FOCUS ON
SMOKING IN PREGNANCY
An overview

ACT Government Health

Why is this important?

- Smoking in pregnancy is the most important preventable cause of a wide range of adverse pregnancy outcomes. Smoking causes obstetric and fetal complications and there is growing evidence of serious harm extending into childhood and even adulthood.
- Outcomes for women in the ACT who stopped smoking in the first 20 weeks of pregnancy were similar to those for non-smokers. To maximise the benefits of smoking cessation in pregnancy, the mother should stop smoking in the first 12 weeks of pregnancy.[1,2]
- Unfortunately, most smokers who become pregnant continue to smoke and most of those who quit relapse after delivery. Smoking interventions in pregnancy can significantly reduce the relative risk of low birthweight and pre-term birth.[1]
- Pregnant women who express an interest in quitting smoking are provided with information, and referred where appropriate to support services such as the Quitline.

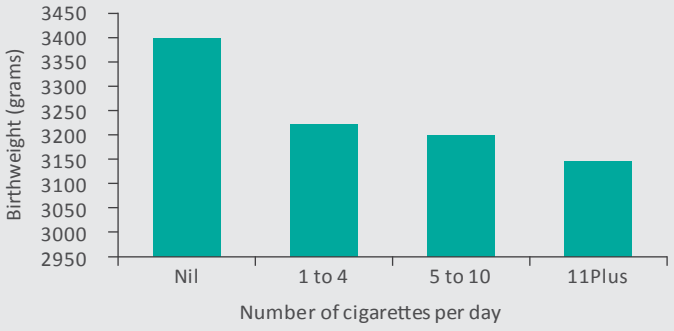
How are we progressing?

- Overall, we are doing well, with the percentage of ACT women who smoke during pregnancy decreasing from 11% in 2009 to 7% in 2014. However there is still room for improvement.
- Younger women were more likely to smoke during pregnancy with over 30% of teenage women reporting smoking in pregnancy in 2014. The percentage decreases significantly in older age groups, with 7% of women aged 20 to 34 years and 5% of women aged 35 years and over reporting smoking in pregnancy.
- Smoking in pregnancy is also higher for Aboriginal and Torres Strait Islander women who were four times more likely to smoke during pregnancy than non-Aboriginal and Torres Strait Islander women.
- Most women (approximately 80%) who reported smoking in the first 20 weeks of pregnancy continued to smoke in the second half of their pregnancy.
- Outcomes for babies of women who stopped smoking during pregnancy were similar to the outcomes for babies of non-smokers.

What is the impact of smoking?

- Smoking in pregnancy has been linked to a number of negative outcomes such as premature birth, perinatal mortality and low birthweight.
- The birthweight for babies of women who smoked during pregnancy was significantly lower than for babies of women who did not smoke and the number of cigarettes smoked per day also negatively impacted on birthweight (Figure 1).
- Low birthweight is an important determinant of a baby's chance of survival and good health. Low birthweight is a risk factor for physical and neurological disability and the development of conditions such as Type 2 diabetes and high blood pressure later in life.[4]

Figure 1: Average birthweight by estimated number of cigarettes smoked per day during pregnancy



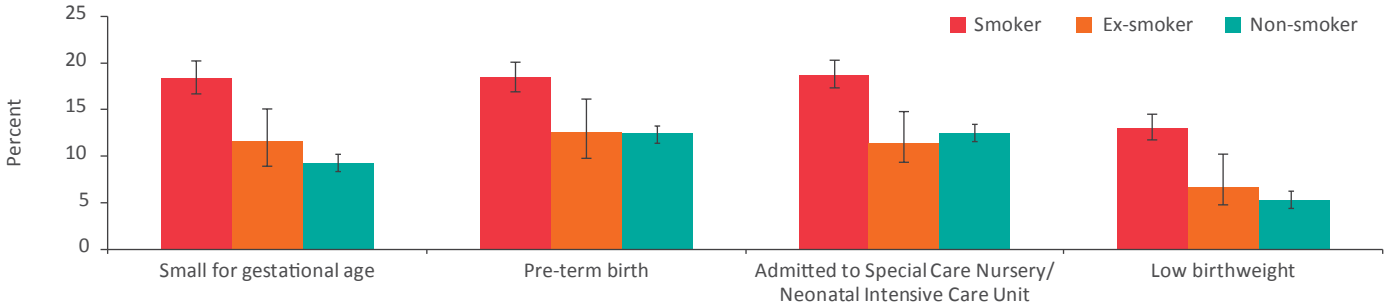
Source: ACT Maternal Perinatal Data Collection, 2009–14.

Does smoking cessation during pregnancy make a difference to birth outcomes?

Yes, the birth outcomes for women who ceased smoking (became an ex-smoker) in the first 20 weeks of pregnancy improved significantly.

In fact, outcomes such as low birthweight, pre-term birth and special care nursery admissions for ex-smokers were similar to those for non-smokers (Figure 1).

Figure 1: Birth outcomes by smoking status of mother



Source: ACT Maternal Perinatal Data Collection, 2009–14.

Where to from here?

The majority of women (approximately 80%) who smoke at the start of their pregnancy continue to smoke. In response, ACT Health has commenced the Smoking in Pregnancy Project, which aims to:

Prevent smoking uptake amongst all young women in the ACT.

Reduce smoking rates during pregnancy amongst young women aged 15 to 24, and also support their partners and families in quitting.

15 – 24 years

Reduce smoking rates during pregnancy for all Aboriginal and Torres Strait Islander women, and also support their partners and families in quitting.

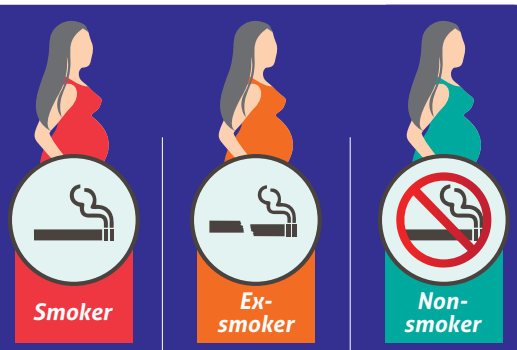
QUIT

The strategies used include:

Behaviour change campaign.

A pilot of free, medically-supervised Nicotine Replacement Therapy for nicotine dependent young pregnant women and their cohabitants, where quit attempts using behavioural counselling alone have not been successful.

Capacity building for organisations which work with young pregnant women such as smoking care training for health and other professionals.



Smoker — women who reported smoking in both the first 20 weeks and the second 20 weeks of pregnancy

Ex-smoker — women who reported smoking in the first 20 weeks, but not later in pregnancy (second 20 weeks)

Non-smoker — women who reported that they did not smoke during pregnancy

What do we measure?

Information about tobacco smoking in pregnancy is collected at antenatal visits at two points in time, once early in pregnancy (first 20 weeks) and again later in pregnancy (second 20 weeks). Women are asked whether they currently smoke tobacco and if they answer yes, they are asked how many cigarettes per day they smoke. Information on characteristics of women giving birth and birth outcomes is collected. More information is available here: *http://stats.health.act.gov.au/*

Smoking in pregnancy will continue to be measured over time to monitor our progress. For more information about the Smoking in Pregnancy Project please contact the Health Improvement Branch on healthpromotion@act.gov.au.

For more information about quitting or reducing your smoking please contact your health professional or phone Quitline on 13 78 48.

References:

[1] Chamberlain C, O'Mara-Eves, A., Oliver, S., Caird, J. R., Perlen, S. M., Eades, S. J. & Thomas, J. Psychosocial interventions for supporting women to stop smoking in pregnancy. Cochrane Database of Systematic Reviews. 2013(10).

[2] Hodyl NA, Grzeskowiak, L. E., Stark, M. J., Scheil, W. & Vicki L Clifton, V. L. The impact of Aboriginal status, cigarette smoking and smoking cessation on perinatal outcomes in South Australia. MJA. 2014;201(5):274-8.

[3] Yan J & Groothuis P. Timing of prenatal smoking cessation or reduction and infant birth weight: Evidence from the United Kingdom Millennium Cohort Study. Matern Child Health J. 2015;19(3):447-58.