



# Smoking and Pregnancy in Tasmania 2012

October 2014

**Perinatal Data Collection:** This is a statewide collection of obstetric and perinatal information for all births reported in Tasmania, including live births and stillbirths of at least 400 grams or 20 weeks gestation.

The data on smoking prevalence during pregnancy are from self-reported information obtained by clinicians from the mother and reported to the Perinatal Data Collection.

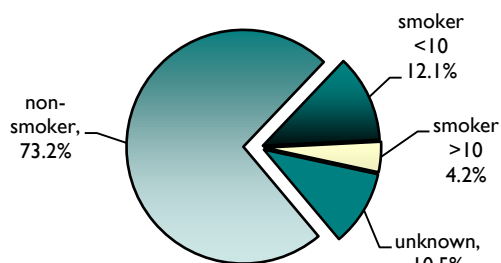
Smoking during pregnancy is regarded as one of the key preventable causes of low birth weight and pre-term birth.

Low birth weight (LBW) babies (less than 2500 grams) are more likely to die in the first year of life and are more susceptible to chronic illness later in life, such as heart and kidney disease and diabetes.

**In 2012, 16.3 per cent** of Tasmanian women smoked tobacco during their pregnancy slightly less than in 2011 at 17.1 per cent.

Of those who smoked, 12.1 per cent smoked less than 10 cigarettes a day and 4.2 per cent smoked more than 10 cigarettes daily.

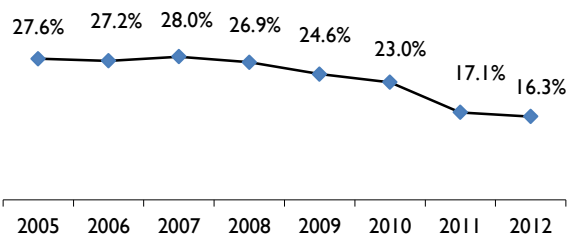
**Self-reported tobacco smoking status during pregnancy, Tasmania 2012**



Number of mothers 6 220, Council of Obstetric and Pediatric Mortality and Morbidity Annual Report 2012

The prevalence of smoking during pregnancy in 2012 has declined by **11.3 per cent since 2005**, and by **0.8 per cent since 2011**.

**Self-reported tobacco smoking during pregnancy, Tasmania 2005-2012**



Council of Obstetric and Pediatric Mortality and Morbidity Annual Reports

In 2011, Tasmania had the second highest proportion of women who smoked during their pregnancy.

**Self-reported tobacco smoking during pregnancy by state and territory, 2011**

NT	26.0%
SA	17.0%
Qld	16.1%
Vic	12.2%
WA	12.1%
NSW	11.2%
ACT	10.0%

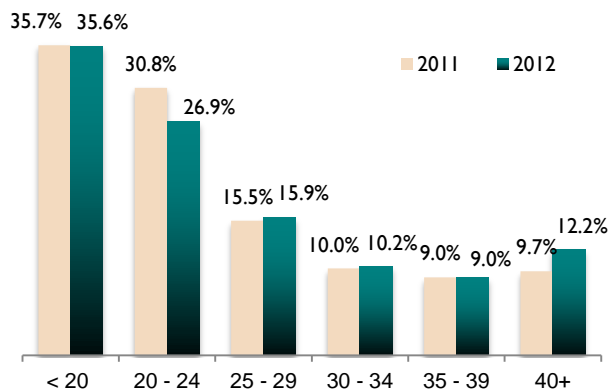
AIHW, National Perinatal Statistics Unit, Australia's Mothers and Babies 2011

**Young Women:** Maternal smoking is still more prevalent among younger women in Tasmania, particularly those aged less than 20 years.

The prevalence of maternal smoking of women under 20 years (35.6 per cent) has remained almost unchanged from the previous year. The smoking rate for the 20-24 year age group fell by 3.9 per cent.

The proportion of maternal smokers in the 40+ age group increased from 9.7 per cent to 12.2 per cent, but this is not statistically significant.

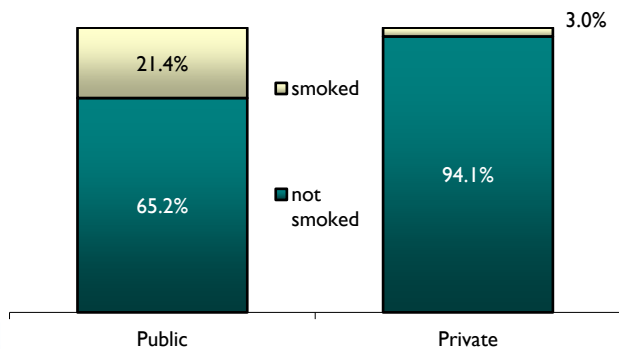
**Self-reported tobacco smoking during pregnancy by age, 2011 and 2012**



Council of Obstetric and Pediatric Mortality and Morbidity Annual Report, 2012

**Patient Type:** Smoking during pregnancy continues to be more prevalent for public patients (21.4 per cent) compared to private patients (3.0 per cent), which reflects the higher prevalence of smoking in lower socio-economic groups.

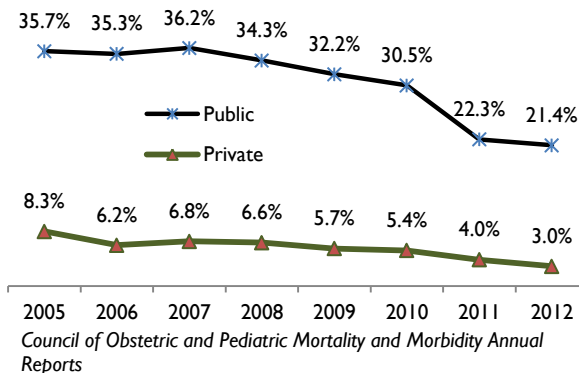
**Self-reported tobacco smoking status by public/private patients, Tasmania 2012**



Council of Obstetric and Pediatric Mortality and Morbidity Annual Report 2012

Smoking during pregnancy has declined further for public and private patients over the previous 12 months.

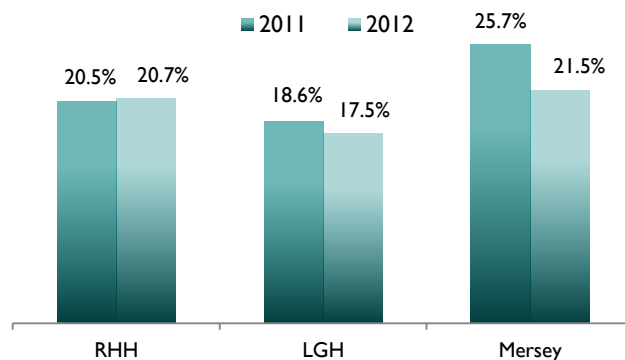
**Self-reported tobacco smoking for public and private patients, Tasmania 2005-2012**



Council of Obstetric and Pediatric Mortality and Morbidity Annual Reports

**Hospital:** Smoking during pregnancy in 2012 was reported most frequently by patients at the Mersey Community Hospital (21.5 per cent), down from 25.7 per cent in 2011, followed by the Royal Hobart Hospital (20.7 per cent).

**Self-reported tobacco smoking during pregnancy by public hospital, Tasmania 2011 and 2012**



Council of Obstetric and Pediatric Mortality and Morbidity Annual Report 2012

Since 2005, the prevalence of maternal smoking has declined for all public hospitals, with the greatest decline in the RHH.

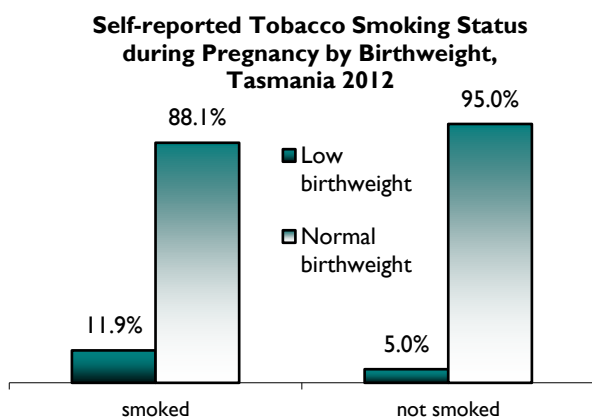
**Self-Reported Tobacco Smoking during Pregnancy by Public Hospital, Tasmania 2005-12**

	2005	2012	change
RHH	38.2%	20.7%	-17.5%
LGH	26.2%	17.5%	-8.7%
Mersey	30.7%	21.5%	-9.2%

Council of Obstetric & Paediatric Mortality and Morbidity, Annual Reports

**Low birth weight:** LBW is defined as a weight of less than 2500 grams and includes babies that are small for gestational age as well as premature. Excluding multiple births, a total of 399 babies were born in 2011 with a birth weight of less than 2500 grams. Of these, 22.8 per cent (91) had a weight of less than 1500 grams (very LBW).

Of all women who had smoked in pregnancy in 2012, 11.9% had a LBW baby, compared to 5.0 per cent of women who reported not to have smoked, a difference which is statistically significant ( $p < 0.001$ ). The relative risk of having a LBW baby in 2012 was 2.42 (95%CI 1.95–3.01) in women who smoked in pregnancy compared with those who reported not to have smoked.



Council of Obstetric and Pediatric Mortality and Morbidity Annual Report

It is important to note that a number of sources of error may influence the strength of the association between smoking during pregnancy and birth weight. For example, since some women may be uncomfortable in disclosing their smoking status during the course of their pregnancy, the reported data may not provide an accurate measure of trends.

Furthermore, maternal smokers may have other risk factors associated with LBW babies including younger maternal age, poorer prenatal care, inadequate maternal weight gain or other substance abuse. Such factors were not able to be adjusted for in the analyses and if one or more is positively associated with LBW, they may be responsible for some of the excess risk that is attributed to maternal smoking. That is, the relative risk estimate of  $RR = 2.42$  may be an overestimate due to confounding.