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ENHANCED EPIDEMIOLOGICAL SUMMARY

Invasive Group A Streptococcal (iGAS) Disease in Ontario: October 1, 2024 to August 31, 2025

Published: September 11, 2025

Introduction

An iGAS season is defined as the period spanning October 1 to September 30. This report summarizes the epidemiology of Group A Streptococcal[1] (iGAS) disease in Ontario from October 1, 2024 to August 31, 2025. It provides comparisons to iGAS activity in the last season from October 1, 2023 to August 31, 2024, as well as to past seasons, including the 2022-23 season and the five pre-pandemic seasons (October 1, 2014 to September 30, 2019). The report is based on information entered in the Ontario Ministry of Health (MOH) integrated Public Health Information System (iPHIS) database.

A description of the 2023-24 season that focuses on the age distribution of cases, severity, geographic distribution and *emm* typing can be found in the Invasive Group A Streptococcal (iGAS) Disease in Ontario: 2023-24 Seasonal Summary report.[2]

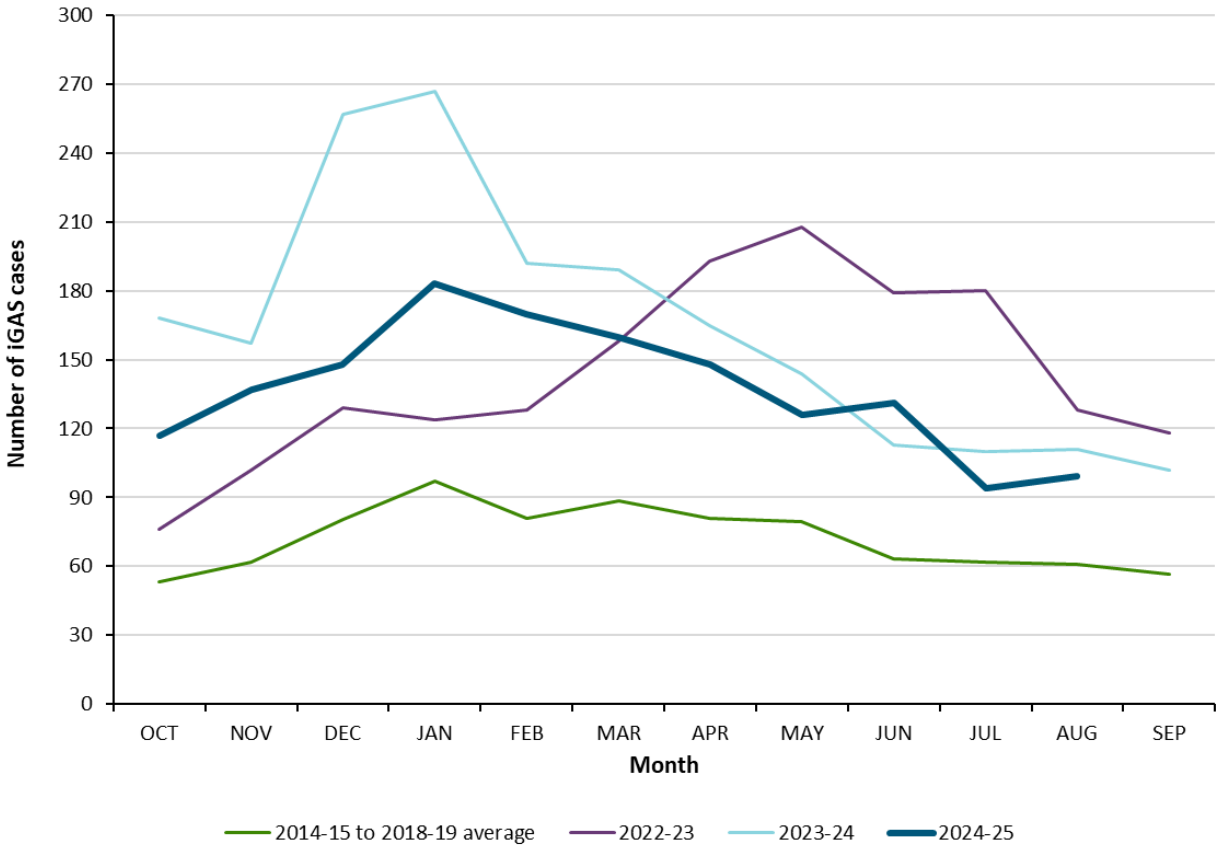
Highlights

- A total of 1,513 confirmed iGAS cases were reported in Ontario between October 1, 2024 and August 31, 2025, corresponding to an overall incidence rate of 9.3 cases per 100,000 population (Table 1).
- The number of cases reported in August 2025 was lower than the number of cases reported in August 2023 and August 2024. July and August had the lowest number of cases to date this season (Figure 1). Case counts for the most recent month should be interpreted with caution owing to an increase in data lags in the current season.
    - There were 7 cases among those under 18 years of age (pediatric cases) in August 2025, up from the 2 cases reported in July 2025. This is lower than the 8 cases reported in August 2024, and 14 cases reported in August 2023. July had the lowest number of pediatric cases of any month to date this season (Figure 2).
- The overall number of iGAS cases and the incidence rate reported in the 2024-25 season to date is lower than the corresponding values for the same period in the 2023-24 season. This represents a 20.5% reduction in the incidence rate (Table 1).
    - However, the total case count in the 2024-25 season thus far continues to exceed counts for the same time period for the average of the five pre-pandemic seasons (Figure 1).
    - The total number of pediatric iGAS cases reported in the 2024-25 season up to August is lower than the total in 2022-23 and 2023-24 for the same time period, but higher than the average for the five pre-pandemic seasons (Figure 2).

- In August 2025, rates of confirmed iGAS cases were highest in Northeastern, Thunder Bay District Health Unit and Northwestern Health Unit (Figure 3).
- Those 65 years of age and older reported the highest incidence rate (17.1 cases per 100,000 population). Based on data reported between October to August for the 2023-24 season, all age groups, except for those under one year old, have had lower incidence rates this season to date (Table 1).
- The overall proportion of iGAS cases requiring hospitalization this season to date is 79.2% compared to 82.0% for the previous season, however interpretation of the data should consider the possible impact of lags in reporting (Table 2).
- For the 2024-25 season up to August 31, 2025, fatal pediatric iGAS cases have been older compared to the previous season. Of all fatal pediatric iGAS cases so far this season, three have occurred in children less than five years of age (Table 2).
    - 6.6% (8/121) of pediatric iGAS cases have had a fatal outcome reported compared to 7.4% (15/204) during the corresponding period of the previous season.
    - The proportion of fatal cases among adults (cases ≥ 18 years of age) in the 2024-25 season was 10.8% (150/1,390) compared to 12.4% (206/1,666) for the previous season.
    - Interpretation of the data should consider the possible impact of lags in reporting.
- Among iGAS cases in the 2024-25 season to date, the most commonly reported *emm* types are *emm49*, *emm1*, *emm3*, *emm41*, and *emm92* in adults and *emm1*, *emm3* and *emm4* in children (Table 3).
    - *Emm* types were available for 73.4% of adult cases, and for 82.6% of pediatric cases.
    - These data are expected to change because *emm* types are often confirmed after initial public health notification and follow up with the case.

Trends

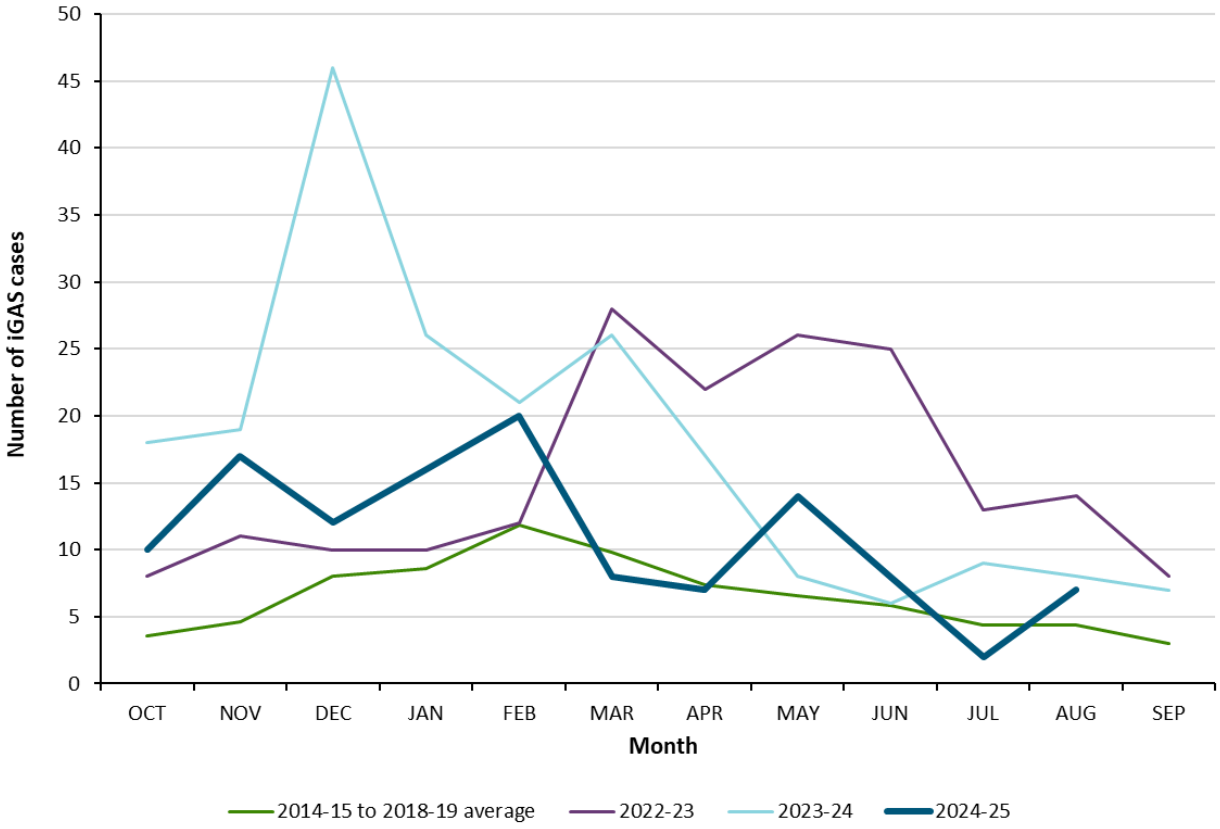
Figure 1: Confirmed iGAS Case Counts by Month for All Ages: Current Season (October 1, 2024 – August 31, 2025)* Compared to 2022-23 and 2023-24 and the Five Pre-Pandemic Season Average



Data source: iPHIS

*Data for the current season (2024-2025) includes cases reported up to August 31, 2025. Data for the most recent reporting month should be interpreted with caution due to reporting lags.

Figure 2: Confirmed iGAS Case Counts by Month in Children 0-17 Years of Age: Current Season (October 1, 2024 – August 31, 2025)* Compared to 2022-23 and 2023-24 and the Five Pre-Pandemic Season Average



Data source: iPHIS

*Data for the 2024-2025 season includes cases reported up to August 31, 2025. Data for the most recent reporting month should be interpreted with caution due to reporting lags.

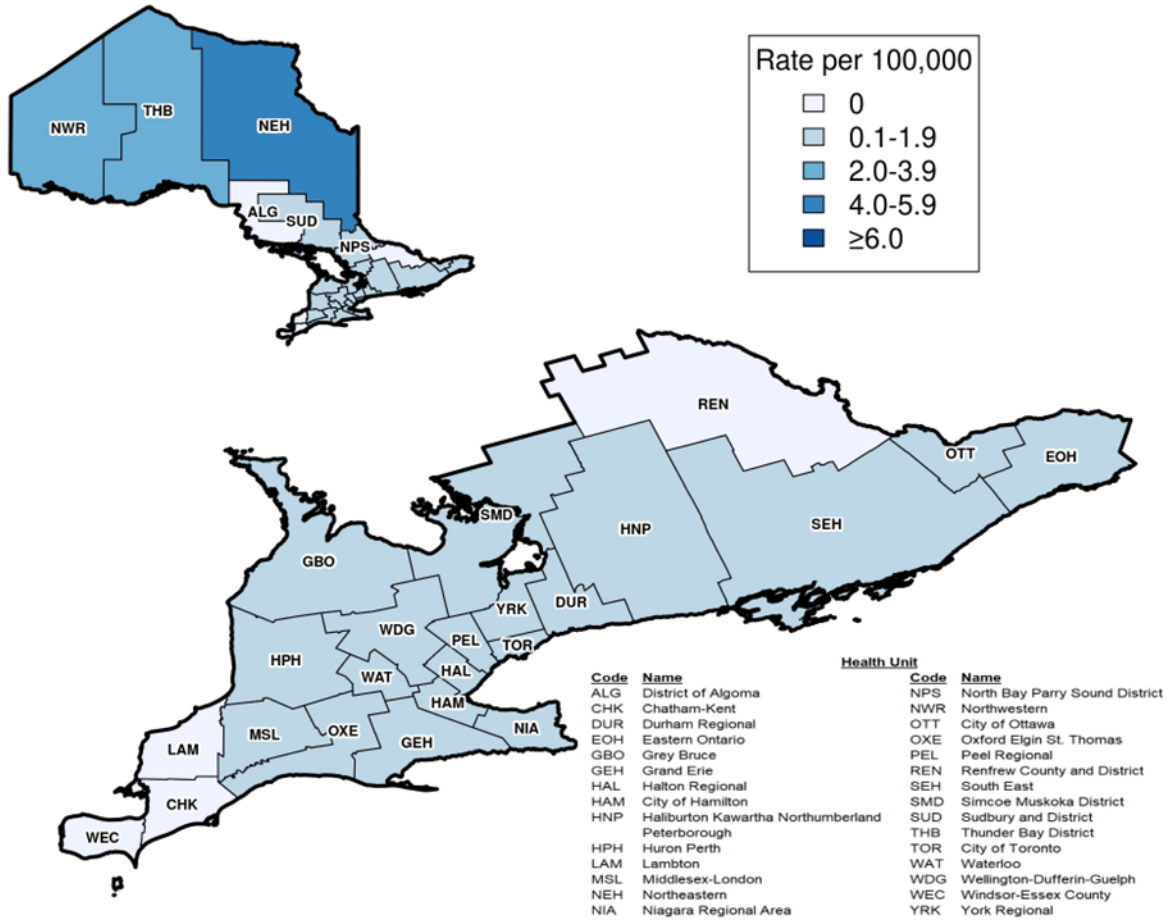
Table 1: Confirmed iGAS Cases and Rate (per 100,000 Population) by Age Group in Ontario: Current Season (October 1, 2024 – August 31, 2025) Compared to the 2023-24 Season (October 1, 2023– August 31, 2024)*

Age Group (years)	Current season: Total number of cases reported (October 1, 2024 – August 31, 2025)	Current season: Rate per 100,000 population (October 1, 2024 – August 31, 2025)	Previous season: Total number of cases reported (October 1, 2023– August 31, 2024)	Previous season: Rate per 100,000 population (October 1, 2023– August 31, 2024)	Percentage change in current season rate compared to 2023-24 season
< 1	17	10.6	12	7.7	37.7%
1 – 4	37	6.1	67	11.5	-47.0%
5 – 9	33	4.2	86	11.0	-61.8%
10 – 13	21	3.2	24	3.7	-13.5%
14 – 17	13	1.9	15	2.2	-13.6%
18 – 64	866	8.3	1045	10.2	-18.6%
≥ 65	524	17.1	621	21.0	-18.6%
Unknown	2	N/A	3	N/A	N/A
Total	**1,513**	**9.3**	**1,873**	**11.7**	**-20.5%**

Data source: iPHIS

* For comparability to the current iGAS season, only data for confirmed iGAS cases reported for the previous season from October 1, 2023 – August 31, 2024 are presented.

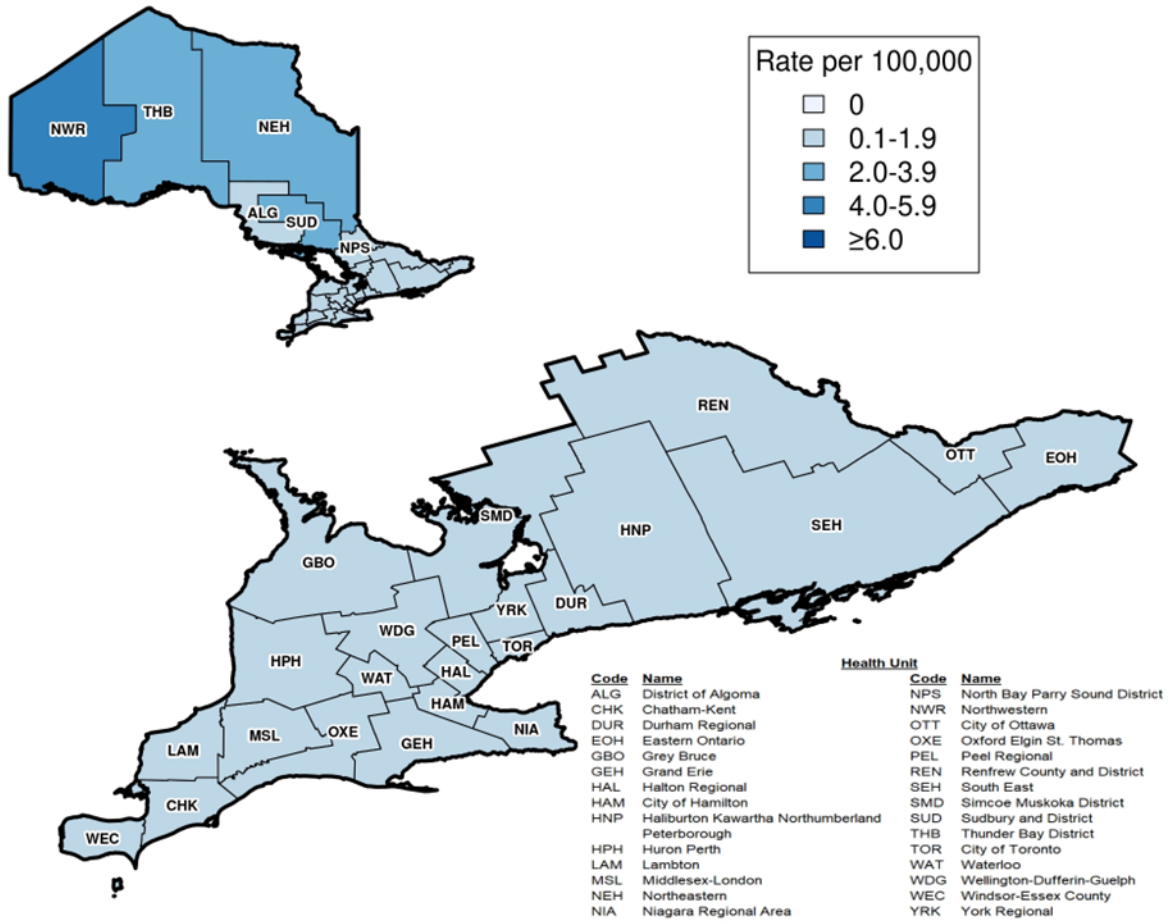
Figure 3: Rate of Confirmed Cases of iGAS Reported in August 2025 by Public Health Unit in Ontario



Health Unit			
Code	**Name**	**Code**	**Name**
ALG	District of Algoma	NPS	North Bay Parry Sound District
CHK	Chatham-Kent	NWR	Northwestern
DUR	Durham Regional	OTT	City of Ottawa
EOH	Eastern Ontario	OXE	Oxford Elgin St. Thomas
GBO	Grey Bruce	PEL	Peel Regional
GEH	Grand Erie	REN	Renfrew County and District
HAL	Halton Regional	SEH	South East
HAM	City of Hamilton	SMD	Simcoe Muskoka District
HNP	Haliburton Kawartha Northumberland Peterborough	SUD	Sudbury and District
		THB	Thunder Bay District
HPH	Huron Perth	TOR	City of Toronto
LAM	Lambton	WAT	Waterloo
MSL	Middlesex-London	WDG	Wellington-Dufferin-Guelph
NEH	Northeastern	WEC	Windsor-Essex County
NIA	Niagara Regional Area	YRK	York Regional

Data source: iPHIS

Figure 4: Average Monthly Rate of Confirmed Cases of iGAS Reported in the Current Season (October 1, 2024 – August 31, 2025) by Public Health Unit in Ontario



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HAL	Halton Regional	SEH	South East
HAM	City of Hamilton	SMD	Simcoe Muskoka District
HNP	Haliburton Kawartha Northumberland Peterborough	SUD	Sudbury and District
		THB	Thunder Bay District
HPH	Huron Perth	TOR	City of Toronto
LAM	Lambton	WAT	Waterloo
MSL	Middlesex-London	WDG	Wellington-Dufferin-Guelph
NEH	Northeastern	WEC	Windsor-Essex County
NIA	Niagara Regional Area	YRK	York Regional

Data source: iPHIS

*The average monthly rate was determined by dividing the cumulative rate of confirmed iGAS cases for each PHU by the number of months included in the reporting period (i.e., for data captured until August 31, 2025, the cumulative rate was divided by eleven months to determine the monthly rate for each PHU).

Severity

Table 2: Severe Outcomes for Confirmed iGAS Cases by Age Group and Season in Ontario: Current Season (October 1, 2024 – August 31, 2025) Compared to the 2023-24 Season (October 1, 2023– August 31, 2024)*

Age Group (years)	Current season: Number (%) of cases hospitalized (October 1, 2024 – August 31, 2025)	Previous season: Number (%) of cases hospitalized (October 1, 2023 – August 31, 2024)	Current season: Number (%) of cases with a fatal outcome (October 1, 2024 – August 31, 2025)	Previous season: Number (%) of cases with a fatal outcome (October 1, 2023 – August 31, 2024)
< 1	13/17 (76.5%)	10/12 (83.3%)	2/17 (11.8%)	1/12 (8.3%)
1 – 4	27/37 (73.0%)	56/67 (83.6%)	1/37 (2.7%)	7/67 (10.4%)
5 - 9	26/33 (78.8%)	77/86 (89.5%)	1/33 (3.0%)	5/86 (5.8%)
10 - 13	20/21 (95.2%)	19/24 (79.2%)	2/21 (9.5%)	2/24 (8.3%)
14 - 17	9/13 (69.2%)	10/15 (66.7%)	2/13 (15.4%)	0/15 (0.0%)
18 - 64	676/866 (78.1%)	855/1045 (81.8%)	79/866 (9.1%)	109/1045 (10.4%)
≥65	428/524 (81.7%)	509/621 (82%)	71/524 (13.5%)	97/621 (15.6%)
Unknown	0/2 (0.0%)	0/3 (0.0%)	0/2 (0.0%)	1/3 (33.3%)
Total	**1,199/1,513 (79.2%)**	**1,536/1,873 (82.0%)**	**158/1,513 (10.4%)**	**222/1,873 (11.9%)**

Data source: iPHIS

*For the previous season, only data for confirmed iGAS cases reported October 1, 2023 – August 31, 2024 is presented, for comparability to the current iGAS season.

Table 3: Number (%) of Most Commonly Reported *Emm* Types Among Confirmed iGAS Cases in Ontario by Age Group*: Current Season (October 1, 2024 – August 31, 2025) Compared to the 2023-24 Season (October 1, 2023 – August 31, 2024)**

Most commonly reported *emm* type by rank	Current season: ≥ 18 years of age (October 1, 2024 – August 31, 2025)	Previous season: ≥ 18 years of age (October 1, 2023– August 31, 2024)	Current season: < 18 years of age (October 1, 2024 – August 31, 2025)	Previous season: < 18 years of age (October 1, 2023– August 31, 2024)
emm49	103 (10.1%)	84 (6.1%)	1 (1.0%)	1 (0.6%)
emm1	99 (9.7%)	453 (33.1%)	30 (30.0%)	109 (65.7%)
emm3	95 (9.3%)	6 (0.4%)	26 (26.0%)	1 (0.6%)
emm41	80 (7.8%)	55 (4.0%)	1 (1.0%)	0 (0.0%)
emm92	78 (7.6%)	65 (4.8%)	2 (2.0%)	1 (0.6%)
emm74	66 (6.5%)	94 (6.9%)	3 (3.0%)	0 (0.0%)
emm59	65 (6.4%)	59 (4.3%)	3 (3.0%)	0 (0.0%)
emm5	48 (4.7%)	5 (0.4%)	1 (1.0%)	1 (0.6%)
emm28	44 (4.3%)	41 (3.0%)	3 (3.0%)	2 (1.2%)
emm80	41 (4%)	67 (4.9%)	1 (1.0%)	1 (0.6%)
emm89	39 (3.8%)	23 (1.7%)	2 (2.0%)	3 (1.8%)
emm4	34 (3.3%)	36 (2.6%)	13 (13.0%)	11 (6.6%)
Other	228 (22.4%)	379 (27.7%)	14 (14.0%)	36 (21.7%)
Total with *emm* type	1020 (73.4%)	1367 (82.1%)	100 (82.6%)	166 (81.4%)
Total without *emm* type	370 (26.6%)	299 (17.9%)	21 (17.4%)	38 (18.6%)
Total	**1,390 (100.0%)**	**1,666 (100.0%)**	**121 (100.0%)**	**204 (100.0%)**

Data source: iPHIS

* Cases with an unknown age are excluded from this table.

**For the previous season, only data for confirmed iGAS cases reported October 1, 2023 – August 31, 2024 is presented, for comparability to the current iGAS season.

Technical Notes

- The data for this report were based on information entered in iPHIS as of:
  - **September 8, 2025 at 9 a.m.** for cases reported October 1, 2023 onwards.
  - **November 12, 2024 at 9 a.m.** for cases reported during the five pre-pandemic seasons (October 1, 2014 – September 30, 2019) and the 2022-23 season (October 1, 2022 to September 30, 2023).
- iPHIS is a dynamic disease reporting system that allows ongoing updates to previously entered data. As a result, data extracted from iPHIS represent a snapshot at the time of extraction and may differ from previous or subsequent reports.
- These data only represent laboratory-confirmed cases of iGAS reported to public health and recorded in iPHIS. As a result, all case counts are subject to varying degrees of underreporting due to a variety of factors, such as disease awareness and medical care seeking behaviours that may depend on severity of illness, clinical practices, and changes in laboratory testing and reporting behaviours.
- Population estimates used to calculate rates for total cases were calculated using the Ontario 2024 and 2025 population projections[3], sourced from the Ontario Ministry of Finance.
- Only iGAS cases meeting the confirmed case classification as listed in the Ontario Ministry of Health (MOH) surveillance case definitions are included in the reported case counts.[1]
  - Provincial surveillance case definitions available online under the Infectious Diseases Protocol are the most current.
  - Changes to provincial surveillance case definitions and disease classifications have occurred over the years and thus may impact the analysis of trends over time. Cases are classified in iPHIS based on the Ontario MOH surveillance case definitions in use at the time the case was identified.
  - PHO's technical report "Factors Affecting Reporting Diseases in Ontario: Case Definition Changes and Associated Trends 1991-2016" and its associated appendix provide more detailed information on this topic.[4,5]
- Cases are reported based on the Episode Date, which is an estimate of the onset date of disease for a case. In order to determine this date, the following hierarchy exists in iPHIS: Onset Date > Specimen Collection Date > Lab Test Date > Reported Date.
  - For example: If an Onset Date exists, it will be used as the Episode Date. If Onset Date is not available, then the next available date in the hierarchy (i.e., Specimen Collection Date) will be used, and so on.
- Hospitalized iGAS cases were determined based on a reported intervention type description of "Hospitalization" or "ICU" (Intensive Care Unit) and a reported intervention start date on or after the case's episode date.
- Fatal iGAS cases were determined based on a case outcome description of "Fatal" and the type of death not being reported as "Reportable disease was unrelated to cause of death."
- Cases for which the Diagnosing Heath Unit (DHU) was reported as Ontario Ministry of Health and Long-Term Care (MOHLTC) (to signify a case that is not a resident of Ontario) or MUSKOKA-PARRY SOUND (a public health unit that no longer exists) were excluded from this analysis.

References

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Appendix A

Table A1: Confirmed iGAS Case Counts by Month Across All Ages: Current Season (October 1, 2024 – August 31, 2025)* Compared to the 2022-23, 2023-24 Seasons and the Five Pre-Pandemic Seasons

Month	2014 – 2015	2015 – 2016	2016 – 2017	2017 – 2018	2018 – 2019	2022-2023	2023 – 2024	2024 – 2025
October	31	29	55	81	70	76	168	117
November	42	41	63	63	99	102	157	137
December	72	47	95	92	96	129	257	148
January	78	76	96	138	97	124	267	183
February	42	75	87	121	80	128	192	170
March	62	69	102	96	114	158	189	160
April	55	53	82	126	89	193	165	148
May	63	52	76	106	99	208	144	126
June	49	40	68	83	75	179	113	131
July	41	45	72	73	79	180	110	94
August	39	44	61	74	85	128	111	99
September	35	50	55	61	81	118	102	-
Total	**609**	**621**	**912**	**1,114**	**1,064**	**1,723**	**1,975**	**1,513**

Data source: iPHIS

*Data for the most recent reporting month should be interpreted with caution due to reporting and/or data entry lags.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Invasive Group A Streptococcal (iGAS) Disease in Ontario: October 1, 2024 to August 31, 2025. Toronto, ON: King's Printer for Ontario; 2025.

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