

# SMOKING CESSATION DURING PREGNANCY AND RELAPSE AFTER CHILDBIRTH IN CANADA

## SUMMARY

- Smoking during pregnancy increases the risk of adverse health outcomes: stillbirth, preterm birth, low birth weight and infant death.
- The proportion of women who smoked during pregnancy declined from 22% in 1992–1995 to 12% in 2005–2008 in Canada.
- More than 50% of women who smoke at the beginning of their pregnancy quit by their third trimester. However, approximately 50% of mothers who quit smoking during their pregnancy relapse after the birth of their child.
- These findings illustrate the need for smoking cessation counselling for smoking pregnant women during their pregnancy and as part of their postpartum follow-up.

## INTRODUCTION

Women who smoke during pregnancy have a higher risk of stillbirth or preterm delivery, and their babies are at increased risk of low birth weight and of death in their first year of life.<sup>1</sup>

Prenatal smoking has declined steadily in Canada in recent years. The reported rate of maternal smoking during pregnancy fell from 22% in 1992–1995 to 12% in 2005–2008.<sup>2</sup> Data from the Maternity Experiences Survey (MES), described in more detail below, were used by the Agency to determine the rates and determinants of smoking cessation during pregnancy and smoking relapse after childbirth in Canada.

## SMOKING CESSATION AND RELAPSE

Among mothers who delivered a live child in 2006, 22% smoked just before their pregnancy, but only 11% smoked during their third trimester. In other words, more than half of smoking pregnant women (53%) had quit by their third trimester of pregnancy.<sup>3</sup>

The more cigarettes women smoked before their pregnancy, the less likely they were to quit smoking. In addition, women who self-identified as Inuit, those who were aged 35 years or more, those who had more than one live birth, those who were less educated, those who had a lower income, those who did not attend prenatal classes, those who experienced stress during their pregnancy and those who lived with a smoker were less likely to quit smoking during their pregnancy. Conversely, those who self-identified as First Nation were more likely to quit smoking.<sup>4</sup>

Almost half (47%) of the women who had quit smoking during pregnancy relapsed after the birth of their child. The risk of relapse was higher among those who lived with a smoker. Mothers who breastfed their child were less likely to relapse than mothers who did not breastfeed.<sup>4</sup>



## DATA SOURCE

In 2006–2007, the Canadian Maternity Experiences Survey (MES) surveyed Canadian women about their experiences and practices before and during pregnancy, after childbirth, and in the early months of being a parent. The MES was a project of the Agency's Canadian Perinatal Surveillance System (CPSS), which monitors and reports on key indicators of maternal, fetal and infant health in Canada. For more information about CPSS, please visit the Public Health Agency of Canada's website at [www.phac-aspc.gc.ca/rhs-ssg](http://www.phac-aspc.gc.ca/rhs-ssg).

## CONCLUSION

Notwithstanding recent trends towards a decline in maternal smoking during pregnancy, the Public Health Agency of Canada continues to strongly advise pregnant women not to smoke, given the known adverse effects of smoking.<sup>5</sup> In addition, the Society of Obstetricians and Gynaecologists of Canada recommends that smoking cessation counselling be offered to smoking pregnant women to help them quit.<sup>1</sup>

## REFERENCES

- <sup>1</sup> Society of Obstetricians and Gynaecologists of Canada. Substance use in pregnancy. SOGC Clinical Practice Guideline No. 256. *J Obstet Gynaecol Can* 2011; 33(4):367–384.
- <sup>2</sup> Public Health Agency of Canada. Perinatal Health Indicators for Canada 2013. A report from the Canadian Perinatal Surveillance System. 2013; HP7-1/2013E-PDF.
- <sup>3</sup> Public Health Agency of Canada. What Mothers Say: the Canadian Maternity Experiences Survey. 2009.
- <sup>4</sup> Gilbert NL, Nelson CRM, Greaves L. Smoking cessation during pregnancy and relapse after childbirth in Canada. *J Obstet Gynaecol Can* 2015.
- <sup>5</sup> Public Health Agency of Canada. The sensible guide for a healthy pregnancy. 2011.