



Risk Factors

Alcohol

Stage 2

Epidemiological Series Report # 2007-17

April 2007

Introduction

The following overview presents the prevalence and incidence of alcohol consumption among the participants of the North West Adelaide Health Study, as well as the demographic factors and chronic conditions associated with intermediate to very high risk level of alcohol consumption. Stage 1 (baseline examination) of the study was conducted between 2000 and 2003, and Stage 2 (second examination) was conducted from 2004 to 2006.

Measurement and definition of alcohol consumption

Alcohol consumption prevalence was calculated using data obtained from the self report questionnaire. Participants were asked how often they drank alcohol, and if they drank, on a day when they drank alcohol, how many drinks they usually had. The participants were then classified according to their level of risk, as non-drinkers or no risk, low alcohol risk, and intermediate to very high alcohol risk¹.

Incidence of high risk alcohol consumption

The annual incidence of becoming an intermediate to high risk drinker between Stage 1 and Stage 2 was 9.6 incident cases per 1000 in the adult population.

The annual incidence of becoming a no or low risk alcohol drinker between Stage 1 and Stage 2 was 11.2 incident cases per 1000 in the adult population.

Prevalence of alcohol consumption – Stage 1 & Stage 2

The prevalence of different categories of alcohol consumption according to self report in the questionnaire for both Stage 1 and Stage 2 is shown in Table 1. Overall in Stage 1, **6.1%** (95% CI 5.4-6.8) and in Stage 2, **5.7%** (95% CI 4.9-6.6) of study participants were intermediate to very high risk alcohol drinkers. Additionally in Stage 1, **53.4%** (95% CI 51.9-54.9) and in Stage 2, **50.8%** (95% CI 49.0-52.5) of study participants were non drinkers or at no risk.

Table 1: Prevalence of alcohol consumption

	Stage 1		Stage 2	
	n	%	n	%
Non-drinker, no risk	2148	53.4	1592	50.8
Low Alcohol Risk	1630	40.5	1364	43.5
Intermediate to Very High Alcohol risk	244	6.1	178	5.7
Total	4023*	100.0	3135*	100.0

* Note: (Stage 1) 37 participants and (Stage 2) 125 participants did not provide responses and were excluded

Transition to and from various levels of alcohol consumption

Overall, 3.4% (95% CI 2.8-4.1) of participants went from being a non or low risk drinker in Stage 1 to an intermediate or high risk drinker in Stage 2 (Table 2).

Table 2: Transition to and from various levels of alcohol consumption

Stage 1	Stage 2	n	%
Non/ No/ Low Risk	Non/ No/ Low Risk	2822	90.5
Non/ No/ Low Risk	Intermediate/ Very High Risk	106	3.4
Intermediate/ Very High Risk	Intermediate/ Very High Risk	72	2.3
Intermediate/ Very High Risk	Non/ No/ Low Risk	120	3.8
Total		3120	100.0

¹ National Heart Foundation of Australia. *Risk Factor Prevalence Study. Survey No. 3 - 1989.* 1989.

The prevalence of intermediate to high risk drinking was 6.1% in Stage 1, which decreased to 5.7% in Stage 2.

Overall, 3.4% of the cohort who reported that they did not drink or were a low risk drinker in Stage 1 became intermediate to high risk drinkers in Stage 2.

Demographic profile of intermediate to high risk drinkers

The prevalence of intermediate to high risk drinking was statistically significantly higher among males, and those never married. The prevalence was statistically significantly lower among females, and in those aged 25 to 34 years, or 75 years and over or those retired or performing home duties (Table 3).

Table 3: Univariate Odds Ratios for demographic variables associated with intermediate to high risk drinking

Variable	n	%	OR	(95% CI)	p value
Sex					
Male	116/1555	7.4	1.00		
Female	63/1580	4.0	0.52	(0.38-0.71)	<0.001
Age group					
20 to 24 years	20/226	8.7	1.00		
25 to 34 years	26/665	4.0	0.43	(0.24-0.79)	0.007
35 to 44 years	43/640	6.7	0.75	(0.43-1.31)	0.32
45 to 54 years	37/552	6.7	0.75	(0.42-1.32)	0.30
55 to 64 years	24/432	5.7	0.63	(0.34-1.16)	0.14
65 to 74 years	20/317	6.3	0.71	(0.37-1.35)	0.29
75 years and over	8/303	2.6	0.28	(0.12-0.66)	0.003
Highest education level obtained*					
Secondary	84/1389	6.0	1.00		
Trade/apprenticeship/cert/diploma	68/1161	5.9	0.98	(0.70-1.36)	0.89
Bachelor degree or higher	24/542	4.5	0.73	(0.46-1.16)	0.19
Gross annual household income*					
Up to \$20,000	27/588	4.7	1.00		
\$20,001- \$40,000	49/710	7.0	1.53	(0.95-2.47)	0.08
\$40,001- \$60,000	35/675	5.1	1.11	(0.66-1.85)	0.69
More than \$60,000	66/1039	6.3	1.38	(0.88-2.18)	0.17
Family structure*					
Family & children, 2 biological/adoptive parents	57/1152	5.0	1.00		
Adult living with partner, no children	51/860	6.0	1.22	(0.83-1.80)	0.32
Adult living alone	21/423	5.0	1.00	(0.60-1.67)	1.00
Adults – related/unrelated, living together	23/330	7.0	1.44	(0.87-2.37)	0.15
Step/sole/shared parenting & other	26/330	7.7	1.61	(0.99-2.60)	0.06
Marital status*					
Married or living with partner	108/2100	5.1	1.00		
Separated/divorced	19/266	7.2	1.45	(0.87-2.39)	0.15
Widowed	8/201	3.8	0.73	(0.34-1.54)	0.41
Never married	44/558	7.9	1.59	(1.11-2.29)	0.01
Work status*					
Full time employed	92/1418	6.5	1.00		
Part time/casual employed	34/527	6.4	0.99	(0.66-1.49)	0.96
Unemployed	4/75	4.8	0.72	(0.25-2.13)	0.56
Home duties/retired	41/953	4.3	0.65	(0.45-0.95)	0.03
Student/other	9/151	5.8	0.90	(0.44-1.84)	0.77

*Not stated category not reported

Current intermediate to high risk drinkers were significantly more likely to be:

- male;
- never married;

& less likely to be:

- aged 25 to 34 years or 75 years and over;
- undertaking home duties or retired.

Chronic condition profile of intermediate to high risk drinkers

Intermediate to high risk drinking was statistically significantly less likely among those with CVD and statistically significantly more likely among those with COPD (Table 4).

Table 4: Univariate Odds Ratios for chronic conditions associated with intermediate to high risk drinking

Variable	n	%	OR	(95% CI)	p value
Diabetes*					
No	161/2834	5.7	1.00		
Yes	6/221	2.6	0.44	(0.19-1.02)	0.06
Asthma*					
No	147/2558	5.7	1.00		
Yes	20/500	4.0	0.68	(0.42-1.10)	0.11
COPD*					
No	151/2857	5.3	1.00		
Yes	16/148	10.9	2.19	(1.28-3.77)	0.005
Cardiovascular Disease*					
No	171/2871	5.9	1.00		
Yes	4/200	2.1	0.34	(0.13-0.90)	0.03
Arthritis*					
No	133/2419	5.5	1.00		
Yes	42/641	6.6	1.21	(0.84-1.73)	0.30
Mental Health Condition*					
No	139/2594	5.4	1.00		
Yes	35/477	7.4	1.40	(0.95-2.05)	0.09

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

Quality of Life profile of intermediate to high risk drinkers

Figure 1 shows the mean scores of the SF-36 subscales for people who were and were not intermediate to high risk drinkers. People who were intermediate to high risk drinkers did not score statistically significantly different on any dimensions of the SF-36 when compared with non or low risk drinkers.

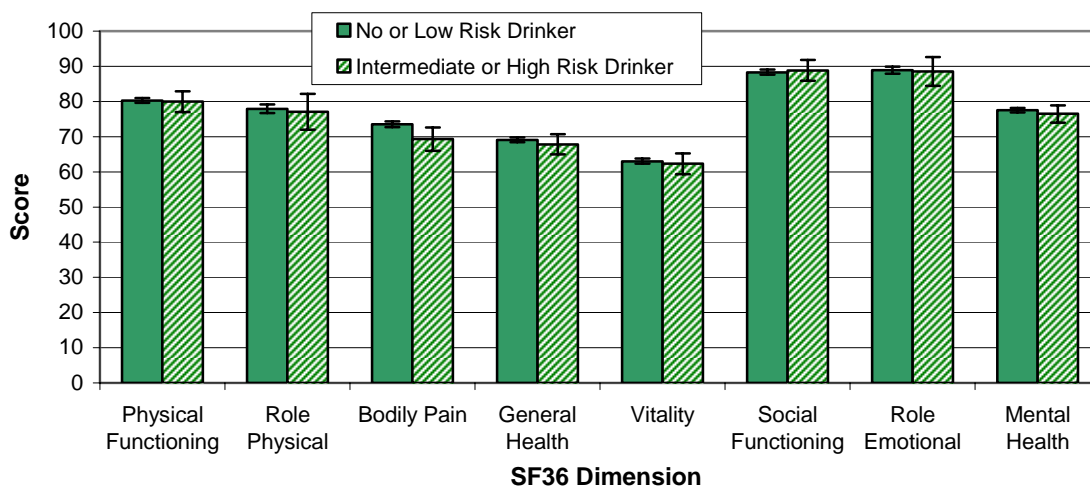


Figure 1: SF-36 mean scores for Intermediate to High Risk and Non or Low Risk drinkers

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/

CONTACT DETAILS:

Population Research & Outcome Studies Unit – South Australian Department of Health
 PO Box 287 Rundle Mall Level 8 CitiCentre, 11 Hindmarsh Square, Adelaide SA 5000
 Telephone (08) 8226 7042 Facsimile (08) 8226 6244
 Email: pros@health.sa.gov.au

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Intermediate to high risk drinking was significantly less likely to be among those with cardiovascular disease and more likely among those with COPD.

There is no difference in the quality of life scores for all dimensions of the SF-36 between no or low risk drinkers and intermediate to high risk drinkers.