

# MAKE SMOKING HISTORY<sup>®</sup>

## Second hand smoke: a guide for health professionals

### What is passive smoking?

Passive smoking (or involuntary smoking) is the inhalation of second hand smoke (SHS).<sup>1</sup> While SHS has been referred to as environmental tobacco smoke in the past, the term SHS better captures the involuntary nature of exposure: most people do not want to breathe tobacco smoke.<sup>1</sup> Tobacco smoke contains more than 4,000 chemical compounds including more than 69 known human carcinogens.<sup>1</sup>

### Current behaviours and trends: smoking in cars and homes

Most indoor spaces such as workplaces and public venues are now smoke free. Nonetheless, many smokers continue to light up in their home and car, often unaware of the health risks they impose on others. There is still a low level of awareness and misconceptions about the health harms of SHS exposure, including the common misconception that only visible smoke is harmful. Some smokers mistakenly believe that smoking in another room, winding down car windows or blowing smoke away from a child will protect against its harmful effects.

### Health impacts

The evidence is clear that exposure to other people's tobacco smoke can be detrimental to health. There is no risk-free level of exposure to SHS<sup>1</sup> and while anyone exposed is at risk, it is particularly hazardous to those who are frequently exposed for extended periods.

#### *Smoking and pregnancy*

Pregnant women who smoke or who are exposed to SHS can compromise the health of their unborn child. Toxins such as nicotine and carbon monoxide in tobacco smoke can cross the placenta and have a direct effect on the oxygen supply to the foetus as well as the function of the umbilical cord and placenta.<sup>2</sup> If a woman smokes while pregnant, the impact of tobacco on the unborn child can potentially have several health effects including:

- low birth weight;
- premature birth;
- greater risk of sudden infant death syndrome (SIDS);
- an increased risk of miscarriage; and
- an increased risk of stillbirth.<sup>3</sup>

In addition, some studies<sup>4</sup> have indicated that there may be longer term side effects such as learning difficulties and slower growth.

#### *Infants and children*

Infants and children are especially vulnerable if parents and guardians smoke in confined areas like the home or car. The 2006 US Surgeon General's report<sup>1</sup> states that the evidence is sufficient to infer a causal relationship between:

- exposure to SHS and SIDS;
- maternal exposure to SHS during pregnancy and reduced birth weight;

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- SHS exposure from parental smoking and:
  - lower respiratory illnesses in infants and children (with increased risk greatest from smoking by the mother);
  - middle ear disease in children, including acute and recurrent otitis media and chronic middle ear effusion;
  - cough, phlegm, wheeze and breathlessness among school aged children; and
  - school aged children ever having asthma and the onset of wheeze illnesses in early childhood.
- maternal smoking during pregnancy and persistent adverse effects on lung function across childhood; and
- exposure to SHS after birth and a lower level of lung function during childhood.

In addition to the many health harms of smoking, children of parents who smoke are also more likely to become smokers themselves.<sup>5</sup>

## Morbidity and mortality

Studies show that the associated health impacts are significant in Australia and Western Australia:

- In 2004-05, 149 Australians died as a consequence of involuntary smoking, 36 aged 0-14 years. In the same period, involuntary smoking was responsible for 63,667 hospital bed days at a cost of \$33.7 million. The vast majority of these days were made up of children aged 0-14 (i.e. 61,178 days).<sup>6</sup>
- In Western Australia the total number of deaths caused by involuntary smoking in 2004-05 was 11, of which 2 were among those aged 0-14 years. Hospital bed days numbered 6,750 and as was the case nationally it was children who made up a significant proportion with those aged 0-14 accounting for 6,570 hospital bed days. The total cost for Western Australia in this period was \$5.9 million.<sup>7</sup>

<sup>1</sup> U.S. Department of Health and Human Services. The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centres for Disease Control and Prevention, Coordinating Centre for Health Promotion, National Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006.

<sup>2</sup> US Department of Health and Human Services. The health consequences of smoking: cancer: a report of the Surgeon General. DHHS Publication No (PHS) 82-50179. Rockville, Maryland: US Department of Health and Human Services, Public Health Service, Office on Smoking and Health; 1982.

<sup>3</sup> US Department of Health and Human Services. The health consequences of smoking for women: a report of the Surgeon General. Rockville, Maryland: US Department of Health and Human Services, Public Health Service, Office of the Assistant Secretary for Health, Office on Smoking and Health; 2001.

<sup>4</sup> Weitzman M, Gortmaker S, Sobol A. Maternal smoking and behaviour problems of children. *Pediatrics*. 1992;90:342-349.

<sup>5</sup> Silburn SR, Zubrick SR, Garton A, Gurrin L, Burton P, Dalby R, et al. Western Australian Child Health Survey: family and community health. Perth: Australian Bureau of Statistics and the TVW Telethon Institute for Child Health Research; 1996.

<sup>6</sup> Collins DJ, Lapsley HM. The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05 summary version. Monograph Series No. 66. Canberra: Department of Health and Ageing; 2008.

<sup>7</sup> Collins DJ, Lapsley HM. The social costs of smoking in Western Australia in 2004/05 and the social benefits of public policy measures to reduce smoking prevalence. Perth: Cancer Council Western Australia; 2008.