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ENHANCED EPIDEMIOLOGICAL SUMMARY

Invasive Group A Streptococcal (iGAS) Disease in Ontario: October 1, 2024 to September 30, 2025

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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 September 30, 2025. It provides comparisons to iGAS activity in the last season from October 1, 2023 to September 30, 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]

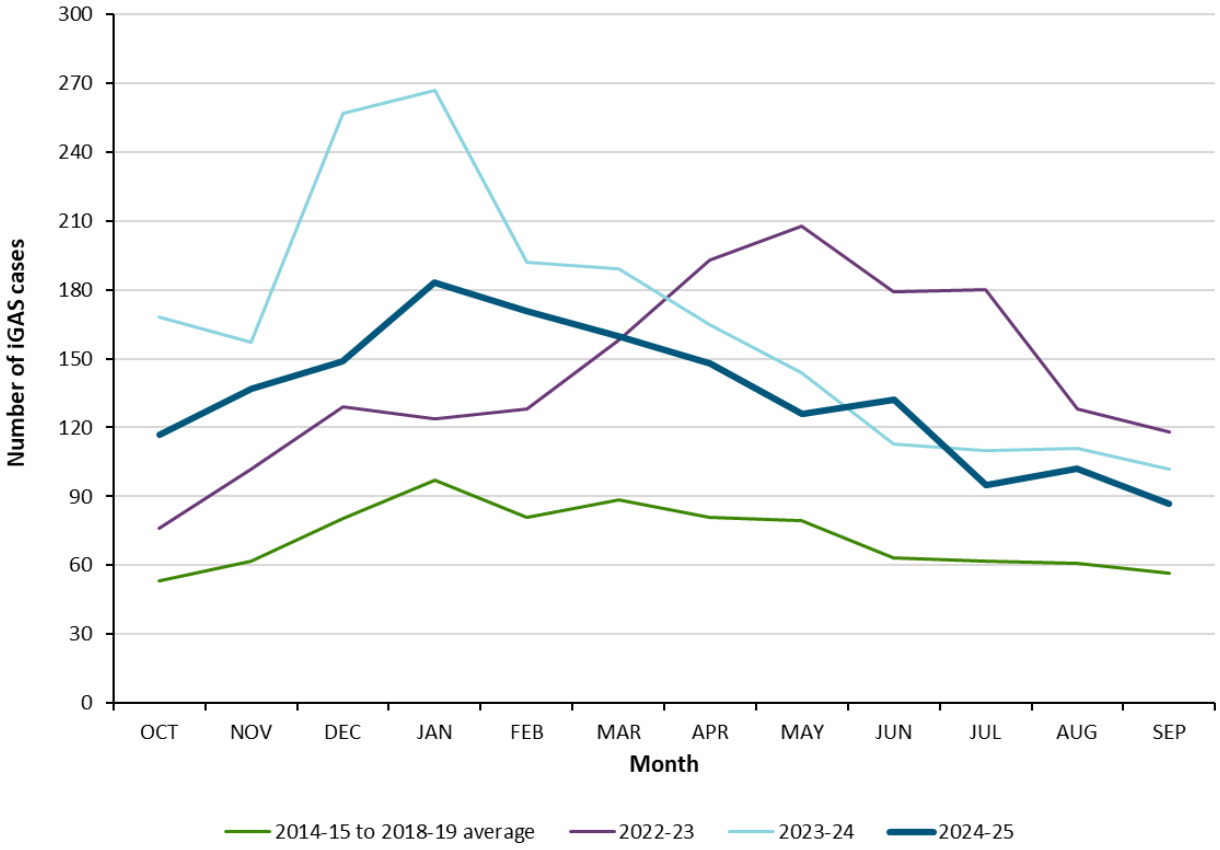
Highlights

- A total of 1,607 confirmed iGAS cases were reported in Ontario between October 1, 2024 and September 30, 2025, corresponding to an overall incidence rate of 9.8 cases per 100,000 population (Table 1).
- The number of cases reported in September 2025 was lower than the number of cases reported in September for 2023 and 2024. July and September had the lowest number of cases 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 3 cases among those under 18 years of age (pediatric cases) in September 2025, down from the 8 cases reported in August 2025. This is lower than number of cases reported in September for 2023 and 2024. July and September had the lowest number of pediatric cases of 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 20.3% 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 September 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 September 2025, rates of confirmed iGAS cases were highest in Northwestern, Thunder Bay District Health Unit and North Bay Parry Sound District Health Unit (Figure 3).
- Those 65 years of age and older reported the highest incidence rate (18.1 cases per 100,000 population). Based on data reported between October to September 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 80.0% compared to 82.1% 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 September 30, 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).
    - 6.4% (8/125) of pediatric iGAS cases have had a fatal outcome reported compared to 7.6% (16/211) 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% (160/1,480) compared to 12.4% (218/1,761) 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* and *emm3* in children (Table 3).
    - *Emm* types were available for 78.9% of adult cases, and for 87.2% 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

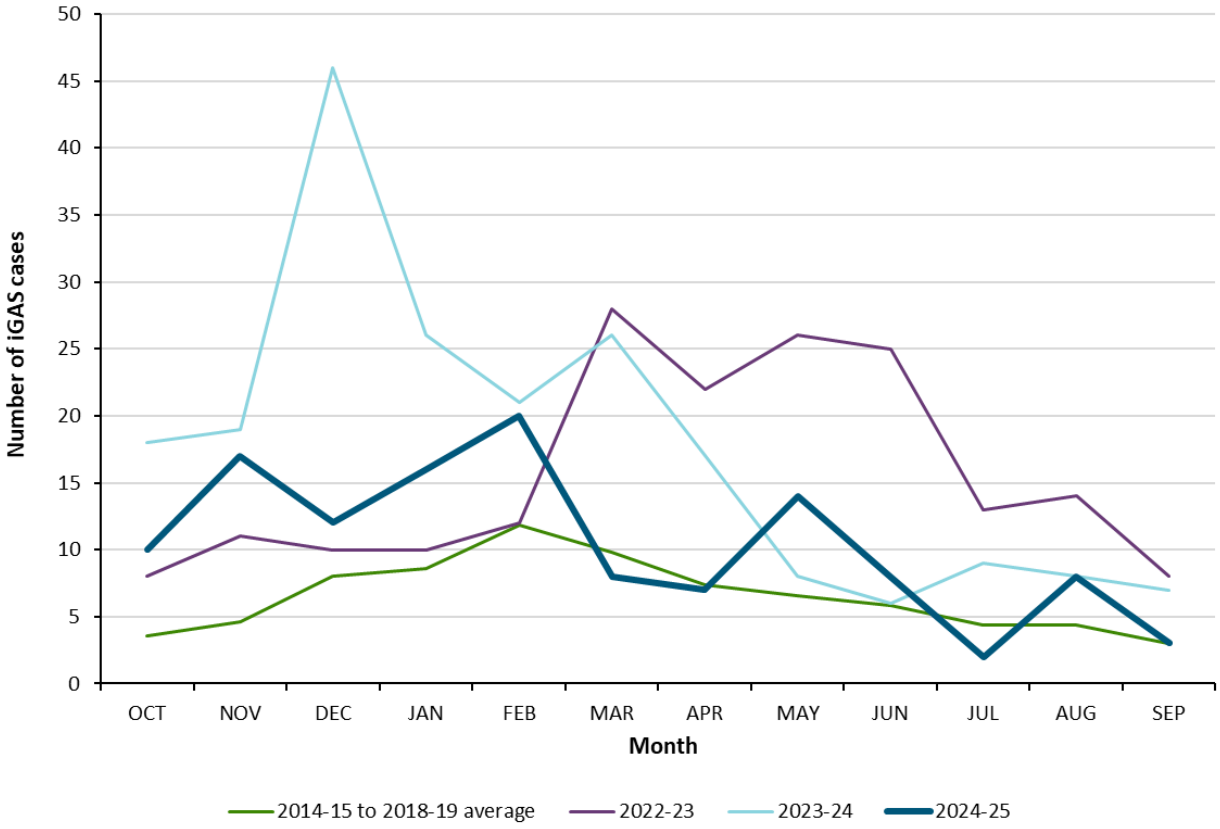
Figure 1: Confirmed iGAS Case Counts by Month for All Ages: Current Season (October 1, 2024 – September 30, 2025)* Compared to 2022-23 and 2023-24 and the Five Pre-Pandemic Season Average



Data source: iPHIS

*Data for the current season (2024-2025) includes cases reported up to September 30, 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 – September 30, 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 September 30, 2025. Data for the most recent reporting month should be interpreted with caution due to reporting lags.

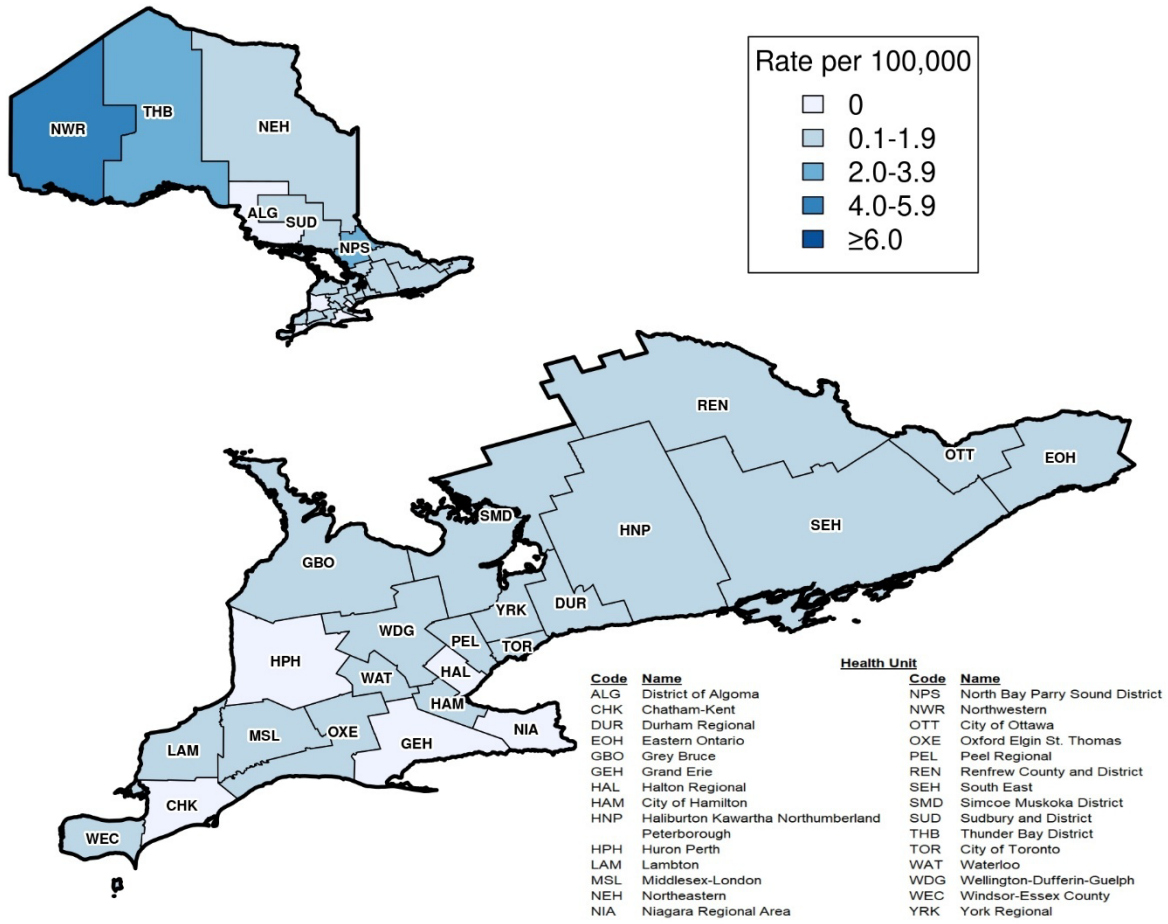
Table 1: Confirmed iGAS Cases and Rate (per 100,000 Population) by Age Group in Ontario: Current Season (October 1, 2024 – September 30, 2025) Compared to the 2023-24 Season (October 1, 2023– September 30, 2024)*

Age Group (years)	Current season: Total number of cases reported (October 1, 2024 – September 30, 2025)	Current season: Rate per 100,000 population (October 1, 2024 – September 30, 2025)	Previous season: Total number of cases reported (October 1, 2023– September 30, 2024)	Previous season: Rate per 100,000 population (October 1, 2023– September 30, 2024)	Percentage change in current season rate compared to 2023-24 season
< 1	19	11.8	12	7.7	53.2%
1 – 4	39	6.5	68	11.6	-44%
5 – 9	33	4.2	90	11.5	-63.5%
10 – 13	21	3.2	25	3.9	-17.9%
14 – 17	13	1.9	16	2.4	-20.8%
18 – 64	926	8.9	1111	10.9	-18.3%
≥ 65	554	18.1	650	21.9	-17.4%
Unknown	2	N/A	3	N/A	N/A
Total	**1,607**	**9.8**	**1,975**	**12.3**	**-20.3%**

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 – September 30, 2024 are presented.

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



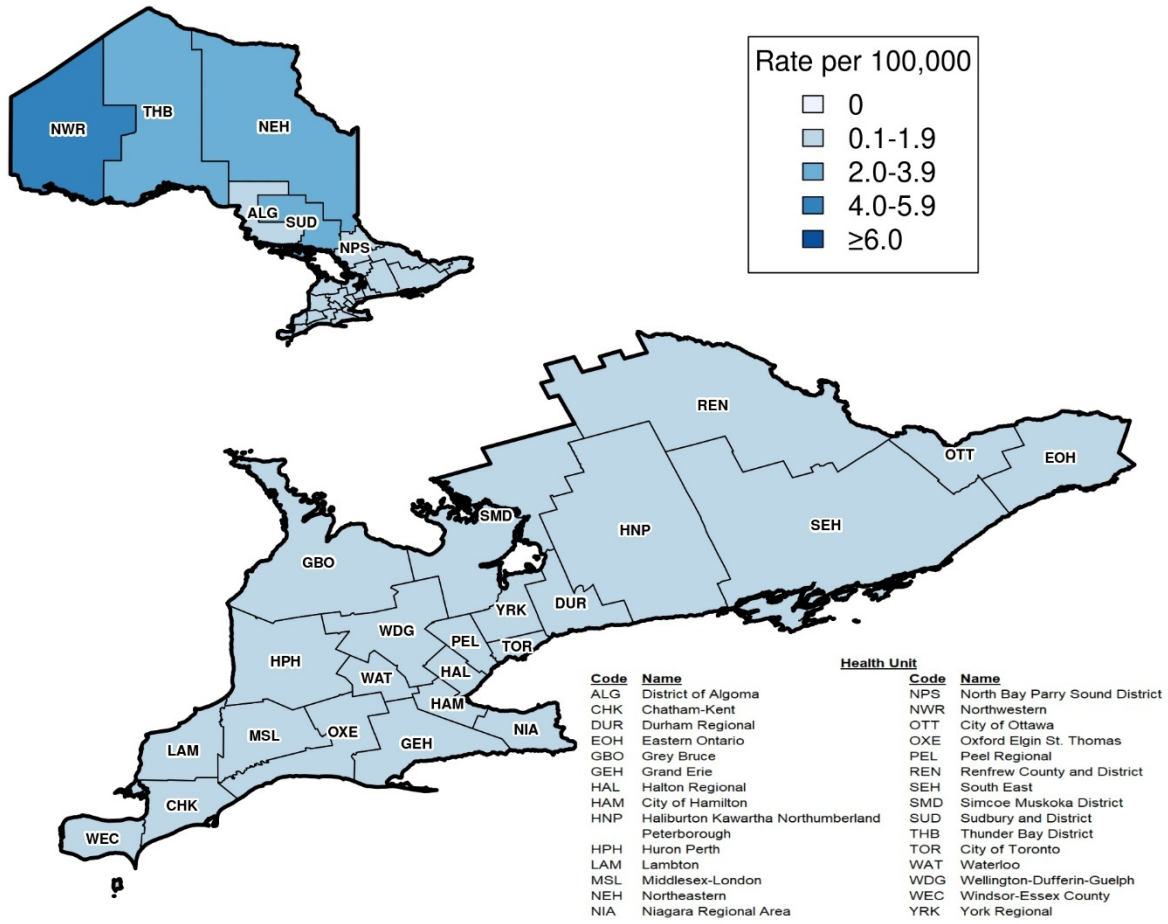
Code	Name
ALG	District of Algoma
CHK	Chatham-Kent
DUR	Durham Regional
EOH	Eastern Ontario
GBO	Grey Bruce
GEH	Grand Erie
HAL	Halton Regional
HAM	City of Hamilton
HNP	Haliburton Kawartha Northumberland Peterborough
HPH	Huron Perth
LAM	Lambton
MSL	Middlesex-London
NEH	Northeastern
NIA	Niagara Regional Area

Health Unit

Code	Name
NPS	North Bay Parry Sound District
NWR	Northwestern
OTT	City of Ottawa
OXE	Oxford Elgin St. Thomas
PEL	Peel Regional
REN	Renfrew County and District
SEH	South East
SMD	Simcoe Muskoka District
SUD	Sudbury and District
THB	Thunder Bay District
TOR	City of Toronto
WAT	Waterloo
WDG	Wellington-Dufferin-Guelph
WEC	Windsor-Essex County
YRK	York Regional

Data source: iPHIS

Figure 4: Average Monthly Rate of Confirmed Cases of iGAS Reported in the Current Season (October 1, 2024 – September 30, 2025) by Public Health Unit in Ontario



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 September 30, 2025, the cumulative rate was divided by twelve 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 – September 30, 2025) Compared to the 2023-24 Season (October 1, 2023– September 30, 2024)*

Age Group (years)	Current season: Number (%) of cases hospitalized (October 1, 2024 – September 30, 2025)	Previous season: Number (%) of cases hospitalized (October 1, 2023 – September 30, 2024)	Current season: Number (%) of cases with a fatal outcome (October 1, 2024 – September 30, 2025)	Previous season: Number (%) of cases with a fatal outcome (October 1, 2023 – September 30, 2024)
< 1	14/19 (73.7%)	10/12 (83.3%)	2/19 (10.5%)	1/12 (8.3%)
1 – 4	29/39 (74.4%)	57/68 (83.8%)	1/39 (2.6%)	7/68 (10.3%)
5 - 9	27/33 (81.8%)	81/90 (90.0%)	1/33 (3%)	6/90 (6.7%)
10 - 13	20/21 (95.2%)	19/25 (76%)	2/21 (9.5%)	2/25 (8%)
14 - 17	9/13 (69.2%)	10/16 (62.5%)	2/13 (15.4%)	0/16 (0.0%)
18 - 64	725/926 (78.3%)	908/1111 (81.7%)	86/926 (9.3%)	115/1111 (10.4%)
≥65	462/554 (83.4%)	537/650 (82.6%)	74/554 (13.4%)	103/650 (15.8%)
Unknown	0/2 (0.0%)	0/3 (0.0%)	0/2 (0.0%)	1/3 (33.3%)
Total	**1,286/1,607 (80.0%)**	**1,622/1,975 (82.1%)**	**168/1,607 (10.5%)**	**235/1,975 (11.9%)**

Data source: iPHIS

*For the previous season, only data for confirmed iGAS cases reported October 1, 2023 – September 30, 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 – September 30, 2025) Compared to the 2023-24 Season (October 1, 2023 – September 30, 2024)**

Most commonly reported *emm* type by rank	Current season: ≥ 18 years of age (October 1, 2024 – September 30, 2025)	Previous season: ≥ 18 years of age (October 1, 2023– September 30, 2024)	Current season: < 18 years of age (October 1, 2024 – September 30, 2025)	Previous season: < 18 years of age (October 1, 2023– September 30, 2024)
emm49	111 (9.5%)	89 (6.2%)	1 (0.9%)	1 (0.6%)
emm1	108 (9.2%)	460 (32%)	34 (31.2%)	110 (63.6%)
emm3	105 (9.0%)	6 (0.4%)	26 (23.9%)	2 (1.2%)
emm41	92 (7.9%)	61 (4.2%)	1 (0.9%)	0 (0.0%)
emm92	85 (7.3%)	76 (5.3%)	2 (1.8%)	1 (0.6%)
emm74	77 (6.6%)	98 (6.8%)	3 (2.8%)	1 (0.6%)
emm59	72 (6.2%)	61 (4.2%)	3 (2.8%)	0 (0.0%)
emm5	65 (5.6%)	5 (0.3%)	1 (0.9%)	1 (0.6%)
emm28	52 (4.5%)	44 (3.1%)	3 (2.8%)	2 (1.2%)
emm83	50 (4.3%)	29 (2.0%)	0 (0.0%)	0 (0.0%)
emm80	43 (3.7%)	72 (5.0%)	1 (0.9%)	1 (0.6%)
emm89	43 (3.7%)	25 (1.7%)	2 (1.8%)	3 (1.7%)
Other	265 (22.7%)	412 (28.7%)	32 (29.4%)	51 (29.5%)
Total with *emm* type	1168 (78.9%)	1438 (81.7%)	109 (87.2%)	173 (82.0%)
Total without *emm* type	312 (21.1%)	323 (18.3%)	16 (12.8%)	38 (18.0%)
Total	**1,480 (100.0%)**	**1,761 (100.0%)**	**125 (100.0%)**	**211 (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 – September 30, 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 13, 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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4. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Factors affecting reportable diseases in Ontario (1991-2016) [Internet]. Toronto, ON: Queen's Printer for Ontario; 2018 [cited 2024 Nov 11]. Available from: https://www.publichealthontario.ca/-/media/documents/F/2018/factors-reportable-diseases-ontario-1991-2016.pdf
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Appendix A

Table A1: Confirmed iGAS Case Counts by Month Across All Ages: Current Season (October 1, 2024 – September 30, 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	149
January	78	76	96	138	97	124	267	183
February	42	75	87	121	80	128	192	171
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	132
July	41	45	72	73	79	180	110	95
August	39	44	61	74	85	128	111	102
September	35	50	55	61	81	118	102	87
Total	**609**	**621**	**912**	**1,114**	**1,064**	**1,723**	**1,975**	**1,607**

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 September 30, 2025. Toronto, ON: King's Printer for Ontario; 2025.

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