Highlights of 2011–2012
Selected Indicators Describing the Birthing Process in Canada

Background

This summary contains key information on selected childbirth indicators and newborns data for Canada in 2011–2012, which is now available through CIHI’s Quick Stats. The childbirth indicators are available from 2001–2002 to 2011–2012 (by province/territory and health region), and the newborns data is available from 1995–1996 to 2011–2012 (by province/territory). The data source is the 2011–2012 Hospital Morbidity Database (HMDB). Historical data is sourced from the Discharge Abstract Database (DAD) and the MED-ÉCHO database.

Highlights

Newborns

In 2011–2012, almost 373,000 babies were born in Canadian hospitals. Although the number of babies born annually in hospital decreased steadily between 1995–1996 and 2000–2001 (dropping by 13.1%, or about 50,000 newborns during that period) (Figure 1), the next nine years saw an annual increase in births, such that the number of babies born in 2009–2010 mirrored that in 1995–1996. However, 2010–2011 saw a decrease in births (a drop of 1.5%, or about 5,600 newborns) compared with 2009–2010; this occurred in all jurisdictions except Yukon. The number of newborns born in hospital increased by just 0.5% between 2010–2011 and 2011–2012. Overall, this number has been relatively stable for the last five years.
Primary and Repeat Caesarean Sections

The primary Caesarean section (C-section) rate is defined as the proportion of women who underwent a C-section for the first time. In 2011–2012, the Canadian primary C-section rate remained stable at 17.9%. As seen last year, among the provinces, Newfoundland and Labrador and British Columbia had the highest primary C-section rates (21.1% and 22.4%, respectively), while Manitoba and Quebec had the lowest rates (14.2% and 15.3%, respectively). Among the territories and overall, Nunavut had the lowest rate at 7.1%; this was significantly lower than the Canadian rate.

As shown in Figure 2, in 2011–2012 Canadian women age 35 and older continued to have significantly higher primary C-section rates than their younger counterparts (22.3% versus 17.0%). Among the provinces, the primary C-section rates in women age 35 and older continued to range from highs of 28.5% in Newfoundland and Labrador and 26.7% in B.C. to lows of 18.7% in Manitoba and 18.9% in Quebec. Among the territories, Yukon had the highest rate at 28.2%.

Similar to last year, the Canadian repeat C-section rate—the proportion of women who underwent a C-section with a history of a previous C-section—was 82.5% in 2011–2012. Among the provinces, Newfoundland and Labrador (91.5%) and New Brunswick (87.2%) had the highest repeat C-section rates, while Manitoba and Saskatchewan continued to have the lowest (72.1% and 76.0%, respectively) (Figure 3). Among the territories, the Northwest Territories had the highest rate at 84.1%.

Preterm Birth Rate

The in-hospital preterm birth rate represents the proportion of babies born in a Canadian hospital before 36 completed weeks of gestation. In 2011–2012, the Canadian in-hospital preterm birth rate was 7.8%; this has remained relatively stable for the past six years (Figure 4).

As seen in the past, Alberta continued to have the highest provincial preterm birth rate at 8.3%, with Newfoundland and Labrador (8.2%), Ontario (8.1%) and Saskatchewan (8.1%) following closely behind (Table 1). In 2011–2012, Alberta and Ontario continued to be significantly above the Canadian rate. The lowest rates continued to be seen in Nova Scotia (6.9%) and Quebec (7.0%). Among the territories and overall, Nunavut had the highest preterm birth rate at 13.9%.

Small for Gestational Age Rate

The in-hospital small for gestational age (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. As in the previous year, in 2011–2012, the Canadian in-hospital SGA rate remained stable at 8.7% among singletons (Figure 4).
Similar to last year and to the preterm birth rates, Ontario and Alberta had the highest SGA rates among the provinces (9.3% and 9.4%, respectively) (Table 1). Prince Edward Island (6.3%) and Newfoundland and Labrador (6.8%) had the lowest provincial rates. Among the territories, Yukon had the highest SGA rate at 6.5%.

Additional Information

For more information, please go to CIHI’s website (www.cihi.ca), click on “Quick Stats,” select “Interactive Data” under “Type” and “Hospital Care” under “Topic,” then select from the “DAD/HMDB Childbirth Indicators by Place of Residence” or “DAD/HMDB Newborns Born in Hospital” statistics.

Information on total C-section rates for 2011–2012 was released in Health Indicators 2013 in May 2013.
Figure 1: Total Newborn Discharges From Acute Care Institutions, Canada, 1995–1996 to 2011–2012

Explanation
Although changes in the number of births are influenced by many factors, the two key factors are fertility rates and the number of women in their childbearing years (age 20 to 39).

1. 1995 to 2001: The drop in the number of newborns was largely the result of an 8.4% decrease in fertility rates and a 4.0% decrease in the population of women age 20 to 39.
2. 2001 to 2006: The number of newborns was fairly stable, largely the result of a 5.2% increase in fertility rates and a 1.5% decrease in the population of women age 20 to 39.
3. 2006 to 2009: The increase in the number of newborns was largely the result of a 3.7% increase in fertility rates and a 5.1% increase in the population of women age 20 to 39.
4. There was a drop in newborn volumes in 2010–2011 and a slight increase of 0.5% in 2011–2012. Volumes will continue to be monitored in future fiscal years.

Notes
Newborn discharges from acute care institutions in Canada may include non-residents of Canada.

Coverage issues
- In 2002–2003, Nunavut did not submit discharge data to CIHI. As such, Canadian figures for 2002–2003 do not include Nunavut and are not comparable with figures from other fiscal years.
- One hospital in New Brunswick did not submit four periods of data to CIHI in 2004–2005.
- One hospital in Quebec did not submit two periods of data to CIHI in 2005–2006.
- Two hospitals in Alberta did not submit two periods of data to CIHI in 2005–2006, and a third hospital did not submit three periods of data; one acute care facility in Alberta did not submit three periods of data to CIHI in 2006–2007 and two periods of data in 2008–2009.

Sources
Figure 2: Primary Caesarean Section Rates, by Age Group and Province/Territory, 2011–2012

Notes
Data represents the province or territory the patient was from (excluding non-residents of Canada).
I represents the 95% confidence interval.
The dotted line is the Canadian primary C-section rate for women younger than age 35 (17.0% in 2011–2012); the solid black line is the Canadian primary C-section rate for women age 35 and older (22.3% in 2011–2012).

Coverage issues
Two small acute care facilities in Ontario did not submit data to CIHI in 2011–2012.

Source
Hospital Morbidity Database, 2011–2012, Canadian Institute for Health Information.
Figure 3: Repeat Caesarean Section Rate, by Province/Territory, 2011–2012

Notes
Data represents the province or territory the patient was from (excluding non-residents of Canada).
I represents the 95% confidence interval.
The dotted line is the Canadian repeat C-section rate for all ages (82.5% in 2011–2012).

Coverage issues
Two small acute care facilities in Ontario did not submit data to CIHI in 2011–2012.

Source
Hospital Morbidity Database, 2011–2012, Canadian Institute for Health Information.
Figure 4: Preterm Birth and Small for Gestational Age Rates, Canada, 2006–2007 to 2011–2012

Notes
Data represents the province the patient was from (excluding non-residents of Canada).

Coverage issues

Sources
Table 1: Preterm Birth and Small for Gestational Age Rates, by Province/Territory, 2011–2012

<table>
<thead>
<tr>
<th>Province/Territory</th>
<th>Preterm Birth Rate (&lt;37 Weeks)</th>
<th>Small for Gestational Age Rate</th>
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<tr>
<td></td>
<td>Rate (95% CI)</td>
<td>Rate (95% CI)</td>
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<td>B.C.</td>
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<td>8.0 (7.8–8.3)</td>
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<td>9.4 (9.1–9.6)</td>
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<td>8.7 (8.0–9.4)</td>
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<tr>
<td>Can.</td>
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<td>8.7 (8.6–8.8)</td>
</tr>
</tbody>
</table>

Notes
CI: confidence interval.
Data represents the province or territory the patient was from (excluding non-residents of Canada).
Note that significant differences were determined by the second decimal place (not shown).

Coverage issues
Two small acute care facilities in Ontario did not submit data to CIHI in 2011–2012.

Source
Hospital Morbidity Database, 2011–2012, Canadian Institute for Health Information.