Topic

Cases and Deaths

Case Rates

Death Rates

Syndromes

Serotypes

Antibiotic Resistance

Surveillance Report

Year

2019

Dataset version: Mar 2021 Final run: Jun 16, 2021

Note: Click <u>here</u> to access Surveillance Reports prior to 2019.



Data Download

Group A *Streptococcus* (GAS)

Group B *Streptococcus* (GBS)

Haemophilus influenzae (HFlu) Neisseria meningitidis (NMen)

Streptococcus pneumoniae (SPN)



Active Bacterial Core Surveillance (ABCs) Report Emerging Infections Program Network Group A *Streptococcus*, 2019

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 34,577,823 persons. Source: National Center for Health Statistics bridged-race vintage 2019 postcensal file.

ABCs Case Definition: Invasive bacterial disease is defined as isolation of group A *Streptococcus* from a normally sterile site or detection of ABCs pathogen-specific nucleic acid in a specimen obtained from a normally sterile body 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. Regular laboratory audits assessed active surveillance completeness.

Rates were calculated using population estimates from the bridged-race vintage postcensal 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.¶

ABCs Profiles

Race _	No.	Rate*	Ethnicity	No.	Rate*
Black	407	6.9	Hispanic	282	5.7
White	1,961	7.8	Non-Hispanic	2,008	-
Other	246	7.3	Unknown	325	-

	Cases		Dea	Deaths		
Age (years)	No.	Rate*	No.	Rate*		
<1	13	3.3	2	0.51		
1	28	7.1	1	0.25		
2-4	36	2.9	3	0.24		
5-17	76	1.4	1	0.02		
18-34	381	4.7	11	0.14		
35-49	515	7.5	36	0.53		
50-64	706	10.6	51	0.76		
65-74	400	12.6	41	1.29		
75-84	278	18.2	45	2.95		
≥85	181	27.8	41	6.30		
Total	2,614	7.6	232	0.67		
*Rates are per 100 000 population for ARCs areas						

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National Estimates of Invasive Disease

Total Cases: 25,050 (7.63/100,000 population)
Deaths: 2,250 (0.69/100,000 population)

¶ Surveillance Note

Missing race (n=256) data were multiply imputed using sequential regression imputation methods.

Emm Types

Area	Most Common emm Types**	% Area Isolates
Total	1,92,82,28,89,12,49,59	59.6
CA	59,1,92,83,28,82,89,43	70.6
CO	82,59,1,83,11,28,92,77,89	74.8
CT	1,11,89,4,12,77	64.2
GA	1,12,89,28	60.0
MD	49,82,1,28,89,12	62.6
MN	1,28,89,12,82	63.8
NM	92,43,91,60,82,1,12,83	68.3
NY	1,28,89,12,4,6,58,82	73.3
OR	82,60,92,28,1,59,89	72.9
TN	92,1,12,11,81,91,89,28	74.6

^{**}Requires ≥ 3 isolates and $\geq 5\%$ of isolates typed by area. Based on reference lab testing of 2235 isolates.

Syndromes

Syndrome	No.	% ▼		
Cellulitis	1,168	44.7		
Bacteremia without focus	528	20.2		
Pneumonia	393	15.0		
Necrotizing fasciitis	118	4.5		
Streptococcal toxic shock syndrome	83	3.2		
Note: Some cases had more than 1 syndrome.				

Citation

Centers for Disease Control and Prevention. 2019. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group A Streptococcus, 2019.

www.cdc.gov/abcs/downloads/GAS_Surveillance_Report_2019.pdf