



1995

EMBARGO: 11:30 AM (CANBERRA TIME) TUES 11 NOV 1997

National Health Survey

Cardiovascular and Related Conditions

Australia

NOTES

SYMBOLS AND OTHER USAGES

ABS	Australian Bureau of Statistics
ICD	International Classification of Diseases
NHS	National Health Survey
SF-36	Short Form 36-Item Health Survey
*	relative standard error of 25% to 50%
**	relative standard error over 50%

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INQUIRIES

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

For further information about these statistics, contact the Health Section on 1800 060 050.

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MAIN FEATURES

- In 1995, one in five (21%) Australians aged 18 years and over (2.8 million people) reported having a cardiovascular condition.
- The most common cardiovascular condition reported was hypertension which was reported by 14% of the adult population.
- The State/Territory with the lowest age and sex standardised prevalence of cardiovascular conditions was the Northern Territory (15%) while New South Wales and Tasmania had the highest prevalence (22%).
- The age and sex standardised prevalence of cardiovascular conditions in the adult overseas-born population was 20% compared with 21% in the adult Australian-born population.
- Of adults with a cardiovascular condition, 41% were overweight or obese compared with 29% of adults without a cardiovascular condition.
- The age standardised death rate from cardiovascular conditions for the total Australian population has declined from 399.3 deaths per 100,000 in 1981 to 252.0 deaths per 100,000 in 1995.

INTRODUCTION

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WHAT ARE CARDIOVASCULAR AND RELATED CONDITIONS?

Cardiovascular and related conditions comprise all diseases of the heart and blood vessels, including heart attack, stroke and peripheral vascular disease. For this publication cardiovascular and related conditions have been classified as:

- hypertension (high blood pressure);
- heart disease (including ischaemic heart disease, diseases of pulmonary circulation and heart failure);
- atherosclerosis (plaque lining the arteries);
- cerebrovascular disease (including stroke and its after effects);
- other circulatory diseases (including thrombosis, aneurysms and diseases of the capillaries); and
- ill-defined heart conditions (including heart problems/trouble, irregular heart beat and palpitations).

The term cardiovascular conditions is used in this publication to denote all cardiovascular and related conditions.

Data on fluid problems, varicose veins and haemorrhoids are not included in this publication.

National Health Survey (NHS) data in this publication refer to adults aged 18 years and over. This is in accordance with suggested national guidelines for monitoring cardiovascular disease set down by the Australian Institute of Health and Welfare in 1995.¹

WHY IS NATIONAL INFORMATION ABOUT CARDIOVASCULAR CONDITIONS IMPORTANT?

The high prevalence of cardiovascular conditions is a major concern for both health authorities and the general population. Cardiovascular conditions are a leading cause of death in Australia. Ischaemic heart disease alone accounted for 24% of all deaths in 1995, and stroke accounted for a further 10%. Cardiovascular conditions also place a heavy burden on society in terms of illness, disability and economic cost. Cardiovascular conditions are associated with specific risk factors including high cholesterol, smoking, obesity, alcohol consumption and exercise. They are also age related and therefore of increasing concern with the ageing of the Australian population. Improving cardiovascular health has been identified as a priority area by the Australian Health Ministers' Advisory Council.² Improving information on cardiovascular conditions has been identified as a high priority development direction in the National Health Information Development Plan.

¹ S. Bennett, A. J. Dobson & P. Magnus, *Outline of a national monitoring system for cardiovascular disease*, Australian Institute of Health and Welfare, Canberra, 1995 (Cardiovascular Disease Series; no. 4).

² Commonwealth Department of Human Services and Health, *Better Health Outcomes for Australians*, AGPS, Canberra, 1994.

CARDIOVASCULAR CONDITIONS

PREVALENCE

In 1995 one in five (21%) Australians aged 18 years and over (2.8 million people) reported having a cardiovascular condition. The most common cardiovascular condition reported was hypertension which affected 14% of the adult population. Heart disease was reported by 4% of the population. Many of those with cardiovascular conditions had more than one type. For example, half (50%) of those with heart disease also had hypertension.

Almost all (96%) of those who reported cardiovascular conditions reported them as both a recent illness (experienced in the two weeks before interview) and a long-term condition (had lasted or was expected to last for six months or more).

When compared with the 1989-90 NHS there has been an increase in the prevalence of cardiovascular conditions. The proportion of the adult population with cardiovascular conditions increased from 17% in 1989-90 to 21% in 1995. Hypertension increased from 12% to 14%, with heart disease showing a small increase from 3.5% to 3.7%. The increases are due in part to the ageing of the Australian population. The increase may also be a reflection of heightened public awareness and improved medical diagnosis related to cardiovascular conditions. The effect of the ageing of the population can be removed by age and sex standardising the data (see Explanatory Notes, paragraphs 18 and 19). When standardised the prevalence of cardiovascular conditions increased to 18% in 1989-90 compared with 21% in 1995.

1 Adults with cardiovascular conditions(a)

Type of condition	1989-90		1995	
	'000	%	'000	%
Hypertension	1 535.1	12.3	1 932.5	14.4
Heart disease	440.1	3.5	493.5	3.7
Atherosclerosis	45.7	0.4	25.5	0.2
Stroke (and other cerebrovascular disease)	89.6	0.7	115.7	0.9
Other diseases of the circulatory system	274.8	2.2	694.8	5.2
Ill-defined signs and symptoms of heart conditions	256.2	2.1	337.5	2.5
All cardiovascular conditions(b)	2 164.7	17.4	2 795.5	20.9
All cardiovascular conditions standardised(c)	2 244.4	18.0	2 795.5	20.9

(a) Small differences occur in the classification of cardiovascular conditions between the surveys.

(b) Each person may have reported more than one type of condition and therefore components may not add to totals.

(c) Data have been age and sex standardised (see Explanatory Notes, paragraphs 18 and 19).

CARDIOVASCULAR CONDITIONS *continued*

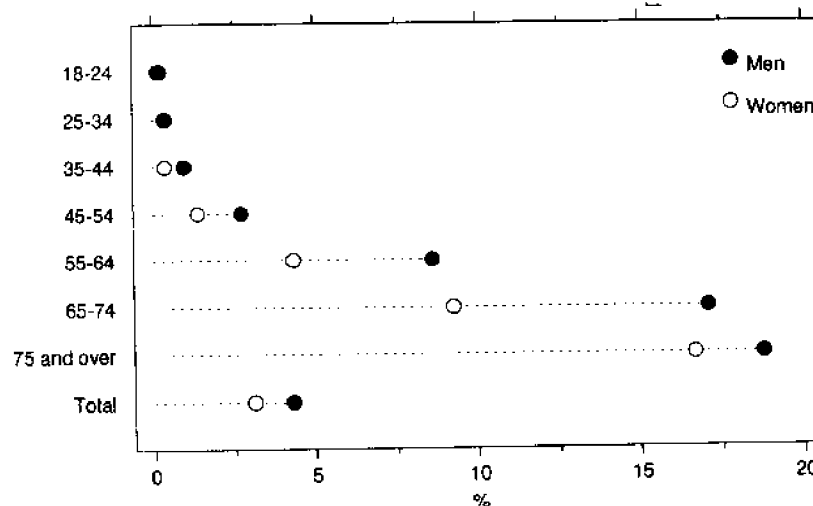
Age and sex

The prevalence of cardiovascular conditions increased with age from 4% for 18–24 year olds to 61% for those aged 75 years and over. The largest increase was reported for hypertension, from 2% in 18–24 year olds to 43% in those aged 75 or more. Other cardiovascular conditions illustrated similar but less pronounced patterns of increase.

Cardiovascular conditions were more prevalent among women (23%) than men (19%). This was partly explained by the higher proportion of women reporting hypertension (15% compared with 14%) and other cardiovascular conditions (6% compared with 4%). Another factor is the larger number of women than men in older age groups. Age standardisation of the data resulted in a narrowing of the difference in prevalence with 22% of women reporting cardiovascular conditions compared with 20% of men.

In contrast to the lower prevalence of cardiovascular conditions overall among men, a higher proportion of men reported heart disease (4% compared with 3%). The difference was especially noticeable among those aged 55–74.

2 Adults with heart disease, by age



GEOGRAPHIC LOCATION

Proportions of adults with cardiovascular conditions varied between States and Territories, with the highest prevalence recorded in Tasmania (23%) and the lowest in the Northern Territory (11%). This was due in part to the relatively young population in the Northern Territory.

After standardising for age and sex differences between the States and Territories, Tasmania and New South Wales had the highest prevalence (22%) while the Northern Territory was still the lowest (15%).

CARDIOVASCULAR CONDITIONS *continued*

3 Adults with cardiovascular conditions, by State and Territory

Type of condition	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
Hypertension	16.0	13.7	13.7	14.3	12.9	16.8	7.4	11.5	14.4
Heart disease	3.9	3.7	3.6	3.9	2.9	5.1	*0.7	2.4	3.7
All other diseases of the circulatory system(b)	6.5	5.2	5.9	6.5	5.7	6.3	*1.9	5.1	5.9
Ill-defined signs and symptoms of heart conditions	2.9	2.5	2.3	2.2	2.3	2.4	2.0	1.7	2.5
All cardiovascular conditions(c)	22.8	20.0	20.0	20.6	19.1	23.1	11.0	16.9	20.9
All cardiovascular conditions (standardised)(d)	22.3	19.8	20.5	19.5	20.1	22.3	14.6	20.6	20.9

(a) Estimates relate to predominantly urban areas only.

(b) Includes atherosclerosis, cerebrovascular disease, stroke and its after effects and other diseases of the circulatory system.

(c) Each person may have reported more than one type of condition and therefore components may not add to totals.

(d) Age and sex standardised (see Explanatory Notes, paragraphs 18 and 19).

EMPLOYMENT CHARACTERISTICS

Employment status

Labour force status was collected for persons aged 18–64 years. Overall, cardiovascular conditions were more prevalent among persons not in the labour force (24%) than unemployed and employed persons (both 11%). After age and sex standardisation, the difference was reduced to 18% of those not in the labour force compared with 15% of unemployed and 12% of employed persons.

Occupation

Of employed persons, managers and administrators had the highest prevalence of cardiovascular conditions (13.2%) followed by clerks (11.8%). The lowest prevalence of cardiovascular conditions was recorded for tradespersons (9.1%).

After age and sex standardisation of these data, plant and machine operators and drivers recorded the highest rate of cardiovascular conditions (14.2%) followed by salespersons and personal service workers (13.9%). The lowest rate of cardiovascular conditions was found for para-professionals (10.6%) followed by labourers (12.0%). The standardised prevalence rate for managers and administrators decreased to 12.4%.

BIRTHPLACE

Those born overseas had a similar prevalence of cardiovascular conditions to the Australian-born population (22% compared with 21%). The highest proportions were found in those born in Western Europe (29%) and Southern Europe (26%). The Southeast Asia born population had a particularly low prevalence rate at 12%.

Women recorded a higher prevalence of cardiovascular conditions than men in nearly all birthplaces with the largest differences observed in the Middle East, Southern Europe and Australia.

CARDIOVASCULAR CONDITIONS *continued*

BIRTHPLACE *continued*

As these comparisons are affected by the different age structures of the populations being compared, the data were age and sex standardised. In contrast to the actual prevalence rates, the standardised prevalence rate of cardiovascular conditions was slightly higher in the Australian-born population (21%) than the overseas-born population (20%). The highest standardised rate of cardiovascular conditions was in the Middle East-born population (25%) and the lowest in the New Zealand-born population (18%).

4 Adults with cardiovascular conditions, by birthplace

<i>Birthplace</i>	<i>Men</i>	<i>Women</i>	<i>Persons</i>	<i>Persons (age and sex standardised)</i>
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
Australia	18.3	22.7	20.6	21.4
All overseas born	20.7	22.9	21.8	19.7
Western Europe	27.4	29.9	28.6	20.6
Southern Europe	23.3	28.9	25.9	18.9
United Kingdom and Ireland	23.2	25.8	24.5	19.5
Africa (including North Africa)	25.7	20.2	22.9	21.3
Middle East	12.2	20.0	15.9	25.2
New Zealand	14.3	15.1	14.7	18.1
Northern America	13.7	13.8	13.7	19.6
Southeast Asia	10.7	12.5	11.7	18.6
Total	19.0	22.7	20.9	20.9

RISK FACTORS

Persons may be at risk of developing a cardiovascular condition due to the presence of related conditions such as stress, diabetes or a high level of blood cholesterol and triglycerides. They may also be at risk due to lifestyle risk factors such as smoking, lack of exercise, obesity and high alcohol consumption. As risk factors are themselves related to age and sex, in the analysis that follows, all data have been age and sex standardised to allow meaningful comparisons between persons with and without cardiovascular conditions to be made.

Overuse of alcohol has been shown to contribute to conditions such as hypertension and obesity. Standardised proportions showed that 8% of adults without a cardiovascular condition reported consuming alcohol at a high risk level. For adults with a cardiovascular condition much the same proportion (9%) consumed alcohol at a high risk level. The small difference was due mainly to those reporting hypertension where 10% reported high risk alcohol level consumption. For all other cardiovascular conditions (which include the more serious conditions), less than 6% of adults reported high risk level alcohol consumption.

Regular physical exercise has been established as instrumental in reducing the risk of a range of medical conditions including cardiovascular disease and diabetes. Standardised proportions showed that on an exercise level measure derived by the ABS, 69% of

CARDIOVASCULAR CONDITIONS *continued*

RISK FACTORS *continued*

adults without a cardiovascular condition exercised at a sedentary or low exercise level (inactive). Of adults with a cardiovascular condition a similar proportion (71%) reported that they were inactive.

Overweight and obesity are possible health risks for a range of conditions including heart disease and hypertension. Body mass index provides a measure of levels of overweight and obesity (see Explanatory Notes, paragraph 13). Standardised proportions showed that 41% of adults with a cardiovascular condition reported being overweight or obese compared with 29% of persons without a cardiovascular condition.

Smoking is seen as a health risk for many conditions including heart disease, stroke and thrombosis. Standardised proportions showed little difference in the prevalence of current smoking reported between adults with and without cardiovascular conditions (26% and 24% respectively) and between different cardiovascular conditions. There was also little difference in the prevalence of ex-smoking reported between adults with and without cardiovascular conditions (29% and 27% respectively). However, the prevalence of ex-smoking varied between different cardiovascular conditions. A higher proportion of adults with heart disease were ex-smokers compared with adults with hypertension (40% compared with 27%), reflecting that adults with serious cardiovascular conditions are more likely to have smoked at some stage in their lives and then to have given up.

Adults with a cardiovascular condition reported a slightly higher number of risk factors (lack of exercise, obesity, smoker or ex-smoker and high alcohol consumption) than those without a cardiovascular condition. Standardised proportions show 61% of adults with a cardiovascular condition reported two or more of these risk factors compared with 52% of adults without a cardiovascular condition. When interpreting risk factor data, it should be noted that persons with a cardiovascular condition may change their risk factor behaviour as a consequence of their condition (e.g. adopt a healthier lifestyle).

5 Adults, by health risk factors(a)

Risk factor	Hypertension	Heart disease	Total with cardiovascular conditions	Total without cardiovascular conditions
	%	%	%	%
High risk alcohol consumption(b)	10.4	**4.2	9.3	8.5
Inactive(c)	72.3	65.9	70.6	68.7
Overweight or obese	48.9	34.4	40.5	29.4
Smoker or ex-smoker	51.8	62.0	54.8	51.1
Smoker	25.1	22.2	25.6	24.1
Ex-smoker	26.7	39.8	29.2	26.9
Total with one or more risk factors	93.1	94.8	93.0	88.8
Total with no risk factors	6.9	5.2	7.0	11.2

(a) Age and sex standardised (see Explanatory Notes, paragraphs 18 and 19).

(b) Average daily alcohol consumption 50 ml or more for males and 25 ml or more for females.

(c) Sedentary or low exercise level.

CARDIOVASCULAR CONDITIONS *continued*

Associated conditions

Overall, the proportions of adults with a cardiovascular condition who reported diabetes or high cholesterol were higher than the proportions of persons without a cardiovascular condition reporting these medical conditions. Standardised proportions show 5% of adults with a cardiovascular condition reported diabetes and 14% reported high cholesterol, this is compared with 2% and 5% respectively for persons without a cardiovascular condition.

HEALTH-RELATED ACTIONS

Of the 2.8 million adults with a cardiovascular condition, 97% reported taking one or more health-related actions in the two weeks prior to interview. The most common health-related actions taken by them were using medication (92%) and consulting a doctor (40%). Not all health-related actions taken by adults with a cardiovascular condition were specifically for their cardiovascular condition. However, the most common health-related actions taken specifically for a cardiovascular condition were also using medication, reported by 70%, and consulting a doctor, reported by 9%.

6 Adults, by types of health-related action taken

<i>Type of action taken in two weeks prior to interview</i>	<i>Total with cardiovascular conditions</i>	<i>Total without cardiovascular conditions</i>
	%	%
Total taking action	96.8	75.4
Used medication(a)	91.7	57.7
Doctor consultation	40.0	21.2
Taken vitamins, minerals	29.4	28.7
Consulted other health professionals	17.8	14.4
Taken natural or herbal medications	12.9	10.8
Visited casualty/emergency/outpatients	4.5	2.5
Hospital day clinic visits	2.6	1.4
Hospital inpatient episode	1.7	0.7
Other action(b)	17.0	13.3
Taking no action	3.2	24.6
Total persons(c)	100.0	100.0

(a) Medications other than vitamins/minerals, and natural/herbal medications.

(b) Includes days away from work or school, other days of reduced activity, and seeing or talking to anyone else.

(c) Persons may have reported more than one action therefore components may not add to totals.

CARDIOVASCULAR CONDITIONS *continued*

HEALTH-RELATED ACTIONS *continued*

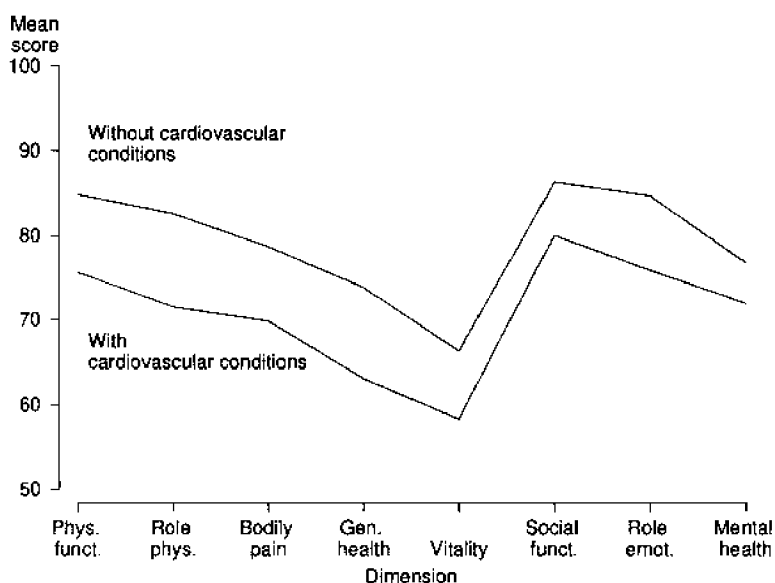
Adults with cardiovascular conditions were more likely than those without them to take a range of health-related actions, especially using medication and consulting a doctor reported by 58% and 21% respectively of adults without cardiovascular conditions.

Two thirds (67%) of adults with a cardiovascular condition took medications for heart problems/blood pressure. Other medication types used for cardiovascular conditions were pain relievers (24%) and fluid tablets/diuretics (11%).

GENERAL HEALTH AND WELL-BEING

The Short Form 36-Item Health Survey (SF-36) is used to produce a general or multi-dimensional health status profile. The SF-36 measures eight health dimensions: physical functioning, role limitations due to physical problems (role physical), bodily pain, general health, vitality, social functioning, role limitations due to emotional problems (role emotional) and mental health. The SF-36 allows comparisons to be drawn between various population groups on the eight health dimensions. The SF-36 data were age and sex standardised. A lower value in a dimension represents more limitations and problems in that dimension, with a higher score representing competence and well-being.

7 Adults, SF-36 age and sex standardised mean scores



Overall, adults with cardiovascular conditions had statistically significant lower standardised mean SF-36 scores than adults without cardiovascular conditions for all eight health dimensions ($p < 0.01$, see Explanatory Notes, paragraph 17). The largest differences were found in the physical aspects of their health such as the role limitations due to physical problems, physical functioning and general health dimensions, with the smallest differences observed in mental aspects such as the social functioning and mental health dimensions.

CARDIOVASCULAR CONDITIONS *continued*

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GENERAL HEALTH AND WELL-BEING *continued*

Adults with heart disease reported lower standardised mean SF-36 scores than those with hypertension for all eight health dimensions. The largest differences were observed in the role limitations due to physical problems and general health dimensions.

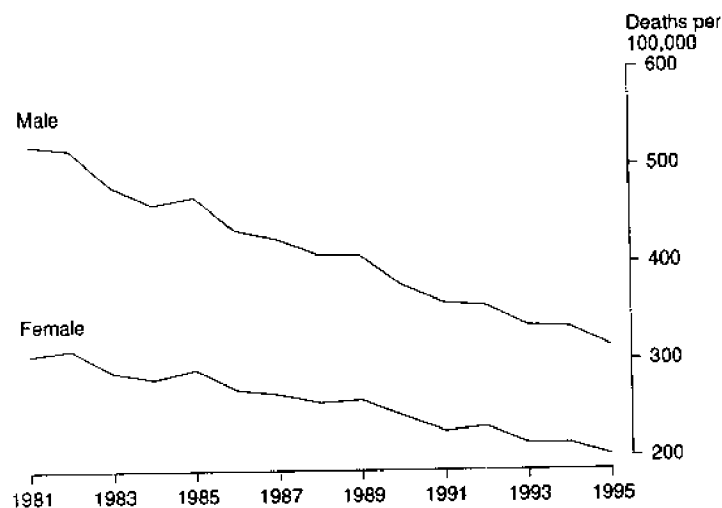
DEATHS DUE TO CARDIOVASCULAR CONDITIONS

In 1995, there were 49,726 deaths for which cardiovascular conditions were identified as the underlying cause. Death rates relate to the entire Australian population (of all ages) and the annual death rates have been age standardised to the Australian population as at 30 June 1991.

Between 1981 and 1995 the age standardised death rate for cardiovascular conditions has decreased by 37%. Male death rates have decreased from 521.0 per 100,000 male population in 1981 to 314.0 in 1995 and female death rates have decreased from 306.4 in 1981 to 201.4.

In 1995, ischaemic heart disease (a subset of the heart disease category) was the second leading cause of death overall (cancer was the first), accounting for 24% of all deaths, with cerebrovascular disease accounting for a further 10% of all deaths.

8 Death rates due to cardiovascular conditions(a)(b)



(a) Standardised death rate (see Explanatory Notes, paragraphs 18 and 19).

(b) See Explanatory Notes, paragraph 12 for International Classification of Diseases (ICD) codes.

EXPLANATORY NOTES

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INTRODUCTION

1 The 1995 National Health Survey is the second in a series of regular five-yearly population surveys designed to obtain national benchmark information on a range of health-related issues and to enable the monitoring of trends in health over time. The 1995 survey was conducted throughout the 12 month period February 1995 to January 1996.

2 Topics covered in the survey included recent illness and long-term conditions; self-assessed health status and general health and well-being; use of health services; use of medications and vitamins/minerals; days away from work and school and other days of reduced activity; smoking, alcohol consumption and exercise; height and weight; sun protection; breastfeeding; supplementary women's health issues; and injury/accidents. An extensive range of demographic and socioeconomic information was also obtained.

RELIABILITY OF ESTIMATES

3 The estimates contained in this publication are based on information obtained from residents of a sample of 23,800 private dwellings, selected at random using a stratified multi-stage area sample. In order to maximise the capacity of the survey, some sections were administered to half of the sample only. For output, weighted estimates for all items, regardless of the particular sample in which they were included, relate to the total population of appropriate age and/or sex. Comprehensive details of the concepts, methodologies and procedures used in the NHS are provided in *National Health Survey: Users' Guide, 1995* (Cat. no. 4363.0).

4 Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings they are subject to sampling variability; that is they may differ from the figures that would have been produced if all dwellings had been included in the survey.

5 One measure of the likely difference is given by the standard error, which indicates the extent to which estimates might have varied by chance because only a sample of dwellings was included.

6 Another measure of the likely difference is the relative standard error, which is obtained by expressing the standard error as a percentage of the estimate. In this publication, only estimates with relative standard errors less than 25% are considered sufficiently reliable for most purposes. However, estimates with relative standard errors of 25% or more have been included and are preceded by one or two asterisks (e.g. *4.3) as explained in Notes on page 2 and should be used with caution. Tables of standard errors are given in *National Health Survey: Summary of Results, 1995* (Cat. no. 4364.0).

7 Information reported in the NHS is as reported by respondents, and hence may differ from that which might be obtained from other sources or via other methodologies. Reported information on medical conditions was not medically verified, and was not necessarily based on diagnoses by a medical practitioner.

8 Conditions which have a considerable effect on people are likely to be better reported than those which have little effect. Some people may be unaware of conditions which have not been diagnosed. There may also be instances of under-reporting as a consequence of respondents being unwilling to talk about a particular condition at an interview. Results of previous surveys of alcohol and tobacco consumption suggest a tendency for respondents to under-report actual consumption levels.

EXPLANATORY NOTES *continued*

COMPARABILITY BETWEEN SURVEYS

9 Data for cardiovascular conditions, from the 1989-90 and the 1995 NHS are not directly comparable. This is partially the result of changes introduced for the 1995 survey which included the revision of the classification categories for various cardiovascular conditions (which may have affected the counts of illness conditions) and inclusion of new questions on specific conditions.

10 Other factors which may have contributed to increased reporting of conditions in the 1995 survey include increased testing and preventative measures and a higher public awareness of particular conditions (e.g. high cholesterol, hypertension and allergic conditions). For all these reasons, care should be taken in interpreting differences between the two surveys in the prevalence of conditions. For further details see *National Health Survey: Users' Guide* (Cat. no. 4363.0).

SELECTED VARIABLES

11 Most of the variables presented in this publication are either self-explanatory or explicated in the text. However the variables cardiovascular conditions and body mass index require more detailed explanation.

Cardiovascular conditions

12 The design of the NHS enabled medical conditions to be reported as both a recent illness (experienced in the two weeks before interview) and a long-term condition (had lasted or was expected to last for six months or more). All conditions were coded to a single classification based on the International Classification of Diseases, 9th Revision (ICD9). The classification of cardiovascular conditions as shown below is broadly comparable to that used in the 1989-90 NHS. For further details on the classification of medical conditions see *National Health Survey: Users' Guide* (Cat. no. 4363.0).

Classification of cardiovascular conditions

Condition	NHS code	ICD code
Hypertension	72	401-405
Heart disease	282	391, 393-398, 410-426, 428
Atherosclerosis	15	440
Cerebrovascular disease including stroke and its after effects	219, 119	430-438
Other diseases of the circulatory system	19	390,441-448,451-453, 457-459
Ill-defined signs and symptoms of heart conditions	182	427, 429

Body mass index

13 Based on the height and weight reported by respondents, body mass was derived using Quetelet's body mass index which is calculated as weight divided by the square of height. Scores were grouped into four categories, defined by the National Health and Medical Research Council as shown below.

Category	Body mass index score kg/m ²
Underweight	< 20
Acceptable weight	20-25
Overweight	>25-30
Obese	>30

SF-36

14 The SF-36 (Short Form, 36 questions) is a survey questionnaire which provides information about general health and well-being through indicators across eight dimensions of health and well-being: physical functioning, role limitations due to physical problems, bodily pain, general health perceptions, vitality, social functioning, role limitations due to emotional problems, and mental health, as well as a separate single-item dimension called health transition.

15 With the exception of the health transition item, each question contributes, in association with other questions, to a score derived for one of the eight dimensions. Scores for all dimensions (except health transition) are expressed on a scale of 0-100, where a higher score indicates a better state of health or well-being

16 For output, the dimensions are presented in the order as listed above: that is from dimensions most strongly related to the physical to those most strongly related to mental health and well-being. Mean values for different SF-36 dimensions cannot be compared, because each dimension is created in a different way and is independent of other dimensions: mean values for the same dimension for different population groups can be compared. Although the dimensions are independent of each other, for graphical presentation the points are joined to form a line graph. This line represents the score profile for the particular population group. It is important to note that points on the same line should not be compared, and the points do not form a trend. Instead comparison should be made between one line which represents the SF-36 scale profile of one population and another line which represents the profile of a different population.

SF-36 SIGNIFICANCE TESTING

17 The significance test was based on a z score for the difference between means for the group with cardiovascular conditions and the group without cardiovascular conditions. The difference in mean scores was significant for all eight scales with all p-values less than 0.01.

EXPLANATORY NOTES *continued*

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STANDARDISATION

18 Standardisation is a technique used when comparing estimates for populations which have different structures. Where indicated in the text and tables in this publication, prevalence rates for certain conditions have been age and sex standardised.

19 These standardised rates show the prevalence rates which would occur in different populations if they had the same age and sex composition as the standard population. Unless otherwise specified, the standard population used in this publication is the estimated total Australian population used in the 1995 National Health Survey.

ACKNOWLEDGEMENT

20 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.



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The National Health Survey offers an extensive range of information on the population characteristics, health status, health-related actions, private health insurance and health-related aspects of lifestyle reported by Australians.

We can supply you with your requested information in a variety of formats to best suit your needs:

- printed tables
- spreadsheets in a range of formats
- via E-mail
- floppy disk

The ABS's publication *National Health Survey: Data Reference Package, 1995* (Cat. no. 4363.0.001) contains a listing of output data items, unpublished data tables available on request and other material designed to assist users in making best use of the survey results.

Telephone the Health Section about any inquiries you may have about information from the National Health Survey on **1800 060 050**.

Other ABS information is also available

We can mix and match from our extensive ABS-wide data holdings to give a more comprehensive statistical picture for your policy, planning and research needs.

Contact one of our consultants to discuss your needs or to inquire about the complete range of ABS products and services. They will provide you with the best possible option to solve your data requests and a written quote, clearly setting out all the costs and time frames. Please see the back cover for your nearest contact details. The ABS internet site at <http://www.abs.gov.au> can also provide you with up-to-date statistical facts.

RELATED STATISTICS

The ABS publishes a wide range of statistics on health.

	<i>Publication title</i>	<i>Catalogue number</i>	<i>Release date</i>
RELEASED	■ National Health Survey: Cardiovascular and Related Conditions, Australia, 1989-90	4372.0	Nov 1991
	■ Causes of Death, Australia, 1995	3303.0	Nov 1996
	■ National Health Survey: Users' Guide, 1995	4363.0	Dec 1996
	■ National Health Survey: Summary of Results, 1995	4364.0	Aug 1997
	■ National Health Survey: Diabetes, Australia, 1995	4371.0	Oct 1997
	■ National Health Survey: SF36 Population Norms, Australia, 1995	4399.0	Oct 1997
	■ Causes of Death, Australia, 1996	3303.0	Oct 1997
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Produced by the Australian Bureau of Statistics
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Recommended retail price: \$15.00



2437200001953
ISBN 0 642 23170 2