

# Inpatient Hospitalizations, Surgeries, Newborns and Childbirth Indicators, 2015–2016

The Canadian Institute for Health Information (CIHI) collects administrative, clinical and demographic data from hospitals across Canada that submit information on inpatient, day surgery, emergency and ambulatory care episodes.

Inpatient hospitalization statistics — which include volumes and average lengths of stay by sex, age group and province/territory — are available from 1995–1996 onward in the Inpatient Quick Stats.

Selected childbirth indicators by province/territory and health region are available from 2001–2002 onward in the <a href="Childbirth Quick Stats">Childbirth Quick Stats</a>.

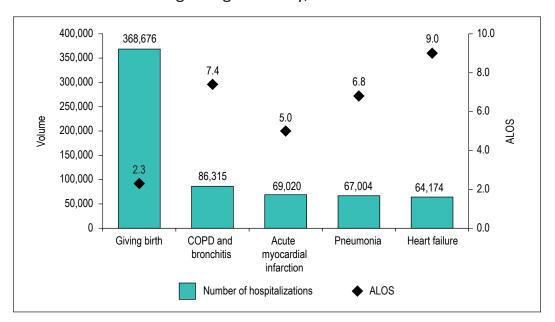
<u>Pre-formatted tables</u> on hospitalization rates, top 10 reasons for hospitalizations and surgeries, and in-hospital births are also available via Quick Stats.



# Inpatient hospitalization rate declining over time

In 2015–2016, there were almost 3 million acute inpatient hospitalizations in Canada. After adjusting for differences in age, sex and population growth, the hospitalization rate was 8,054 per 100,000 in 2015–2016, down from 8,332 per 100,000 in 2011–2012. The age-adjusted average length of stay (ALOS) in hospital has been relatively stable: 7.0 days in 2015–2016 compared with 6.9 days in 2014–2015.

Figure 1 Top 5 reasons for inpatient hospitalizations\* by volume and average length of stay, 2015–2016



# Notes

ALOS: Average length of stay.

COPD: Chronic obstructive pulmonary disease.

# Sources

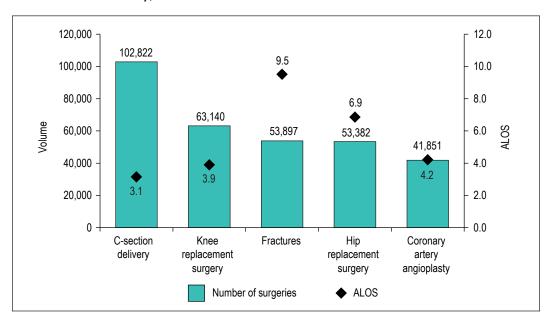
Hospital Morbidity Database and Ontario Mental Health Reporting System, 2015–2016, Canadian Institute for Health Information.

Consistent with 2014–2015 findings, the most common reason for hospitalization in 2015–2016 was giving birth, with an ALOS of 2.3 days. This was followed by COPD and bronchitis (7.4 days) and acute myocardial infarction (5.0 days). See Figure 1 for details on the top 5 inpatient hospitalizations.

<sup>\*</sup> Numbers exclude newborns and include obstetric records.

Also consistent with 2014–2015 results, in 2015–2016, the most common inpatient surgery in Canada was a Caesarean section (C-section), with an ALOS of 3.1 days, followed by knee replacements (3.9 days) and fractures (9.5 days). The top 5 inpatient surgeries are shown in Figure 2.

Figure 2 Top 5 inpatient surgeries by volume and average length of stay,\* 2015–2016



# Notes

The analysis includes all types of knee/hip replacements (including total, partial, primary and revision).

# Source

Hospital Morbidity Database, 2015–2016, Canadian Institute for Health Information.

# Rate of newborns born in hospital declining over time

The rate of babies born in hospital in Canada has been declining gradually over the last several years. In 2015–2016, the rate was 104 per 10,000 population, down from 112 per 10,000 population in 2009–2010.

# Preterm birth rates and SGA rates stable over time

In 2015–2016, the rate of babies born before 37 weeks of gestation (i.e., preterm) in Canadian hospitals was 7.9%. The rate of single babies born who were small for gestational age (SGA; smaller than 90% of the babies with the same gestational age and sex) was 9.1%. These rates have remained relatively stable since 2006.

<sup>\*</sup> Length of stay is calculated for the complete acute care hospitalization, which may have included other treatments and procedures. ALOS: Average length of stay.

# Primary C-section rates higher for women 35 and older; epidural rates remain high in Canada

The primary C-section rate is defined as the proportion of women who had a C-section for the first time. Across all provinces, women 35 and older continued to be more likely to have a primary C-section than younger women (23.6% versus 17.8%, respectively). The Canadian epidural rate for vaginal deliveries decreased slightly from 59.4% in 2014–2015 to 57.8% in 2015–2016, which was the first decline in 10 years.

Canada 57.8% 23.6% 17.8% 36.8% 17.7% 16.9% 7.5% 21.6% 16.9% 20.4% 16.9% 17.6% P.E.I. 13.4% Y.T. 5.8% N.W.T. Nun. 23.8% 37.5% 19.7% 72.1% 55.9% 29.3% 56.8% 37.2% 21.4% 24.4% 60.0% 23.3% 19.3% 18.3% 15.9% 19.0% 23.4% B.C. 14.9% 14.7% 17.7% Que. Alta. Sask. Man. Ont. N.S. 49.3% N.B. 52.6% 22.5% Epidural rate (vaginal deliveries), 2015-2016 24.7% 17.2% C-section rate, age 35+, 2015-2016 C-section rate, age <35, 2015-2016

Figure 3 Primary C-section and epidural rates across Canada, 2015–2016

# Source

Hospital Morbidity Database, 2015–2016, Canadian Institute for Health Information.

# More information

For more information, please access the interactive <u>inpatient</u> and <u>childbirth</u> data in CIHI's Quick Stats. <u>Pre-formatted tables</u> are also available via Quick Stats. These include data on the top 10 reasons for hospitalizations and surgeries, in-hospital births, and standardized hospitalization rates and average lengths of stay.

Feedback and questions are welcome at <a href="mailto:cad@cihi.ca">cad@cihi.ca</a>.

# Appendix: Text alternative for figures

Data table for Figure 1: Top 5 reasons for inpatient hospitalizations\* by volume and average length of stay, 2015–2016

Ranking	Most responsible diagnoses for inpatient hospitalizations	Number of inpatient hospitalizations in 2015–2016	Average length of stay of inpatient hospitalizations in 2015–2016
1	Giving birth	368,676	2.3
2	COPD and bronchitis	86,315	7.4
3	Acute myocardial infarction	69,020	5.0
4	Pneumonia	67,004	6.8
5	Heart failure	64,174	9.0

# Notes

COPD: Chronic obstructive pulmonary disease.

# Sources

Hospital Morbidity Database and Ontario Mental Health Reporting System, 2015–2016, Canadian Institute for Health Information.

# Data table for Figure 2: Top 5 inpatient surgeries by volume and average length of stay,\* 2015-2016

Ranking	Surgical interventions in 2015–2016	Number of inpatient surgeries in 2015–2016	Average length of stay of inpatient surgeries in 2015–2016
1	C-section delivery	102,822	3.1
2	Knee replacement surgery	63,140	3.9
3	Fractures	53,897	9.5
4	Hip replacement surgery	53,382	6.9
5	Coronary artery angioplasty	41,851	4.2

# Notes

# Source

Hospital Morbidity Database, 2015–2016, Canadian Institute for Health Information.

Numbers exclude newborns and include obstetric records.

<sup>\*</sup> Length of stay is calculated for the complete acute care hospitalization, which may have included other treatments and procedures. The analysis includes all types of knee/hip replacements (including total, partial, primary and revision).

# Data table for Figure 3: Primary C-section and epidural rates across Canada, 2015–2016

Jurisdiction	Epidural rate for vaginal deliveries (%)	Primary C-section rate, 35+ years (%)	Primary C-section rate, <35 years (%)
Canada	57.8	23.6	17.8
Newfoundland and Labrador	49.1	23.8	19.7
Prince Edward Island	44.9	21.6	17.6
Nova Scotia	49.3	22.5	17.2
New Brunswick	52.6	24.7	17.6
Quebec	72.1	21.4	15.9
Ontario	60.0	23.4	17.7
Manitoba	37.2	18.3	14.7
Saskatchewan	56.8	19.3	14.9
Alberta	55.9	24.4	19.0
British Columbia	37.5	29.3	23.3
Yukon	36.8	17.7	16.9
Northwest Territories	16.9	20.4	13.4
Nunavut	7.5	16.9	5.8

#### Source

Hospital Morbidity Database, 2015–2016, Canadian Institute for Health Information.



For data-specific information:

cad@cihi.ca



cihi.ca