

Caesarean Sections

Age-standardized percentage of in-hospital Caesarean section deliveries by Health Service Zone, 2004-2013

A caesarean section (C-section) is a surgical procedure in which an incision is made through the abdominal and uterine walls to deliver a baby. C-sections are recommended for pregnancies in which vaginal delivery could threaten the health of the newborn or mother. C-sections are not recommended for all births, as there are additional risks and complications for mothers and newborns. Since 1985, the World Health Organization has recommended a C-section rate between 10-15 per cent.¹ The Canadian C-section rate was approximately 27 per cent in 2010, up 58 per cent since 1995.² This increase has been attributed to a rise in both elective and medically necessary C-section births.³

Today's edition of *Health Trend Alberta* focuses on the percentage of all Alberta hospital deliveries by Caesarean section.

Percentage of C- section deliveries has been increasing since 2011

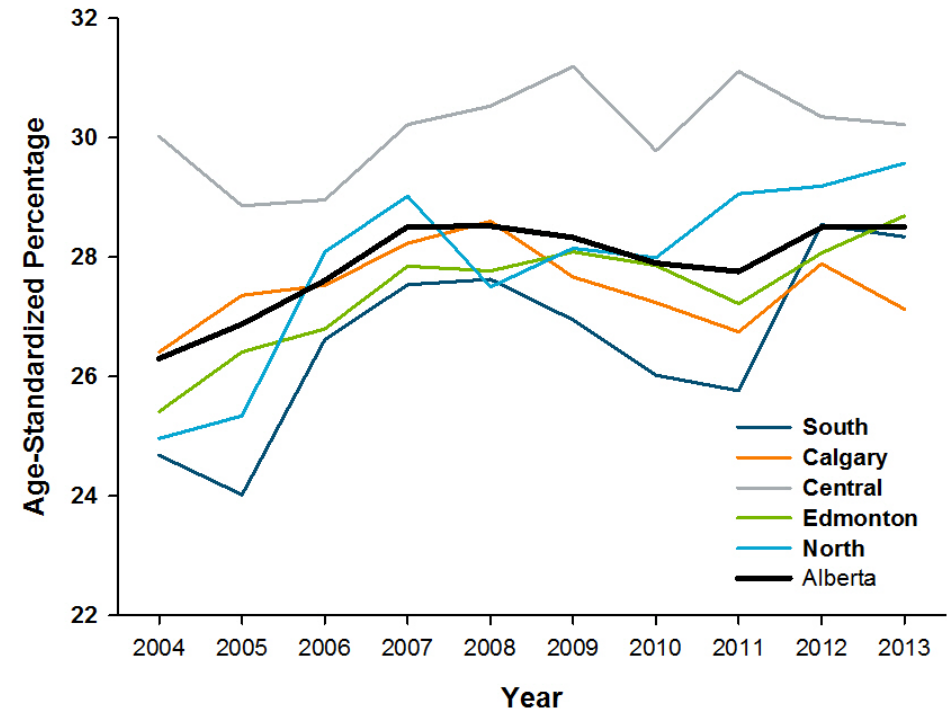
In 2013, the age-standardized percentage of C-section deliveries in Alberta was 28.5. The Central zone had the highest age-standardized percentage of C-section deliveries from 2004 to 2013 with mean of 30.1 (range 28.9-31.1); approximately twice the upper limit of the WHO recommendation.

The trend can be broken into three time trends: (i) increasing from 2004 to 2007 (RR*: 1.03, p<0.0001), (ii) decreasing from 2007 to 2011 (RR: 0.99, p<0.01), and (iii) increasing from 2011 to 2013 (RR: 1.01, p <0.01). During the final time period, the proportion of C-section deliveries was variable across the zones. While the provincial proportion increased, the proportion decreased in Central Zone from 2011 to 2013, while the other four zones increased.

Across the 10-year time period, the proportion of C-sections in the South Zone was found to be significantly lower than each of the four other zones, after adjusting for age (RR ranging from 1.13 in Central Zone to 1.02 in Edmonton Zone).

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*RR: risk ratio, the ratio of two percentages.



¹ World Health Organization Statement on Caesarean Section Rates. http://apps.who.int/iris/bitstream/10665/161442/1/WHO_RHR_15.02_eng.pdf?ua=1

² Pulling back the curtain on Canada's rising C-section rate. <http://healthydebate.ca/2014/05/topic/quality/c-section-variation>

³ The Source for Women's Health. <http://www.womenshealthdata.ca/category.aspx?catid=108>