

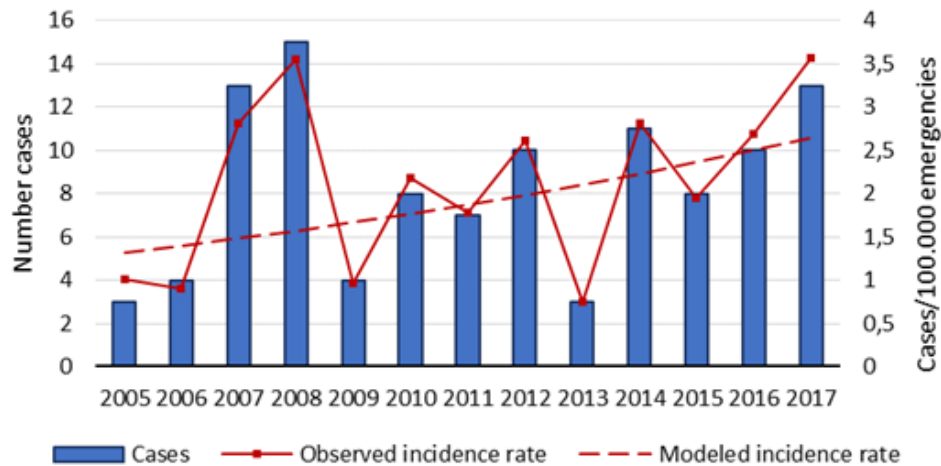
SUPPLEMENTARY INFORMATION

- **Online Resource 1.** Table S1: page 1
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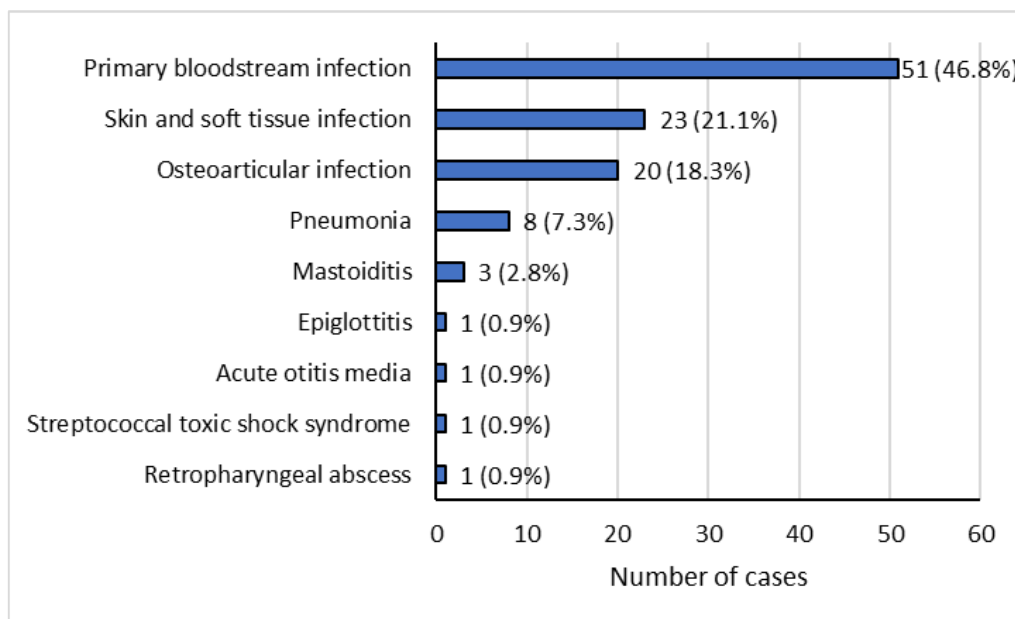
Online Resource 1. Table S1: Definition of confirmed invasive *Streptococcus* Group A (GAS) infection.

- **Confirmed Invasive group A streptococcal infection:** GAS isolated from a normally sterile site, such as blood, cerebrospinal fluid, pleural fluid, peritoneal fluid, pericardial fluid, bone, joint/synovial fluid, or internal body site (eg, lymph node, brain)” or from a wound culture accompanied by necrotizing fasciitis or Streptococcal toxic shock syndrome per Centers for Disease Control and Prevention (Reference: Centers for Disease Control and Prevention. Active bacterial core surveillance: case definition and ascertainment. Available at: <https://www.cdc.gov/abcs/methodology/case-def-ascertain.html>. Accessed 24 Januray 2023).

Online Resource 2. Figure S1: Annual number of episodes of Group A *Streptococcus* bloodstream infections and annual incidence rate of Group A *Streptococcus* bloodstream infections per 100.000 emergencies in children ≤ 16 years old.



Online Resource 3. Figure S2. Clinical syndromes associated with GAS bacteremia in our study.



Online Resource 4. Table S2. Epidemiological, clinical characteristics, and outcome of children with GAS bacteremia according to the period studied.

	P1 (2005-June 2011) (N=51)	P2 (July 2011-2017) (N=58)	p-value
Age (months)¹	29.2 [14.2-57.8]	21.7 [13.2-49.1]	0.395
Sex, male (%)	31 (60.8%)	31(53.4%)	0.440
Fever	33 (64.7%)	46 (79.3%)	0.088
Clinical diagnoses:			
- Primary BSI	26 (51.0%)	25 (43.1%)	0.411
- Osteoarticular infection	10 (19.6%)	10 (17.2%)	0.750
- Skin and soft tissue infection	12 (23.5%)	11 (19.0%)	0.560
- Pneumonia	2 (3.9%)	6 (10.3%)	0.199
- Mastoiditis	1 (2.0%)	2 (3.4%)	0.636
Laboratory parameters at presentation ¹			
- White blood cell count	16,470.0 [11,400.0-21,980.0]	15,000.0 [12,260.0-19,970.0]	0.917
- Neutrophil count	11,770.0 [6674.0-17,500.0]	10,900.0 [8600.0-15,400.0]	0.858
- C-reactive protein level	9.1 [4.4,20.0]	14.7 [5.7,25.1]	0.097
- Procalcitonin level	5.2 [0.5,7.8]	3.7 [0.6,11.8]	0.898
Antibiotic resistance to:			
- Clindamycin	1/48 (2.1%)	0/48 (0.0%)	0.315
- Erythromycin	9/46 (19.6%)	4/46 (8.7%)	0.135
Length of hospital stay¹	10.0 [7.0-15.0]	10.5 [6.0-18.0]	0.959
Total antibiotic therapy days¹	15.0 [10.0-26.0]	14.0 [10.0-26.0]	0.987
Surgery	11 (21.6%)	16 (27.6%)	0.468
Complication	16/51 (31.4%)	17/58 (29.3%)	0.815
Sequelae	0 (0.0%)	1 (1.7%)	0.346
PICU admission	9 (17.6%)	15 (25.9%)	0.302
Death	1 (2.0%)	1 (1.7%)	0.927

Primary BSI: no clinical syndrome or source of infection was identified.

¹Median [IQR].