

Topic

Cases and Deaths

Case Rates

Death Rates

Syndromes

Serotypes

Antibiotic Resistance

Surveillance Report

Year

2021

Dataset version: May 2023
Final run: Jun 2, 2023

Note: Click [here](#) to access and download Surveillance Reports.



Data Download

Group A *Streptococcus* (GAS)

Group B *Streptococcus* (GBS)

Haemophilus influenzae (HFlu)

Neisseria meningitidis (NMen)

Streptococcus pneumoniae (SPN)

Bact Facts

Active Bacterial Core Surveillance (ABCs) Report
Emerging Infections Program Network
Group A *Streptococcus*, 2021

ABCs Areas: California (3 county San Francisco Bay area); Colorado (5 county Denver area); Connecticut; Georgia (20 county Atlanta area); Maryland (6 county Baltimore area); Minnesota; New Mexico; New York (15 county Rochester and Albany areas); Oregon (3 county Portland area); Tennessee (20 urban counties).

ABCs Population: The surveillance areas represent 34,898,786 persons. Source: Census Bureau's Vintage 2021 population estimates.

ABCs Case Definition: Invasive bacterial disease is defined as isolation of group A *Streptococcus* from a normally sterile site or from a wound culture accompanied by necrotizing fasciitis or streptococcal toxic shock syndrome or detection of ABCs pathogen-specific nucleic acid in a specimen obtained from a normally sterile site, using a validated molecular test in a resident of one of the surveillance areas.

ABCs Methodology: ABCs personnel routinely contacted all microbiology laboratories serving acute care hospitals to identify cases. Standardized case report forms including demographic and clinical characteristics were completed for each case. All group A *Streptococcus* (GAS) isolates were subject to whole genome sequencing (WGS) to derive *emm* types and to predict minimum inhibitory concentration (MIC). Regular laboratory audits assessed active surveillance completeness. Rates were calculated using population estimates from the Vintage 2021 file. For national estimates of cases, race and age specific rates of disease were applied from the aggregate surveillance area to the age and racial distribution of the U.S. population. Cases with missing data, excluding ethnicity, were multiply imputed using sequential regression imputation methods.¹

ABCs Profiles

Race [▲]	No.	Rate*	Ethnicity [▲]	No.	Rate*
Black	326	5.7	Hispanic	319	6.3
White	1,609	6.5	Non-Hispanic	1,703	-
Other	259	6.0	Unknown	172	-

Age (years) [▲]	Cases		Deaths	
	No.	Rate*	No.	Rate*
<1	9	2.5	0	0.00
1	4	1.1	0	0.00
2-4	6	0.5	0	0.00
5-17	23	0.4	1	0.02
18-34	416	5.2	19	0.24
35-49	489	7.0	25	0.36
50-64	651	9.6	64	0.95
65-74	292	8.6	30	0.88
75-84	204	13.0	37	2.35
≥85	100	17.0	21	3.57
Total	2,194	6.3	197	0.56

*Rates are per 100,000 population for ABCs areas

National Estimates of Invasive Disease

Total Cases: 20,910 (6.30/100,000 population)
Deaths: 1,910 (0.58/100,000 population)

1 Surveillance Note

Missing race (n=212) data were multiply imputed using sequential regression imputation methods.

Citation

Centers for Disease Control and Prevention. 2021. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group A *Streptococcus*, 2021. www.cdc.gov/abcs/downloads/GAS_Surveillance_Report_2021.pdf

Emm Types

Area	Most Common emm Types**	% Area Isolates
Total	49,82,77,11,92,81	52.6
CA	53,49,92,83,58,43	76.4
CO	82,59,58,43,11,49,92,83,77	81.7
CT	11,89,88,77,90,1	70.0
GA	89,11,92,77,58,75	61.1
MD	49,82,11,28,87,77	75.9
MN	81,53,43,28,11,89,75	78.4
NM	49,82,151,91,83	78.3
NY	169,77,11,89	79.5
OR	77,82,83,53,89,60,49,59	79.4
TN	92,11,91,77,49,82	73.7

**Requires ≥3 isolates and ≥5% of isolates typed by area. Based on reference lab testing of 1823 isolates.

Syndromes

Syndrome	No.	% [▼]
Cellulitis	1,065	48.5
Bacteremia without focus	376	17.1
Pneumonia	230	10.5
Necrotizing fasciitis	99	4.5
Streptococcal toxic shock syndrome	36	1.6

Note: Some cases had more than 1 syndrome.