

Small for Gestational Age Rate

Name	Small for Gestational Age Rate
Short/Other Names	SGA
Description	Crude rate for small for gestational age (SGA)
Interpretation	The in-hospital SGA rate represents the proportion of singleton babies born in a Canadian hospital with a birth weight below SGA are smaller than 90% of the babies from a standard reference population of the same gestational age and sex. Lower rates for this indicator are desirable.
HSP Framework Dimension	Health System Outcomes: Improve health status of Canadians
Areas of Need	Not applicable
Geographic Coverage	All provinces/territories
Reporting Level/Disaggregation	National, Province/Territory, Region
Indicator Results	https://apps.cihi.ca/mstrapp/asp/Main.aspx?Server=apmstrextpd_i&project=Quick%20Stats&uid=pce_pub_en&pwd=&evl

Identifying Information

Name Small for Gestational Age Rate

Short/Other Names SGA

Indicator Description and Calculation

Description Crude rate for small for gestational age (SGA)

Calculation: $\text{Rate} = (\text{Number of live singleton newborns classified as SGA at birth}) \div (\text{Number of live singleton newborns with a valid birth weight, gestational age and gender}) \times 100$

Description

Unit of Analysis: Discharges from acute care facilities

Calculation:

Geographic Assignment Place of residence

Calculation:

Type of Measurement Rate - Per 100

Calculation:

Adjustment Applied None

Calculation:

Method of Adjustment Not applicable

Description:

Number of live singleton newborns with a valid birth weight, gestational age and gender

Inclusions:

1. ICD-10-CA in-hospital singleton birth code:
 - a. A diagnosis code of Z38.0 coded in any position

Exclusions:

1. Non-newborn records
2. Cadaveric donors
3. Invalid birth weight (Weight = blank, 0000, 0001 or ZZZZ)

Denominator

4. Invalid or out-of-range gestational age (Delivery Gestational Age = blank or ZZ or <22 weeks or >43 weeks)
5. Gender Code not equal to F or M
6. ICD-10-CA multiple births codes:
 - a. Any newborn record (Entry Code = N with a Z38 diagnosis code) where two or more newborn records are born to the same mother (duplicate Maternal Newborn Chart Number) within 40 days of one another (based on Admission Date) in the same institution (Institution Number) OR
 - b. Any one ICD-10-CA multiple birth diagnosis code of Z38.3, Z38.4, Z38.5, Z38.6, Z38.7 or Z38.8 coded in any diagnosis field

7. ICD-10-CA abortion or other out-of-hospital birth codes:

a. Any one diagnosis code of P96.4, Z38.1 or Z38.2 coded in any diagnosis field

Description:

Number of live singleton newborns classified as SGA at birth

Inclusions:

Numerator 1. Weight <10th percentile for gestational age and gender category. Standard Canadian birth weights for gestational age by gender charts were used (M. S. Kramer et al., 2001).

Exclusions:

Same as denominator (numerator is a subset of the denominator)

Background, Interpretation and Benchmarks

Rationale SGA rates continue to vary among provinces/territories. Given this variance, this indicator can be used to inform government planners, policy-makers, health system decision-makers, health care providers, patients and the general public. It can help raise awareness and allow Canada to compare its rates with the rates of other countries.

Interpretation The in-hospital SGA rate represents the proportion of singleton babies born in a Canadian hospital with a birth weight below the 10th percentile for their gestational age and sex. In other words, babies classified as SGA are smaller than 90% of the babies from a standard reference population of the same gestational age and sex.

Lower rates for this indicator are desirable.

HSP Framework

Dimension Health System Outcomes: Improve health status of Canadians

Areas of Need Not applicable

Targets/Benchmarks Not applicable

References Kramer MS, Platt RW, Wen SW, et al. A new and improved population-based Canadian reference for birth weight for gestational age. *Pediatrics*. 2001;108(2):e35. <http://www.pediatrics.org/cgi/content/full/108/2/e35>.

Availability of Data Sources and Results

Data Sources DAD, HMDB, MED-ÉCHO

Type of Year:

Fiscal

Available Data Years **First Available Year:**

2007

Last Available Year:

2017

Geographic Coverage All provinces/territories

Reporting Level/Disaggregation National, Province/Territory, Region

Result Updates

Update Every year

Frequency

Web Tool:

Indicator Quick Stats

Results **URL:** https://apps.cihi.ca/mstrapp/asp/Main.aspx?Server=apmstrextrprd_i&project=Quick%20Stats&uid=pce_pub_en&pwd=&evt=2048/CCE822

Updates As of 2015–2016, the national results include non-residents of Canada.

Quality Statement

In order to provide a more stable rate estimate, only data from regions with a population of at least 50,000 was reported. Additional reasons for suppression were privacy, rate instability and under-reporting. As of 2015–2016, regions are not suppressed based on population; instead, the following suppression methodology is used:

Caveats

and a) Suppression due to privacy: To ensure privacy, a suppression rule is applied to all clinical indicator results. Numerators and/or Limitations denominators between 1 and 4 are suppressed.

b) Suppression due to unstable results: Unstable indicator results are suppressed. In general, these are indicator results with a denominator between 1 and 49.

Results are presented for a patient's region of residence, rather than the location of the facility where hospitalization occurred. For P.E.I. and the territories, the entire province/territory is included as a region. Health regions in Nova Scotia and Alberta have changed over time. The Postal Code Conversion File (PCCF/PCCF+) was used to assign patients to their region of residence.

Trending Issues

As of 2015–2016, the national results include non-residents of Canada.

2016–2017 data for Nunavut is incomplete; indicator results have therefore been suppressed.

Comments Standard Canadian birth weights for gestational age by gender charts were used (M. S. Kramer et al., 2001).