

## SMOKING HARMS UNBORN BABIES



**Figure 1**  
**Front of Cigarette Pack**  
**(representation only)**

**Back of Cigarette Pack**  
**(representation only)**

Smoking during pregnancy reduces the growth and health of babies and increases the risks of a number of complications and illnesses for both the mother and baby. Babies born to women who smoke during pregnancy have a greater chance of premature birth, low birth weight, stillbirth and infant mortality.<sup>1</sup> Smoking during pregnancy can also affect the development of babies' lungs which increases the risk for many health problems.<sup>1,2</sup>

Nicotine and other chemicals in tobacco smoke are passed onto the baby through the placenta. Nicotine causes the blood vessels to constrict which decreases the amount of oxygen going to the unborn baby<sup>1</sup> and is an important contributor to low birth weight<sup>3</sup>. Mothers who smoke also pass nicotine onto their babies through their breast milk.<sup>4</sup>

Australian research shows that in 2003, for babies of mothers who smoked, the likelihood of preterm birth was 60% higher than in babies of mothers who did not smoke.<sup>5</sup> Smoking during any stage of pregnancy increases the risk of premature birth.<sup>3</sup>

In 2003, babies of mothers who smoked were twice as likely to be of low birthweight compared to babies of mothers who did not smoke.<sup>5</sup> On average, babies born to smoking mothers weigh about 200grams lighter than those born to non-smoking mothers.<sup>5</sup> Low birth weight is a leading cause of infant death<sup>4</sup> and an important risk factor for a number of health problems and complications in infancy and childhood.<sup>3</sup>

Mothers who smoke are 50% more likely to have a stillborn baby compared to mothers who do not smoke.<sup>5</sup> This risk is believed to be influenced by smoking-induced placental complications combined with smoking-induced abnormal fetal growth.<sup>3</sup>

In addition, babies born to mothers who smoke before and after birth are three times more likely to die from Sudden Infant Death Syndrome (SIDS).<sup>1,2</sup>

Some of the long term health effects on the development of children born to smoking mothers include:

- Allergies – fourfold increased risk of having allergic skin diseases by 18 months of age.<sup>3</sup>
- Higher blood pressure in childhood.<sup>3</sup>
- Childhood respiratory disorders such as asthma and wheezing.<sup>3</sup>
- Increased risk of obesity in childhood<sup>3</sup> and into adolescence<sup>6</sup>. According to a recent study, Australian children of mothers who smoked while pregnant are approximately 42% more likely to be obese by their early teens compared to mothers who did not smoke while pregnant.<sup>6,7</sup>

In addition to avoiding smoking while pregnant it is also important for pregnant women to avoid exposure to secondhand smoke as this can harm unborn babies. Maternal exposure to secondhand smoke may result in premature birth and lower birth weight for their babies. There is emerging evidence that the risk of some childhood cancers increases as a result of the mother's exposure to secondhand smoke during pregnancy. Other studies suggest that children of fathers who smoke have an increased risk of developing childhood cancers, possibly as a result of damage to the father's sperm.<sup>2</sup>

In Australia approximately 20% of women report that they smoked while pregnant and/or breastfeeding.<sup>8</sup> Quitting smoking before or during pregnancy, and avoiding exposure to secondhand smoke, will have a positive impact on the health of both the mother and the unborn baby. It will also reduce the likelihood of related health problems for the child after birth.

Decided to quit? For help, talk to your doctor or pharmacist, call the Quitline on 131 848 or visit the Quitline web site at [www.quitnow.info.au](http://www.quitnow.info.au).

## Sources

1. U.S. Department of Health and Human Services. *The Health Consequences of Smoking: what it means to you*. U.S. Department of Health and Human Services, Centres for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004  
[http://www.cdc.gov/tobacco/sgr/sgr\\_2004/consumerpiece/index.htm](http://www.cdc.gov/tobacco/sgr/sgr_2004/consumerpiece/index.htm)
2. U.S. Department of Health and Human Services. *The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General*. U.S. Department of Health and Human Services, Centres for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006. [http://www.cdc.gov/tobacco/sgr/sgr\\_2006/index.htm](http://www.cdc.gov/tobacco/sgr/sgr_2006/index.htm)
3. American Council on Science and Health. *Cigarettes: What the warning label doesn't tell you*. Second edition. New York, American Council on Science and Health, 2003.
4. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General*. U.S. Department of Health and Human Services, Centres for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004.  
[http://www.cdc.gov/tobacco/sgr/sgr\\_2004/index.htm](http://www.cdc.gov/tobacco/sgr/sgr_2004/index.htm)
5. Laws PJ, Grayson N & Sullivan EA 2006. *Smoking and pregnancy*. AIHW Cat. No. PER 33. Sydney: AIHW National Perinatal Statistics Unit. <http://www.npsu.unsw.edu.au/smoking2006.htm>
6. Al Mamun A, Lawlor D, Alati R, O'Callaghan MJ, Williams GM, Najman JM. *Does maternal smoking during pregnancy have a direct effect on future offspring obesity? Evidence from a prospective birth cohort study*. Am J Epidemiol. 2006 June 14. [Epub ahead of print]  
<http://aje.oxfordjournals.org/cgi/reprint/kwj209v1?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=1&author1=mamun&andorexactitle=and&andorexactitleabs=and&andorexactfulltext=and&searchid=1&FIRSTINDEX=0&sortspec=relevance&fdate=//&resourcetype=HWCIT> (printed 11 July 2006)
7. UQ News Online. *Smoking mums risk fat teens*. The University Of Queensland. Published 28 June 2006.  
<http://www.uq.edu.au/news/index.html?article=9993> (printed 11 July 2006)
8. AIHW 2005. *Statistics on drug use in Australia, 2004*. AIHW Cat. No. PHE 62. Canberra: AIHW (Drug Statistics Series No. 15). <http://www.aihw.gov.au/publications/index.cfm/title/10143>