Latino, any race	451 (12.2)	27.8	334 (9.8)	12.6
Not Hispanic or Latino - White	1939 (52.6)	40.0	1850 (54.3)	24.5
Not Hispanic or Latino - Black or African American	896 (24.3)	43.3	1021 (30.0)	27.9
Not Hispanic or Latino - Asian or Native Hawaiian/Other Pacific Islander[d]	314 (8.5)	19.6	149 (4.4)	7.4
Not Hispanic or Latino – Asian only	216 (5.9)	13.7	100 (2.9)	5.0
Not Hispanic or Latino – Native Hawaiian/Other Pacific Islander only	17 (0.5)	71.0	13 (0.4)	48.6
Not Hispanic or Latino – American Indian/Alaskan Native or Multiracial	85 (2.3)	23.5	51 (1.5)	10.2
Not Hispanic or Latino - American Indian/Alaskan Native only[e]	30 (0.8)	101.2	23 (0.7)	56.1
Not Hispanic or Latino – Multiracial only[e]	21 (0.6)	6.3	9 (0.3)	2.0

[a] The bolded rows include both reported and imputed race/ethnicity. Race/ethnicity was imputed for cases with missing race/ethnicity (MSSA: n = 492 [13.3%]; MRSA: n = 283 [8.3%]) using BISG, as described in the methods section. Among cases with non-missing race/ethnicity for MSSA and MRSA, respectively, there were 380 and 305 Hispanic or Latino, (any race), 1722 and 1722 non-Hispanic White, 808 and 949 non-Hispanic Black or African American, 233 and 113 non-Hispanic Asian or Native Hawaiian/Other Pacific Islander, and 51 and 32 non-Hispanic American Indian/Alaska Native or multiracial cases. Non-bolded rows are sub-groups of bolded rows above them. Case counts for non-bolded rows were calculated using reported (i.e., non-missing) data only. Missing data for these racial/ethnic groups were not separately imputed because BISG combines each of these groups with another racial/ethnic group.

[b] Case counts do not sum to totals due to rounding of BISG-imputed probabilities

[c] Cases per 100,000 population for EIP areas (crude rates)

Table 2. MSSA (N=3686) and MRSA (N=3404) Case and Death Rate[a] by Epidemiologic Classification, Emerging Infections Program, 2024

Class	MSSA Cases No. (Rate[a])	MSSA Deaths No. (Rate[a])	MRSA Cases No. (Rate[a])	MRSA Deaths No. (Rate[a])
CA	1261 (12.0)	100 (1.0)	782 (4.8)	75 (0.5)
HCA[b]	2418 (23.0)	317 (3.0)	2610 (15.9)	410 (2.5)
HCA–HO	491 (4.7)	95 (0.9)	461 (2.8)	97 (0.6)
HCA–HACO	1927 (18.4)	222 (2.1)	2149 (13.1)	313 (1.9)
Unknown	7 (0.1)	1 (<0.1)	12 (0.1)	2 (<0.1)
Total	3686 (35.1)	418 (4.0)	3404 (20.8)	487 (3.0)

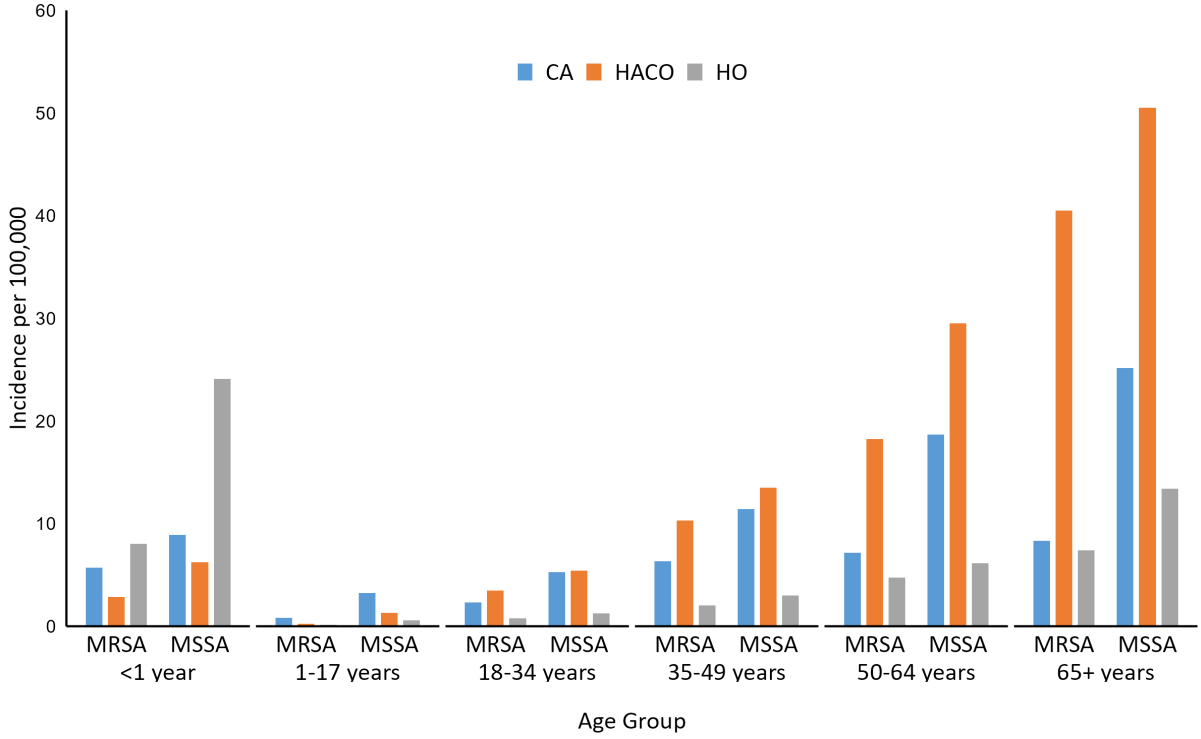
[a] Cases and deaths per 100,000 population for EIP areas (crude rates using 2024 U.S. Census Data as described in the methods section)
[b] HCA: Healthcare-associated invasive SA infection; sum of patients that are classified as either the HO or HACO classes

Table 3. MSSA (N=3686) and MRSA (N=3404) Cases and Rates by Sex, Emerging Infections Program, 2024

Sex	MSSA No. (%)	MSSA Rate[a]	MRSA No. (%)	MRSA Rate[a]
Female	1329 (36.1)	24.8	1204 (35.4)	14.4
Male	2357 (63.9)	45.9	2200 (64.6)	27.5

[a] Cases per 100,000 population for EIP areas (crude rates)

Figure 1. Incidence[a] of Invasive *Staphylococcus aureus* by Epidemiologic Class, Age Group, and Methicillin-Resistance Status, 2024



[a] Incidence (no. per 100,000 population per year) calculated using 2024 U.S. Census Data

Table 4. Location of Invasive MSSA (N=3686) and MRSA (N=3404) Cases Before Incident Specimen Collection, Emerging Infections Program, 2024

Location of patient before incident specimen collection[a]	MSSA No. (%)	MRSA No. (%)
Private residence	2815 (76.4)	2109 (62.0)
Long-term care facility	195 (5.3)	521 (15.3)
Acute-care hospital (inpatient)	459 (12.5)	442 (13.0)
Long-term acute care hospital	4 (0.1)	20 (0.6)
Homeless	193 (5.2)	276 (8.1)
Other	14 (0.4)	25 (0.7)
Unknown	6 (0.2)	11 (0.3)

[a] Represents location of the patient three days before incident specimen collection, where date of initial culture is day 0

Table 5. Location of Invasive MSSA (N=3686) and MRSA (N=3404) Cases at Time of Incident Specimen Collection, Emerging Infections Program, 2024

Location of incident specimen collection	MSSA No. (%)	MRSA No. (%)
Outpatient setting or emergency department	2664 (72.3)	2471 (72.6)
Acute care hospital	1008 (27.3)	891 (26.2)
Long-term care facility	1 (<0.1)	13 (0.4)
Long-term acute care hospital	1 (<0.1)	12 (0.4)
Other	9 (0.2)	10 (0.3)
Unknown	3 (0.1)	7 (0.2)

Table 6. Selected Clinical Characteristics of Invasive MSSA (N=3686[a]) and MRSA (N=3404[a]) Cases by Epidemiological Class, Emerging Infections Program, 2024

Charlson comorbidity index	MSSA CA (n=1261) No. (%)	MRSA CA (n=782) No. (%)	MSSA HACO (n=1927) No. (%)	MRSA HACO (n=2149) No. (%)	MSSA HO (n=491) No. (%)	MRSA HO (n=461) No. (%)
0	433 (34.3)	298 (38.1)	256 (13.3)	213 (9.9)	106 (21.6)	75 (16.3)
1	358 (28.4)	195 (24.9)	305 (15.8)	370 (17.2)	89 (18.1)	73 (15.8)
≥2	466 (37.0)	287 (36.7)	1359 (70.5)	1564 (72.8)	296 (60.3)	312 (67.7)
Unknown	4 (0.3)	2 (0.3)	7 (0.4)	2 (0.1)	0 (0.0)	1 (0.2)

Underlying condition[b]	MSSA CA (n=1261) No. (%)	MRSA CA (n=782) No. (%)	MSSA HACO (n=1927) No. (%)	MRSA HACO (n=2149) No. (%)	MSSA HO (n=491) No. (%)	MRSA HO (n=461) No. (%)
Burn or surgical wound	4 (0.3)	1 (0.1)	50 (2.6)	72 (3.4)	10 (2.0)	11 (2.4)
Chronic pulmonary disease	213 (16.9)	129 (16.5)	404 (21.0)	547 (25.5)	108 (22.0)	134 (29.1)
Chronic kidney disease	173 (13.7)	103 (13.2)	765 (39.7)	883 (41.1)	140 (28.5)	169 (36.7)
Chronic liver disease	60 (4.8)	35 (4.5)	158 (8.2)	118 (5.5)	47 (9.6)	35 (7.6)
Congestive heart failure	120 (9.5)	76 (9.7)	528 (27.4)	675 (31.4)	143 (29.1)	152 (33.0)
Decubitus/pressure ulcer	36 (2.9)	36 (4.6)	108 (5.6)	277 (12.9)	20 (4.1)	49 (10.6)
Diabetes mellitus	419 (33.2)	224 (28.6)	860 (44.6)	1029 (47.9)	186 (37.9)	190 (41.2)
Hemiplegia or paraplegia	11 (0.9)	20 (2.6)	46 (2.4)	97 (4.5)	5 (1.0)	13 (2.8)
Injection drug use	148 (11.7)	156 (19.9)	105 (5.4)	196 (9.1)	12 (2.4)	24 (5.2)
Malignancy, solid organ	88 (7.0)	54 (6.9)	293 (15.2)	280 (13.0)	62 (12.6)	58 (12.6)
Malignancy, hematologic	16 (1.3)	6 (0.8)	51 (2.6)	67 (3.1)	22 (4.5)	19 (4.1)
Obesity or morbid obesity	194 (15.4)	96 (12.3)	354 (18.4)	429 (20.0)	83 (16.9)	79 (17.1)
Other chronic ulcer or chronic wound	170 (13.5)	115 (14.7)	321 (16.7)	450 (20.9)	34 (6.9)	54 (11.7)
Pregnancy	7 (0.6)	5 (0.6)	2 (0.1)	1 (<0.1)	1 (0.2)	1 (0.2)

Underlying condition[b]	MSSA CA (n=1261) No. (%)	MRSA CA (n=782) No. (%)	MSSA HACO (n=1927) No. (%)	MRSA HACO (n=2149) No. (%)	MSSA HO (n=491) No. (%)	MRSA HO (n=461) No. (%)
Unknown	4 (0.3)	2 (0.3)	7 (0.4)	2 (0.1)	0 (0.0)	1 (0.2)

Infection type[c]	MSSA CA (n=1261) No. (%)	MRSA CA (n=782) No. (%)	MSSA HACO (n=1927) No. (%)	MRSA HACO (n=2149) No. (%)	MSSA HO (n=491) No. (%)	MRSA HO (n=461) No. (%)
Bloodstream infection with another infection type	804 (63.8)	535 (68.4)	1203 (62.4)	1438 (66.9)	210 (42.8)	211 (45.8)
Bloodstream infection with no other infection type[c]	249 (19.7)	122 (15.6)	466 (24.2)	484 (22.5)	188 (38.3)	126 (27.3)
Pneumonia	157 (12.5)	122 (15.6)	189 (9.8)	288 (13.4)	61 (12.4)	85 (18.4)
Osteomyelitis	234 (18.6)	143 (18.3)	315 (16.3)	403 (18.8)	43 (8.8)	69 (15.0)
Endocarditis	117 (9.3)	95 (12.1)	177 (9.2)	210 (9.8)	36 (7.3)	35 (7.6)
Cellulitis	216 (17.1)	189 (24.2)	229 (11.9)	267 (12.4)	48 (9.8)	43 (9.3)
Septic Arthritis	216 (17.1)	123 (15.7)	266 (13.8)	277 (12.9)	37 (7.5)	45 (9.8)
Internal abscess	163 (12.9)	140 (17.9)	148 (7.7)	189 (8.8)	33 (6.7)	52 (11.3)
Surgical wound infection[d]	3 (0.2)	3 (0.4)	172 (8.9)	182 (8.5)	20 (4.1)	26 (5.6)
Decubitus/pressure ulcer infection	11 (0.9)	13 (1.7)	27 (1.4)	95 (4.4)	3 (0.6)	13 (2.8)
Skin abscess[e]	96 (7.6)	80 (10.2)	81 (4.2)	117 (5.4)	11 (2.2)	16 (3.5)
Traumatic wound infection	34 (2.7)	25 (3.2)	22 (1.1)	24 (1.1)	8 (1.6)	8 (1.7)
Other wound infection[f]	93 (7.4)	49 (6.3)	155 (8.0)	213 (9.9)	11 (2.2)	15 (3.3)
Unknown	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)

[a] Excludes 7 MSSA and 12 MRSA cases with unknown epidemiologic class.

[b] Some case patients had more than one underlying condition.

[c] Some case patients had more than one infection type.

[d] Combines deep tissue/organ infection and infection of a surgical wound, post-operatively.

[e] Category includes skin abscess, necrotizing fasciitis, gangrene.

[f] Category includes non-traumatic and other chronic wound infections.

Table 7. Selected Healthcare Exposures and Risk Factors of Invasive MSSA (N=3686) and MRSA (N=3404), Emerging Infections Program, 2024

Exposures	MSSA (n=3686) No. (%)	MRSA (n=3404) No. (%)
Healthcare facility stay in the year before incident specimen collection – Any[a]	1893 (51.4)	2297 (67.5)
Healthcare facility stay in the year before incident specimen collection – Acute care hospitalization	1838 (49.9)	2205 (64.8)
Healthcare facility stay in the year before incident specimen collection – Long-term care facility residence	441 (12.0)	971 (28.5)
Healthcare facility stay in the year before incident specimen collection – Long-term acute care hospitalization	8 (0.2)	44 (1.3)
Surgery in the year before the date of incident specimen collection	864 (23.4)	1053 (30.9)
Chronic dialysis – Any Modality	480 (13.0)	463 (13.6)
Chronic dialysis - Modality - Peritoneal[b]	40 (8.3)	14 (3.0)
Chronic dialysis - Modality - Hemodialysis[b]	440 (91.7)	449 (97.0)
Chronic dialysis - Hemodialysis[c] - AV Fistula/Graft	198 (45.0)	157 (35.0)
Chronic dialysis - Hemodialysis[c] - CVC	247 (56.1)	295 (65.7)
Chronic dialysis - Modality - Unknown	0 (0.0)	0 (0.0)
Central vascular catheter in place at any time in the 2 calendar days before incident specimen collection	563 (15.3)	577 (17.0)
Unknown	6 (0.2)	12 (0.4)

[a] Some case patients stayed in more than one type of healthcare facility in the year before incident specimen collection

[b] Percentages calculated out of cases associated with chronic dialysis

[c] 5 MSSA and 4 MRSA cases had both AV Fistula/Graft and CVC. 0 MSSA and 1 MRSA cases had unknown AV Fistula Graft/CVC. Percentages calculated out of cases associated with chronic hemodialysis

Table 8. MSSA (N=3620[a]) and MRSA (N=3404) Infections by Dialysis Status and Epidemiologic Class, Emerging Infections Program, 2024

Epidemiologic Class	MSSA Dialysis Patients No. (Rate[b])	MRSA Dialysis Patients No. (Rate[b])	MSSA Non-Dialysis Patients No. (Rate[c])	MRSA Non-Dialysis Patients No. (Rate[c])	MSSA Total[d] No. (Rate[c])	MRSA Total[d] No. (Rate[c])
CA	NA	NA	1234 (12.0)	782 (4.8)	1234 (12.0)	782 (4.8)
HCA[e]	472 (2556.7)	463 (1617.7)	1903 (18.5)	2146 (13.1)	2379 (23.1)	2610 (15.9)
HCA–HO	44 (238.3)	59 (206.1)	439 (4.3)	402 (2.5)	483 (4.7)	461 (2.8)
HCA–HACO	428 (2318.4)	404 (1411.6)	1464 (14.2)	1744 (10.7)	1896 (18.4)	2149 (13.1)
Overall[f]	472 (2556.7)	463 (1617.7)	3137 (30.4)	2928 (17.9)	3620 (35.1)	3404 (20.8)

[a] For MSSA, to align with available dialysis denominator data, surveillance is restricted to New Haven County for Connecticut. This resulted in a difference in total case number from estimates using the full surveillance area.

[b] Incidence (no. per 100,000 dialysis patients per year) for dialysis patients calculated using 2023 USRDS point prevalence data

[c] Incidence (no. per 100,000 population per year) calculated using 2021 and 2024 U.S. Census Data as described in the methods

[d] The total counts and rates include 4 HACO MSSA and 1 HACO MRSA cases with unknown dialysis status

[e] HCA: Healthcare-associated invasive MRSA infection; sum of patients that are classified as either the HO or HACO classes

[f] The overall counts and rates include 7 MSSA and 12 MRSA cases with unknown epidemiological class

NA: By definition, CA cases cannot have dialysis in the past year

Figure 2. Incidence of Invasive MRSA by Epidemiologic Class, Emerging Infections Program, 2009–2024[a]

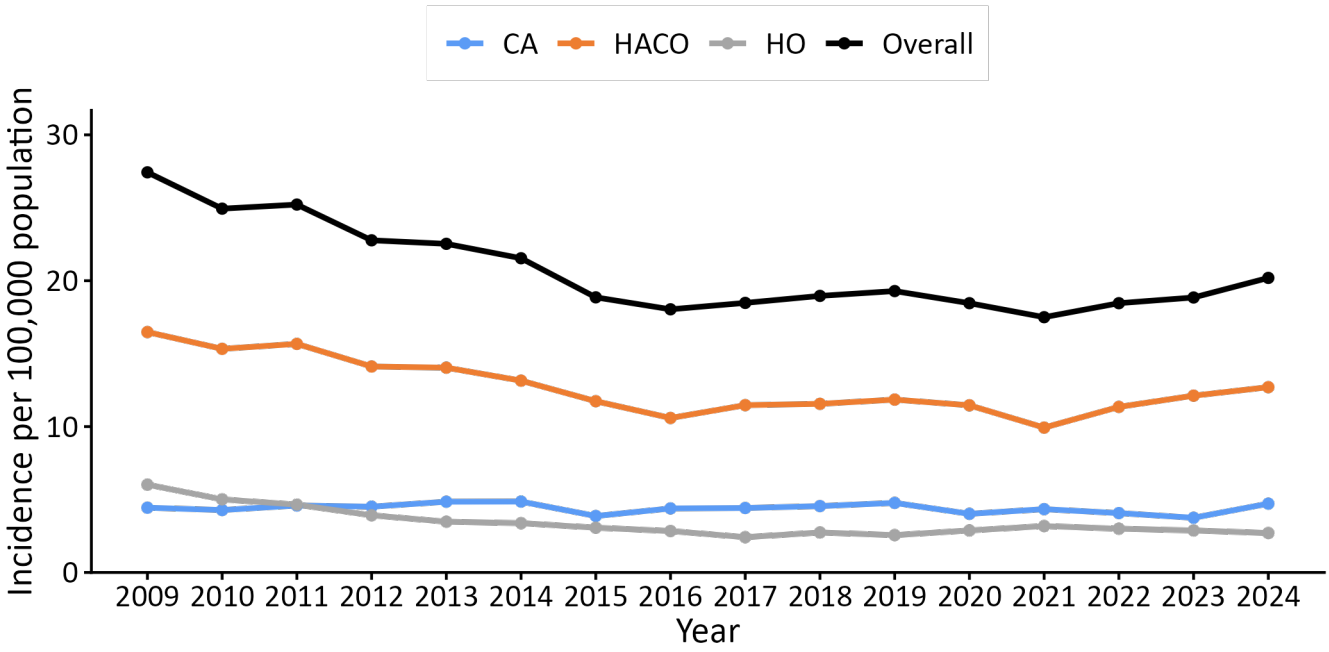
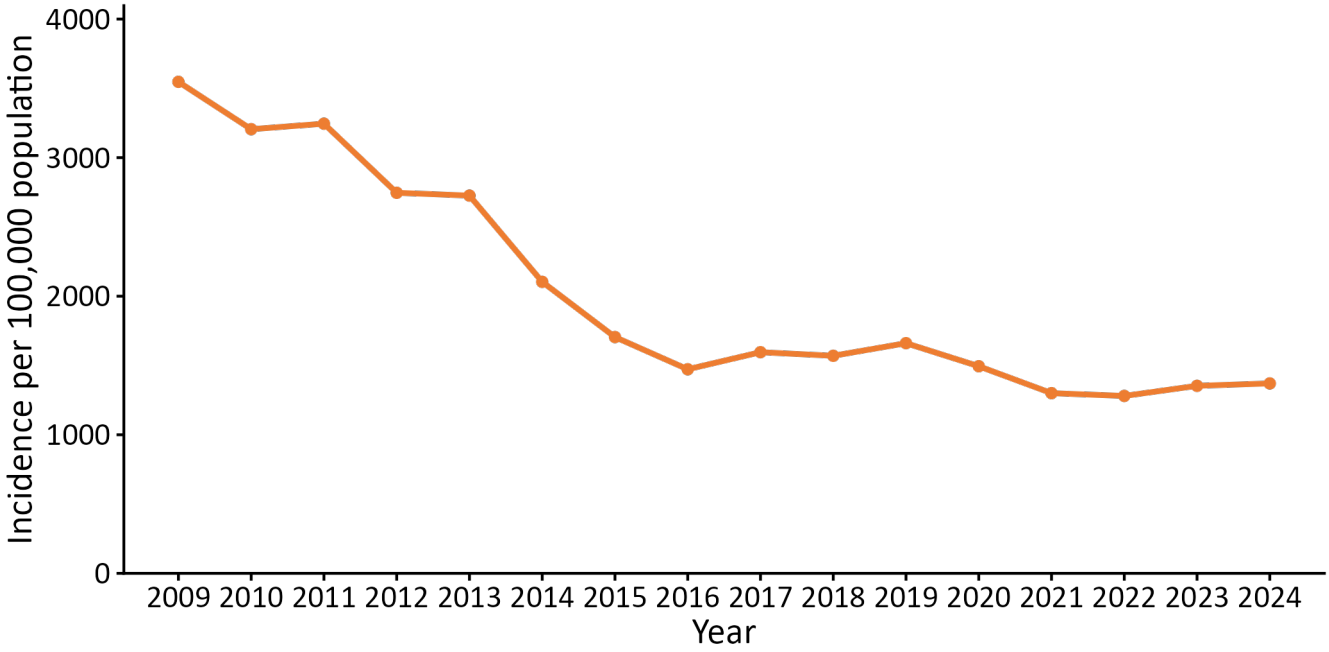


Figure 3. Incidence of Invasive Healthcare-Associated Community-Onset MRSA among Persons on Dialysis, Emerging Infections Program, 2009–2024[a]



[a] Restricted to the continuous catchment area (California [3 county San Francisco Bay area]; Connecticut [Fairfield, Hartford, and New Haven Counties]; Georgia [8 county Atlanta area]; Minnesota [2 county Minneapolis-Saint Paul area]; New York [1 Rochester county]; and Tennessee [1 Nashville county]) for comparison of trends over time.

Figure 4. Incidence of Invasive MSSA by Epidemiologic Class, Emerging Infections Program, 2017–2024[a]

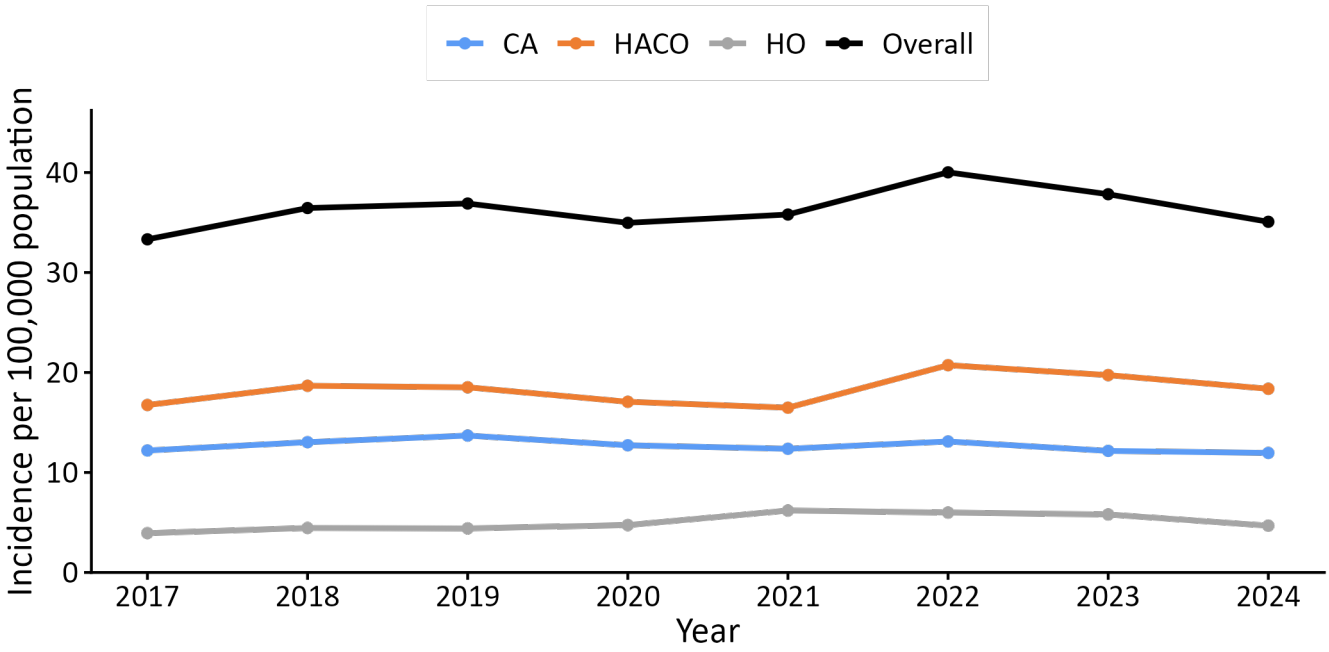
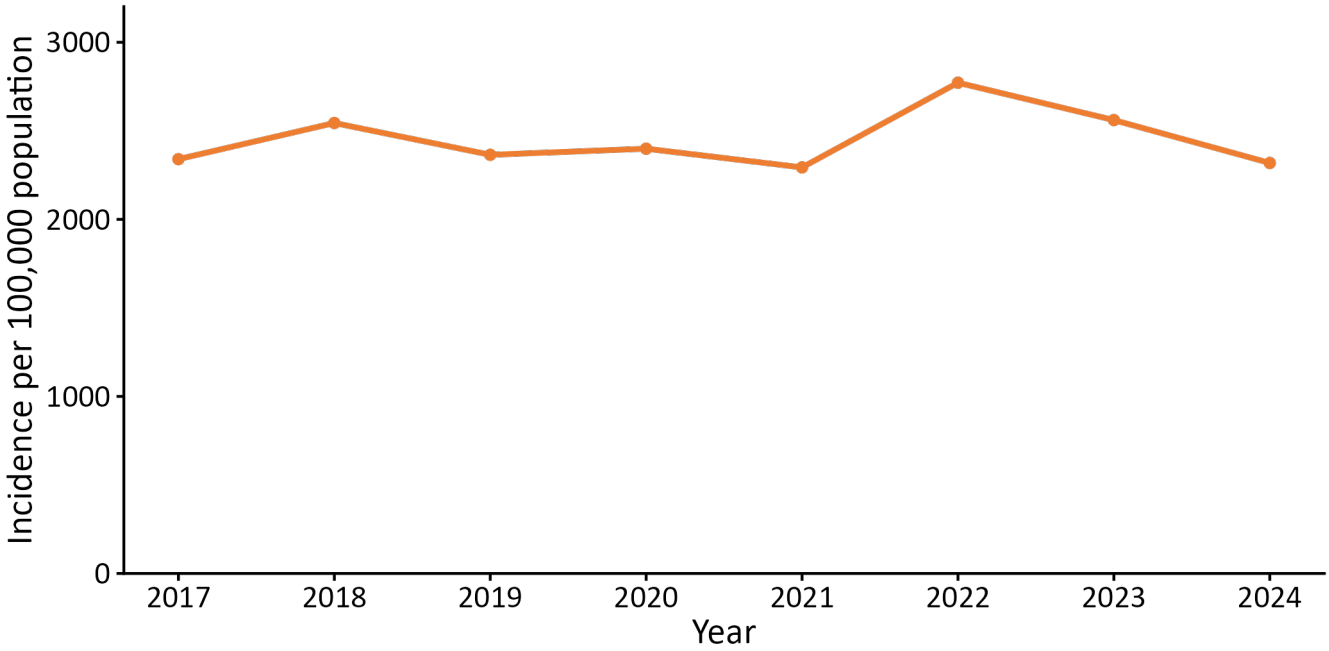


Figure 5. Incidence of Invasive Healthcare-Associated Community-Onset MSSA among Persons on Dialysis, Emerging Infections Program, 2017–2024[a]



[a] Restricted to the continuous catchment area (California [3 county San Francisco Bay area]; Connecticut New Haven County]; Georgia [1 Atlanta county]; Minnesota [2 county Minneapolis-Saint Paul area]; New York [1 Rochester county]; and Tennessee [1 Nashville county]) for comparison of trends over time.

Table 9. Outcomes of Invasive MSSA (N=3686[a]) and MRSA (N=3404[a]) Cases by Epidemiologic Class, Emerging Infections Program, 2024

Outcomes[b]	CA MSSA (n=1261) No. (%)	CA MRSA (n=782) No. (%)	HACO MSSA (n=1927) No. (%)	HACO MRSA (n=2149) No. (%)	HO MSSA (n=491) No. (%)	HO MRSA (n=461) No. (%)
Died	100 (7.9)	75 (9.6)	222 (11.5)	313 (14.6)	95 (19.3)	97 (21.0)
Survived	1161 (92.1)	706 (90.3)	1699 (88.2)	1835 (85.4)	396 (80.7)	364 (79.0)
Acute-care hospitalization - survived	1065 (84.5)	653 (83.5)	1625 (84.3)	1779 (82.8)	396 (80.7)	364 (79.0)
Acute-care hospitalization - survived - Discharged to LTCF[c]	288 (27.0)	164 (25.1)	524 (32.2)	767 (43.1)	127 (32.1)	139 (38.2)
Acute care hospitalization - survived - Discharged to LTACH[c]	16 (1.5)	12 (1.8)	24 (1.5)	38 (2.1)	19 (4.8)	15 (4.1)
Acute-care hospitalization - survived - Discharged to Other[c],[d]	755 (70.9)	472 (72.3)	1064 (65.5)	965 (54.2)	246 (62.1)	209 (57.4)
Acute-care hospitalization - survived - discharged to Unknown[c]	6 (0.6)	5 (0.8)	13 (0.8)	9 (0.5)	4 (1.0)	1 (0.3)
Unknown	0 (0.0)	1 (0.1)	6 (0.3)	1 (<0.1)	0 (0.0)	0 (0.0)

[a] Excludes 7 MSSA and 12 MRSA cases with unknown epidemiologic class.

[b] For patients admitted to a hospital, vital status was assessed at the time of discharge. For patients that were in a long-term care facility, long-term acute care facility, or seen at an outpatient dialysis center, vital status was assessed 30 days after the date of incident culture. For all other patients, vital status was ascertained using medical records from the healthcare facility encounter associated with the incident culture. Deaths represent all-cause mortality.

[c] Percentages calculated out of the number of cases that survived acute-care hospitalization.

[d] Examples include private residence, correctional facility, homeless shelter, and drug rehabilitation program.

Summary

Surveillance data from 2024 represent the twentieth full year of population-based surveillance for invasive MRSA infections through the Emerging Infections Program, and the ninth for MSSA.

Among racial and ethnic groups, rates of invasive MRSA and MSSA are highest among non-Hispanic American Indian/Alaskan Native persons. Rates of MRSA and MSSA are higher among males than females. Among age groups, overall incidence of invasive MRSA and MSSA is highest among persons ≥65 years old; incidence of HO MRSA and MSSA is highest among infants <1 year old.

In 2024 compared to 2023, CA and HACO MRSA incidence increased and HO MRSA decreased slightly. In 2024 compared to 2023, incidence of all MSSA epidemiologic classes decreased; HACO MSSA incidence among people on dialysis also decreased.

Citation

Centers for Disease Control and Prevention. 2026. Emerging Infections Program, Healthcare-Associated Infections – Community Interface Surveillance Report, Invasive *Staphylococcus aureus*, 2024. Available at: http://www.cdc.gov/healthcare-associated-infections/media/pdfs/2024-iSA-Report-508.pdf

For more information, visit our web sites:

- Invasive *Staphylococcus aureus* (MRSA/MSSA) Infection Tracking (https://www.cdc.gov/healthcare-associated-infections/php/haic-eip/invasive-staphylococcus.html)
- Methicillin-Resistant *Staphylococcus aureus.* Antimicrobial Resistance & Patient Safety Portal (https://arpsp.cdc.gov/profile/eip/mrsa)
- Methicillin-resistant *Staphylococcus aureus* (MRSA) (http://www.cdc.gov/mrsa/about/index.html)