

## SMOKING AND SOCIAL INEQUALITIES

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## Introduction

There is an extensive body of literature documenting the relationship between smoking and socio-economic status (SES), both throughout Australia and the world<sup>1-10</sup>. These studies have all shown that people of low socio-economic backgrounds, or living in low socio-economic areas are more likely to smoke tobacco. This effect remains despite SES being measured using a range of different indicators, including income, education, employment status, area of residence, or any combination of these and others. This brief report presents a picture of the socio-economic predictors of smoking in South Australia, which are likely to be very similar for Australia more generally.

## Methodology

The Health Omnibus Survey (HOS) data forms the basis of this report. The HOS has been used to monitor progress in tobacco control in South Australia for over a decade and is conducted in spring every year. The response rate has always been at least 70% with a sample size of 3000+. The sample is weighted by age, gender and geographic area to reflect the South Australian population. To determine trends over time, data were used from 1989 onwards (or as early as possible). Where trends were not required, 2002 data were used. Postcodes for all respondents and participants in the HOS were matched against the Index of Relative Socio-economic Disadvantage (IRSD) from the Socio-economic Indexes for Areas (SEIFA) published by the Australian Bureau of Statistics<sup>11</sup>. This summary measure combines a range of information relating to social and

economic characteristics of populations in postal areas and gives an overall value of disadvantage for that area. The information used to determine this index includes household income, education, employment status, family structure and occupation<sup>11</sup>. The scores of IRSD for each population are divided into quartiles, for ease of interpretation from highest level of disadvantage (1st quartile) to lowest level of disadvantage (4th quartile). Analyses were conducted using SPSS volume 11.5 and EpiInfo 6.

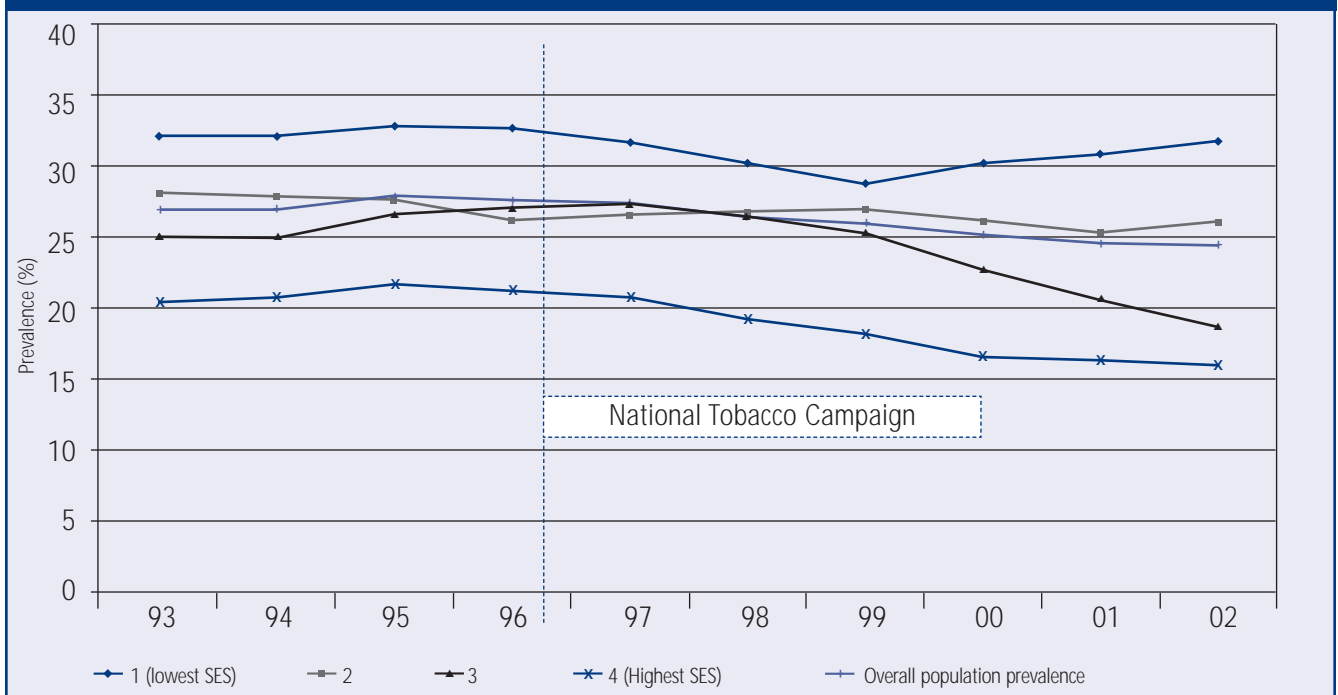
## Key Findings

## Smoking and the 'Widening Gap'

Evidence from the UK demonstrates that a widening gap is emerging between smoking rates among the most and least advantaged sectors of that society. While smoking rates in the UK have decreased among the more affluent, the same advances have not been observed in the lower social classes<sup>3,12,13</sup>. This has led the UK Government to set a target to reduce smoking in the whole population and to make most progress in the groups of least socio-economic advantage.

Arguably, tobacco control in Australia has been more progressive than in the UK. In Australia we have had more comprehensive restrictions on tobacco advertising, legislation or policy to restrict smoking in public places and workplaces, considerable excise on cigarettes, internationally acclaimed mass media campaigns to promote quitting and good cessation services for smokers. In 1997, Australia launched the National Tobacco Campaign, deliberately targeting blue-collar workers, because smoking rates were highest and potential gains to public health from quitting were greatest in these groups. Comprehensive evaluations of that campaign suggest that significant quitting occurred in response to that campaign, in blue-collar groups, but also across all other occupational levels<sup>14</sup>.

**Figure 1:**  
Smoking prevalence for South Australia over time and by Index of Relative Socio-economic Disadvantage quartiles (1993-2002)



SES = socio-economic status

Figure 1 shows that smoking rates fell in all sectors of the South Australian community from 1997 onwards. However, the gap in smoking prevalence has widened slightly over recent years and particularly since 1999, where the prevalence rates in the lowest SES quartile began to trend upward and those in the highest quartile remained on the downward trend. There is a similar trend for both males and females.

### Smoking and Quitting by SES

Some studies from the UK indicate that the increase in disparity observed there may have occurred, at least in part, because smokers in lower social classes find it more difficult to quit smoking. Jarvis<sup>12</sup> argues that although smokers with higher levels of deprivation express as much or more desire to quit smoking than those of lower levels of deprivation, those with high levels of deprivation are less confident about succeeding at quitting and less likely to have made a quit attempt in the past five years.

The South Australian data confirm that there are no SES differences in the desire to quit, however residents in lower SES areas expressed somewhat less confidence about quitting. Smokers in lower SES areas also demonstrated higher levels of consumption (smoking more per day) and higher rates of nicotine dependence. However, differences were not observed in previous quitting attempts, and intention to try to quit in the near future, which is very encouraging.

### Smoking and Individual Socio-Demographics

It has been observed overseas that factors of deprivation may reveal more about inequalities in smoking and due to smoking. Deprivation has been measured by combinations of factors including: unemployment; marital status (separated or divorced); education; and occupation. Looking at South Australian data by individual socio-demographics, men were consistently more likely to smoke than women. Those with lower levels of education were more likely to smoke and the greater the level of education the less likely a person was to smoke. Smoking rates were particularly high among the

unemployed. Those who were not married/de facto (those who were separated, divorced or never married) were the most likely to smoke, however the gap by marital status is closing rather than widening over time. People in young to middle adulthood are the most likely to smoke. Those who live in country areas or in the Northern Adelaide health regions, had a higher smoking prevalence overall. Obviously many of these variables interact with each other, For example, access to education has increased over time and would therefore interact with measures of age. Multivariate analyses are required to determine whether separate effects exist for many of the socio-demographic variables.

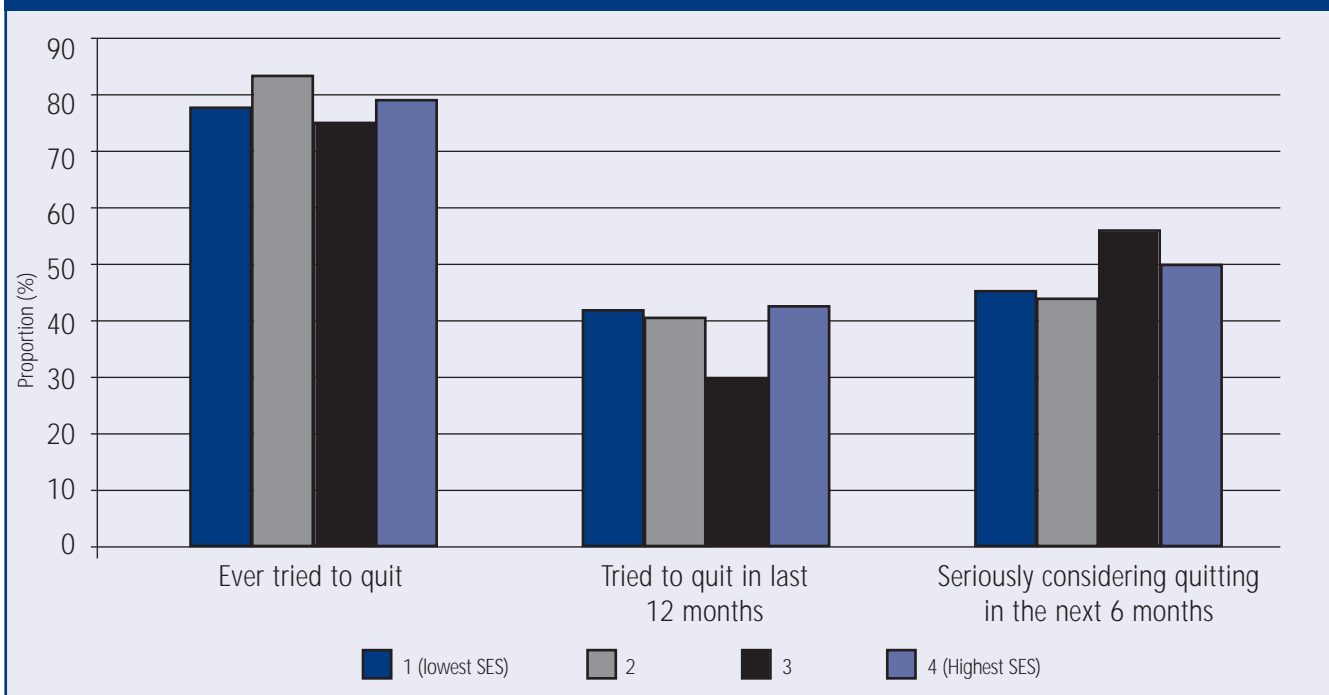
Figures 3 and 4 present some of these data differently and address the question of who are South Australia's smokers? While smoking rates are very high among unemployed people, the vast majority of South Australia's smokers are in full-time or part-time work.

### Groups with the Highest Prevalence

The present study did not examine South Australian data on youth smoking and maternal smoking by SES, however the literature suggests that smoking in these groups is inversely related to SES, where prevalence rates increase as SES decreases<sup>15-20</sup>. The literature also reveals a relationship between smoking rates and reported financial stress, with households including smokers reporting more severe financial stress than households with no smokers<sup>21</sup>. This study found that Indigenous Australians had a significantly higher smoking rate than other Australians, which has long been documented and the literature further suggests a strong relationship between SES and prevalence<sup>22</sup>.

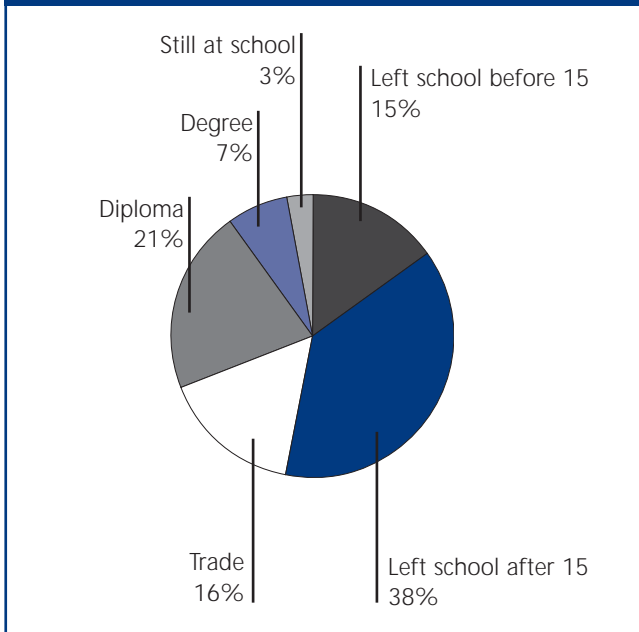
The literature identifies lone mothers as a group at high risk, with smoking rates three times that of their married counterparts<sup>8</sup>. South Australian data demonstrate slightly more smoking among lone mothers than lone fathers, however, the difference was not statistically significant. People with a serious mental illness also show disproportionately high

**Figure 2:**  
Quit attempts and intention to quit by Index of Relative Socio-economic Disadvantage quartiles in 2002



SES = socio-economic status

**Figure 3:**  
Educational attainment of SA smokers  
(2002)



rates of smoking. Rates of smoking vary with different disorders and extremely high rates have been observed among people with disorders such as schizophrenia<sup>23,26</sup>.

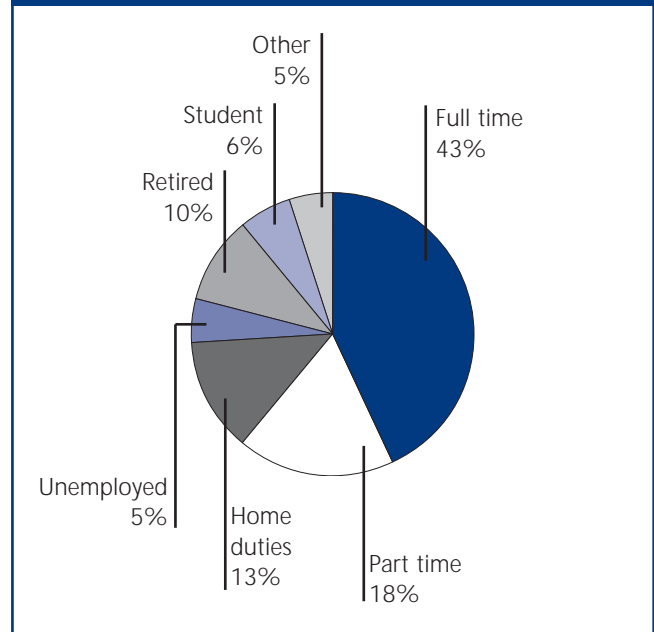
### SES and Passive Smoking

Exposure to passive smoke also varies by socio-economic status. The findings in South Australia are consistent with the literature, whereby those in the lower SES quartile are significantly less likely to live in smoke-free environments than those in the highest quartile. While considerable progress has been seen in white-collar workplaces, mostly through voluntary policy rather than legislation, people working in hospitality and blue-collar settings are being left behind, as they are least likely to be protected from passive smoking at work<sup>27</sup>. However, in domestic settings the gap has not widened, as all groups have gradually been making their homes and cars smoke-free.

### Discussion

This report shows that social inequalities are evident in the prevalence of smoking and involuntary exposure to tobacco smoke in South Australia. The findings indicate that equal progress was being made in all SES groups in the late 1990's, but that the gap in smoking prevalence and SES in South Australia has widened slightly since 1999. These findings highlight a need for interventions to be re-focused to address smoking prevalence in males and to reduce the smoking amongst individuals living in lower SES areas. Smoking rates are influenced by a number of personal and environmental variables, but messages encouraging people to quit and reminding them to stay quit are a fundamental foundation to any comprehensive tobacco control strategy<sup>28</sup>. The National Tobacco Campaign (NTC) was targeted precisely at this disadvantaged group with high smoking rates and demonstrated considerable and specific success<sup>14</sup>. The divergence of the groups occurs at about the same time that investment in the NTC was diminishing and new material was no longer being produced and aired. A common view is that smoking rates are more analogous to a spring (which needs to be held down), than a screw (which once down will stay down without continued effort). It is very likely that the divergence in

**Figure 4:**  
Employment status of SA smokers (2002)



smoking rates and the non-decline in the population smoking prevalence figure in 2002, are a consequence of reduced resources for tobacco control at a national level and in South Australia, the absence of new campaign material in 2002, to underpin an environment which encourages smokers to quit and to help people who have already quit.

Introducing legislative measures to prohibit smoking in indoor workplaces (including hospitality venues) will make a major contribution to redress the significant disparity in exposure to tobacco smoke between Australia's most and least affluent sectors. In addition to reducing the unequal burden of disease and mortality associated with passive smoking exposure, smoke-free workplaces have been shown to have flow-on effects to encourage quitting, as well as introducing voluntary smoke-free policies in domestic settings.

Interventions that successfully reduce smoking prevalence and passive smoking exposure need to be targeted to lower socio-economic groups, in order to capture the largest groups of smokers. In addition, there is a case for some interventions that are careful to adapt specifically to the needs of groups with especially high prevalence, including Indigenous people, people with mental illnesses, lone mothers and others in very disadvantaged circumstances. Public health principles require that efforts to target smaller groups with greatest disadvantage (increased equity in outcome) be weighed carefully with the need to maximise overall population gain.

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