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NEW ISSUE

1989-90 NATIONAL HEALTH SURVEY ALCOHOL CONSUMPTION, AUSTRALIA

This publication presents a selection of statistics from the 1989-90 National Health Survey about the consumption of alcohol and the characteristics of those persons who consumed alcohol. Where relevant, data from the survey *Alcohol and Tobacco Consumption Patterns, February, 1977* have been included for comparative purposes.

Details shown are for persons aged 18 years or more at the time of the survey and generally relate to the consumption of alcohol during the seven days prior to interview. All types of alcohol including that derived from homemade wines and beers are included.

Care should be taken in interpreting these statistics due to possible under reporting of the levels of actual consumption. See paragraph 5 in Explanatory Notes, p 9.

MAIN FEATURES

- Almost three-quarters of males (74% or 4.5 million) and approximately half the females (52% or 3.3 million) aged 18 years or more drank alcohol during the week prior to interview.
- Levels of consumption were highest among younger age groups. The average daily consumption of male drinkers aged 18 to 24 years was 36 millilitres, compared with 31 millilitres for all age groups. Equivalent figures for females were 16 and 13 millilitres respectively.
- The highest proportion of adults who drank alcohol in the reference week was recorded in the Australian Capital Territory: 80 per cent of males and 61 per cent of females. However, the Northern Territory had the highest average daily consumption of alcohol by persons who drank. Drinkers in that State reported consuming an average of 36 millilitres (or the equivalent of three 10oz glasses each) of full strength beer per day.
- When compared with results of a similar survey in 1977, the 1989-90 survey shows an increased consumption of wine in all but the 18 to 24 year age group, while the consumption of beer has decreased as a percentage across all age groups.

INQUIRIES

For further information about National Health Survey output contact Brian Richings on Canberra (06) 252 5786 or any ABS State office.

For information about other ABS statistics and services please refer to the back of this publication.

Sex and age

Almost three-quarters of males (73.5% or 4,518,000) and approximately half the females (51.8% or 3,260,000) aged 18 years or more drank alcohol during the week prior to interview. The table below shows that in comparison with the results of the 1977 survey the proportion of males who drank alcohol in the seven days prior to interview has fallen while that of females has risen. Increases in the proportion of female drinkers were reported across all age groups.

TABLE 1. PERSONS AGED 18 YEARS AND OVER WHO DRANK ANY ALCOHOL DURING THE WEEK PRIOR TO INTERVIEW BY AGE BY SEX, AUSTRALIA, 1977 AND 1989-90 (Per cent)

Year of survey	Age group (years)				Total
	18 - 24	25 - 44	45 - 64	65 and over	
Males					
1977	75.0	80.1	74.0	57.3	75.0
1989-90	70.1	78.3	73.9	60.9	73.5
Females					
1977	53.7	55.7	46.2	30.3	49.0
1989-90	56.5	57.3	50.5	36.1	51.8
Persons					
1977	64.4	68.1	60.1	41.5	61.8
1989-90	63.4	67.9	62.4	46.6	62.5

For those persons aged 18 years and over who drank alcohol in the week prior to interview, the average daily consumption was 23.6 millilitres; 31.0 millilitres for males and 13.2 millilitres for females. For both males and females, drinkers aged 18 to 24 years reported the highest average daily intake at 36.3 and 15.8 millilitres respectively.

Based on consumption levels in the week prior to interview, people were grouped by health risk level, as defined by the National Health and Medical Research Council (see paragraph 6 of Explanatory Notes). Of male drinkers aged 18 to 24 years, 24.8 per cent were classified at medium or high risk levels compared with 20.2 per cent of male drinkers overall. Equivalent proportions for females were 18.1 per cent and 14.4 per cent respectively.

States and Territories

The Australian Capital Territory reported the highest percentage of both adult males and females who had consumed alcohol in the seven days prior to interview with 79.8 and 61.3 per cent respectively. Western Australia with 77.7 per cent of males and 56.8 per cent of females had the next highest proportion. Victoria and New South Wales had the lowest proportion of male drinkers with 72.5 and 72.6 per cent respectively while Queensland and Victoria reported the smallest proportions of females who drank (49.6% and 50.6% respectively).

The highest average daily consumption of alcohol among persons who drank was recorded in the Northern Territory. Drinkers in that State reported consuming an average of 36.4 millilitres (or the equivalent of three 10oz glasses each of full-strength beer) of alcohol per day compared with 25.2 millilitres in Queensland and 24.5 millilitres in New South Wales and the Australian Capital Territory. The table below shows the average daily consumption of alcohol by type of alcoholic drink for each State.

TABLE 2. PERSONS AGED 18 YEARS AND OVER WHO DRANK ANY ALCOHOL: AVERAGE DAILY CONSUMPTION BY TYPE OF ALCOHOLIC DRINK, STATES AND TERRITORIES, 1989-90 (millilitres of alcohol)

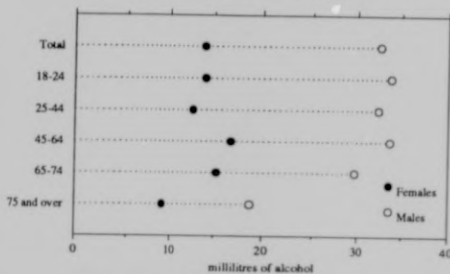
Type of alcoholic drink consumed	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Australia
Beer - extra/special light	3.5	3.5	4.5	3.5	2.9	3.5	4.1	5.2	3.7
Beer - low alcohol	7.1	9.6	9.6	7.7	11.6	7.9	9.9	7.7	9.4
Beer - full strength	30.0	27.6	31.9	27.3	26.4	24.9	41.7	28.3	29.1
Wine	11.3	12.4	11.2	11.9	11.5	9.4	17.4	13.2	11.7
Spirits	10.7	10.4	13.6	11.4	9.5	9.8	12.8	12.1	11.1
Fortified wine	9.9	8.3	10.2	8.3	7.8	7.9	5.5	5.2	8.8
Other	7.9	10.5	10.8	14.0	6.7	6.9	6.8	5.9	9.4
Total	24.5	22.1	25.2	22.0	22.2	20.6	36.4	24.5	23.6

Type of alcoholic drink

The proportion of persons who drank full strength beer (28.6%) was slightly higher than the proportion who drank wine (26.4%). However, there was a marked variation between the sexes in the consumption of beer and wine. Only 10.4 per cent of females drank full strength beer compared with 47.1 per cent of males. In contrast, 22.2 per cent of males drank wine compared with 30.5 per cent of females. The proportion of males and females who drank spirits was similar (16.7% and 18.2% respectively) with the highest proportion of spirits drinkers in the younger age groups.

The chart below shows the average daily consumption of full strength beer across each age group and within each sex.

CHART 1. AVERAGE DAILY CONSUMPTION OF FULL STRENGTH BEER(a) BY AGE AND SEX, AUSTRALIA, 1989-90



(a) Average consumption by those who drank.

Comparison with results of a 1977 survey shows that the proportion of adults who drank wine has increased from 19.5 per cent to 26.4 per cent overall, and most markedly for females where the increase was from 19.7 per cent to 30.5 per cent. The proportion drinking spirits has also increased marginally overall (14.3% to 17.5%), but has risen more noticeably among younger age groups (19.8% to 29.1% of persons aged 18 to 24 years). In contrast, the proportion drinking beer has fallen, most notably in age groups from 25 to 64 years.

TABLE 3. PERSONS AGED 18 YEARS AND OVER: TYPE OF ALCOHOLIC DRINK CONSUMED BY AGE AND SEX, AUSTRALIA, 1977 AND 1989-90 (Per cent)

Type of alcoholic drink consumed	Age group (years)					Males	Females	Persons
	18 - 24	25 - 44	45 - 64	65 - 74	75 and over			
1977								
No alcohol consumed	35.6	31.9	39.8	55.2	65.8	24.9	51.0	38.2
Beer	40.5	47.6	45.4	28.8	19.5	65.6	21.1	43.0
Wine	20.9	24.5	16.5	9.0	5.9	19.2	19.7	19.5
Spirits	19.8	15.3	11.7	9.5	7.5	13.0	15.5	14.3
Fortified wine	5.9	7.1	5.4	6.3	5.9	4.4	8.0	6.3
Other	5.9	5.2	2.9	3.0	1.6	2.7	5.9	4.3
Total who drank alcohol(a)	64.4	68.1	60.1	44.8	34.2	75.0	49.0	61.8
1989-90								
No alcohol consumed	36.6	32.1	37.6	49.2	60.7	26.5	48.2	37.5
Beer - extra/special light	1.8	4.5	5.0	5.2	2.2	6.6	1.8	4.2
Beer - low alcohol	3.3	8.1	8.4	6.3	3.4	11.0	3.1	7.0
Beer - full strength	36.8	32.4	25.0	18.4	10.6	47.1	10.4	28.6
Total Beer	39.6	40.7	35.5	28.2	15.9	59.0	14.7	36.6
Wine	18.1	30.9	29.3	18.7	14.1	22.2	30.5	26.4
Spirits	29.1	17.7	13.5	12.4	10.5	16.7	18.2	17.5
Fortified wine	2.9	4.8	5.4	6.5	7.3	4.8	5.1	5.0
Other	2.6	1.5	0.6	0.3	0.2	0.9	1.6	1.3
Total who drank alcohol(a)	63.4	67.9	62.4	50.8	39.3	73.5	51.8	62.5

(a) Each person may have reported more than one type of alcoholic drink and therefore components do not add to totals.

Usual consumption

Gross personal annual income

The percentage of persons who had drunk alcohol during the week prior to interview increased as gross personal annual income increased. While less than half (48.1%) of those earning less than \$10,000 had consumed alcohol, 82.8 per cent of those with incomes of \$50,000 or more had done so.

TABLE 6. PERSONS AGED 18 YEARS AND OVER: TYPE OF ALCOHOLIC DRINK CONSUMED BY GROSS PERSONAL ANNUAL INCOME, AUSTRALIA, 1989-90
(Per cent)

Type of alcoholic drink consumed	Less than - \$10,000	\$10,000 - 19,999	\$20,000 - 29,999	\$30,000 - 39,999	\$40,000 - 49,999	\$50,000 or more	Not stated	Total
No alcohol consumed	51.9	37.6	27.1	22.3	17.4	17.2	36.6	37.5
Beer - extra/special light	2.7	3.3	4.7	6.4	8.0	9.1	4.1	4.2
Beer - low alcohol	4.3	5.5	8.3	11.1	14.4	15.1	6.9	7.0
Beer - full strength	17.2	27.0	38.0	41.3	45.6	44.3	27.7	28.6
Wine	20.4	23.7	27.3	35.8	39.4	50.6	30.0	26.4
Spirits	12.7	19.9	20.8	21.3	19.0	21.3	15.5	17.5
Fortified wine	4.4	4.0	4.9	6.9	8.4	7.7	4.1	5.0
Other	1.0	1.7	1.5	1.2	0.9	0.9	1.0	1.3
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Each person may have reported more than one type of alcoholic drink, and therefore components do not add to totals.

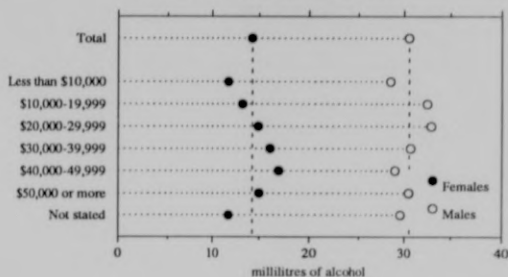
The proportion of males who drank wine was higher among higher income groups (see Table 7). Whereas only 20.7 per cent of those with an annual income between \$10,000 and \$19,999 had drunk wine in the reference period, 58.9 per cent of those with incomes in excess of \$50,000 had done so. Full strength beer was the favoured drink of male drinkers across most income groups. The proportions of female drinkers consuming wine also increased with income to a high of 81.5 per cent of those with incomes of \$50,000 or more.

TABLE 7. PERSONS AGED 18 YEARS AND OVER WHO DRANK ANY ALCOHOL: TYPE OF ALCOHOLIC DRINK CONSUMED BY GROSS PERSONAL ANNUAL INCOME BY SEX, AUSTRALIA, 1989-90
(Per cent)

Type of alcoholic drink consumed	Less than - \$10,000	\$10,000 - 19,999	\$20,000 - 29,999	\$30,000 - 39,999	\$40,000 - 49,999	\$50,000 or more	Not stated	Total
MALES								
Beer - full strength	60.3	66.6	68.3	64.3	60.6	57.6	61.6	64.1
Wine	23.3	20.7	23.6	36.2	44.2	58.9	35.4	30.2
Spirits	20.3	24.1	22.7	23.8	22.0	24.4	20.7	22.7
FEMALES								
Beer - full strength	21.5	20.8	19.3	15.9	14.8	16.2	15.4	20.2
Wine	53.6	54.4	65.4	78.8	74.4	81.5	66.2	58.8
Spirits	29.9	39.3	40.6	39.6	30.4	37.8	30.5	35.1
PERSONS								
Beer - full strength	35.9	43.3	52.1	53.1	55.2	53.5	43.7	45.7
Wine	42.4	37.9	37.4	46.1	47.7	61.1	47.3	42.2
Spirits	26.3	31.9	28.6	27.4	23.0	25.7	24.5	27.9

The average daily consumption of alcohol by gross personal income for males and females is shown in Chart 2. Males in the income group \$20,000 to \$29,999 had the highest average daily intake (32.9 millilitres). The highest average consumption for females (17.0 millilitres) was in the income group \$40,000 to \$49,999.

CHART 2. PERSONS AGED 18 YEARS AND OVER WHO DRANK ALCOHOL: AVERAGE DAILY CONSUMPTION BY GROSS PERSONAL ANNUAL INCOME BY SEX, AUSTRALIA, 1989-90



Country of birth

Of those persons aged 18 years and over who consumed alcohol in the seven days prior to interview, those born in New Zealand and Australia reported the highest daily average consumption with 28.4 and 24.6 millilitres respectively. This was true of males (38.2 and 33.0 millilitres). For females, those born in New Zealand (16.6 millilitres), North America (14.9 millilitres) and Australia (13.6 millilitres) reported the highest average daily consumption. Persons from the Middle East and North Africa and Southeast Asia had the lowest average daily consumption levels of drinkers (10.6 and 12.3 millilitres respectively). The proportion of adults from the Middle East and North Africa and Southeast Asia who had consumed alcohol in the previous seven days was also markedly lower (37.9% and 33.7% respectively) than for Australian born (64.2%).

As the table below shows average consumption of alcohol was highest among the younger age groups from predominantly English-speaking countries and Northern and Eastern Europe and USSR. For persons born in Australia and New Zealand, those in the age groups 18 to 24 and 25 to 34 years had rates of consumption of alcohol slightly higher than the overall averages for persons born in that country. Each of the three age groups for persons under the age of 45 born in the United Kingdom and Ireland showed a higher daily consumption than for those populations overall. For other country groups the highest rates of alcohol consumption generally occur in the middle age groups.

TABLE 8. PERSONS AGED 18 YEARS AND OVER WHO DRANK ALCOHOL: AVERAGE DAILY CONSUMPTION BY COUNTRY OF BIRTH BY AGE, AUSTRALIA, 1989-90 (millilitres of alcohol)

Country of Birth	Age group (years)						Total	Per cent of population who drank alcohol(a)
	18-24	25-34	35-44	45-64	65-74	75 and over		
Australia	28.0	25.6	24.0	24.5	20.2	13.0	24.6	64.2
New Zealand	31.0	30.4	27.3	27.3	15.2	11.3	28.4	73.9
United Kingdom & Ireland	25.3	23.3	22.0	21.6	19.6	13.5	21.7	68.8
Southern Europe	13.5	15.9	18.5	23.1	19.9	13.0	20.1	51.9
Western Europe	21.7	10.6	23.6	19.7	17.3	7.3	19.6	65.9
Northern & Eastern Europe and USSR	30.1	16.3	20.6	19.7	20.9	13.2	19.8	54.6
Middle East & North Africa	15.5	9.4	9.1	13.9	4.2	1.7	10.8	37.9
Southeast Asia	13.8	14.2	9.3	12.8	15.5	22.5	12.3	33.7
Northeast & Southern Asia	9.0	12.7	11.1	20.3	9.8	7.3	13.7	39.4
Total all countries	27.3	24.6	15.3	14.7	10.0	5.1	23.6	62.5

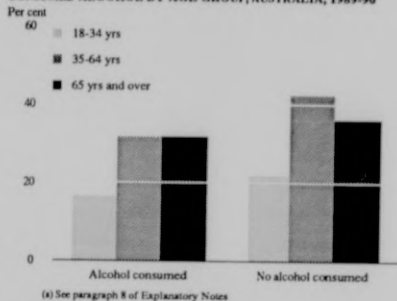
(a) Per cent of population of birthplace shown who drank alcohol in the week prior to interview.

Body mass index

It is generally thought that drinkers are more likely to be overweight or obese than those who do not drink. Data from the survey support this hypothesis in the case of males; 44.2 per cent of those who had consumed alcohol in the week prior to interview were classified overweight or obese compared with 41.6 per cent of non-drinkers. However, in the case of females the reverse was true with 25.4 per cent of drinkers classified overweight or obese compared to 34.2 per cent of non-drinkers.

As the chart below shows this relationship was maintained across all ages for females and can not be ascribed to the presence of a large number of older women in the 'did not drink' category.

CHART 3 FEMALE AGED 18 YEARS AND OVER WHO WERE CLASSIFIED AS OVERWEIGHT OR OBESE(a): WHETHER CONSUMED ALCOHOL BY AGE GROUP, AUSTRALIA, 1989-90



Self assessed health status

Results of the survey suggest a relationship at younger ages between alcohol risk level (calculated from consumption levels during the week prior to interview) and self-assessed health status. For example, of persons aged 18-24 years who considered themselves in excellent or good health, 13.0 per cent were classified as drinking alcohol at a medium or high risk level, whereas of those who considered themselves in fair or poor health 20.1 per cent were classified as medium or high alcohol risk level. As shown in the following table, this relationship is not evident for older age groups.

TABLE 9. PERSONS AGED 18 AND OVER: SELF-ASSESSED HEALTH STATUS BY ALCOHOL RISK LEVEL(a)
BY AGE AUSTRALIA, 1989-90
(Per cent)

Age group (years)	Self-assessed health status					
	Excellent/good			Fair/poor		
	Did not consume/ low risk	Medium and high risk	Total	Did not consume/ low risk	Medium and high risk	Total
18 - 24	87.0	13.0	100.0	79.9	20.1	100.0
25 - 34	88.0	12.0	100.0	84.4	15.6	100.0
35 - 44	88.6	11.4	100.0	88.8	11.2	100.0
45 - 54	87.7	12.3	100.0	87.8	12.2	100.0
55 - 64	89.1	10.9	100.0	90.5	9.5	100.0
65 and over	93.6	6.4	100.0	95.6	4.4	100.0
Total	88.6	11.4	100.0	89.8	10.2	100.0

(a) Based on consumption of alcohol in the week prior to interview.

Smoker status

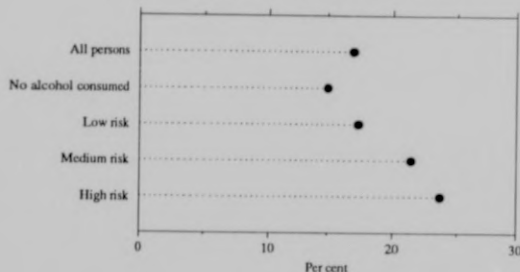
Results of the survey suggest a relationship between alcohol consumption and smoking. Of those males who had not consumed alcohol during the week prior to interview 24.0 per cent were smokers, and 26.2 per cent were ex-smokers, whereas of those who had consumed alcohol, 35.0 per cent were current smokers and 29.7 per cent were ex-smokers.

The pattern was similar for females where 29.6 and 20.9 per cent of those who had consumed alcohol in the week prior to interview were smokers and ex-smokers respectively compared to 19.5 and 14.5 per cent for non-drinkers.

Alcohol and accidents

Based on the survey data there appears to be a relationship between a person having an injury/accident and the level of alcohol consumption. As the chart shows the percentage of persons who reported an accident rose when mapped against the alcohol risk level.

TABLE 4. PERSONS AGED 18 YEARS AND OVER WHO REPORTED AN ACCIDENT BY ALCOHOL RISK LEVEL, AUSTRALIA, 1989-90



EXPLANATORY NOTES

The 1989-90 National Health Survey was conducted during the twelve months October 1989 to September 1990 and covered approximately 22,200 private and special dwellings (e.g. hotels, motels, boarding houses) selected throughout Australia. Hospitals and nursing homes were excluded from the sample. Where possible, each adult member of selected households was interviewed by a trained ABS interviewer; an adult member of each household, usually a parent or guardian, was asked to provide information about children in the household.

2. The National Health Survey was conducted over a full year, with an approximately equal number of households selected for interview in each fortnight. As the estimates are based on information obtained from occupants of a sample of dwellings, they may differ from figures that would have been obtained if all dwellings had been included.

3. Information collected in the survey included medical conditions experienced, actions people had taken in relation to their health such as doctor consultations, use of medications, episodes in hospital, and aspects of lifestyle and other factors which may influence their health such as smoking, alcohol consumption, exercise and height and weight. A range of demographic and socio-economic information was also collected. Women aged 18 to 64 years were invited to complete a small additional questionnaire on specific women's health issues.

4. Alcohol consumption refers to the consumption of alcoholic drinks, and focuses on the intake of alcohol derived from information about types and quantities of alcoholic drinks consumed on each of the seven days prior to interview. Homemade wines and beers were included.

5. Some under-reporting of consumption, both in terms of persons identifying as having drunk alcohol and in the quantities reported, is expected to have occurred. Analysis of results of previous surveys employing similar methodologies to that used in the 1989-90 NHS have indicated under-reporting when results were compared with data from other sources (e.g. the ABS Apparent Consumption of Foodstuffs series). As data were not directly comparable between these sources it is not possible to accurately quantify the level of under-reporting, but comparisons based on tests leading up to the 1977 *Survey of Alcohol and Tobacco Consumption Patterns* indicated that reported consumption only accounted for around half of apparent consumption. A full account may be found in the article *Measurement of Alcohol Consumption in the Australian Population*, Millwood and Mackay, Community Health Studies, Vol II, No. 3, 1978. However, the possible under-reporting which has occurred does not invalidate the survey results as indicators of relative consumption levels (current and over time), and of the relative health risks of the consumption levels identified.

6. The indicators of relative health risk were derived from the average daily amount of alcohol consumed over the reference week. According to average daily intake, respondents were grouped into three categories of relative risk level based on recommendations of the National Health and Medical Research Council (NH&MRC).

Relative Risk	Consumption per day	
	Male	Female
Low	<50ml	<25ml
Medium	50-75ml	25-50ml
High	>75ml	>50ml

7. Recommendations expressed in grams of absolute alcohol per day have been converted to millilitre equivalents using the ratio 1ml=0.8g. It should be noted, however, that the NH&MRC recommendations relate to consumption on a regular basis, whereas indicators derived in the 1989-90 NHS relate to consumption only during the reference week and take no account of whether or not consumption in that week was more, less or similar to usual consumption levels. In addition, this indicator takes no account of other factors related to health status, other lifestyle behaviours, etc. which may influence the absolute level of personal health risk from drinking alcohol.

8. Body mass index scores were derived from self-reported height and weight using the formula of weight (kg) divided by the square of height (m^2). Persons were classified to one of four groups according to their scores. These groups are based on recommendations of the National Health and Medical Research Council, as applied in the analysis of data from the National Heart Foundation's Risk Factor Prevalence Study 1989. The criteria on which the groups used in this publication have been defined have been amended with the result that data shown are not directly comparable with body mass data contained in the publication *1989-90 National Health Survey, Summary of Results* (Cat. No. 4364.0).

9. Details of the survey, its scope and coverage, content, methods and notes concerning the interpretation of results (including comparability with previous ABS health surveys) are contained in the publication *1989-90 National Health Survey: Users' Guide* (Cat. No. 4363.0). Information about the range of publications to be released from this survey, and the availability of unpublished results is contained in the information brochure *1989-90 National Health Survey: Products and Services* which is available free of charge from any office of the ABS.

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