

Smoking and Pregnancy in Tasmania 2010

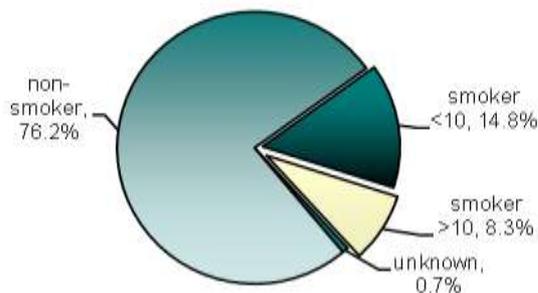
August 2012

Perinatal Data Collection: This is a state-wide 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 derived 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 2010, 23.1% of Tasmanian women smoked tobacco during their pregnancy, down from 24.5% in 2009. Of those who had smoked, 14.8% reported smoking less than 10 cigarettes per day and 8.3% reported smoking more than 10 cigarettes daily.

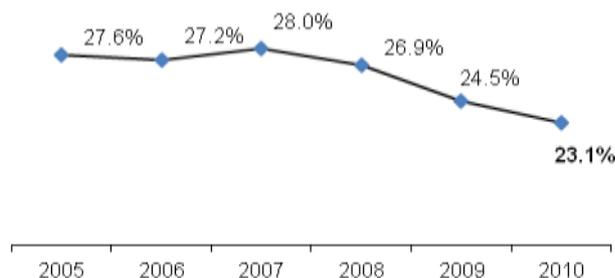
Self-reported Tobacco Smoking Status during Pregnancy, Tasmania 2010



Number: of mothers reporting 6,020, Council of Obstetric and Pediatric Mortality and Morbidity Annual Report 2010

Smoking prevalence during pregnancy has declined by 4.5% since 2005.

Self-reported Tobacco Smoking during Pregnancy, Tasmania 2005-2010



Council of Obstetric and Pediatric Mortality and Morbidity Annual Reports

Tasmania continued to have the highest proportion of women who smoked during their pregnancy in 2009.

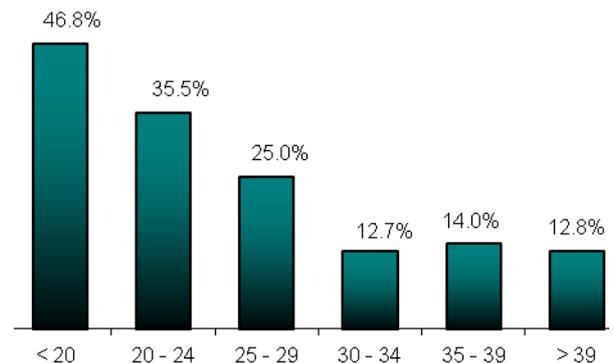
Self-Reported Tobacco Smoking during Pregnancy by State and Territory, 2009

Tas	24.5%*
NT	23.2%
SA	19.6%
Qld	18.7%
WA	14.5%
ACT	10.9%
NSW	12.0%
Vic	11.7%

AIHW, National Perinatal Statistics Unit, Australia's Mothers and Babies 2009. * **Note that Tas 2009 data has been revised from the previously cited 23.9%.**

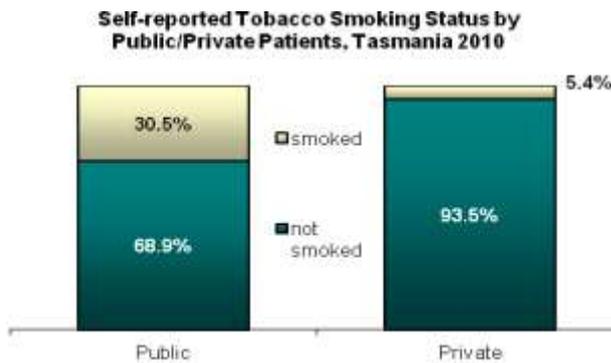
Young Women: Smoking continues to be more prevalent among young women, particularly those aged less than 20 years. Although maternal smoking has declined overall, there has been a statistically significant reduction in maternal smoking since 2009 only among women aged 20-24 years.

Self-reported Tobacco Smoking during Pregnancy by Age, Tasmania 2010



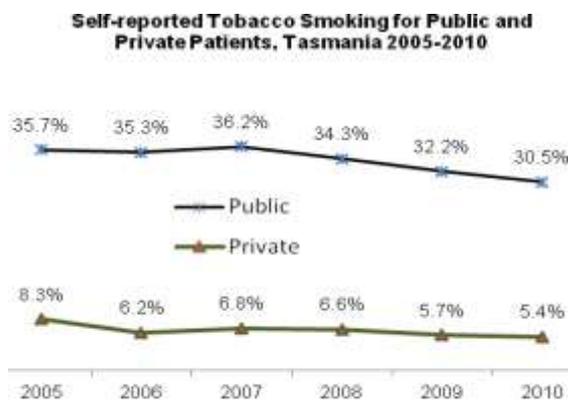
Council of Obstetric and Pediatric Mortality and Morbidity Annual Report, 2010

Patient Type: Smoking during pregnancy continues to be more prevalent for public patients (30.5%) compared to private patients (5.4%) which reflects the higher prevalence of smoking in lower socio-economic groups.



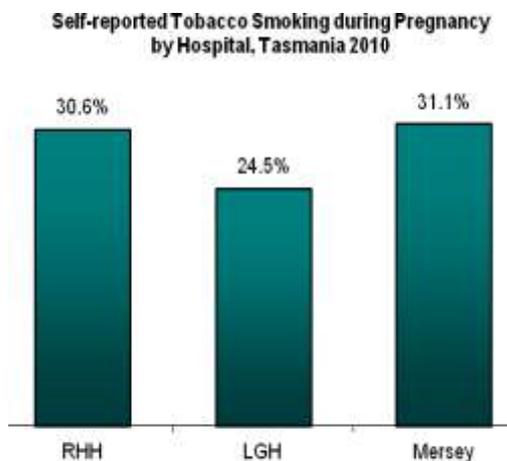
Council of Obstetric and Paediatric Mortality and Morbidity Annual Report 2010

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



Council of Obstetric and Paediatric Mortality and Morbidity Annual Reports

Hospital: Smoking during pregnancy in 2010 was reported most frequently by patients at the Mersey Community Hospital (31.1%), followed by the Royal Hobart Hospital (30.6%). The only statistically significant reduction in smoking since 2009 was noted for the Royal Hobart Hospital, down by 3.3% from the previous year.



Council of Obstetric and Paediatric Mortality and Morbidity Annual Report 2010

Since 2005, the prevalence of maternal smoking has declined for all public hospitals, with the exception of the Mersey where the maternal smoking prevalence rose slightly from 2009 to 2010 to a level slightly higher than for 2005.

Self-Reported Tobacco Smoking during Pregnancy by Public Hospital, Tasmania 2005-10(%)

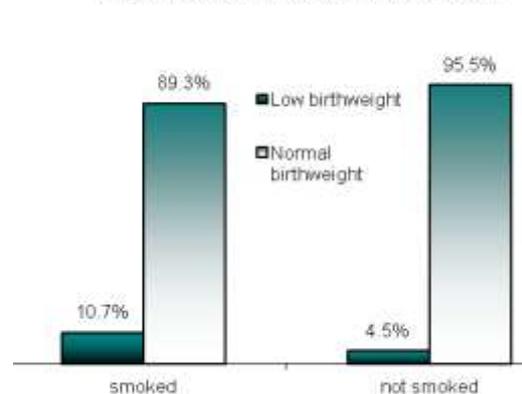
	2005	2006	2007	2008	2009	2010
RHH	38.2	36.6	33.3	30.8	33.9	30.6
LGH	26.2	27.0	24.3	23.7	24.2	24.5
Mersey	30.7	31.1	25.6	27.4	28.6	31.1

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 352 babies were born in 2010 with a birth weight of less than 2500 grams. Of these, 24% (85) had a weight of less than 1500 grams (very LBW).

Of all women who had smoked in pregnancy in 2010, 10.7% had a LBW baby, compared to 4.5% of women who reported not to have smoked, a difference which is statistically significant ($p < 0.0001$). The relative risk of having a LBW baby in 2010 was 2.38 (95%CI 1.94–2.92) in women who smoked in pregnancy compared with those who reported not to have smoked.

Self-reported Tobacco Smoking Status during Pregnancy by Birthweight, Tasmania 2010



Council of Obstetric and Paediatric Mortality and Morbidity Annual Report 2010

It is important to note that a number of sources of error may influence the strength of the association between smoking during pregnancy and birthweight. 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 $RR = 2.38$ may be an overestimate due to confounding.