

Revised briefing
May 2008

Smoking among 15-29 year-olds in SA, 1990-2007

South Australia's Strategic Plan (2008) T2.1 - Smoking

METHODOLOGY

The South Australian Health Omnibus Survey is a state-wide, annual household survey of approximately 3,000 respondents, conducted face-to-face. The sample size in 2007 was however 2398.¹

RESULTS

Smoking prevalence in 2007

There was no significant difference in smoking prevalence overall (aged 15+ years) from 2006 to 2007.

Table 1: Smoking prevalence in 2007 (age standardised to 2001 population)

	Smoking prevalence (%)	95% CI
Males	22.4	19.5-25.3
Females	18.8	16.2-21.4
15-29 years	23.0	18.9-27.1
30-44 years	29.4	25.1-33.7
45-59 years	21.3	17.4-25.2
60+ years	6.7	4.3-9.1
Total	20.6	18.7-22.5

¹ Harrison Health Research advises that this is partly attributed to the nationwide trend of declining response rates. Further analysis reveals that the demographic characteristics between completed interviews in 2006 and 2007 are similar.

Table 2: Smoking prevalence for 15-29 year olds by health region in 2007 (not for comparison over time)

	Smoking prevalence (%)	95% CI
Central Northern Adelaide	18.3	13.2-23.4
Southern Adelaide	19.4	11.0-27.8
SA Country	34.3*	24.8-43.8

* Due to an error by Harrison Health Research, this statistic has been updated from the April report

Changes over time

Table 3 and Figure 1 show that smoking prevalence among the 15-29 year age group has fluctuated over the past seventeen years, but has generally trended downwards over time. There is a statistically significant downward trend from 1990 to 2007 ($\chi^2 = 36.08$, $p < 0.001$). There was no significant difference in smoking prevalence from 2006 and 2007.

The baseline year for South Australia's Strategic Plan (T2.1) is 2004 with a smoking prevalence of 27.9% (in 15-29 year olds). The target is 17.9% by 2014 as shown by Figure 1.

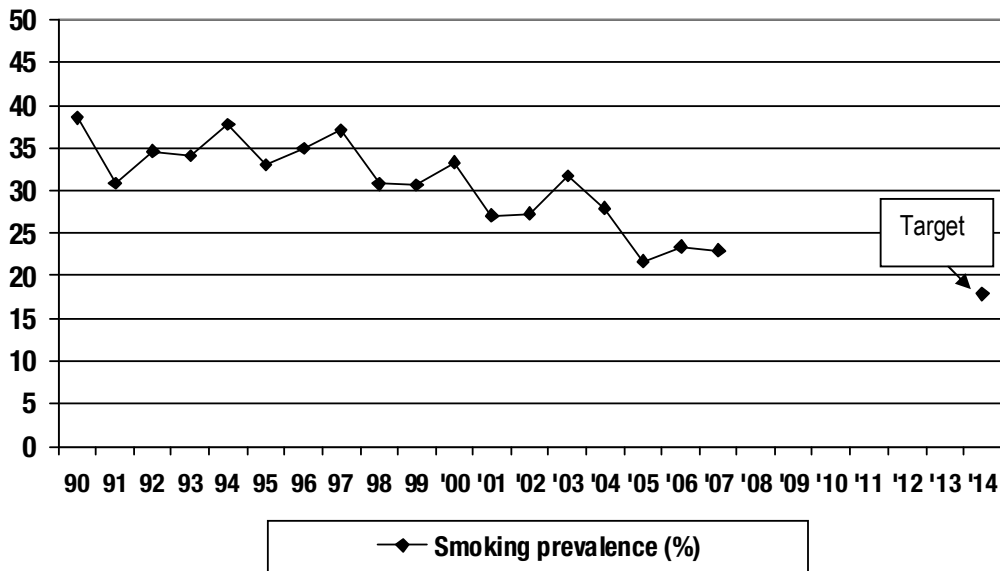
Smoking prevalence year to year

Table 3: Smoking prevalence, 15-29 years, age standardised to 2001 population

Year	Smoking prevalence	n	95% confidence interval ²
1990	38.5%	782	34.4-42.6
1991	30.9%	1046	27.5-34.3
1992	34.6%	893	30.9-38.3
1993	34.1%	889	30.4-37.8
1994	37.7%	849	33.8-41.6
1995	33.0%	832	29.2-36.8
1996	34.9%	815	31.0-38.8
1997	37.0%	799	33.0-41.0
1998	30.8%	788	26.9-34.7
1999	30.6%	783	26.7-34.5
2000	33.3%	777	29.3-37.3
2001	27.1%	768	23.3-30.9
2002	27.3%	737	23.4-31.2
2003	31.7%	727	27.6-35.8
2004	27.9%	719	24.0-31.8
2005	21.7%	723	18.1-25.3
2006	23.4%	712	19.7-27.1
2007	23.0%	572	18.9-27.1

² Standard errors used to create confidence intervals are inflated to reflect clustered sampling technique used in the Health Omnibus Survey

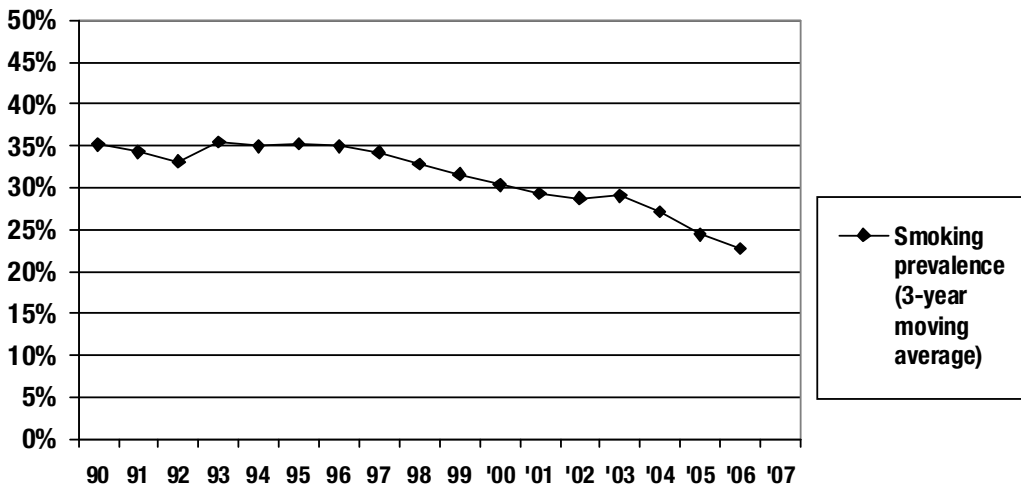
Figure 1: Smoking prevalence (%), 15-29 years, age standardised to 2001 population



Three-year moving averages

Because of the fluctuating prevalence estimates over the years, trends in smoking prevalence over time are usually presented graphically using 3-year moving averages. This method shows the general trend of the data more clearly, without extreme peaks and troughs.

Figure 2: 15-29 years, age standardised to 2001 population, 3-year moving averages



Changes by gender

Table 4 and Figure 3 show that smoking prevalence for males and females in the 15-29 year age group have fluctuated over the past seventeen years, but has generally trended downwards. There is a statistically significant downward linear trend from 1990 to 2007 for both males ($\chi^2 = 22.89$, $p < 0.001$) and females ($\chi^2 = 13.81$, $p < 0.001$). There was no significant difference in prevalence between males and females in this age group in 2007. There was no significant difference in prevalence for males or females from 2006 to 2007.

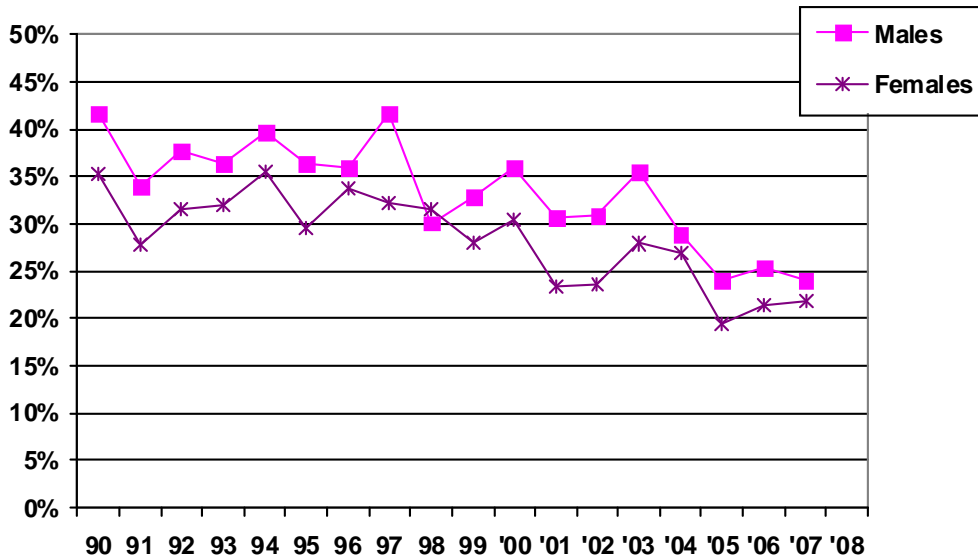
Table 4: Smoking prevalence for males and females aged 15-29 years, age standardised to 2001 population (1990-2007)

Year	Males		Females		P value*
	Smoking prevalence (%)	95% confidence interval ^a	Smoking prevalence (%)	95% confidence interval ^a	
1990	41.6	35.8-47.4	35.3	29.5-41.1	NS
1991	33.9	29.1-38.5	27.8	23.1-32.5	P<0.05
1992	37.6	32.2-43.0	31.5	26.3-36.7	P<0.05
1993	36.3	31.0-41.6	31.9	26.7-37.1	NS
1994	39.7	34.2-45.2	35.6	30.1-41.1	NS
1995	36.3	30.8-41.8	29.6	24.3-34.9	P<0.05
1996	36.0	30.5-41.5	33.7	28.1-39.3	NS
1997	41.7	35.9-47.5	32.1	26.6-37.6	P<0.05
1998	30.1	24.7-35.5	31.5	25.9-37.1	NS
1999	32.9	27.4-38.4	28.1	22.7-33.5	NS
2000	36.0	30.3-41.7	30.5	24.9-36.1	NS
2001	30.7	25.2-36.2	23.4	18.3-28.5	P<0.05
2002	30.9	25.3-36.5	23.5	18.3-28.7	P<0.05
2003	35.4	29.6-41.2	27.9	22.3-33.5	P<0.05
2004	28.8	23.3-34.3	27.0	21.4-32.6	NS
2005	24.1	18.9-29.3	19.3	14.3-24.3	NS
2006	25.3	20.1-30.5	21.4	16.1-26.7	NS
2007	24.0	18.0-30.0	21.9	16.2-27.6	NS

^a Standard errors used to create confidence intervals are inflated to reflect clustered sampling technique used in the Health Omnibus Survey

* Chi square comparison between males and females

Figure 3: Smoking prevalence for males and females aged 15-29 years over time, age standardised to 2001 population



Because of the fluctuating prevalence estimates over the years, trends in smoking prevalence over time are usually presented graphically using 3-year moving averages. This method shows the general trend of the data more clearly, without extreme peaks and troughs.

Figure 4: Smoking prevalence for males and females 15-29 years over time, age standardised to 2001 population, 3-year moving averages

