



Risk Factors

Smoking

Stage 2
Epidemiological Series Report # 2007-22
April 2007

Introduction

The following overview of smoking among the participants of the North West Adelaide Health Study discusses the burden of smoking, the prevalence and incidence are examined and demographics and chronic conditions associated with current smoking are presented. Stage 1 (baseline examination) of the study was conducted between 2000 and 2003, with Stage 2 (second examination) conducted from 2004 to 2006.

Measurement and definition of current smoking

Smoking prevalence was calculated using data obtained from the self report questionnaire. Participants were asked if they currently smoked, if they had ever smoked and if they had given up smoking. The participants were then classified as non-smokers, current smokers or ex smokers.

Incidence of Current Smoking

The annual incidence of becoming a smoker between Stage 1 and Stage 2 was 6.9 incident cases per 1000 in the adult population.

The annual incidence of becoming a non or ex smoker between Stage 1 and Stage 2 was 16.3 cases per 1000 in the adult population.

Prevalence of Current Smoking – Stage 1 & Stage 2

The prevalence of current smoking according to self report in the questionnaire for both Stage 1 and Stage 2 is shown in Table 1. Overall in Stage 1, **24.4%** (95% CI 23.1-25.8) and in Stage 2, **20.1%** (95% CI 18.7-21.5) of study participants were current smokers.

Table 1: Smoking prevalence

	Stage 1		Stage 2	
	n	%	n	%
Non-smoker	1908	47.3	1493	45.9
Ex-smoker	1143	28.3	1109	34.1
Current Smoker	985	24.4	653	20.1
Total	4036	100.0	3256	100.0

* Note: (Stage 1) 24 participants and (Stage 2) 4 participants did not provide smoking information and were excluded

Transition to and from smoking

Overall, 17.5% (95% CI 16.3-18.9) were smokers in Stage 1 and Stage 2 and 2.5% (95% CI 2.0-3.1) were non smokers in Stage 1 and had commenced smoking in Stage 2 (Table 2).

Table 2: The transition to and from smoking

Stage 1	Stage 2	n	%
Non or Ex smoker	Non or Ex smoker	2414	74.3
Current smoker	Current smoker	569	17.5
Non or Ex smoker	Current smoker	82	2.5
Current smoker	Non or Ex smoker	182	5.6
Total		3247	100.0

The prevalence of smoking in Stage 1 was 24.4%, which decreased to 20.1% for Stage 2.

Overall, 2.5% of the cohort who reported that they did not smoke in Stage 1 reported that they were smokers in Stage 2.

Demographic profile of current smokers

The prevalence of current smoking was statistically significantly higher among those aged 25 to 44 years, those in a step or sole or shared care family, those separated, divorced, or never married, and those unemployed. The prevalence was statistically significantly lower among those aged 65 years and over, those with an education level higher than secondary, those living in a house without children, those who had been widowed and those who carried out home duties or were retired (Table 3).

Table 3: Univariate Odds Ratios for demographic variables associated with current smoking

Variable	n	%	OR	(95% CI)	p value
Sex					
Male	344/1598	21.5	1.00		
Female	310/1657	18.7	0.84	(0.71-1.00)	0.05
Age group					
20 to 24 years	40/233	17.1	1.00		
25 to 34 years	201/694	28.9	1.97	(1.35-2.88)	<0.001
35 to 44 years	179/661	27.0	1.79	(1.23-2.63)	0.003
45 to 54 years	133/577	23.0	1.45	(0.98-2.14)	0.06
55 to 64 years	59/443	13.4	0.75	(0.48-1.16)	0.20
65 to 74 years	24/329	7.3	0.38	(0.22-0.65)	<0.001
75 years and over	18/318	5.7	0.29	(0.16-0.52)	<0.001
Highest education level obtained*					
Secondary	348/1447	24.1	1.00		
Trade/apprenticeship/cert/diploma	240/1202	20.0	0.79	(0.66-0.95)	0.01
Bachelor degree or higher	56/559	10.0	0.35	(0.26-0.47)	<0.001
Gross annual household income*					
Up to \$20,000	125/611	20.5	1.00		
\$20,001- 40,000	173/745	23.2	1.18	(0.91-1.52)	0.22
\$40,001- 60,000	141/697	20.3	0.99	(0.76-1.30)	0.94
More than \$60,000	201/1072	18.7	0.90	(0.70-1.15)	0.39
Family structure*					
Family & children, 2 biol/adop parents	247/1207	20.5	1.00		
Adult living with partner, no children	130/887	14.7	0.67	(0.53-0.84)	0.001
Adult living alone	72/435	16.6	0.77	(0.58-1.03)	0.08
Adults – re/reltd/unreltd, living together	79/336	23.4	1.19	(0.89-1.58)	0.25
Step/sole/shared parenting & other	120/348	34.4	2.04	(1.57-2.65)	0.001
Marital status*					
Married or living with partner	383/2184	17.5	1.00		
Separated/divorced	81/276	29.3	1.95	(1.47-2.58)	<0.001
Widowed	17/212	8.0	0.41	(0.25-0.68)	0.001
Never married	170/573	29.7	1.99	(1.61-2.45)	<0.001
Work status*					
Full time employed	339/1474	23.0	1.00		
Part time/casual employed	120/544	22.0	0.94	(0.74-1.19)	0.62
Unemployed	40/77	52.4	3.69	(2.32-5.88)	<0.001
Home duties/retired	113/996	11.4	0.43	(0.34-0.54)	<0.001
Student/other	41/154	26.9	1.23	(0.85-1.80)	0.27

*Not stated category not reported

Current smokers were significantly more likely to be

- aged 25 to 44 years;
- step/ sole or shared care families;
- separated, divorced or never married; or
- unemployed.

Chronic Condition profile of current smokers

Current smoking was statistically significantly more likely among those who had a mental health condition and significantly less likely among those with cardiovascular disease or arthritis than in those without these conditions (Table 4).

Table 4: Univariate Odds Ratios for Chronic Conditions associated with current smoking

Variable	n	%	OR	(95% CI)	p value
Diabetes*					
No	592/2946	20.1	1.00		
Yes	34/228	14.8	0.69	(0.48-1.01)	0.06
Asthma*					
No	528/2657	19.9	1.00		
Yes	98/520	18.8	0.94	(0.74-1.19)	0.59
COPD*					
No	584/2971	19.5	1.00		
Yes	35/150	23.4	1.25	(0.85-1.84)	0.26
Cardiovascular Disease*					
No	620/2986	20.8	1.00		
Yes	21/206	10.0	0.42	(0.27-0.67)	<0.001
Arthritis*					
No	550/2513	21.9	1.00		
Yes	89/667	13.4	0.55	(0.43-0.70)	<0.001
Mental Health Condition*					
No	485/2696	18.0	1.00		
Yes	156/496	31.4	2.09	(1.69-2.59)	<0.001

* Don't know/ refused/ not stated category not reported

Quality of Life profile of current smokers

Figure 1 shows the mean scores of the SF-36 subscales for people who did and did not currently smoke. People who currently smoked scored statistically significantly lower on all dimensions of the SF-36 when compared with non or ex smokers.

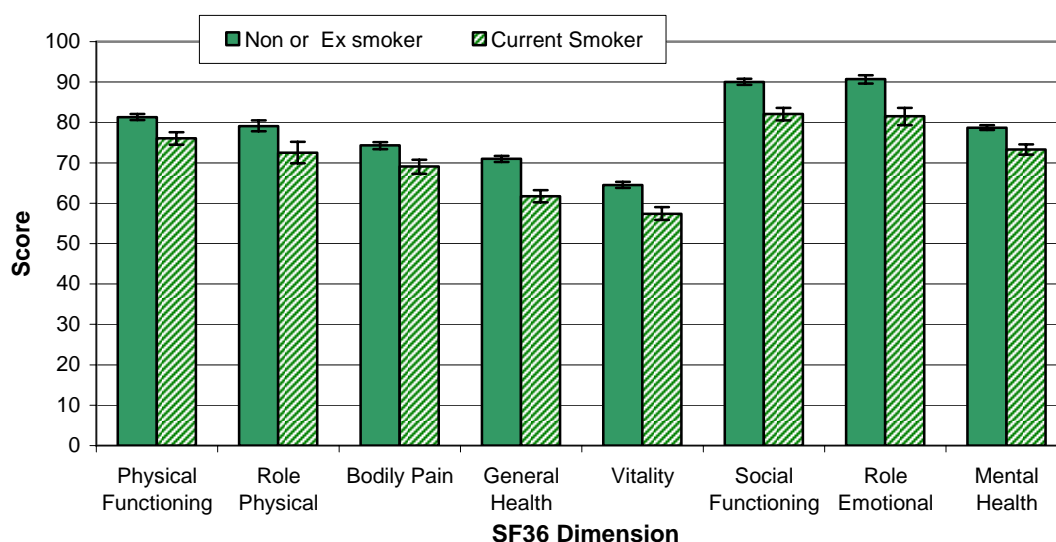


Figure 1: SF-36 mean scores for Current Smokers and Non or Ex Smokers

This document is one of a series of reports concerning Stage 2 of the North West Adelaide Health Study. Please see website for other reports in the series - www.health.sa.gov.au/pros/

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Smoking was significantly more likely to be among those who had a mental health condition.

Current smokers have significantly lower quality of life scores for all dimensions of the SF-36.