



# **WOMEN'S HEALTH**

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## PREFACE

This publication is a comprehensive social report describing a range of issues relating to the health of Australian women.

In 1989 the Government released the National Women's Health Policy after extensive consultation with organisations, service providers and individuals. The goal of the policy is 'to improve the health and well-being of all women in Australia, with a focus on those most at risk, and to encourage the health system to be more responsive to the needs of women'.

One of the principles underlying this policy is that 'Women's health policy must be based on accurate data...'. Although many data gaps still exist and data are at times piecemeal and not available on a national basis, progress has occurred over the last decade in achieving more comprehensive data in relation to the health of Australian women. This publication contains an extensive range of such data from ABS and other sources.

*Women's Health* was researched and written by members of the Research and Development Unit, Health Section, ABS Canberra. It was edited by Mary Patton and Maureen Millar.

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## **SYMBOLS AND GENERAL INFORMATION**

### **Symbols**

The following symbols, where shown in columns of figures or elsewhere in tables, mean:

- \* subject to relative standard error of between 25 and 50 per cent
- \*\* nil or subject to sampling variability too high for most practical uses
- .. not applicable
- nil or rounded to zero (including null cells)
- n.a. not available
- nec not elsewhere classified
- nos not otherwise specified

### **Abbreviations**

- kj — kilojoules
- mls — millilitres
- mmol/L — millimols per litre

### **Other usages**

Where figures have been rounded, discrepancies may occur between the sums of the component items and totals.

### **General information**

General inquiries about the content and interpretation of statistics in this publication should be addressed to Principal Research Officer, Health Section, ABS, PO Box 10 Belconnen, ACT 2616, telephone (06) 252 6429.

Inquiries regarding the availability of more recent data from the ABS sources quoted in this publication should be addressed to Information Services in your nearest ABS office.

A complete list of ABS publications produced in Canberra and each of the State Offices is contained in the ABS Catalogue of Publications and Products (1101.0) which is available from any ABS office.

In many cases, the ABS can also provide information which is not published or which is historical or compiled from a variety of published and unpublished sources. Information of this kind may be obtained through the Information Consultancy Service. This information may be made available in one or more of the following forms: consultancy reports, microfiche, floppy disk, magnetic tape, computer printout or photocopy. Charges are generally made for such information. Inquiries may be made by contacting Information Services in your nearest ABS office.



## INTRODUCTION

There has been an increased emphasis on women's health over the last three decades. The document "National Policy on Women's Health: A Framework For Change"<sup>1</sup> places the women's health movement in Australia within the broader women's movement of the 1960s and 70s. It emerged from a historical focus on issues such as family planning and maternal and child health which broadened to include the wide spectrum of issues which affect women's health.

A number of factors underpin the value of a particular focus on women's health. These are described in "National Policy on Women's Health: A Framework For Change"<sup>1</sup>. They include the following:

- Women live longer than men and experience more disability due to their longer life expectancy.
- Women consume more health services than men generally.
- People in low socio-economic groups which often incorporate lone parents, Aboriginal and Torres Strait Islander people, people with little education and/or low incomes, and people from non English speaking backgrounds frequently have poorer health status than the rest of the population. Women make up a significant proportion of people in socio-economically disadvantaged groups such as these.
- Women's reproductive role necessitates special health requirements. The issue of women's health is, however, recognised as being much broader than this one topic.
- There is concern that health providers who are predominantly male (Medical specialists: 84%, GPs: 75%) may be less able to empathise with the priority health issues of women consumers.
- Women are not well represented in decision making positions which affect the way the health care system operates.

The United Nations decade for women ran from 1976 to 1985 and addressed issues of concern for women including health. At the end of the decade a health conference titled "Women's Health in a Changing Society" was held in Adelaide. One of the major resolutions coming out of that conference was that a National Women's Health Policy should be developed. In November 1985 the Government gave an undertaking to develop such a policy to provide a framework and planned strategy to improve the health of women in Australia.

In June 1987, the Minister for Community Services and Health appointed a special advisor to co-ordinate the development of the policy. In October of that year the Australian Health Ministers Advisory Council (AHMAC) established a subcommittee on women and health which worked in conjunction with the special advisor in the development of the policy.

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<sup>1</sup> Commonwealth Department of Community Services and Health. *National Policy on Women's Health: A Framework for Change, A Discussion Paper for Community Comment and Response*, Australian Government Publishing Service, Canberra, February 1988.

After extensive consultation with organisations, community groups, service providers and individuals, a paper titled "National Policy on Women's Health: A Framework For Change — A Discussion Paper for Community Comment and Response"<sup>1</sup> was released in February 1988. This document led in the early part of 1989 to the development of the final National Women's Health Policy. This policy was approved in principle by the Commonwealth, State and Territory Health Ministers at the meeting of the Australian Health Ministers Conference in March 1989 and launched by the then Prime Minister Mr R. J. L. Hawke in April 1989.

The policy identified seven major priority issues in relation to women's health. These were:

- reproductive health and sexuality;
- health of ageing women;
- emotional and mental health;
- violence against women;
- occupational health and safety;
- health needs of women as carers;
- health effects of sex role stereotyping on women.

The goal of this policy was "to improve the health and well-being of all women in Australia, with a focus on those most at risk, and to encourage the health system to be responsive to the needs of women".

This ABS publication is a compendium of primarily national data currently available in Australia. Information is presented in respect of each of the seven major priority issues identified where data are available and of reasonable quality. Reproductive health and sexuality is covered in Chapter 6 "Reproduction and associated health issues" and Chapter 10 "Awareness and use of preventative health". Health of ageing women is addressed in Chapter 7 "Health of selected groups - 7.4 Older women". It is also addressed throughout the publication where data are cross-classified by age, such as Chapter 2 "Mortality". Emotional and mental health is covered in Chapter 3 "Health Status". Violence against women is in the chapter of the same name, Chapter 9. Occupational health and safety is covered in Chapter 8 "Illness and health by occupation". Health needs of women as carers is covered in Chapter 7 "Health of selected groups" under section 7.3 "Women with disabilities" and 7.4 "Older women". Health effects of sex role stereotyping on women is covered in Chapter 3 "Health status", Chapter 5 "Lifestyle" and Chapter 8 "Illness and health by occupation".

Women's health is, however, treated as a broader issue than just the priority areas identified in the National Women's Health Policy. Account has also been taken of the "Goals and Targets for Australia's Health in the Year 2000 and Beyond"<sup>2</sup> in selecting material for inclusion, particularly where specific goals are targeted at women.

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<sup>1</sup> Commonwealth Department of Community Services and Health, *National Policy on Women's Health: A Framework for Change, A Discussion Paper for Community Comment and Response*, Australian Government Publishing Service, Canberra, February 1988.

<sup>2</sup> Report prepared for the Commonwealth Department of Health, Housing and Community Services by: Professor Don Nutbeam, Ms Marilyn Wise, Dr Adrian Bauman, Ms Elizabeth Harris & Professor Stephen Leeder, Department of Public Health, University of Sydney, *Goals and Targets for Australia's Health in the Year 2000 and Beyond*, Australian Government Publishing Service, Canberra, 1993.

The report commences with a chapter on the demographic and social characteristics of women. This has been included as a large number of factors influence women's health including cultural background, income, marital status, education, age and family structure. Where possible and where particular points appear pertinent, health data have been cross-classified with these characteristics in the main body of the report where various aspects of women's health are addressed. Where it appeared relevant to give a comparison between women's and men's health, this has been presented.

Health topics covered in the publication include life expectancy and mortality; health status which details recent and long term illness conditions and mental health; health actions covering medical and dental consultations, hospital episodes, and days away from work or school; lifestyle detailing information on risk factors such as alcohol and tobacco consumption, diet and exercise; reproduction and associated issues; health of selected groups comprising Aboriginal and Torres Strait Islander women, overseas born women, women with disabilities and older women; illness and health by occupation; violence against women; preventative health covering pap smears, breast examinations and rubella immunisation; health labour force; health expenditure on women and private health insurance coverage. Data presented come from a number of sources, not solely from the Australian Bureau of Statistics, including the Department of Human Services and Health, the Australian Institute of Health and Welfare and Worksafe Australia.

Although the publication is as comprehensive as current data availability will allow, women's health is a topic which is considerably more complex than this publication is able to convey. In addition, there are gaps and deficiencies in the existing data which are presented at Appendix A. The Commonwealth Government has committed \$3.5 million to a major longitudinal study into women's health to be conducted over the next four years. This study is being designed to provide data to fill some of the gaps which currently exist and help clarify issues where existing data are deficient.



# GRAPHIC SOCIAL CHARACTERISTICS

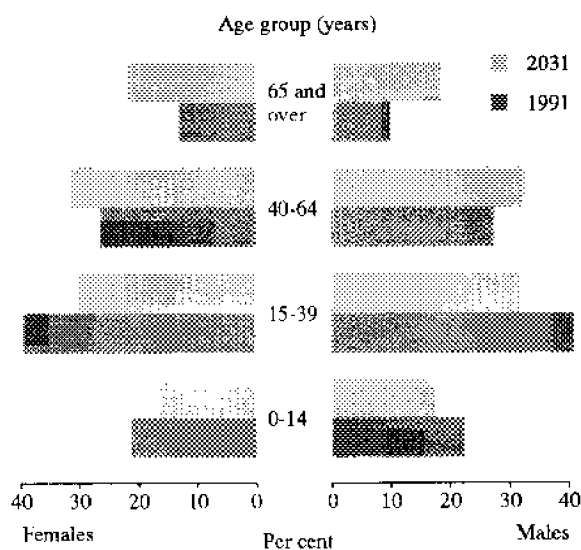
## DEMOGRAPHIC AND SOCIAL CHARACTERISTICS

### Population

At the 1991 Census, the resident population of Australia was 16,850,540. Just over half (50.4%) were females (8,487,725).

More than one in five females (21.6%) and males (23.1%) were less than 15 years of age. There were slightly more males than females in this age group. It is projected that by the year 2031 a smaller proportion of both females and males will be aged less than 15 years (16.5% of females and 17.5% of males). By that time, the Australian population is projected to reach 26.0 million.

CHART 1.1 PROJECTED RESIDENT POPULATION OF AUSTRALIA, 1991 AND 2031



Source: *Projections of the Populations of Australia, States and Territories, 1989 to 2031 (3222.0)*

The population of Australia has been ageing since the early 1970s. This trend is projected to continue with the number of persons aged over 65 years projected to increase, and the number of persons aged under 65 years projected to decrease by the year 2031. The population of persons of working age (15–64 years) is projected to decrease from 66.3 per cent to 62.9 per cent of the total population.

At the 1991 Census 12.9 per cent of females were aged 65 years or older compared with 9.8 per cent of males. Females have a greater life expectancy than males and will account for a larger proportion of the aged population in the coming years if such factors as fertility and migration remain constant. By the year 2031, it is projected that 21.8 per cent of the female population and 18.3 per cent of the male population will be aged 65 years or older. This is projected to equate to 83.2 males per 100 females in the over 65 years age group.

### Aboriginal and Torres Strait Islanders

Aboriginal and Torres Strait Islander females accounted for 1.6 per cent of the female Australian population at the 1991 Census. Of all Aboriginal and Torres Strait Islanders 50.4 per cent were female. While the largest proportion (41.5%) of Aboriginal and Torres Strait Islander females lived in other urban

centres (a population cluster of between 1,000 and 99,999), 27.2 per cent lived in cities with a population of more than 100,000, 17.7 per cent lived in other rural areas (population of less than 200) and the remaining 13.5 per cent lived in rural localities (population between 200 and 999).

Overseas born

At the 1991 Census, 22.3 per cent (3.76 million) of the Australian population were born overseas. Of those persons born overseas 49.5 per cent were females. Females from the United Kingdom and Ireland accounted for 31.4 per cent of all overseas born females in Australia. Table 1.1 gives the origins of the largest groups of overseas born females and males.

**TABLE 1.1 OVERSEAS BORN PEOPLE: COUNTRY OF BIRTH BY SEX, AUSTRALIA, 1991**

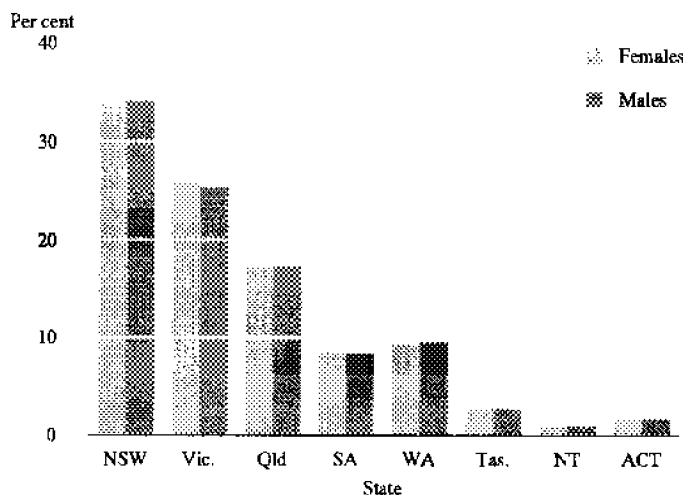
Country of birth	Females		Males	
	Number	Per cent	Number	Per cent
United Kingdom and Ireland	583,325	31.4	587,661	31.0
New Zealand	135,927	7.3	139,918	7.4
Italy	118,610	6.4	136,314	7.2
Yugoslavia	75,245	4.0	85,893	4.5
Greece	66,555	3.6	69,580	3.7
Germany	58,621	3.2	56,602	3.0
Vietnam	58,317	3.1	63,987	3.4
Netherlands	44,974	2.4	50,735	2.7
Malaysia	37,608	2.0	34,851	1.8
China	37,245	2.0	41,645	2.2
Lebanon	32,765	1.8	36,183	1.9
Other	609,188	32.8	593,805	31.3
<b>Total</b>	<b>1,858,380</b>	<b>100.0</b>	<b>1,897,174</b>	<b>100.0</b>

Source: 1991 Census

State

In 1991, almost 60 per cent of females lived in either New South Wales (34.1%) or Victoria (25.7%). The proportion of females living in the remaining States and Territories were Queensland 17.1 per cent, Western Australia 9.3 per cent, South Australia 8.5 per cent, Tasmania 2.7 per cent, Australian Capital Territory 1.7 per cent and Northern Territory 0.9 per cent (see Chart 1.2). Numerically, there were more females than males living in all States except Western Australia and the Northern Territory.

**CHART 1.2 POPULATION BY STATE AND SEX, AUSTRALIA, 1991**



Source: Australian Demographic Statistics, December Quarter 1992 (3101.0)

## Rural/urban proportions

At the 1991 Census, 63.5 per cent of Australian females lived in capital cities, with 21.1 per cent of all females living in Sydney and 18.2 per cent in Melbourne. Historically, males have outnumbered females by substantial margins in rural areas.

For example, in rural areas, a ratio of 121 males for every 100 females was recorded at the 1954 Census. Since then, however, the proportion of males has steadily declined and in 1991 the ratio was 109 males per 100 females in rural areas compared with 97 males per 100 females in urban areas.

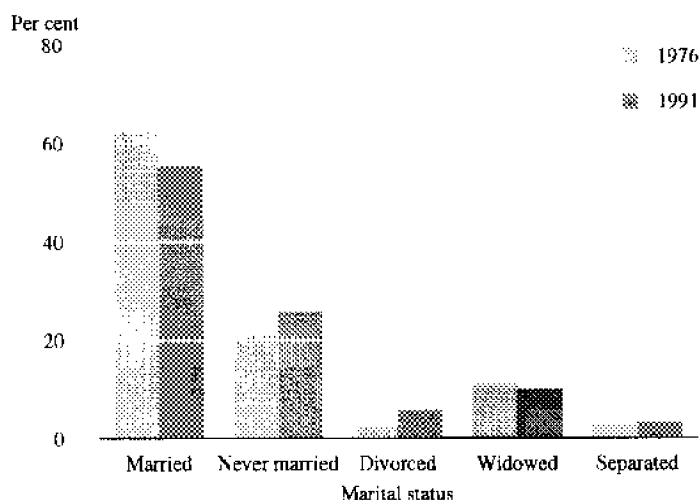
## Lifecycle/families

## Marital status

In 1991, 55.4 per cent of females aged 15 years or more were married which was a decrease from 1976 when 62.6 per cent of women in this age group were married. There were higher proportions of women in the never married, divorced and separated categories in 1991 than in 1976. In 1991, 25.8 per cent of women had never been married compared with 21.1 per cent in 1976. Only 2.5 per cent of women aged 15 years and older were divorced in 1976, compared with 5.8 per cent in 1991. Widowed women accounted for 10.1 per cent of females aged 15 years and over in 1991 which was a decrease from 1976 (11.1%) (see Chart 1.3).

Similar trends were evident in the marital status of males between 1976 and 1991. The most notable difference during this time period was the much higher level of widowhood for females (10.1%) as opposed to males (2.5%). This difference reflects the differing life expectancies of females and males.

CHART 1.3 FEMALES: MARITAL STATUS, AUSTRALIA, 1976 AND 1991



Source: 1976 Census: Population and Dwellings: Summary Tables (2417.0). 1991 Census

## Divorce

There were 45,630 divorces granted in 1991 which was a 7 per cent increase from 1990 (42,635). Almost half of these occurred within the first ten years of marriage. One in five divorces occur within the first five years of marriage.

The largest increase in the divorce rate (per 1,000 married males and females) between 1990 and 1991 occurred in the under 25 years age group with the rate for females increasing from 18.3 to 22.9 and the rate for males increasing from 12.9 to 16.6. In 1991 the divorce rate for females aged under 25 years was, for the first time, higher than for females aged 25–29 years (21.4).



The median age at divorce in 1991 was 35.5 years for females and 38.4 years for males. The median duration between marriage and separation was 7.4 years. A higher proportion of males (16.3%) had been previously divorced than females (15.4%).

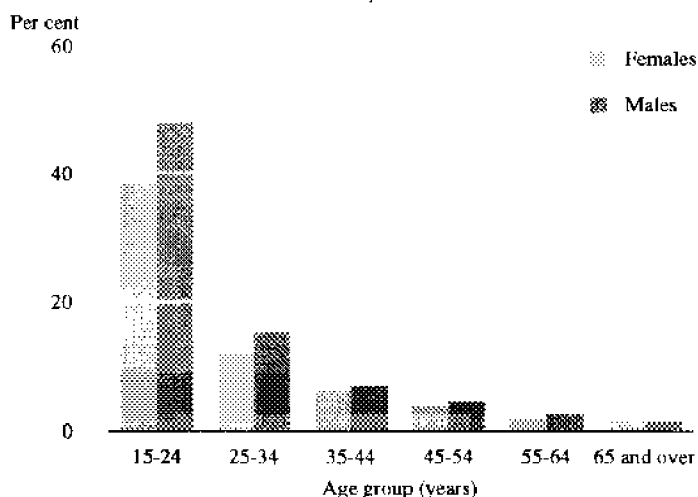
There were 46,697 children who were dependents of persons divorcing in 1991. Of all divorces in 1991 54.2 per cent involved children compared with 55.6 per cent in 1990 and 59.7 per cent in 1986.

#### *De facto relationships*

The number of de facto relationships in Australia is increasing. At the 1991 Census, 8.2 per cent of all couple families were based on de facto relationships, compared with 5.7 per cent of all couple families at the 1986 Census. The proportion of de facto couple families varied between States and Territories. In 1991, the Northern Territory recorded the highest (18.4%) and Victoria the lowest (6.7%).

De facto relationships were more common in younger age groups. Of all people who reported that they were in de facto relationships, 24.0 per cent were under 25 years of age and 62.8 per cent were less than 35 years old. In partnerships where the female was aged less than 25 years, 2 in 5 were de facto (see Chart 1.4).

**CHART 1.4 PERSONS LIVING WITH A PARTNER: PROPORTION LIVING IN A DE FACTO RELATIONSHIP BY AGE AND SEX, AUSTRALIA, 1991**



Source: 1991 Census

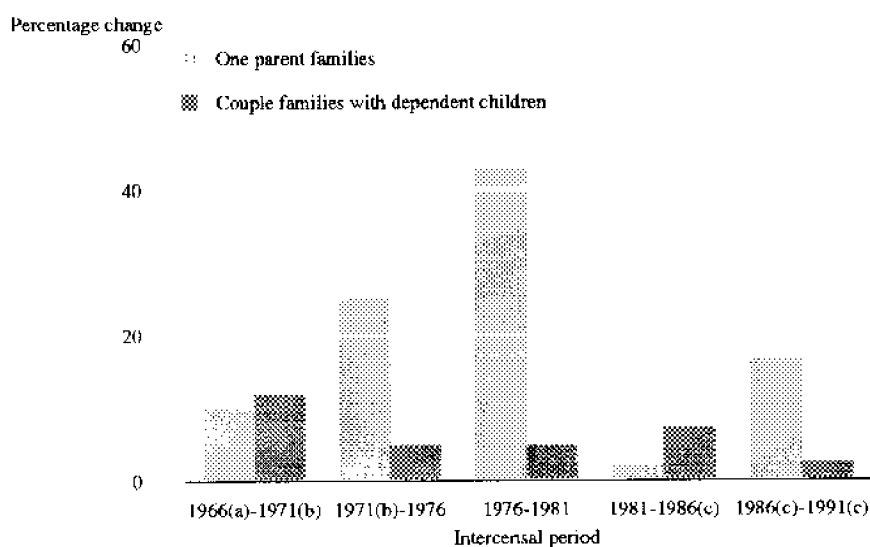
#### *One parent families*

In 1991, 16.5 per cent (369,704) of families with dependent children were one parent families. Of these one parent families, 82.8 per cent were headed by a female.

A lower proportion of sole parents had responsibility for children aged 0-4 years (29.5%) than couples with dependent children (41.7%).

Since 1966, the number of one parent families has more than doubled, with the largest increase between 1976 and 1981 (43.2%) (see Chart 1.5).

CHART 1.5 ONE PARENT FAMILIES AND COUPLE FAMILIES WITH DEPENDENT CHILDREN: PERCENTAGE CHANGE BETWEEN CENSUSES, AUSTRALIA, 1966-91



(a) Excludes Aboriginal people of more than half-descent except where they were counted in a dwelling in which non-Aboriginal or half-descent Aboriginal people were also counted. (b) Data are from a 10 per cent sample file and may differ from total counts. (c) In the 1986 and 1991 Censuses, household and family structure was based on the number and relationship of the people usually resident in the household, rather than people present in the dwelling on census night, as in previous censuses. This has affected the comparability of the 1986 and 1991 figures with figures from previous censuses.

Source: *Census 86 — Australia's One Parent Families* (2511.0), 1991 Census

## Education

In February 1993, 43.2 per cent (5,322,100) of the total estimated civilian population aged 15–69 years (12,305,600) had post school qualifications<sup>(a)</sup>. Of all persons with a post school qualification 43.6 per cent were females. The proportion of females aged 15–69 years with a post school qualification was 37.9 per cent.

Of the females who had post school qualifications 69.0 per cent had a certificate or diploma, 22.5 per cent had a degree and 7.4 per cent had a trade qualification.

In February 1993, 8.5 per cent of females and 11.1 per cent of males aged 15–69 years had a degree. Of females aged 25–34 years 13.0 per cent had a degree compared with 2.9 per cent of 55–69 year olds. The figures for males in the same age groups were 13.5 per cent and 7.7 per cent respectively.

## Employment

In February 1993, the estimated civilian labour force of Australia was 8,658,900, of whom 41.8 per cent were women (3,617,500). Of the civilian female population aged 15–64 years, 61.7 per cent were in the civilian labour force<sup>(b)</sup>, compared with 83.9 per cent of the civilian male population in the same age group.

Part time workers accounted for 41.2 per cent of employed females in the civilian labour force compared with 9.2 per cent of males.

Of people in the civilian labour force in February 1993 31.3 per cent were either a husband or wife with children aged 14 years or less (19.8% were husbands and 11.5% were wives). Women in this category represented 27.6 per cent of all women in the civilian labour force. Sole parents with

(a) These figures are based on the highest educational qualification of the respondent. (b) A person is considered to be 'in the labour force' if she or he was employed, or was unemployed but was available for work and had actively looked for work in the previous four weeks.

children aged 14 years or less accounted for 2.1 per cent of the estimated civilian labour force. Of these sole parents, 86.5 per cent were female.

A survey of women's employment patterns conducted in South Australia in November 1992 found that 53.5 per cent of women aged 18–59 years who were responsible for children aged under 12 years were employed. Women born in Australia were more likely to be employed (65.6%) than women born in non-English speaking countries (50.5%). Of women with a Bachelor degree or higher 82.1 per cent were employed. Of women who did not complete secondary school 53.5 per cent were employed.

Of those women employed at some time since 1982 54.7 per cent had a break of three months or more from employment in that period and 17.8 per cent had more than one break. Of women whose most recent change in employment conditions was a break from employment, the main reason for taking this break was either for the birth of a child or caring for children or other persons (41.0%). In November 1992, 76.6 per cent of women taking their most recent break stopped work, resigned, retired, were retrenched or were dismissed and 10.6 per cent took maternity leave.

In February 1993, the majority of employed women were employed as Clerks (30.6%), or Salespersons and personal service workers (24.2%). Of employed women, 29.2 per cent worked in Community services, 22.9 per cent in Wholesale and retail trade and 12.6 per cent in Finance, property and business services (see Table 1.2).

As at February 1993 the only industries which employed more females than males were Community services (65.9% were female) and Recreation, personal and other services (55.5% were female).

**TABLE 1.2 EMPLOYED PERSONS: INDUSTRY BY SEX, AUSTRALIA, FEBRUARY 1993**  
(Per cent)

<i>Industry</i>	<i>Industry distribution</i>		<i>Sex distribution</i>	
	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>
Agriculture, forestry, fishing and hunting	3.9	6.6	30.2	69.8
Mining	0.3	1.7	10.8	89.2
Manufacturing	9.5	18.2	27.6	72.4
Electricity, gas and water	0.3	2.0	10.3	89.6
Construction	2.3	10.6	13.5	86.5
Wholesale and retail trade	22.9	19.9	45.6	54.4
Transport and storage	2.5	6.8	21.1	78.9
Communication	1.0	1.8	29.7	70.3
Finance, property and business services	12.6	10.0	47.8	52.2
Public administration and defence	4.9	5.2	40.6	59.4
Community services	29.2	11.0	65.9	34.1
Recreation, personal and other services	10.5	6.2	55.5	44.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>42.1</b>	<b>57.9</b>

*Source: The Labour Force, Australia, February 1993 (6203.0)*

In February 1993, Tasmania recorded the highest unemployment rate for females (11.4%), followed by South Australia and New South Wales (11.3%). Tasmania also had the highest unemployment rate for males (13.7%), followed by Victoria (13.4%). The Australian Capital Territory recorded the lowest unemployment rate for both females and males (9.7% and 8.0% respectively).

## Income

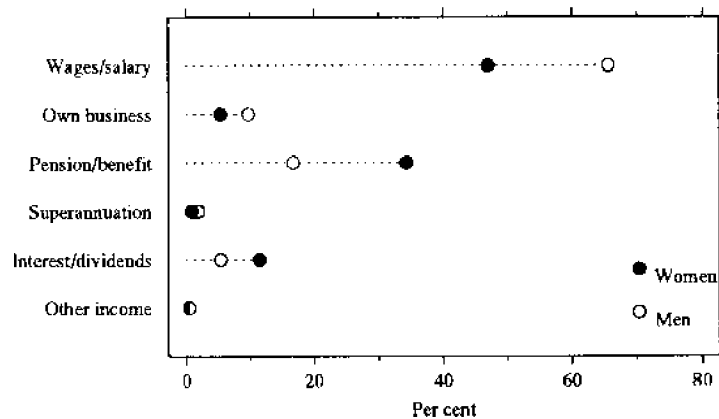
In February 1993, average weekly ordinary time earnings<sup>(a)</sup> for full-time adult<sup>(b)</sup> females was \$530.60, compared with \$628.60 for adult males. In the year from February 1992, average weekly ordinary time earnings of full-time adult females increased by 1.3 per cent compared with 0.6 per cent for males.

In February 1993, the average weekly ordinary time earnings of adult females employed in the public sector was \$599.10 compared with \$489.10 in the private sector. For adult males the figures were \$665.50 and \$611.30 respectively.

In the 12 months from February 1992, the average weekly ordinary time earnings for full-time females in the private sector rose 1.1 per cent while equivalent male earnings rose 0.2 per cent. In the public sector, average weekly ordinary time earnings for full-time females rose 2.2 per cent while the equivalent male earnings rose 1.6 per cent.

In 1989–90, 59.1 per cent of women received some income from government pensions or benefits (including Family Allowance), compared with 24 per cent of men. For 34.4 per cent of women, government pensions or benefits were the main source of income, compared with 16.7 per cent of men (see Chart 1.6). The average annual income for these women was \$6,000, less than half of the overall average for women of \$14,000 a year.

CHART 1.6 INCOME RECIPIENTS AGED 15 YEARS AND OVER:  
MAIN SOURCE OF INCOME, AUSTRALIA, 1989-90

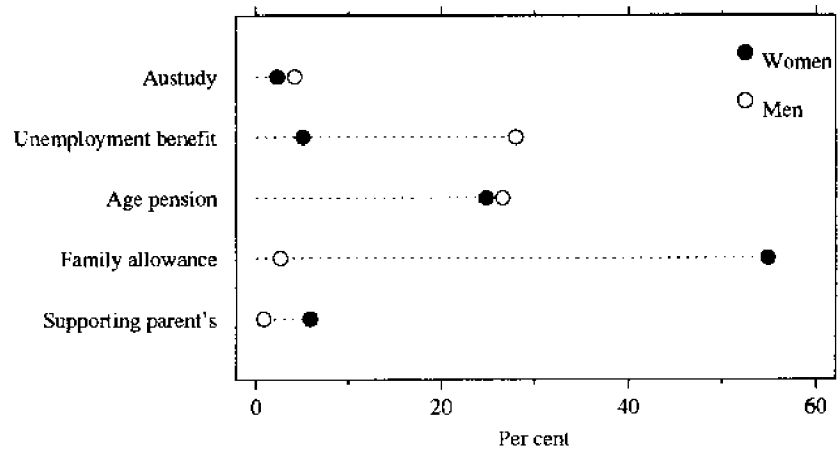


Source: *Women in Australia* (4113.0)

Women with children and older women were the most likely to receive cash benefits from the government. Of those women who received cash benefits from the government in 1989–90, 54.9 per cent received the Family Allowance, and 24.8 per cent received the Age Pension.

(a) Average weekly earnings statistics represent average gross (before tax) earnings of employees and do not relate to average award rates nor to the earnings of the average person.  
(b) Adult employees are those employees 21 years of age or older and those employees who, although under 21, are paid at full adult rate for their occupation.

CHART 1.7 PERSONS WHO RECEIVED GOVERNMENT PENSIONS/BENEFITS:  
PROPORTION RECEIVING SELECTED PENSIONS/BENEFITS, AUSTRALIA,  
1989-90



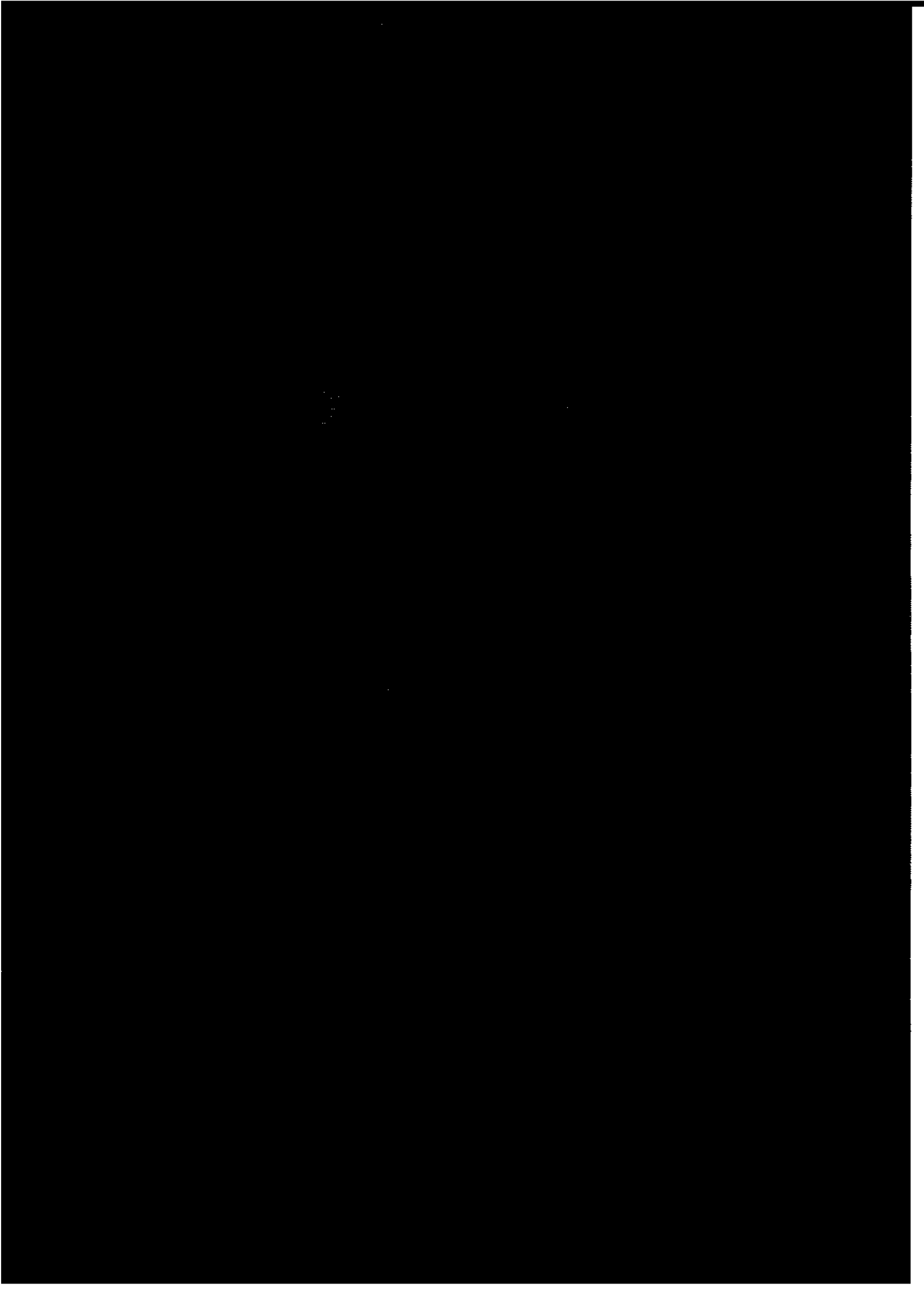
Source: *Women in Australia* (4113.0)

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## **MORTALITY**

### **Main findings**

- Life expectancy at birth for Australian females has risen steadily over the last one hundred years, from 50.8 years during the period 1881–91 to 80.9 years in 1993, with a temporary plateau in the 1960s.
- Life expectancy for women at a particular age has always been higher than that of men at the same age. However, the difference at age zero between the two sexes has narrowed to 5.9 years, having peaked at 7.1 years during the period 1980–82.
- An Australian female at birth is expected to live for almost 81 years according to the projected death rates for 1996, and to 84 years according to the rates for 2031.
- Ischaemic heart disease, malignant neoplasms (cancer) and cerebrovascular disease (stroke) have been the major causes of death of Australian women over the last two decades, consistently accounting for three fifths of all deaths during this time.
- Age standardised death rates for ischaemic heart disease and cerebrovascular disease for both sexes have decreased markedly during the period 1970 to 1993, while those for malignant neoplasms increased slightly.
- Cancer first became the principal cause of death for females in 1991 (it had become the principal cause for males in 1990), replacing ischaemic heart disease.
- Age-specific death rates for ischaemic heart disease and cerebrovascular disease increase rapidly with age. Rates remain low until the age of 65 years.
- Malignant neoplasms contributed the largest component of years of potential life lost (YPLL) for females in 1992 accounting for 30.7 per cent of YPLL for females aged 65 years or less.
- The most common cause of cancer death in females in 1993 was breast cancer (accounting for 18.6% of all female cancer deaths) followed by cancer of the trachea, bronchus and lung (12.9% of all female cancer deaths) and then colon cancer (11.1% of all female cancer deaths).
- Age standardised death rates for female breast cancer have shown little change over the last 50 years.
- Age-specific death rates for cervical cancer have declined in most age groups since 1960 when the pap smear test was introduced to Australia.
- Female age standardised death rates from lung cancer continue to increase, whereas the male rates have decreased in recent years.
- Accidents, poisoning and violence contributed more to years of potential life lost (17.2%) than total heart disease for females between ages 0 and 65 years.
- The distribution of female suicide deaths by age has changed markedly between 1960 and 1993. Whereas females in the middle age groups were more likely to suicide in 1960, the largest proportion of suicides are now in the younger age groups.



- The majority of female asthma deaths occurred in the older age groups with more than four-fifths (80.5%) in the age groups 55 years or older.

## Introduction

Australian women in the 1990s experience low mortality rates. This has been achieved through a number of factors which are well documented such as increased hygiene, improved nutrition, increased awareness of risk factors and improved medical technology. Women are no longer dying from diseases such as infectious and parasitic diseases or from maternal mortality as they did at the turn of the century. The principal causes of death are now so called "lifestyle" diseases such as heart disease, cancer and stroke which are seen to be influenced by various risk factors such as limited exercise, poor nutrition/overweight, smoking and alcohol consumption. The emphasis is increasingly on prevention of disease rather than cure. It should be stressed that mortality in isolation does not give a complete picture of women's health. Other facets which need to be considered include health status (recent and long term conditions), reproductive health, preventative health measures, occupational health and lifestyle. These are detailed in other chapters of this publication.

Over the last century, Australian women's life expectancy at birth has increased by just over 30 years (see Table 2.1). A female born in Australia in 1993 can expect to live for 81 years, while a woman aged 65 years in 1993 can expect to live to 84.5 years. For women aged 65 years, the additional gain in life expectancy has been 7.2 years, of which 5.1 years occurred in the period following the end of the Second World War.

**TABLE 2.1 COMPLETE EXPECTATION OF LIFE IN YEARS(a) AT SELECTED AGES, AUSTRALIA, 1881-91 to 1993**

Life Table	Age					
	At birth		At 30 years		At 65 years	
	Females	Males	Females	Males	Females	Males
1881-91	50.8	47.2	36.1	33.6	12.3	11.1
1891-00	54.8	51.1	37.9	35.1	12.8	11.3
1901-10	58.8	55.2	39.3	36.5	12.9	11.3
1920-22	63.3	59.2	41.5	38.4	13.6	12.0
1932-34	67.1	63.5	42.8	39.9	14.2	12.4
1946-48	70.6	66.1	44.1	40.4	14.4	12.3
1953-55	72.8	67.1	45.4	40.9	15.0	12.3
1960-62	74.2	67.9	46.5	41.1	15.7	12.5
1965-67	74.2	67.6	46.3	40.7	15.7	12.2
1970-72	74.8	68.1	46.9	41.1	16.1	12.4
1975-77	76.6	69.6	48.3	42.2	17.1	13.1
1980-82	78.3	71.2	49.7	43.5	18.0	13.8
1985-87	79.2	72.7	50.5	44.8	18.6	14.6
1993(b)	80.9	75.0	51.8	46.6	19.5	15.7

(a) Average number of additional years a person of a given age and sex might expect to live if the age-specific death rates of the given period continued throughout her or his lifetime.

(b) Based on deaths registered for the single year 1993. Differs from life tables constructed by the Australian Government Actuary. The Australian Government Actuary constructs life tables based on deaths occurring during the years around the census including the census year.

Source: Office of the Australian Government Actuary (1991) *Australian Life Tables 1985-87. Deaths, Australia, 1993 (3302.0)*

Life expectancy for women at a particular age has always been higher than that of men at the same age. This is partly due to their biological make-up but additional risks, such as smoking, alcohol consumption, motor vehicle traffic accidents and suicide which are generally higher for men, also contribute. As shown in Table 2.1, the difference in life expectancy between the two sexes at birth has narrowed to 5.9 years in 1993, having peaked at 7.1 years for the period in 1980–82.

Life expectancy of Australian women compares favourably with some other English-speaking countries (Canada, USA, United Kingdom and New Zealand) but is still behind that of Japan, France and Switzerland (see Table 2.2). This suggests that there is potential for life expectancy to further improve in the future for Australian women.

**TABLE 2.2 LIFE EXPECTANCY FOR FEMALES AT BIRTH:  
SELECTED COUNTRIES**

<i>Country</i>	<i>Life expectancy (years)</i>
Japan (1991)	82.8
France (1990)	81.8
Switzerland (1991)	81.4
Australia (1993)	80.9
Sweden (1989)	80.8
Canada (1990)	80.8
Italy (1989)	80.4
Netherlands (1990)	80.3
USA (1989)	78.9
United Kingdom (1991)	78.8
New Zealand (1989)	78.1

*Source: ABS unpublished data*

Increases in life expectancy are expected to continue in the future. ABS projections based on the analysis of causes of death data show that an Australian female born in 1996 can expect to live for 81 years and a female born in 2031 is expected to live for 84 years. Increases are also projected at other ages (see Table 2.3).

**TABLE 2.3 PROJECTED FEMALE LIFE EXPECTANCY IN YEARS AT  
SELECTED AGES, AUSTRALIA, 1996 AND 2031**

<i>Age</i>	<i>1996</i>	<i>2031</i>
At birth	81.2	84.2
At 30 years	61.9	64.5
At 50 years	37.6	40.0
At 70 years	19.7	21.6

*Source: ABS unpublished data*

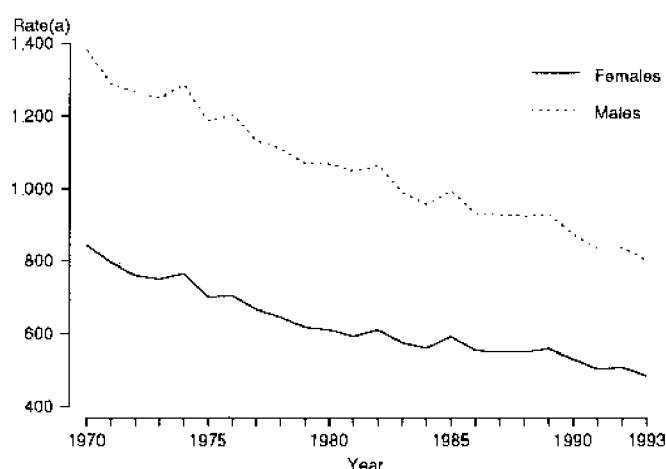
Although mortality rates have improved over the last century and are expected to continue to improve in the future, and mortality rates for Australian women compare favourably with those experienced internationally, there are still areas of mortality where improvements are achievable. These need to be viewed in the context of recent trends in mortality and causes of death which are currently most prominent. These are discussed in the next two sections.

## Recent trends in mortality

Mortality has been steadily declining during the last century, except for a decade of stagnation in the 1960s. The greatest decline has been observed in the last two decades since the early 1970s. The discussion in this section will focus on this period as it is the most relevant in relation to current developments in mortality.

Age standardised death rates for all deaths by sex for the period 1970 to 1993 are presented in Chart 2.1. The decline in death rates over this period is evident for both sexes. Standardised death rates for females declined by 43 per cent between 1970 and 1993 (and for males by 42% during the same period). Standardised mortality rates for females were lower than those for males for each year during this period. The largest sex differential in age standardised death rates was observed in 1981 when the male rate was 76 per cent higher than that of females. This has since fallen to 68 per cent higher for males in the 1990s (Jain, 1994).

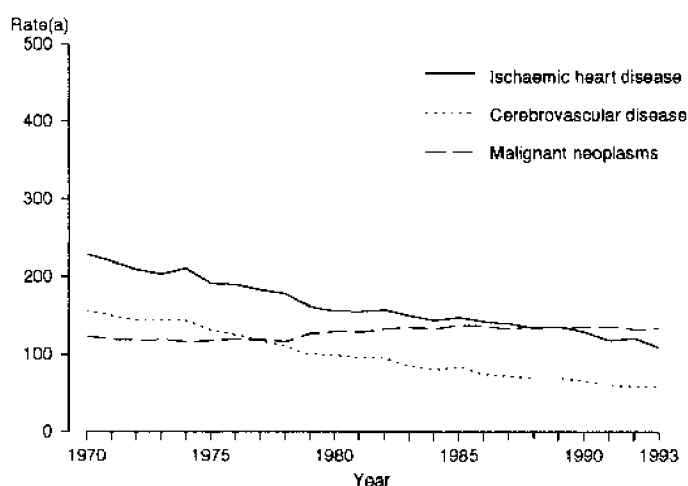
CHART 2.1 DEATHS DUE TO ALL CAUSES: STANDARDISED DEATH RATES(a) BY SEX, AUSTRALIA, 1970-1993



(a) Per 100,000 population, standardised to 1986 total Australian population.  
Source: ABS Causes of Death data

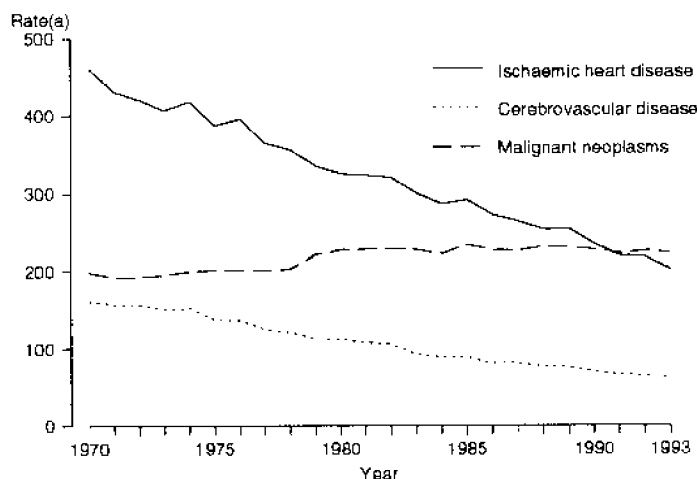
Ischaemic heart disease, malignant neoplasms and cerebrovascular disease have been the major causes of death of Australian women over the last two decades. Together, these three causes consistently accounted for three fifths of all deaths during this time. However, the contribution of each disease has changed over the period. Charts 2.2 and 2.3 present age standardised death rates for these causes for females and males respectively.

CHART 2.2 FEMALE LEADING CAUSES OF DEATH: STANDARDISED DEATH RATES(a), AUSTRALIA, 1970-1993



(a) Per 100,000 female population, standardised to 1986 total Australian population.  
Source: ABS Causes of Death data

CHART 2.3 MALE LEADING CAUSES OF DEATH: STANDARDISED DEATH RATES(a), AUSTRALIA, 1970-1993



(a) Per 100,000 male population, standardised to 1986 total Australian population.  
Source: ABS Causes of Death data

The age standardised death rates for both females and males for ischaemic heart disease and cerebrovascular disease have decreased quite markedly during the period 1970 to 1993 (for females, for ischaemic heart disease by 53% and for cerebrovascular disease by 64%) while those for malignant neoplasms have increased slightly (for females by 9%).

The age standardised death rates for ischaemic heart disease and malignant neoplasms were consistently lower for females than for males. For cerebrovascular disease, age standardised rates were only marginally lower for females than for males over the period.

The age standardised death rates for most causes of death decreased over the period examined. For females, notable exceptions to this were malignant neoplasms (as described above), chronic obstructive pulmonary disease and allied conditions, and nephritis, nephrotic syndrome and nephrosis. More in-depth discussion on trends in mortality can be found in Jain (1994).

#### Principal causes of death, 1993 — a snapshot

The principal causes of death for females and males for 1993 are shown in Table 2.4.

The age standardised death rates were lower for females than males for all the major cause of death groups. For the category "All causes" the male rate was 65 per cent higher than the female rate.

TABLE 2.4 PRINCIPAL CAUSES OF DEATH(a) BY SEX, AUSTRALIA, 1993

Cause of death and ICD(b) code	Deaths					
	Females			Males		
	Number	Per cent	Standardised rate(c)	Number	Per cent	Standardised rate(c)
Malignant neoplasms (140-208)	14,212	25.1	134.5	18,479	28.4	223.3
Ischaemic heart disease (410-414)	13,424	23.8	108.8	16,335	25.1	202.8
Cerebrovascular disease (430-438)	7,319	13.0	57.0	4,818	7.4	62.0
Chronic obstructive pulmonary disease and allied conditions (490-496)(d)	2,364	4.2	21.3	3,974	6.1	49.8
Accidents(E800-E949)	1,433	2.5	14.1	3,081	4.7	35.9
Diseases of the arteries, arterioles and capillaries (440-448)(e)	1,442	2.6	11.2	1,628	2.5	20.8
Diseases of the nervous system and sense organs (320-389)	1,398	2.5	11.9	1,396	2.1	17.5
Diabetes mellitus (250)	1,290	2.3	11.1	1,278	2.0	15.8
Mental disorders (290-319)	1,343	2.4	10.3	1,001	1.5	12.7
Pneumonia and influenza (480-487)	855	1.5	6.6	808	1.2	10.6
All other causes	11,429	20.2	97.4	12,287	18.9	150.0
<b>All causes</b>	<b>56,509</b>	<b>100.0</b>	<b>484.3</b>	<b>65,085</b>	<b>100.0</b>	<b>801.2</b>

(a) Excludes deaths of usual residents of *Other Territories*, comprising Jervis Bay, Christmas Islands and Cocos (Keeling) Islands. (b) International Classification of Diseases (ICD) — see Glossary for further information. (c) Per 100,000 population, standardised to 1986 total Australian population. (d) includes asthma, emphysema and bronchitis. (e) Includes atherosclerosis and aortic aneurism.

Source: ABS Causes of Death data

Malignant neoplasms and ischaemic heart disease together accounted for approximately half of all female and male deaths.

Particular causes of death have greater or lesser significance depending on age. The leading causes of death in each age group are shown in Table 2.5. In 1993 the principal cause of death for females in the 1-14 and 15-24 years age groups was accidents, poisoning and violence, in the 25-44, 45-54 and 55-64 years age groups malignant neoplasms was the principal cause, and at ages 65-74 years and 75 years and over diseases of the circulatory system became the principal cause of death.

There are also marked differences in the age-specific death rates experienced by females and males. These are most evident for accidents, poisoning and violence in the three youngest age groups, diseases of the circulatory system in those aged 45-64 years, and in diseases of the respiratory system in those aged over 65 years. For example, in the 15-24 years age group the male rate for accidents, poisoning and violence was more than three times the female rate. Similarly, in the 55-64 years age group the male rate for diseases of the circulatory system was more than two and a half times the female rate.

**TABLE 2.5 LEADING CAUSES OF DEATH IN EACH AGE GROUP BY SEX, AGE-SPECIFIC DEATH RATES AND PERCENTAGE OF DEATHS IN EACH AGE GROUP, AUSTRALIA, 1983 AND 1993**

Cause of death and ICD code	Age-specific death rates(a)				Percentage of deaths in the age group (1993)	
	1983		1993		Female	Male
	Female	Male	Female	Male		
<b>1-14 years</b>						
<i>All causes</i>	25	38	20	27	100	100
Accidents, poisonings and violence (E800-E999)	12	19	7	13	37	49
Motor vehicle traffic accidents (E810-E819)	5	8	3	4	15	15
Malignant neoplasms (140-208)	3	5	4	4	18	13
Congenital anomalies (740-759)	3	3	3	3	13	10
Diseases of the nervous system and sense organs (320-389)	2	3	2	3	10	9
<b>15-24 years</b>						
<i>All causes</i>	42	131	37	98	100	100
Accidents, poisonings and violence (E800-E999)	26	105	20	76	53	78
Motor vehicle traffic accidents (E810-E819)	17	63	10	33	27	34
Suicide (E950-E959)	3	19	4	25	11	25
Malignant neoplasms(140-208)	5	8	5	4	14	4
Diseases of the nervous system and sense organs (320-389)	2	4	2	3	5	4
<b>25-44 years</b>						
<i>All causes</i>	77	152	69	150	100	100
Malignant neoplasms (140-208)	29	24	28	24	40	16
Accidents, poisonings and violence (E800-E999)	21	73	18	66	25	44
Suicide (E950-E959)	7	22	6	25	8	17
Motor vehicle traffic accidents (E810-E819)	7	26	6	17	9	11
Diseases of the circulatory system (390-459)	12	30	8	20	12	13
<b>45-54 years</b>						
<i>All causes</i>	317	563	218	371	100	100
Malignant neoplasms (140-208)	154	163	126	127	58	34
Diseases of the circulatory system (390-459)	80	234	38	113	18	30
Ischaemic heart disease (410-414)	45	178	17	81	8	22
Cerebrovascular disease (430-438)	21	26	12	13	5	3
Accidents, poisonings and violence (E800-E999)	25	70	16	58	7	16
<b>55-64 years</b>						
<i>All causes</i>	781	1,535	615	1,122	100	100
Malignant neoplasms (140-208)	340	497	313	460	51	41
Diseases of the circulatory system (390-459)	279	731	158	411	26	37
Ischaemic heart disease (410-414)	169	546	94	297	15	26
Cerebrovascular disease (430-438)	70	93	30	47	5	4
Diseases of the respiratory system (460-519)	43	82	41	71	7	6

For footnotes see end of table

**TABLE 2.5 LEADING CAUSES OF DEATH IN EACH AGE GROUP BY SEX, AGE-SPECIFIC DEATH RATES AND PERCENTAGE OF DEATHS IN EACH AGE GROUP, AUSTRALIA, 1983 AND 1993 — *continued***

Cause of death and ICD code	Age-specific death rates(a)				Percentage of deaths in the age group (1993)	
	1983		1993		Female	Male
	Female	Male	Female	Male		
65–74 years						
<i>All causes</i>	1,971	3,820	1,614	2,986	100	100
Diseases of the circulatory system (390–459)	996	1,966	628	1,277	39	43
Ischaemic heart disease (410–414)	610	1,358	375	856	23	29
Cerebrovascular disease (430–438)	228	324	136	198	8	7
Malignant neoplasms (140–208)	581	1,099	599	1,064	37	36
Diseases of the respiratory system (460–519)	121	351	140	272	9	9
75 years and over						
<i>All causes</i>	7,734	10,613	7,001	9,298	100	100
Diseases of the circulatory system (390–459)	5,125	5,913	4,097	4,593	59	49
Ischaemic heart disease (410–414)	2,318	3,311	1,961	2,593	28	28
Cerebrovascular disease (430–438)	1,551	1,362	1,178	1,009	17	11
Malignant neoplasms (140–208)	1,075	2,110	1,134	2,197	16	24
Diseases of the respiratory system (460–519)	444	1,250	456	999	7	11

(a) Deaths per 100,000 population of the same age and sex.

Source: *Causes of Death, Australia, 1983 and 1993 (3303.0)*

### Specific issues

In the remainder of this chapter the focus is on specific issues in mortality that have either been identified by the National Women's Health Policy, Goals and Targets for Australia's Health in the Year 2000 and Beyond or that satisfy one or more of the following criteria, namely that the cause of death:

- accounts for a large proportion of female deaths
- is preventable (and is therefore an issue for health policy)
- is increasing markedly
- relates specifically to women's biological make-up
- when compared with males, the number of female deaths is markedly greater
- contributes to a large number of years of potential life lost (YPLL).

Using the above criteria, the following causes of death have been selected for analysis:

Diseases of the circulatory system  
  heart disease  
  stroke

Malignant neoplasms  
  breast cancer  
  cancer of the cervix uteri  
  lung cancer

Accidents, Poisoning and Violence  
 suicide  
 motor vehicle traffic accidents

Maternal mortality

Asthma

#### Diseases of the circulatory system

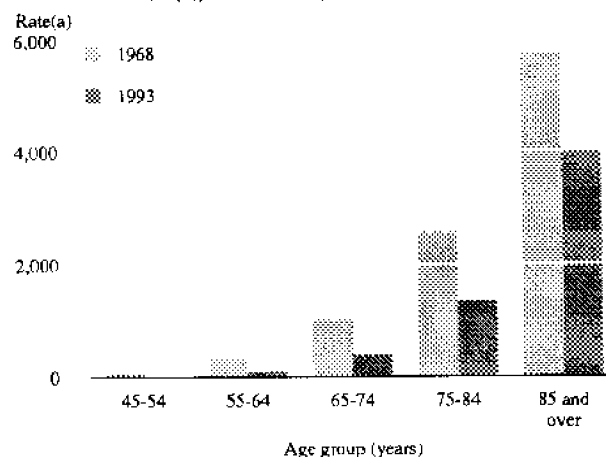
Diseases of the circulatory system is a major cause of death of Australian women. It includes deaths from ischaemic heart disease and cerebrovascular disease. Until 1991 ischaemic heart disease was the principal cause of death for females (1991 was the first year that more females died from malignant neoplasms than ischaemic heart disease).

In 1993, deaths due to ischaemic heart disease accounted for nearly twice the percentage of deaths attributed to cerebrovascular disease (23.8% and 13.0% of all female deaths respectively). The crude death rates were 152 and 83 per 100,000 female population for ischaemic heart disease and cerebrovascular disease respectively. The comparable male rates were 186 and 55 deaths per 100,000 male population respectively, indicating a relatively greater dominance of ischaemic heart disease over cerebrovascular disease in males.

Age standardised death rates for both ischaemic heart disease and cerebrovascular disease have decreased in recent years. Ischaemic heart disease and cerebrovascular disease have both been significant causes of death for most of this century. Standardised death rates for ischaemic heart disease reached a peak in 1968 for both females and males (when for females the rate was more than double what it was in 1993). The age standardised death rates for cerebrovascular disease showed little change between 1950 and 1970 but have subsequently declined.

Chart 2.4 shows age-specific death rates for female deaths due to ischaemic heart disease in 1968 and 1993. Age-specific death rates increase rapidly with age. The rates for females in 1993 are considerably lower for all ages compared with 1968.

CHART 2.4 FEMALE DEATHS DUE TO ISCHAEMIC HEART DISEASE:  
 AGE-SPECIFIC DEATH RATES(a) FOR FEMALES AGED 45 YEARS AND  
 OVER(b), AUSTRALIA, 1968 AND 1993



(a) Per 100,000 female population of same age. (b) The age-specific death rates were less than 20 per 100,000 females for females aged less than 45 years.  
 Source: Australian Demography Bulletin, 1968. ABS Causes of Death data, 1993



Deaths due to diseases of the circulatory system, although affecting mostly people in the older age groups, do contribute significantly to years of potential life lost (YPLL). In 1992, these diseases together accounted for 10.9 per cent of YPLL for females aged 65 years or less (heart disease 7.9%, cerebrovascular disease 3.0%). Heart disease made the third largest contribution to YPLL after malignant neoplasms (30.7%) and motor vehicle traffic accidents (7.4%) for females aged 65 years or less (Jain, 1994).

### Malignant neoplasms

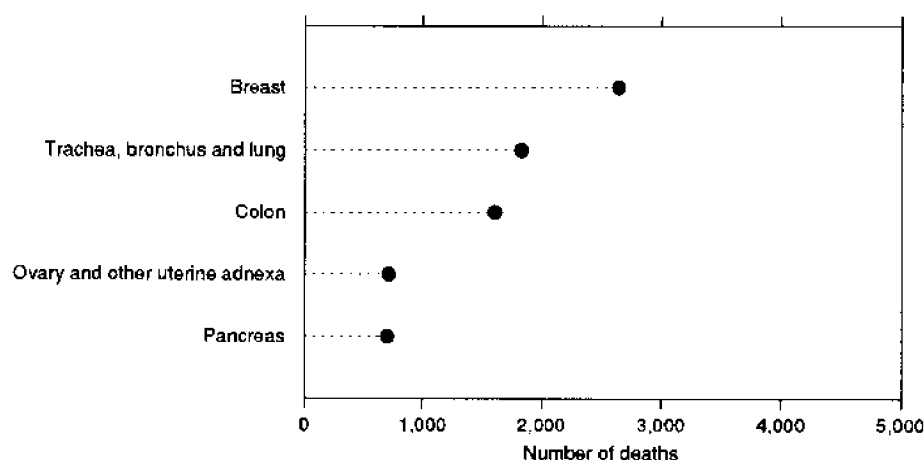
The disease group malignant neoplasms (also known as cancer) is one of a small number of causes of death where deaths continued to increase. In 1993, it was the principal cause of death for both females and males accounting for 25.1 per cent of all female deaths and 28.4 per cent of all male deaths. Its prominence is not solely due to the fact that the number of deaths from malignant neoplasms has increased (as the increase has not been marked), but primarily due to the fact that deaths from ischaemic heart disease and cerebrovascular disease have fallen sharply over the last two decades (refer to section on recent trends in mortality).

Malignant neoplasms contributed the largest component of years of potential life lost (YPLL) for females in 1992 accounting for 30.7 per cent of YPLL for females aged 65 years or less.

Malignant neoplasms features as a major cause of death in all age groups (see Table 2.5). In 1993 it was the primary cause of death in the age groups 25–44 years, 45–54 years and 55–64 years and was exceeded only by accidents, poisoning and violence as a cause of death in those aged less than 25 years and by diseases of the circulatory system in those aged 65 years and over.

The most common cause of cancer death in females is breast cancer followed by cancer of the trachea, bronchus and lung and then colon cancer. Chart 2.5 shows the major sites responsible for female cancer deaths in 1993. Breast cancer, cancer of the cervix uteri and lung cancer are examined in more detail in the following sections. These three cancers are regarded as preventable and have been identified as priority issues in women's health. Screening is available for breast and cervical cancer and is discussed in Chapter 10.

CHART 2.5 FEMALE DEATHS DUE TO MALIGNANT NEOPLASMS  
- MAIN SITES, AUSTRALIA, 1993



Source: *Causes of Death, Australia, 1993 (3303.0)*

## Breast cancer

Breast cancer is the primary cause of cancer death in females. It has retained this position since the 1930s when it overtook stomach cancer as a cause of death (the stomach is no longer a site which accounts for a large number of female cancer deaths). In 1993, cancer of the breast accounted for 18.6 per cent of all female cancer deaths and 4.7 per cent of all female deaths in that year.

Table 2.6 shows age-specific death rates at ten year time intervals from 1940 to 1990. For each of the years shown age-specific death rates for breast cancer increase with age. In all age groups from 35–44 years to 75–84 years there was an increase in the age-specific death rates from breast cancer in 1990 compared with 1980. Over this ten year time period, the overall death rate from breast cancer rose from 24.5 to 28.6 per 100,000 female population.

**TABLE 2.6 FEMALE BREAST CANCER DEATHS: AGE-SPECIFIC DEATH RATES(a), AGE BY SELECTED YEARS, AUSTRALIA 1940–1990**

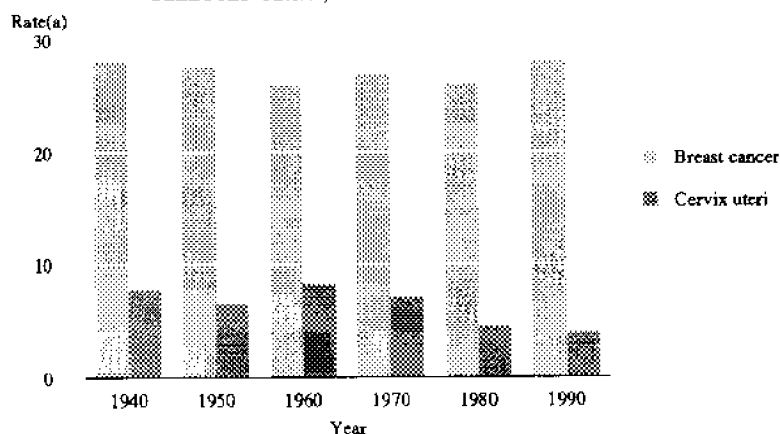
Age group (years)	Year					
	1940	1950	1960	1970	1980	1990
Less than 25	—	0.1	—	0.1	—	—
25–34	2.5	2.5	3.4	3.1	2.9	2.4
35–44	13.4	16.0	15.0	18.0	14.9	16.9
45–54	45.5	41.7	38.9	39.4	42.1	45.9
55–64	66.7	61.5	58.1	68.4	62.4	69.5
65–74	98.1	105.3	85.0	91.8	90.2	96.6
75–84	140.8	130.6	130.9	131.5	121.5	130.0
85 and over	239.6	225.1	262.2	187.3	214.3	211.2
<b>All ages</b>	<b>22.4</b>	<b>23.8</b>	<b>22.4</b>	<b>23.9</b>	<b>24.5</b>	<b>28.6</b>

(a) Deaths per 100,00 of the female population of the same age.

Source: *Australian Demographic Bulletins, 1940–1960. Causes of Death, 1969 and 1970, Bulletin No. 7. Causes of Death, Australia, 1980 and 1990 (3303.0)*

The last decade's increase in breast cancer deaths is clearly evident in the age standardised rates plotted in Chart 2.6. Breast cancer mortality has failed to decline over the past 50 years, in contrast to generally declining mortality from other main causes.

**CHART 2.6 FEMALE DEATHS DUE TO BREAST CANCER AND CANCER OF THE CERVIX UTERI: STANDARDISED DEATH RATES(a), AUSTRALIA, SELECTED YEARS, 1940–1990**



(a) Per 100,000 female population, standardised to 1986 Australian female population.  
Source: *Australian Demographic Bulletins, 1940–1960. Causes of Death, 1969 and 1970, Bulletin No. 7. Causes of Death, Australia, 1980 and 1990 (3303.0)*

*Cancer of the cervix uteri*

Cancer of the cervix uteri is not a major killer of Australian females. In 1993 it was responsible for 317 deaths or 0.6 per cent of all female deaths. However, it has been shown to be largely preventable, with screening programs that allow early detection and cure in many cases, and so is an important women's health issue.

The age standardised death rates (see Chart 2.6) show a decline in cancer of the cervix uteri mortality in recent decades. Age-specific death rates are presented in Table 2.7 at ten year intervals from 1960 to 1990. Rates experienced in 1960 are higher than those for each of the other years shown in all age groups except for those aged less than 35 years and those aged 85 years and over. Since 1960 the rates have decreased for all age groups except females aged less than 35 years. This decrease was influenced by the introduction of the pap smear test into Australia during the early 1960s (see also Chart 2.7 which compares age-specific death rates for 1960 (pre pap smears) and 1990).

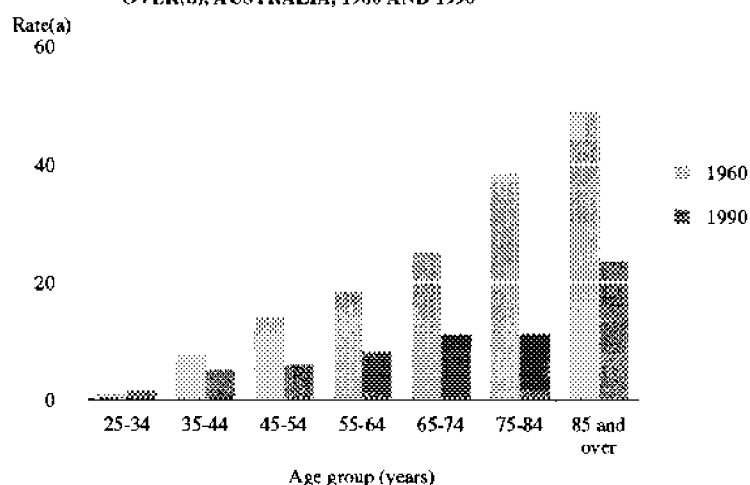
**TABLE 2.7 CANCER OF THE CERVIX UTERI DEATHS: AGE-SPECIFIC DEATH RATES(a), AGE BY SELECTED YEARS, AUSTRALIA 1960-1990**

Age group (years)	Year			
	1960	1970	1980	1990
Less than 25	—	—	—	0.1
25-34	1.2	0.9	1.4	1.7
35-44	7.9	5.0	4.0	5.3
45-54	14.1	12.6	6.1	6.1
55-64	18.4	16.4	11.6	8.2
65-74	25.1	22.9	14.7	11.3
75-84	38.5	28.3	18.0	11.4
85 and over	48.7	55.5	21.0	23.7
<b>All ages</b>	<b>7.4</b>	<b>6.2</b>	<b>4.2</b>	<b>4.0</b>

(a) Deaths per 100,00 of the female population of the same age.

Source: *Australian Demographic Bulletins, 1940-1960. Causes of Death, 1960 and 1970, Bulletin No. 7. Causes of Death, Australia, 1980 and 1990 (3303.0)*

**CHART 2.7 FEMALE DEATHS DUE TO CANCER OF CERVIX UTERI: AGE-SPECIFIC DEATH RATES(a) FOR FEMALES AGED 25 YEARS AND OVER(b), AUSTRALIA, 1960 AND 1990**



(a) Per 100,000 female population of same age. (b) The age-specific death rates were less than one per 100,000 females for those aged less than 25 years. Source: *Australian Demography Bulletin, 1960. ABS Causes of Death data, 1990*

## Lung cancer

In 1993, lung cancer was responsible for 21 deaths per 100,000 of the female population. The corresponding male rate was 52. Deaths due to lung cancer have increased over the last 50 years for both females and males, although the male death rate is now lower than it was in 1980. Whereas in 1940, 0.3 per cent of all female deaths were attributable to lung cancer, in 1993, 3.2 per cent of female deaths were attributed to this cause.

Deaths from lung cancer as a proportion of cancer deaths have also increased since 1940. In 1991, 12.6 per cent of all female cancer deaths were due to lung cancer, an increase of over six times the 1940 proportion of 1.9 per cent.

Historically, lung cancer has been responsible for more male than female deaths. This continues to be true. Age-specific death rates for both females and males due to lung cancer increased during the period 1940 to 1980 (see Table 2.8). Unlike the rate for females which continued to increase, male age-specific death rates due to lung cancer decreased between 1980 and 1990. The decrease occurred in all age groups except those aged 85 years and over.

**TABLE 2.8 LUNG CANCER DEATHS: AGE-SPECIFIC DEATH RATES(a), AGE BY SELECTED YEARS, AUSTRALIA, 1940-1990**

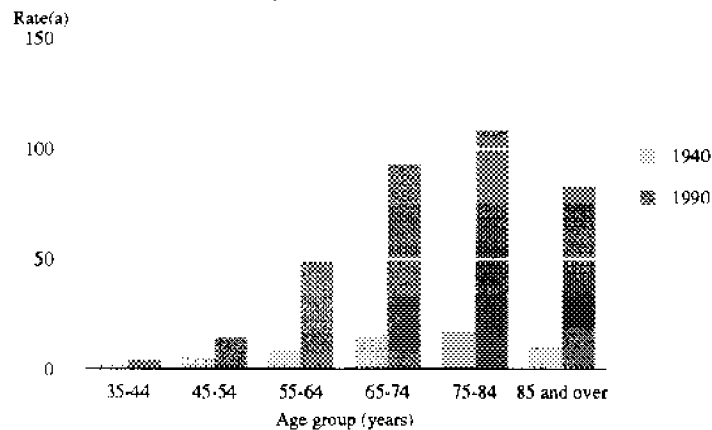
Age group (years)	Year					
	1940	1950	1960	1970	1980	1990
<b>FEMALES</b>						
Less than 25	0.2	0.1	—	—	—	—
25-34	—	0.6	1.8	0.2	0.4	0.3
35-44	1.3	2.1	1.6	2.7	3.7	3.8
45-54	5.1	3.5	4.3	10.2	14.9	14.2
55-64	8.8	11.0	12.8	29.2	39.7	48.9
65-74	15.3	15.4	19.9	39.9	60.7	92.7
75-84	16.9	22.7	31.5	39.4	74.6	108.3
85 and over	10.4	5.2	11.2	27.7	44.8	83.3
<b>All ages</b>	<b>2.8</b>	<b>3.4</b>	<b>4.2</b>	<b>7.9</b>	<b>12.7</b>	<b>18.6</b>
<b>MALES</b>						
Less than 25	0.2	0.1	0.1	—	—	—
25-34	0.5	0.3	0.7	0.9	0.4	0.2
35-44	3.7	3.5	4.4	6.5	6.3	4.1
45-54	16.7	22.0	37.1	43.7	51.9	32.5
55-64	36.9	66.3	116.9	164.8	175.0	147.3
65-74	52.5	90.4	188.1	332.8	368.6	315.8
75-84	59.6	58.4	177.0	385.7	534.4	490.4
85 and over	14.5	46.5	143.8	230.6	432.4	466.7
<b>All ages</b>	<b>9.5</b>	<b>15.0</b>	<b>27.9</b>	<b>43.8</b>	<b>55.3</b>	<b>52.5</b>

(a) Deaths per 100,000 of the respective female and male population of the same age.

Source: *Australian Demographic Bulletins, 1940-1960. Causes of Death, 1969 and 1970, Bulletin No. 7. Causes of Death, Australia, 1980 and 1990 (3303.0)*

Chart 2.8 gives age-specific death rates for females in 1940 and 1990. The marked increases are particularly evident in the age groups over 55 years.

**CHART 2.8 FEMALE DEATHS DUE TO LUNG CANCER: AGE-SPECIFIC DEATH RATES<sup>(a)</sup> FOR FEMALES AGED 35 YEARS AND OVER<sup>(b)</sup>, AUSTRALIA, 1940 AND 1990**

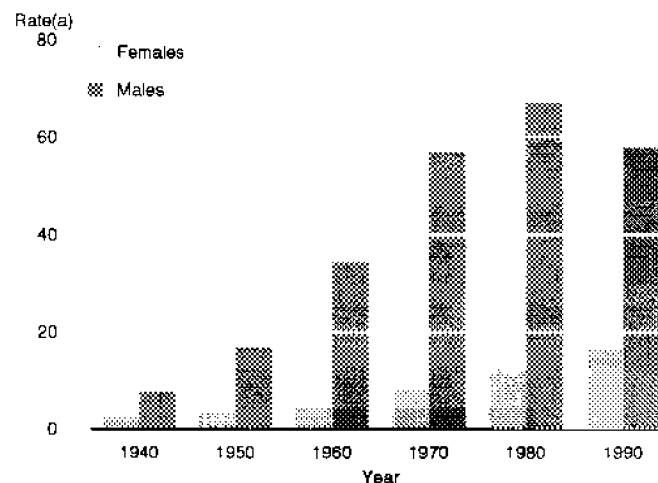


(a) Per 100,000 female population of same age. (b) The age-specific death rates were less than 1 per 100,000 females for females aged less than 35 years.  
Source: *Australian Demography Bulletin*, 1940 Causes of Death data, 1990

The Australian Institute of Health and Welfare, in *Australia's Health 1994*, associates the increases in female lung cancer death rates with increases in rates of females smoking since the 1940s. It also observes that male smoking declined throughout the 1980s and into the 1990s. The smaller increases in age-specific death rates for female lung cancer for those aged less than 55 years during the period 1940 to 1990 may be due to the period of time the disease takes to develop.

The age standardised death rates for lung cancer have risen since 1940 (see Chart 2.9). The rise in female rates, however, was not as sharp as that for males. However, whereas the rate for males decreased between 1980 and 1990, the rate for females has continued to increase.

**CHART 2.9 DEATHS DUE TO LUNG CANCER: STANDARDISED DEATH RATES<sup>(a)</sup>, BY SEX, AUSTRALIA, SELECTED YEARS, 1940-1990**



(a) Per 100,000 population, standardised to 1986 total Australian population.  
Source: *Australian Demography Bulletins*, 1940-60 ABS Causes of Death data, 1970-1990

Accidents, poisoning and violence

Accidents, poisoning and violence made a large contribution to years of potential life lost (YPLL) in 1992. It accounted for 17.2 per cent of YPLL for females aged between 0 and 65 years, making the second largest contribution

to YPLL after malignant neoplasms (30.7%). They contributed more to YPLL than total heart disease.

In 1993, 22 female deaths per 100,000 female population were due to accidents, poisoning and violence representing 3.5 per cent of all female deaths. Although not as significant a cause of death as for males, it is still one of the major causes of female death in those under the age of 45 years (see Table 2.9).

**TABLE 2.9 DEATHS DUE TO ACCIDENTS, POISONING AND VIOLENCE: PROPORTION OF DEATHS IN EACH AGE GROUP, AUSTRALIA, 1993 (Per cent)**

<i>Age group (years)</i>	<i>Female</i>	<i>Male</i>
Under 1	2.2	3.1
1-14	37.1	49.4
15-24	53.2	77.8
25-44	25.5	43.8
45-54	7.2	15.6
55-64	3.1	4.8
65-74	2.0	2.1
75+	1.6	1.8
<b>All ages</b>	<b>3.5</b>	<b>7.8</b>

*Source: Causes of Death, Australia, 1993 (3303.0)*

Age-specific death rates for accidents, poisoning and violence for each age group have decreased in the decade from 1983 to 1993 (see Table 2.5).

Injury can occur in many different contexts including domestic violence, occupational injury, assault, sport and recreation, road traffic accidents and self inflicted injury (suicide). Assault and homicide are discussed in the chapter relating to violence against women. Suicide and motor vehicle traffic accidents are discussed in more detail in the following sections. These two causes of death were responsible for 49.0 per cent of all female deaths from accidents, poisoning and violence in 1993. In 1992, in terms of years of total potential female life lost (YPLL), suicide contributed 4.7 per cent and motor vehicle traffic accidents contributed 7.4 per cent.

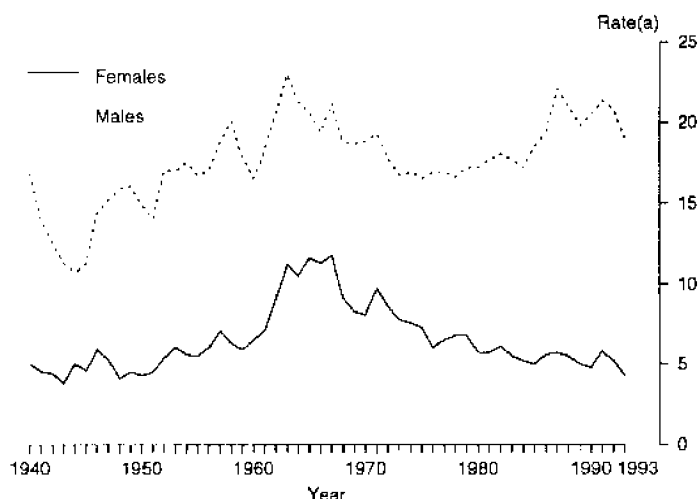
### *Suicide*

Suicide is not a major cause of death of Australian women generally. It affects more males than females. In 1993, 0.7 per cent of all female deaths were due to suicide (compared with 2.6% of all male deaths).

However, suicide is a significant cause of death for females in the younger age groups. In 1993, 11.0 per cent of all female deaths which occurred in the 15-24 years age group and 8.3 per cent of all female deaths in the 25-44 years age group were due to suicide. The percentage contribution of suicides to male deaths in these age groups was markedly higher (25.1% in the 15-24 years age group and 16.8% in the 25-44 years age group).

For females, the age standardised death rate for suicides started rising during the 1950s and reached a peak in 1967. Since then the trend has reversed and in 1993 the standardised rate was less than half (36%) the peak rate. In comparison, male suicide rates have continued to rise over the last few decades. Before the 1970s the trends in female and male suicides were similar with the male rate being consistently higher than the female rate (see Chart 2.10).

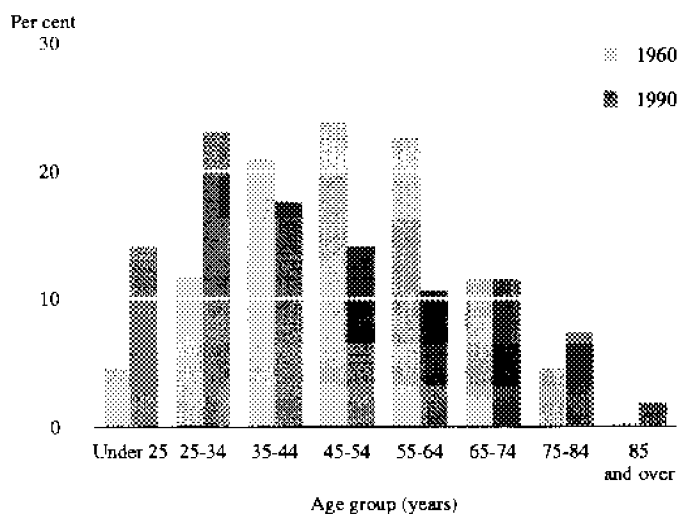
CHART 2.10 DEATHS DUE TO SUICIDE: STANDARDISED DEATH RATES(a) BY SEX, AUSTRALIA, 1940-93



(a) Per 100,000 population, standardised to 1986 total Australian population  
 Source: *Suicides Australia, 1982-1992* (3309.0) ABS Causes of Death data, 1993

There has been a marked change in the distribution of female suicide deaths by age between 1960 and 1990. While those in the middle age groups were more likely to suicide in 1960, the largest proportion of suicides now occurs in the younger age groups (see Chart 2.11). In 1960 only 16.2 per cent of suicides were in the under 25 years age groups, whereas these ages accounted for 20.6 per cent of suicides in 1990.

CHART 2.11 FEMALE DEATHS DUE TO SUICIDE: PROPORTION OF DEATHS IN EACH AGE GROUP, AUSTRALIA, 1960 AND 1990



Source: *Australian Demography Bulletin, 1960*. ABS Causes of Death data, 1990

This shift over time in the age distribution of suicide deaths is also reflected in the age-specific death rates for suicide. Since 1960, female suicide rates have fallen in all age groups except the 15-24 and 25-34 years groups, which have shown increases. Nevertheless, age-specific death rates in 1990 were as high or higher in the middle and older age groups as in the younger age groups, with the highest rate in the age group 75 years and over. The age-specific death rates for males, although substantially higher, show a similar pattern (see Table 2.10).

**TABLE 2.10. SUICIDES: AGE-SPECIFIC DEATH RATES(a), AGE BY SELECTED YEARS, AUSTRALIA, 1940-1990**

Age group (years)	Year					
	1940	1950	1960	1970	1980	1990
FEMALES						
0-14	—	0.2	—	0.2	0.1	—
15-24	3.1	2.2	2.0	4.7	4.4	4.4
25-34	5.9	4.1	5.5	7.8	6.9	7.0
35-44	7.2	7.0	9.5	11.7	9.8	5.9
45-54	11.4	7.7	12.9	14.7	9.2	6.8
55-64	5.7	13.0	16.5	17.1	7.8	6.2
65-74	9.9	9.6	11.0	14.5	7.0	7.9
75 and over	5.8	3.3	8.8	9.5	9.0	8.4
<b>All ages</b>	<b>5.0</b>	<b>4.8</b>	<b>6.2</b>	<b>7.6</b>	<b>5.5</b>	<b>5.0</b>
MALES						
0-14	—	0.3	0.2	0.2	0.2	0.3
15-24	7.0	7.0	6.8	12.5	17.5	27.0
25-34	15.3	11.3	18.3	20.2	22.6	29.1
35-44	18.7	18.4	22.4	26.1	23.7	25.4
45-54	33.5	23.3	27.1	33.8	22.4	21.4
55-64	41.2	27.1	29.3	31.4	24.1	24.8
65-74	28.6	39.3	38.2	31.3	22.1	26.1
75 and over	34.3	46.9	31.7	38.1	31.9	32.1
<b>All ages</b>	<b>16.0</b>	<b>13.8</b>	<b>15.0</b>	<b>17.1</b>	<b>16.3</b>	<b>20.4</b>

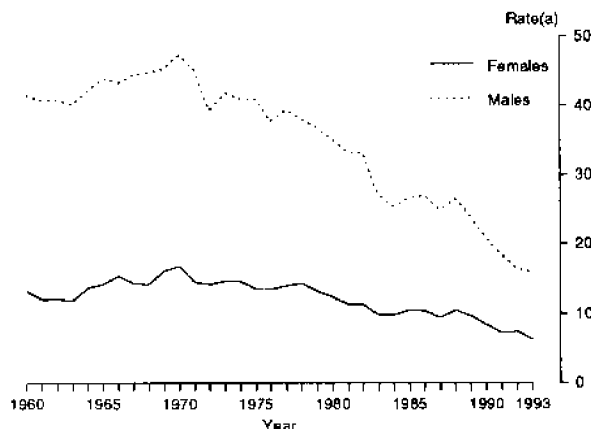
(a) Deaths per 100,000 of the respective female and male population of the same age.

Source: Australian Demographic Bulletins, 1940-1960. ABS Causes of Death data, 1970-1990

**Motor vehicle traffic accidents** In 1993, motor vehicle traffic accidents were responsible for 1.0 per cent of all female deaths and 2.1 per cent of all male deaths. Although not a major cause of death generally, it accounts for a large proportion of all deaths which occur in younger females.

Age standardised death rates for motor vehicle traffic accidents are presented in Chart 2.12 below. A decrease in standardised death rates can be observed for both females and males since 1970, with the male decrease being more marked (see Chart 2.12). Between 1970 and 1990, the standardised death rate decreased for females by 50.3 per cent and for males by 56.1 per cent. Road safety measures, such as compulsory seat belts, improved roads and random breath testing have been introduced during this time.

**CHART 2.12 DEATHS FROM MOTOR VEHICLE TRAFFIC ACCIDENTS: STANDARDISED DEATH RATES(e) BY SEX, AUSTRALIA, 1960-93**



(e) Per 100,000 population, standardised to 1988 total Australian population.  
Source: Australian Demography Bulletin, 1960-68. Causes of Death, 1969 and 1970.  
Bulletin No. 7. ABS Causes of Death data, 1971-93



Although motor vehicle traffic accidents were responsible for only a small proportion of all deaths in 1993, it had a disproportionate impact on the younger age groups. This cause accounted for 27.1 per cent of all female deaths which occurred in the 15–24 years age group and 15.4 per cent of all female deaths in the 1–14 years age group. The contribution to male deaths was higher (33.7% of deaths in the 15–24 years age group and 14.7% of deaths in the 1–14 years age group were due to this cause). There has been a decrease in age-specific death rates in all age groups for both females and males during the last two decades (see Table 2.11). There has been a convergence of male and female death rates from motor vehicle traffic accidents over the time period given in the table, although males continue to experience substantially higher rates than females. This has been largely due to decreases in male death rates.

The highest age-specific death rates for both sexes are for the 75 years and over age group (except males in 1980). This may be due to the large number of pedestrian deaths in this age group.

**TABLE 2.11 DEATHS FROM MOTOR VEHICLE TRAFFIC ACCIDENTS:  
AGE-SPECIFIC DEATH RATES(a), AGE BY SELECTED YEARS, AUSTRALIA,  
1940–1990**

Age group (years)	Year					
	1940	1950	1960	1970	1980	1990
<b>FEMALES</b>						
0–14	6.3	5.5	7.1	8.3	7.1	4.1
15–24	8.7	9.8	17.4	24.3	19.4	14.4
25–34	4.3	3.8	5.8	11.8	9.5	6.2
35–44	4.7	5.1	8.6	12.1	8.5	5.6
45–54	6.7	6.4	14.0	17.2	10.8	7.6
55–64	14.5	7.4	20.9	21.5	14.0	9.5
65–74	20.3	10.8	30.6	30.3	19.1	13.2
75 and over	30.1	24.1	33.6	40.3	30.2	19.5
<b>All ages</b>	<b>8.2</b>	<b>7.0</b>	<b>12.9</b>	<b>16.7</b>	<b>12.6</b>	<b>8.6</b>
<b>MALES</b>						
0–14	12.2	10.4	9.1	12.4	10.6	6.5
15–24	51.0	74.2	69.1	95.4	79.1	42.0
25–34	34.9	37.6	43.9	44.3	37.0	26.9
35–44	29.4	31.6	33.7	36.4	26.4	13.9
45–54	30.9	31.6	34.5	41.1	23.2	14.9
55–64	37.2	34.1	47.5	48.1	28.2	15.2
65–74	46.1	53.5	64.2	53.4	39.0	19.9
75 and over	74.0	77.4	95.1	102.0	56.5	43.0
<b>All ages</b>	<b>32.5</b>	<b>35.5</b>	<b>36.8</b>	<b>44.7</b>	<b>34.8</b>	<b>20.6</b>

(a) Deaths per 100,000 of the respective female and male population of the same age.

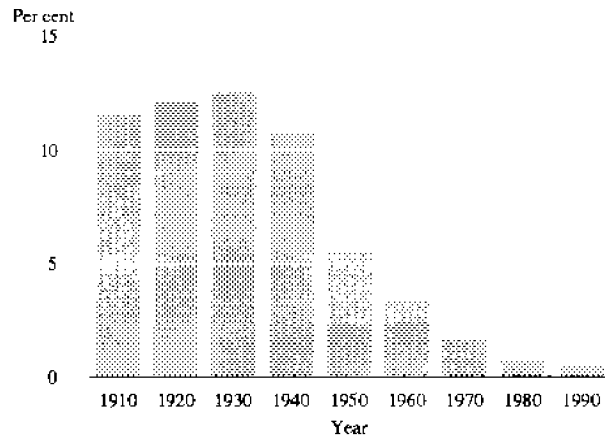
Source: *Australian Demographic Bulletins, 1940–1960*. ABS *Causes of Death data, 1970–1990*

## Maternal mortality

Maternal mortality has fallen dramatically since early this century. There have been very few such deaths in recent years.

In 1910, the number of maternal deaths related to pregnancy was 3.0 per cent of all female deaths or 11.5 per cent of deaths of women aged 15–49 years (see Chart 2.13). In 1930, maternal deaths related to pregnancy were 2.8 per cent of all female deaths, or 12.5 per cent of deaths of women aged 15–49 years. In 1990, there were only 16 maternal deaths related to pregnancy, which represented 0.5 per cent of deaths of women aged 15–49 years. In 1993, 15 maternal deaths relating to pregnancy occurred.

CHART 2.13 MATERNAL DEATHS RELATED TO PREGNANCY: PERCENTAGE OF FEMALE DEATHS FOR THE AGE GROUP 15-49 YEARS, AUSTRALIA  
SELECTED YEARS, 1910-1990



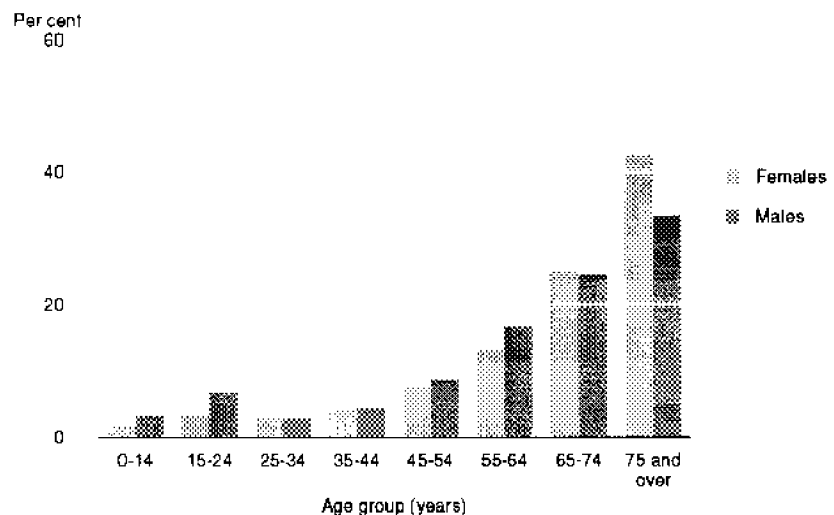
Source: Australian Demography Bulletins, 1910-1960. Causes of Death, 1969 and 1970, Bulletin No 7 Causes of Death, 1980 and 1990 (3303.0)

## Asthma

In 1993, there were more female than male asthma deaths (451 compared with 326). This equates to 5.1 deaths per 100,000 female population and 3.7 deaths per 100,000 male population. Asthma did not contribute greatly to overall deaths, being responsible for only 0.8 per cent of all female deaths.

The majority of female asthma deaths occurred in the older age groups. In 1993, 42.4 per cent of asthma deaths were in the age group 75 years and over, 25.1 per cent were in the 65-74 years age group and 13.1 per cent were in the 55-64 years age group. Female asthma deaths in those aged under 25 years accounted for only 4.9 per cent of all asthma deaths in females. The male distribution of asthma deaths was similar (see Chart 2.14).

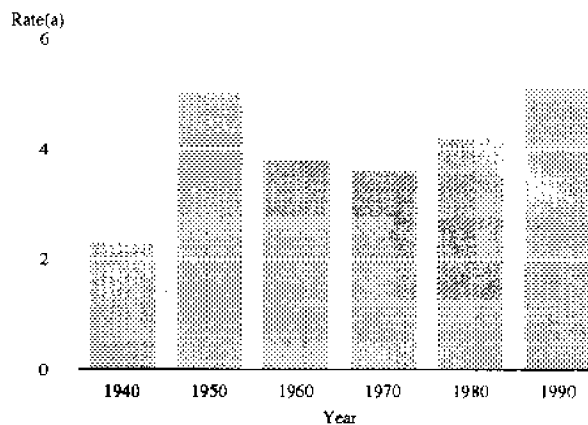
CHART 2.14 DEATHS DUE TO ASTHMA: DISTRIBUTION IN EACH AGE GROUP BY SEX, AUSTRALIA, 1993



Source: ABS Causes of Death data

Female standardised death rates for asthma have generally increased since about 1940, with a trough between 1960 and 1970 (see Chart 2.15). In 1970 there were 3.6 deaths per 100,000 female population. This rose to 5.1 deaths per 100,000 female population in 1990.

CHART 2.15 FEMALE DEATHS DUE TO ASTHMA: STANDARDISED DEATH RATES<sup>(a)</sup>, AUSTRALIA, SELECTED YEARS, 1940-1990



<sup>(a)</sup> Per 100,000 female population, standardised to 1986 Australian female population.  
Source: *Australian Demography Bulletins, 1940-1960. Causes of Death, 1969 and 1970, Bulletin No. 7. Causes of Death, Australia, 1980 and 1990 (3303 0)*

Age-specific death rates for the period 1983 to 1993 are shown in Table 2.12. They generally increase with age. Some age-specific death rates were higher during the period 1985 to 1989 than experienced during the rest of the period. This appears to be particularly true of older age groups.

TABLE 2.12 ASTHMA DEATHS: AGE-SPECIFIC DEATH RATES(a), AUSTRALIA, 1983-1993

Age group (years)	Year										
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
	FEMALES										
0-14	0.3	0.4	0.5	0.4	0.4	0.6	0.3	0.3	0.4	0.3	0.4
15-24	0.9	1.2	1.9	2.0	2.1	1.4	1.8	1.7	1.4	0.4	1.1
25-34	1.3	1.7	1.7	1.7	1.6	0.9	1.2	1.4	1.1	0.6	0.9
35-44	1.5	3.4	1.9	2.1	2.8	2.2	2.8	2.0	1.5	1.1	1.4
45-54	3.8	4.8	5.8	4.7	6.0	5.9	5.3	4.1	2.8	3.7	3.4
55-64	9.9	6.6	11.4	8.4	11.6	10.6	12.4	8.8	9.1	4.5	8.0
65-74	17.2	12.9	18.1	17.8	20.4	16.9	21.5	16.3	16.7	18.7	17.1
75 and over	24.3	26.3	33.5	27.2	30.7	34.7	40.3	35.9	32.2	41.1	37.4
<b>All ages</b>	<b>4.2</b>	<b>4.2</b>	<b>5.5</b>	<b>4.8</b>	<b>5.8</b>	<b>5.4</b>	<b>6.3</b>	<b>5.2</b>	<b>4.8</b>	<b>4.9</b>	<b>5.1</b>
	MALES										
0-14	0.5	0.6	0.6	0.9	0.6	0.4	0.6	0.6	0.4	0.3	0.5
15-24	1.1	2.1	1.6	2.4	1.7	1.6	1.6	1.3	1.0	0.7	1.6
25-34	1.4	1.5	1.5	1.1	1.6	1.6	1.4	1.3	1.0	1.0	0.6
35-44	2.0	2.2	1.9	2.5	1.8	1.9	1.7	1.9	1.4	1.3	1.0
45-54	4.4	4.5	4.0	4.6	3.6	3.4	3.5	3.8	2.6	3.2	2.7
55-64	9.3	8.9	10.4	10.2	11.1	11.1	10.9	9.3	7.6	8.4	7.3
65-74	15.6	19.6	21.8	23.8	21.8	19.4	24.3	19.6	17.9	15.1	13.8
75 and over	32.6	28.8	43.7	34.2	33.6	37.3	45.0	37.6	35.1	35.6	35.4
<b>All ages</b>	<b>3.9</b>	<b>4.3</b>	<b>4.8</b>	<b>5.0</b>	<b>4.7</b>	<b>4.6</b>	<b>5.2</b>	<b>4.5</b>	<b>3.9</b>	<b>3.8</b>	<b>3.7</b>

(a) Deaths per 100,000 of the respective female and male population of the same age.

Source: Causes of Death, Australia, 1983-1993 (3303.0)

## GLOSSARY

<b>Age-specific death rates</b>	Age-specific death rates are the number of deaths in an age group per 100,000 of the mid-year estimated resident population at that age.														
<b>Crude death rates</b>	Crude death rates are the total number of deaths for a specific cause per 100,000 of the estimated mean resident population for a particular year.														
<b>External causes</b>	Accidents, poisoning and violence are commonly called external causes and include motor vehicle traffic accidents and suicide.														
<b>International Classification of Diseases (ICD)</b>	<p>The International Classification of Diseases Ninth Revision is presently used. Up to the Fifth Revision, the classification was known as the International List of Causes of Death. The Sixth to Eighth Revisions were known as the International Statistical Classification of Diseases, Injuries and Causes of Death. The following revisions have been used in this publication:</p> <p>International List of Causes of Death</p> <table> <tr> <td>Second Revision</td> <td>(ICD2) 1910–1921</td> </tr> <tr> <td>Third Revision</td> <td>(ICD3) 1922–1930</td> </tr> <tr> <td>Fifth Revision</td> <td>(ICD5) 1940–1949</td> </tr> </table> <p>International Statistical Classification of Diseases, Injuries and Causes of Death</p> <table> <tr> <td>Sixth Revision</td> <td>(ICD6) 1950–1957</td> </tr> <tr> <td>Seventh Revision</td> <td>(ICD7) 1958–1967</td> </tr> <tr> <td>Eighth Revision</td> <td>(ICD8) 1968–1978</td> </tr> </table> <p>International Classification of Diseases</p> <table> <tr> <td>Ninth Revision</td> <td>(ICD9) 1979–present</td> </tr> </table>	Second Revision	(ICD2) 1910–1921	Third Revision	(ICD3) 1922–1930	Fifth Revision	(ICD5) 1940–1949	Sixth Revision	(ICD6) 1950–1957	Seventh Revision	(ICD7) 1958–1967	Eighth Revision	(ICD8) 1968–1978	Ninth Revision	(ICD9) 1979–present
Second Revision	(ICD2) 1910–1921														
Third Revision	(ICD3) 1922–1930														
Fifth Revision	(ICD5) 1940–1949														
Sixth Revision	(ICD6) 1950–1957														
Seventh Revision	(ICD7) 1958–1967														
Eighth Revision	(ICD8) 1968–1978														
Ninth Revision	(ICD9) 1979–present														
<b>Life expectancy</b>	Life expectancy refers to the average number of additional years a person of a given age and sex might expect to live if the age-specific death rates of the given period continued throughout her or his lifetime.														
<b>Standardised death rates</b>	Standardised death rates relate to the overall death rates that would have prevailed in a standard population if it had experienced at each age group the death rates of the population being studied. The standard population used in these calculations is the total Australian 1986 population. The rates have been calculated using the direct method of standardisation.														
<b>Years of potential life lost (YPLL)</b>	Years of potential life lost (YPLL) indicate the number of years lost due to specific causes based on the assumption that up to an exact age 65 years the decedent (deceased) would not have died from any other cause.														

Jain (1994) calculated the YPLL index by multiplying the number of deaths in the life table from each cause by the number of years remaining up to a given birthday. Thus,

$$\text{YPLL for a cause} = \sum_x n d_x \cdot (65 - (x + 2.5)) \quad \text{for } x = 0, 5, \dots, 60$$

- where  $n d_x$  = number of deaths in the life table in the age interval  $x$  to  $x+n$ .  
 $n$  = class interval for the age groups (for example for ages 0–4, 5–9 and so on,  $n = 5$ ).  
 $x$  = age in completed number of years.

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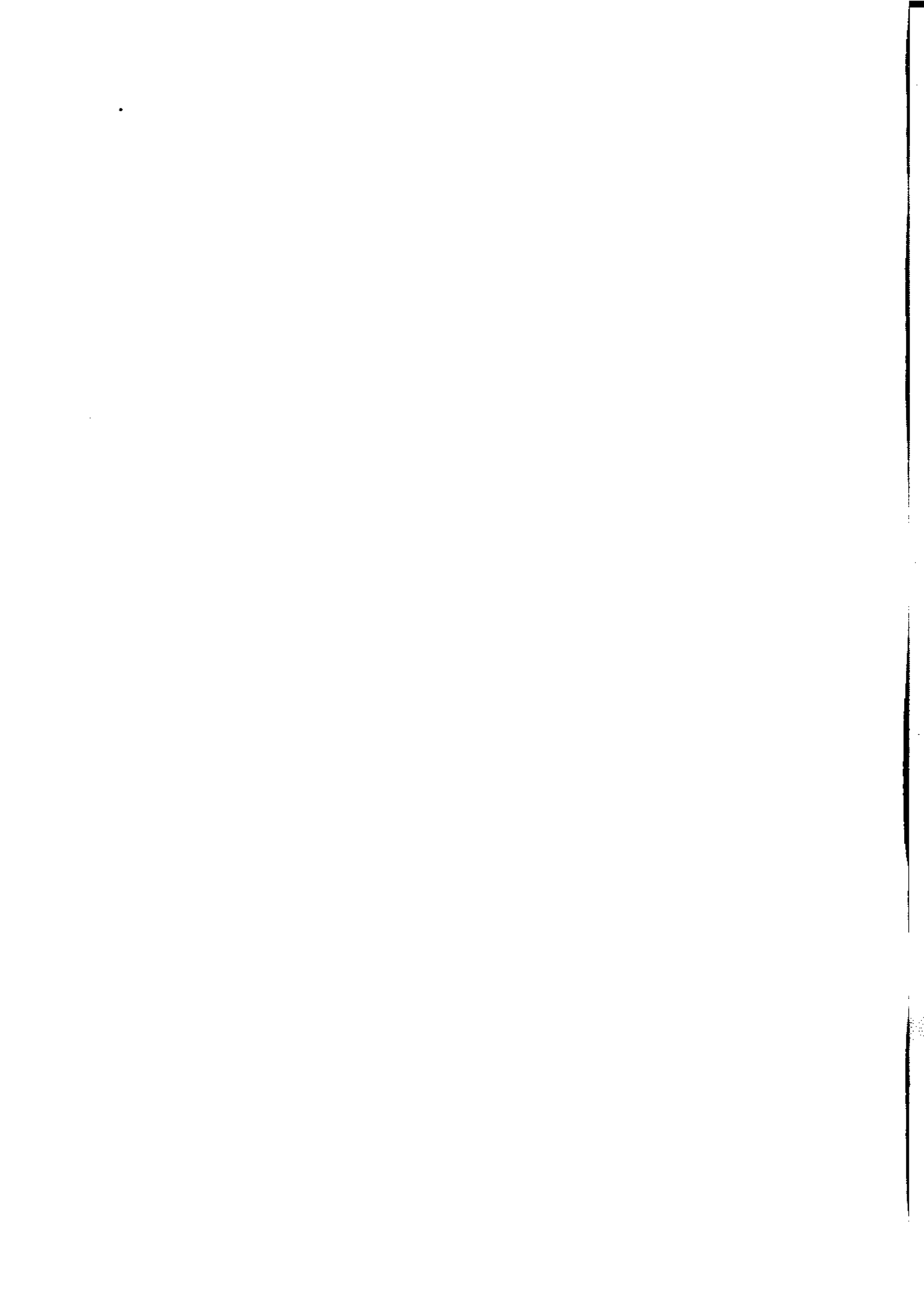
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US

## HEALTH STATUS

### Main findings

- 75.4 per cent of the female population reported one or more recent illnesses in the two weeks prior to interview. This compared with 66.2 per cent of the male population.
- The most commonly reported recent illnesses for both females and males were headache (due to unspecified or trivial cause) and the common cold.
- 68.2 per cent of the female population reported one or more long-term conditions. This compared with 64.0 per cent of the male population.
- 57.5 per cent of females reported experiencing both a recent and a long-term condition during the two weeks prior to interview (males 48.8%).
- The proportion of persons reporting recent illnesses increased with age. The prevalence of long-term conditions also increased with age.
- Recent illnesses were reported most frequently by females in Queensland (77.9%) and least frequently by females in the Northern Territory (67.8%).
- Self assessed health status for women and men (aged 18 years and over) was similar, with over three quarters of the respective populations rating their health status as good or excellent.
- When asked about their happiness, most people reported that they were happy or very happy (95.7% of women, 95.6% of men aged over 18 years).
- According to the 1993 Survey of Disability, Ageing and Carers, 2.2 per cent of all females reported experiencing mental disorders as a disabling condition (compared with 1.8% of males).

The ABS National Health Survey 1989–90 collected information about health status, focussing on measures of ill-health, specifically:

- the number and types of medical conditions recently experienced;
- the number and types of long-term medical conditions experienced.

Some caution must be exercised when interpreting these data as they are based on respondent self assessment and do not necessarily represent medically diagnosed conditions.

## Recent and long-term conditions

### Overview

According to the 1989–90 National Health Survey, 57.5 per cent of females reported that they had experienced both recent and long-term conditions in the two weeks prior to interview. An additional 17.9 per cent reported only recent conditions and 10.7 per cent reported only long-term conditions (see Table 3.1).

**TABLE 3.1 PERSONS: WHETHER REPORTED A RECENT OR LONG-TERM CONDITION BY SEX, AUSTRALIA, 1989–90**  
(Per cent)

<i>Whether reported a recent or long-term condition</i>	<i>Females</i>	<i>Males</i>	<i>Persons</i>
No recent or long-term conditions	13.9	18.6	16.3
Recent conditions only	17.9	17.4	17.6
Long-term conditions only	10.7	15.2	12.9
Both recent and long-term conditions	57.5	48.8	53.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Source: 1989–90 National Health Survey Health Status Indicators Australia (4370.0)*

### Recent illnesses

Recent illnesses were defined in the National Health Survey as any medical conditions experienced in the two weeks prior to interview.

Similar proportions of females (17.9%) and males (17.4%) reported having experienced a recent condition only in the two weeks prior to interview. Over 50 per cent of the Australian population reported having experienced both recent and long-term conditions, with a higher percentage of females (57.5%) reporting such conditions than males (48.8%).

The two most commonly reported recent illnesses, reported by both females and males, were headache due to unspecified or trivial cause and the common cold. Of the total female population, 14.7 per cent reported suffering from headache due to unspecified cause and 9.4 per cent reported experiencing a common cold in the two weeks prior to interview.

Table 3.2 shows the most frequently reported illnesses ranked by sex. Hypertension as a recent illness affected 9.4 per cent of the female population and accounted for 12.4 per cent of all recent illnesses reported. It was the third most reported recent illness for females.

A higher percentage of females than males reported headache due to unspecified or trivial cause, hypertension, arthritis, headache due to stress, and constipation. A lower percentage of females than males reported injuries, asthma and the common cold.

**TABLE 3.2 PERSONS: THE MOST FREQUENTLY REPORTED RECENT ILLNESSES BY SEX, AUSTRALIA, 1989-90**  
(Per cent)(a)

<i>Recent illness</i>	<i>Percentage of persons who reported a recent illness</i>		<i>Percentage of total population</i>	
	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>
Headache due to unspecified or trivial cause	19.5	14.7	14.7	9.7
Common cold	12.5	14.7	9.4	9.7
Hypertension	12.4	9.8	9.4	6.5
Injuries	8.3	12.0	6.3	8.0
Eczema, dermatitis	8.3	7.2	6.3	4.8
Arthritis	8.1	5.1	6.1	3.3
Other diseases of the musculoskeletal system and connective tissue	7.5	7.3	5.7	4.8
Dental problems	7.4	7.6	5.6	5.0
Disorders of menstruation	6.2	..	4.7	..
Other diseases of the skin and subcutaneous tissue	6.1	6.2	4.6	4.1
Headache due to stress	6.0	2.8	4.5	1.9
Asthma	5.5	6.8	4.1	4.5
Insomnia	5.4	3.1	4.0	2.0
Other diseases of the digestive system	4.8	4.8	3.6	3.2
Nerves, tension, nervousness and emotional problems	4.7	2.6	3.5	1.7
Constipation	4.5	1.4	3.4	0.9
Influenza	4.1	4.4	3.1	2.9
Hayfever	3.8	3.5	2.9	2.3
Back trouble (unspecified)	3.7	3.9	2.8	2.6
Sinusitis	3.7	2.4	2.8	1.6
<b>Total</b>	<b>(b)100.0</b>	<b>(b)100.0</b>	<b>75.4</b>	<b>66.2</b>

(a) These percentages are expressed firstly as a proportion of females and males who reported a recent illness, and secondly as a proportion of total females and males. (b) Components add up to over 100 per cent as a person can experience more than one type of condition.

Source: 1989-90 National Health Survey Health Status Indicators Australia (4370.0)

### Age

The proportion of females (and males) reporting recent illnesses generally increased with age, from 65.1 per cent of all females in the under five years age group to 92.7 per cent of the 75 years and over age group (see Table 3.3).

In the age groups 15-24, 25-34, 35-44 and 45-54 years headache due to unspecified cause was the most commonly reported illness for women (and for men in the age groups 25-34 and 35-44 years). Women reported a higher occurrence of such headaches than men in all of these age groups. Women in the age groups 15-24, 35-44 and 45-54 years frequently reported disorders of menstruation (which were ranked third, second and third in these three age groups respectively). However, such disorders were ranked only eighth for those aged 25-34 years, which are the prime child-bearing years.

Hypertension was the most commonly reported recent illness for both women and men in the age groups 55-64, 65-74 and 75 years and over. Arthritis was the second most commonly reported recent illness for women in these age groups. Females reported a higher percentage of these illnesses than males

in each age group. Insomnia also featured strongly in the older age groups. More than one in five (21.3%) women aged 75 years and over reported insomnia as a recent illness.

**TABLE 3.3 PERSONS: THE MOST FREQUENTLY REPORTED RECENT ILLNESSES IN EACH AGE GROUP BY SEX, AUSTRALIA, 1989-90 (Per cent)**

<i>Age group (years) and type of recent illness</i>	<i>Percentage in age group who reported recent illness</i>		
	<i>Females</i>	<i>Males</i>	<i>Persons</i>
<b>Under 5</b>			
<i>Total recent illnesses</i>	65.1	66.6	65.9
Common cold	22.7	22.7	22.7
Eczema, dermatitis	15.6	15.0	15.3
Dental problems	9.8	10.7	10.3
Injuries	6.3	7.6	7.0
Cough or sore throat	4.1	4.3	4.2
<b>5-14</b>			
<i>Total recent illnesses</i>	59.8	56.5	58.1
Common cold	13.3	12.2	12.7
Injuries	9.0	9.0	9.0
Headache — due to unspecified or trivial causes	7.8	5.9	6.8
Dental problems	6.4	6.0	6.2
Asthma	6.3	10.1	8.3
<b>15-24</b>			
<i>Total recent illnesses</i>	71.9	59.1	65.4
Headache — due to unspecified or trivial causes	19.5	11.2	15.3
Common cold	10.5	10.0	10.3
Disorders of menstruation	7.4	..	3.6
Injuries	6.9	11.5	9.2
Eczema, dermatitis	6.7	3.9	5.2
<b>25-34</b>			
<i>Total recent illnesses</i>	73.9	62.9	68.3
Headache — due to unspecified or trivial causes	19.0	13.2	16.1
Common cold	8.5	9.1	8.8
Headache — due to stress or tension	7.6	2.7	5.1
Eczema, dermatitis	7.0	3.7	5.3
Dental problems	6.0	4.1	5.1
<b>35-44</b>			
<i>Total recent illnesses</i>	75.9	64.4	70.1
Headache — due to unspecified or trivial causes	19.9	14.0	16.9
Disorders of menstruation	7.8	..	3.9
Headache — due to stress or tension	7.8	3.2	5.5
Common cold	6.9	7.2	7.1
Other diseases of the musculoskeletal system and connective tissue	6.8	5.8	6.3

**TABLE 3.3 PERSONS: THE MOST FREQUENTLY REPORTED RECENT ILLNESSES IN EACH AGE GROUP BY SEX, AUSTRALIA, 1989-90 — continued**  
(Per cent)

Age group (years) and type of recent illness	Percentage in age group who reported recent illness		
	Females	Males	Persons
<b>45-54</b>			
<i>Total recent illnesses</i>	82.6	68.9	75.6
Headache — due to unspecified or trivial causes	18.4	10.3	14.2
Hypertension	13.4	11.0	12.2
Disorders of menstruation	10.4	..	5.1
Other diseases of the musculoskeletal system and connective tissue	8.8	6.4	7.5
Arthritis	8.1	3.4	5.7
<b>55-64</b>			
<i>Total recent illnesses</i>	85.6	79.3	82.5
Hypertension	27.4	21.2	24.3
Arthritis	16.7	10.3	13.5
Headache — due to unspecified or trivial causes	14.1	11.1	12.6
Insomnia	8.3	4.1	6.2
Other diseases of the musculoskeletal system and connective tissue	8.2	7.3	7.7
<b>65-74</b>			
<i>Total recent illnesses</i>	90.7	86.5	88.8
Hypertension	38.3	30.5	34.7
Arthritis	23.8	17.2	20.8
Insomnia	14.5	8.7	11.9
Headache — due to unspecified or trivial causes	10.8	5.9	8.6
Other diseases of the musculoskeletal system and connective tissue	9.3	7.3	8.4
<b>75 and over</b>			
<i>Total recent illnesses</i>	92.7	87.9	90.9
Hypertension	39.4	24.3	33.7
Arthritis	29.0	19.4	25.4
Insomnia	21.3	13.6	18.4
Heart disease	14.2	15.5	14.7
Constipation	11.5	7.2	9.9
Other diseases of the musculoskeletal system and connective tissue	11.3	7.2	9.8

Source: 1989-90 National Health Survey Health Status Indicators Australia (4370.0)

#### State

The proportion of females reporting recent illnesses differed from State to State; the highest being observed in Queensland (77.9%) and the Australian Capital Territory (77.8%), and the lowest being observed in the Northern Territory (67.8%). This compared with a national female average of 75.4 per cent.

The most commonly reported recent illness for females in every State/Territory was headache due to unspecified cause. The common cold was the second most frequently reported recent illness for females in Victoria, Western Australia and the Australian Capital Territory. Hypertension was the second most frequently reported recent illness for females in the other States, except in the Northern Territory where injuries was the second most frequently reported recent condition.

*Capital city compared with rest of State*

Females who lived in capital cities were more likely to have reported experiencing an illness in the two weeks prior to interview than females who lived in the rest of the State (see Table 3.4).

**TABLE 3.4 FEMALES: WHETHER REPORTED A RECENT OR LONG-TERM CONDITION BY AREA OF RESIDENCE, AUSTRALIA, 1989-90**  
(Per cent)

<i>Whether reported a recent or long-term condition</i>	<i>Area of residence</i>		
	<i>Capital city</i>	<i>Rest of State</i>	<i>Total</i>
No recent or long-term conditions	13.2	15.2	13.9
Recent conditions only	17.0	19.5	17.9
Long-term conditions only	10.6	10.8	10.7
Both recent and long-term conditions	59.2	54.5	57.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Source: 1989-90 National Health Survey Health Status Indicators Australia (4370.0)*

Over three quarters (76.2%) of females in capital cities reported experiencing a recent illness. This compared with 74.0 per cent of females from the rest of the State.

All capital cities had a higher proportion of females reporting recent illnesses than the rest of the State. For males, Western Australia and the Australian Capital Territory were the only States or Territories where a higher proportion of those living outside the capital cities reported recent illnesses than those from the capital cities.

*Long-term conditions*

Long-term conditions were defined in the National Health Survey as medical conditions (illness, injury or disability) which have lasted at least six months, or which the respondent expects to last for six months or more. Included in this definition are long-term conditions experienced from which only infrequent attacks may occur, e.g. asthma; long-term conditions which may be under control, for example through the continuing use of medication, e.g. diabetes, epilepsy; conditions which, although present, may not be generally considered 'illness' because they are not necessarily debilitating, e.g. reduced sight; and long-term or permanent impairments or disability.

Two thirds of the Australian population reported having one or more long-term conditions, with a higher percentage of females (68.2%) reporting such conditions than males (64.0%).

The most commonly reported long-term condition was disorders of refraction and accommodation. This affected 31.5 per cent of the population (34.6% of females, and 28.4% of males) and includes far and short sightedness, astigmatism and refractive error.

Table 3.5 shows the most frequently reported long-term conditions. These differed between females and males. While arthritis was reported by 19.0 per cent of females with long-term conditions, it was reported by only 12.9 per cent of males with long-term conditions. Arthritis was the second most reported long-term condition for females, affecting 12.9 per cent of the female population, whereas for males it was ranked fourth, and affected 8.3 per cent of the male population.

A higher percentage of females than males reported disorders of refraction and accommodation, arthritis, varicose veins, migraine and hypertension. However, a lower percentage of females than males suffered complete or partial deafness, unspecified back trouble, gout and disorders of the intervertebral disc. Neoplasms (tumours) were reported by equal proportions of females and males.

**TABLE 3.5 PERSONS: THE MOST FREQUENTLY REPORTED LONG-TERM CONDITIONS BY SEX, AUSTRALIA, 1989-90 (Per cent)(a)**

<i>Long-term condition</i>	<i>Percentage of persons who reported a long-term condition</i>		<i>Percentage of total population</i>	
	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>
Disorders of refraction and accommodation	50.7	44.4	34.6	28.4
Arthritis	19.0	12.9	12.9	8.3
Hayfever	15.5	14.0	10.5	9.0
Hypertension	12.0	9.5	8.2	6.1
Asthma	11.6	12.8	7.9	8.2
Back trouble (unspecified)	10.7	13.8	7.3	8.8
Other diseases of the musculoskeletal system and connective tissue	8.5	8.9	5.8	5.7
Migraine	6.9	3.3	4.7	2.1
Eczema, dermatitis	6.5	4.6	4.5	2.9
Sinusitis	5.8	3.9	3.9	2.5
Varicose veins	5.6	1.6	3.8	1.0
Other diseases of the eye and adnexa	5.1	4.9	3.5	3.1
Deafness (complete or partial)	4.4	8.0	3.0	5.1
Bronchitis, emphysema	4.3	4.6	3.0	2.9
Other diseases of the digestive system	3.7	2.5	2.5	1.6
Allergy (unspecified)	3.7	2.8	2.5	1.8
High cholesterol	3.6	3.2	2.5	2.0
Disorders of the intervertebral disc	3.1	4.9	2.1	3.1
Heart disease	2.5	3.2	1.7	2.0
Neoplasms (tumours)	2.4	2.5	1.6	1.6
Other diseases of the skin and subcutaneous tissue	2.2	2.5	1.5	1.6
Musculoskeletal deformities	2.2	1.8	1.5	1.1
Thyroid disorders	2.2	0.3	1.5	0.2
<b>Total</b>	<b>(b)100.0</b>	<b>(b)100.0</b>	<b>68.2</b>	<b>64.0</b>

(a) These percentages are expressed firstly as a proportion of females and males who reported a long-term condition, and secondly as a proportion of total females and males.

(b) Components add up to over 100 per cent as a person can experience more than one type of condition.

Source: 1989-90 National Health Survey Health Status Indicators Australia (4370.0)



*Age* . The proportion of females reporting long-term conditions progressively increased with age, from 25.1 per cent of those aged under 5 years to 96.4 per cent of those aged 75 years and over. (For males the corresponding figures were 26.5% and 94.9%). Of people aged 65–74 years who reported a long-term condition 54.4 per cent were female, and of people aged 75 years and over reporting a long-term condition 62.8 per cent were female.

Asthma was the most common long-term condition reported by females and males aged under 15 years. For women aged 15 years and over and men aged 25 years and over, disorders of refraction and accommodation were the most frequently reported conditions. Hayfever was the second most frequently reported long-term condition for women aged 15–44 years. Arthritis was the second most commonly reported long-term condition for women aged 45 years and over, and for men aged 55 years and over (see Table 3.6).

**TABLE 3.6 PERSONS: THE MOST FREQUENTLY REPORTED LONG-TERM CONDITIONS IN EACH AGE GROUP BY SEX, AUSTRALIA, 1989–90 (Per cent)**

<i>Age group (years) and type of long-term condition</i>	<i>Percentage in age group who reported long-term condition</i>		
	<i>Females</i>	<i>Males</i>	<i>Persons</i>
<b>Under 5</b>			
<i>Total long-term conditions</i>	25.1	26.5	25.8
Asthma	7.9	10.5	9.2
Eczema, dermatitis	6.1	5.2	5.7
Allergy unspecified	2.2	2.3	2.2
Other diseases of the respiratory system	1.9	2.1	2.0
Bronchitis, emphysema	1.3	1.9	1.6
<b>5–14</b>			
<i>Total long-term conditions</i>	39.8	44.3	42.1
Asthma	12.5	17.8	15.2
Disorders of refraction and accommodation	6.8	5.9	6.3
Hayfever	6.0	6.3	6.2
Eczema, dermatitis	4.3	3.3	3.8
Allergy unspecified	2.8	3.1	3.0
<b>15–24</b>			
<i>Total long-term conditions</i>	61.4	49.8	55.5
Disorders of refraction and accommodation	21.3	10.1	15.6
Hayfever	14.1	11.9	13.0
Asthma	10.8	9.3	10.0
Back trouble (unspecified)	6.9	6.0	6.5
Eczema, dermatitis	5.7	2.1	3.9
<b>25–34</b>			
<i>Total long-term conditions</i>	66.4	61.1	63.8
Disorders of refraction and accommodation	22.7	17.5	20.1
Hayfever	14.7	12.7	13.7
Back trouble (unspecified)	9.6	11.4	10.5
Asthma	7.3	5.9	6.6
Migraine	6.8	2.5	4.6

**TABLE 3.6 PERSONS: THE MOST FREQUENTLY REPORTED LONG-TERM CONDITIONS IN EACH AGE GROUP BY SEX, AUSTRALIA, 1989-90 — continued**  
(Per cent)

Age group (years) and type of long-term condition	Percentage in age group who reported long-term condition		
	Females	Males	Persons
<b>35-44</b>			
<i>Total long-term conditions</i>	72.5	70.4	71.5
Disorders of refraction and accommodation	31.2	26.0	28.6
Hayfever	13.5	10.0	11.7
Back trouble (unspecified)	11.9	15.2	13.6
Arthritis	8.4	7.1	7.8
Migraine	7.8	3.2	5.5
<b>45-54</b>			
<i>Total long-term conditions</i>	88.9	83.6	86.2
Disorders of refraction and accommodation	66.3	57.9	62.0
Arthritis	21.3	11.1	16.1
Hypertension	12.5	10.3	11.4
Hayfever	11.9	9.5	10.7
Back trouble (unspecified)	11.2	15.1	13.2
<b>55-64</b>			
<i>Total long-term conditions</i>	94.9	92.8	93.9
Disorders of refraction and accommodation	75.3	71.4	73.3
Arthritis	34.3	22.8	28.5
Hypertension	23.1	19.4	21.3
High cholesterol	10.8	6.1	8.5
Back trouble (unspecified)	10.6	13.2	11.9
<b>65-74</b>			
<i>Total long-term conditions</i>	94.5	95.4	94.9
Disorders of refraction and accommodation	70.3	70.0	70.1
Arthritis	42.7	31.4	37.6
Hypertension	31.9	25.0	28.8
Other diseases of the eye and adnexa	10.8	10.5	10.7
Other diseases of the musculoskeletal system and connective tissue	8.2	7.5	7.8
<b>75 and over</b>			
<i>Total long-term conditions</i>	96.4	94.9	95.8
Disorders of refraction and accommodation	63.0	64.2	63.5
Arthritis	45.8	34.9	41.7
Hypertension	30.1	21.2	26.7
Other diseases of the eye and adnexa	19.0	18.1	18.7
Deafness (complete or partial)	13.5	22.5	16.9

Source: 1989-90 National Health Survey Health Status Indicators Australia (4370.0)

**State** . Three quarters of females (75.1%) in the Australian Capital Territory reported having one or more long-term conditions, compared with 73.9 per cent in Western Australia and 72.2 per cent in Queensland. The Australian Capital Territory also recorded the highest proportion of males reporting long-term conditions (69.1%), followed by Western Australia (68.5%) and Queensland (68.4%). The Northern Territory recorded the lowest proportion of both females and males reporting long-term conditions (41.8% for females and 48.2% for males).

The most commonly reported long-term condition for females and males in every State/Territory were disorders of refraction and accommodation. For females in New South Wales, Victoria, Queensland, South Australia, and Tasmania, the second most commonly reported long-term condition was arthritis, while in Western Australia and the Territories it was hayfever. Males in New South Wales and Queensland reported unspecified back trouble as the second most common long-term condition; in Victoria, South Australia, Western Australia, and the Australian Capital Territory it was hayfever; in Tasmania it was arthritis; and in the Northern Territory, asthma.

**Capital city compared with rest of State**

Overall, females living in capital cities (69.8%) were more likely than females living elsewhere (65.3%) to report a long-term condition. Females living in capital cities were more likely to report long-term conditions than those from the rest of their State in all States except Tasmania and the Australian Capital Territory. Males living in capital cities were more likely to report long-term conditions than those from the rest of the State in all States except for the Northern Territory and the Australian Capital Territory.

**Self assessed health status**

The National Health Survey addressed the concept of 'well-being' by asking respondents how they rated their health in general (from excellent to poor) and how they felt overall (very happy to very unhappy).

**Self assessed health**

The self assessed health status of women and men (aged 18 years and over) was similar, with over three quarters rating their health as good or excellent. Fewer than 1 in 20 people rated their health as poor (see Table 3.7).

**TABLE 3.7 PERSONS AGED 18 YEARS AND OVER: SELF ASSESSED HEALTH STATUS BY SEX, AUSTRALIA, 1989-90**  
(Per cent)

<i>Self assessed health status</i>	<i>Females</i>	<i>Males</i>	<i>Persons</i>
Excellent	28.6	29.8	29.2
Good	49.7	50.3	50.0
Fair	17.0	15.5	16.3
Poor	4.6	4.5	4.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Source: 1989-90 National Health Survey Health Status Indicators Australia (4370.0)*

**Self assessed happiness**

Most of the population aged 18 years and over reported themselves to be happy or very happy (95.7% of women and 95.6% of men).

There is a relationship between how a person rated their health and self assessed happiness (see Table 3.8). For example, of women who regarded their health as excellent, 49.5 per cent said they were very happy and 49.3 per cent said they were happy. Conversely, women who regarded themselves to be in poor health were the group least likely to rate themselves as very happy

(9.6%), and most likely to rate themselves as unhappy or very unhappy (25.8% and 6.5% respectively).

**TABLE 3.8 WOMEN AGED 18 YEARS AND OVER: SELF ASSESSED HAPPINESS BY SELF ASSESSED HEALTH STATUS, AUSTRALIA, 1989-90 (Per cent)**

<i>Self assessed happiness</i>	<i>Self assessed health status</i>				<i>Total</i>
	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	
Very happy	49.5	23.7	11.7	9.6	28.4
Happy	49.3	74.1	80.1	58.0	67.3
Unhappy	1.0	2.0	7.5	25.8	3.7
Very unhappy	0.2	0.2	0.7	6.5	0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Source: 1989-90 National Health Survey Health Status Indicators Australia (4370.0)*

There is also a relationship between self assessed health and whether the person reported a recent or long-term condition (see Table 3.9).

**TABLE 3.9 WOMEN AGED 18 YEARS AND OVER: WHETHER REPORTED A RECENT OR LONG-TERM CONDITION BY SELF ASSESSED HEALTH STATUS, AUSTRALIA, 1989-90 (Per cent)**

<i>Whether reported a recent or long-term condition</i>	<i>Self assessed health status</i>				<i>Total</i>
	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	
No recent or long-term conditions	48.1	48.0	3.6	0.3	100.0
Recent conditions only	37.8	51.9	9.0	1.3	100.0
Long-term conditions only	43.0	49.7	7.1	0.2	100.0
Both recent and long-term conditions	22.0	49.6	21.9	6.6	100.0
<b>Total</b>	<b>28.6</b>	<b>49.7</b>	<b>17.0</b>	<b>4.6</b>	<b>100.0</b>

*Source: 1989-90 National Health Survey Health Status Indicators Australia (4370.0)*

Women who reported no recent or long-term conditions were the group most likely to rate their health as excellent (48.1%). Women who reported experiencing both recent and long-term conditions were the group least likely to report their health status as excellent (22.0%), and were more likely than any other group to report themselves to be in fair or poor health (21.9% and 6.6% respectively).

## Mental health

### Mental health services

The collection of meaningful statistics of mental health services has become increasingly difficult since the 1970s because of the movement away from institutional care for mental patients. No comprehensive national data currently exist on the prevalence of mental disorders in Australia. There are currently a range of mental health services provided for in-patients and out-patients at psychiatric hospitals, admission and reception centres, day hospitals, out-patient clinics, training centres, homes for the mentally ill and geriatric patients, psychiatric units in general hospitals, and the like. Statistics relating

to mental health institutions are available from relevant agencies in most States.

Some data about hospital morbidity and utilisation are collected in the Hospital Utilisation and Costs Study (HUCS), conducted by the Australian Institute of Health and Welfare (AIHW) (Gillett, Liu and Solon, 1993). This collection includes information about psychiatric patients in public and private acute hospitals in each State. It is based on a collation of the morbidity records from individual hospitals, all of which have been mapped to the clinical modification of ICD9 (ICD-9-CM).

According to this collection, in 1989-90, of people receiving treatment for mental disorders, females accounted for the larger proportion of periods of hospital care in both public and private acute hospitals (which include psychiatric hospitals). Females receiving treatment for mental disorders accounted for 3.7 separations per 1,000 from public acute hospitals and 1.5 from private acute hospitals, compared with rates of 3.6 and 0.8 separations per 1,000 males respectively. Females receiving treatment for mental disorders also accounted for a longer average length of stay in hospital than their male counterparts. The average length of stay for these females was 15.0 days in public acute hospitals and 15.6 days in private acute hospitals, compared with 11.6 and 13.1 days respectively for males.

According to the 1986 Census 6,040 females and 8,590 males were in-patients of psychiatric hospitals or institutions on the night of 30 June 1986. This translates to a rate of 7.7 female in-patients in psychiatric hospitals or institutions per 10,000 female population, compared with 11.1 male in-patients per 10,000 male population. The rate of hospitalisation in psychiatric hospitals or institutions per 10,000 population increased with age, rising from 1.2 females per 10,000 at age 5-14 years to 22.7 females per 10,000 by age 75 years and over.

According to data from Medicare, more females utilised services (for which Medicare benefits were paid) related to psychiatric and group therapy treatment than males (see Table 3.10).

**TABLE 3.10 PSYCHIATRIC ATTENDANCES, GROUP THERAPY CONSULTATIONS NOT INVOLVING A PSYCHIATRIST, AND PROCEDURAL TREATMENTS CLAIMED UNDER MEDICARE(a), ITEM GROUP BY SEX, AUSTRALIA, 1991-92**

<i>Medicare benefits schedule item group</i>	<i>Number of patients</i>		
	<i>Females</i>	<i>Males</i>	<i>Total</i>
Procedural treatments	570	280	850
Group therapy items not involving a psychiatrist	4,640	3,690	8,330
Psychiatric attendances	130,790	97,640	228,430
<b>Total</b>	<b>136,000</b>	<b>101,610</b>	<b>237,610</b>

(a) These data relate only to services for which Medicare benefits were paid. They exclude services rendered free of charge to public patients in public hospitals, Veterans' Affairs patients and compensation cases.

Source: Department of Health, Housing, Local Government and Community Services, Medicare Estimates and Statistics Section, based on a ten per cent sample of Medicare patients

## Prevalence of mental disorders

According to the National Mental Health Policy (1992, pp1, 7):

1. Mental health problems and mental disorders will affect 1 in 5 Australians at some point in their lives ...
2. It has been estimated that, at any particular point in time, 3–4 per cent of all Australians will experience severe mental disorders which will significantly interfere with their mental well-being.

The National Women's Health Policy (Department of Community Services and Health, 1989, p43) explicitly recognised that women are more affected than men by mental health problems and that women's susceptibility is closely associated with their status, work and roles in society. Women identified as being particularly at risk of mental illness include those from a non-English speaking background, women working in the home or who are unemployed, women who have recently given birth, women who suffer sexual and physical violence, and women who are carers of elderly people and people with disabilities. This report found that women suffer more than men from depression, are far more likely to experience eating disorders (such as anorexia nervosa and bulimia), and are more likely to experience anxiety and panic attacks.

A discussion paper presented to the Australian Health Ministers' Advisory Council (Mental Health Discussion Paper, 1989) further stated that women report greater mental stress and are more frequent users of psychiatrists than men. On the other hand, men have higher rates of death by suicide and higher incidence of alcohol abuse.

## ABS Survey of Disability, Ageing and Carers, 1993

From the 1993 Survey of Disability, Ageing and Carers it was estimated that 2.2 per cent of the total female population suffered mental disorders as a disabling condition, compared with 1.8 per cent of the total male population.

## ABS National Health Survey, 1989–90

According to the 1989–90 National Health Survey, a greater proportion of females than males reported mental disorders (5.8% of females and 4.0% of males). A greater proportion of females than males reported nerves, tension, nervousness, and emotional problems (3.9% of females and 2.0% of males), and depression episodes (0.9% of females and 0.4% of males) as conditions.

The prevalence of mental disorders also varied by marital status, with only 4.0 per cent of never married women above the age of 15 years reporting mental disorders — the lowest prevalence of mental disorders for any marital status type. Of married women 6.1 per cent reported mental disorders, as did 5.6 per cent of women in de facto relationships. Women who were separated reported the highest prevalence of mental disorders (13.7%), followed by those who were widowed (11.9%) and divorced (11.5%). Differences in the prevalence rates of mental disorders by marital status may in part be due to age differences between single, married and widowed women.

The proportion of women (and men) reporting mental disorders generally increased with age, from 3.0 per cent of women (and 2.1% of men) in the 15–24 years age group to 12.2 per cent of women (and 6.3% of men) aged 75 years and over.

Females born in Europe and the USSR reported the highest occurrence of mental disorders (7.4%), while females born in Southeast Asia reported the lowest (1.1%).

The prevalence of mental disorders also varied by employment status, with women who were not in the labour force reporting the highest prevalence of mental disorders at 7.8 per cent of all women not in the labour force (compared with 8.7% of men who were not in the labour force). Of unemployed women 6.5 per cent reported a mental disorder (compared with 4.9% of men), while 4.0 per cent of employed women reported a mental disorder (compared with 2.7% of employed men).

## GLOSSARY

- Long-term conditions** Medical conditions (illness, injury or disability) which have lasted at least six months, or which the respondent expects to last for six months or more, including:
- long-term conditions from which the respondent experienced infrequent or spasmodic attacks e.g. asthma;
  - long-term conditions which may be under control through use of medications or other treatment e.g. diabetes, epilepsy;
  - conditions which, although present, may not be generally considered illness because they are not necessarily debilitating e.g. reduced eyesight;
  - long-term and permanent impairments or disabilities.
- Recent illness** Medical conditions (illness, injury or disability) experienced in the two weeks prior to interview.
- Self assessed health status** Respondent's perception of their general health status and overall happiness.

## REFERENCES

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- *Disability, Ageing and Carers, Summary of Findings, Australia, 1993* (4430.0).

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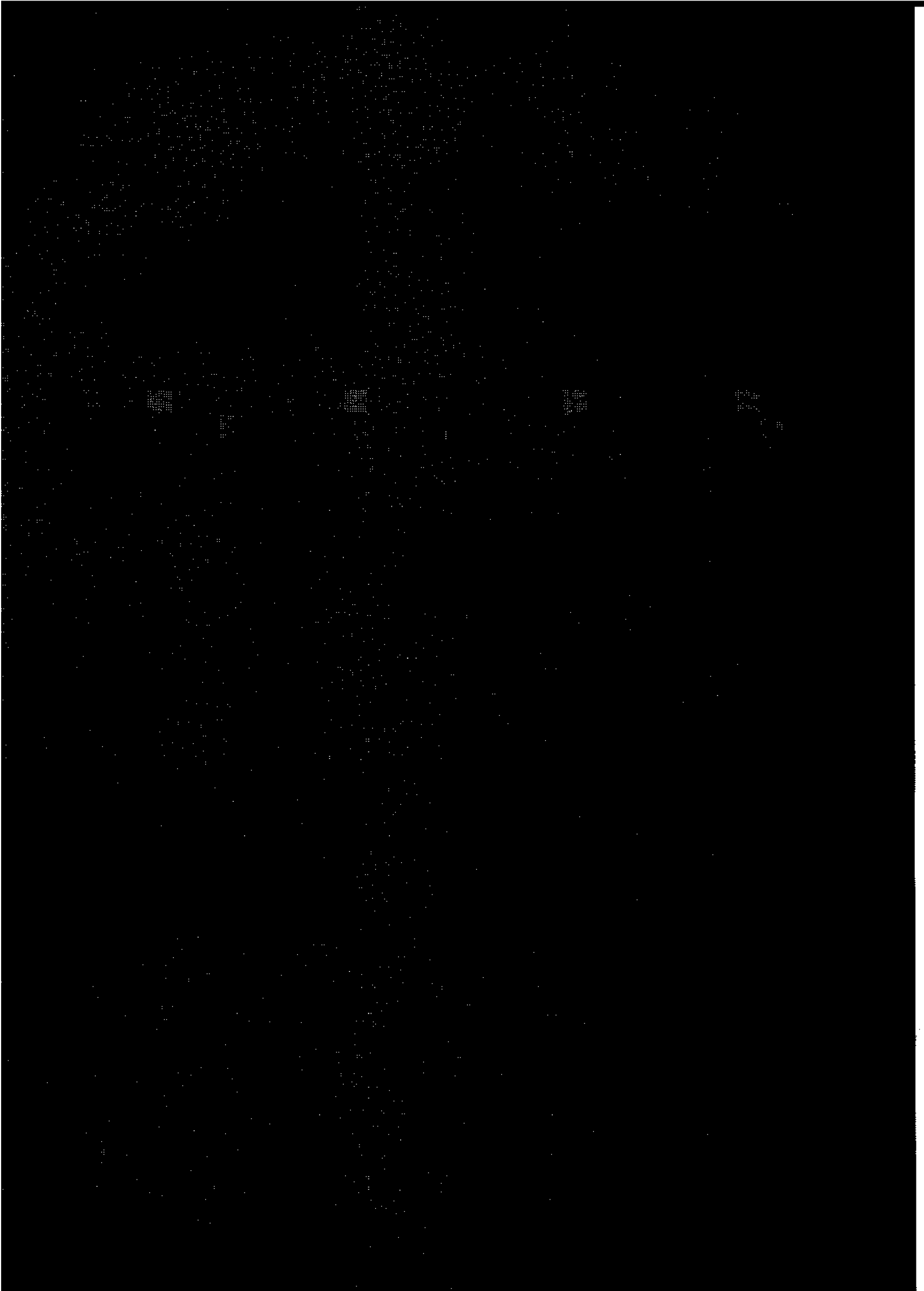
**Gillett, S., Liu, Z.R., Solon, R.** (1993) *Hospital Utilisation and Costs Study 1989-90 Vol 2*, Australian Institute of Health and Welfare: Health Services Series No.4, AGPS, Canberra.

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## HEALTH ACTIONS

### Main findings

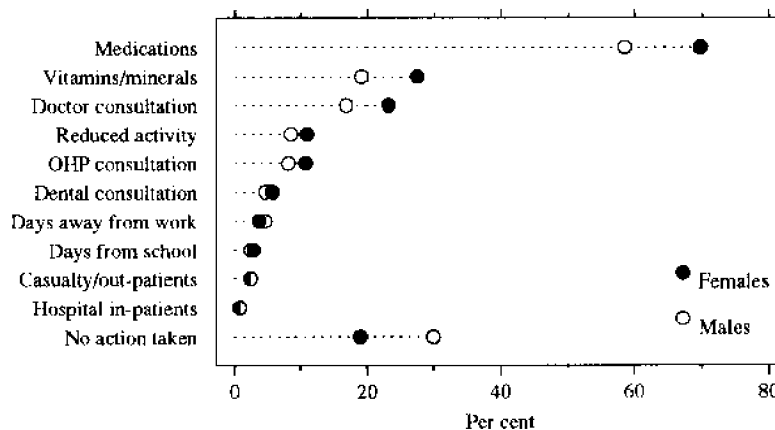
- Although females had a greater number of hospital separations than males, when pregnancy related separations were excluded, separation numbers were similar.
- In 1989–90, nearly one in four females (23.2%) consulted a doctor in the two weeks prior to interview, compared with one in six males (16.8%).
- 36.1 per cent of females aged two years or over reported they had never visited a dentist or had not visited a dentist in the last two years, compared with 40.8 per cent of males.
- One in eight (12.7%) females in the Northern Territory had never visited a dentist — the highest proportion in any State.
- One in every ten females (10.7%) visited a health professional, other than a doctor or a dentist, in the two weeks prior to interview.
- Except doctors and dentists, the most common health professionals consulted by females in the two weeks prior to interview were chemists.
- Females were more likely than males to consult naturopaths, acupuncturists, dietitians, herbalists, or osteopaths.
- One in ten employed females (10.2%) reported they had taken days away from work due to illness or injury in the two weeks prior to interview.
- 76.2 per cent of females and 64.5 per cent of males took some form of medication in the two weeks prior to interview.

### Overview

Results from the ABS National Health Survey 1989–90 show that, in the two weeks prior to interview, 81.0 per cent of Australian females took some kind of health action, compared with 70.0 per cent of males.

The most common health action taken by both females and males was the taking of medications (excluding vitamins and minerals and sunscreens) which were taken by 69.8 per cent of females and 58.5 per cent of males. The second most commonly reported health action was the taking of vitamins and minerals (27.5% of females), followed by doctor consultations (23.2% of females) (see Chart 4.1).

CHART 4.1 PERSONS: TYPE OF HEALTH ACTION TAKEN<sup>(a)</sup> IN THE TWO WEEKS PRIOR TO INTERVIEW BY SEX, AUSTRALIA, 1989-90



(a) Persons may have reported more than one type of health action, therefore components do not add to 100 per cent.  
Source: 1989-90 National Health Survey Health Related Actions Australia (4375.0)

The following analysis profiles the health actions taken by women due to illness or injury. It covers six main areas: hospital episodes and separations, consultations with doctors, consultations with dentists, consultations with other health professionals, use of medications and days of reduced activity. For definitions see Glossary.

Data are mainly from the ABS National Health Survey 1989-90. The section on hospital episodes and separations also makes use of the Hospital Utilisation and Costs Study 1989-90 (HUCS) conducted by the Australian Institute of Health and Welfare. For a description of HUCS, see Appendix A at the end of this Chapter.

## Hospital episodes and separations

### Frequency

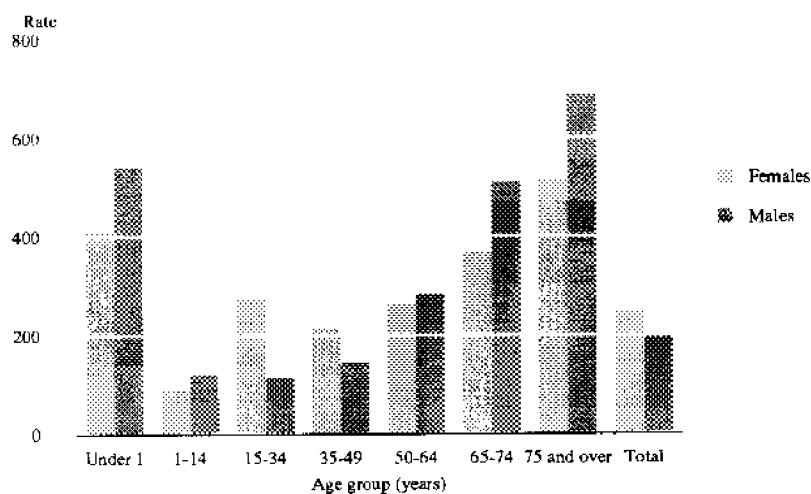
The National Health Survey found that 15.7 per cent of the total female population reported at least one hospital episode in the twelve months prior to interview compared with 11.2 per cent of the total male population. Of the people who had a hospital in-patient episode in 1989-90, 58.4 per cent were female.

Data from HUCS showed that females were more likely than males to experience hospital separations. HUCS found that females had a hospital separation rate of 245.5 per 1,000 population, compared with a rate of 193.6 for males. However, when separations related to pregnancy and childbirth were excluded<sup>(a)</sup>, the rates were similar (199.7 compared with 193.6).

According to HUCS, hospital separation rates varied considerably according to age. The female rate was higher than the male rate in the 15-34 and 35-49 years age groups, but was lower in all other age groups. In the 15-34 years age group (the main child-bearing years) the female rate was more than double that for males (275.5 per 1,000 females of that age compared with 113.6 per 1,000 males of that age) (see Chart 4.2).

(a) Excluded were: pregnancy with abortive outcome, direct obstetric causes, indirect obstetric causes and normal delivery. Separations for pregnancy supervision were not excluded.

CHART 4.2 HOSPITAL SEPARATIONS PER 1,000 POPULATION BY SEX AND AGE, AUSTRALIA, 1989-90



Source: Australian Institute of Health and Welfare, Hospital Utilisation and Costs Study, 1989-90

### Length of stay

According to the 1989-90 National Health Survey, of the people who had had a hospital episode in the twelve months prior to interview, in their most recent episode, the majority had a length of stay of between one and six nights (61.8% of females and 61.5% of males) (see Table 4.1).

TABLE 4.1 PEOPLE WHO HAD AN EPISODE IN HOSPITAL IN THE TWELVE MONTHS PRIOR TO INTERVIEW: LENGTH OF MOST RECENT HOSPITAL STAY BY AGE AND SEX, AUSTRALIA, 1989-90 (Per cent)

Length of stay	Age group (years)									Total
	Less than 5	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75 and over	
FEMALES										
No nights	16.0	15.6	11.4	11.1	15.4	20.6	14.4	10.3	4.5	12.8
1 to 6 nights	70.0	76.6	74.8	67.2	63.3	54.9	46.2	46.6	41.0	61.8
1 week to less than 2 weeks	9.8	*5.3	12.3	18.3	16.3	16.3	25.4	24.4	28.4	17.6
2 weeks to less than 1 month	*3.0	*1.8	**	2.5	3.8	5.6	10.0	11.8	16.3	5.2
1 month or more	**	**	*1.0	*0.9	*1.1	*2.5	*4.0	6.8	9.8	2.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MALES										
No nights	18.1	20.8	19.6	17.2	20.2	12.1	7.8	8.2	6.6	14.6
1 to 6 nights	70.6	72.1	68.4	68.0	59.7	61.9	59.1	47.6	45.2	61.5
1 week to less than 2 weeks	7.9	*3.4	8.1	7.5	12.5	17.0	21.0	24.1	26.7	14.1
2 weeks to less than 1 month	**	*3.0	*3.1	*4.8	5.9	6.7	9.0	13.6	14.5	6.9
1 month or more	*1.9	**	**	*2.5	*1.8	*2.3	*3.2	6.7	*7.0	2.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: 1989-90 National Health Survey Health Related Actions Australia (4375.0)

Older female patients were more likely to have lengthy periods of stay in hospital. Of the females who had a length of stay of one month or more, 30.1 per cent were aged 75 years and over and 22.9 per cent were aged between 65 and 74 years. Similarly, of the females who had a stay of between two weeks and less than one month, 24.8 per cent were aged 75 years and over and 19.7 per cent were aged between 65 and 74 years. The pattern was similar for males.

According to the Hospital Utilisation and Costs Study, the average length of stay in acute hospitals was the same for females and males (5.5 days). Females in Tasmania recorded the longest average length of stay (7.1 days) while females in New South Wales recorded the shortest (5.3 days). In comparison, males in the Northern Territory recorded the longest average length of stay (7.2 days) while males in Western Australia and South Australia recorded the shortest (5.2 days).

The longest average length of stay for females was for cerebrovascular disease (19.5 days), followed by mental disorders (14.8 days). For males, the longest average length of stay was for cerebrovascular disease (17.8 days) followed by tuberculosis (17.2 days).

While the average length of stay by diagnosis was generally similar between the sexes, females had a longer average stay in hospital for fractures and mental disorders (see Table 4.2).

#### Principal diagnosis

According to HUCS, direct obstetric causes was the most common principal diagnosis for females, accounting for 29.7 separations per 1,000 females in the population, followed by diseases of the genital organs (22.5), diseases of the musculoskeletal system and connective tissue (13.6) and signs, symptoms and ill-defined conditions (13.5). For males, the most common principal diagnosis was diseases of the musculoskeletal system and connective tissue (14.3 separations per 1,000 males), followed by signs, symptoms and ill-defined conditions (12.3), other diseases of the respiratory system (8.4) and ischaemic heart disease (8.2) (see Table 4.2).

#### Bed-days

The Hospital Utilisation and Costs Study measured the utilisation of hospital services by calculating the number of days on which beds were occupied by patients with particular conditions per 1,000 people. For every 1,000 females in Australia, 162.3 days were spent by female patients in hospital for direct obstetric causes. Obstetrics constituted a higher rate of hospital utilisation than any other cause. For females, it was followed by diseases of the musculoskeletal system and connective tissue (95.7 days) and mental disorders (80.4 days). For males, the diagnosis which occupied the highest number of bed-days per 1,000 population was diseases of the musculoskeletal system and connective tissue (74.4 days) followed by mental disorders (56.5 days) (see Table 4.2).

**TABLE 4.2 SEPARATION RATE(a), AVERAGE LENGTH OF STAY (DAYS)  
AND BED DAYS OCCUPIED IN ACUTE HOSPITALS PER 1,000  
POPULATION: PRINCIPAL DIAGNOSIS BY SEX, AUSTRALIA, 1989-90**

<i>Principal diagnosis</i>	<i>Separation rate(a)</i>		<i>Average length of stay (days)</i>		<i>Bed days(b)</i>	
	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>
Intestinal infectious diseases	0.9	0.9	3.6	3.5	3.4	3.2
Tuberculosis	—	0.1	14.5	17.2	0.6	0.9
Other bacterial diseases	0.4	0.4	9.9	10.2	3.6	4.0
Human immunodeficiency virus infection	—	0.7	6.5	4.1	0.1	2.8
Viral diseases	2.1	1.6	3.3	3.2	7.0	5.1
Rickettsioses and arthropod-borne diseases	—	0.1	4.5	4.4	0.1	0.3
Syphilis and other venereal diseases	—	—	3.9	5.9	0.2	0.2
Other infectious and parasitic diseases	0.2	0.2	6.2	7.6	1.0	1.5
Malignant neoplasm of lip, oral cavity, pharynx	0.1	0.3	10.4	11.0	1.2	3.6
Malignant neoplasm of digestive organs, peritoneum	1.3	1.8	13.7	12.4	17.6	21.6
Malignant neoplasm of respiratory, intrathoracic organs	0.5	1.5	10.0	10.5	5.1	15.8
Malignant neoplasm of bone, connective tissue, skin, breast	3.3	2.4	6.3	4.2	20.9	9.7
Malignant neoplasm of genitourinary organs	1.5	2.4	7.9	7.9	11.4	18.7
Malignant neoplasm of other, unspecified sites	1.5	1.4	11.4	10.8	16.8	15.2
Malignant neoplasm of lymphatic, haematopoietic tissue	1.0	1.4	7.9	7.0	7.9	9.7
Benign neoplasm	4.6	2.4	3.9	2.5	17.2	5.9
Carcinoma in situ	0.7	0.1	2.9	4.1	1.9	0.5
Other and unspecified neoplasm	0.4	0.4	6.0	4.9	2.2	2.1
Thyroid and other endocrine gland disorders	2.0	1.3	8.6	9.7	17.3	12.8
Nutritional deficiencies	—	—	12.5	13.5	0.5	0.5
Other metabolic and immunity disorders	0.9	0.9	7.1	6.2	6.5	5.3
Diseases of blood and blood forming organs	2.0	1.8	4.5	3.7	9.1	6.8
Mental disorders	5.4	4.9	14.8	11.5	80.4	56.5
Central nervous system disorders and diseases	2.4	2.3	9.4	9.8	22.2	22.4
Disorders of peripheral nervous system	1.5	1.1	3.9	4.4	5.7	4.7
Disorders of eye and adnexa	5.7	4.6	2.8	2.8	15.4	12.4
Diseases of ear and mastoid process	2.8	3.4	2.1	1.8	5.8	5.9
Rheumatic fever and rheumatic heart disease	0.1	0.1	9.3	10.2	1.3	0.8
Hypertensive disease	0.7	0.4	7.3	6.7	5.5	2.9
Ischaemic heart disease	4.4	8.2	7.6	6.6	33.3	53.5
Diseases of pulmonary circulatory system	3.9	4.5	10.2	8.6	40.2	38.5
Cerebrovascular disease	2.3	2.5	19.5	17.8	45.0	43.9
Other diseases of circulatory system	4.4	4.5	7.5	8.2	32.1	35.8
Acute respiratory infections	2.5	3.2	3.5	3.1	8.9	9.9
Other diseases of upper respiratory tract	3.8	4.3	2.4	2.3	9.1	9.8
Pneumonia and influenza	2.0	2.4	9.3	8.9	18.6	21.0
Other diseases of respiratory system	6.9	8.4	6.2	6.3	43.8	53.2

For footnotes see end of table.

**TABLE 4.2 SEPARATION RATE(a), AVERAGE LENGTH OF STAY (DAYS) AND BED DAYS OCCUPIED IN ACUTE HOSPITALS PER 1,000 POPULATION: PRINCIPAL DIAGNOSIS BY SEX, AUSTRALIA, 1989-90 — continued**

<i>Principal diagnosis</i>	<i>Separation rate(a)</i>		<i>Average length of stay (days)</i>		<i>Bed days(b)</i>	
	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>
Diseases of oral cavity, salivary glands, jaws	4.7	3.2	1.5	1.6	7.3	5.2
Diseases of oesophagus, stomach, duodenum	5.1	5.8	3.3	3.1	16.3	17.4
Appendicitis	1.4	1.5	4.6	4.5	6.6	6.7
Noninfectious enteritis, colitis	3.9	6.7	4.3	4.1	16.6	27.4
Other diseases of intestines, peritoneum	4.7	3.8	5.3	4.7	24.0	17.4
Other diseases of digestive system	4.6	3.2	7.4	7.5	33.5	23.8
Diseases of urinary system	5.0	5.3	5.1	4.8	24.4	25.0
Diseases of genital organs	22.5	5.3	3.0	4.7	68.3	24.5
Pregnancy with abortive outcome	6.8	..	1.6	..	10.6	..
Direct obstetric causes	29.7	..	5.4	..	162.3	..
Indirect obstetric causes	1.1	..	5.5	..	5.8	..
Normal delivery	8.2	..	4.8	..	40.0	..
Diseases of skin and subcutaneous tissue	4.3	5.0	7.1	6.0	29.1	28.9
Diseases of musculoskeletal system, connective tissue	13.6	14.3	7.3	5.4	95.7	74.4
Congenital anomalies	1.6	2.2	5.5	5.1	8.6	10.8
Certain conditions origins in perinatal period	2.2	2.7	9.3	9.0	20.5	24.6
Signs, symptoms and ill-defined conditions	13.5	12.3	3.9	3.7	52.9	45.5
Fractures	5.6	7.4	11.6	7.6	64.5	55.1
Dislocations, sprains and strains	0.9	2.0	4.2	3.2	3.6	6.0
Intracranial and internal injuries	1.2	2.7	3.8	4.3	4.7	11.6
Open wounds, injury to blood vessels	1.5	3.7	4.8	3.3	7.0	12.0
Late effects of injuries, poison, toxic effects	0.1	0.1	6.8	7.0	0.3	0.7
Superficial and other injuries	1.6	2.4	4.7	3.4	7.8	8.3
Effect of foreign body entering through orifice	0.3	0.4	1.7	2.0	0.4	0.7
Burns	0.3	0.6	9.9	8.1	2.6	5.0
Poisoning, toxic effects	1.8	1.6	3.1	2.8	5.7	4.3
Complications of surgical, medical care n.e.c.	2.0	2.1	9.8	9.3	19.6	19.4
Other reasons for contact with health services	25.3	22.2	3.2	2.7	81.8	58.9
<b>Total</b>	<b>245.5</b>	<b>193.6</b>	<b>5.5</b>	<b>5.5</b>	<b>1,339.4</b>	<b>1,031.7</b>

(a) Number of separations per 1,000 population of the same sex. (b) Bed days occupied in acute hospitals per 1,000 population of the same sex.

Source: Australian Institute of Health and Welfare, *Hospital Utilisation and Costs Study, 1989-90*

## Doctor consultations

The 1989-90 National Health Survey found that one in five (20.0%) Australians had visited a doctor in the two weeks prior to interview. An estimated 1,973,300 females consulted a doctor, representing 58.0 per cent of all persons who had a doctor consultation. Visits to a general practitioner comprised 85.2 per cent of the most recent doctor consultations reported by females in the two weeks prior to interview. The remaining 14.8 per cent involved specialist consultations.

## Frequency

Not only did more females than males consult doctors, they did so more often. In the two weeks prior to interview, 23.2 per cent of all females consulted a doctor, compared with 16.8 per cent of males. Two or more consultations were reported by 21.7 per cent of females and 20.4 per cent of males who consulted doctors in the two weeks prior to interview (see Table 4.3).

**TABLE 4.3 PERSONS: PERIOD SINCE LAST DOCTOR CONSULTATION BY SEX, AUSTRALIA, 1989-90 (Per cent)**

<i>Period since last consultation</i>	<i>Females</i>	<i>Males</i>
Two weeks or less	23.2	16.8
More than 2 weeks to less than 3 months	34.7	30.3
3 months to less than 6 months	16.1	16.3
6 months to less than 12 months	12.4	14.1
12 months or more	13.1	21.7
Never/Not known	0.5	0.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

*Source: 1989-90 National Health Survey Health Related Actions Australia (4375.0)*

In the three months prior to interview, 57.9 per cent of all females reported that they had consulted a doctor compared with 47.1 per cent of males. In the twelve months prior to interview, 86.4 per cent of females and 77.5 per cent of males had at least one doctor consultation.

One in eight females (13.6%) had not been to the doctor within the twelve months prior to interview, compared with more than one in five males (22.5%).

## Reasons for consultation

The most common reason reported by females for consulting a doctor was diseases of the respiratory system, including conditions such as colds, influenza and asthma. Visits to the doctor for this reason accounted for 20.3 per cent of consultations by females in the two weeks prior to interview, compared with 23.8 per cent of consultations by males. Other diseases which featured strongly as reasons for the most recent doctor consultation undertaken by females included diseases of the circulatory system (11.1% of consultations), and diseases of the musculoskeletal and connective tissue (11.1%).

Females were slightly more likely than males to consult a doctor because of circulatory conditions, ill-defined conditions and for a checkup/examination. Males were much more likely to consult a doctor for injuries and poisoning, and marginally more likely than females to consult a doctor for conditions relating to musculoskeletal, nervous and digestive systems and for skin disorders (see Table 4.4).



**TABLE 4.4 PERSONS WHO CONSULTED A DOCTOR IN THE TWO WEEKS PRIOR TO INTERVIEW: FIFTEEN MOST FREQUENTLY REPORTED REASONS REPORTED BY FEMALES FOR MOST RECENT CONSULTATION, AUSTRALIA, 1989-90 (Per cent)**

<i>Reasons for most recent consultation</i>	<i>Females</i>	<i>Males</i>	<i>Persons</i>
Diseases of the respiratory system	20.3	23.8	21.8
Diseases of the circulatory system	11.1	9.9	10.6
Diseases of the musculoskeletal system and connective tissue	11.1	12.1	11.5
Symptoms, signs and ill-defined conditions	8.6	8.0	8.3
Check up/examination	8.0	7.5	7.8
Diseases of the nervous system and sense organs	7.2	8.6	7.8
Diseases of the skin and subcutaneous tissue	5.8	6.5	6.1
Diseases of the genitourinary system	5.5	1.9	4.0
Pregnancy supervision	5.2	.	3.0
Diseases of the digestive system	5.2	6.7	5.8
Injury and poisoning	4.9	10.6	7.3
Tests/X-rays	4.5	1.8	3.4
Endocrine, nutritional and metabolic diseases and immunity disorders	3.7	3.1	3.4
Infectious and parasitic diseases	3.1	2.8	3.0
Mental disorders	2.9	2.4	2.7
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Persons may have reported more than one reason for consultation and therefore components do not add to totals.

Source: 1989-90 National Health Survey Health Related Actions Australia (4375.0)

## Age

Diseases of the respiratory system featured in the four leading reasons for a doctor consultation for females in all age groups. Excluding pregnancy supervision for females in the age group 25-34 years, it was the major reason why females in all age groups under 45 years consulted a doctor in the two weeks prior to interview, accounting for 25.5 per cent of consultations for this group.

The most common reason for consulting a doctor for females aged 45-54 years was diseases of the musculoskeletal system and connective tissue (17.0% of most recent consultations). This cause featured in the leading five reasons for doctor consultations by females in all age groups 35 years and older. For women in the over 55 years age group, diseases of the musculoskeletal system and connective tissue was surpassed by diseases of the circulatory system as the major reason for visiting a doctor (28.3% of most recent consultations) see Table 4.5.

**TABLE 4.5 FEMALES WHO CONSULTED A DOCTOR IN THE TWO WEEKS PRIOR TO INTERVIEW: REASONS FOR MOST RECENT CONSULTATION BY AGE, AUSTRALIA, 1989-90 ('000)**

Reasons for most recent consultation	Age group (years)									Total
	Under 5	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75 and over	
Infectious and parasitic diseases	6.5	14.9	10.9	8.6	9.6	*4.3	*1.6	*2.4	*1.7	60.6
Neoplasms	**	**	*1.4	*3.4	6.6	*4.4	*4.7	8.1	7.5	36.9
Endocrine, nutritional and metabolic diseases and immunity disorders	**	*1.4	*4.7	6.7	8.2	12.3	15.7	17.6	5.6	72.2
Diseases of blood and blood forming organs	**	**	*2.5	*5.3	**	**	*2.3	*3.2	*3.8	19.3
Mental disorders	**	*1.4	*4.0	9.1	11.8	11.7	7.7	7.1	*5.1	58.1
Diseases of the nervous system and sense organs	21.8	26.7	15.0	14.0	14.2	13.9	12.6	15.7	8.8	142.7
Diseases of the circulatory system	**	**	*3.7	8.3	15.2	29.8	41.9	69.9	51.1	220.0
Diseases of the respiratory system	62.4	68.5	77.0	54.2	42.6	29.9	24.1	28.1	14.6	401.4
Diseases of the digestive system	14.0	8.0	10.5	14.8	9.7	13.0	12.3	8.9	11.3	102.5
Diseases of the genitourinary system	*1.9	5.6	18.5	20.5	20.9	19.1	9.4	6.7	5.5	108.2
Complications of pregnancy, childbirth and the puerperium	**	**	*2.8	8.6	**	**	**	**	**	12.0
Diseases of the skin and subcutaneous tissue	10.1	11.8	19.9	17.1	16.5	10.9	8.1	12.1	7.5	114.0
Diseases of the musculoskeletal system and connective tissue	**	5.9	20.6	21.9	32.7	34.7	31.7	39.3	31.5	219.4
Symptoms, signs and ill-defined conditions	15.2	19.5	34.6	30.6	20.8	10.5	11.0	14.6	12.5	169.4
Injury and poisoning	*4.2	13.4	13.5	13.9	12.7	10.6	9.8	11.0	8.0	97.1
Disability n.e.c.	**	**	**	**	**	**	**	**	**	*4.6
Unspecified illness	**	**	**	**	**	**	**	**	**	*1.9
Other reasons										
Check-up/ examination	9.3	*3.7	15.8	22.7	19.9	16.7	15.9	24.9	28.6	157.4
Tests/X-ray	*1.7	*2.3	15.9	22.0	21.3	9.1	8.2	5.6	*3.3	89.4
Pregnancy supervision	**	**	24.7	70.5	8.3	**	**	**	**	103.5
Contraceptive management	**	**	11.9	14.2	*3.3	**	**	**	**	29.4
Immunisation	11.0	*5.1	5.5	7.2	7.0	*2.2	5.5	*3.9	*4.7	52.2
Other reasons	**	**	*2.2	*1.5	*2.3	*1.5	*4.1	*1.5	**	14.4
<b>Total(a)</b>	<b>144.5</b>	<b>177.5</b>	<b>282.4</b>	<b>336.4</b>	<b>252.5</b>	<b>204.4</b>	<b>187.7</b>	<b>221.9</b>	<b>165.9</b>	<b>1,973.3</b>

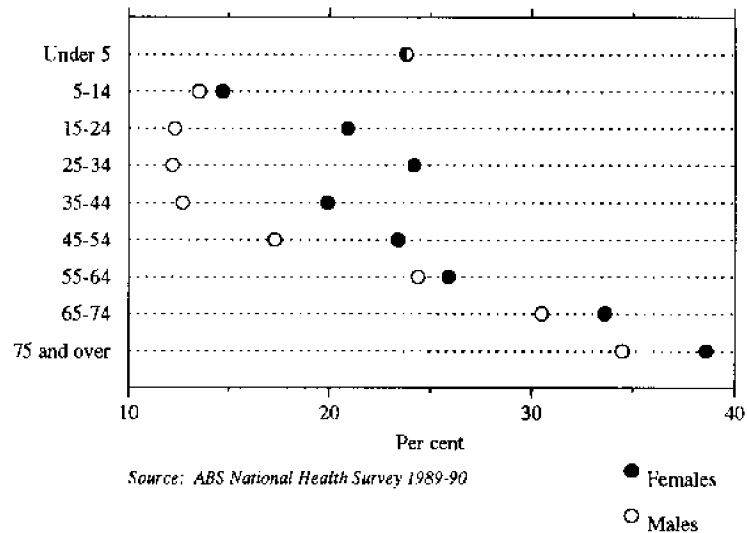
(a) Women may have reported more than one reason for consultation, therefore figures do not add to totals.

Source: 1989-90 National Health Survey Health Related Actions Australia (4375.0)

Women in older age groups were more likely to consult a doctor in the two weeks prior to interview than younger women. Generally, doctor consultations increased with age (see Chart 4.3).

Males and females under 5 years experienced similar proportions of doctor consultations (23.8%). In all age categories older than 5 years, a larger proportion of females than males reported consulting a doctor in the two weeks prior to interview.

CHART 4.3 PERSONS WHO CONSULTED A DOCTOR IN THE TWO WEEKS PRIOR TO INTERVIEW: AGE BY SEX, AUSTRALIA, 1989-90



Substantial differences were observed in the rates of female and male doctor consultations in the two weeks prior to interview between the ages of 15 and 54 years. The largest difference was observed in the 25-34 years age group where the proportion of women consulting a doctor was nearly double that reported by men (24.2% compared with 12.2%).

More than one in every five doctor consultations (21.0%) undertaken by women in the 25-34 years age group was for pregnancy supervision. A further 2.6 per cent were for complications of pregnancy, childbirth and the puerperium, while contraceptive management accounted for 4.2 per cent of doctor consultations for this age group. It is interesting to note, however, that even when these causes (pregnancy, complications of pregnancy and contraceptive management) are excluded, the female rate of doctor consultations in the two weeks prior to interview was still substantially higher than the male rate (17.5% opposed to 12.2%).

After the age of 55 years, more than one in four women had consulted a doctor in the two weeks prior to interview. One in three women (33.6%) aged 65-74 years reported a doctor consultation. This increased to a peak of 38.6 per cent for women aged 75 years and over who reported consulting a doctor in the two weeks prior to interview.

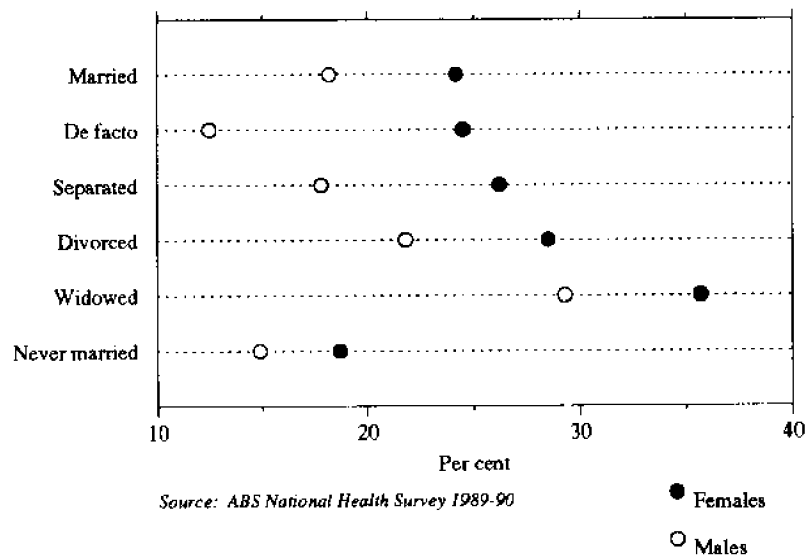
#### Marital status

Marital status is related to age. For example, never married women tend to be in younger age categories, and widowed women are generally in the older age groupings. This should be kept in mind when interpreting data by marital status.

Women who were divorced were slightly more likely to have consulted a doctor in the two weeks prior to interview (28.5%) than their separated (26.2%), married (24.2%) or de facto (24.5%) counterparts.

The proportion of women consulting a doctor was greater than the proportion of men in all marital status categories (see Chart 4.4). The most marked difference was observed in the de facto category where the rate of consultations by women was nearly double that of consultations by men (24.5% and 12.5% respectively). The highest rate of consultations for both women and men was observed in the widowed category (women 35.7%, men 29.3%) and the lowest was observed for women in the never married group (18.7%), and for men in the de facto category (12.5%).

**CHART 4.4 PERSONS WHO CONSULTED A DOCTOR IN THE TWO WEEKS PRIOR TO INTERVIEW: MARITAL STATUS BY SEX, AUSTRALIA, 1989-90**



## Income

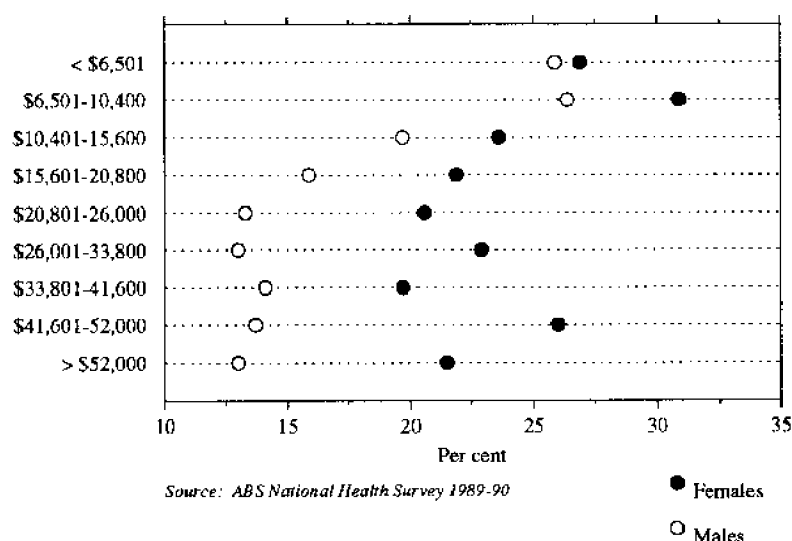
Women(a) with gross personal incomes of less than \$10,400 per annum were more likely to have had a doctor consultation in the two weeks prior to interview than those in higher income brackets (28.7% and 22.2% respectively).

Women in the income bracket \$33,801-41,600 were the least likely to have consulted a doctor in the two weeks prior to interview (19.7%).

Generally, the greater the income, the greater the difference in the female and male rates of doctor consultations in the two weeks prior to interview. The female rate was higher than the male rate in all income groups (see Chart 4.5).

(a) Women aged 15 years and over, excluding those women who were dependents still at school.

CHART 4.5 PERSONS AGED 15 YEARS AND OVER WHO CONSULTED A DOCTOR IN THE TWO WEEKS PRIOR TO INTERVIEW: GROSS ANNUAL PERSONAL INCOME BY SEX, AUSTRALIA, 1989-90



**Treatment arranged/provided** The most frequently reported treatment received by females consulting a doctor in the two weeks prior to interview was that they were given or prescribed medication. Medication was given or prescribed in 60.6 per cent of female doctor consultations in the two weeks prior to interview. Other major treatments which were reported by females (in order of frequency) were "checked blood pressure" (40.2%), "appointment for further visit" (32.6%) and "blood test" (12.0%).

Very little variation occurred in the rates of treatments given to females and males during doctor consultations (see Table 4.6).

TABLE 4.6 PERSONS WHO CONSULTED A DOCTOR IN THE TWO WEEKS PRIOR TO INTERVIEW: TYPE OF TREATMENT ARRANGED OR PROVIDED AT MOST RECENT CONSULTATION BY SEX, AUSTRALIA, 1989-90 (Per cent)

Type of treatment	Females	Males	Persons
Given or arranged injection	9.8	10.3	10.0
Given or prescribed medication	60.6	61.3	60.9
Appointment for further visit	32.6	31.0	31.9
Admission to hospital, nursing or convalescent home	2.5	2.1	2.4
Checked blood pressure	40.2	35.0	38.0
X-Ray	6.6	8.0	7.2
Blood test	12.0	11.2	11.7
Urine test	8.8	5.3	7.3
Other test	8.8	6.2	7.7
None of these	10.5	12.6	11.4
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) More than one type of treatment may have been arranged or provided at the same consultation, and therefore columns do not add to 100 per cent.

Source: 1989-90 National Health Survey Health Related Actions Australia (4375.0)

**Dental consultations**

In the two weeks prior to interview, 5.2 per cent of the total population visited a dentist (females 5.7%, males 4.7%). Females accounted for 55.0 per cent of all dental consultations.

**Frequency**

Nearly a third (31.6%) of females aged two years or older had not been to the dentist for two years or more, and a further 4.5 per cent had never visited a dentist. In comparison, 35.8 per cent of males aged two years or older had not visited a dentist in the last two years or more, and a further 5.0 per cent had never visited a dentist.

The largest proportion of people aged two years or older who had never visited a dentist fell into the age group 2–4 years (68.5%). This accounted for 71.0 per cent of females and 66.3 per cent of males aged two years or older who had never visited a dentist.

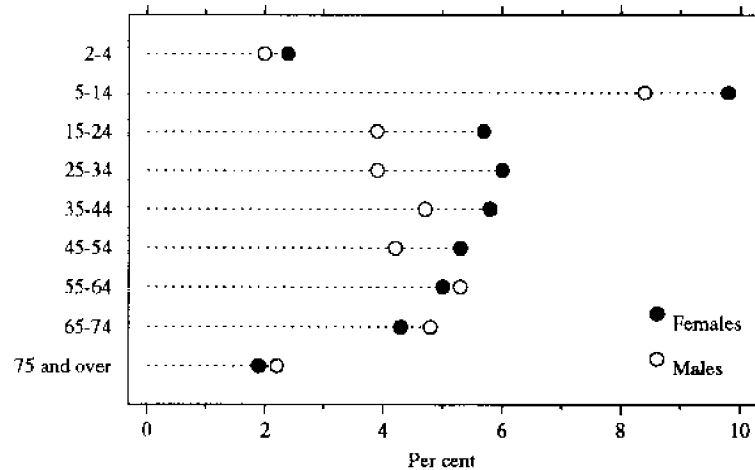
**Age**

A higher proportion of females than males reported consulting a dentist in the two weeks prior to interview in all age groups up to the 45–54 years age group. After that age group the proportion of males consulting a dentist exceeded the proportion of females (see Chart 4.6).

Females and males aged 5–14 years were most likely to have visited a dentist in the two weeks prior to interview (9.8% and 8.4%).

For females, the age group with the next highest proportion of the population consulting a dentist in the two weeks prior to interview was the 25–34 years age group (6.0%, compared with 3.9% of males in this age group).

**CHART 4.6 PERSONS AGED TWO YEARS AND OVER WHO CONSULTED A DENTIST IN THE TWO WEEKS PRIOR TO INTERVIEW: AGE BY SEX, AUSTRALIA, 1989-90**



Source: 1989-90 National Health Survey Health Related Actions Australia (4375.0)

The age groups least likely to consult dentists in the two weeks prior to interview were those aged 75 years and over (1.9% of females and 2.2% of males in this age group consulted a dentist) and those aged 2–4 years (2.4% of females and 2.0% of males).

**State**

A slightly higher proportion of females in the Northern Territory had visited a dentist in the two weeks prior to interview (7.8%) than in any other State or Territory. The State or Territory with the highest proportion of females who had visited a dentist in the past twelve months was the Australian Capital Territory (53.4%) (see Table 4.7).

**TABLE 4.7 FEMALES AGED TWO YEARS AND OVER: PERIOD SINCE  
LAST DENTAL CONSULTATION BY STATE, AUSTRALIA, 1989-90  
(Per cent)**

Period since last dental consultation	State								
	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Two weeks ago or less	5.5	6.2	5.6	6.4	5.8	5.2	7.8	4.6	5.8
More than two weeks to less than twelve months	40.4	42.0	43.2	45.4	45.0	39.2	42.0	48.9	42.3
Twelve months to less than two years	16.2	15.1	16.1	13.7	14.2	13.6	16.9	16.2	15.4
Two years or more	32.0	32.3	31.0	31.2	30.7	37.4	20.5	25.2	31.6
Never	5.6	4.0	3.7	2.8	4.0	4.0	12.7	5.0	4.5
Not known	0.2	0.4	*0.4	*0.5	*0.2	**	**	**	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: 1989-90 National Health Survey Health Related Actions Australia (4375.0)

Females in the Northern Territory were more likely than females in other States or Territories to have never visited a dentist (12.7%). This was nearly three times the proportion of the total female population who had never consulted a dentist (4.5%).

The Northern Territory also had one of the highest levels of females who reported dental problems as a recent illness (5.8%). Recent dental problems were least common for females in the Australian Capital Territory (3.7%).

#### Treatment received

The most common treatment received by females who had consulted a dentist in the two weeks prior to interview was the filling of cavities in teeth (30.0% of females who consulted a dentist in this period, compared with 37.8% of males).

Females were more likely to have received a check-up (28.4%) or fluoride treatment (11.0%) when they visited a dentist in the two weeks prior to interview than were males (25.5% and 10.0% respectively).

For women in all age groups between 25-54 years, the most common treatment received was the filling of teeth. The filling of teeth was the most common treatment for males in all age groups 15-64 years (see Table 4.8).

**TABLE 4.8 FEMALES AGED TWO YEARS AND OVER WHO CONSULTED A DENTIST IN THE TWO WEEKS PRIOR TO INTERVIEW: TYPE OF DENTAL TREATMENT RECEIVED AT MOST RECENT CONSULTATION BY AGE, AUSTRALIA, 1989-90**  
(Per cent)

Treatment received	Age group (years)									Total
	2-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75 and over	
Teeth extracted	**	*4.3	7.2	7.2	8.0	*6.4	*6.0	*5.2	**	6.1
X-ray	**	5.5	18.2	24.8	20.2	22.5	15.7	*13.3	**	16.0
Teeth/dentures cleaned or polished	*20.5	14.9	31.4	31.2	27.2	25.7	29.9	21.0	*23.5	25.0
Fluoride treatment or coating	**	17.1	16.5	11.0	*7.2	*5.1	**	**	**	11.0
Teeth filled	**	14.0	22.2	41.9	43.1	44.8	40.1	20.6	*22.2	30.0
Check-up	64.8	44.9	29.6	19.2	25.5	18.8	16.5	*16.4	**	28.4
Other treatment	**	27.9	31.6	19.4	26.2	28.3	43.7	51.7	*60.5	29.7
No treatment	**	*1.3	**	**	**	**	**	**	**	1.1
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) More than one type of treatment may have been received at the same consultation, and therefore columns do not add to 100 per cent.

Source: 1989-90 National Health Survey Health Related Actions Australia (4375.0)

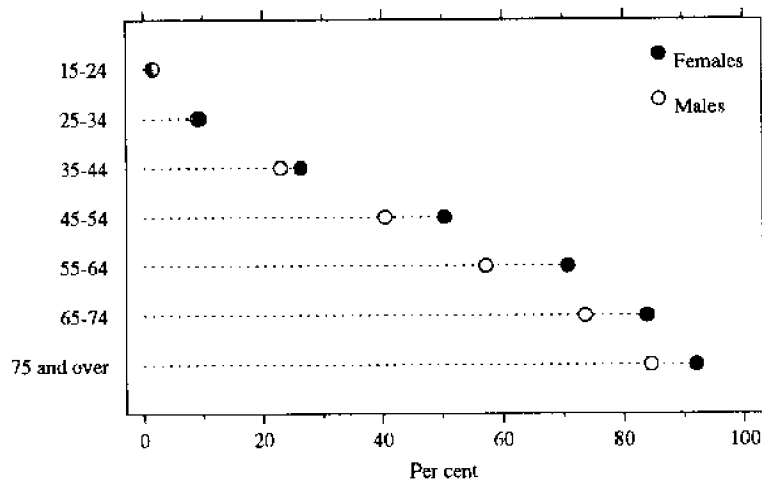
#### Dentures and false teeth

At the time of interview, approximately one in every three people over the age of 15 years had some form of dentures or false teeth. Of this number, 56.2 per cent were women, and 43.8 per cent were men.

The proportion of women with dentures or false teeth increased steadily with age. Only 1.5 per cent of women aged 15-24 years had some form of dentures or false teeth, increasing to 92.0 per cent of women over 75 years of age. In comparison, 1.6 per cent of men aged 15-24 years had dentures or false teeth, rising to 84.6 per cent of men over 75 years of age.

From about the age of 25 years, women were more likely than men to have dentures or false teeth (see Chart 4.7).

**CHART 4.7 PERSONS AGED 15 YEARS AND OVER WHO HAD FALSE TEETH OR DENTURES: AGE BY SEX, AUSTRALIA, 1989-90**



Source: 1989-90 National Health Survey Health Related Actions Australia (4375.0)



Women were more likely than men to have a full set of false teeth or dentures in both jaws (44.4% of women with false teeth or dentures and 32.9% of men). This was the most common form of false teeth or dentures for women in the 45–54 years and older age groups. Of women aged 75 years and over with false teeth or dentures, 72.2 per cent had a full set of false teeth in both jaws, compared with 59.5 per cent of their male counterparts.

**Consultations with health professionals other than doctors or dentists**

For the purposes of this analysis, data from the 1989–90 National Health Survey relating to consultations with health professionals other than doctors or dentists have been divided into two sections: Selected Health Professionals and Other Health Professionals.

The section relating to Selected Health Professionals is based on consultations undertaken in the twelve months prior to interview with the following health professionals:

- Chiropractor
- Osteopath
- Naturopath
- Herbalist
- Acupuncturist
- Dietitian

The section relating to Other Health Professionals is based on consultations undertaken in the two weeks prior to interview with the following health professionals:

- Chiropractor
- Osteopath
- Naturopath
- Herbalist
- Acupuncturist
- Dietitian
- Chemist
- Optician/optometrist
- Physiotherapist
- Chiropodist/podiatrist
- Psychologist
- Social worker/welfare officer
- School nurse
- Baby health nurse
- Other nurse

**Selected Health Professionals** In the twelve months prior to interview, 1,865,400 persons consulted a Selected Health Professional. More than half of these people were females (53.1%).

The most common type of Selected Health Professional consulted was a chiropractor. Of all females, 6.6 per cent (compared with 7.2% of males) visited a chiropractor in the twelve months prior to interview.

Females were more likely than males to have consulted a naturopath (2.8% compared with 1.5%), acupuncturist (1.6% compared with 1.0%), dietitian (1.5% compared with 0.8%), herbalist (0.7% compared with 0.4%) or osteopath (0.7% compared with 0.6%).

### Age

The proportion of women who consulted a chiropractor in the twelve months prior to interview increased steadily with age, peaking in the 45–54 years age group at 11.0 per cent of all women in this age group. After that age group, the percentage of women who consulted a chiropractor declined rapidly (see Table 4.9).

**TABLE 4.9 FEMALES: TYPE OF SELECTED HEALTH PROFESSIONAL CONSULTED IN THE TWELVE MONTHS PRIOR TO INTERVIEW BY AGE, AUSTRALIA, 1989–90 (Per cent)**

Selected Health Professional consulted	Age group (years)									Total
	Under 5	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75 and over	
Chiropractor	1.2	2.1	6.5	9.3	9.4	11.0	6.9	4.8	2.5	6.6
Osteopath	**	*0.2	0.6	1.3	0.8	0.9	1.0	*0.4	*0.5	0.7
Naturopath	1.0	1.3	3.1	4.3	4.2	3.2	2.1	1.9	*1.0	2.8
Herbalist	*0.2	*0.2	0.5	1.2	1.1	*0.5	*0.6	*0.4	*0.6	0.7
Acupuncturist	**	*0.2	1.3	2.2	2.2	3.0	1.9	1.3	1.5	1.6
Dietitian	*0.5	0.5	1.3	1.4	1.6	2.0	2.8	2.4	1.4	1.5
<b>Total(a)</b>	<b>2.8</b>	<b>4.1</b>	<b>11.3</b>	<b>15.9</b>	<b>16.0</b>	<b>18.0</b>	<b>13.4</b>	<b>9.7</b>	<b>6.6</b>	<b>11.6</b>

(a) Persons may have reported a consultation with more than one type of selected health professional, therefore components do not add to totals.

Source: 1989–90 National Health Survey Health Related Actions Australia (4375.0)

The proportion of females who consulted an osteopath peaked in the 25–34 years age group, at 1.3 per cent of all women in this age group.

The percentage of females who consulted a naturopath (4.3%) or herbalist (1.2%) also peaked in the 25–34 years age group.

Women aged 45–54 years were more likely to have consulted an acupuncturist (3.0%) in the twelve months prior to interview than were women in other age groups.

The percentage of females who consulted a dietitian in the twelve months prior to interview increased steadily with age, until the age group 55–64 years (2.8%).

## Other Health Professionals

In the two weeks prior to interview, 10.7 per cent of the female population consulted with health professionals other than doctors and dentists. The most common health professionals consulted were chemists, who were visited by 3.5 per cent of the female population in the two weeks prior to interview. Of all consultations with chemists, 58.7 per cent were made by females.

The second most common Other Health Professionals consulted were opticians, who were visited by 1.8 per cent of the female population in the two weeks prior to interview. Of all consultations with opticians, 57.3 per cent were made by females.

Females were more likely to have consulted a chiropodist or podiatrist (0.7%) than were males (0.4%).

A slightly higher proportion of females consulted a psychologist in the two weeks before interview (0.3%) than males (0.2%).

Females were slightly more likely to have consulted a social worker or welfare officer in the previous two weeks (0.3%) than were males (0.2%).

## Age

The percentage of females who consulted chemists was highest in the under 5 years age group (7.1% of all girls in this age group) (see Table 4.10).

Women aged 65–74 years were more likely to have consulted an optician in the two weeks prior to interview than were females in other age groups (3.5%).

The proportion of females who visited a physiotherapist in the two weeks prior to interview increased steadily with age to 2.6 per cent of all women aged 75 years and over.

The percentage of females who consulted a chiropodist or podiatrist also increased with age. Women aged 75 years and over were more likely than all other age groups to have visited a chiropodist or podiatrist (4.8%).

**TABLE 4.10 FEMALES: TYPE OF OTHER HEALTH PROFESSIONAL CONSULTED IN THE TWO WEEKS PRIOR TO INTERVIEW BY AGE, AUSTRALIA, 1989–90**  
(Per cent)

Other Health Professional consulted	Age group (years)									Total
	Under 5	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75 and over	
Chemist	7.1	2.8	4.3	4.8	3.4	2.6	1.9	1.5	1.3	3.5
Optician	*0.3	0.9	2.0	1.5	1.3	3.0	2.4	3.5	3.1	1.8
Physiotherapist	*0.5	0.6	1.0	1.6	1.9	2.0	2.0	2.3	2.6	1.5
Psychologist	**	*0.1	*0.3	0.5	*0.4	*0.3	**	**	**	0.3
Social worker	*0.2	*0.3	*0.4	0.6	*0.2	*0.3	*0.4	**	*0.7	0.3
Chiropodist	**	*0.1	*0.1	*0.2	*0.2	*0.6	1.4	2.5	4.8	0.7
<b>Total(a)</b>	<b>16.1</b>	<b>5.7</b>	<b>10.0</b>	<b>11.5</b>	<b>10.1</b>	<b>12.0</b>	<b>10.3</b>	<b>11.9</b>	<b>15.2</b>	<b>10.7</b>

(a) Persons may have reported a consultation with more than one type of other health professional, therefore components do not add to totals. Totals also include consultations with a chiropractor, osteopath, naturopath, herbalist, acupuncturist and dietitian in the two weeks prior to interview.

Source: 1989–90 National Health Survey Health Related Actions Australia (4375.0)

**Medication use**

Some form of medication was taken by 76.2 per cent of females in the two weeks prior to interview, compared with 64.5 per cent of males. Medication was the most common type of action taken by females who had reported a recent condition (92.3%). The most common type of medication taken by females in the two weeks prior to interview was pain relievers, followed by vitamins and minerals and skin ointments.

A higher proportion of females than males took medication in all age groups except the under 5 years age group. The greatest difference between the proportions of females and males who used medications was in the 15–24 years age group (73.1% for females and 56.3% for males).

The most common reasons reported by females for using medications in the two weeks prior to interview were headaches due to unspecified or trivial cause (20.7%), followed by hypertension (13.2%) and the common cold (12.1%).

Further information regarding the types of medications used can be found in Chapter 5.

**Days of reduced activity**

One or more days of reduced activity were reported by 16.2 per cent of Australian females in the two weeks prior to interview, compared with 13.9 per cent of males. Of those females who had days of reduced activity, 6.7 per cent spent days in hospital, 23.5 per cent took days away from work, 18.0 per cent spent days away from school or university, and 67.4 per cent had other days of reduced activity(a).

**Days away from work/school**

Of those women who were employed, 10.2 per cent reported they had taken days away from work due to illness or injury in the two weeks prior to interview, compared with 8.4 per cent of employed men. However, men took an average of 3.0 days away from work, compared with 2.8 days for women.

Employed women aged 15–24 years were more likely than employed women of other ages to take days off work due to illness or injury (13.6%), but they had the lowest average number of days away from work (2.2 days). Women aged 45–54 years had the highest average number of days away from work (3.8 days), whereas men aged 55–64 years had the highest average at 5.3 days away from work.

Employed women born in the United Kingdom and Ireland were the most likely to have taken one or more days away from work in the two weeks prior to interview (12.0%) compared with women born in other countries. Those women who were the least likely to have taken days off work were born in Southeast Asia (5.5%).

Influenza and the common cold were the two most commonly reported recent conditions for which females took days off work or school in the two weeks prior to interview (15.1% and 12.9% respectively of women who took days off work or school).

Further analysis of days away from work is contained in Chapter 8.

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(a) Some females may have reported more than one kind of day of reduced activity in the two weeks prior to interview, therefore components do not add to 100 per cent.

Other days of reduced activity

A higher proportion of females than males had one or more "other days of reduced activity" in the two weeks prior to interview (10.9% of females and 8.5% of males). These were days on which the respondent cut down on the amount of activity she or he would usually have undertaken, other than days spent in hospital or days away from work or school. Females on average had 6.6 days of reduced activity, compared with 6.5 days for males. The percentage of females and males who had other days of reduced activity generally increased with age. The most pronounced difference in the proportion of females and males who had days of reduced activity was in the age group 25–34 years (11.4% of females, 7.1% of males).

Injuries (11.3%), other diseases of the musculoskeletal and connective tissue (8.7%) and influenza (8.1%) were the most often reported recent conditions for which females had an other day of reduced activity.

More females than males spent days in bed due to illness or injury in the two weeks prior to interview (5.9% of females and 4.7% of males). Females also on average spent slightly more days in bed than males (2.7 days for females compared with 2.5 days for males). Women aged 15–24 years were more likely to spend days in bed (8.7%) than females of other ages, but had the lowest average number of days in bed (1.9 days). The average number of days spent in bed generally increased with age to 6.2 days for women aged 75 years and over.

## **APPENDIX A**

The Hospital Utilisation and Costs Study (HUCS) was conducted by the Australian Institute of Health and Welfare (AIHW) in response to a request from the Australian Health Ministers' Advisory Council (AHMAC) for information on hospital use and costs for the year 1989–90. Information was collected on utilisation, costs, staffing and patient morbidity for hospitals and related institutions. Data for HUCS were supplied by the Department of Veterans' Affairs and by health authorities in the following States and Territories for the following years:

1989–90: New South Wales, Victoria, South Australia, Tasmania and the Department of Veterans' Affairs;

1989: Queensland and Western Australia;

1988–89: Australian Capital Territory;

1988: Northern Territory.

HUCS data for acute hospitals combine information received from public, private and repatriation hospitals. However, the data for Victoria, Tasmania, the Northern Territory and the Australian Capital Territory exclude private hospital data. All totals for acute hospitals exclude private hospital data for these States and Territories.

## GLOSSARY

<b>Acute hospitals</b>	In the Hospital Utilisation and Costs Study, acute hospitals were defined as establishments which provide at least minimal medical, surgical or obstetrical services for in-patient treatment and/or care, and which provide round the clock comprehensive qualified nursing services as well as other necessary professional services. They must be licensed by the State health department or controlled by Government departments. Data for acute hospitals combine information received from public, private and repatriation hospitals.
<b>Age</b>	For Hospital Utilisation and Costs Study data, age is the age at admission to hospital. For National Health Survey data, age is age at the time of interview.
<b>Average length of stay</b>	The total number of bed-days divided by the number of hospital separations.
<b>Bed-days</b>	In the Hospital Utilisation and Costs Study, bed-days were the number of days which were spent by patients in hospital for every 1,000 people. The number of bed-days per patient was calculated by subtracting the admission date from the separation date. Where the admission date and the separation date were the same, the length of stay was one day. Where a patient stayed more than 300 days, only 300 bed-days were counted.
<b>Consultations with health professionals other than doctors or dentists</b>	Any occasion in the reference period on which a respondent consulted with one or more health professionals other than doctors or dentists for discussion or treatment of a health-related matter or a medical condition. Occasions on which respondents may have visited the professional only to obtain medical supplies or aids are excluded.
<b>Days of reduced activity</b>	Refers to days during the two weeks prior to interview on which a person cut down on her/his usual activities for all or most of the day due to an illness/injury which they experienced. Within this term are three mutually exclusive sub-categories: <ul style="list-style-type: none"> <li>• <i>Days away from work or school</i> — Normal work or school days (other than days in hospital) on which the respondent did not attend for all or most of the day. School days include days away from college, university, etc.</li> <li>• <i>Days in hospital</i> — Use of in-patient services for periods of one night or more, or for less than one night on doctor's referral, or use of emergency, casualty or out-patient services at a hospital.</li> <li>• <i>Other days of reduced activity</i> — Days (other than days in hospital and days away from work or school) on which the respondent cut down on her/his usual activities.</li> </ul>
<b>Dental check-ups</b>	The category 'dental check-ups' was allocated where X-ray, teeth polished/cleaned, fluoride treatment/coating, check up, or other treatments/services were provided.
<b>Dental consultation</b>	Any occasion in the two weeks prior to interview on which a respondent consulted a dentist or other dental professional (e.g. orthodontist, dental nurse, dental technician) about their teeth, dentures or gums. Consultations at dental hospitals are included. Persons who consulted a doctor about dental problems

are included under the item 'doctor consultations'. In this analysis, the terms 'dentist' and 'dental professional' are used interchangeably.

<b>Dental problems</b>	The category 'dental problems' was allocated where any of the following treatments/services were received: extraction of teeth, filling of teeth, fitting or repair of dentures or fitting or maintenance of braces.
<b>Doctor consultation</b>	Any occasion in the two weeks prior to interview on which a respondent discussed his/her own health with, or received treatment from a doctor, including consultations by telephone or having someone else consult a doctor on behalf of the respondent, but excluding consultations at hospital casualty/out-patient clinics or as part of a hospital in-patient episode. The term 'doctor' includes general practitioners and specialists such as surgeons, pathologists, gynaecologists, radiologists, psychiatrists, etc.
<b>Hospital</b>	When reference is made to hospitals in data obtained from the National Health Survey reference is to an institution which offers residential health care, other than a nursing or convalescent home. For the definition of hospitals used in the Hospital Utilisation and Costs Study refer to acute hospitals.
<b>Hospital episode</b>	Refers to the use of hospitals including: <ul style="list-style-type: none"><li>• admissions to hospital as an in-patient for periods of one night or more, or for less than one night on doctor's referral (such as day patients admitted for minor surgery, tests, etc.), and</li><li>• use of emergency, casualty and out-patient services at a hospital (but not including admission and excluding consultations at dental hospitals which are sometimes attached to a hospital as part of their out-patient clinic).</li></ul>
<b>Hospital separation</b>	The Hospital Utilisation and Costs Study counted hospital separations whereas the National Health Survey counted hospital episodes (see definition above). A separation is the process whereby a patient leaves hospital. This can be either by discharge, transfer or death. The number of separations refers to the number of periods of hospital care, not the number of people going to hospital in a given year. Some patients have multiple periods of care and are counted multiple times.
<b>Medication use</b>	In the National Health Survey, use of medications refers to the consumption or other use of any medications, pills or ointments during the two weeks prior to interview.
<b>Other Health Professionals</b>	Refers to the following health professionals: <ul style="list-style-type: none"><li>• Chiropractor</li><li>• Osteopath</li><li>• Naturopath</li><li>• Herbalist</li><li>• Acupuncturist</li><li>• Dietitian</li><li>• Chemist</li></ul>



- Optician/optometrist
- Physiotherapist
- Chiropodist/podiatrist
- Psychologist
- Social worker/welfare officer
- School nurse
- Baby health nurse
- Other nurse

<b>Principal diagnosis</b>	The disease, condition or injury treated which, at the time of hospital separation, best accounts for the stay in hospital.
<b>Recent illness</b>	Medical conditions (illness, injury or disability) experienced in the two weeks prior to interview.
<b>Same day separation</b>	A separation for which the date of separation equals the date of admission.
<b>Selected Health Professionals</b>	Refers to the following health professionals: <ul style="list-style-type: none"> <li>• Chiropractor</li> <li>• Osteopath</li> <li>• Naturopath</li> <li>• Herbalist</li> <li>• Acupuncturist</li> <li>• Dietitian</li> </ul>

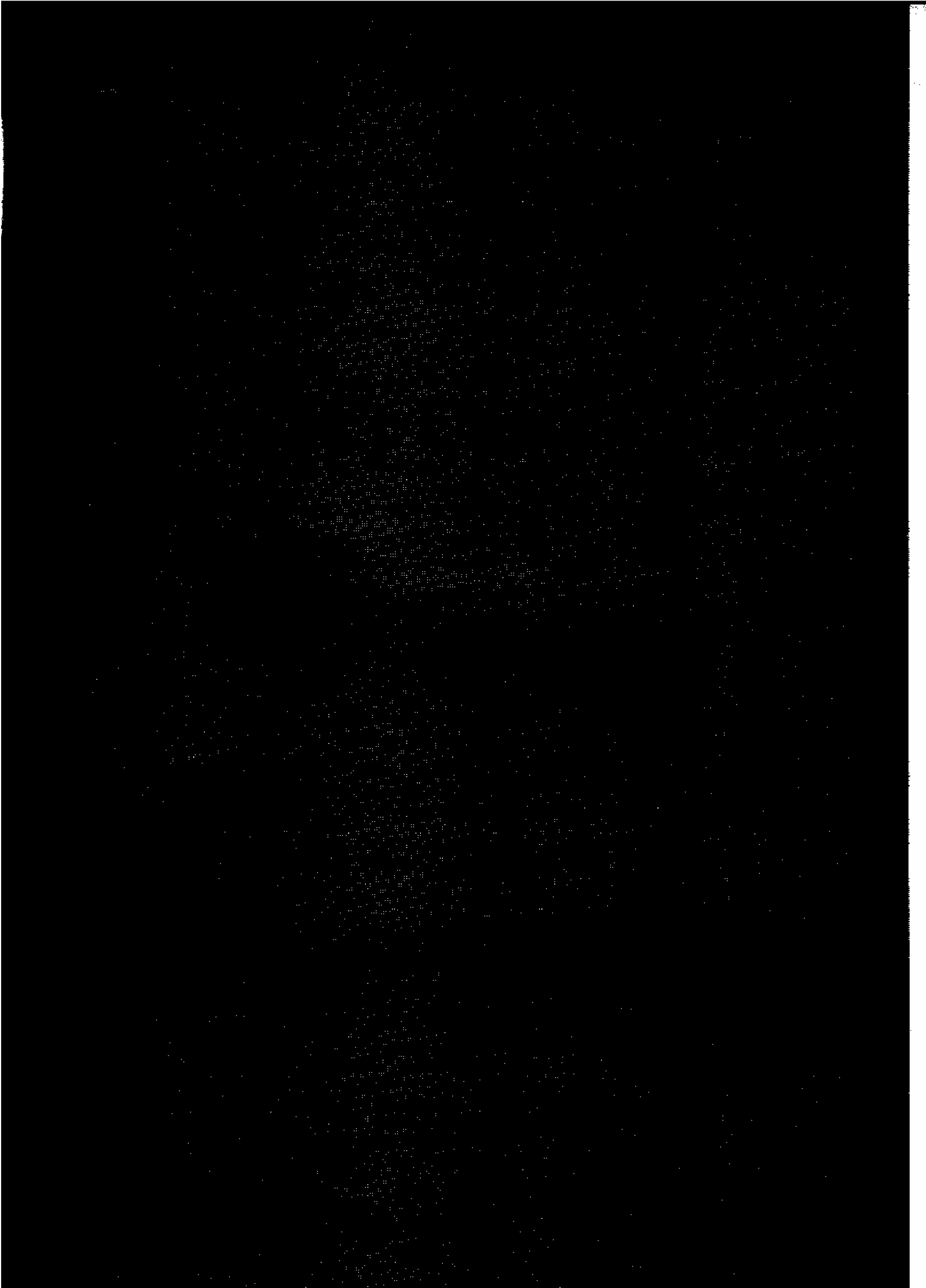
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## LIFESTYLE

### Main findings

- Fewer women than men smoked (24.7% compared with 32.1%). This was the case in all age groups except 18–24 year olds.
- On average, women smoked fewer cigarettes per day and smoked cigarettes of a lower tar content than men.
- A smaller proportion of female smokers (11.3%) had begun smoking before the age of 15 than had male smokers (19.3%).
- A smaller proportion of females (51.8%) than males (73.5%) drank alcohol in the week prior to interview.
- Women were more likely to have drunk wine than any other alcoholic beverage. This was true of all ages except 18–24 year old women who were more likely to drink spirits. Males of all ages were more likely to drink full strength beer.
- The average daily consumption of alcohol was substantially lower for females (13.2 millilitres) than males (31.0 millilitres). 18–24 year olds reported the highest average daily alcohol intake for both sexes.
- Women were more likely to use sunscreen than men (64.4% compared with 52.0%). Use of sunscreen decreased progressively with age for both sexes.
- 64.8 per cent of females took part in exercise in the two weeks prior to interview. Although exercise participation levels for males were similar (65.9%), males were more likely to engage in vigorous exercise than females.
- For both sexes, the amount of exercise decreased with age.
- Women had healthier eating habits than men. They ate less fat and were less likely to add salt to their food.
- Women were less likely to be overweight or obese than men (29.6% compared with 43.6%). Women were more likely to be underweight than men (17.2% compared with 6.2%).
- 72 per cent of females took medication in the two weeks prior to interview. The use of medication increased with age.
- Females were less likely than males to use illicit drugs.

### Smoking

#### Smoker status

Of the female population aged 18 years and over, 24.7 per cent smoked. This compares with 32.1 per cent of the male population who were smokers. Both the number and proportion of smokers were higher among males than females in all age groups with the exception of the 18–24 years age group. In this age group 35.9 per cent of smokers were males and 36.0 per cent were females.

Data from the Anti Cancer Council of Victoria, in *Statistics on Drug Abuse in Australia 1989*, (DHHCS), show that the proportion of males who were smokers had decreased from 72 per cent in 1945 to 32 per cent in 1986. The proportion of females who were smokers increased from 26 per cent in 1945 to 31 per cent in 1980 but then decreased to 29 per cent in 1986.

The 1989–90 National Health Survey, revealed that more females than males had never smoked (57.4% and 39.1% respectively). This was true for all ages except for the 18–24 years age group. In this age group more males (55.1%) reported having never smoked than females (52.2%). The highest proportion of women who have never smoked was reported by the 75 years and over age group (77.0%). Women in the 25–34 years age group were the least likely to report having never smoked (48.8%) (see Charts 5.1 and 5.2).

In the over 35 years age group, a higher proportion of males (28.8%) than females (17.8%) were ex-smokers. In the 18–24 years age group, a higher proportion of females (11.8%) than males (9.0%) were ex-smokers. The proportions of males and females who were ex-smokers in the 25–34 years age group were similar (19.1% and 19.8% respectively).

**CHART 5.1 FEMALES AGED 18 YEARS AND OVER: SMOKER STATUS BY AGE, AUSTRALIA, 1989-90**

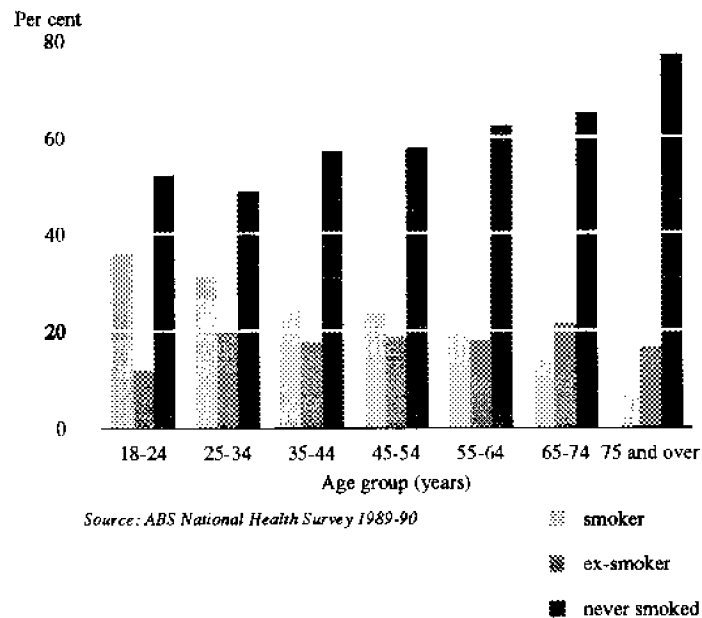
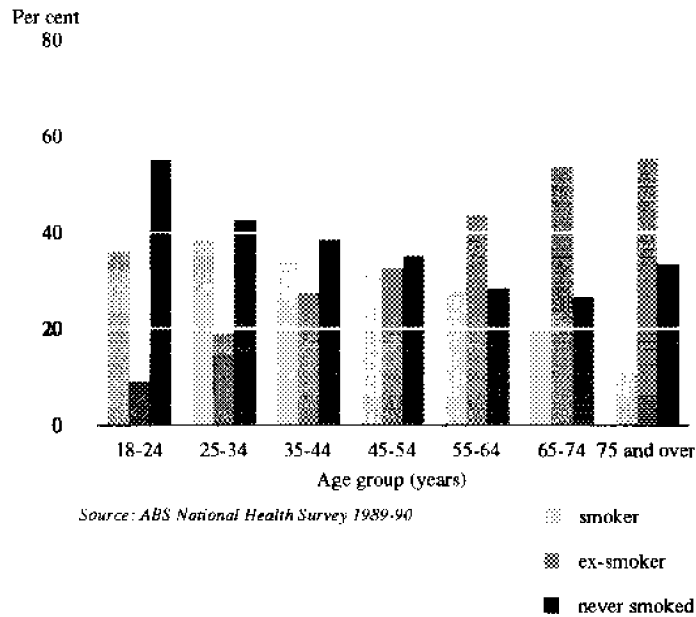


CHART 5.2 MALES AGED 18 YEARS AND OVER: SMOKER STATUS  
BY AGE, AUSTRALIA, 1989-90



**Number of cigarettes smoked** Women smoked fewer cigarettes per day than men. Of the women who smoked packet cigarettes, 28.4 per cent smoked over 20 cigarettes per day compared to 41.6 per cent of men who smoked over 20 cigarettes per day. Of the men who smoked packet cigarettes, 22.4 per cent smoked under 10 cigarettes per day, compared to 33.4 per cent of women smokers. Of the women who smoked, 1.3 per cent smoked over forty cigarettes per day. The greatest proportion of these (29.7%), were aged between 35 and 44 years.

**Tar content** Women smoked cigarettes of a lower tar content than men. Only 15.9 per cent of women smoked cigarettes with a tar content of more than 14 mg, compared to 27.6 per cent of men. The majority of women smoked cigarettes with a tar content of 10 mg or less while men were most likely to smoke cigarettes with a tar content of 11 mg or more.

**Age commenced smoking** Fewer females than males started smoking at younger ages. 11.3 per cent of female smokers and ex-smokers compared to 19.3 per cent of male smokers and ex-smokers started smoking at ages less than 15 years. When the figures are cross classified by current age they indicate that younger females and males started to smoke at younger ages. This is most pronounced among women. Among female smokers and ex-smokers aged 18-24 years, 22.3 per cent started at an age less than 15 years. This compares with 11.4 per cent and 6.6 per cent respectively for those aged 25-44 and 45-64 years (see Table 5.1).

**TABLE 5.1 PERSONS WHO ARE CURRENT CIGARETTE SMOKERS AND EX-CIGARETTE SMOKERS: AGE COMMENCED SMOKING REGULARLY BY CURRENT AGE AND SEX, AUSTRALIA, 1989-90**  
(Per cent)

Age commenced smoking regularly (years)	Age group (years)				Total
	18-24	25-44	45-64	65 and over	
<b>FEMALES</b>					
Less than 15	22.3	11.4	6.6	5.4	11.3
15-19	73.9	66.6	48.1	34.5	59.5
20-24	3.8	16.4	24.5	26.2	17.4
25 and over	..	5.6	20.7	33.9	11.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>MALES</b>					
Less than 15	21.9	17.3	20.2	21.4	19.3
15-19	72.8	63.2	55.1	47.6	59.5
20-24	5.3	15.3	18.2	21.2	15.9
25 and over	..	4.2	6.5	9.8	5.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: ABS National Health Survey 1989-90

- Duration of smoking** The number of years a person has smoked is directly related to the age of the smoker. In the 65 years and over age group, 100 per cent of men and 95.9 per cent of women who smoked, had been smoking for 20 years or more.
- Smokers who have attempted to give up smoking** Of all those who smoked, fewer females (71.4%) than males (74.0%) have attempted to give up smoking. Of females, those aged 25-34 years were more likely to have attempted to give up smoking (74.9%).
- Alcohol consumption** National Health Survey 1989-90 results show that 51.8 per cent of females and 73.5 per cent of males aged 18 years and over drank alcohol during the week prior to interview. Thirteen per cent of females and 4.8 per cent of males had never consumed alcohol.
- The highest proportion of women who drank alcohol in the reference week was recorded in the Australian Capital Territory (61.2%). The lowest proportion of female drinkers was recorded in Queensland (49.6%).
- Type of alcohol consumed** Across all States and Territories, wine was the most popular type of alcoholic beverage consumed by women. Of all women, 30.5 per cent said they drank wine followed by 18.2 per cent who said they drank spirits. This was true of all age groups except for 18-24 year olds. Females in this age group reported a preference for spirits rather than wine (32.8% and 25.9% respectively). Males were more likely to drink full strength beer, (47.1%) followed by wine (22.2%).

**TABLE 5.2 PERSONS AGED 18 YEARS AND OVER: TYPE OF ALCOHOLIC DRINK CONSUMED IN THE WEEK PRIOR TO INTERVIEW BY AGE AND SEX, AUSTRALIA, 1989-90**  
(Per cent)

Type of alcoholic drink consumed	Age group (years)					Total
	18-24	25-44	45-64	65-74	75 and over	
<b>FEMALES</b>						
Did not drink alcohol	43.5	42.7	49.5	60.7	68.8	48.2
Beer-extra/special light	0.9	1.7	2.3	2.5	*0.9	1.8
Beer-low alcohol	1.8	3.3	4.1	2.8	1.4	3.1
Beer-full strength	16.7	11.0	8.3	8.0	4.7	10.4
Wine	25.9	37.2	31.5	18.9	12.6	30.5
Spirits	32.8	18.9	13.3	11.5	9.9	18.2
Fortified wine	3.3	4.9	5.4	7.0	7.2	5.1
Other	3.3	2.0	0.8	*0.3	**	1.6
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>MALES</b>						
Did not drink alcohol	29.9	21.7	26.1	35.4	47.2	26.5
Beer-extra/special light	2.6	7.3	7.6	8.4	4.5	6.6
Beer-low alcohol	4.7	12.9	12.5	10.6	6.7	11.0
Beer-full strength	56.2	53.4	41.1	30.8	20.5	47.1
Wine	10.5	24.8	27.1	18.4	16.5	22.2
Spirits	25.5	16.5	13.6	13.5	11.5	16.7
Fortified wine	2.4	4.8	5.4	5.8	7.4	4.8
Other	1.8	1.1	0.5	*0.3	**	0.9
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

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

Source: ABS National Health Survey 1989-90

**Amount of alcohol consumed** For persons aged 18 years and over, the average daily consumption of alcohol for females was 13.2 millilitres compared with 31.0 millilitres for males. The highest average daily alcohol intake for females was recorded among women who drank full strength beer, 14.0 millilitres, followed by those drinking wine, 10.2 millilitres.

For both females and males the highest average daily alcohol intake was reported by those aged 18-24 years. In this age group, females reported an average daily intake of 15.8 millilitres compared with 36.3 millilitres for males (see Table 5.3). In this and most other age groups, the highest average daily alcohol intake for both females and males was recorded for those drinking full strength beer, probably reflecting the larger amounts of beer consumed, compared to wine and spirits.



**TABLE 5.3 PERSONS AGED 18 YEARS AND OVER WHO DRANK ALCOHOL IN THE WEEK PRIOR TO INTERVIEW: AVERAGE DAILY ALCOHOL CONSUMPTION, TYPE OF ALCOHOLIC DRINK CONSUMED BY AGE AND SEX, AUSTRALIA, 1989-90**  
(millilitres)

Type of alcoholic drink consumed	Age group (years)					Total
	18-24	25-44	45-64	65-74	75 and over	
<b>FEMALES</b>						
Beer-extra/special light	2.5	1.9	2.0	2.4	*0.9	2.0
Beer-low alcohol	2.9	4.6	6.5	4.4	3.7	5.1
Beer-full strength	14.1	12.7	16.8	15.3	9.0	14.0
Wine	8.7	10.4	10.8	10.7	7.1	10.2
Spirits	11.3	7.3	7.1	9.1	8.6	8.5
Fortified wine	5.0	5.4	8.9	8.8	10.3	7.2
Other	10.6	7.3	5.8	*2.1	* *	8.0
<b>Total who drank alcohol</b>	<b>15.8</b>	<b>12.7</b>	<b>13.1</b>	<b>12.9</b>	<b>9.5</b>	<b>13.2</b>
<b>MALES</b>						
Beer-extra/special light	4.6	3.9	4.7	3.6	4.2	4.2
Beer-low alcohol	7.0	10.7	11.7	10.2	5.6	10.6
Beer-full strength	33.8	32.4	33.7	29.7	18.8	32.6
Wine	9.5	12.8	16.1	14.4	13.3	13.8
Spirits	17.9	12.8	12.6	13.7	10.0	14.0
Fortified wine	8.7	8.5	12.9	14.1	10.9	10.6
Other	12.8	11.1	13.7	*13.5	* *	11.9
<b>Total who drank alcohol</b>	<b>36.3</b>	<b>31.7</b>	<b>30.5</b>	<b>24.6</b>	<b>16.2</b>	<b>31.0</b>

Source: ABS National Health Survey 1989-90

#### Alcohol risk level

Females were much less likely than males to consume alcohol to a high health risk level; 3.1 per cent compared with 9.6 per cent. (Health risk levels differ for females and males; see Glossary). The highest proportion of females who consumed alcohol to a high health risk level were in the 18-24 years age group (5.1%).

Females employed as Labourers (4.6%) and Plant and machine operators and drivers (4.3%), were more likely than women employed in other occupations to consume alcohol to a high risk level. Women employed as Managers and administrators and Tradespersons were more likely than women employed in other occupations to drink alcohol to a medium risk level.

#### Use of sunscreens

National Health Survey results show that females (64.4%) were more likely to use sunscreen than males (52.0%), this was true for all age groups.

For both sexes the likelihood of using a sunscreen decreased with age (see Table 5.4). This does not indicate that older people were less likely to protect their skin against sun damage. The proportion of people who fully protected themselves against the sun by other means (hats, clothing, etc.), or did not expose themselves to the sun at all, increased with age.

**TABLE 5.4 PERSONS AGED 15 YEARS AND OVER: WHETHER SUNSCREEN USED BY AGE AND SEX, AUSTRALIA, 1989-90**  
(Per cent)

Whether sunscreen used	Age group (years)							Total
	15-24	25-34	35-44	45-54	55-64	65-74	75 and over	
FEMALES								
Uses sunscreen	76.0	73.4	68.4	54.6	46.3	31.1	14.7	64.4
Does not use sunscreen	21.9	23.3	25.2	34.0	40.2	45.2	48.7	26.5
Fully protected	0.3	0.8	1.4	2.4	4.3	8.5	10.3	2.4
Not exposed	1.8	2.5	5.1	9.0	9.2	15.2	26.3	6.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MALES								
Uses sunscreen	57.7	54.9	47.6	34.9	28.4	25.1	14.5	52.0
Does not use sunscreen	40.3	41.2	46.2	56.1	58.5	57.8	60.2	40.9
Fully protected	0.8	2.0	3.3	4.2	6.9	11.0	14.4	3.4
Not exposed	1.2	1.9	2.9	4.7	6.2	6.1	10.9	3.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: ABS National Health Survey 1989-90

- Education** Women holding Bachelor degrees or higher had the highest prevalence of sunscreen usage (76.1%), while those with no post-school qualifications were least likely to use sunscreen (52.6%).
- Occupation** Women employed in Professional occupations had the highest usage of sunscreen (81.2%), followed by women in Para-professional occupations (77.7%). Plant and machine operators and drivers (48.5%) and Labourers and related workers (55.8%) were occupations where women were least likely to use a sunscreen.
- State** Across all States and Territories, Western Australian women had the highest rate of sunscreen usage (68.8%), followed by women living in South Australia (66.2%). Women living in the Northern Territory were the least likely to use a sunscreen (55.2%).
- Exercise** Results from the 1989-90 National Health Survey revealed that 64.8 per cent of females (compared with 65.9% of males) over the age of 15 years had taken part in some form of exercise during the preceding fortnight.
- Although the overall proportions of females and males who reported that they had exercised in the two weeks prior to interview are similar, differences exist in the type of exercise undertaken by each sex (see Table 5.5).
- Females were more likely to engage in walking for exercise than males (48.9% and 40.3% respectively). More males (22.8%) than females (13.2%) reported that they had engaged in vigorous exercise.

**TABLE 5.5 PERSONS AGED 15 YEARS AND OVER: TYPE OF EXERCISE(a)  
BY SEX, AUSTRALIA, 1989-90  
(Per cent)**

Type of exercise(a)	Females	Males	Persons
Vigorous exercise	13.2	22.8	17.9
Moderate exercise	30.1	35.2	32.6
Walking exercise	48.9	40.3	44.7
<b>Total reporting exercise</b>	<b>64.8</b>	<b>65.9</b>	<b>65.4</b>

(a) In the two weeks prior to interview as reported by respondents.

Source: ABS National Health Survey 1989-90

#### Exercise level

An 'exercise level' of low, medium or high was derived for each respondent who exercised using information they reported for frequency, duration and intensity of exercise. Although the majority of both women and men who reported exercising in the fortnight preceding interview did so to a low exercise level, this was more the case with females than males (36.3% and 27.9% respectively). Females were less likely than males to exercise to a high level of intensity (11.2% and 19.7% respectively).

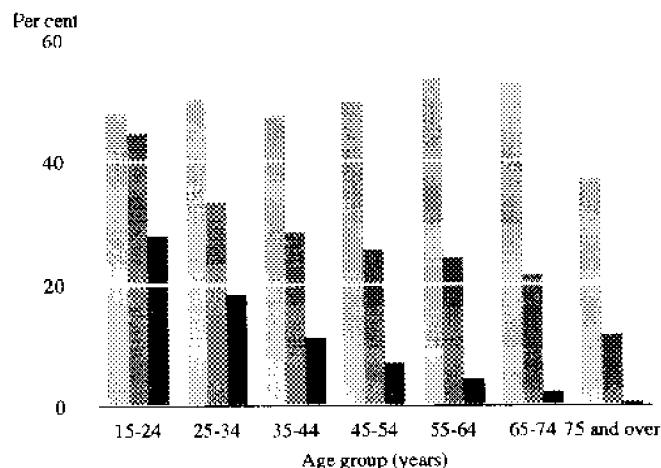
#### Age

For both sexes, the amount of any type of exercise decreased with age. Women aged 15-24 years were more likely than women in any other age group to have exercised in the two weeks prior to interview (75.8%). Those women least likely to have exercised in the two weeks prior to interview were those aged 75 years and over (42.8%).

#### State

The largest proportion of women who reported exercising in the two weeks prior to interview were those living in the Northern Territory (71.5%). Females

**CHART 5.3 FEMALES AGED 15 YEARS AND OVER: PERCENTAGE PARTICIPATING IN WALKING, MODERATE OR VIGOROUS EXERCISE IN THE TWO WEEKS PRIOR TO INTERVIEW, AUSTRALIA, 1989-90**



Source: ABS National Health Survey 1989-90

Walking  
Moderate  
Vigorous

living in New South Wales were the least likely to have exercised in the two weeks prior to interview (62.1%).

#### Income

Generally, the largest proportion of women who reported having exercised in the two weeks prior to interview were those in the higher income ranges. Females who were earning over \$50,000 per annum were the most likely to exercise (72.9%). Women in the \$0-\$9,999 income group were the least likely to exercise (61.7%) (see Table 5.6). However, it is likely that this is due to the concentration of elderly women in this low income group.

**TABLE 5.6 PERSONS AGED 18 YEARS AND OVER: EXERCISE LEVEL(a) BY GROSS PERSONAL ANNUAL INCOME AND SEX, AUSTRALIA, 1989-90 (Per cent)**

Exercise level(a)	Gross personal annual income					
	\$0-\$9,999	\$10,000-\$19,999	\$20,000-\$29,999	\$30,000-\$39,999	\$40,000-\$49,999	\$50,000 and over
Females						
Did not exercise	38.3	37.0	32.2	27.8	30.5	27.0
Low	35.8	36.7	37.0	40.9	36.1	38.4
Medium	15.3	16.2	18.0	18.8	20.3	18.0
High	10.6	10.1	12.7	12.5	13.1	16.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Males						
Did not exercise	35.3	38.4	37.6	32.6	32.5	26.1
Low	27.3	26.7	26.8	29.2	32.6	32.1
Medium	17.4	15.3	16.3	18.1	17.8	20.7
High	20.0	19.6	19.2	20.1	17.2	21.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

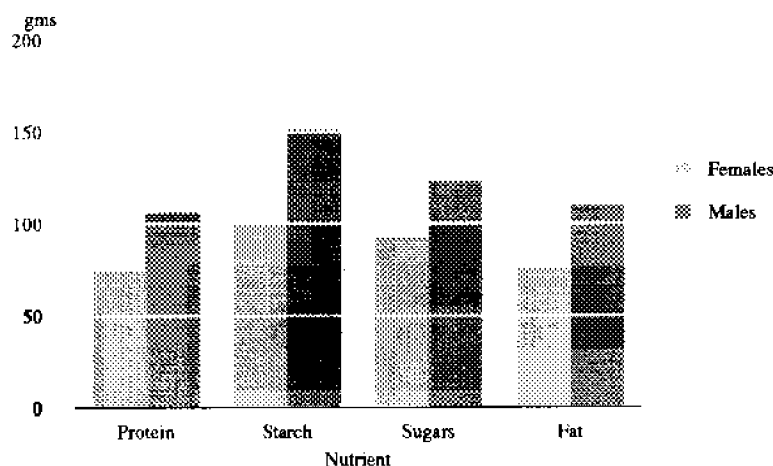
(a) Based on reported intensity, frequency and duration of exercise undertaken for recreation, sport or fitness in the two weeks prior to interview (see Glossary).

Source: ABS National Health Survey 1989-90

#### Diet and nutrition

The National Dietary Survey of Adults 1983 conducted by the Department of Community Services and Health in collaboration with the National Heart Foundation revealed that the average daily energy intake of women (7,410 kJ) was considerably less than that of men (11,010 kJ). For both sexes, energy intake declined with age. The energy intake by women was less than men for all nutrients (see Chart 5.4).

CHART 5.4 PERSONS AGED 25 YEARS AND OVER: AVERAGE DAILY NUTRIENT INTAKE BY SEX, AUSTRALIA, 1983



Source: DCHS, in collaboration with the National Heart Foundation, *National Dietary Survey of Adults 1983, No. 2 Nutrient Intakes*

#### Eating habits

The National Heart Foundation of Australia and the Australian Institute of Health, in the Risk Factor Prevalence Study 1989, reported that 6.5 per cent of women were on a weight reduction diet compared to 2.4 per cent of men. Women generally had healthier eating habits than men. Women ate less fat than men, only 7.0 per cent said that they usually ate the fat on meat, compared to 18.4 per cent of men. A larger proportion of women (64.7%) than men (48.6%) said that they ate the fat on meat rarely or never. At almost all ages, women were less likely than men to add salt to their food. Fifty-eight per cent of women reported rarely or never adding salt to their food compared with 49.0 per cent of men.

#### Change in diet

National Health Survey 1989–90 data indicate that more women than men were making healthy changes to their diets. In the two years prior to interview, 43.3 per cent of women compared to 37.9 per cent of men reported that they had made changes to their diets. More women than men increased vegetable and fruit intakes, and decreased the amounts of fatty or fried foods (see Table 5.7).

The most common reason reported for both men and women to change diet was to improve general health. Medical conditions were reported as the second most common reason and to lose weight third. Of those persons who changed their diet, a larger proportion of women (18.1%) than men (11.6%) changed diet in order to lose weight.

Of those women who changed their diet, those in the age groups 18–24 years and 45–54 years were most likely to report weight loss as the principal reason for a change in diet (21.6% and 21.5% respectively).

**TABLE 5.7 PERSONS AGED 18 YEARS AND OVER WHO CHANGED THEIR DIET DURING THE LAST TWO YEARS(a): TYPE OF FOOD BY CHANGE IN AMOUNT AND SEX, AUSTRALIA, 1989-90 (Per cent)**

Type of food	Increased		Decreased		Same		Did not consume(b)	
	F	M	F	M	F	M	F	M
Vegetables	52.1	45.8	6.9	8.0	40.7	45.8	0.3	0.3
Fresh fruit (incl. fruit juices)	51.5	47.8	6.1	7.3	41.2	43.2	1.3	1.7
Fish	35.9	34.2	10.0	9.6	45.5	49.8	8.7	6.3
Bread	13.5	19.8	31.7	21.7	53.5	57.6	1.3	0.8
Breakfast cereals	20.2	21.0	14.1	14.6	45.8	45.1	20.0	19.3
Fat on meat	1.3	2.6	53.1	53.0	15.2	23.0	30.4	21.3
Fried foods	3.5	7.3	54.7	52.5	23.4	28.9	18.5	11.4
Butter or margarine	3.0	5.7	39.7	31.4	52.9	58.8	4.5	4.1
Cheese or cream	8.9	11.5	41.1	34.7	42.9	46.7	7.0	7.2
Salt	2.6	3.6	45.0	42.6	32.9	37.9	19.5	16.0
Sugar	2.5	3.4	39.8	35.6	37.5	47.1	20.2	13.9
Cakes, pastries or desserts	4.8	7.1	47.8	40.0	34.6	39.0	12.7	13.9
<b>Total persons who changed their diet</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Excludes persons who had not made any change to their diet. (b) Includes persons who reported they had ceased consuming selected foods during the last two years.

Source: ABS National Health Survey 1989-90

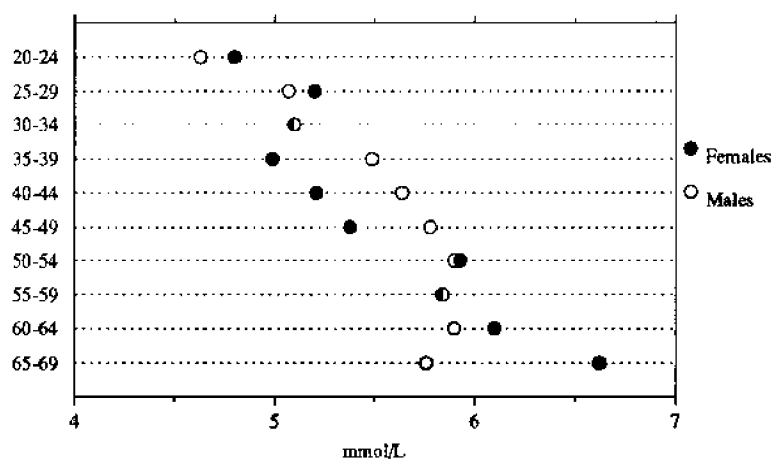
## Cholesterol and triglycerides

The following analysis of cholesterol and triglyceride levels is based on data collected in the Risk Factor Prevalence Study 1989, conducted by the National Heart Foundation of Australia and the Australian Institute of Health.

### Plasma cholesterol

Average plasma cholesterol levels were slightly lower overall for females (5.30 mmol/L) than males (5.42 mmol/L). In the 20-29 years age group plasma cholesterol levels were higher in females than males. In the 35-49 years age group the reverse was true. From age 60-69 years the level was again higher in women than men (see Chart 5.5). For both women and men, the prevalence of raised plasma cholesterol levels increased overall with age. No uniform

**CHART 5.5 AVERAGE PLASMA CHOLESTEROL LEVELS BY SEX BY AGE, AUSTRALIA, 1989**



Source: NHFA and AIH, Risk Factor Prevalence Study 1989

pattern was found in the estimated differences in plasma cholesterol levels between women taking and not taking oral contraceptives.

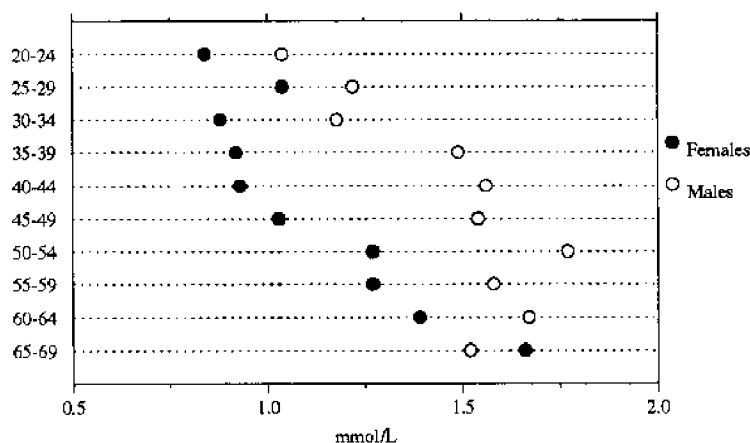
A lower proportion of women (38.6%) than men (46.6%) had plasma cholesterol levels of 5.5 mmol/L or more, the level which the National Heart Foundation regards as higher than desirable. More men (16.0%) than women (14.2%) had levels of 6.5 mmol/L or more. The prevalence of plasma cholesterol of 6.5 mmol/L or more among women aged 25–29 years (not taking oral contraceptives) was relatively high (16.9%).

#### Plasma triglycerides

Average plasma triglyceride levels were lower in females (1.02 mmol/L) than males (1.41 mmol/L). Generally, for both sexes plasma triglyceride levels increased with age, peaking at 1.66 mmol/L for women and 1.77 mmol/L for men (see Chart 5.6). Plasma triglyceride levels were generally higher in women taking oral contraceptive pills than in women not taking them.

A lower proportion of females (6.8%) than males (16.6%) had plasma triglyceride concentrations of 2.0 mmol/L or more. The prevalence peaked at 27.1 per cent at ages 60–64 years in men and 25.9 per cent at ages 65–69 years in women. The proportions of men and women with a triglyceride concentration of 5.0 mmol/L or more were 1.0 per cent and 0.1 per cent respectively.

CHART 5.6 AVERAGE PLASMA TRIGLYCERIDE LEVELS BY AGE BY SEX, AUSTRALIA, 1989



Source: NHFA and AIH, Risk Factor Prevalence Study 1989

#### Body mass index

Results from the 1989–90 National Health Survey indicate that, of all women aged 18 years and over, 48.7 per cent were in the acceptable weight range, 17.2 per cent were underweight, 20.5 per cent were overweight and 9.1 per cent were obese (see Glossary for definitions). Information was not available for 4.5 per cent of women.

Men were more likely to be overweight or obese (43.6%) than women (29.6%). Women were more likely to be underweight (17.2%) than men (6.2%).

#### Age

Women in the younger age groups were more likely to be underweight than other women or men. In the 18–24 years age group 31.0 per cent of women were underweight compared to 13.4 per cent of men. The largest proportion of

women in all age groups fell within the acceptable weight range. This was not true for men. While the largest proportion of men in the 18–44 years age group were in the acceptable weight range, men in the 45–64 years age group were more likely to fall in the overweight category than any other. The proportion of both overweight or obese women increased between the ages of 18 and 64 years and then decreased. From the 55–64 years age group the proportion of women in the underweight range increased (see Table 5.8).

**TABLE 5.8 PERSONS AGED 18 YEARS AND OVER: BODY MASS INDEX(a)  
BY AGE AND SEX, AUSTRALIA, 1989–90  
(Per cent)**

Body mass index(a)	Age group (years)							Total
	18–24	25–34	35–44	45–54	55–64	65–74	75 and over	
FEMALES								
Underweight	31.0	22.1	14.8	9.4	8.5	11.4	17.4	17.2
Acceptable weight	49.0	52.8	52.3	47.1	44.0	43.9	42.1	48.7
Overweight	10.4	14.9	20.3	26.9	30.8	27.5	20.6	20.5
Obese	3.8	7.0	9.2	13.8	13.2	11.2	7.2	9.1
Not available	5.8	3.2	3.4	2.8	3.4	5.9	12.7	4.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MALES								
Underweight	13.4	5.8	4.2	3.1	3.9	5.2	11.6	6.2
Acceptable weight	56.9	52.8	45.3	40.5	40.9	43.4	51.4	47.7
Overweight	21.2	32.5	38.8	43.2	42.7	40.4	27.8	35.3
Obese	3.7	6.7	10.1	11.3	10.5	9.4	4.1	8.2
Not available	4.8	2.2	1.5	1.8	2.1	1.6	5.1	2.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Derived from self-reported height and weight (see Glossary).

Source: ABS National Health Survey 1989–90

#### State

Of all Australian women, those living in the Northern Territory were more likely to be in the underweight category than were women living in any other State or Territory (27.9%), this was followed by women living in Queensland (19.6%). The Australian Capital Territory had the highest proportion of women falling in the acceptable weight range (54.1%) and the smallest proportion of women in the overweight category (15.7%). In the other States, the proportions of women in the overweight category were fairly similar, ranging between 19.8 per cent and 22.0 per cent. The highest proportion of women in the obese category were those living in Victoria (9.8%). Women living in the Northern Territory were the least likely to be obese (5.8%).

#### Occupation

Women employed as Labourers and related workers (35.4%) and Plant and machine operators and drivers (33.0%), were more likely than women in any other occupation group to be overweight or obese. Women employed as Salespersons and personal service workers (19.6%) and Professionals (19.9%) were the least likely to be overweight or obese. These occupations have the highest percentages of women in the acceptable weight range (56.3% and 55.4% respectively).

#### Employment

Employed women (53.1%) were more likely to be in the acceptable weight range than those who were either unemployed (48.1%) or not in the labour



force (44.5%). A higher proportion of women who were unemployed or not in the labour force were obese (11.6%) compared to those who were employed (7.2%).

#### Income

Females in the lower income groups were more likely to be overweight or obese than females in higher income groups. The highest proportion of women who were overweight (23.1%) or obese (11.4%) were in the 'no income' income group (persons still at school and persons who did not report a source of income). The smallest proportion of women who were overweight (14.1%) were in the \$30,000–\$39,999 per annum income group, and the smallest proportion of obese women (5.8%) were in the \$40,000–\$49,999 income group.

#### Eating disorders

Eating disorders such as Anorexia Nervosa and Bulimia Nervosa affect women of all ages from different backgrounds. Although many small studies have been conducted, no national data are currently available on eating disorders.

#### Time use

It is widely believed that adequate leisure and time for relaxation assist in the control of stress levels and maintenance of good health. The way in which people spend their time may contribute to or detract from their well-being. The following analysis is based on data obtained from the ABS Time Use Survey, 1992.

Women spent 8.8 per cent of their time on labour force activities, 20.2 per cent on household activities, 43.5 per cent on sleeping, eating and personal care, 2.0 per cent on education and 25.4 per cent on community, social and leisure activities. This pattern was similar for both sexes (see Table 5.9) except men, compared with women, spent twice as much of their time on labour force activities (18.7%) and half as much time on household activities (10.4%). Approximately two-thirds (66.5%) of unpaid household work was done by women.

**TABLE 5.9 PERSONS AGED 15 YEARS AND OVER: AVERAGE PROPORTION OF DAY SPENT ON ACTIVITIES BY SEX, AUSTRALIA, 1992**

Activity	Proportion of day (per cent)	
	Females	Males
Labour force	8.8	18.7
Household —		
Domestic activities	13.0	7.0
Child care/minding	3.4	1.0
Purchasing goods/services	3.8	2.4
Sleeping, eating and personal care	43.5	43.1
Education	2.0	2.3
Community, social and leisure —		
Volunteer work and community participation	1.8	1.7
Social life and entertainment	7.5	6.4
Active leisure	3.2	3.9
Passive leisure	12.9	13.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

Source: *How Australians Use their Time, 1992 (4153.0)*

- Drug and medication use** More females than males used medications. National Health Survey 1989–90 results indicate that 76.2 per cent of females reported taking medication in the two weeks prior to interview, compared to 64.5 per cent of males. For females, from age 5 years onwards, the use of medication increased steadily with age from a low of 56.6 per cent (53.1% for males) at age 5–14 years to peak at 93.3 per cent in the 75 years and over age group.
- The most commonly used medications were pain relievers, vitamin and mineral supplements and skin ointments.
- Pain relievers** More females than males reported taking pain relievers in the two weeks prior to interview (41.9% and 28.9% respectively). This is true for all age groups over 5 years of age. The highest proportions of females using pain relievers were recorded for the age groups 45–54 years (50.1%) and 35–44 years (49.8%).
- The highest proportion of women who reported taking pain relievers was recorded in Queensland (46.0%), followed by South Australia (43.0%). Females living in Tasmania were the least likely to take pain relievers (37.3%).
- Skin ointments** More females than males used skin ointments in the two weeks prior to interview (19.2% and 17.1% respectively).
- For both females and males, the use of skin ointments was more prevalent in the 75 years and over age group (26.5% and 25.0%) and the under 5 years age group (26.0% and 23.6%).
- The highest proportion of women using skin ointments was recorded in the Australian Capital Territory (22.3%).
- Vitamin and mineral supplements** More females than males reported taking vitamin and mineral supplements in the two weeks prior to interview (27.5% and 19.1% respectively).
- This was true for all age groups over the age of 5 years. The highest proportion of women to use vitamin and mineral supplements (33.9%) was in the 45–54 years age group.
- The highest proportions of women taking vitamin and mineral supplements were recorded by those living in Queensland (31.6%) and the Australian Capital Territory (29.9%). The lowest proportion was recorded in South Australia (23.4%).
- Sleeping medications** More females than males took sleeping medications (6.5% and 3.4% respectively). For both females and males over 5 years of age the use of sleeping medications increased with age, peaking at 27.3 per cent and 16.8 per cent respectively in the over 75 years age group.
- The highest proportions of women taking sleeping medications were reported by those living in South Australia (7.5%) and Tasmania (7.2%). The lowest proportions of women taking sleeping medications were recorded in the Australian Capital Territory (3.7%) and the Northern Territory (3.8%). However, age may be a contributing factor to this pattern since the highest proportion of women aged 75 years or over was in South Australia, and the lowest proportions of women in this age group were in the Northern Territory and the Australian Capital Territory.

Tranquillisers and sedatives More females (2.7%) than males (1.7%) used tranquillisers or sedatives in the two weeks prior to interview. People in the older age groups were more likely to use tranquillisers and sedatives than those in the younger age groups. For both females and males the use of tranquillisers or sedatives peaked in the 65-74 years age group (7.8% and 5.3% respectively).

The highest proportion of females using tranquillisers or sedatives (3.1%) was recorded in Queensland. The lowest proportion of women to use tranquillisers or sedatives (0.5%) was recorded in the Northern Territory.

**TABLE 5.10 PERSONS: TYPE OF MEDICATION OR VITAMINS USED IN THE TWO WEEKS PRIOR TO INTERVIEW BY AGE AND SEX, AUSTRALIA, 1989-90 (Per cent)**

Type of medication used	Age group (years)									Total
	Under 5		5-14	15-24	25-34	35-44	45-54	55-64	65-74	
FEMALES										
Vitamin and mineral supplements	14.4	18.2	26.7	31.2	33.0	33.9	31.7	29.0	24.7	27.5
Cough and cold medications	26.1	15.2	13.2	10.7	9.1	8.7	9.0	8.3	9.0	12.0
Allergy medications	3.3	6.1	6.1	6.9	7.6	8.5	7.3	6.5	3.6	6.5
Skin ointments	26.0	15.9	19.6	18.7	16.7	17.5	17.9	23.2	26.5	19.2
Stomach medicines or laxatives	3.0	2.3	5.1	7.2	8.2	12.4	15.6	20.3	23.4	9.1
Medications for fluid/heart, b.p.	**	**	*0.3	1.8	5.7	18.9	33.4	50.0	59.1	12.8
Pain relievers	26.2	23.8	42.9	47.0	49.8	50.1	45.8	44.8	44.5	41.9
Sleeping medications	2.8	*0.2	1.5	2.5	4.4	8.1	13.7	20.9	27.3	6.5
Tranquillisers or sedatives	**	**	0.5	1.6	2.7	4.5	6.7	7.8	6.5	2.7
Other medications	11.0	10.9	18.9	19.7	18.0	26.4	33.5	39.8	42.6	22.0
<b>Total using medication(a)</b>	<b>64.8</b>	<b>56.6</b>	<b>73.1</b>	<b>76.9</b>	<b>78.7</b>	<b>83.6</b>	<b>86.6</b>	<b>90.1</b>	<b>93.3</b>	<b>76.2</b>

For footnotes see end of table

**TABLE 5.10 PERSONS: TYPE OF MEDICATION OR VITAMINS USED IN THE TWO WEEKS PRIOR TO INTERVIEW BY AGE AND SEX, AUSTRALIA, 1989-90 — continued**  
(Per cent)

Type of medication used	Age group (years)									Total
	Under 5	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75 and over	
<b>MALES</b>										
Vitamin and mineral supplements	15.0	18.0	18.2	21.3	19.4	19.1	20.0	20.4	19.5	19.1
Cough and cold medications	27.1	14.7	11.1	10.7	8.6	8.5	10.2	10.1	10.2	11.9
Allergy medications	4.0	7.8	4.9	5.6	5.5	5.2	4.3	5.1	2.4	5.4
Skin ointments	23.6	12.3	16.0	15.6	18.0	14.8	19.9	22.6	25.0	17.1
Stomach medicines or laxatives	2.4	1.9	2.8	4.2	6.8	8.0	12.4	17.7	21.6	6.4
Medications for fluid/heart, b.p.	**	**	*0.2	1.0	4.5	13.2	27.7	42.0	46.1	8.8
Pain relievers	29.6	17.8	26.2	31.7	33.0	31.3	34.1	31.2	34.7	28.9
Sleeping medications	2.6	*0.3	0.7	1.4	2.6	4.2	7.4	12.7	16.8	3.4
Tranquillisers or sedatives	*0.3	*0.1	*0.2	1.0	1.8	2.8	4.6	5.3	4.7	1.7
Other medications	13.7	13.0	10.4	9.2	12.0	16.4	27.3	39.0	45.8	16.1
<b>Total using medication(a)</b>	<b>66.4</b>	<b>53.1</b>	<b>56.3</b>	<b>61.8</b>	<b>63.7</b>	<b>67.3</b>	<b>77.5</b>	<b>85.6</b>	<b>87.8</b>	<b>64.5</b>

(a) Persons may have used more than one type of medication, and therefore components do not add to totals.

Source: ABS National Health Survey 1989-90

#### Use of illicit drugs

Information on the use of illicit drugs was collected in the National Campaign Against Drug Abuse National Household Survey, 1991, by the Department of Health, Housing and Community Services.

The following data (see Table 5.11) may be under reported due to problems such as a reluctance to admit use of illicit drugs. Females were less likely than males to use illicit drugs (11% and 19% respectively). For both sexes use of illicit drugs was more prevalent in the younger age groups, particularly the 14-24 years category. Marijuana was the most commonly used illicit drug by both females and males, although males were almost twice as likely to use marijuana than females. More data can be obtained from the Department of Human Services and Health, National Drug Strategy.

**TABLE 5.11 PERSONS AGED 14 YEARS AND OVER: PROPORTION WHO HAVE USED ILLICIT DRUGS IN THE PAST YEAR: TYPE OF ILLICIT DRUG BY AGE AND SEX, AUSTRALIA, 1991**  
(Per cent)

Type of illicit drug	Age group (years)			Total
	14-24	25-39	40 and over	
<b>FEMALES</b>				
Marijuana	20	13	2	9
Amphetamines	6	1	—	2
Barbiturates	2	1	2	2
Cocaine/crack	1	—	1	1
Hallucinogens	3	—	—	1
Heroin	2	(a)	—	1
Inhalants	2	(a)	1	1
Ecstasy/designer drugs	2	—	—	1
Injected illicit drugs	1	(a)	(a)	—
<b>Total illicit drugs(a)</b>	<b>24</b>	<b>14</b>	<b>4</b>	<b>11</b>
<b>MALES</b>				
Marijuana	38	25	3	17
Amphetamines	11	5	—	4
Barbiturates	3	3	1	2
Cocaine/crack	3	2	(a)	1
Hallucinogens	9	3	(a)	3
Heroin	(a)	2	(a)	—
Inhalants	5	1	(a)	1
Ecstasy/designer drugs	4	2	1	2
Injected illicit drugs	2	1	—	1
<b>Total illicit drugs(a)</b>	<b>41</b>	<b>25</b>	<b>4</b>	<b>19</b>

(a) Any of the drugs listed above.

Source: NCADA National Household Survey 1991

## GLOSSARY

**Alcohol consumption** Refers to consumption of alcoholic drinks. Information was collected on the types and quantities of alcoholic drinks consumed on each of the seven days prior to interview. Homemade wines and beers were included.

**Alcohol risk level** The indicators of relative health risk were derived from the average daily amount of alcohol consumed over the reference week. According to the average daily intake, respondents to the National Health Survey 1989–90 were grouped into three categories of relative risk level based on recommendations of the National Health and Medical Research Council (NHMRC).

<i>Relative risk</i>	<i>Consumption per day ml(a)</i>	
	<i>Female</i>	<i>Male</i>
Low	<25	<50
Medium	25–50	50–75
High	>50	>75

(a) Recommendations expressed in grams of absolute alcohol per day have been converted to millilitre equivalents using the ratio 1ml = 0.70g.

**Body mass index** This was derived using Quetelet's body mass index which is calculated as weight (kg) divided by the square of height (m<sup>2</sup>). Scores were grouped into four categories, defined by the National Health and Medical Research Council.

	<i>Body mass index (kg/m<sup>2</sup>)</i>
Underweight	<20
Acceptable weight	20–25
Overweight	26–30
Obese	>30

**Change in diet** Refers to the changes in the kind or amount of foods eaten or drunk, or to other changes respondents to the National Health Survey 1989–90 reported making in their diet during the two years prior to interview. Information about the reasons for change and changes made to the amount eaten of selected foodstuffs was also collected.

**Exercise** Refers to physical exercise undertaken for recreation, sport or health/fitness purposes during the two weeks prior to interview. The term does not include physical activity undertaken in the course of work or for reasons other than recreation, sport or health/fitness.

Respondents to the National Health Survey 1989–90 were asked whether, during the previous two weeks, they did any:

- walking for exercise or recreation;
- moderate exercise;
- vigorous exercise.

Moderate exercise was defined as exercise or other activities (undertaken for recreation, sport or health/fitness) that caused a moderate increase in the heart rate or breathing of the respondent. Vigorous exercise was defined as exercise or other activities (as above) that caused the respondent to perspire and/or resulted in a large increase in the respondent's heart rate or breathing.

### Exercise level

An 'exercise level' of low, medium or high was derived for each respondent of the National Health Survey who reported some exercise in the previous two weeks. The aim was to produce a single descriptor of relative overall exercise level, and to indicate the quality of the activities undertaken in terms of maintaining heart, lung and muscle fitness. The level is based on a score derived from:

Number of times activity undertaken	X	Average time per session	X	Intensity
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where intensity is a measure of the energy expenditure required to carry out the exercise, expressed as a multiple of the resting metabolic rate. Because the NHS did not collect details of the types of activities undertaken an intensity value was estimated for each of the three categories of exercise identified in the survey; the values applied were 3.2 for walking, 5.7 for moderate exercise and 8.5 for vigorous exercise.

A score was derived for each of the three categories of exercise and then summed to provide a total for the respondent for the two week reference period. Respondents were grouped into levels as follows:

Score less than 1500	= low
Score 1500 to 3250	= medium
Score more than 3250	= high

### Height and weight

Refers to the height (without shoes) and weight (without clothes and shoes) of respondents, as reported during interview. No measurements of height and weight were taken as part of the survey. Women who were pregnant at the time of interview were asked to provide their usual weight before pregnancy.

### Medication use

Refers to the consumption or other use of any medications, pills or ointments during the two weeks prior to interview.

### Smoking

Refers to the regular smoking of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excludes chewing tobacco and smoking of non-tobacco products. 'Regular' was defined as one or more cigarettes (or pipes or cigars) per day on average as reported by the respondent. It relates to current smokers and ex-smokers at the time of interview. Most of the information collected in the National Health Survey 1989-90 related to smoking of packet cigarettes.

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THE  
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## REPRODUCTION AND ASSOCIATED HEALTH ISSUES

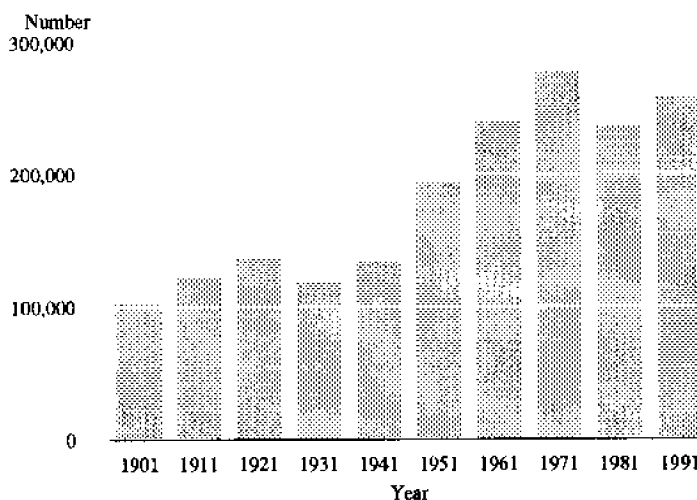
### Main findings

- Women are waiting until they are older to have children and are having fewer children than previously.
- More women are waiting until the second year of marriage to have their first child. Prior to 1983 women were most likely to have their first child within the first year of marriage.
- There has been a steady increase in the number of births that are ex-nuptial, from 6.0 per cent in 1901 to 24.9 per cent in 1993.
- Up to one in five births in Australia are delivered by caesarean section.
- The majority of mothers (77.0%) with a child(ren) aged 5 years or less had either breastfed or were breastfeeding their child(ren) in 1989–90.
- The number of maternal deaths associated with abortion has fallen from a total of 45 between 1964 and 1966 to 5 between 1985 and 1987.
- Almost half of all women aged 18–24 years were taking the oral contraceptive pill in 1989–90.
- There have been 8,430 births after assisted conception (in-vitro fertilisation, gamete intrafallopian transfer and other methods) in Australia and New Zealand between 1979 and 1990.
- More than one in five Australian women aged between 40 and 54 years have had a hysterectomy.
- Females accounted for 6.8 per cent of new HIV diagnoses, 3.6 per cent of new AIDS diagnoses and 2.0 per cent of AIDS deaths between October 1991 and September 1992.

### Births

In 1993, 260,229 births were registered in Australia, compared with 264,151 in 1992, representing a 1.5 per cent decrease on 1992 registrations. The number of births registered in 1992 was a 2.7 per cent increase on 1991 registrations. Chart 6.1 shows the number of births registered since 1901.

CHART 6.1 BIRTHS, AUSTRALIA, 1901-1991



Source: ABS Year Book Australia (1301.0). ABS Births, Australia (3301.0)

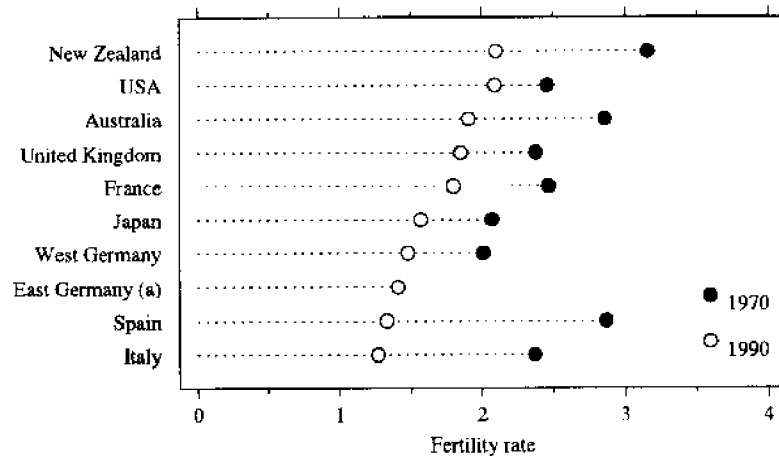
Total fertility rates and net reproduction rates

Based on births registered within the reference years, the total fertility rate (per female aged 15 to 49 years), fell on a national basis in 1993 by 2.2 per cent, from 1.907 in 1990 to 1.865 in 1993. Only Victoria, South Australia and the Australian Capital Territory recorded rates below that for Australia, with the Australian Capital Territory recording the lowest total fertility rate of all States and Territories at 1.693.

The 1993 total fertility rate of 1.865 births per woman was considerably lower than rates for the earlier part of this century. For example, in 1921 Australia's total fertility rate was 3.116 births per woman.

Chart 6.2 shows the total fertility rates for selected countries in 1970 and 1990. The total fertility rate decreased in all the countries shown. Australia's rate was the third highest in both years, and in 1990 was higher than in other similarly 'more developed' countries in Europe and Japan.

CHART 6.2 TOTAL FERTILITY RATES, SELECTED COUNTRIES, 1970 AND 1990



(a) Figures for 1970 are not available.  
Source: ABS Year Book Australia, 1992 (1301.0)

The net reproduction rate fell from 0.911 in 1990 to 0.896 in 1993 and is 10.4 per cent below long-term replacement level. In comparison, in 1961 the net reproduction rate was 67.2 per cent above long-term replacement level, in 1971 it was 36.2 per cent above long-term replacement level, while in 1981 it fell to 7.5 per cent below long-term replacement level.

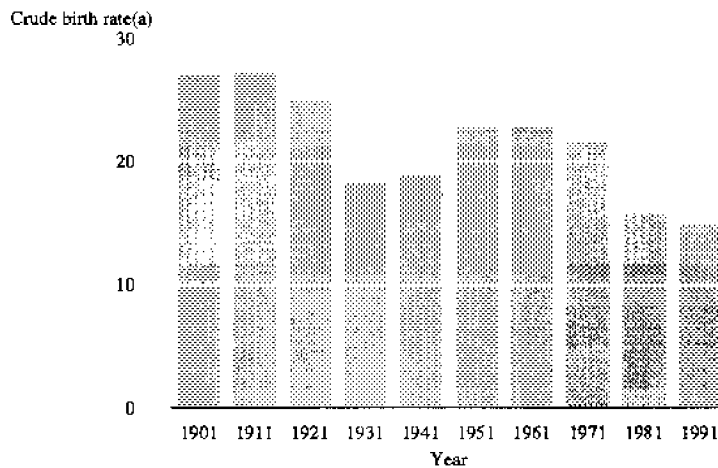
Birth rates

While the age-specific birth rates continued to decrease in the younger age groups in 1993, the rate for the 35–39 year olds increased by nearly 8 per cent from 1991.

The trend to increasing fertility at older ages has continued in 1993. While women in the 25–29 years age group remain the peak fertility group, in 1987 women in the 30–34 years age group replaced those in the 20–24 years age group as the second most fertile group.

Although the overall trend has been a decrease, the crude birth rate (the number of births per 1,000 of mean population) has fluctuated between 1901 and 1991 (see Chart 6.3). The rate fell steadily from a high of 27.2 in 1911 to 18.2 in 1931, increased again to 22.9 in 1951 and then decreased to its lowest level of 14.7 in 1993.

CHART 6.3 CRUDE BIRTH RATE(a), AUSTRALIA, 1901-1991



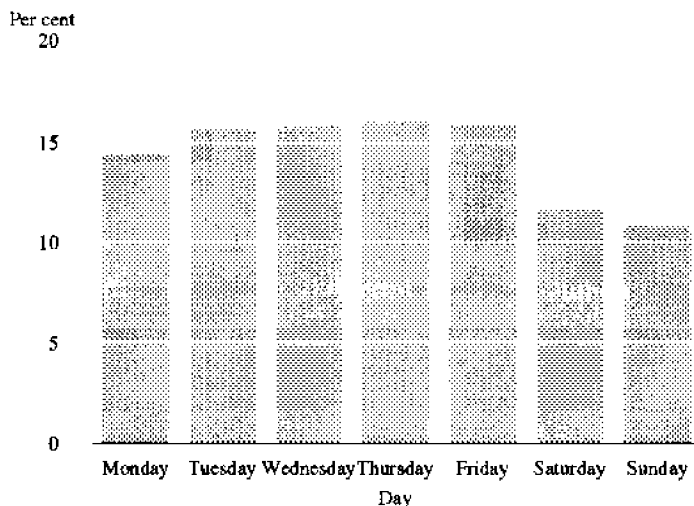
(a) Number of births per 1,000 of mean population.  
 Source: ABS Year Book Australia (1301.0). ABS Births, Australia (3301.0)

**Number of children ever born** The average number of children ever born to ever married women decreased by about 6 per cent between 1971 and 1986(a) (from 2.54 to 2.39 children per woman). This occurred in every age group of women up to 50 years.

There has also been an increase in childlessness, particularly among younger women. At the 1971 Census, 5 per cent of currently married women aged 40–44 years had not had children, compared with 6 per cent at the 1986 Census. 16 per cent of currently married women aged 25–29 years were childless at the 1971 Census, compared with 29 per cent in 1986.

**Day and month in which birth occurred** An analysis of the day of the week on which babies were born shows a definite pattern (see Chart 6.4). In 1991 most babies were likely to be delivered on one of the weekdays Tuesday through to Friday. Relatively few births occurred at the weekend.

CHART 6.4 BIRTHS BY DAY OF WEEK, AUSTRALIA, 1991



Source: ABS Births data, 1991

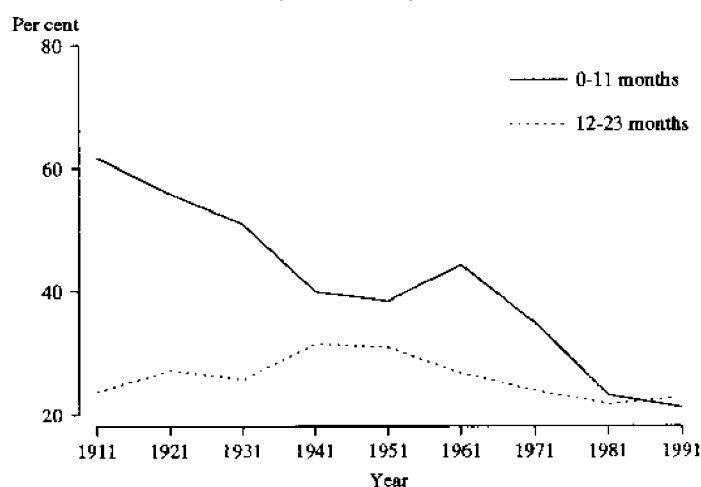
(a) These figures are based on 1986 Census results as a question on fertility was not included in the 1991 Census.

In 1991, the majority (28.2%) of babies were born in Autumn, followed closely by Winter (27.5%), Spring (24.6%) and Summer (19.7%). It is interesting to note that only 2.0 per cent of births occurred in December and 6.8 per cent in November, while for the rest of the year the monthly figure was relatively constant (between 8.5% and 9.5%).

#### Nuptial first births

In 1993, 19.6 per cent (15,234) of nuptial first births occurred within the first year of marriage (0–11 months), and 22.7 per cent (17,613) between the first and second year of marriage (12–23 months). This compares with 61.8 per cent of nuptial first births within the first year of marriage in 1911 and 38.5 per cent in 1951. 1983 saw a reversal of the trend when, for the first time, more nuptial first births were recorded within the second year of marriage than within the first year of marriage<sup>(a)</sup> (see Chart 6.5).

CHART 6.5 NUPTIAL FIRST BIRTHS<sup>(a)</sup> BY DURATION OF CURRENT MARRIAGE, AUSTRALIA, 1911-1991



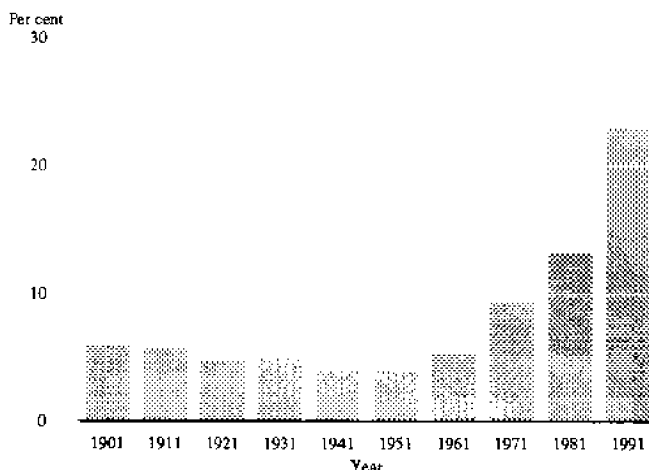
(a) The first birth in the current marriage.  
Source: ABS Year Book Australia (1301.0). ABS Births, Australia (3301.0)

#### Ex-nuptial births

In 1993, 24.9 per cent (64,874) of registered births were to unmarried women. This continues the long established upward trend in the proportion of births that are ex-nuptial (see Chart 6.6). In 1991, 23.0 per cent (59,223) of births were registered to unmarried women, compared with 20.3 per cent (50,788) in 1989 and 13.2 per cent (31,200) in 1981. In 1993, Victoria (19.7%) and the Australian Capital Territory (22.9%) had the lowest percentage of ex-nuptial births, while the Northern Territory had the highest (55.3%).

(a) This information is based on data obtained by decade from 1911 to 1991. When the reversal of the trend was observed more detailed analysis was made and it was discovered that 1983 was the year which marked the change.

CHART 6.6 EX-NUPTIAL BIRTHS(a), AUSTRALIA, 1901-1991

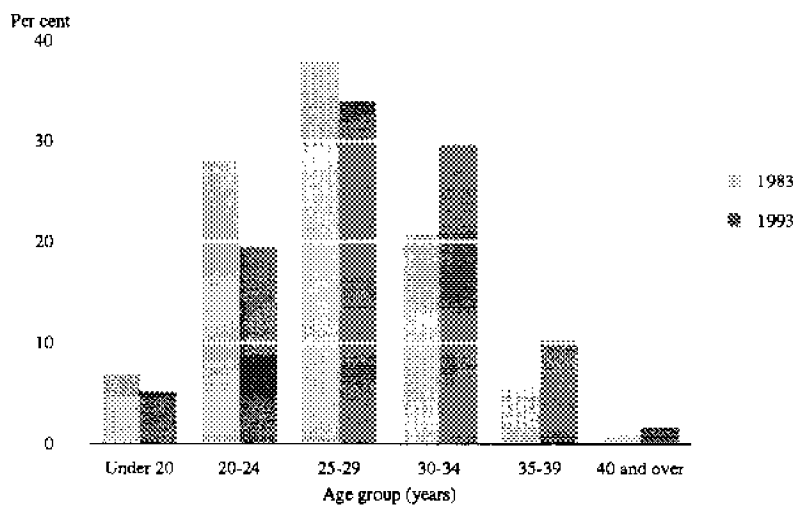


(a) Number of births to unmarried women as a percentage of total births.  
 Source: ABS Year Book Australia (1301.0); ABS Births, Australia (3301.0)

#### Age of parents at birth of child

Nearly 59 per cent (58.5% or 152,135) of births registered in 1993 were to mothers aged under 30 years and 58.0 per cent (88,279) of these were to mothers in the 25–29 years age group. There has been an increase in births to older women since 1983 (see Chart 6.7).

CHART 6.7 BIRTHS TO WOMEN IN SELECTED AGE GROUPS, AUSTRALIA, 1983 AND 1993



Source: ABS Births, Australia (3301.0)

The median age of both mothers and fathers at birth of child has increased throughout the 1980s and early 1990s. In 1993, the median age of the mother was 28.9 years compared with 28.3 years in 1990 and 26.9 years in 1983. For fathers, the median age of nuptial confinements in 1993 was 32.0 years compared with 31.4 years in 1990 and 30.0 years in 1983.

In 1993, 13,175 births were registered to women under 20 years of age, accounting for 5.1 per cent of all births. When the proportion of births to women under 20 years is compared by State and Territory, the Northern Territory had the highest proportion (13.6%) while Victoria had the lowest (3.4%).

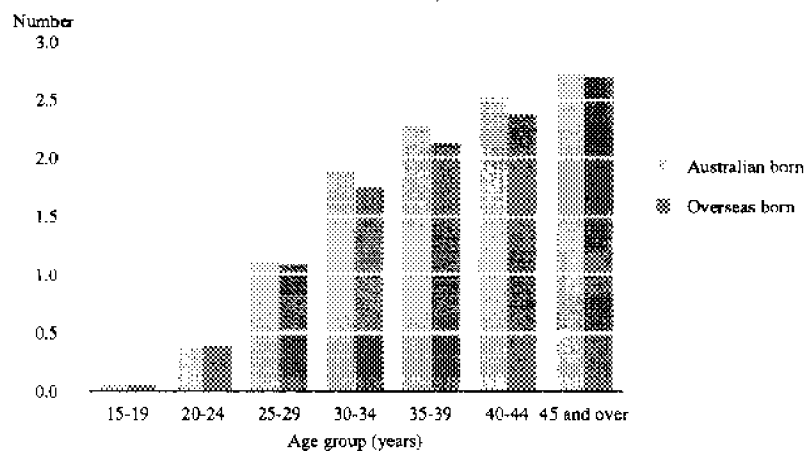
## Rural/urban differences

Rural women tended to have had more children than those in urban areas. In 1986, allowing for differences in the age composition of women in rural and urban areas, the average number of children ever born to women in rural areas (2.194) was 24.8 per cent higher than for women in major urban centres (1.758) but only 4.6 per cent higher than for women in other urban areas (2.098).

## Country of birth

According to the 1986 Census, the age standardised average number of children ever born to Australian born women was slightly higher (3.2%) than for overseas born women (1.909 compared with 1.849). The average number of children ever born to Australian born women was higher at all ages over 25 years when compared with overseas born women, but lower in the 15–19 and 20–24 years age groups (see Chart 6.8).

CHART 6.8 AVERAGE NUMBER OF CHILDREN EVER BORN BY COUNTRY OF BIRTH AND AGE OF MOTHER, 1986



Source: ABS Fertility in Australia (2514.0)

## Education

According to the 1986 Census, the average number of children ever born to women aged 15 years or over who had no tertiary qualifications was 47.3 per cent greater than that of women who held a degree, when standardised for differences in age (1.994 compared with 1.354). Similarly, the average number of children ever born to women who left school before the age of 13 years was 53.4 per cent higher than for women who left school aged 19 years or more, when standardised for age (2.293 compared with 1.495).

## Homebirths

The following homebirth statistics were obtained from Homebirth Australia. The data are compiled through the voluntary participation of registered and unregistered homebirth practitioners throughout Australia. The criteria for inclusion in the data were that the home was the intended place of birth at the onset of labour and that the birth was attended by a homebirth practitioner.

Between 1988 and 1990, 3,021 planned homebirths were reported to Homebirth Australia. However, there was some underreporting as 10.4 per cent (24) of known homebirth practitioners did not participate in the collection for one or more years. An additional 574 births among this group were ascertained bringing the total number of planned, attended homebirths between 1988 and 1990 to 3,595. These accounted for 0.5 per cent of all births in Australia, with the highest proportionate occurrence in the Australian Capital Territory (1.9% of births) and the lowest in Victoria (0.2%).

Women planning homebirths between 1988 and 1990 were likely to be older than the national average for all women giving birth in this time. Of mothers

planning homebirths 74 per cent were aged 25–34 years compared with 63.9 per cent for total national births.

Of the women who had a homebirth between 1988 and 1990, 28.4 per cent had not previously given birth, while 71.6 per cent had previously had one or more children.

#### Caesarean sections

There is no comprehensive, uniform source of national data on trends in caesarean section rates in Australia. Figures are available from the Department of Human Services and Health, and State and Territory Health Departments but these are incomplete. The following figures should be seen as a guide only.

According to the Australian Institute of Health and Welfare (AIHW), in 1986 16.9 caesareans were performed for every 100 live births on mainland Australia. While the Australian Capital Territory had an exceptionally high rate (26.3), the Northern Territory, Queensland and South Australia also recorded higher than average rates. The lowest rate was recorded in Western Australia (15.1). The rate for metropolitan regions (17.5) was slightly higher than for non-metropolitan regions (15.3).

The AIHW also found that in 1986 women with private health insurance were more likely (19.4%) to have a caesarean section than non-insured women (13.7%). This has been attributed to supply factors (the ratio of obstetricians to the number of insured women and the type of insurance cover), demand factors (social expectations and affluence), and the pressure felt by obstetricians to practise 'defensive medicine'.

Table 6.1 shows the proportion of confinements which resulted in a caesarean section by State/Territory between 1987 and 1990. South Australia recorded the highest proportion in every year except 1989 with approximately one in five confinements resulting in a caesarean section. The lowest proportion was consistently recorded in either Tasmania or the Northern Territory.



**TABLE 6.1 PROPORTION OF CONFINEMENTS RESULTING IN A CAESAREAN SECTION: STATE BY YEAR, AUSTRALIA, 1987-1990(a)**  
(Per cent)

State	Year			
	1987	1988	1989	1990
New South Wales(b)	15.3	15.8	16.3	15.9
Victoria	16.4	15.9	16.7	16.6
Queensland	18.9	19.5	19.3	18.7
South Australia	19.5	20.1	22.0	21.5
Western Australia	16.9	16.9	18.1	19.3
Tasmania	12.6	13.5	14.6	15.0
Northern Territory (Total)(c)(d)	15.2	11.8	11.7	15.6
Aboriginal and Torres Strait Islander	22.9	16.9	15.3	17.1
Other	12.4	9.2	9.4	14.8
Australian Capital Territory	18.2	18.4	23.0	20.3

(a) The percentage of total confinements which were delivered by caesarean section. Comparisons between the States and Territories should be seen as a general indication only as the data were obtained from a number of different sources. (b) From 1988 NSW figures are by financial year. (c) Figures for Darwin Private Hospital not included. (d) Prior to September 1988, the Northern Territory Births registration form did not have an area where the birth could be identified as Aboriginal or Torres Strait Islander. Indigenous births were determined from parentage. To conform to the accepted definition of Aboriginal and Torres Strait Islander, however, the registration form was changed to include a question about the child. The accepted definition of Aboriginal and Torres Strait Islander is based on three criteria: the person is of Aboriginal or Torres Strait Islander descent; identifies as an Aboriginal or Torres Strait Islander; and is accepted as such by the Aboriginal or Torres Strait Island community with which the person identifies. In asking the parents if the child is Aboriginal or Torres Strait Islander, this "acceptance" criterion is met. Data for 1987 and 1988 should therefore be treated with care.

Source: Relevant State/Territory Health Departments. *Births, Australia (3301.0)*

## Breastfeeding

According to the 1989-90 National Health Survey, 77.0 per cent of women who had a child or children aged 5 years or less had breastfed or were breastfeeding their child(ren). Almost 80 per cent of mothers aged 25-34 years had either breastfed or were breastfeeding their child(ren), followed by 76.8 per cent of mothers aged 18-24 years and 70.5 per cent of 35-44 year old mothers. One third (33.3%) of mothers aged 45-50 years had breastfed or were breastfeeding their child(ren).

Mothers aged 18-24 years and 45-50 years were likely to have breastfed for shorter periods of time than mothers aged 25-34 years and 35-44 years. 59.8 per cent of mothers aged 18-24 years, and 66.7 per cent of mothers aged 45-50 years either did not breastfeed or breastfed for less than three months, compared with 41.0 per cent of 25-34 year olds, and 40.0 per cent of 35-44 year olds. Mothers aged 35-44 years were most likely (24.0%) to breastfeed for longer than twelve months, compared with 14.6 per cent of 45-50 year olds, 12.6 per cent of 25-34 year olds and 5.1 per cent of 18-24 year olds.

The longer the mother had stayed at school, the more likely she was to breastfeed. Of mothers who left school aged 16 years or more 79.9 per cent breastfed, compared with 70.1 per cent of mothers who left school aged 15 years or less.

Table 6.2 outlines the employment status of mothers with children aged 5 years or less and whether or not they have breastfed or were breastfeeding their child(ren). Of the mothers who were employed full-time, almost 72 per cent (71.9%) had breastfed or were breastfeeding their child(ren) and over 80 per cent (80.7%) of mothers employed part-time had breastfed or were breastfeeding their child(ren). The group of women least likely to have breastfed their children were those unemployed and looking for full-time work (34.0% had not breastfed).

**TABLE 6.2 MOTHERS AGED 18-50 YEARS: EMPLOYMENT STATUS BY WHETHER BREASTFED/BREASTFEEDING CHILD(REN), AUSTRALIA, 1989-90**

Employment status of mother	Has breastfed/is breastfeeding child(ren)		Has not breastfed child(ren)		Total	
	Number ('000)	Per cent	Number ('000)	Per cent	Number ('000)	Per cent
	Employed full-time	105.4	71.9	41.2	28.1	146.6
Employed part-time	258.5	80.7	62.0	19.3	320.5	30.4
Unemployed looking for full-time work	21.2	66.0	10.9	34.0	32.1	3.0
Unemployed looking for part-time work	30.1	76.2	9.4	23.8	39.5	3.7
Not in the labour force	397.1	76.9	119.5	23.1	516.6	48.9
<b>Total</b>	<b>812.4</b>	<b>77.0</b>	<b>243.0</b>	<b>23.0</b>	<b>1,055.3</b>	<b>100.0</b>

Source: ABS National Health Survey 1989-90

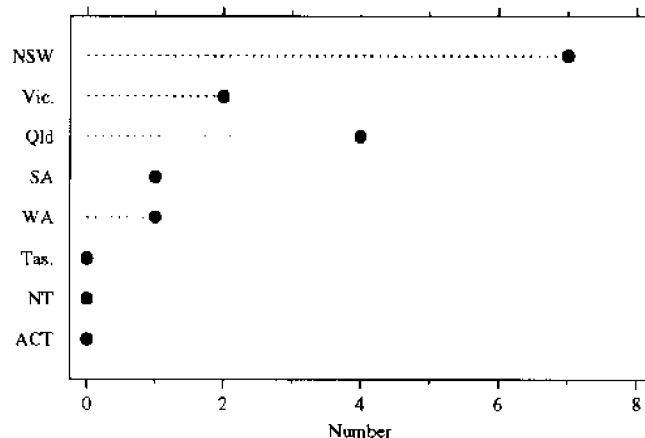
According to research (Bundrock, 1990) conducted by the Nursing Mothers' Association of Australia various Australian and overseas studies point to a number of health benefits for mothers who breastfeed and for their infants. According to this research, there is "clear" evidence that breastfed infants suffer fewer gastro-intestinal infections, and there is "fairly strong" evidence that breastfed infants suffer fewer respiratory tract infections, middle-ear infections, and allergies. In addition, there is "fairly strong" evidence that extended breastfeeding is linked to a lower risk of breast cancer in the mother.

## Complications of pregnancy

### Maternal deaths

According to ABS deaths data, the maternal mortality rate in 1993 was 5.84 deaths per 100,000 confinements. There were 15 deaths of the mother due to the group of conditions known as *complications of pregnancy, childbirth and the puerperium* in 1993, compared with 16 in 1990 and 13 in 1989. One death involved a 15-24 year old, and 14 involved 25-44 year olds. The majority of deaths occurred in New South Wales (see Chart 6.9).

**CHART 6.9 MATERNAL DEATHS BY STATE/TERRITORY, AUSTRALIA, 1993**



Source: ABS Causes of Death, Australia, 1993 (3303.0)

The number of maternal deaths has declined dramatically this century, from a high of 650 in 1931 to 13 in 1991(a).

According to the National Health and Medical Research Council (NHMRC), there were 86 maternal deaths between 1985 and 1987. These figures include a wider range of conditions leading to death than those contained in the ABS deaths data. Included in the NHMRC maternal death figures are direct maternal deaths resulting from obstetric complications of the pregnant state (32); indirect obstetric deaths resulting from pre-existing disease or disease that developed during pregnancy which may have been aggravated by the pregnancy (30); and incidental deaths due to conditions occurring during pregnancy such as road accidents, malignancies and suicide (24). In many deaths multiple factors were present.

Of the 86 maternal deaths between 1985 and 1987, 16 involved haemorrhage as a major cause of death; 12 were solely related to caesarean sections and/or the associated anaesthetic; and 12 involved heart disease as a significant cause of death.

Between 1985 and 1987, five maternal deaths were associated with abortion. This figure includes miscarriage (spontaneous abortion), terminations of pregnancy and cases in which the distinction could not be made. The NHMRC has collected and presented figures on maternal deaths in triennial reports since 1964–66. The number of maternal deaths associated with abortion have declined rapidly since abortion became readily available in the early 1970s (see Chart 6.10).

CHART 6.10 MATERNAL DEATHS ASSOCIATED WITH ABORTION, AUSTRALIA, 1964-1987



Source: National Health and Medical Research Council Report on Maternal Deaths in Australia, 1985-1987

According to NHMRC data, the overall maternal mortality rate fell by over 70 per cent (71.4%) between 1964–66 and 1985–87 (see Table 6.3). This was largely due to the relatively sustained reduction in direct maternal deaths. Both indirect and incidental death rates have fluctuated slightly, but overall have not changed notably in the period.

(a) This information is based on data obtained by decade from 1911–1991. For further information on maternal deaths, see Chapter 2.

**TABLE 6.3 DIRECT, INDIRECT AND INCIDENTAL MATERNAL MORTALITY RATES(a) BY TRIENNIA, AUSTRALIA**

<i>Triennium</i>	<i>Direct</i>	<i>Indirect</i>	<i>Incidental</i>	<i>Total</i>
1964-66	30.3		10.9 (b)	41.2
1967-69	23.3		10.0 (b)	33.2
1970-72	19.0		11.8 (b)	30.8
1973-75	8.3	4.4	6.2	18.9
1976-78	7.7	5.1	2.8	15.6
1979-81	7.9	5.0	1.5	14.4
1982-84	5.9	3.5	3.5	13.2
1985-87	4.4	4.1	3.3	11.8

(a) Rates are maternal deaths per 100,000 total confinements. (b) In the first 3 triennia indirect and incidental deaths were not separated.

Source: NHMRC Report on Maternal Deaths in Australia 1985-1987

#### Perinatal deaths

There were 2,131 perinatal deaths recorded in 1993, of which 1,245 were foetal deaths (stillbirths) and 886 were neonatal deaths (children born alive who died within 28 days of birth). The 1993 perinatal death rate was 8.2 deaths per 1,000 births compared with 10.3 in 1990, 14.1 in 1980 and 18.7 in 1975.

The Northern Territory had the highest perinatal death rate in 1993 at 19.3 deaths per 1,000 live births, followed by Tasmania at 9.5. The Australian Capital Territory had the lowest perinatal death rate at 7.2.

Children born to mothers less than 20 years of age had the highest perinatal death rate in 1993 (11.6), followed by children of mothers 40 years and more (10.6). Children born to mothers aged 30-34 years had the lowest perinatal death rate (7.1).

As in previous years there were more male perinatal deaths than female. Compared with the 1993 live birth ratio of 105 males to every 100 females, the ratio of perinatal deaths was 124:100. The male perinatal death rate decreased from 11.4 in 1990 to 8.8 in 1993, while the female rate declined from 9.1 in 1990 to 7.5 in 1993.

#### Contraceptive use

No comprehensive national data exist on contraceptive usage in Australia. Some data have been collected on use of the oral contraceptive pill and the intra-uterine device (IUD), but little information exists on the use of condoms, the diaphragm/cap, Depo Provera and abstinence. Sources of information include the ABS 1989-90 National Health Survey<sup>(a)</sup>, the National Heart Foundation's Risk Factor Prevalence Studies, and the Family Planning Federation of Australia.

#### Oral contraceptives

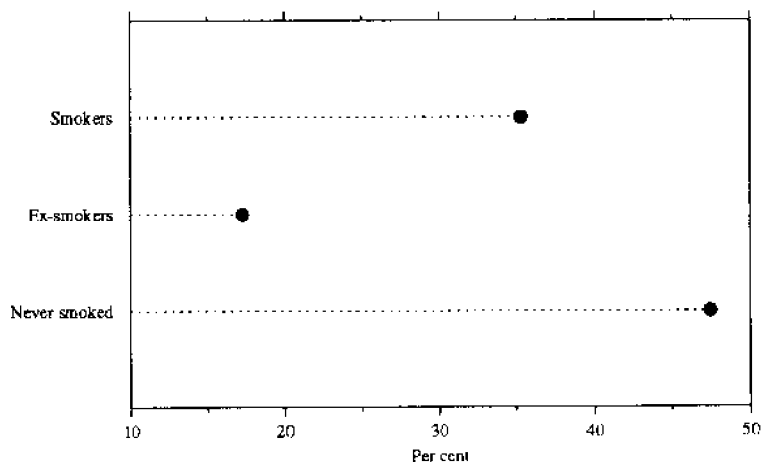
The National Health Survey found that 27.6 per cent of women aged 18-50 years were taking the oral contraceptive pill. Use of the contraceptive pill progressively decreased with age. While almost half (48.4%) of all women in the 18-24 years age group were taking the contraceptive pill, this decreased to 35.9 per cent in 25-34 year olds, 12.8 per cent in 35-44 year olds and 3.9 per cent in 45-50 year olds.

It is reported (Hatcher, Stewart, Trussell, Kowal, Guest, Stewart and Cates, 1990) that women who smoke and take the contraceptive pill are at increased risk of myocardial infarction, stroke and thromboembolic injury. The National Health Survey found that 35.3 per cent of women who were currently taking the contraceptive pill were smokers. Almost half of these women were aged

(a) National Health Survey data on contraceptive usage are for women aged between 18 and 50 years.

18–24 years. Of those women currently taking the contraceptive pill 47.4 per cent had never smoked (see Chart 6.11).

CHART 6.11 WOMEN WHO USE THE ORAL CONTRACEPTIVE PILL BY SMOKER STATUS, AUSTRALIA, 1989-90



Source: ABS National Health Survey 1989-90

The Risk Factor Prevalence Studies conducted by the National Heart Foundation of Australia document trends in usage of the contraceptive pill since its introduction in the 1960s. The 1989 study found that while approximately 70 per cent of all women, and 86 per cent of women aged 25–39 years had taken oral contraceptives at some time in their lives the proportion progressively decreased with age. Only 33 per cent of 60–64 year olds had ever used the contraceptive pill. The study also found that of all women who had ever taken the contraceptive pill, 45 per cent had done so for longer than 5 years and 12 per cent for less than 6 months.

#### Intra-uterine devices (IUD's)

Only a small number of women were fitted with an intra-uterine device (IUD) at the time of the 1989–90 National Health Survey (2.8%).

IUDs were most commonly used by 35–44 year olds (3.8%), followed by women aged 25–34 years (3.3%), then 45–50 year olds (2.3%). Only 1.0 per cent of 18–24 year olds were fitted with an IUD at the time of the Survey.

#### Infertility

##### In-vitro fertilisation (IVF) and gamete intrafallopian transfer (GIFT) pregnancies

In-vitro fertilisation (IVF) is fertilisation that takes place within a laboratory, in a test-tube or culture dish. Gamete intrafallopian transfer (GIFT) is the procedure by which ova and sperm are placed directly into the fallopian tubes with fertilisation occurring inside the woman.

The following figures are from the Australian Institute of Health and Welfare National Perinatal Statistics Unit in Sydney and include statistics for IVF and GIFT in Australia and New Zealand. In 1990, 4 of the 25 units carrying out these procedures were in New Zealand, and between 1979 and 1990 4.8 per cent of IVF pregnancies and 2.3 per cent of GIFT pregnancies were to mothers whose place of usual residence was New Zealand.

(a) National Health Survey data on contraceptive usage are for women aged between 18 and 50 years.

In 1990, there were 1,110 live births following IVF and 740 after GIFT, which brought the total number of live births after assisted conception in Australia and New Zealand to 8,430.

Between 1979 (when IVF began) and 1990, 69.8 per cent of completed IVF pregnancies resulted in a live birth, 21.4 per cent ended in spontaneous abortion, 6.2 per cent were ectopic pregnancies (pregnancies occurring outside the uterus), 2.3 per cent were still births and 0.3 per cent ended in termination of the pregnancy. For GIFT, 70.9 per cent of completed pregnancies resulted in a live birth, 21.7 per cent ended in spontaneous abortion, 4.6 per cent were ectopic pregnancies, 2.3 per cent were stillbirths, and 0.5 per cent ended in termination of the pregnancy.

### Causes of infertility

Causes of infertility differed between those couples treated with IVF and those treated with GIFT (see Table 6.4). GIFT is an option for women with non-tubal causes of infertility. Tubal factors were the main cause of infertility in women who became pregnant after IVF in both 1986 and 1990, followed by multiple causes. In 1990, however, male factors<sup>(a)</sup> replaced unexplained factors as the third highest cause of infertility. In 1985–86 and 1990, unexplained causes was the main cause of infertility in women who became pregnant after treatment with GIFT. Between 1985–86 and 1990, however, male factors replaced multiple causes as the second highest cause of infertility.

**TABLE 6.4 IVF AND GIFT PREGNANCIES: CAUSES OF INFERTILITY BY SELECTED YEARS, AUSTRALIA AND NEW ZEALAND**  
(Per cent)

<i>Causes of infertility</i>	<i>IVF 1986</i>	<i>IVF 1990</i>	<i>GIFT 1985–86</i>	<i>GIFT 1990</i>
Tubal	43.4	40.2	6.6	6.3
Male factor	5.9	15.3	13.6	23.7
Endometriosis	7.1	5.4	18.3	14.2
Other stated causes	3.2	4.3	6.6	6.9
Multiple causes	27.8	26.2	23.3	22.1
Unexplained infertility	12.6	8.7	31.5	26.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Source: Assisted Conception Australia and New Zealand, 1990, and IVF and GIFT Pregnancies Australia and New Zealand 1986, National Perinatal Statistics Unit, Fertility Society of Australia*

### Hysterectomies

The 1989–90 National Health Survey found that 11.7 per cent of women aged between 18 and 64 years had had a hysterectomy (see Table 6.5). Of the women who had had a hysterectomy, over half were aged between 40 and 54 years. Fewer than 2.0 per cent were aged below 25 years. Of all Australian women aged between 40 and 54 years, more than 1 in 5 (21.2%) had had a hysterectomy.

(a) Factors related to the male partner such as a low sperm count or abnormal sperm.

**TABLE 6.5 WOMEN AGED 18-64 YEARS WHO HAVE HAD A HYSTERECTOMY(a): AGE BY NUMBER, PER CENT AND RATE(b), AUSTRALIA, 1989-90**

<i>Age group (years)</i>	<i>Women who have had a hysterectomy</i>		<i>Hysterectomy rates(b)</i>
	<i>Number ('000)</i>	<i>Per cent</i>	
18-19	2.3	0.4	0.8
20-24	6.1	1.0	0.9
25-29	17.1	2.9	2.5
30-34	35.2	5.9	5.2
35-39	59.9	10.1	9.4
40-44	95.7	16.1	16.1
45-49	102.7	17.4	22.4
50-54	105.8	17.9	27.9
55-59	83.6	14.1	24.6
60-64	83.3	14.1	23.6
<b>Total</b>	<b>591.8</b>	<b>100.0</b>	<b>11.7</b>

(a) Women aged less than 18 years and older than 64 years were not asked if they had had a hysterectomy. (b) The number of women who have had a hysterectomy per 100 women in Australia of the same age.

Source: ABS National Health Survey 1989-90

Medicare data from 1980 to 1987 show there were between 21,000 and 24,000 hysterectomies performed annually in Australia. However, as Medicare data exclude public patients treated in public hospitals these figures are indicative only. The Department of Health, Housing, Local Government and Community Services estimated that in 1987, in addition to the national 21,807 hysterectomies recorded under Medicare, there may have been another 11,000 performed in public hospitals, giving an estimated total of 33,000 hysterectomies performed in Australia that year.

## Abortion

Comprehensive national data on abortion are not available. Medicare data exist on fee-for-service procedures, i.e. those which attract a fee rebate for eligible patients. However, Medicare data exclude public patients in public hospitals and therefore underestimate the actual number of medical procedures. Medicare also uses the same Schedule numbers to record the number of legally induced abortions, miscarriages and a number of other procedures.

South Australia is the only State for which comprehensive abortion figures are available. Its Criminal Law Consolidation Act requires that all abortions be notified. According to the Pregnancy Outcome Unit of the South Australian Health Commission, there were 4,696 terminations of pregnancy notified in 1991. Of those abortions, 30.6 per cent were performed on 20-24 year olds, and 20.8 per cent on women under 20 years of age. The majority of abortions (60.1%) were performed on never married women. Ninety-six per cent of abortions were performed within the first 14 weeks of pregnancy and most frequently (95.1%) by vacuum aspiration. Of those women who had a termination, 26.3 per cent had had a previous termination. Of those women aged 15-19 years, 11.7 per cent had had a previous termination.

In South Australia, the abortion proportion rose from 0.09 in 1971 to 0.19 in 1991, but has remained fairly constant in recent years (see Table 6.6). The rate has been consistently highest for women aged 15-19 years and 40-44 years. In 1991, approximately 45.0 per cent of pregnancies of women

aged 15 to 19 years ended in abortion compared with approximately 21.0 per cent in 1971. For women aged 40–44 years the figures for 1991 and 1971 were approximately 37.0 per cent and 32.0 per cent respectively.

**TABLE 6.6 ABORTION PROPORTION(a): SELECTED YEARS BY AGE, SOUTH AUSTRALIA**

Year	Age group (years)						All ages
	15–19	20–24	25–29	30–34	35–39	40–44	
1971	0.21	0.07	0.05	0.10	0.19	0.32	0.09
1976	0.36	0.11	0.08	0.12	0.26	0.47	0.15
1981	0.45	0.18	0.09	0.13	0.22	0.48	0.17
1986	0.48	0.21	0.10	0.12	0.22	0.39	0.18
1989	0.46	0.23	0.11	0.12	0.18	0.38	0.18
1990	0.46	0.24	0.11	0.12	0.19	0.35	0.18
1991	0.45	0.26	0.11	0.12	0.22	0.37	0.19

(a) Abortion Proportion: abortion as a proportion of abortions and births.

Source: *Medical Termination Of Pregnancy In South Australia – The First 20 Years 1970–1989, and Pregnancy Outcome in South Australia 1991*, Pregnancy Outcome Unit, Epidemiology Branch, South Australian Health Commission

### Sexually transmissible diseases

Information on sexually transmissible diseases, including HIV (Human Immunodeficiency Virus) and AIDS (Acquired Immunodeficiency Syndrome), is collected by the Department of Human Services and Health, Communicable Diseases section. However some data are not available for all States/Territories. Detailed information on HIV and AIDS is available from the National Centre in HIV Epidemiology and Clinical Research. The ABS collects information on AIDS deaths – where the death was directly attributed to AIDS or where AIDS was a condition mentioned on the medical certificate of death but was not the underlying cause.

### HIV and AIDS

AIDS is by definition an acquired condition which depresses the body's immune system, leaving the individual vulnerable to a range of opportunistic infections and malignancies. In short, it impairs the body's ability to fight disease.

HIV is a human retrovirus, which means that when it infects a cell it transfers genetic information in a direction which is the reverse of that which usually occurs. HIV can lead to AIDS.

Males accounted for the largest proportion of new diagnoses of HIV infection. From 1 October 1991 to 30 September 1992, only 83 (6.8%) of the 1,216 people newly diagnosed as infected with the HIV virus were female. Most of the females diagnosed with HIV contracted the virus through heterosexual contact (see Table 6.7).

Males also accounted for the majority of new AIDS diagnoses and deaths. Only 22 (3.6%) of the 604 people newly diagnosed with AIDS in the period 1 October 1991 to 30 September 1992 were female. Similarly, only 10 (2.0%) of the 491 people who died following AIDS between 1 October 1991 and 30 September 1992 were female.



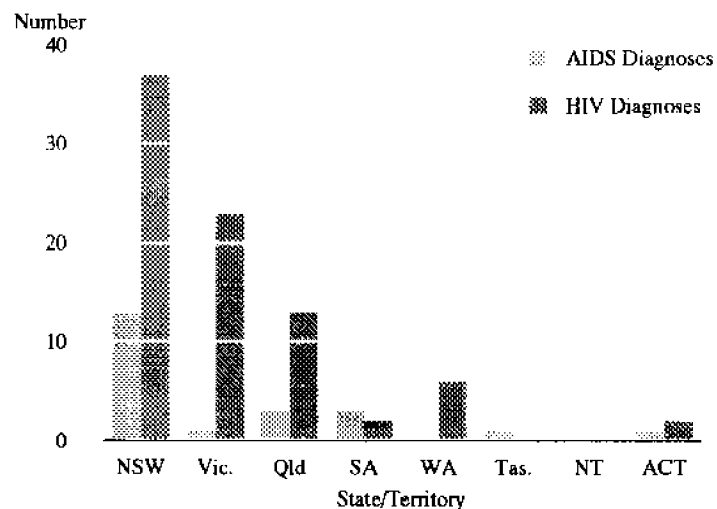
**TABLE 6.7 NUMBER OF AIDS DEATHS(a) AND NEW HIV DIAGNOSES: EXPOSURE CATEGORY BY SEX, AUSTRALIA, 1990-91 AND 1991-92**

Exposure category	Number of AIDS deaths(a)				Number of new HIV diagnoses			
	1 Oct 90- 30 Sept 91		1 Oct 91- 30 Sept 92		1 Oct 90- 30 Sept 91		1 Oct 91- 30 Sept 92	
	Female	Male	Female	Male	Female	Male	Female	Male
Male homosexual/ bisexual contact	..	417	..	426	..	772	..	698
Male homosexual/ bisexual contact and injecting drug use	..	11	..	12	..	26	..	33
Injecting drug use	4	2	4	9	7	40	9	36
Heterosexual contact	1	7	3	15	39	86	46	82
Haemophilia/coagulation disorder	—	9	—	7	—	5	—	2
Receipt of blood transfusion, blood components, or tissue	5	10	2	4	3	13	5	3
Mother with/at risk for HIV infection	1	—	—	—	3	3	1	2
Other/Undetermined(b)	1	13	1	8	37	306	22	277
<b>Total</b>	<b>12</b>	<b>469</b>	<b>10</b>	<b>481</b>	<b>89</b>	<b>1,251</b>	<b>83</b>	<b>1,133</b>

(a) The number of people who are notified as having AIDS who have died. (b) Includes 16 people whose sex was reported as transsexual.

Source: Australian HIV Surveillance Report, Volume 9, Number 1, January 1993: Tables 2.5 and 3.2

Chart 6.12 illustrates the number of new female AIDS and HIV diagnoses by State/Territory.

**CHART 6.12 NEW FEMALE AIDS AND HIV DIAGNOSES BY STATE/TERRITORY, AUSTRALIA, 1 OCTOBER 1991 TO 30 SEPTEMBER 1992**

Source: Australian HIV Surveillance Report, National Centre in HIV Epidemiology and Clinical Research, Volume 9, Number 1, January 1993

According to ABS deaths data, between 1988 and 1991, the total number of female deaths from AIDS was 29 compared with 1,120 for males.

Other sexually transmissible diseases

Table 6.8 outlines the number of reported cases of selected sexually transmissible diseases. In 1991, females accounted for 28.3 per cent of reported cases of gonococcal, 47.5 per cent of reported cases of syphilis, and 37.0 per cent of reported cases of hepatitis.

**TABLE 6.8 REPORTED CASES OF SELECTED SEXUALLY TRANSMISSABLE DISEASES: STATE/TERRITORY BY TYPE OF DISEASE AND SEX, AUSTRALIA, 1991**

<i>State</i>	<i>Type of disease</i>					
	<i>Gonococcal(a)</i>		<i>Syphilis(b)</i>		<i>Hepatitis(c)</i>	
	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>
New South Wales	85	298	290	247	1,050	1,894
Victoria	20	138	16	11	1,463	2,248
Queensland	159	334	259	256	1,411	2,174
South Australia	33	34	75	122	36	108
Western Australia	191	458	110	142	301	463
Tasmania	0	4	3	2	36	62
Northern Territory	211	449	202	214	57	55
Australian Capital Territory	3	7	2	3	52	79
<b>Australia(d)</b>	<b>702</b>	<b>1,722</b>	<b>957</b>	<b>997</b>	<b>4,406</b>	<b>7,083</b>

(a) Gonococcal refers to conditions related to or caused by gonococci, the organism causing gonorrhoea. Sex was not stated in 58 cases. (b) Sex was not stated in 62 cases. (c) Includes figures for hepatitis A, B, C and cases where the category was not stated. Figures for Hepatitis C were not available for South Australia or Western Australia. Sex was not stated in 435 cases. (d) Excludes 58 cases of gonococcal, 62 cases of syphilis and 435 cases of hepatitis where sex was not stated.

Source: Department of Health, Housing, Local Government and Community Services, Communicable Diseases Register

## **GLOSSARY**

<b>Abortion proportion</b>	Abortions as a proportion of abortions and births.
<b>Anomaly</b>	Any deviation from the usual; any organ or part existing in an abnormal form, structure, or location.
<b>Asphyxia</b>	Unconsciousness resulting from oxygen deprivation and the systemic accumulation of carbon dioxide; suffocation.
<b>Births</b>	This term relates to live births, i.e. the delivery of a child, irrespective of the duration of pregnancy, who after being born, breathes or shows any other evidence of life such as heartbeat.
<b>Confinements</b>	The number of pregnancies resulting in at least one live birth.
<b>Congenital</b>	Existing before or at birth. Dating from, but not necessarily detected at, birth.
<b>Crude birth rate</b>	The number of live births registered during the calendar year per 1,000 of mean estimated resident population for the calendar year.
<b>Foetal death</b>	Relates to the delivery of a child weighing at least 500 grams at delivery (or, when birthweight is unavailable, of at least 22 weeks gestation) which did not, at any time after delivery, breathe or show any other evidence of life such as a heartbeat.
<b>Hypoxia</b>	Oxygen want or deficiency; any state wherein a physiologically inadequate amount of oxygen is available to, or utilised by, tissue without respect to cause or degree.
<b>Neonatal death</b>	Relates to any child weighing at least 500 grams at delivery (or, when birthweight is unavailable, of at least 22 weeks gestation) who after being born, breathes or shows any other evidence of life such as a heartbeat but dies within 28 days of birth.
<b>Net reproduction rate</b>	The sum of the female 5-year age-specific fertility rates (i.e. the number of female live births according to age of mother per 1,000 females of that age) multiplied by 5 and divided by 1,000. It represents the average number of daughters that would be born per woman in a group of women all of whom survive to the end of the reproductive period and had born daughters at each age in accordance with the rates prevailing during that year. It is an indication of the extent to which the population would reproduce itself under these conditions, except that it does not allow for females who fail to survive to the end of the childbearing period.
<b>Nuptial first births</b>	The first births in the current marriage and therefore do not necessarily represent the woman's first ever birth.

<b>Nuptiality</b>	Live births are identified as nuptial where the father registered was married to the mother at the time of the birth, or where the husband died during the pregnancy. Other confinements and the children resulting from them, are classified as ex-nuptial whether or not the parents were living together at the time of the birth and whether or not the child may subsequently have been legitimated or adopted.
<b>Perinatal death</b>	Fetal death or neonatal death.
<b>Perinatal death rate</b>	For fetal deaths and total perinatal deaths, the rates represent the number of deaths per 1,000 live births and fetal deaths combined. For neonatal deaths, the rates represent the number of deaths per 1,000 live births.
<b>Puerperium</b>	The state of a woman in labour or who has just been delivered. It is the period from delivery to the time when the uterus has regained its normal size, which is about 6 weeks.
<b>Total fertility rate</b>	This is obtained by summing the 5-year age-specific birth rates and multiplying by 5. It represents the number of children 1,000 women would bear during their lifetimes if they experienced the birth rates of the year shown.

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THE SECOND  
SINGLE  
SILVER WOMEN

## **ABORIGINAL AND TORRES STRAIT ISLANDER WOMEN**

### **Main findings**

- The life expectancy of Aboriginal and Torres Strait Islander females in the Northern Territory was 20.4 years shorter than the life expectancy of the total Australian female population.
- Seven times as many indigenous women aged 15–19 years had had one or more children, compared with non-indigenous women in the same age group.
- The infant mortality rate for Aboriginal and Torres Strait Islander Australians was approximately 2 to 4 times higher than the rate for the total Australian population.
- Indigenous females accounted for almost 15 per cent of all maternal deaths between 1985 and 1987, despite the fact that they only constituted 1.5 per cent of the Australian female population in 1986.
- Indigenous women aged 18–64 years were less likely to have had a doctor or medical assistant examine their breasts (59%) than the total female population of the same age (71%).
- Fifty-three per cent of indigenous women aged 18–64 years regularly examined their own breasts, compared with 63 per cent of all women in the same age group.
- Eighty-nine per cent of Aboriginal and Torres Strait Islander women aged 18–64 years had never had a mammogram(a), compared with 82 per cent of all women in the same age group.
- Similar proportions of indigenous women and all Australian women had had a pap smear (84% and 86% respectively).
- One out of every two (50%) indigenous women aged 18–50 years who had a child or children aged 5 years or less in 1989–90 breastfed their child(ren), compared with over three in four (77%) of all women in Australia.
- A lower proportion of Aboriginal and Torres Strait Islander women aged 18 years and over drank alcohol in the week prior to interview (38%) than all Australian women (52%).
- A higher proportion of indigenous women aged 18 years and over were smokers (42%) than all Australian women (25%).
- Twenty per cent of indigenous women aged 18 years and over were obese, compared with 10 per cent of all Australian women.
- Of indigenous females aged two years and over, 17 per cent had never visited a dentist or did not know whether they had, compared with 5 per cent of all females in the same age group.
- A lower proportion of indigenous females took vitamins and minerals in the two weeks prior to interview (15%) than all Australian females (28%).
- Indigenous females were less likely to have used medications in the two weeks prior to interview than all females (69% compared with 76%).

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(a) Includes women who had not heard of a mammogram.



At the 1991 Census, 1.6 per cent of the Australian population identified themselves as being of Aboriginal or Torres Strait Islander origin. Of the indigenous population, 50.5 per cent were female.

The indigenous population was younger than the total population of Australia. At the 1991 Census, 59.7 per cent of indigenous females were under 25 years of age compared with 37.0 per cent of the total female population. Of the indigenous female population, 2.8 per cent were aged 65 years or more compared with 12.9 per cent of the total female population.

### Life expectancy

Information regarding Aboriginal and Torres Strait Islander deaths is not consistent nationally. Death registration systems maintained by each State and Territory are the main sources of indigenous mortality data. However, only figures from Western Australia, South Australia, and the Northern Territory are considered complete enough for analysis.

Indigenous women had a shorter life expectancy than women in the total population. Based on data from Western Australia, South Australia, and the Northern Territory, the expectation of life at birth for indigenous females was up to 20.4 years shorter than the expectation of life at birth for the total Australian female population. For the period 1988 to 1990, the longest life expectancy for indigenous females was 66.1 years in South Australia, while the life expectancy for all Australian females was 79.7 years. The life expectancy for indigenous males was up to 22.3 years shorter than for the total male population (see Table 7.1.1).

**TABLE 7.1.1 EXPECTATION OF LIFE AT BIRTH: SELECTED STATES/TERRITORY BY SEX, AUSTRALIA, 1988-90 (Years)**

	<i>Females</i>	<i>Males</i>
<i>Indigenous population —</i>		
South Australia	66.1	54.1
Western Australia	63.8	58.2
Northern Territory	59.3	51.1
<b>Total Australian population</b>	<b>79.7</b>	<b>73.4</b>

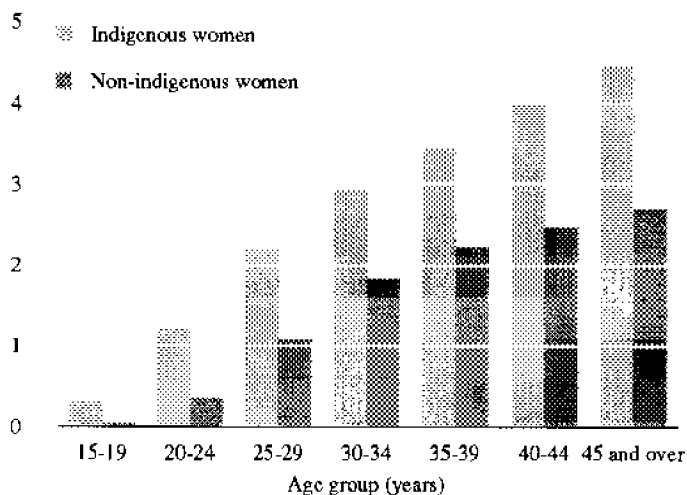
*Source: Figures for the total Australian population were derived from unpublished ABS deaths data. Figures for the indigenous population are from the Australian Institute of Health and Welfare and were derived from State/Territory death registration records.*

### Fertility<sup>(a)</sup>

At the 1986 Census, indigenous women of all ages had had, on average, more children than non-indigenous women (see Chart 7.1.1).

(a) The following figures are based on 1986 Census results as a question on fertility was not included in the 1991 Census. It was considered that a fertility question need only be asked every 10 years (every second Census) as this is an adequate time frame in which to measure changes in fertility trends. It is expected that a fertility question will be included in the 1996 Census.

CHART 7.1.1 AVERAGE NUMBER OF CHILDREN EVER BORN TO INDIGENOUS AND NON-INDIGENOUS WOMEN BY AGE, AUSTRALIA, 1986



Source: *Fertility in Australia (2514.0)*

Indigenous women aged 45 years and over had had an average of 4.5 children compared with 2.7 children for non-indigenous women of the same age.

Indigenous women also began to have children at an earlier age than non-indigenous women. Approximately twenty-three per cent (23.4%) of indigenous women aged 15–19 years had had one or more children. This was over seven times the rate for non-indigenous women (3.3%) in the same age group.

## Mortality

### Age-specific death rates

The indigenous population had higher mortality rates than the total Australian population in all age groups. The peak difference in the age-specific death rates for females occurred in the age groups between 25 and 54 years, where the rates for indigenous females were approximately seven times greater than the rates for the total female population of the same age. For males, the peak difference occurred in the 35–44 year age group, where the rate for indigenous males was more than nine times that of the total male population of the same age (see Table 7.1.2).

TABLE 7.1.2 ABORIGINAL AND TORRES STRAIT ISLANDER POPULATION AND TOTAL POPULATION: AGE-SPECIFIC DEATH RATES(a), AGE BY SEX, AUSTRALIA, 1988–90

Age group (years)	Indigenous population(b)		Total Australia	
	Females	Males	Females	Males
0–4	6.9	8.6	1.8	2.2
5–14	0.7	0.8	0.2	0.2
15–24	1.8	4.7	0.4	1.2
25–34	3.6	8.1	0.5	1.4
35–44	7.4	16.5	1.0	1.8
45–54	17.2	27.6	2.6	4.4
55–64	37.8	54.0	6.9	13.2
65–74	53.3	73.6	18.0	33.9
75 and over	108.1	142.5	75.1	100.1

(a) Number of deaths per 1,000 persons of the same age, sex and population group.

(b) Indigenous age-specific death rates were calculated using data from Western Australia, South Australia and the Northern Territory only.

Source: Figures for total Australia were derived from unpublished ABS deaths data. Figures for indigenous Australians are from the Australian Institute of Health and Welfare and were derived from State/Territory death registration records.

Causes of death

Diseases of the circulatory system was the leading cause of death for both female and male indigenous Australians for the combined years 1988 to 1990. This was also the case for the Australian population as a whole.

Table 7.1.3 shows the observed and expected death rates for the indigenous population by selected States/Territories. The expected death rate is the number of deaths which could be expected in the female and male indigenous population if they experienced the same death rates as a reference population (in this case the 1988 total Australian female and male populations). The observed female indigenous death rates were much higher than the expected rates in each condition observed. This was also the case for indigenous males for every condition except neoplasms in Western Australia where the observed and expected rates were similar.

**TABLE 7.1.3 ABORIGINALS AND TORRES STRAIT ISLANDERS: OBSERVED AND EXPECTED DEATH RATES(a), CAUSE OF DEATH BY SEX AND SELECTED STATES/TERRITORY, AUSTRALIA, 1988-90**

Cause of death	South Australia		Western Australia		Northern Territory	
	Observed	Expected	Observed	Expected	Observed	Expected
FEMALES						
Circulatory diseases	211	80	210	94	250	74
Neoplasms	80	53	71	58	102	55
Injury and poisoning	89	22	71	22	97	22
Respiratory diseases	84	13	66	14	170	12
Endocrine, nutritional	21	5	56	6	73	5
Digestive diseases	21	7	35	8	36	6
Genitourinary disorders	13	3	31	4	48	3
Ill-defined conditions	13	5	31	5	64	4
Nervous system diseases	21	5	25	5	20	5
Other conditions	46	25	61	25	125	22
MALES						
Circulatory diseases	312	97	300	128	353	97
Injury and poisoning	312	63	149	63	294	62
Respiratory diseases	117	20	141	27	218	20
Neoplasms	86	65	85	83	129	68
Digestive diseases	59	9	66	11	36	9
Mental disorders	36	6	52	6	40	5
Ill-defined conditions	14	8	45	8	80	7
Nervous system diseases	32	6	35	7	34	6
Endocrine, nutritional	45	6	32	8	51	6
Other conditions	108	27	70	29	156	25

(a) Number of deaths per 100,000 persons of the same sex.

Source: Australian Institute of Health and Welfare, derived from State/Territory death registration records.

Infant mortality

The most comprehensive information available regarding indigenous fetal and infant deaths is for Western Australia, South Australia, and the Northern Territory. For Queensland the information relates only to indigenous people living in selected indigenous communities, comprising approximately one fifth of the indigenous population in Queensland.

For the period 1988 to 1990, indigenous infant mortality rates were much higher than for the total Australian population. The rates ranged from 15.6 infant deaths per 1,000 live births (in Queensland indigenous communities) to 31.2 in the Northern Territory. The rate for the total Australian population was 8.3 infant deaths per 1,000 live births. The perinatal mortality

rate was also higher for indigenous Australians than for the total Australian population. (see Table 7.1.4).

**TABLE 7.1.4 INFANT AND PERINATAL MORTALITY RATES(a): SELECTED STATES/TERRITORY, AUSTRALIA, 1988-90**

	<i>Infant mortality rates</i>	<i>Perinatal mortality rates</i>
<i>Indigenous population —</i>		
Queensland(b)	15.6	26.9
South Australia	23.2	38.8
Western Australia	22.3	17.6
Northern Territory	31.2	44.4
<b>Total Australian population</b>	<b>8.3</b>	<b>10.8</b>

(a) Infant mortality rates are the number of deaths of children under one year of age per thousand live births in the year in which registered. Perinatal mortality rates are the number of fetal and neonatal deaths per 1,000 total births and fetal deaths combined. (b) Queensland figures are for selected indigenous communities.

Source: Figures for infant mortality for total Australia are from *Deaths, Australia (3302.0)*. Infant mortality and perinatal mortality figures for indigenous Australians and perinatal mortality figures for total Australia are from the *Australian Institute of Health and Welfare* and were derived from State/Territory death registration records.

#### Maternal mortality

Statistics on maternal mortality are collected by a maternal mortality committee in each State and Territory. They are contained in the National Health and Medical Research Council's "Report on Maternal Deaths in Australia, 1985-87".

Between 1985 and 1987 there were 13 indigenous maternal deaths, which accounted for 15.1 per cent of all maternal deaths (86). Considering that Aboriginal and Torres Strait Islander females constituted only 1.5 per cent of the total female population in 1986, this figure is disproportionately high.

The 13 maternal deaths consisted of 4 direct deaths, which are those resulting from complications of the pregnancy itself; 4 indirect deaths, which are those resulting from pre-existing disease or disease that developed during pregnancy which may have been aggravated by the pregnancy; and 5 incidental deaths, which are due to conditions occurring during pregnancy where the pregnancy is unlikely to have contributed significantly to the death, such as road accidents, malignancies and suicide.

#### Specific women's health issues

The following information comes from the ABS National Health Survey 1989-90. Aboriginal and Torres Strait Islander status was identified by an adult spokesperson within each household. It should be noted that the survey sample was designed to be representative of the population overall, and not necessarily of particular groups within it such as indigenous Australians. To the extent that a higher proportion of the Aboriginal and Torres Strait Islander population live in remote areas or population clusters than does the Australian population overall, those sections of the Aboriginal and Torres Strait Islander population may be under-represented in the sample. These factors should be considered when interpreting results from the survey relating to the health characteristics of Aboriginals and Torres Strait Islanders.

The data often have quite high standard errors and should be interpreted with caution. Figures with a relative standard error of between 25 per cent and

50 per cent are marked with an asterisk (\*) while figures with a relative standard error of 51 per cent or more were excluded. In addition, all figures are presented as whole numbers only, and are not taken to one decimal place as are figures elsewhere in this publication.

The ABS conducted the National Aboriginal and Torres Strait Islander survey from March to July 1994. Urban, rural and remote Aboriginal and Torres Strait Islander communities in all States and Territories were included, with approximately 15,000 people being interviewed. Questions were asked on a number of health related topics within this survey. Final results are expected to be available from December 1994 and to be of a better quality in respect of Aboriginal and Torres Strait Islander people than data available from the National Health Survey.

Pap smears

At the time of the 1989-90 National Health Survey, 84 per cent of indigenous women aged 18-64 years had had a pap smear compared with 86 per cent of all women. Forty-four per cent of indigenous women had had a pap test less than a year ago, while a further 32 per cent had had a pap test one year to less than 3 years ago. These proportions were similar to those for all women (43% and 28% respectively). Eight per cent of indigenous women had had a pap test 3 years or more ago compared with 15 per cent of all women in the same group.

Sixteen per cent of indigenous women aged 18-64 years had never had a pap test(a). This compares with 14 per cent of all women in the same age group.

Breast examination

Of indigenous women aged 18-64 years, 59 per cent reported that they had had a doctor or medical assistant examine their breasts, compared with 71 per cent of all women in the same age group. The highest proportion of indigenous women who had had a breast examination were aged 25-34 years (71%), followed by women aged 45-54 years (66%\*). For all women, the highest proportion who had had their breasts examined were in the age groups 35-44 years and 45-54 years (both 79%).

Fifty-three per cent of Aboriginal and Torres Strait Islander women aged 18-64 years regularly examined their own breasts compared with 63 per cent of all women in this age group. Indigenous women in the 35 to 44 years age group were more likely to examine their own breasts (75%) than any other age group. The same age group in the total Australian female population was most likely to examine their own breasts (69%).

Mammograms

Of Aboriginal and Torres Strait Islander women aged 18-64 years, 89 per cent had never had a mammogram(b). This compares with 82 per cent of all women in this age group.

Breastfeeding

Of indigenous women aged 18-50 years who had a child or children aged 5 years or less at the time of the National Health Survey, 50 per cent had breastfed or were breastfeeding their child(ren). This compares with 77 per cent for all women in the same age group.

The age at which Aboriginal and Torres Strait Islander women were most likely to have breastfed was younger than for all Australian women. Indigenous women aged 18-24 years were the most likely to have breastfed (61%\*) compared with women aged 25-34 (79%) for all Australian women.

(a) Includes women who had not heard of a pap test. (b) Includes women who had not heard of a mammogram.

## Contraceptive use

Similar proportions of indigenous women and all women aged 18–50 years were taking the oral contraceptive pill at the time of the National Health Survey (27% and 28% respectively). As with all Australian women (48%), indigenous women aged 18–24 years were the most likely to be taking the pill (49%\*).

## Lifestyle

## Exercise

Sixty-two per cent of indigenous women aged 15 years and over exercised in the two weeks prior to interview, compared with 65 per cent of all women in the same age group. Of the indigenous women who exercised, 65 per cent reported a low exercise level, 15\* per cent reported a moderate level and 20 per cent reported a high exercise level. This compares with 56 per cent, 26 per cent and 18 per cent respectively for all women.

## Alcohol consumption

Thirty-eight per cent of Aboriginal and Torres Strait Islander women aged 18 years and over consumed alcohol in the week prior to interview, compared with over half (52%) of all Australian women.

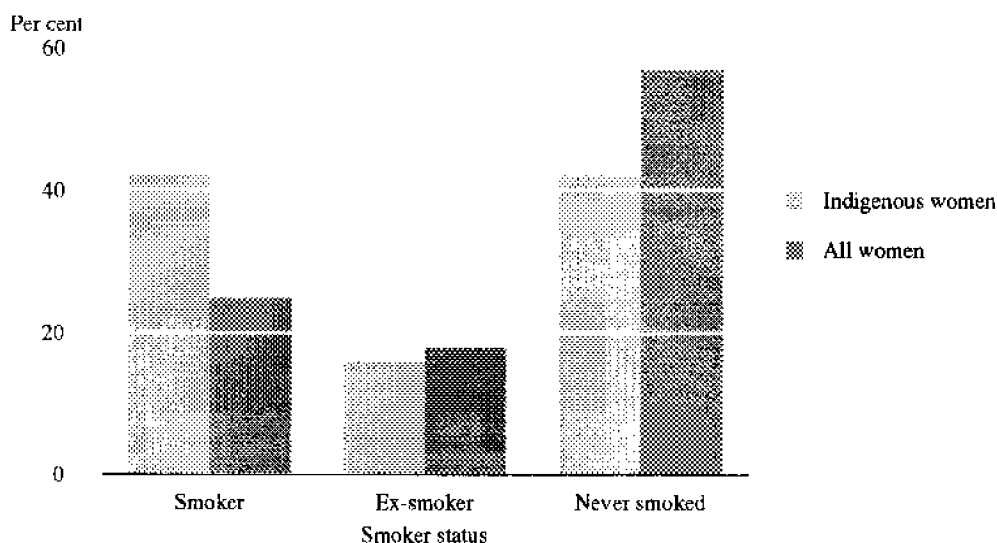
Of the indigenous women aged 18 years and over who consumed alcohol in the week prior to interview, a higher proportion were likely to drink at a high or medium alcohol risk level than all Australian women (21%\* compared with 14%).

Proportionally fewer indigenous women aged 18 years and over consumed alcohol within the month prior to interview (49%) than all Australian women in the same age group (64%). In addition, a greater proportion of indigenous women (19%) than all Australian women (13%) reported they had never consumed alcohol.

## Smoking

Smoking is more prevalent among indigenous women than it is among all Australian women. Forty-two per cent of indigenous women aged 18 years and over were smokers at the time of the survey compared with 25 per cent for all Australian women. In addition, a higher proportion of all Australian women had never smoked (57%) than indigenous women (42%) (see Chart 7.1.2).

**CHART 7.1.2 SMOKER STATUS OF INDIGENOUS WOMEN AND ALL WOMEN AGED 18 YEARS AND OVER, AUSTRALIA, 1989-90**



Source: ABS National Health Survey 1989-90

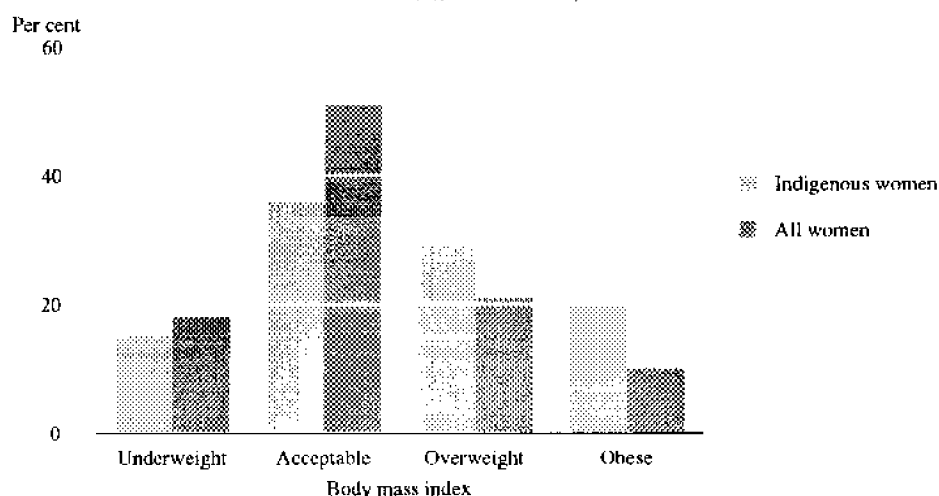
Seventy-nine per cent of indigenous women who smoked had smoked for 10 years or more, compared with 71 per cent for all women.

Forty-three per cent of Aboriginal and Torres Strait Islander women who smoked manufactured cigarettes smoked between 11 and 20 cigarettes a day, while a further 28\* per cent smoked more than 20 a day. This compares with 38 per cent and 28 per cent respectively for all women.

**Body mass index**

The data on body mass index were derived from the respondents' self-reporting of height and weight. A total of 15 per cent of indigenous women and 5 per cent of all Australian women did not provide details of their height and weight. The following figures exclude these women.

**CHART 7.1.3 BODY MASS INDEX OF INDIGENOUS WOMEN AND ALL WOMEN AGED 18 YEARS AND OVER(a), AUSTRALIA, 1989-90**



(a) Excluding the 15 per cent of indigenous women and 5 per cent of all women who did not provide details of their height and weight.  
 Source: ABS National Health Survey 1989-90

Twenty-nine per cent of Aboriginal and Torres Strait Islander women aged 18 years and over were classed as overweight at the time of the survey, while a further 20 per cent were classed as obese. This compares with 21 per cent and 10 per cent respectively for all women (see Chart 7.1.3). The prevalence of overweight and obesity increased with age in both the indigenous population and the total population.

**Health actions**

Seventy-four per cent of Aboriginal and Torres Strait Islander females reported taking a health related action during the two weeks prior to interview, compared with 81 per cent of all females.

As shown in Table 7.1.5, indigenous females were more likely than all females to visit a hospital(a), visit a doctor, and take a day away from work or school. All females were almost twice as likely to take vitamins or minerals than indigenous females. They were also more likely to have used other medications and had other days of reduced activity.

(a) Including out-patients and casualty.

**TABLE 7.1.5 ABORIGINAL AND TORRES STRAIT ISLANDER FEMALES AND ALL FEMALES: HEALTH RELATED ACTIONS TAKEN IN THE TWO WEEKS PRIOR TO INTERVIEW, AUSTRALIA, 1989-90**  
(Per cent)

<i>Type of action</i>	<i>Indigenous females</i>	<i>All females</i>
Hospital episode(a)	8	4
Doctor consultation	25	23
Dental consultation(b)	7	6
Consultation with other health professional	12	11
Taken vitamins/minerals	15	28
Used other medications	65	70
Days away from work/school	11	7
Other days of reduced activity	8	11
<i>Total females taking action(c)</i>	<i>74</i>	<i>81</i>
<i>Took no action</i>	<i>26</i>	<i>19</i>
<b>Total</b>	<b>100</b>	<b>100</b>

(a) Includes visits to casualty and out-patients. (b) Persons aged 2 years and over. (c) Persons may have reported more than one health action within the two weeks prior to interview and therefore components do not add to totals.

Source: ABS National Health Survey 1989-90

- Doctor consultations** Approximately 28,600 indigenous females (25%) consulted a doctor in the two weeks prior to interview compared with 23 per cent for all Australian women. In comparison with all females, Aboriginal and Torres Strait Islander females who visited a doctor were more likely to do so for diseases of the respiratory system (32% and 20% respectively).
- Dental consultations** Of all indigenous females aged 2 years and over, 17 per cent had never visited a dentist or did not know if they had, compared with 5 per cent of all females in the same age group. Over a quarter of indigenous females (28%) had visited a dentist two years or more ago compared with 32 per cent of all females. In addition, 7 per cent of indigenous females had visited a dentist two weeks or less ago, compared with 6 per cent of all females.
- Hospital episodes** In the 12 months prior to interview, 22 per cent of indigenous females reported an in-patient episode in hospital compared with 16 per cent of all females.
- Medication use** Indigenous women were less likely to use medications during the two weeks prior to interview than all females (69% compared with 76%).
- The most common medications used by indigenous females were pain relievers (38%), medications for cough or cold (16%), vitamin and mineral supplements (15%) and skin ointments (14%). The only medications which were used proportionally more by indigenous females than all females were medications for coughs or colds (16% and 12% respectively).



## GLOSSARY

**Alcohol consumption** Refers to consumption of alcoholic drinks. Information was collected on the types and quantities of alcoholic drinks consumed on each of the seven days prior to interview. Homemade wines and beers were included.

**Alcohol risk level** 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 to the National Health Survey 1989–90 were grouped into three categories of relative risk level based on recommendations of the National Health and Medical Research Council (NHMRC).

<i>Relative risk</i>	<i>Consumption per day ml(a)</i>	
	<i>Female</i>	<i>Male</i>
Low	<25	<50
Medium	25–50	50–75
High	>50	>75

(a) Recommendations expressed in grams of absolute alcohol per day have been converted to millilitre equivalents using the ratio 1ml=0.70g.

**Body mass index** This was derived using Quetelet's body mass index which is calculated as weight (kg) divided by the square of height ( $m^2$ ). Scores were grouped into four categories, defined by the National Health and Medical Research Council.

	<i>Body mass index (kg/m<sup>2</sup>)</i>
Underweight	<20
Acceptable weight	20–25
Overweight	26–30
Obese	>30

**Dental consultation** Any occasion in the two weeks prior to interview on which a respondent consulted a dentist or other dental professional (e.g. orthodontist, dental nurse, dental technician) about their teeth, dentures or gums. Consultations at dental hospitals are included.

**Doctor consultation** Any occasion in the two weeks prior to interview on which a respondent discussed his/her own health with, or received treatment from a doctor including consultations by telephone or having someone else consult a doctor on behalf of the respondent, but excluding consultations at hospital casualty/out-patient clinics or as part of a hospital in-patient episode. The term 'doctor' includes general practitioners and specialists such as surgeons, pathologists, gynaecologists, radiologists, psychiatrists, etc.

**Exercise** Refers to physical exercise undertaken for recreation, sport or health/fitness purposes during the two weeks prior to interview. The term does not include physical activity undertaken in the course of work or for reasons other than recreation, sport or health/fitness.

<b>Height and weight</b>	Refers to the height (without shoes) and weight (without clothes and shoes) of respondents, as reported during interview. No measurements of height and weight were taken as part of the survey. Women who were pregnant at the time of the interview were asked to provide their usual weight before pregnancy.
<b>Hospital episode</b>	<p>Refers to the use of hospitals including:</p> <ul style="list-style-type: none"><li>• admissions to hospital as an in-patient for periods of one night or more, or for less than one night on doctor's referral (such as day patients admitted for minor surgery, tests, etc.), and</li><li>• use of emergency, casualty and out-patient services at a hospital (but not including admission and excluding consultations at dental hospitals which are sometimes attached to a hospital as part of their out-patient clinic).</li></ul> <p>A hospital is defined as an institution which offers residential health care, other than a nursing or convalescent home. In order to be counted as an in-patient episode the stay in hospital must have commenced with formal admission and ended in formal discharge, with both admission and discharge taking place in the twelve months prior to interview.</p>
<b>Infant mortality rates</b>	The number of deaths of children under one year of age per 1,000 live births registered in the year.
<b>Life expectancy</b>	The average number of years that a newly born female or male might be expected to live if the age-specific death rates of the given period continued throughout her or his lifetime.
<b>Medication use</b>	Refers to the consumption or other use of any medications, pills or ointments during the two weeks prior to interview.
<b>Mortality rate</b>	The number of deaths per 1,000 population.
<b>Perinatal mortality rates</b>	The number of fetal or neonatal deaths per 1,000 live births and fetal deaths combined. A fetal death relates to the delivery of a child weighing at least 500 grams at delivery (or, when birthweight is unavailable, of at least 22 weeks gestation) which did not, at any time after delivery, breathe or show any other evidence of life such as a heartbeat. A neonatal death relates to any child weighing at least 500 grams at delivery (or, when birthweight is unavailable, of at least 22 weeks gestation) who is born alive and who dies within 28 days of birth.
<b>Smoking</b>	Refers to the regular smoking of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excludes chewing tobacco and smoking of non-tobacco products. 'Regular' was defined as one or more cigarettes (or pipes or cigars) per day on average as reported by the respondent. It relates to current smokers and ex-smokers at the time of interview. Most of the information collected related to smoking of packet cigarettes.

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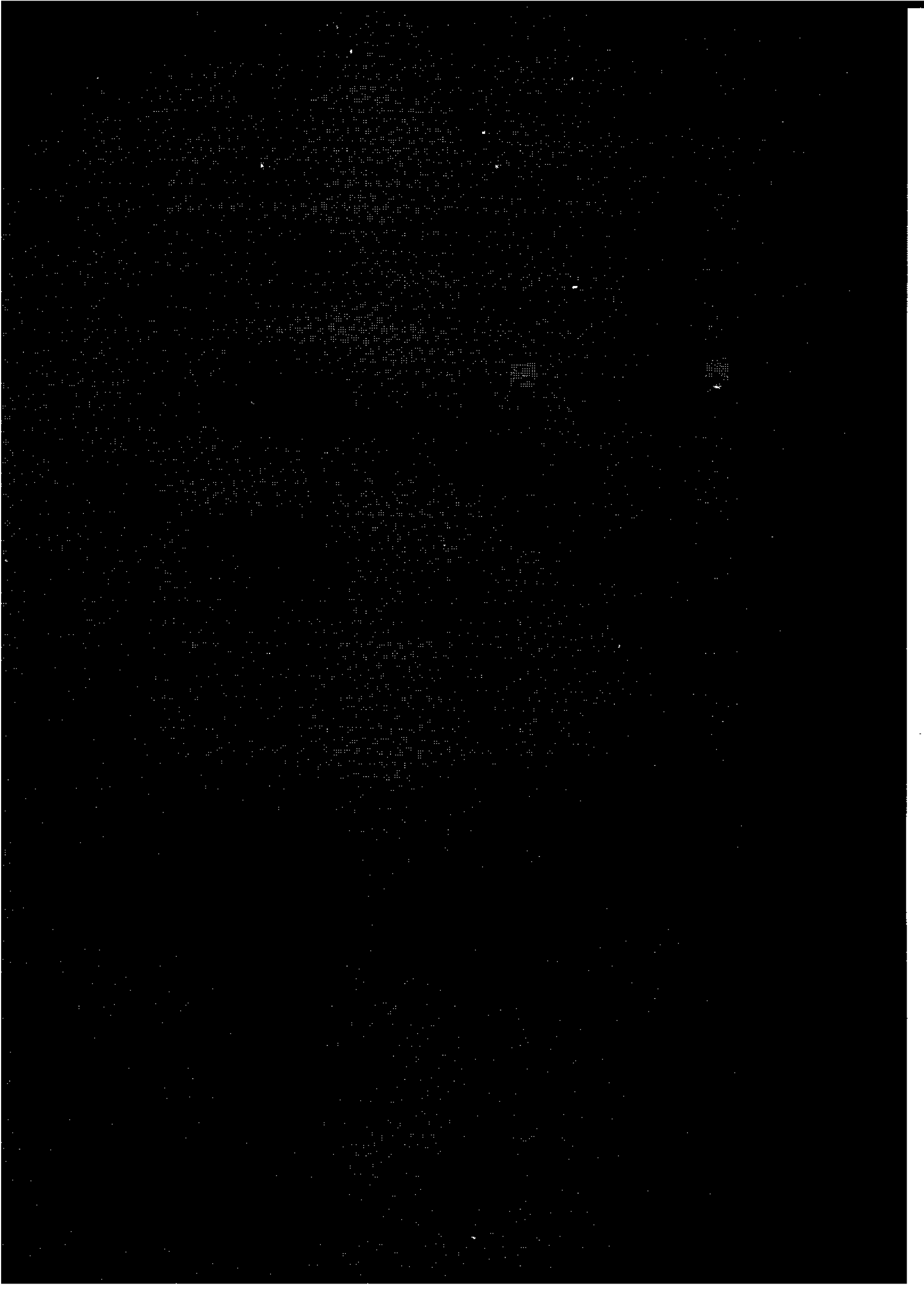
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Aboriginal and Torres Strait Islander data on life expectancy, age-specific death rates and infant mortality were provided by **Dr Neil Thomson** and **Dr David Achanfuo-Yeboah** of the **Australian Institute of Health and Welfare**.

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## OVERSEAS BORN WOMEN

### Main findings

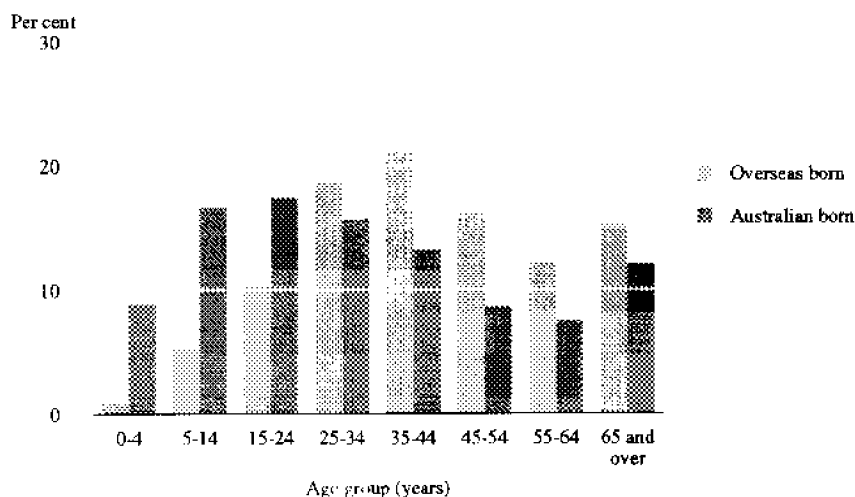
- A higher proportion of overseas born females (74.5%) experienced a long-term condition than Australian born females (66.5%).
- Of women aged 18–64 years, a lower percentage of overseas born women (27.7%) than Australian born women (33.5%) rated their self assessed health status as excellent.
- Proportionally fewer overseas born women (21.9%) than Australian born women (25.8%) were smokers.
- Although women born in Southeast Asia were the second least likely to smoke, those that did smoke recorded the highest tar and nicotine content per cigarette of any group examined.
- Overseas born women (45.5%) were less likely than Australian born women (54.0%) to have consumed alcohol in the week prior to interview.
- A lower proportion of overseas born women (79.0%) than Australian born women (87.8%) had ever had a pap smear.
- Overseas born women were over five times more likely than Australian born women to have never heard of a pap test (11.0% compared with 2.0%).
- Women born overseas (67.1%) were less likely to have had a breast examination by a doctor or medical assistant than were Australian born women (72.2%). They were also less likely to have examined their own breasts (61.2%) than Australian born women (63.4%).
- Proportionally more overseas born women (19.3%) than Australian born women (17.2%) reported having had a mammogram.
- Overseas born women were almost twice as likely not to have heard of a mammogram than Australian born women (28.6% compared with 15.9%).
- A much higher proportion of overseas born females had their own teeth (79.5%) than Australian born females (61.4%).
- Overseas born women experienced lower mortality than Australian born women.

The health issues which confront Australian born women also affect women who were born overseas. For overseas born women these problems may sometimes be compounded by language problems and cultural differences. Some overseas born women may not be aware of the health services that are available. Overseas born women often face higher levels of unemployment, tend to be occupationally segmented into the manual and semi-skilled sectors of industry and may be isolated due to language and cultural differences. Another major consideration is that some migrant communities are ageing rapidly. Aged overseas born women, particularly those who are widowed, face problems of isolation. They often speak little or no English, and for them adaptation to a new culture is particularly difficult.

The term 'overseas born' has been used to describe people from all overseas countries, encompassing a very large variety of languages and ethnic groups. For example, there are 70 different ethnic groups speaking 55 different languages in NSW alone (Women's Health Policy Review Committee, 1985). To obtain reliable estimates, countries of birth have been grouped into regions of birth.

Data from the ABS National Health Survey 1989–90, reflect the fact that the overseas born female and Australian born female populations differ in age structure. The overseas born female population is older. Women aged 35 years and over accounted for 64.8 per cent of the total overseas born female population in 1989–90. In comparison, 41.5 per cent of Australian born women were aged 35 years and over in 1989–90 (see Chart 7.2.1).

CHART 7.2.1 FEMALES: AGE BY WHETHER BORN IN AUSTRALIA OR OVERSEAS, AUSTRALIA, 1989-90



Source: ABS National Health Survey 1989-90

The older age structure of the overseas born female population may influence results, within this study, which are not standardised for age. Older persons tend to display different health characteristics to their younger counterparts. Refer to Chapter 7.4 for more details.

## Health status

### Long-term conditions

1989–90 National Health Survey data indicate that, overall, a higher proportion of overseas born females (74.5%) experienced a long-term condition than Australian born females (66.5%). Within particular age groups, the proportion of overseas born females with long-term conditions tended to be slightly lower than for Australian born females (see Table 7.2.1).

TABLE 7.2.1 FEMALES: PROPORTION WHO REPORTED LONG-TERM CONDITIONS(a), AGE BY WHETHER BORN IN AUSTRALIA OR OVERSEAS, AUSTRALIA, 1989-90

Age group (years)	Overseas born	Australian born
Under 18	36.9	38.4
18-34	62.0	66.7
35-64	81.5	83.9
65 and over	94.9	95.4
<b>Total</b>	<b>74.5</b>	<b>66.5</b>

(a) Per 100 population of same age and sex.

Source: ABS National Health Survey 1989-90

Overseas born females were more likely than Australian born females to experience the following long-term conditions:

- diseases of the nervous system and sense organs;
- diseases of the musculoskeletal system and connective tissue;
- diseases of the circulatory system;
- endocrine, nutritional and metabolic diseases and immunity disorders; and
- diseases of the digestive system.

Australian born females were more likely to have diseases of the respiratory system and diseases of the skin and subcutaneous tissue (see Table 7.2.2).

**TABLE 7.2.2 FEMALES: SELECTED LONG-TERM CONDITIONS BY WHETHER BORN IN AUSTRALIA OR OVERSEAS, AUSTRALIA, 1989-90 (Per cent)**

<i>Type of illness</i>	<i>Overseas born</i>	<i>Australian born</i>
Diseases of the nervous system and sense organs	49.4	39.3
Diseases of the musculoskeletal system and connective tissue	32.7	25.4
Diseases of the circulatory system	19.3	14.6
Diseases of the respiratory system	18.8	23.8
Endocrine, nutritional and metabolic diseases and immunity disorders	7.9	5.3
Diseases of the digestive system	6.4	5.1
Diseases of the skin and subcutaneous tissue	5.1	6.7
<b>Total reporting long-term conditions</b>	<b>74.5</b>	<b>66.5</b>

*Source: ABS National Health Survey 1989-90*

#### Recent illnesses

Although the overall proportions of overseas and Australian born females reporting recent illnesses were similar (74.9% and 75.5% respectively), age-specific rates indicate that overseas born females were less likely than Australian born females to report a recent illness in all age groups (see Table 7.2.3). The proportion of females with recent illnesses increased with age for both overseas and Australian born females.

**TABLE 7.2.3 FEMALES: PROPORTION WHO REPORTED RECENT ILLNESS(a), AGE BY WHETHER BORN IN AUSTRALIA OR OVERSEAS, AUSTRALIA, 1989-90**

<i>Age group (years)</i>	<i>Overseas born</i>	<i>Australian born</i>
Under 18	51.6	63.6
18-34	69.5	74.8
35-64	77.0	81.9
65 and over	90.7	91.8
<b>Total</b>	<b>74.9</b>	<b>75.5</b>

(a) Per 100 population of same age and sex.

*Source: ABS National Health Survey 1989-90*



Females who were born overseas were more likely than females born in Australia to experience the following recent illnesses:

- symptoms, signs and ill-defined conditions;
- diseases of the musculoskeletal system and connective tissue;
- diseases of the circulatory system;
- diseases of the digestive system; and
- endocrine, nutritional and metabolic diseases and immunity disorders.

However, as with long-term conditions, females born overseas were less likely to experience recent illnesses related to diseases of the respiratory system and of the skin and subcutaneous tissue (see Table 7.2.4).

**TABLE 7.2.4 FEMALES: SELECTED RECENT ILLNESSES BY WHETHER BORN IN AUSTRALIA OR OVERSEAS, AUSTRALIA, 1989-90**  
(Per cent)

<i>Type of illness</i>	<i>Overseas born</i>	<i>Australian born</i>
Symptoms, signs and ill-defined conditions	29.6	27.5
Diseases of the respiratory system	19.1	25.0
Diseases of the musculoskeletal system and connective tissue	18.5	14.1
Diseases of the circulatory system	16.0	13.2
Diseases of the digestive system	15.9	14.1
Diseases of the skin and subcutaneous tissue	11.0	14.4
Endocrine, nutritional and metabolic diseases and immunity disorders	6.8	4.5
<b>Total reporting recent illnesses</b>	<b>74.9</b>	<b>75.5</b>

*Source: ABS National Health Survey 1989-90*

#### Self assessed health status

Overall, a lower percentage of overseas born women aged 18-64 years rated their self assessed health status as excellent (27.7%) than Australian born women (33.5%). More overseas born women rated their health status as fair or poor than Australian born women (see Table 7.2.5). Women born in Northern America and Other Oceania were most likely to rate their health status as excellent, while women born in South America, Central America and the Caribbean were most likely to rate their health status as poor. Northern American women were the only group to have a larger proportion who rated their health as excellent as opposed to good.

**TABLE 7.2.5 WOMEN AGED 18 YEARS AND OVER: COUNTRY OF BIRTH BY SELF ASSESSED HEALTH STATUS, AUSTRALIA, 1989-90**  
(Per cent)

Country of birth	Self assessed health status				Total
	Excellent	Good	Fair	Poor	
Other Oceania	37.0	48.3	12.3	*2.5	100.0
Europe and U.S.S.R.	23.5	48.1	20.4	8.0	100.0
Middle East	14.7	49.4	24.8	11.0	100.0
Southeast Asia	25.3	54.4	16.8	*3.5	100.0
Northeast and Southern Asia	22.1	57.3	15.6	5.0	100.0
Northern America	37.5	42.7	*19.9	**	100.0
South America, Central America and the Caribbean	*24.2	53.4	*11.0	*11.4	100.0
Africa (including North Africa)	32.8	50.9	14.2	**	100.0
<b>Total overseas born</b>	<b>24.7</b>	<b>49.4</b>	<b>19.0</b>	<b>6.9</b>	<b>100.0</b>
<b>Australian born</b>	<b>30.0</b>	<b>49.8</b>	<b>16.3</b>	<b>3.8</b>	<b>100.0</b>

Source: ABS National Health Survey 1989-90

## Health actions

### Hospital episodes

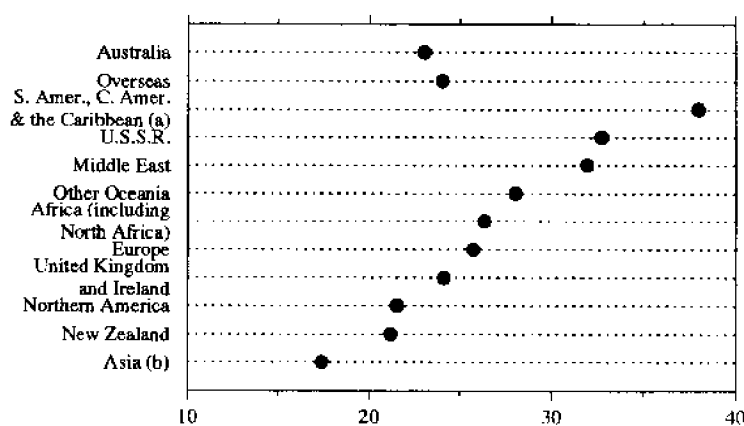
Although age-specific admission rates for overseas born and Australian born women were similar at most ages, the proportion who were admitted to hospital in the previous twelve months was lower for overseas born women at age 75 years and over (20.9%) than for Australian born women of the same age (25.7%).

### Doctor consultations

A slightly higher proportion of overseas born females consulted a doctor in the two weeks prior to interview (24.0%) than did Australian born females (23.0%). For both overseas born females and Australian born females the rates of doctor consultations were higher in the 65 years and over age group (36.7% and 35.2% respectively).

Females from South America, Central America and the Caribbean (38.0%), the U.S.S.R. (32.7%) and the Middle East (31.9%) had the highest rates of doctor consultations in the two weeks prior to interview. Females from Asia had the lowest rate (17.4%) (see Chart 7.2.2).

**CHART 7.2.2 FEMALES WHO CONSULTED A DOCTOR IN THE TWO WEEKS PRIOR TO INTERVIEW: COUNTRY OF BIRTH, AUSTRALIA, 1989-90**  
(Per cent)



(a) South America, Central America and the Caribbean. (b) Includes Southeast, Northeast and Southern Asia.

Source: ABS National Health Survey 1989-90

**Dental consultations** A slightly higher proportion of overseas born females consulted a dentist in the two weeks prior to interview (6.0%) than did Australian born females (5.6%). This was particularly true for women aged 60 years and over, where the rate of overseas born women visiting a dentist was 4.8 per cent, compared with 3.1 per cent for Australian born women.

A higher proportion of overseas born females had their own teeth (79.5%), than Australian born females (61.4%). This was the case for all age groups over 40 years.

**Lifestyle** In the following analysis, data from the National Health Survey on changes in diet, smoking, alcohol consumption and body mass index are for people aged 18 years and over. Data on exercise are for people aged 15 years and over and data on use of medications are for people of all ages.

**Diet and nutrition**

*Food consumption* The results of a number of population based studies of food consumption differences between overseas born and Australian born populations are discussed in *The Health of Immigrant Australia; A Social Perspective* (Reid and Trompf, 1990). Reid and Trompf (1990) report that the differences between the two groups are consistent for selected food groups or items. Butter and margarine, added sugars and alcoholic beverages are consumed in smaller amounts or less frequently by the overseas born than by those born in Australia, while cereal intake among the overseas born appears to be higher. Dairy product consumption appears to be consistently lower for Asian migrants, particularly females. In addition, although the Australian born population consume more meats, dairy products and fat spreads than those born overseas, the consumption of these foods appears to be decreasing among the Australian born and increasing among migrant groups.

*Change in diet* The National Health Survey 1989-90 collected data about changes made to diet during the two years prior to interview. Results indicate few differences in changes made to diet between overseas born women and Australian born women (see Table 7.2.6). A slightly higher proportion of overseas born women reported increases in the intake of vegetables, fresh fruits and juices. The most positive changes to diet, such as decreases in fat and increases in fruit and vegetable intake were reported by women born in 'Other Oceania'. However, given that it is unknown what amounts of the various types of food were consumed prior to the change in diet, it is impossible to comment on the significance of these changes from a health perspective.

**TABLE 7.2.6 AUSTRALIAN AND OVERSEAS BORN WOMEN AGED 18 YEARS AND OVER: PROPORTIONS WHO CHANGED THEIR DIET IN THE LAST TWO YEARS, TYPE OF FOOD BY DIRECTION OF CHANGE, AUSTRALIA, 1989-90 (Per cent)**

<i>Type of food</i>	<i>Increased</i>		<i>Decreased</i>	
	<i>Overseas born</i>	<i>Australian born</i>	<i>Overseas born</i>	<i>Australian born</i>
Vegetables	24.6	21.8	2.3	3.3
Fresh fruit (incl. fruit juices)	23.2	22.0	2.2	2.8
Fish	16.0	15.4	4.7	4.2
Bread	6.3	5.6	13.4	13.9
Breakfast cereals	8.6	8.8	5.7	6.3
Fat on meat	0.7	0.5	22.2	23.3
Fried foods	1.4	1.5	23.7	23.7
Butter or margarine	1.6	1.2	18.0	16.9
Cheese or cream	3.9	3.9	17.3	18.0
Salt	0.8	1.3	18.8	19.7
Sugar	1.2	1.1	16.6	17.5
Cakes, pastries or desserts	2.2	2.1	19.3	21.2

Source: ABS National Health Survey 1989-90

### Nutrition

The following data on nutrition were obtained from the 1983 National Dietary Survey conducted by the Department of Community Services and Health in collaboration with the National Heart Foundation.

Generally, the mean daily energy intake for males was almost 40 per cent higher than females for both the overseas born and the Australasian born population. Females from Australasia and the United Kingdom had a higher energy intake than females from other regions (see Table 7.2.7).

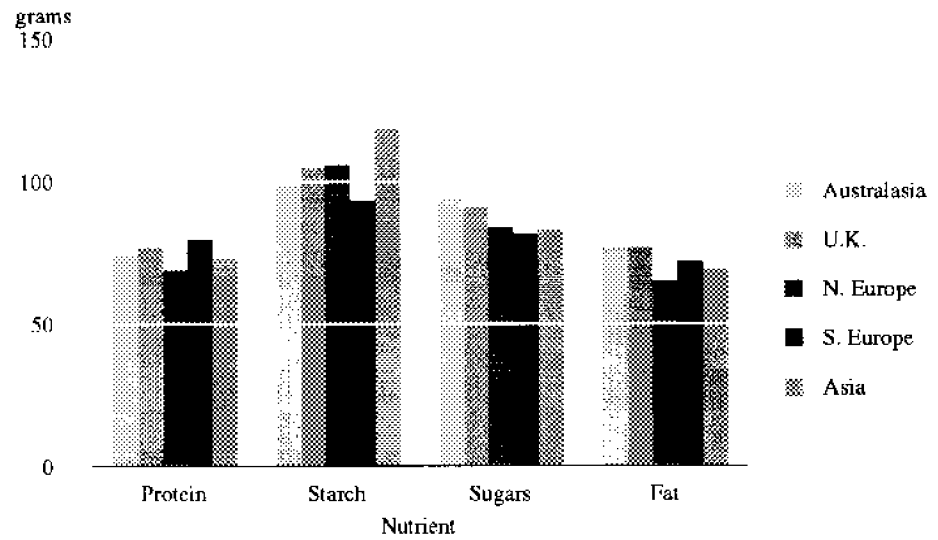
**TABLE 7.2.7 MEAN DAILY ENERGY INTAKE (Kj): SELECTED COUNTRY OF BIRTH BY SEX, AUSTRALIA, 1983**

<i>Country of birth</i>	<i>Females</i>	<i>Males</i>
Australasia	7,490	11,340
United Kingdom	7,630	11,070
Northern Europe	6,770	9,810
Southern Europe	7,040	9,730
Asia	7,190	10,880

Source: Department of Community Services and Health, National Dietary Survey, 1983

Relative amounts of nutrients included in the diet differed slightly according to country of birth. Chart 7.2.3 shows daily nutrient intake for females by country of birth. Southern European born women had the highest intake of protein (80g) while Northern European born women had the lowest (69g). Women born in Asia had the highest intake of starches (118g) while Southern European born women had the lowest (93g). Women born in Northern Europe had the lowest daily fat intake (65g) while women from the United Kingdom and Australasia had the highest (77g).

**CHART 7.2.3 AVERAGE DAILY NUTRIENT INTAKE FOR WOMEN BY COUNTRY OF BIRTH, AUSTRALIA, 1983**



Source: Department of Community Services and Health, National Dietary Survey, 1983

## Exercise

Overall, proportionally fewer overseas born women (25.3%) than Australian born women (31.8%) exercised moderately in the two weeks prior to interview. Women born in Northern America (48.2%) and Northern Europe (45.7%) were most likely to have engaged in moderate exercise. However, 21.0 per cent of Northern European women reported exercising only once or twice in this period. Women born in Southern Europe and the Middle East were the least likely to have exercised. A higher proportion of women born in the U.S.S.R. and Eastern Europe engaged in moderate exercise 7 or more times in the two weeks prior to interview. Two out of every five overseas born women reported taking no exercise in the two weeks prior to interview. The proportion of Australian born women who did no exercise was slightly lower (33.4%) (see Table 7.2.8).

**TABLE 7.2.8 WOMEN AGED 15 YEARS AND OVER: COUNTRY OF BIRTH  
BY NUMBER OF TIMES EXERCISED MODERATELY IN THE PAST TWO  
WEEKS, AUSTRALIA, 1989-90  
(Per cent)**

Country of birth	Number of times exercised moderately in the past two weeks			Total who exercised moderately	Total who reported no exercise
	1-2	3-6	7 or more		
New Zealand	12.1	11.7	10.8	34.6	28.2
Other Oceania	*6.6	*9.2	*11.4	27.2	43.4
United Kingdom and Ireland	10.9	10.9	8.3	30.0	32.4
Southern Europe	3.6	3.3	4.9	11.7	55.2
Western Europe	7.2	9.9	7.6	24.6	36.5
Northern Europe	*21.0	**	*12.4	45.7	*28.6
Eastern Europe	*7.8	9.9	13.5	31.0	29.3
U.S.S.R.	**	**	*15.4	19.6	45.0
Middle East	*2.6	*5.2	8.1	15.8	53.2
Southeast Asia	8.4	7.4	10.4	26.2	49.0
Northeast and Southern Asia	7.8	5.9	10.6	24.3	48.0
Northern America	*14.5	21.0	*12.3	48.2	*16.7
South America, Central America and the Caribbean	*10.6	*14.1	**	26.0	41.4
Africa (including North Africa)	14.7	12.7	*6.7	34.2	35.9
<i>Total overseas born</i>	<i>8.4</i>	<i>8.6</i>	<i>8.4</i>	<i>25.3</i>	<i>40.4</i>
<i>Australian born</i>	<i>12.7</i>	<i>11.4</i>	<i>7.6</i>	<i>31.8</i>	<i>33.4</i>
<b>Total</b>	<b>11.6</b>	<b>10.7</b>	<b>7.8</b>	<b>30.1</b>	<b>35.2</b>

Source: ABS National Health Survey 1989-90

## Smoking

A lower proportion of overseas born women smoked (21.9%) than Australian born women (25.8%). The highest proportion of smokers was recorded among women born in New Zealand (39.2%). The lowest proportion of smokers was recorded among women born in Northeast and Southern Asia (7.0%) and Southeast Asia (9.5%) (see Table 7.2.9).

**TABLE 7.2.9 WOMEN AGED 18 YEARS AND OVER: COUNTRY OF BIRTH  
BY SMOKER STATUS, AUSTRALIA, 1989-90**  
(Per cent)

<i>Country of birth</i>	<i>Smoker status</i>			<i>Total</i>
	<i>Smoker</i>	<i>Ex-smoker</i>	<i>Never smoked</i>	
New Zealand	39.2	24.3	36.4	100.0
Other Oceania	*16.2	*13.4	70.4	100.0
United Kingdom and Ireland	27.6	25.5	46.9	100.0
Southern Europe	14.8	7.3	78.0	100.0
Western Europe	23.8	21.3	54.9	100.0
Northern Europe	*36.8	*21.1	*42.1	100.0
Eastern Europe	21.1	17.1	61.8	100.0
U.S.S.R.	*16.5	22.3	61.2	100.0
Middle East	27.8	12.0	60.2	100.0
Southeast Asia	9.5	4.7	85.8	100.0
Northeast and Southern Asia	7.0	8.6	84.4	100.0
Northern America	*15.2	26.9	57.9	100.0
South America, Central America and the Caribbean	31.4	*17.5	51.1	100.0
Africa (including North Africa)	19.9	18.7	61.4	100.0
<i>Total overseas born</i>	<i>21.9</i>	<i>17.3</i>	<i>60.8</i>	<i>100.0</i>
<i>Australian born</i>	<i>25.8</i>	<i>18.0</i>	<i>56.2</i>	<i>100.0</i>
<b>Total</b>	<b>24.7</b>	<b>17.8</b>	<b>57.4</b>	<b>100.0</b>

Source: ABS National Health Survey 1989-90

Of the women who smoked, overseas born women tended to smoke slightly fewer cigarettes per day than women born in Australia. Of overseas born women who smoked, 26.7 per cent smoked 21 or more cigarettes per day, compared with 28.9 per cent of Australian born women. Women born in Northern Europe (66.7%), Latin America (66.7%) and Southeast Asia (64.8%) were more likely to smoke less than ten cigarettes per day than women born in other countries.

Women born in Southeast Asia recorded the highest tar and nicotine content per cigarette (31.3% smoked cigarettes with a tar content between 14 and 16 milligrams and 29.8% smoked cigarettes with a nicotine content of 1.5 milligrams or more). Women born in Northeast and Southern Asia recorded the lowest tar content per cigarette (38.2% smoked cigarettes with a tar content of less than 5 milligrams) while women born in Western Europe recorded the lowest nicotine content per cigarette (62.4% smoked cigarettes with a nicotine content of 0.1 to 0.8 milligrams).

#### Alcohol consumption

A smaller proportion of overseas born women reported that they had consumed alcohol in the week prior to interview (45.5%) than Australian born women (54.0%). Women from Northern America were the most likely to have consumed alcohol in the week prior to interview (71.9%) while women from the Middle East (23.2%) and Southeast Asia (23.2%) were the least likely to have consumed alcohol.

National Health Survey results indicate that, of the women who drank alcohol in the week prior to interview, women born in New Zealand (16.6 millilitres), Northern America (14.9 millilitres) and Australia (13.6 millilitres) had the highest average daily consumption. The lowest average daily consumption was reported by women from the Middle East (5.7 millilitres) (see Table 7.2.10).

**TABLE 7.2.10 PERSONS AGED 18 YEARS AND OVER WHO DRANK ALCOHOL IN THE WEEK PRIOR TO INTERVIEW: AVERAGE DAILY ALCOHOL CONSUMPTION, COUNTRY OF BIRTH BY SEX, AUSTRALIA, 1989-90 (millilitres)**

<i>Country of birth</i>	<i>Females</i>	<i>Males</i>	<i>Persons</i>
New Zealand	16.6	38.2	28.4
Other Oceania	11.9	35.5	26.4
Europe and U.S.S.R.	11.6	26.5	20.9
Middle East	5.7	12.9	10.6
Southeast Asia	9.9	13.7	12.3
Other Asia	7.9	16.5	13.7
Northern America	14.9	27.5	21.5
South America, Central America and the Caribbean	8.4	19.0	15.0
Africa (including North Africa)	11.8	18.3	15.2
<i>Total overseas born</i>	<i>11.8</i>	<i>25.8</i>	<i>20.4</i>
<i>Australian born</i>	<i>13.6</i>	<i>33.0</i>	<i>24.6</i>
<b>Total</b>	<b>13.2</b>	<b>31.0</b>	<b>23.6</b>

Source: ABS National Health Survey 1989-90

#### Body mass index

Although the proportions of overseas born women and Australian born women who were underweight, of acceptable weight, overweight or obese were similar, a slightly higher proportion of overseas born women were overweight or obese (see Table 7.2.11).

Age-specific rates indicate that in the 18-34 years age group, a lower proportion of overseas born women were overweight or obese than Australian born women. In the other age groups, a higher proportion of overseas born women than Australian born women were overweight or obese. Of women aged 18 years and over, those born in Southern Europe were most likely to be overweight (31.6%) or obese (17.3%) while those born in Southeast Asia were most likely to be underweight (33.8%).

**TABLE 7.2.11 WOMEN AGED 18 YEARS AND OVER: BODY MASS INDEX BY AGE AND WHETHER BORN IN AUSTRALIA OR OVERSEAS, AUSTRALIA, 1989-90 (Per cent)**

<i>Body mass index</i>	<i>Age group (years)</i>							
	<i>18-34</i>		<i>35-64</i>		<i>65 and over</i>		<i>Total</i>	
	<i>Over-seas born</i>	<i>Aust-ralian born</i>	<i>Over-seas born</i>	<i>Aust-ralian born</i>	<i>Over-seas born</i>	<i>Aust-ralian born</i>	<i>Over-seas born</i>	<i>Aust-ralian born</i>
Underweight	28.5	25.0	11.8	11.5	11.5	14.6	16.6	17.4
Acceptable	52.0	51.0	45.5	50.0	41.9	43.7	46.8	49.3
Overweight	11.8	13.4	26.6	24.2	25.8	24.4	22.2	19.9
Obese	4.7	6.0	12.5	11.2	10.3	9.4	9.8	8.8
Not available	2.9	4.6	3.5	3.1	10.5	7.9	4.5	4.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: ABS National Health Survey 1989-90



## Medication use

National Health Survey results indicate that a slightly lower proportion of overseas born females (75.6%) than Australian born females (76.4%) took some form of medication in the two weeks prior to interview. Overseas born females were less likely than Australian born females to take medication for coughs or colds (12.7% and 16.5% respectively), for allergies (6.5% and 9.1%) and to use skin ointments (21.6% and 26.2%). Overseas born females were more likely than Australian born females to take stomach medicines or laxatives (14.8% and 11.2% respectively), medications for fluid, heart and blood pressure (19.8% and 16.0%), pain relievers (55.7% and 54.8%) and sleeping medications (10.7% and 8.0%) (see Table 7.2.12). For further information, see Chapter 5.

**TABLE 7.2.12 FEMALES WHO TOOK MEDICATION IN THE TWO WEEKS PRIOR TO INTERVIEW: TYPE OF MEDICATION BY WHETHER BORN IN AUSTRALIA OR OVERSEAS, AUSTRALIA, 1989-90**  
(Per cent)

<i>Type of medication</i>	<i>Overseas born</i>	<i>Australian born</i>
Vitamin and mineral supplements	35.9	36.2
Medication for cough or cold	12.7	16.5
Medication for allergy	6.5	9.1
Skin ointments	21.6	26.2
Stomach medicines or laxatives	14.8	11.2
Medications for fluid, heart, blood pressure	19.8	16.0
Pain relievers	55.7	54.8
Sleeping medications	10.7	8.0
Tranquillisers or sedatives	4.0	3.5
Other medications	30.9	28.4
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>

(a) Persons may have used more than one type of medication, and therefore components do not add to totals.

Source: ABS National Health Survey 1989-90

## Specific women's health issues

The following information is from the women's health component of the 1989-90 National Health Survey. Data on pap smears, breast examinations, mammograms and hysterectomies are based on responses from women aged 18-64 years, while the data on contraception are for women aged 18-50 years. The data on breastfeeding are for women aged 18-50 years who had a child or children aged 5 years or less at the time of the survey.

## Pap smears

Proportionally fewer overseas born women (79.0%) than Australian born women (87.8%) reported having had a pap smear (see Table 7.2.13). Of those who had been tested, a smaller proportion of overseas born women (47.9%) than Australian born women (50.3%) reported having had a pap smear in the previous 12 months. Overseas born women were over 5 times less likely to have heard of the pap test than Australian born women (2.0% compared with 11.0%).

Women born in Northern America were most likely to have had a pap smear (94.3%) while women born in Asia were least likely to have had a pap smear (57.1%). However, of those women who had been tested, women born in Asia were more likely to have been tested in the twelve months prior to interview (50.0%) than were those born in the U.S.S.R. (42.7%), United Kingdom and Ireland (44.1%), Europe (44.3%) and Other Oceania (45.0%). Of all women who had been tested, women born in Northern America were the most likely to have had the test in the 12 months prior to interview (64.8%).

A higher proportion of women who spoke English at home reported having had a pap smear (88.0%) than those who spoke another language at home (62.0%).

**TABLE 7.2.13 WOMEN AGED 18-64 YEARS: COUNTRY OF BIRTH BY WHETHER HAD A PAP SMEAR AND TYPE OF BREAST CANCER SCREENING, AUSTRALIA, 1989-90**  
(Per cent)

Country of birth	Type of screening			
	Has had a pap smear	Regularly examines own breasts	Has had breasts examined	Has had a mammogram
United Kingdom and Ireland	91.3	69.4	76.6	23.3
Europe	74.9	59.7	65.7	21.0
U.S.S.R.	57.7	45.4	70.8	*19.2
Middle East	68.1	50.4	57.0	19.6
Africa (including North Africa)	84.1	63.2	73.2	17.8
Asia(a)	57.1	47.1	45.6	9.9
Northern America	94.3	59.8	87.8	*22.7
South America, Central America and the Caribbean	85.9	65.8	74.4	*22.6
New Zealand	89.3	66.0	73.0	14.2
Other Oceania	75.1	64.3	62.9	*11.3
<i>Australian born</i>	<i>87.8</i>	<i>63.4</i>	<i>72.2</i>	<i>17.2</i>
<i>Overseas born</i>	<i>79.0</i>	<i>61.2</i>	<i>67.1</i>	<i>19.3</i>
<b>Total</b>	<b>85.5</b>	<b>62.8</b>	<b>70.9</b>	<b>17.8</b>

(a) Comprising Southeast Asia and Northeast and Southern Asia.

Source: ABS National Health Survey 1989-90

#### Breast examination

A smaller proportion of overseas born women (67.1%) than Australian born women (72.2%) reported having had a breast examination by a doctor or medical assistant or having examined their own breasts (61.2% and 63.4% respectively). Overall, a higher proportion of women born in Northern America had had a breast examination (87.8%) than women of other birthplaces. A higher proportion of women born in the United Kingdom and Ireland had had a breast examination than Australian born women (76.6% and 72.2% respectively). Women born in the United Kingdom and Ireland were also more likely than Australian born women to have examined their own breasts (69.4% and 63.4% respectively). Asian born women were the least likely to have had a breast examination (45.6%) or to have examined their own breasts (47.1%) (see Table 7.2.13).

#### Mammograms

Overall, a larger proportion of overseas born women (19.3%) than Australian born women (17.2%) reported having had a mammogram (see Table 7.2.13). The highest proportion who reported having had a mammogram was recorded among women born in the United Kingdom and Ireland (23.3%), and most of these women had been tested in the last 3 years (71.6%). The lowest proportion of women who reported having had a mammogram was recorded for Asian born women (9.9%). The majority of Asian born women who had had a mammogram had the test within the last three years.

Proportionally fewer overseas born women (71.4%) than Australian born women (84.1%) reported that they had heard of a mammogram. Women born in the United Kingdom and Ireland had the highest awareness of

mammograms (88.3%). Women born in Northeast and Southern Asia had the least awareness of mammograms (50.2%).

#### Breastfeeding

A slightly lower proportion of overseas born women than Australian born women reported that they breastfed their child(ren) (72.2% and 78.5% respectively).

#### Contraceptive use

##### *Oral contraceptives*

A lower proportion of overseas born women aged 18–50 years (20.2%) used oral contraceptive pills than women of the same age born in Australia (30.6%). Women born in Northern Europe (35.4%), Africa (34.0%) and New Zealand (30.5%) were more likely to use oral contraceptives than women born in other countries. A lower proportion of women born in Western Europe (12.2%), Northeast and Southern Asia (13.4%) and Eastern Europe (13.6%) used oral contraceptives than women born in other countries. These figures in part reflect differences in the age structures of the different population groups, particularly in the proportions of women aged 18 to 24 years, as this was the age at which women were most likely to use oral contraceptives.

However, age-specific analysis shows that oral contraceptive use was consistently higher for women born in Africa and New Zealand than in other countries for all age groups between 18 and 44 years. Oral contraceptive use was consistently lower for women between the ages of 18 and 44 years born in Southeast, Northeast and Southern Asia.

##### *Intra-uterine devices (IUD's)*

The National Health Survey 1989–90 asked women who were not using oral contraceptive pills whether they were currently fitted with an intra-uterine device (IUD). A slightly higher proportion of overseas born women (4.5%) reported that they were fitted with an IUD than Australian born women (3.6%). This was true for all age groups between 18 and 44 years. In the 45–50 years age group, however, a lower proportion of overseas born women were fitted with an IUD (1.2%) than Australian born women (2.9%).

Of women who were not taking the oral contraceptive pill, those born in South America, Central America and the Caribbean (14.8%), Eastern Europe (12.0%) and the Middle East (9.2%) were most likely to be fitted with an IUD, while women born in Southeast Asia (2.8%), Southern Europe (3.2%) and the United Kingdom and Ireland (3.7%) were least likely to be fitted with an IUD.

#### Hysterectomies

Overall, the proportions of overseas born and Australian born women who reported having had a hysterectomy were the same (11.7%). The proportions were similar for all age groups, except for the 55–64 years age group, where 18.4 per cent of overseas born women reported having had a hysterectomy compared with 26.5 per cent of Australian born women (see Table 7.2.14).

A large proportion of women born in Europe and the U.S.S.R. reported having had a hysterectomy (14.2%), while those born in Northern America (4.3%) and Southeast Asia (4.8%) had the lowest proportions.

**TABLE 7.2.14 WOMEN AGED 18-64 YEARS: PROPORTION WHO HAVE HAD A HYSTERECTOMY, WHETHER BORN IN AUSTRALIA OR OVERSEAS BY AGE, AUSTRALIA, 1989-90 (Per cent)**

<i>Birthplace</i>	<i>Age group (years)</i>					<i>Total</i>
	<i>18-24</i>	<i>25-34</i>	<i>35-44</i>	<i>45-54</i>	<i>55-64</i>	
Overseas born	0.7	3.5	10.6	23.5	18.4	11.7
Australian born	0.9	3.9	13.5	25.5	26.5	11.7
<b>Total</b>	<b>0.9</b>	<b>3.8</b>	<b>12.6</b>	<b>24.9</b>	<b>24.1</b>	<b>11.7</b>

*Source: ABS National Health Survey 1989-90*

## Mortality

A study by Young (cited in Donovan, d'Espaignet, Merton and van Ommeren, 1992) showed, by using standardised mortality ratios (SMRs), that in general, women born overseas experienced lower mortality than Australian born women. Hong Kong and Macao born women experienced the lowest mortality. Women born in New Zealand, the United States and Other Oceania had higher mortality than Australian born women.

Analysis of two principal causes of death, malignant neoplasms and diseases of the circulatory system, shows that women born in Australia experienced relatively moderate levels of mortality in comparison with women born overseas.

Women born in Lebanon, Greece and the Philippines experienced low mortality from malignant neoplasms. In contrast, women born in Canada, New Zealand, South Africa and the United Kingdom and Ireland experienced high mortality from malignant neoplasms.

Low mortality from diseases of the circulatory system was experienced by women born in Vietnam, Greece and the Philippines while women born in Egypt, Malta and Other Oceania experienced high mortality (see Table 7.2.15).

**TABLE 7.2.15 STANDARDISED MORTALITY RATIOS FOR FEMALES AGED 15-74 YEARS: SELECTED COUNTRY OF BIRTH BY SELECTED CAUSE OF DEATH, AUSTRALIA, 1987-89**

<i>Country of birth</i>	<i>Cause of death</i>		
	<i>Malignant neoplasms</i>	<i>Diseases of the circulatory system</i>	<i>All causes</i>
Australia	101	104	103
Egypt	89	122	101
South Africa	109	85	87
Canada	115	66	90
United States	108	109	114
Central and South America	84	69	69
China	107	61	83
Hong Kong and Macao	75	(a)	56
India	86	80	83
Lebanon	66	118	78
Malaysia	86	59	72
Philippines	72	56	74
Vietnam	78	35	57
Germany	99	90	93
Greece	67	55	60
Italy	73	68	69
Malta	83	124	94
Netherlands	81	84	80
Poland	97	117	102
United Kingdom and Ireland	109	91	98
Yugoslavia	85	79	84
New Zealand	115	105	108
Other Oceania	96	165	132
<b>Total Australia</b>	<b>100</b>	<b>100</b>	<b>100</b>

(a) Standardised mortality ratio based on small numbers, therefore omitted.

Source: Donovan J., d'Espaignet E.T., Merton C. and van Ommeren M. (Eds) (1992)

## GLOSSARY

**Alcohol consumption** Refers to consumption of alcoholic drinks. Information was collected on the types and quantities of alcoholic drinks consumed on each of the seven days prior to interview. Homemade wines and beers were included.

**Body mass index** This was derived using Quetelet's body mass index which is calculated as weight (kg) divided by the square of height ( $m^2$ ). Scores were grouped into four categories, defined by the National Health and Medical Research Council.

	<i>Body mass index (kg/m<sup>2</sup>)</i>
Underweight	<20
Acceptable weight	20–25
Overweight	26–30
Obese	>30

**Country of birth** Country of birth was classified according to the standard countries classification in use for ABS population surveys at the commencement of the National Health Survey 1989–90 (see Appendix C of the 1989–90 National Health Survey Users' Guide (4363.0)). Countries have been grouped at various levels consistent with the Australian Standard Classification of Countries for Social Statistics (1269.0).

**Exercise** Refers to physical exercise undertaken for recreation, sport or health/fitness purposes during the two weeks prior to interview. The term does not include physical activity undertaken in the course of work, or for reasons other than recreation, sport or health/fitness.

Moderate exercise was defined as exercise or other activities (undertaken for recreation, sport or health/fitness) that caused a moderate increase in the heart rate or breathing of the respondent.

**Height and weight** Refers to the height (without shoes) and weight (without clothes and shoes) of respondents, as reported during interview. No measurements of height and weight were taken as part of the survey. Women who were pregnant at the time of the interview were asked to provide their usual weight before pregnancy.

**Hospital episode** Refers to the use of hospitals including:

- admissions to hospital as an in-patient for periods of one night or more, or for less than one night on doctor's referral (such as day patients admitted for minor surgery, tests, etc.), and
- use of emergency, casualty and out-patient services at a hospital (but not including admission and excluding consultations at dental hospitals which are sometimes attached to a hospital as part of their out-patient clinic).

A hospital is defined as an institution which offers residential health care, other than a nursing or convalescent home. In order to be counted as an in-patient episode the stay in hospital must have commenced with formal admission and ended in formal discharge, with both admission and discharge taking place in the twelve months prior to interview.

<b>Long-term conditions</b>	<p>Medical conditions (illness, injury or disability) which have lasted at least six months, or which the respondent expects to last for six months or more, including:</p> <ul style="list-style-type: none"> <li>• long-term conditions from which the respondent experienced infrequent or spasmodic attacks e.g. asthma;</li> <li>• long-term conditions which may be under control through use of medications or other treatment e.g. diabetes, epilepsy;</li> <li>• conditions which, although present, may not be generally considered illness because they are not necessarily debilitating e.g. reduced eyesight;</li> <li>• long-term and permanent impairments or disabilities.</li> </ul>
<b>Medication use</b>	Refers to the consumption or other use of any medications, pills or ointments during the two weeks prior to interview.
<b>Recent illness</b>	Medical conditions (illness, injury or disability) experienced in the two weeks prior to interview.
<b>Smoking</b>	Refers to the regular smoking of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excludes chewing tobacco and smoking of non-tobacco products. 'Regular' was defined as one or more cigarettes (or pipes or cigars) per day on average as reported by the respondent. It relates to current smokers and ex-smokers at the time of interview. Most of the information collected related to smoking of packet cigarettes.
<b>Standardised mortality ratio (SMR)</b>	The standardised mortality ratio is the ratio of the observed number of deaths to the expected number of deaths for a population. Expected deaths are the number of deaths which would have occurred, if the population had experienced, at each age, the death rates of the standard population. In this study, the standard population is the total Australian population. The SMR is a form of the indirect standardised death rate.

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# WITH BOTTLES

## **WOMEN WITH DISABILITIES**

### **Main findings**

- In 1993, 17.6 per cent of Australian females reported having a disability (14.4% handicapped, 3.2% disabled but not handicapped).
- The three main disabling conditions most frequently reported by females with a disability were arthritis (20.1%); disorders of the ear and mastoid process (10.8%); and other musculoskeletal disorders (10.8%).
- More females with a handicap had a profound handicap (20.4%) than their male counterparts (13.0%).
- Both women and men could expect to live about 80 per cent of their lives without disability, although women experienced more years of disability, handicap and severe handicap due to their longer life expectancy.

### **Introduction**

Data presented in this section come from the ABS Survey of Disability, Ageing and Carers conducted in 1993. For this survey, the disabled population consisted of persons who had one or more limitations, restrictions or impairments which had lasted, or were likely to last, for six months or more. A person with a handicap was defined as a person, with a disability, aged 5 years or over who was further identified as being limited to some degree in her/his ability to perform certain tasks (for detailed definitions of disability, handicap and severity of handicap, see Glossary).

Care is needed when making comparisons between people who are disabled or handicapped and the general population on the basis of variables which are likely to be correlated with disability. For example, the strong relationship between disability (and handicap) and age must be kept in mind when interpreting data for people who are disabled or handicapped, to avoid attributing to disability or handicap alone effects which may be a response to age, or to age and disability combined. Differences in the prevalence rate of disability by marital status for instance, may be at least partially due to age differences between single, married and widowed people.

### **Disability and handicap**

In 1993, 18.0 per cent of all Australians reported having a disability and 14.2 per cent a handicap (see Table 7.3.1).

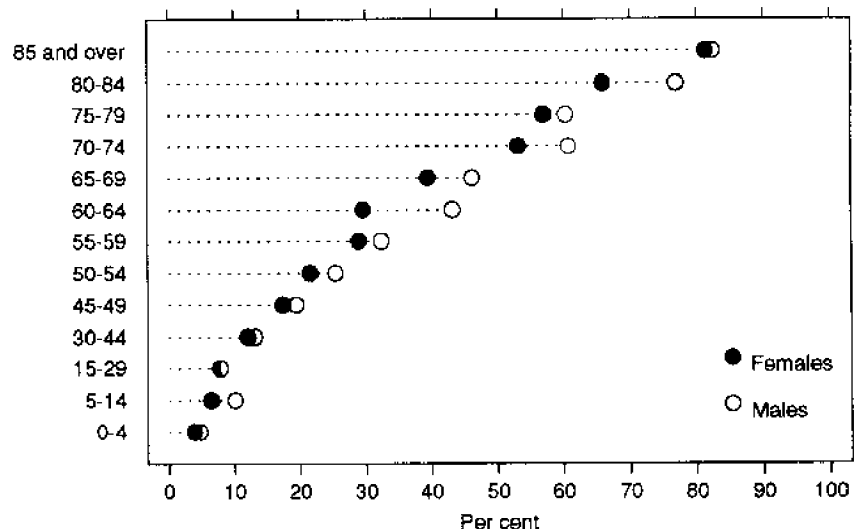
**TABLE 7.3.1 PERSONS: DISABILITY STATUS BY SEX, AUSTRALIA, 1993**

Disability status	Females	Males	Persons
NUMBER ('000)			
Disabled but not handicapped	283.8	392.6	676.4
Handicapped	1,273.5	1,226.7	2,500.2
Disabled (including handicapped)	1,557.4	1,619.3	3,176.7
Not disabled	7,288.9	7,161.5	14,450.4
<b>Total</b>	<b>8,846.2</b>	<b>8,780.8</b>	<b>17,627.1</b>
PER CENT			
Disabled but not handicapped	3.2	4.5	3.8
Handicapped	14.4	14.0	14.2
Disabled (including handicapped)	17.6	18.4	18.0
Not disabled	82.4	81.6	82.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: *Disability, Ageing and Carers, Summary of Findings, Australia, 1993 (4430.0)*

Females with a disability constituted 17.6 per cent of the total female population (14.4% handicapped, 3.2% disabled). Figures for the male population were slightly higher with 18.4 per cent of the male population being disabled (14.0% handicapped, 4.5% disabled).

The proportion of females and males with a disability varied with age. For most age groups a lower proportion of females than males had a disability (see Chart 7.3.1). This was most pronounced for the age groups 60–64 years, 65–69 years and 70–74 years.

**CHART 7.3.1 PERSONS WITH A DISABILITY AS A PERCENTAGE OF THE TOTAL POPULATION IN EACH AGE GROUP BY SEX, AUSTRALIA, 1993**

Source: *Disability, Ageing and Carers, Summary of Findings, Australia, 1993 (4430.0)*

### Main disabling conditions

A person with disabilities may have reported more than one disabling condition. The disabling condition that caused the person the most problems was defined as the main disabling condition. The three most frequently reported main disabling conditions for females were arthritis (20.1% of main disabling conditions reported by females with a disability); disorders of the ear and mastoid process (10.8%); and other musculoskeletal disorders (10.8%) (see Table 7.3.2).

**TABLE 7.3.2 PERSONS WITH A DISABILITY: TYPE OF MAIN DISABLING CONDITION(a) BY SEX, AUSTRALIA, 1993**  
(Per cent)

<i>Type of main disabling condition(a)</i>	<i>Females</i>	<i>Males</i>
Mental psychoses	2.5	1.9
Other mental disorders	9.9	8.0
<i>Total with mental disorders</i>	<i>12.4</i>	<i>9.9</i>
Disorders of the eye and adnexa	4.2	3.5
Disorders of the ear and mastoid process	10.8	17.4
Nervous system diseases	5.8	5.4
Circulatory diseases	8.1	9.3
Respiratory diseases	9.1	9.2
Arthritis	20.1	11.9
Other musculoskeletal disorders	10.8	11.8
All other diseases and conditions	18.8	21.7
<i>Total with physical conditions</i>	<i>87.6</i>	<i>90.1</i>
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>

(a) Persons with a main disabling condition who had both a mental and physical manifestation are shown against both the mental and physical components of the table although they are included only once in the total.

Source: *Disability, Ageing and Carers, Summary of Findings, Australia, 1993 (4430.0)*

People with disabilities were more likely to have physical conditions rather than mental disorders as the main disabling conditions. Of the female disabled population, physical conditions constituted 87.6 per cent of all main disabling conditions, while mental disorders constituted 12.4 per cent. Proportions were similar for males (physical conditions 90.1%, mental disorders 9.9%).

Arthritis was the most frequently reported main disabling condition for women aged 65 years and over (see Table 7.3.3).

Disorders of the eye and adnexa, circulatory diseases and arthritis were reported as a main disabling condition more frequently by females aged 65 years and over than by females aged less than 65 years. Respiratory diseases and other musculoskeletal disorders were reported as a main disabling condition more frequently by females aged less than 65 years than by females aged 65 years and over.

**TABLE 7.3.3 FEMALES WITH A DISABILITY: TYPE OF MAIN DISABLING CONDITION(a) BY AGE, AUSTRALIA, 1993**  
(Per cent)

<i>Type of main disabling condition(a)</i>	<i>Age group (years)</i>	
	<i>Less than 65</i>	<i>65 and over</i>
Mental psychoses	*1.7	*3.8
Other mental disorders	14.0	3.8
<i>Total with mental disorders</i>	15.7	7.5
Disorders of the eye and adnexa	*2.4	6.8
Disorders of the ear and mastoid process	11.2	10.1
Nervous system diseases	6.7	4.5
Circulatory diseases	*4.5	13.3
Respiratory diseases	12.1	4.8
Arthritis	13.6	29.5
Other musculoskeletal disorders	13.7	6.7
All other diseases and conditions	20.1	*16.8
<i>Total with physical conditions</i>	84.3	92.4
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>

(a) Persons with a main disabling condition who had both a mental and physical manifestation are shown against both the mental and physical components of the table although they are included only once in the total.

Source: *Disability, Ageing and Carers, Summary of Findings, Australia, 1993 (4430.0)*

### Living arrangements

Of females with a disability 93.3 per cent lived in private households, while the remainder lived in health establishments. In comparison, 96.7 per cent of males with a disability lived in private households. The proportion of females with a disability residing in private households decreased with age, from 99.0 per cent at age 15–29 to 52.2 per cent by age 85 years and over.

A large proportion of females with a disability residing in households were married (46.0%), while 21.9 per cent were widowed. In comparison, of the disabled male population living in households, 58.7 per cent were married and only 5.1 per cent were widowed.

Females disabled by a mental disorder were more likely to live in health establishments (19.1% of females with a mental disorder) than females with a physical condition (6.8%) (see Table 7.3.4).

**TABLE 7.3.4 PERSONS WITH A DISABILITY: TYPE OF RESIDENCE BY SEX AND TYPE OF DISABILITY, AUSTRALIA, 1993**

<i>Type of residence</i>	<i>Females</i>		<i>Males</i>	
	<i>Number ('000)</i>	<i>Per cent</i>	<i>Number ('000)</i>	<i>Per cent</i>
<b>MENTAL DISORDERS</b>				
Households	259.3	81.0	230.1	87.3
Health establishments	61.0	19.1	33.5	12.7
<i>Total</i>	<i>320.2</i>	<i>100.0</i>	<i>263.6</i>	<i>100.0</i>
<b>PHYSICAL CONDITIONS</b>				
Households	1,361.6	93.2	1,483.7	96.7
Health establishments	100.1	6.8	50.3	3.3
<i>Total</i>	<i>1,461.6</i>	<i>100.0</i>	<i>1,534.1</i>	<i>100.0</i>
<b>TOTAL DISABLED</b>				
Households	1,452.9	93.3	1,565.5	96.7
Health establishments	104.5	6.7	53.8	3.3
<b>Total(a)</b>	<b>1,557.4</b>	<b>100.0</b>	<b>1,619.3</b>	<b>100.0</b>

(a) Total is less than the sum of the components since persons may have more than one disabling condition.

Source: *Disability, Ageing and Carers, Summary of Findings, Australia, 1993 (4430.0)*

People with a disability who were living in health establishments were much more likely than those in households to need help from another person (86.2% compared with 49.0%). The proportion of females with a disability living in a household reporting a need for help increased with age, rising from 38.1 per cent of females at age 5–14 years to 96.7 per cent by age 85 years and over.

Of those with a disability living in a household, a higher proportion of females (60.3%) than males (38.5%) reported a need for help. Of those needing help, higher proportions of females than males required help with mobility, home help, home maintenance and transport. Home maintenance, home help and transport were the activities for which the need for help was most frequently reported by both females and males who were living in a household.

Focussing on the handicapped population, 92.5 per cent of females with a handicap lived in households. This proportion decreased with age as an increasing proportion of females with a handicap moved into health establishments as they got older. The proportion of females with a handicap who were living in health establishments generally increased with age, peaking at 47.4 per cent of those aged 85 years and over.

Females constituted 67.1 per cent of people with a handicap living in health establishments. Of the handicapped female population living in health establishments 68.4 per cent were widowed and 9.1 per cent were married. Of males with a handicap living in health establishments 27.9 per cent were widowed and 27.7 per cent were married. This is partly a function of females having a longer life-span than males.

### Severity of handicap

A higher proportion of females than males were categorised as either severely handicapped (13.2% compared with 10.9% respectively) or profoundly handicapped (20.4% compared with 13.0% respectively) (see Table 7.3.5). This is partly a function of females having a longer life expectancy than males, as there is a relationship between severity of handicap and age. While 44.4 per cent of females with a profound handicap were aged 75 years and

over, only 27.9 per cent of males with a profound handicap were in this age bracket.

**TABLE 7.3.5 PERSONS WITH A HANDICAP: SEVERITY OF HANDICAP BY SEX, AUSTRALIA, 1993**

<i>Severity of handicap</i>	<i>Females</i>		<i>Males</i>	
	<i>Number ('000)</i>	<i>Per cent</i>	<i>Number ('000)</i>	<i>Per cent</i>
Profound	259.9	20.4	160.0	13.0
Severe	167.6	13.2	133.5	10.9
Moderate	229.2	18.0	226.2	18.4
Mild	459.6	36.1	482.1	39.3
Not determined(a)	157.1	12.3	224.8	18.3
<b>Total</b>	<b>1,273.5</b>	<b>100.0</b>	<b>1,226.7</b>	<b>100.0</b>

(a) Comprises all children with a disability aged 0-4 years, and persons who had a schooling or employment limitation only and persons whose only limitation was 'does not use the toilet'.

Source: *Disability, Ageing and Carers, Summary of Findings, Australia, 1993 (4430.0)*

### Health expectancy

Health expectancies are an indicator of the average number of years a person of a given sex and age group may expect to live in various health states. For example, overall life expectancy may be broken down into components of years of disability-free life and years of disabled life. This provides a method of determining whether a population is "living longer but sicker" (Mathers, 1991, p36).

It must be emphasised that health expectancies at any given age are average estimates for the entire population, including persons already disabled at the given age.

Mathers (1994) stated that in 1992, total life expectancy at birth was 80.4 years for females and 74.5 years for males. Disability-free life expectancy at birth in 1992 was 64.0 years for females and 58.2 years for males. A further 16.4 years of life could be expected by females but these would probably be years of disability. Of these disabled years, 13.7 would be expected years of handicap and 5.6 of the handicapped years would be expected to be of severe, or profound handicap. Males, in contrast, could expect to live another 16.3 years of disability, of which 12.4 years would be expected years of handicap and of the handicapped years 3.3 years would be expected to be of severe or profound handicap. In other words, both women and men could expect to live about 80 per cent of their lives without disability, although women could expect more years of disability, handicap and severe handicap due to their longer life expectancy.

The proportion of remaining life spent free of disability drops rapidly with increasing age to below 50 per cent by age 65 years for both women and men (46.9% for women and 41.6% for men). By age 65 years, disability-free life expectancy was 9.0 years for women and 6.4 years for men, plus an additional 10.2 and 9.0 years respectively where disability would expect to be experienced (see Table 7.3.6).

**TABLE 7.3.6 PERSONS: DISABILITY-FREE LIFE EXPECTANCY AND EXPECTATION OF YEARS OF DISABILITY, AGE BY SEX, AUSTRALIA, 1993(a)**

Age	Disability-free life expectancy		Expectation of years of disability	
	Years	Per cent	Years	Per cent
FEMALES				
0	64.0	79.6	16.4	20.4
65	9.0	46.9	10.2	53.1
MALES				
0	58.2	78.1	16.3	21.9
65	6.4	41.6	9.0	58.4

(a) Preliminary estimates for 1993, based on 1992 life table data.

Source: Mathers, C. (1994) Trends in Health expectancies in Australia 1981 - 1993, Paper presented to the Seventh National Conference of the Australian Population Association, 21-23 September, ANU, Canberra

### Carers of the handicapped in the home

The 1993 ABS Survey of Disability Ageing and Carers found that 301,000 people with a severe handicap and 296,300 people with a profound handicap were living in households in Australia in 1993. Under the definition of severity of handicap used, the severely handicapped sometimes required personal help or supervision to perform one or more tasks, whilst those with a profound handicap always required personal help or supervision. Moderately and mildly handicapped people were able to perform tasks with no help or supervision. Carers provide help or supervision to people with a severe or profound handicap.

In this Survey, to identify carers, people with a handicap who required help were asked to identify the person who usually provided this help. If they had more than one helper, they were asked to identify the helper who was the most important. If the helper lived with the person and was aged 15 years or more they were defined as the principal carer. If, however, the helper was not resident with the person and was aged less than 15 years, then no carer was identified.

No data exist from the 1993 survey which specifically relate to carers' health status. However, the survey did collect data which may be indicative. These include information about the effects of the caring role (on the physical and emotional wellbeing of the carer, for instance), the carer's need for help/or more help to care for the recipient, the length of time spent with/or away from the handicapped person, and the carer's income.



**TABLE 7.3.7 ALL PRINCIPAL CARERS OF USUAL RESIDENTS:  
RELATIONSHIP OF CARER TO MAIN RECIPIENT BY AGE OF CARER,  
AUSTRALIA, 1993  
(<sup>'000</sup>)**

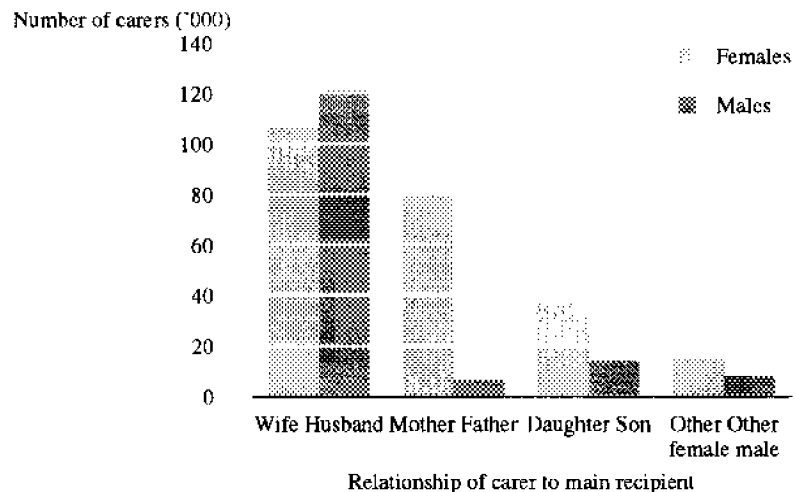
Relationship of carer to main recipient	Age of carer (years)					Total
	15-29	30-44	45-59	60-74	75 and over	
Wife/female partner	*6.1	14.0	30.1	37.9	18.9	107.1
Husband/male partner	*7.9	27.2	32.5	36.5	16.7	120.8
Mother	*5.5	47.7	17.8	*7.6	**	80.1
Father	**	*3.0	**	**	**	*6.8
Daughter	*6.6	*6.0	17.5	*7.0	**	37.1
Son	*6.5	*2.6	*3.8	**	**	14.3
Other relative/friend —						
female	*4.2	*3.0	*5.3	**	**	14.7
male	**	**	**	*3.4	**	8.1
<b>Total</b>	<b>38.0</b>	<b>104.5</b>	<b>110.2</b>	<b>96.6</b>	<b>39.7</b>	<b>388.9</b>

Source: Survey of Disability, Ageing and Carers, 1993, preliminary data

The relationship between the provider and the recipient of care shows the predominance of women as carers (61.5%). Mothers were nearly twelve times more likely than fathers to be nominated as the most important provider of care to a son or daughter with a handicap (see Table 7.3.7).

Similarly, for carers providing help to their parents, the principal carer was more than twice as likely to have been a daughter than a son. Spouse carers were nearly equally divided between females and males (47.0% were wives, 53.0% were husbands) (see Chart 7.3.2).

**CHART 7.3.2 PRINCIPAL CARERS OF USUAL RESIDENTS:  
RELATIONSHIP OF CARER TO MAIN RECIPIENT, AUSTRALIA, 1993**



Source: Survey of Disability, Ageing and Carers, 1993, preliminary data

The largest category of principal carer was the spouse carer, accounting for 58.6 per cent of all principal carers. The next most common relationship was a parent caring for a son or daughter with a handicap (22.3%) followed by a person caring for their handicapped parent (13.2%).

## **GLOSSARY**

### **Disability**

A person with a disability was defined as a person who had one or more of the following limitations, restrictions or impairments which had lasted, or were likely to last, for six months or more:

- loss of sight (even when wearing glasses or contact lenses);
- loss of hearing;
- speech difficulties in native language;
- blackouts, fits, or loss of consciousness;
- slowness at learning or understanding;
- incomplete use of arms or fingers;
- difficulty gripping or holding small objects;
- incomplete use of feet or legs;
- treatment for nerves or an emotional condition;
- restriction in physical activities or in doing physical work;
- disfigurement or deformity;
- long-term effects of head injury, stroke or any other brain damage;
- a mental illness requiring help or supervision;
- treatment or medication for a long-term condition or ailment and still restricted; and
- any other long-term condition resulting in a restriction.

Persons with a disability under 5 years of age were all regarded as being handicapped, but the specific aspects of their handicap were not determined.

### **Handicap**

Handicap refers to the restrictions that impairments and disabilities place on the performance of basic social roles and on interaction with one's environment. A person with a handicap was defined as a person with a disability aged 5 years or over who was further identified as being limited to some degree in her/his ability to perform certain tasks in relation to one or more of the following:

- (a) self care;
- (b) mobility;
- (c) verbal communication;
- (d) schooling; and/or
- (e) employment (not asked of those in health establishments).

### **Severity of handicap**

Four levels of severity were determined for each of three areas of handicap: self care, mobility and verbal communication. These levels were based on the person's ability to perform tasks relevant to these three areas and on the

amount and type of help required. For each area of handicap, the levels of severity were as follows:

- profound handicap — personal help or supervision always required;
- severe handicap — personal help or supervision sometimes required;
- moderate handicap — no personal help or supervision required, but the person had difficulty in performing one or more of the tasks;
- mild handicap — no personal help or supervision required and no difficulty in performing any of the tasks, but the person used an aid, or had a mild mobility handicap or could not easily pick up an object from the floor.

The highest level of severity in any one of the areas of self care, mobility and verbal communication determined the severity of total handicap for people with a handicap.

Severity of handicap in each area and in total was not determined for children aged less than 5 years because the questions were inappropriate for young children. Severity was also not determined for those people with only an employment or schooling limitation.

## REFERENCES

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- *Disability, Ageing and Carers, Summary of Findings, Australia, 1993* (4430.0).

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01

## **OLDER WOMEN**

### **Main findings**

- In 1991, 11.3 per cent of the Australian population were aged 65 years or over.
- Over half (57.2%) of those aged 65 years or over were women.
- In 1989–90, 59.7 per cent of women aged 65–74 years and 52.5 per cent of women aged 75 years or over rated their health as excellent or good.
- Older women had fewer hospital episodes than older men but tended to stay longer.
- More than one in three (35.6%) women aged 65 years or over consulted a doctor in the two weeks prior to interview.
- In 1991, approximately 7 out of 10 residents of nursing homes were female.
- Incontinence is a major contributing factor to the institutionalisation of older women.
- Of the population aged 65 years or more, 5.5 per cent suffer from dementia. After the age of 65 years, the prevalence rate of dementia doubles every 5.1 years of age.
- Of women aged 65 years or over, almost half (47.8%) reported having arthritis in 1989–90.
- 67.9 per cent of women aged 65 years or over reported having disorders of refraction and accommodation.
- Of females who had heart disease, almost 70 per cent (69.1%) were aged 65 years or over.
- Over half (51.7%) of females with diabetes mellitus were aged 65 years or over.
- Deaths of females aged 65 years or more accounted for 80.9 per cent of all female deaths in 1991.
- The leading cause of death for women aged 65 years or over in 1991 was diseases of the circulatory system (this was also the leading cause for men aged 65 years or more).

The health of older women was identified as a major issue in the National Women's Health Policy (Commonwealth Department of Community Services and Health, 1989). Older people may face problems such as isolation, loneliness, chronic illness, difficulties with mobility, and reduced manual and mental dexterity. "The problems of ageing are the result of the following factors:

- lessening of physical strength and dexterity;
- deterioration of mental processes;
- organic degenerative diseases;
- social problems such as difficulties with money, loss of companionship, and the burden placed on those who provide care"

(Better Health Commission, 1986, p37).

Income may impact on health in a number of ways, for example access to adequate housing, the ability to maintain a healthy diet and the ability to buy health goods and services. In 1988–89, the majority of persons aged 65 years or over within a household (69.2%) received a government pension or benefit as the principal source of income. The average weekly income for a household where the reference person was aged 65 years or more was \$323.01, which was less than any other age group.

In 1991, 11.3 per cent of the Australian population were aged 65 years or over. Of these, 57.2 per cent were women. Assuming high fertility and high overseas migration it is projected that by the year 2031, 20.1 per cent of the population will be aged 65 years or over and 54.6 per cent of these will be women.

As age increases the proportion of women to men increases. In 1991, women outnumbered men in each of the older age groups (see Table 7.4.1).

**TABLE 7.4.1 POPULATION AGED 65 YEARS AND OVER: AGE BY SEX, AUSTRALIA, 1991**

<i>Age group (years)</i>	<i>Number of females</i>	<i>Number of males</i>	<i>Number of persons</i>	<i>Proportion of females (Per cent)</i>
65–69	341,855	309,891	651,746	52.5
70–74	277,200	224,034	501,234	55.3
75–79	221,053	155,670	376,723	58.7
80–84	142,547	82,776	225,323	63.3
85–89	72,974	33,707	106,681	68.4
90 and over	35,239	10,210	45,449	77.5
<b>Total 65 and over</b>	<b>1,090,868</b>	<b>816,288</b>	<b>1,907,156</b>	<b>57.2</b>

*Source: 1991 Census*

Women have a longer life expectancy than men. In the older age groups (65 years or over) women tend to outlive their husbands and are more likely to live alone. A woman aged 65 years in 1991 can expect to live another 19.3 years while a man the same age can expect another 15.5 years of life. For further information on life expectancy see Chapter 2.

**Health status**

Information in this section is from the ABS 1989–90 National Health Survey.

**Long-term conditions**

The proportion of people reporting one or more long-term conditions increased with age. In the 65 years and over age group, 95.3 per cent of females reported one or more long-term conditions. A similar proportion of males in this age group reported long-term conditions (95.2%) (see Table 7.4.2).

The five most frequently reported long-term conditions for women aged 65 years or over, in descending order, were:

- diseases of the nervous system and sense organs;
- diseases of the musculoskeletal system and connective tissue;
- diseases of the circulatory system;
- diseases of the respiratory system; and
- endocrine, nutritional and metabolic diseases and immunity disorders.

**TABLE 7.4.2 PERSONS AGED 65 YEARS AND OVER: THE MOST FREQUENTLY REPORTED LONG-TERM CONDITIONS BY SEX AND AGE, AUSTRALIA, 1989-90 (Per cent)**

<i>Long-term condition(a)</i>	<i>Females</i>			<i>Males</i>
	<i>65-74 years</i>	<i>75 years and over</i>	<i>65 years and over</i>	<i>65 years and over</i>
Diseases of the nervous system and sense organs	78.3	78.7	78.5	79.4
Diseases of the musculoskeletal system and connective tissue	55.8	59.5	57.3	49.3
Diseases of the circulatory system	46.5	51.9	48.6	40.3
Diseases of the respiratory system	20.8	15.5	18.7	22.6
Endocrine, nutritional and metabolic diseases and immunity disorders	16.9	11.5	14.8	14.2
<b>Total reporting long-term conditions</b>	<b>94.5</b>	<b>96.4</b>	<b>95.3</b>	<b>95.2</b>

(a) Persons may have reported more than one long-term condition.

Source: ABS National Health Survey 1989-90

#### Recent illnesses

As age increased the proportion of people reporting a recent illness also increased. In the 65 years and over age group, 91.5 per cent of women reported one or more recent illnesses. A slightly lower proportion of males in this age group reported recent illness (86.9%) (see Table 7.4.3).

The five most frequently reported recent illnesses for women aged 65 years and over, in descending order, were:

- diseases of the circulatory system;
- diseases of the musculoskeletal system and connective tissue;
- symptoms, signs and ill-defined conditions;
- diseases of the digestive system; and
- diseases of the respiratory system.

**TABLE 7.4.3 PERSONS AGED 65 YEARS AND OVER: THE MOST FREQUENTLY REPORTED RECENT ILLNESSES BY SEX AND AGE, AUSTRALIA, 1989-90 (Per cent)**

<i>Recent illness(a)</i>	<i>Females</i>			<i>Males</i>
	<i>65-74 years</i>	<i>75 years and over</i>	<i>65 years and over</i>	<i>65 years and over</i>
Diseases of the circulatory system	52.3	63.6	56.8	46.8
Diseases of the musculoskeletal system and connective tissue	35.5	42.1	38.1	28.0
Symptoms, signs and ill-defined conditions	32.1	36.4	33.8	21.5
Diseases of the digestive system	23.5	26.5	24.7	22.1
Diseases of the respiratory system	20.0	16.9	18.8	21.7
<b>Total reporting recent illnesses</b>	<b>90.8</b>	<b>92.7</b>	<b>91.5</b>	<b>86.9</b>

(a) Persons may have reported more than one recent illness.

Source: ABS National Health Survey 1989-90



**Self assessed health status** While those aged 65 years or over did not assess their health as positively as all Australians 18 years and over, a majority of older Australians considered themselves to be in excellent or good health. Of women aged 65–74 years, 59.7 per cent reported their health as excellent or good, compared with 56.2 per cent of men in this age group. In the 75 years and over age group, the proportion of women who rated their health as being excellent or good dropped slightly to 52.5 per cent. For men in this age group the proportion remained steady at 56.3 per cent. In both age groups a lower proportion of women than men assessed their health as poor (10.3% of women aged 65–74 years and 13.4% of women aged 75 years or more, compared with 13.0% and 14.6% respectively for men) (see Table 7.4.4).

**TABLE 7.4.4 PERSONS: SELF ASSESSED HEALTH STATUS BY SELECTED AGE GROUPS AND SEX, AUSTRALIA, 1989–90 (Per cent)**

<i>Self assessed health status</i>	<i>Age group (years)</i>		
	<i>65–74</i>	<i>75 and over</i>	<i>18 and over</i>
<b>FEMALES</b>			
Excellent	14.6	13.5	28.6
Good	45.1	39.0	49.7
Fair	30.0	34.1	17.0
Poor	10.3	13.4	4.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>MALES</b>			
Excellent	13.6	12.5	29.8
Good	42.7	43.8	50.3
Fair	30.8	29.1	15.5
Poor	13.0	14.6	4.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Source: ABS National Health Survey 1989–90*

**Health actions** Information in this section is from the ABS National Health Survey 1989–90.

**Hospital episodes** Of women aged 65 years or over, 20.4 per cent reported a hospital in-patient episode within the 12 months prior to interview. Women aged 75 years or over (24.6%) were more likely to report hospitalisation than those in the 65–74 years age group (17.6%). By comparison, the proportion of all females to report a hospital in-patient episode was 15.7 per cent.

Older women were less likely than older men to have had a hospital in-patient episode in the twelve months prior to interview. Of men aged 65 years or over, 24.7 per cent reported a hospital in-patient episode.

Older women were more likely to have multiple hospital visits than women in other age groups. Of those women aged 65 years or over who were hospitalised, 29.7 per cent had more than one hospital episode in the twelve months prior to interview. Men aged 65 years or over were more likely than women of the same age to have multiple hospital episodes. Of those men in this age group who were hospitalised, 34.7 per cent had more than one episode in the twelve months prior to interview.

Older women were also more likely to stay longer in hospital than those in younger age groups. Just under half (48.5%) the women aged 65 years or over

who were hospitalised reported that the length of their most recent stay exceeded a week compared with 20.8 per cent for females aged less than 65 years. The same was true for men. Slightly more older women stayed longer in hospital than older men. Of men aged 65 years or over who were hospitalised, 45.7 per cent reported that the length of their most recent stay was one week or more.

#### Doctor consultations

More than one in three (35.6%) women aged 65 years or over reported a doctor consultation in the two weeks prior to interview. For women aged 75 years or over, the proportion (38.6%) was slightly higher than for those aged 65–74 years (33.6%). For females of all ages, by comparison, 23.2 per cent visited a doctor in the two weeks prior to interview.

Older women were more likely to have visited a doctor in the two weeks prior to interview than their male counterparts. Of men aged 65 years or over, 31.8 per cent reported consulting a doctor in the two weeks prior to interview.

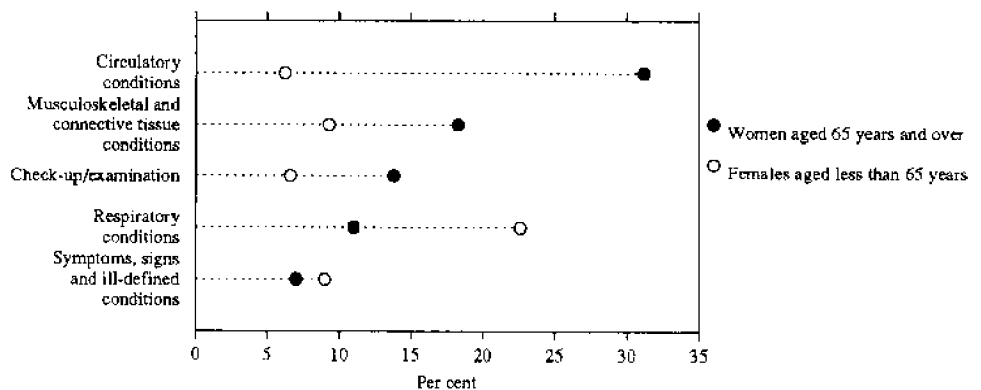
In the twelve months prior to interview 93.4 per cent of women aged 65 years or over had visited a doctor, compared with 91.9 per cent of men in this age group. Women aged 75 years and over (95.5%) were slightly more likely to have visited a doctor in the last twelve months than those aged 65–74 years (92.1%). For females of all ages, 86.4 per cent consulted a doctor in the twelve months prior to interview.

The most common reasons for women aged 65 years or over to consult a doctor in the two weeks prior to interview (based on the most recent consultation) were:

- diseases of the circulatory system (31.2%);
- diseases of the musculoskeletal system and connective tissue (18.3%);
- check-up/examination (13.8%);
- diseases of the respiratory system (11.0%); and
- symptoms, signs and ill-defined conditions (7.0%).

These percentages differ quite markedly in comparison with the reasons women aged less than 65 years consulted a doctor (see Chart 7.4.1).

CHART 7.4.1 FEMALES: REASONS<sup>(a)</sup> FOR MOST RECENT DOCTOR CONSULTATION IN TWO WEEKS PRIOR TO INTERVIEW, AUSTRALIA, 1989-90

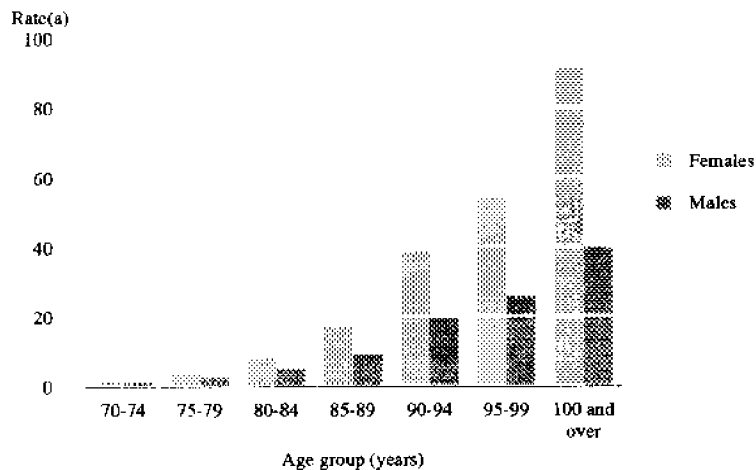


(a) Persons may have reported more than one reason for consultation.

Source: ABS National Health Survey 1989-90

- Dental consultations** Only 3.4 per cent of older women (aged 65 years or over) had a dental consultation in the two weeks prior to interview compared with 6.0 per cent of females aged less than 65 years.
- In the older age groups, a large proportion of women had dentures or false teeth (83.9% of women aged 65–74 years and 92.0% of women aged 75 years or over). The proportions of older men, in these two age groups, with dentures or false teeth were 73.6 per cent and 84.7 per cent respectively. For further information see Chapter 5.
- Consultations with health professionals other than doctors or dentists** In the two weeks prior to interview 13.2 per cent of women aged 65 years or over consulted a health professional other than a doctor or a dentist. Women aged 75 years or over (15.2%) were more likely to consult these health professionals than those aged 65–74 years (11.9%). Of all females, by comparison, 10.7 per cent had consulted a health professional other than a doctor or a dentist in the two weeks prior to interview.
- Older women were more likely than older men to consult these health professionals. In the two weeks prior to interview 10.0 per cent of men aged 65 years or over had done so.
- Women aged 65 years or over who consulted a health professional (other than a doctor or a dentist) in the two weeks prior to interview were most likely to consult a chiropodist or podiatrist (25.8%) or an optician (25.3%). In addition, 18.3 per cent consulted a physiotherapist, 11.4 per cent consulted a nurse and 10.6 per cent consulted a chemist.
- Nursing homes** The most comprehensive data available regarding nursing homes are compiled annually by the Department of Health, Housing, Local Government and Community Services from the nursing home payment system.
- At 30 June 1991 there were 1,439 registered nursing homes for the aged containing 73,220 beds and 1,098 hostels containing 45,827 beds.
- Resident characteristics** There were 71,440 residents registered in nursing homes at 30 June 1991. The majority of residents were aged 70 years or over (89.1%). Females comprised 72.5 per cent of all residents in nursing homes. Women over the age of 70 years were more likely than their male counterparts to be residents in nursing homes. For the age group 85 years and over, the rate of female residency was approximately double the male rate.
- The proportion of the population in nursing homes increased with age. For women aged 70–74 years, 1.2 per cent were residents. This increased to 91.5 per cent of all women aged 100 years or over. For men, the proportion in each age group was lower, ranging from 1.1 per cent for those aged 70–74 years to 40.4 per cent for those aged 100 years or over (see Chart 7.4.2).

CHART 7.4.2 PROPORTION OF THE POPULATION AGED 70 YEARS AND OVER WHO ARE NURSING HOME RESIDENTS(a): BY AGE AND SEX, AUSTRALIA, 1990-91



(a) Per 100 population in the same age group and of the same sex.  
 Source: Commonwealth Department of Health, Housing and Community Services Nursing Homes for the Aged - A Statistical Overview 1990-91. ABS Estimated Resident Population 30 June 1991

#### Care needed

A dependency category is derived by the Department of Health, Housing, Local Government and Community Services, for funding purposes. This dependency category is calculated for non-government nursing home residents by weighting specific conditions requiring care and the level of care required for each condition (such as continence and mobility), then categorising as one of five general levels. Level one refers to most dependent and level five refers to least dependent.

Both female and male residents in non-government nursing homes were most likely to fall into categories 2 and 3. There were no noticeable differences between female and male care needs (see Table 7.4.5).

TABLE 7.4.5 NON-GOVERNMENT NURSING HOME RESIDENTS: SEX BY CATEGORY OF CARE NEEDED, AUSTRALIA, 1990-91 (Per cent)

	Level of care category					Total
	1	2	3	4	5	
Females	5.5	29.1	38.0	18.9	8.5	100.0
Males	6.4	28.6	34.4	19.7	10.9	100.0
Persons	5.7	29.0	37.1	19.1	9.1	100.0

Source: Commonwealth Department of Health, Housing and Community Services, Nursing Homes for the Aged - A Statistical Overview, 1990-91

For definitions of nursing homes for the aged, government and non-government nursing homes and hostels, see Glossary.

#### Home and Community Care (HACC)

The Home and Community Care (HACC) Program administered by the Department of Health, Housing, Local Government and Community Services provides one or more services to about 215,000 clients each month. A HACC User Characteristics Survey conducted in 1990 found that 80 per cent of these clients were aged 65 years or over, 74 per cent of whom were women. The services most utilised by people aged 65 years or over are home meals, home maintenance, home help, home nursing and centre meals (see Table 7.4.6).

**TABLE 7.4.6 HACC CLIENTS: TYPE OF SERVICE RECEIVED BY SELECTED AGE GROUPS, AUSTRALIA, 1990 (Per cent)**

Type of service	Age group (years)(a)		Proportion aged 65 years and over(b)
	65-79	80 and over	
Home help	68	74	83
Home nursing	29	35	83
Home paramedical	10	10	78
Centre paramedical	6	6	76
Home respite care	3	3	44
Centre day care	20	19	79
Home meals	25	37	92
Centre meals	6	6	83
Home maintenance	17	17	84
Transport	32	32	78
Program information	40	40	78
Other home services	9	9	73
Other centre services	3	3	52

(a) Proportion of clients of the same age receiving services. (b) Proportion of all clients receiving services who were aged 65 years or more.

Source: Commonwealth Department of Health, Housing and Community Services, HACC User Characteristics Survey 1990

**Lifestyle**

For information on smoking, alcohol consumption, use of sunscreens, exercise, diet and nutrition, cholesterol and triglycerides, body mass index, time use and drug and medication use, see Chapter 5.

**Specific health issues for older women**

**Osteoporosis**

Osteoporosis is the gradual decrease in bone density due to loss of bone minerals, particularly calcium. As the bones become frail the risk of bone fracture increases (especially spine, hip and wrist fractures).

Osteoporosis is a major underlying cause of bone fractures in postmenopausal women and older persons in general. It has been suggested that, by the age of 70 years, as many as 25 per cent of Australian women will have had one hospital admission for a fracture of the spine, or an upper or lower limb (Eisman and Sambrook, 1985, cited in National Health Technical Advisory Panel, 1986).

From the age of approximately 35 years, bones begin to slowly lose calcium. Women and men of the same age generally lose calcium at the same rate until women reach menopause, when calcium loss occurs at a far greater rate for women than men of the same age. During menopause, hormonal changes, especially the decrease in oestrogen, increase the loss of calcium. Postmenopausal women are therefore particularly at risk of osteoporotic fracture. The risk increases with age.

There is insufficient information available on the incidence of osteoporosis in Australia. Many people are unaware that they have the condition until a fracture occurs from an otherwise harmless fall or incident. Bone density testing is one determinant of osteoporotic fracture. A bone density study of

persons aged 60 years or over residing in Dubbo is presently being undertaken by the Garvan Institute of Medical Research.

- Incontinence** Urinary incontinence is a condition in which the inability to control the passing of urine is a social or hygienic problem (Bates, Bradley, Glen et al., 1979, cited in O'Connell, MacGregor and Russell, 1992). It deprives the affected person of their dignity and independence and is a major contributing factor to the institutionalisation of older people (Health Targets and Implementation (Health for All) Committee, 1988). Few incontinence epidemiology studies have been undertaken in Australia and no comprehensive national figures on its prevalence exist.
- Pneumonia** In 1991, 876 women aged 65 years or over died of pneumonia. This accounted for 91.7 per cent of all female deaths due to pneumonia in 1991. The death rates for older women (8.0 per 10,000 women aged 65 years or over) were similar to those for older men (7.6 per 10,000 men aged 65 years or over) (ABS Cause of Death data 1991).
- Influenza** In 1991, 35 women aged 65 years or over died of influenza. This accounts for over 90 per cent of all female deaths due to influenza in 1991. However, while the elderly are more likely to die of influenza than younger age groups, data from the 1989–90 National Health Survey indicate that only 2.4 per cent of women aged 65 years or over and 2.3 per cent of men in this age group reported influenza as a recent and/or long-term condition, compared with 3.1 per cent of all females and 2.9 per cent of all males.
- Bronchitis and emphysema** Older women are more likely to experience bronchitis and emphysema and are more likely to die from these conditions than those in younger age groups.
- From the 1989–90 National Health Survey, 5.9 per cent of women aged 65 years or over reported bronchitis and emphysema as a recent and/or long-term condition, compared with 3.5 per cent of all women. Women aged 65 years or over were less likely to report these conditions than their male counterparts (10.0%).
- 311 women aged 65 years or over died of bronchitis and emphysema in 1991, accounting for 82.1 per cent of all female deaths from these diseases. The 1991 death rate for bronchitis and emphysema for women aged 65 years or over was 2.8 per 10,000 women compared with 8.3 per 10,000 men, for men of the same age.
- Neoplasms** In 1991 9,196 women aged 65 years or over died of malignant neoplasms, accounting for 67.1 per cent of all female deaths from these conditions.
- From the 1989–90 National Health Survey, of women aged 65 years or over, 6.5 per cent reported neoplasms as a recent and/or long-term condition, compared with 2.3 per cent of all females. Men aged 65 years or over were more likely to report these conditions (10.3%) than women in the same age group.

Dementia.

Dementia, as defined by the World Health Organization,

"is a syndrome due to disease of the brain, usually of a chronic or progressive nature, in which there is disturbance of multiple higher cortical functions, including memory, thinking, orientation, comprehension, calculation, learning capacity, language and judgement. Consciousness is not clouded. The impairments of cognitive function are commonly accompanied, and occasionally preceded, by deterioration in emotional control, social behaviour, or motivation. This syndrome occurs in Alzheimer's disease, in cerebrovascular disease, and in other conditions primarily or secondarily affecting the brain (World Health Organization, 1992, p312)".

There have been numerous studies of dementia reported world-wide. A statistical model derived by Jorm, Korten and Henderson (1987, cited in Jorm and Henderson, 1990) integrated 22 studies and reflected the average prevalence rates reported in them. Dementia is age related. As age increases, the prevalence rate of the syndrome rises sharply. This rate was found to double with every 5.1 years of age. No differences were found between female and male prevalence rates. Jorm and Henderson applied their derived prevalence rates to the population of Australia (Jorm and Henderson, 1990).

In Table 7.4.7 these prevalence rates are applied to Australian 1991 population figures. The results indicate that there were an estimated 105,422 moderate to severe dementia sufferers aged 65 years or more. This was 5.5 per cent of the population aged 65 years or more.

**TABLE 7.4.7 ESTIMATED MODERATE TO SEVERE DEMENTIA SUFFERERS FOR SELECTED AGE GROUPS, AUSTRALIA, 1991**

<i>Age group (years)</i>	<i>Prevalence rates(%) (a)</i>	<i>Population 1991 (b)</i>	<i>Estimated dementia sufferers</i>
65-69	1.42	651,746	9,255
70-74	2.82	501,234	14,135
75-79	5.60	376,723	21,096
80-84	11.11	225,323	25,033
85 and over	23.60	152,130	35,903
<b>65 and over</b>		<b>1,907,156</b>	<b>105,422</b>

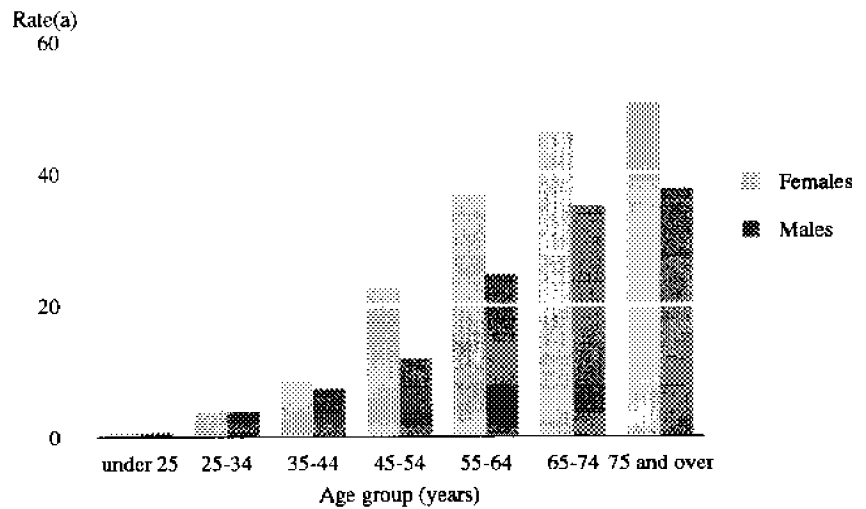
(a) Prevalence rates from Jorm, Korten and Henderson (1987, cited in Jorm and Henderson, 1990). (b) 1991 Census Population.

Source: Adapted from Jorm, A.F. and Henderson, A.S. (1990) *The Problem of Dementia in Australia*, Commonwealth Department of Community Services and Health, Canberra. 1991 Census

Arthritis and rheumatism

From the 1989-90 National Health Survey, of those who reported arthritis as a recent and/or long-term condition, 41.9 per cent were aged 65 years or over. The prevalence of arthritis increases with age and, in all age groups over 5 years of age, females are more likely to experience arthritis than males (see Chart 7.4.3). Of women aged 65 years or over, almost half (47.8%) reported arthritis as a recent and/or long-term condition. In the age group 65-74 years, 46.1 per cent of women reported arthritis as a recent and/or long-term condition, while in the age group 75 years and over, 50.4 per cent of women reported the condition. This is compared with 35.0 per cent and 37.6 per cent respectively of men in these age groups.

CHART 7.4.3 PROPORTION OF POPULATION WHO REPORTED ARTHRITIS AS A RECENT AND/OR LONG-TERM CONDITION(a): BY AGE AND SEX, AUSTRALIA, 1989-90



(a) Per 100 population in the same age group and of the same sex.  
Source: ABS National Health Survey 1989-90

The prevalence of rheumatism increases with age. Of those who reported rheumatism as a recent and/or long-term condition, 46.3 per cent were aged 65 years or over. Women aged 65 years or over (4.4%) were slightly more likely to experience rheumatism than their male counterparts (3.7%).

#### Insomnia

From the 1989-90 National Health Survey, 17.3 per cent of women aged 65 years or over reported insomnia as a recent and/or long-term condition, accounting for over half (54.3%) of all females who reported this condition. Women aged 65 years or over were more likely to experience insomnia than their male counterparts (10.3%). These rates were over four times the rates for the total population (4.1% of females and 2.1% of males).

#### Deafness

From the 1989-90 National Health Survey, 10.1 per cent of women aged 65 years or over reported deafness as a recent and/or long-term condition, compared with 19.3 per cent of men in this age group. These rates were markedly higher than the rates for the total population (3.0% of females and 5.2% of males). As discussed in Chapter 8, industrial deafness was more prevalent in men. This increased with age.

#### Eye problems

Results from the 1989-90 National Health Survey indicate that 67.9 per cent of women aged 65 years or over reported disorders of refraction and accommodation as a recent and/or long-term condition. A similar proportion of men aged 65 years or over (68.6%) reported these disorders. By comparison, 34.8 per cent of all females and 28.6 per cent of all males reported disorders of refraction and accommodation as recent and/or long-term conditions.

Of women aged 65 years or over, 16.3 per cent reported other diseases of the eye and adnexa (including cataracts, conjunctivitis and corneal ulcer). This accounted for almost half (46.4%) of all females who reported these diseases. Men aged 65 years or over were slightly less likely (14.8%) to report these diseases than women in this age group.



Of women aged 65 years or over, 2.6 per cent experienced blindness as a recent and/or long-term condition, accounting for 45.5 per cent of all females who reported this condition. Men aged 65 years or over were slightly less likely (2.4%) to report blindness as a recent and/or long-term condition than their female counterparts.

Heart disease

From the 1989–90 National Health Survey, of females who reported heart disease, almost 70 per cent (69.1%) were aged 65 years or over. In this age group 13.3 per cent of women reported heart disease as a recent and/or long-term condition. Women aged 65 years or over were less likely than their male counterparts (15.6%) to report heart disease.

Diabetes

The prevalence of diabetes increases with age. From the 1989–90 National Health Survey over half (51.7%) of females and 41.2 per cent of males with diabetes were aged 65 years or over. Older women were less likely to experience diabetes than their male counterparts. Of women aged 65 years or over, 5.4 per cent reported diabetes as a recent and/or long-term condition, compared with 6.1 per cent of men in this age group.

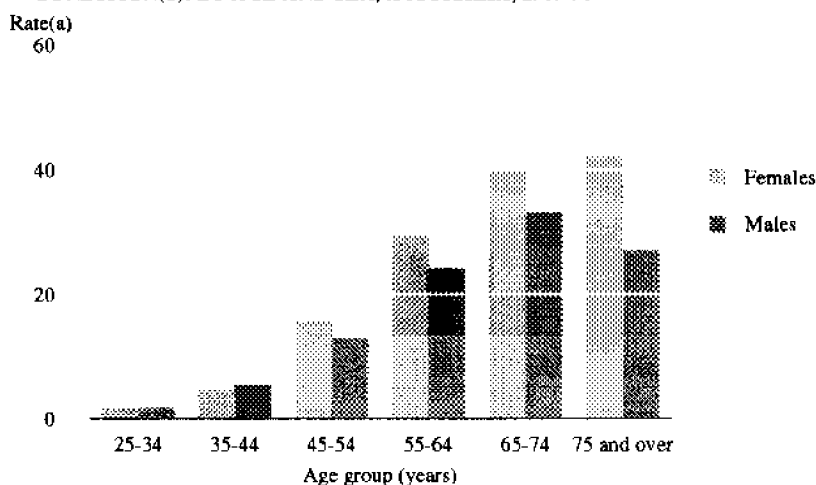
Nerves, tension, nervousness, emotional problems

In the 1989–90 National Health Survey, 9.5 per cent of women aged 65 years or over reported nerves, tension, nervousness or emotional problems, accounting for nearly a third (31.3%) of all females who reported such conditions. Women aged 65 years or over were almost twice as likely as their male counterparts (4.9%) to report nerves, tension, nervousness or emotional problems.

Hypertension

The prevalence of hypertension generally increases with age. In the 1989–90 National Health Survey, 41.1 per cent of women aged 65 years or over reported hypertension as a recent and/or long-term condition, accounting for over half (50.3%) of all females with this condition. Women aged 65 years or over were more likely to have hypertension than were men in this age group (31.2%). In all age groups over 45 years, women were more likely than men to have hypertension (see Chart 7.4.4).

**CHART 7.4.4 PROPORTION OF POPULATION AGED 25 YEARS AND OVER(a) WHO REPORTED HYPERTENSION AS A RECENT AND/OR LONG-TERM CONDITION(b): BY AGE AND SEX, AUSTRALIA, 1989-90**



(a) Less than 1 per cent of females and males aged less than 25 years experienced hypertension.  
 (b) Per 100 population in the same age group and of the same sex.  
 Source: ABS National Health Survey 1989-90

## Disability and handicap

From the ABS Survey of Disability, Ageing and Carers 1993, it was found that over half (54.3%) of all women aged 65 years or over were disabled and 48.5 per cent were handicapped. For further information on disability and handicap see Chapter 7.3.

## Mortality

In 1991, deaths of females aged 75 years or over accounted for 61.3 per cent of all female deaths and deaths of females aged 65 years or over accounted for 80.9 per cent. By comparison, deaths of males aged 75 years or over (42.3%) and 65 years or over (68.7%) accounted for smaller proportions of total male deaths.

The leading cause of death for both women and men aged 65 years or over in 1991 was diseases of the circulatory system. Almost 60 per cent (59.5%) of female deaths in the 75 years or over age group and just over 40 per cent (41.3%) of female deaths in the 65–74 years age group were attributed to diseases of the circulatory system.

The next most frequent causes of death for women aged 65 years or over were malignant neoplasms, diseases of the respiratory system, diseases of the digestive system and endocrine, nutritional and metabolic diseases and immunity disorders. The pattern for men in this age group was similar (see Table 7.4.8). For further information on causes of death see Chapter 2.

**TABLE 7.4.8 PERSONS AGED 65 YEARS AND OVER: LEADING CAUSES OF DEATH BY AGE AND SEX, AUSTRALIA, 1991 (Per cent)**

Cause of death and ICD code	Females		Males	
	65–74 years	75 years and over	65–74 years	75 years and over
Diseases of the circulatory system (390–459)	41.3	59.5	44.0	50.7
Malignant neoplasms (140–208)	35.4	16.0	34.4	22.7
Diseases of the respiratory system (460–519)	7.4	6.5	9.5	10.8
Diseases of the digestive system (520–579)	3.3	3.8	3.0	3.2
Endocrine, nutritional and metabolic diseases and immunity disorders (240–279)	3.5	2.6	2.4	2.3
Other	9.1	11.6	6.7	10.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Causes of Death, Australia, 1991 (3303.0)

## GLOSSARY

- Dental consultation** Any occasion in the two weeks prior to interview on which a respondent consulted a dentist or other dental professional (e.g. orthodontist, dental nurse, dental technician) about their teeth, dentures or gums. Consultations at dental hospitals are included.
- Doctor consultation** Any occasion in the two weeks prior to interview on which a respondent discussed his/her own health with, or received treatment from a doctor including consultations by telephone or having someone else consult a doctor on behalf of the respondent, but excluding consultations at hospital casualty/out-patient clinics or as part of a hospital in-patient episode. The term 'doctor' includes general practitioners and specialists such as surgeons, pathologists, gynaecologists, radiologists, psychiatrists, etc.
- Government nursing homes** As defined by the Commonwealth Department of Health, Housing and Community Services (1992b).  
Nursing homes either operated by or on behalf of a State or Territory Government.
- Hostel** As defined by the Commonwealth Department of Health, Housing and Community Services (1992b).  
A care facility in which an eligible person is provided with hostel care or personal care services.
- Long-term conditions** Medical conditions (illness, injury or disability) which have lasted at least six months, or which the respondent expects to last for six months or more, including:
- long-term conditions from which the respondent experienced infrequent or spasmodic attacks e.g. asthma;
  - long-term conditions which may be under control through use of medications or other treatment e.g. diabetes, epilepsy;
  - conditions which, although present, may not be generally considered illness because they are not necessarily debilitating e.g. reduced eyesight;
  - long-term and permanent impairments or disabilities.
- Non-government nursing homes** As defined by the Commonwealth Department of Health, Housing and Community Services (1992b).  
Nursing homes other than homes funded and operated by the Commonwealth or State Governments. This sector includes homes operated by private individuals and organisations, religious or charitable and Local Government bodies. Since 1 July 1988, subject to transitional arrangements, all these homes have been recurrently funded by the Commonwealth on a consistent basis.

**Nursing homes for the aged** As defined by the Commonwealth Department of Health, Housing and Community Services (1992b).

All nursing homes approved under the National Health Act other than nursing homes for disabled people. In this chapter all references to nursing homes are to nursing homes for the aged.

**Recent illness**

Medical conditions (illness, injury or disability) experienced in the two weeks prior to interview.

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# OCCUPATIO

## ILLNESS AND HEALTH BY OCCUPATION

### Main findings

As there are no up-to-date comprehensive national statistics for employment injuries, the following refers to New South Wales data only for 1991-92, as an indication of current conditions in Australia.

- Females accounted for just over a fifth (20.8%) of all employment injuries.
- Females aged 40-44 years were the most likely to experience an employment injury (15.5% of all female employment injuries).
- Females accounted for less than a tenth of fatal employment injuries (8.5%).
- The industry which incurred the highest incidence of workplace injury for females was Public administration (20.4 injuries per 1,000 female workers).
- Although workplace injuries which led to temporary disability for females generally cost less than males, they involved longer periods off work.
- A third of all workplace injuries to females were sprains and strains to the back (33.3%).
- Body stressing (including lifting and carrying) was the most common cause of workplace injury to females, with an incidence of 4.0 per 1,000 female workers.
- The incidence of occupational disease was almost 5 times lower for females than for males (1.5 per 1,000 female workers compared with 7.3 per 1,000 male workers).
- Females accounted for 52.7 per cent of occupational overuse syndrome (formerly known as repetitive strain injury) claims.
- Females in the Manufacturing industry were the most likely to suffer an occupational disease (4.1 per 1,000 female workers).
- Female Trades assistants and factory hands had the highest incidence of occupational disease (9.2 per 1,000 female workers).

The national data available on occupational illness and health are very limited. Until recently, annual statistics on employment injuries were collected and published by some ABS State Offices. The collection of such statistics are now solely the responsibility of the relevant workers' compensation agencies. These statistics are from administrative by-product data generated under the differing provisions of workers' compensation legislation in each State. These State legislative differences, together with reporting deficiencies of the by-product source data and the absence of comparable data for the Commonwealth employee sector, have prevented the production of comprehensive national employment injuries statistics. The National Occupational Health and Safety Commission (Worksafe Australia) has published some national statistics for the year 1986-87.

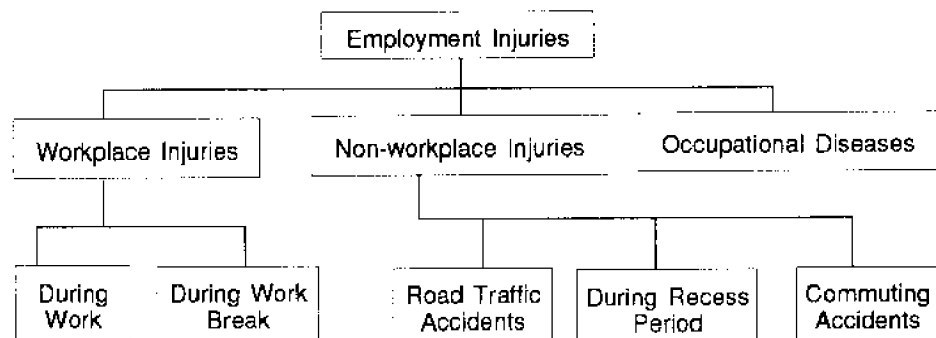
Worksafe Australia has developed the National Data Set for Compensation-based Statistics (NDS), which recommends a standard set of data items to be collected via the compensation based collections administered by State/Territory and Commonwealth agencies. The first NDS-based data by sex for 1991-92 were released in October 1993. Worksafe plan a statistical publication specifically on the occupational health and safety experience of



women workers using these data. The publication is expected to be available by the end of 1994.

The WorkCover Authority of New South Wales publishes workers' compensation statistics for that State. These data have been used in this publication as an indication of current conditions regarding employment injuries in Australia. Appendix A should be read to assist in interpreting the following information as it outlines what is included and what is excluded from the WorkCover data.

WorkCover defines employment injuries as all workplace injuries, all non-workplace injuries, and all occupational diseases contracted or aggravated in the course of a worker's employment. The relationship between the categories of employment injuries is outlined below (see the Glossary for definitions):



## Employment injuries

Employment injuries statistics for New South Wales in 1991–92 indicate that females had a much smaller number of injuries than males. Of the 51,077 injuries recorded for 1991–92, 20.8 per cent (10,608) were for females. The incidence of employment injuries for females was just over a third of the rate for males. In 1991–92, there were 12 employment injuries per 1,000 female workers and 35 employment injuries per 1,000 male workers.

Within the umbrella category of "employment injuries" (see the diagram above), females accounted for 21.2 per cent of workplace injuries, 39.2 per cent of non-workplace injuries, and 13.8 per cent of occupational diseases.

In terms of the severity of the injury, females accounted for less than a tenth of fatal employment injuries (8.5%), just over a tenth of employment injuries resulting in permanent disability (11.5%), less than a third of employment injuries resulting in temporary disability lasting six months and over (30.4%), and less than a quarter of employment injuries resulting in temporary disability lasting less than six months (22.5%).

Females aged 40–44 years were the most likely to experience an employment injury (15.5% of all female employment injuries reported in 1991–92), followed by females aged 45–49 years (13.4%) and 35–39 years (13.0%). In comparison, males aged 30–34 years were the most likely to experience an employment injury (13.4% of employment injuries recorded in 1991–92), followed by males aged 25–29 years (12.9%) and 35–39 years (11.6%).

## Workplace injuries

In New South Wales in 1991–92, there were 38,163 workplace injuries, representing 74.7 per cent of all employment injuries. The incidence of

workplace injuries for females was just over a third of that for males (9.0 per 1,000 female workers compared with 26.1 per 1,000 male workers).

The occupation which incurred the highest incidence of workplace injuries for females was Labourers and related workers (28.3), followed by Tradespersons (16.3). Female Clerks incurred the lowest incidence of workplace injury (2.4). In comparison, for males, Plant and machine operators and drivers (51.2) incurred the highest incidence of workplace injury, while male Professionals incurred the lowest (2.4) (see Table 8.1).

**TABLE 8.1 WORKPLACE INJURIES: OCCUPATION AND INDUSTRY BY SEX, NEW SOUTH WALES, 1991-92**

<i>Occupation</i>	<i>Total cases</i>			
	<i>Females</i>		<i>Males</i>	
	<i>Number</i>	<i>Incidence(a)</i>	<i>Number</i>	<i>Incidence(a)</i>
Managers and administrators	226	6.7	785	6.2
Professionals	431	3.2	405	2.4
Para-professionals	828	12.3	1,020	16.0
Tradespersons	442	16.3	9,378	36.5
Clerks	701	2.4	414	5.0
Salespersons and personal service workers	1,874	9.1	930	8.4
Plant and machine operators and drivers	315	14.9	6,075	51.2
Labourers and related workers	3,258	28.3	11,015	49.2
Not stated and other	2	..	64	..
<b>Total</b>	<b>8,077</b>	<b>9.0</b>	<b>30,086</b>	<b>26.1</b>
<i>Industry</i>				
Agriculture	186	18.7	1,716	51.8
Mining	1	(b)	1,745	77.9
Manufacturing	921	10.2	7,217	29.1
Electricity, gas and water	12	2.4	864	25.0
Construction	52	4.5	3,990	40.6
Wholesale trade	320	6.0	1,750	16.7
Retail trade	1,212	8.1	2,435	18.0
Transport, storage and communication	227	9.6	3,092	37.9
Finance, property and business services	752	5.5	1,513	11.6
Public administration	374	20.4	2,106	56.0
Community services	3,004	10.3	2,246	15.3
Recreation, personal and other services	1,005	10.0	1,377	17.3
Not stated and other	11	..	35	..
<b>Total</b>	<b>8,077</b>	<b>9.0</b>	<b>30,086</b>	<b>26.1</b>

(a) The number of injuries per 1,000 workers of the same sex. (b) Relative standard error exceeds 25 per cent.

Source: WorkCover Authority of N.S.W. (1993) Workers Compensation Statistics, New South Wales 1991/92

For females, the industry which incurred the highest incidence of workplace injury per 1,000 female workers was Public administration (20.4), followed by Agriculture (18.7) and the Food, beverages and tobacco sector of the Manufacturing industry (16.2). For males, the Coal mining industry reported the highest incidence of workplace injury, at 98.0 injuries per 1,000 male workers, followed by the Non-building construction industry (82.3) (see Table 8.1).

As stated in Chapter One, at February 1993, approximately 65 per cent of employed females in Australia were concentrated in the combined industries of Wholesale and retail trades; Finance, property and business services; and Community services, which includes Health, welfare and education. Furthermore, more than half (54.8%) of employed females were working in the occupations of Clerks, and Salespersons and personal service workers.

The National Occupational Health and Safety Commission state in their report *A National Approach to Occupational Health and Safety for Women Workers*, that throughout Australia in 1986–87, the proportion of back injuries for sales workers (33 per cent of all injuries within that occupational group) was higher than the national average of 28 per cent for all workers.

The majority of workplace injuries incurred by both females and males in New South Wales in 1991–92 were sprains and strains (63.7% of all female workplace injuries, compared with 51.3% of all male workplace injuries). Proportionally more females than males suffered a sprain or strain to the back: a third (33.3%) of workplace injuries for females were back sprains or strains, compared with 26.4 per cent for males. After sprains and strains, females were most likely to suffer fractures and dislocations (11.0%) while males were most likely to suffer open and superficial wounds (17.8%) (see Table 8.2).

**TABLE 8.2 WORKPLACE INJURIES: NATURE OF INJURY BY SEX,  
NEW SOUTH WALES, 1991–92  
(Per cent)**

<i>Nature of injury</i>	<i>Females</i>	<i>Males</i>
Sprains and strains to back	33.3	26.4
Sprains and strains to limbs	18.1	16.5
Sprains and strains to neck and shoulders	8.3	5.3
Other sprains and strains	4.0	3.1
Fractures and dislocations	11.0	14.3
Open and superficial wounds	10.1	17.8
Contusions and crushings	10.0	11.2
Burns	3.1	2.7
Multiple injuries and other injury types	1.6	2.2
Concussion	0.6	0.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

*Source: WorkCover Authority of N.S.W. (1993) Workers Compensation Statistics, New South Wales 1991/92*

For females and males, the mechanism of injury with the highest incidence per 1,000 workers was body stressing, which includes lifting and carrying (4.0 compared with 8.5), followed by a fall on the same level (as opposed to a fall from a height) (1.9 compared with 3.7).

Workplace injuries which led to temporary disability for females generally cost less than males (the median gross incurred cost being \$1,843 compared with \$1,880). However, such workplace injuries to females incurred longer periods off work than for males (a median of 2.7 weeks time lost compared with 2.4 weeks for males).

**Road traffic accidents** In New South Wales in 1991–92, 1.4 per cent of all employment injuries were road traffic accidents arising out of, or in the course of employment but excluding commuting accidents. Females accounted for 20.1 per cent of these.

**Occupational diseases** In 1991–92, occupational diseases accounted for 19.2 per cent of all employment injuries in New South Wales. The incidence of occupational disease amongst females was considerably lower than amongst males. Females reported an overall rate of 1.5 diseases per 1,000 female workers, compared with the male figure of 7.3 diseases per 1,000 male workers.

Industrial deafness (60.5%), occupational overuse syndrome (12.1%) and hernia (9.0%) collectively accounted for 81.6 per cent of all occupational disease. The lower incidence of occupational disease amongst females is due mainly to the fact that industrial deafness and hernia were most likely to occur in industries and occupations which are heavily male dominated. While females accounted for 3.0 per cent of industrial deafness claims, and 2.8 per cent of hernia claims, they accounted for 52.7 per cent of occupational overuse syndrome claims (see the section on occupational overuse syndrome below).

Of all cases of occupational diseases affecting females, the highest proportion (27.6%) was reported by those in the Manufacturing industry. Of the occupational diseases that occurred in this industry, almost a quarter (24.9%) occurred in the Food, beverages and tobacco sector, while 16.0 per cent occurred in the Textiles, clothing and footwear sector. In comparison, 41.5 per cent of the occupational diseases recorded for males occurred in the Manufacturing industry, and of these, 46.7 per cent occurred in the Metal products sector. A high proportion of occupational diseases among females was also reported in Community services (25.6%), of which 56.1 per cent occurred in the Health sector.

When occupational diseases are analysed in terms of the proportion of females employed in particular industries, the highest incidence of female occupational disease was recorded in the Manufacturing industry (4.1 per 1,000 female workers). Within this industry, females working in the Metal products sector reported a rate of 7.1 per 1,000 female workers, and those in the Food, beverages and tobacco sector reported 5.2 claims per 1,000 female workers. In comparison, the highest male rates were reported in the Coal mining industry, at 42.8 diseases per 1,000 male workers, followed by the Manufacturing of non-metallic mineral products, at 30.8 diseases per 1,000 male workers.

For females, just over half of all cases of occupational disease (52.3%) occurred in the three occupations of Labourers and related workers (37.3%), Plant and machine operators and drivers (10.2%) and Tradespersons (4.8%). For males, however, almost 9 out of 10 (86.5%) occupational diseases occurred in these three occupations (31.1%, 27.8% and 27.6% respectively).

For females, the highest incidence of occupational disease was reported amongst Trades assistants and factory hands, at 9.2 per 1,000 female workers, followed by Plant and machine operators and drivers (6.5). In contrast, Metal fitting and machining was by far the highest risk occupation for males with a rate of 38.9 per 1,000 male workers.

**Occupational overuse syndrome**

In New South Wales in 1991–92, the incidence of occupational overuse syndrome (OOS), formerly known as repetitive strain injury, for females was 0.7 injuries per 1,000 female workers, compared with 0.5 per 1,000 male workers. This is approximately half the total incidence for all occupational

diseases for females (1.5 diseases per 1,000 female workers) but over 3 times the rate for industrial deafness (0.2) and mental disorders (including stress) (0.2), and seven times the rate for dermatitis and eczema (0.1).

The incidence of OOS was highest in the Agriculture industry (1.7 per 1,000 female and male workers), followed by the Manufacturing industry (1.1), where it was particularly high in the Food, beverages and tobacco sector (1.8), and the Textiles, clothing and footwear sector (1.7). The occupations most affected by OOS were Trades assistants and factory hands (2.8 per 1,000 female and male workers) and Tradespersons in the Metal fitting and machining sector (1.5).

### Results from the ABS National Health Survey 1989-90

Self-reported aspects of occupational illness and health were covered by the ABS National Health Survey 1989-90 and are presented below. Caution must be used in interpreting the data on the incidence of accidents and illnesses by occupation, however, as there may not necessarily be a direct causal link between the occupation and the injury/illness.

Employed professional women were the most likely to report a recent illness (78.3%), and the second most likely to report a long-term condition (74.9%). While female Managers and administrators reported the highest percentage of long-term conditions (77.0%), Plant and machine operators and drivers reported the lowest (69.8%). In addition, while female Plant and machine operators and drivers reported the highest percentage of 'no illness' (12.9%), Professionals reported the lowest (9.1%) (see Table 8.3).

**TABLE 8.3 EMPLOYED WOMEN: MAIN OCCUPATION(a) BY WHETHER REPORTED RECENT OR LONG-TERM CONDITIONS, AUSTRALIA, 1989-90 (Per cent)**

<i>Main occupation(a)</i>	<i>Reported recent illness</i>	<i>Reported long-term condition</i>	<i>Reported no condition</i>	<i>Total(b)</i>
Managers and administrators	77.2	77.0	9.6	100.0
Professionals	78.3	74.9	9.1	100.0
Para-professionals	75.1	72.4	10.2	100.0
Tradespersons	73.9	70.3	11.0	100.0
Clerks	75.3	74.2	11.3	100.0
Salespersons and personal service workers	78.1	72.3	10.2	100.0
Plant and machine operators and drivers	74.8	69.8	12.9	100.0
Labourers and related workers	75.3	73.8	11.9	100.0
<b>Total</b>	<b>76.3</b>	<b>73.6</b>	<b>10.7</b>	<b>100.0</b>

(a) Occupation of main job at time of interview. (b) Persons may have experienced more than one type of illness, therefore components may not add to totals.

Source: ABS National Health Survey 1989-90

### Industry

Of the employed female population, women who worked in the Electricity, gas and water industry (85.5%) were the most likely to report a recent illness while women in the Construction industry were the least likely (70.0%). Women in the Electricity, gas and water industry were more likely than women in any other industry to suffer a number of illnesses, including injuries (12.8%), hypertension (11.1%), unspecified back trouble (6.8%), and arthritis (6.8%). Women employed in Agriculture, forestry and fishing were the next most likely

to report injuries (9.7%), hypertension (8.6%), unspecified back trouble (3.7%), and arthritis (4.1%), and the most likely to report asthma (4.8%).

Women working in the Mining industry (86.1%) were the most likely to report long-term illness conditions, followed by women in the Electricity, gas and water industry (82.9%), while women in the Communication industry were the least likely (68.7%).

The long-term conditions most frequently reported by employed women (and all females) were disorders of refraction and accommodation, hayfever, unspecified back trouble, arthritis and asthma. However, the proportions of women who reported these conditions varied by industry of employment. Employed women in the Electricity, gas and water industry were the most likely to suffer disorders of refraction and accommodation (47.9%), unspecified back trouble (16.2%) and asthma (10.3%). Employed women in the Finance, property and business services industry were the most likely to suffer from hayfever (17.0%), while employed women in the Agriculture, forestry, fishing and hunting industry were the most likely to suffer arthritis (10.5%).

#### Recent illnesses and occupation

The three recent illnesses most frequently reported by women varied between the main occupation groups. Headache due to unspecified or trivial cause was the most frequently reported illness in each occupation group, with the common cold in the top three for every occupation group except Managers and administrators and Labourers and related workers. Injuries was included in the three most frequently reported illnesses for Managers and administrators and Salespersons and personal service workers; eczema/dermatitis for Tradespersons; dental problems for Professionals; and hypertension for Managers and administrators.

Female Managers and administrators (7.6%) were the most likely to report hypertension as a recent illness, while female Salespersons and personal service workers were the least likely (2.8%). Female Tradespersons (10.0%) were almost three times more likely to suffer from eczema/dermatitis than female Plant and machine operators and drivers (3.4%). Unspecified back trouble was most likely to be reported by Professionals (3.6%) and Salespersons and personal service workers (3.6%) and least likely to be reported by Plant and machine operators and drivers (2.0%).

#### Long-term conditions and occupation

The three long-term conditions most frequently reported by women in all main occupation groups were disorders of refraction and accommodation (concerned with the wearing of glasses) (37.3%), hayfever (14.6%) and unspecified back trouble (10.2%) (see Table 8.4). Managers and administrators (44.9%) experienced the highest occurrence of eye disorders.

A lower percentage of employed women than men reported high cholesterol in every occupation except Tradespersons, Plant and machine operators and drivers, and Labourers and related workers. In contrast, proportionally more employed women than men reported asthma in every occupation except Managers and administrators and Labourers and related workers; hayfever in every occupation except Professionals; and arthritis in every occupation except Plant and machine operators and drivers.

**TABLE 8.4 EMPLOYED WOMEN: SELECTED LONG-TERM CONDITIONS BY MAIN OCCUPATION(a), AUSTRALIA, 1989-90**  
(Per cent)

Type of long-term condition	Main occupation(a)							Total	
	Managers and administrators	Professionals	Paraprofessionals	Tradespersons	Clerks	Salespersons and personal service workers	Plant and machine operators and drivers		Labourers and related workers
Disorders of refraction and accommodation	44.9	39.5	39.4	31.3	39.6	31.3	30.5	37.1	37.3
Hayfever	12.6	17.1	15.8	11.6	16.0	14.5	11.4	10.9	14.6
Back trouble (unspecified)	11.7	10.0	10.3	10.0	10.1	9.6	11.8	10.8	10.2
Arthritis	11.9	7.0	6.9	8.5	7.2	7.5	8.8	10.7	8.1
Asthma	5.7	7.2	8.2	7.1	6.8	8.0	5.4	5.8	7.0
Other diseases of the musculoskeletal system and connective tissue(b)	7.1	7.3	6.5	6.0	6.7	5.8	5.6	7.1	6.6
Hypertension	7.9	3.1	2.7	4.1	4.4	3.4	5.3	5.9	4.3
Migraine	7.0	7.1	5.6	6.9	6.2	6.5	6.9	6.6	6.5
High cholesterol	2.8	1.1	1.2	2.2	2.1	1.6	3.1	1.8	1.9
<b>Total reporting long-term conditions(c)</b>	<b>77.0</b>	<b>74.9</b>	<b>72.4</b>	<b>70.3</b>	<b>74.2</b>	<b>72.3</b>	<b>69.8</b>	<b>73.8</b>	<b>73.6</b>

(a) Occupation of main job at time of interview. (b) Includes ache or sore muscle/joint, bunions, cramps, fibrositis, fluid in joint and tennis elbow. (c) Persons may have reported more than one type of illness and therefore components do not add to totals.

Source: ABS National Health Survey 1989-90

## Accidents and illness

Data from the National Health Survey 1989–90 show that a greater proportion of female Managers and administrators (16.0%) reported accidents resulting in an illness or injury than women in other occupations. The occupation in which women were the least likely to report an accident resulting in an illness or injury was Plant and machine operators and drivers (9.7%) (see Table 8.5).

**TABLE 8.5 EMPLOYED WOMEN: MAIN OCCUPATION(a) BY PLACE OF MOST RECENT ACCIDENT RESULTING IN AN ILLNESS OR INJURY, AUSTRALIA, 1989–90 (Per cent)**

Main occupation(a)	Place of most recent accident			Total
	Had no accident	At work	Other place	
Managers and administrators	84.0	4.3	11.7	100.0
Professionals	85.7	1.8	12.5	100.0
Para-professionals	87.1	3.3	9.6	100.0
Tradespersons	85.3	2.7	12.0	100.0
Clerks	88.0	1.5	10.5	100.0
Salespersons and personal service workers	86.3	2.6	11.1	100.0
Plant and machine operators and drivers	90.3	* *	8.5	100.0
Labourers and related workers	86.7	3.5	9.7	100.0
<b>Total</b>	<b>86.8</b>	<b>2.4</b>	<b>10.8</b>	<b>100.0</b>

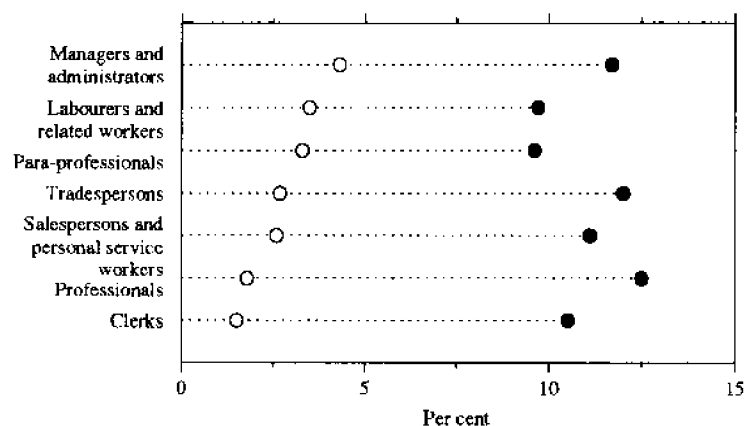
(a) Occupation of main job at time of interview.

Source: ABS National Health Survey 1989–90

A higher percentage of accidents occurred at a place other than work for all employed female occupational groups (see Chart 8.1).

Employed female Managers and administrators reported the highest percentage of illness/injury resulting from an accident at work (4.3%), while Professionals reported the highest percentage of an illness or injury resulting from an accident at a place other than work (12.5%).

**CHART 8.1 EMPLOYED WOMEN: MAIN OCCUPATION(a) BY WHETHER REPORTED AN ILLNESS/INJURY RESULTING FROM AN ACCIDENT AT WORK OR OTHER PLACE, AUSTRALIA, 1989–90**



(a) Occupation of main job at time of interview.

Source: ABS National Health Survey 1989–90

● Other place

○ At work



## Doctor consultations

Employed female Plant and machine operators and drivers and Clerks were more likely to have consulted a doctor in the two weeks prior to interview (22.6%) than women employed in other occupations (see Table 8.6). Para-professionals consulted a doctor the least (19.0%).

**TABLE 8.6 EMPLOYED WOMEN: MAIN OCCUPATION(a) BY WHETHER A DOCTOR WAS CONSULTED IN THE TWO WEEKS PRIOR TO INTERVIEW, AUSTRALIA, 1989-90 (Per cent)**

<i>Main occupation(a)</i>	<i>Whether a doctor was consulted in the two weeks prior to interview</i>		<i>Total</i>
	<i>Doctor consulted</i>	<i>No consultation</i>	
Managers and administrators	19.8	80.2	100.0
Professionals	20.3	79.7	100.0
Para-professionals	19.0	81.0	100.0
Tradespersons	20.3	79.7	100.0
Clerks	22.6	77.4	100.0
Salespersons and personal service workers	20.9	79.1	100.0
Plant and machine operators and drivers	22.6	77.4	100.0
Labourers and related workers	20.7	79.3	100.0
<b>Total</b>	<b>21.2</b>	<b>78.8</b>	<b>100.0</b>

(a) Occupation of main job at time of interview.

Source: ABS National Health Survey 1989-90

## Hospital episodes

Table 8.7 shows that employed tradeswomen were the least likely to have been hospitalised in the twelve months prior to interview (12.0%), while Para-professionals were the most likely (16.6%).

**TABLE 8.7 EMPLOYED WOMEN: MAIN OCCUPATION(a) BY WHETHER HOSPITALISED IN THE TWELVE MONTHS PRIOR TO INTERVIEW, AUSTRALIA, 1989-90 (Per cent)**

<i>Main occupation(a)</i>	<i>Whether hospitalised in the twelve months prior to interview</i>		<i>Total</i>
	<i>Hospitalised</i>	<i>Not hospitalised</i>	
Managers and administrators	15.8	84.2	100.0
Professionals	13.5	86.5	100.0
Para-professionals	16.6	83.4	100.0
Tradespersons	12.0	88.0	100.0
Clerks	14.9	85.1	100.0
Salespersons and personal service workers	15.1	84.9	100.0
Plant and machine operators and drivers	13.9	86.1	100.0
Labourers and related workers	12.5	87.5	100.0
<b>Total</b>	<b>14.5</b>	<b>85.5</b>	<b>100.0</b>

(a) Occupation of main job at time of interview.

Source: ABS National Health Survey 1989-90

## Days away from work

Female Tradespersons had the highest rate of absence from work due to illness or injury in the two weeks prior to interview. For every 100 females employed as Tradespersons, 38.4 days were taken away from work. Female Salespersons and personal service workers had the lowest absence rate at 23.6 days. In contrast, male Labourers and related workers had the highest absence rate (35.0 days) while male Professionals had the lowest (16.1 days) (see Table 8.8).

**TABLE 8.8 EMPLOYED PERSONS: ABSENCE RATE(a) OF MAIN OCCUPATION(b) BY SEX, AUSTRALIA, 1989-90**

<i>Main occupation(b)</i>	<i>Females</i>	<i>Males</i>
Managers and administrators	24.3	16.3
Professionals	25.0	16.1
Para-professionals	38.2	20.3
Tradespersons	38.4	30.8
Clerks	28.0	27.4
Salespersons and personal service workers	23.6	19.9
Plant and machine operators and drivers	36.7	26.8
Labourers and related workers	33.8	35.0
<b>Total</b>	<b>28.5</b>	<b>25.1</b>

(a) The number of days away from work due to illness or injury in the two weeks prior to interview per 100 workers of the same sex employed in that occupation. (b) Occupation of main job at time of interview.

Source: ABS National Health Survey 1989-90

## Labour force participation

Unemployed women were more likely to consult a doctor in the two weeks prior to interview (24.5%), and to have an episode in hospital in the twelve months prior to interview (20.2%) than employed women (21.2% and 14.5% respectively).

Women who were not in the labour force reported higher percentages of long-term conditions (75.0%), and hospitalisation within the last twelve months (21.5%) than either the employed (73.2% and 14.5%) or unemployed (70.9% and 20.2%). This may be due to the age factor, given the large proportion of retired women in the 'not in the labour force' category.

## **APPENDIX A**

### **WORKCOVER AUTHORITY OF NEW SOUTH WALES**

The WorkCover Authority of New South Wales produces a publication entitled "Workers Compensation Statistics, New South Wales". The compensation data collected by WorkCover include cases that have occurred or were claimed during a particular period (new); and are sufficiently severe (major). New cases of employment injury in 1991-92 are those cases which entered the insurer's computer system in 1991-92, while major cases are those which resulted in death or permanent incapacity for work, or temporary disability where five or more working days were paid for total incapacity.

The statistics do not include all work-related employment injuries to workers in New South Wales. The following are excluded:

- Employment injuries to employees who are not covered by the NSW Workers Compensation Act 1987. These include:
  - members of the New South Wales Police recruited prior to 1 April 1988;
  - casual workers employed for one period only of not more than five working days and who are employed other than for the purposes of the employer's trade or business.
- Employment injuries sustained by other persons to whom the provisions of the Act do not apply. These include:
  - most self-employed persons;
  - employees of the Australian Government;
  - employees suffering from diseases caused by the inhalation of dust (except in coal mining);
  - injuries and diseases for which no claim was made under the Act;
  - employment injuries compensatable under the Act, but which did not result in a period paid for total incapacity of at least five working days.

## GLOSSARY

The following terms relate to the section on employment injuries in New South Wales. They are from the publication *Workers Compensation Statistics, New South Wales 1991/92* compiled by the WorkCover Authority of New South Wales.

<b>Age</b>	For workplace and non-workplace injuries, age is the age of the worker at the time of the accident. For occupational diseases, age is the age at the time the disease was first reported to the employer.
<b>Employment injuries</b>	Employment injuries comprise all injuries resulting from accidents, and all occupational diseases contracted or aggravated in the course of a worker's employment.
<b>Fatal employment injuries</b>	Injuries which result in the death of the injured worker and comprises cases where a worker is killed at work and cases where a worker subsequently dies of injuries received at work (except where the death occurred after the end of 1991–92 and the injury was originally reported as non-fatal).
<b>Gross incurred cost</b>	Refers to the sum of payments made, and for claims still open at the end of 1991–92, an estimate of future liability for that claim is also added to the sum of payments made.
<b>Incidence of employment injuries</b>	Refers to the number of injuries per 1,000 workers exposed to risk in 1991–92.
<b>Industry</b>	Is the industry of the establishment at which the worker was employed at the time the injury occurred.
<b>Mechanism of injury</b>	Identifies the action, exposure or event which was the direct cause of the most serious injury.
<b>Nature of injury/disease</b>	Refers to the most serious injury or disease sustained or suffered by the claimant.
<b>Non-workplace injuries</b>	Non-workplace injuries are caused by accidents occurring away from the workplace but where the worker is considered to be on duty. There are three categories of non-workplace injuries: road traffic accidents resulting in injury arising out of or in the course of employment, other than those which occur whilst commuting (see below); accidents away from work during a recess period; and commuting accidents which occur during travel between residence and workplace, to educational institutions for training associated with the worker's employment, or to medical treatment for a compensatable injury.
<b>Occupational diseases</b>	Occupational diseases are diseases contracted or aggravated in the course of employment and to which the employment was a contributing factor.

<b>Permanent disability</b>	Refers to an employment injury where the worker is considered to be either totally or partially permanently incapacitated for any type of work. Partial disability refers to the partial or complete loss of, or loss of the use of, any part of the body faculty, resulting in permanent diminution of the person's earning capacity or opportunities for employment, although she or he is still able to work.
<b>Temporary disability</b>	Refers to an employment injury that does not result in death or permanent disability.
<b>Time lost</b>	Refers to the number of weeks for which the claimant has been off work due to the injury. Time lost is only reported for claims resulting in a temporary disability. It is collected as calendar days and converted to weeks by dividing by seven.
<b>Workplace injuries</b>	Workplace injuries are caused by accidents occurring at the workplace either during work or during a work break, where the worker's activity is under the control of an employer.

## **REFERENCES**

**National Occupational Health and Safety Commission** (1990) *A National Approach to Occupational Health and Safety for Women Workers*, AGPS, Canberra, March 1990.

**WorkCover Authority of N.S.W.** (1993) *Workers Compensation Statistics, New South Wales 1991/92*.



**VIOLENCE  
AGAINST WOMEN**

## VIOLENCE AGAINST WOMEN

### Main findings

- Women were more likely than men to be victims of robbery and assault in their own homes.
- Rape and other forms of sexual assault were more likely to occur in private places, most commonly in homes, and involve people who were acquainted in some way.
- The majority of women who were victims of assault or sexual assault did not report these crimes to the police.
- For both females and males, victimisation rates for robbery and assault were highest in the 15–24 years age group and decreased with age.
- For females, victimisation rates for sexual assault were highest in the 18–24 years age group and decreased with age.
- In the year 1991–92, nearly three fifths (58%) of known victim–offender pairs involved both male victims and male offenders and in only 11 per cent of pairs was the offender female.
- Between 1989 and 1993, 46.3 per cent of female homicide victims were in the 20–39 years age group.

### Introduction

The issue of violence against women is identified as one of seven priority areas in the National Women's Health Policy (Commonwealth Department of Community Services and Health, 1989).

In April 1993 the ABS conducted the national Crime and Safety Survey, data from which are used in the first three sections of this chapter. This survey has the advantage of containing information which may not have been reported to the police. However, residents of non-private dwellings (such as hospitals and jails) and some institutions (defence and diplomatic personnel) were not included.

According to this survey, in the 12 months to April 1993, an estimated 489,200 persons (203,000 females and 286,200 males) aged 15 years and over in Australia, were victims of at least one robbery, assault or sexual assault, giving an overall victimisation rate of 3.7 per cent.

### Robbery

Results from the 1993 Crime and Safety Survey indicate that 1.2 per cent of persons aged 15 years and over were victims of robbery in the 12 months prior to interview. Overall, females (1.1%) were less likely to be victims of robbery than males (1.4%). This was true of all age groups except the 35–44 years and 65 years and over age groups (see Table 9.1).

The proportion of victims of robbery was highest in the 15–24 years age group, in which 2.3 per cent were victims (1.9% of females and 2.6% of males). Of victims of robbery in the last 12 months 37.5 per cent were in the 15–24 years age group. A further 27.9 per cent were in the 25–34 years age group. The pattern for males and females was similar. Overall, the proportion of victims declined with age.



**TABLE 9.1 PERSONS AGED 15 YEARS AND OVER: PROPORTION WHO WERE VICTIMS OF ROBBERY IN THE LAST 12 MONTHS, SEX BY AGE, AUSTRALIA, APRIL 1993**

	Age group (years)						Total victims	
	15-24	25-34	35-44	45-54	55-64	65 and over	Total number	( <sup>'000</sup> )
	— per cent —							
Females	1.9	1.4	1.0	0.5	**	0.6	1.1	70.9
Males	2.6	1.9	1.0	0.8	0.7	**	1.4	89.3
<b>Persons</b>	<b>2.3</b>	<b>1.6</b>	<b>1.0</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	<b>1.2</b>	<b>160.1</b>

Source: ABS Crime and Safety Survey, Australia, 1993

Of victims of robbery, a higher proportion of women (32.3%) than men (27.4%) were robbed in their own homes (see Table 9.2).

**TABLE 9.2 VICTIMS OF ROBBERY IN THE LAST 12 MONTHS (AGED 15 YEARS AND OVER): LOCATION OF THE LAST INCIDENT BY SEX, AUSTRALIA, APRIL 1993 (Per cent)**

Location of last incident	Females	Males	Persons
Own home	32.3	27.4	29.6
Other	67.7	72.6	70.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: ABS Crime and Safety Survey, Australia, 1993

Fifty two point one per cent of victims of robbery reported the crime to the police. Females (60.4%) were more likely than males (45.5%) to report robbery.

### Assault (excluding sexual assault)

According to the 1993 Crime and Safety Survey, 2.5 per cent of persons were victims of assault in the 12 months prior to interview. Females were less likely to be victims of assault than males in all age groups. Overall, 1.8 per cent of females and 3.3 per cent of males were victims.

As with robbery, the age group most at risk of assault was the 15-24 years age group in which 5.6 per cent were victims (3.8% of females and 7.3% of males). This age group accounted for 43.9 per cent of all victims of assault. A further 24.9 per cent were in the 25-34 years age group. The pattern was similar for females and males. The proportion of persons who were victims of assault declined with age (see Table 9.3).

**TABLE 9.3 PERSONS AGED 15 YEARS AND OVER: PROPORTION WHO WERE VICTIMS OF ASSAULT (EXCLUDING SEXUAL ASSAULT) IN THE LAST 12 MONTHS, SEX BY AGE, AUSTRALIA, APRIL 1993**

	Age group (years)						Total victims Total number	Total number ( <sup>'000</sup> )
	15-24	25-34	35-44	45-54	55-64	65 and over		
	— per cent —							
Females	3.8	2.2	1.9	1.1	**	**	1.8	120.4
Males	7.3	3.9	2.6	2.0	0.9	**	3.3	213.8
<b>Persons</b>	<b>5.6</b>	<b>3.0</b>	<b>2.2</b>	<b>1.6</b>	<b>0.7</b>	<b>0.2</b>	<b>2.5</b>	<b>334.2</b>

Source: ABS Crime and Safety Survey, Australia, 1993

Of victims of assault (excluding sexual assault), a much higher proportion of women (41.7%) than men (15.3%) were assaulted at home (see Table 9.4).

**TABLE 9.4 VICTIMS OF ASSAULT (EXCLUDING SEXUAL ASSAULT) IN THE LAST 12 MONTHS (AGED 15 YEARS AND OVER): LOCATION OF THE LAST INCIDENT BY SEX, AUSTRALIA, APRIL 1993  
(Per cent)**

Location of last incident	Females	Males	Persons
Own home	41.7	15.3	24.8
Other	58.4	84.7	75.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: ABS Crime and Safety Survey, Australia, 1993

Thirty two point one per cent of victims of assault reported the crime to the police. Females (38.1%) were more likely than males (28.8%) to report assault.

## Sexual assault

Questions regarding sexual assault in the 1993 Crime and Safety Survey were only asked of females aged 18 years and over. The results suggest that of this population 6 in every 1,000 were victims of sexual assault during the 12 months prior to interview. The 18-24 years age group was at greatest risk of sexual assault. Of females in this age group 2.5 per cent were victims and these accounted for 60.2 per cent of all victims of sexual assault. The proportion of women who were victims of sexual assault declined with age (see Table 9.5). Of those women who were victims of sexual assault, 68.4 per cent knew their attacker(s). Only 25.0 per cent of women who were sexually assaulted reported the crime to the police. The main reasons given for not reporting sexual assault were private matter (27.7%) and fear of reprisal (19.8%).

**TABLE 9.5 FEMALES AGED 18 YEARS AND OVER: PROPORTION WHO WERE VICTIMS OF SEXUAL ASSAULT BY AGE, AUSTRALIA, APRIL 1993  
(Per cent)**

	Age group (years)						Total
	18-24	25-34	35-44	45-54	55-64	65 and over	
	2.5	0.6	0.4	**	**	**	0.6

Source: ABS Crime and Safety Survey, Australia, 1993

There are numerous reasons why many women are reluctant to report sexual assault, for instance lack of confidence in the police and the legal system, the stigma often associated with sexual assault, the fear of rejection and, in some cases, threats of further violence. The proportion of rapes that are reported is estimated by different sources to be anywhere from one in ten to four in ten (Belknap, 1989, Carter, 1991, and Koss, 1989 in Easta, 1992). Grabosky (1989 in National Health and Medical Research Council, 1991) estimates that rapes reported to the police exceed 2,200 per year in Australia. The extent of sexual assault (reported and unreported), represents a major area of traumatic experience for those affected and has profound implications for physical, mental and emotional health, as well as for social functioning.

The Victorian Community Council Against Violence (1991) conducted a research project which investigated all rape offences reported to the police in Victoria over the three year period, 1987–1989. While this project investigated Victoria alone, and was limited to reported incidents, it is reasonable to expect that the results reflect the overall picture. The results may be summarised as follows:

- 93.6 per cent of victims were female;
- 31 per cent of victims were under 18 years of age, and 39.4 per cent were aged 18–25 years;
- 98.9 per cent of offenders were male;
- 42.7 per cent of offenders were aged 18–25 years and 19.3 per cent were aged 26–30 years;
- 82.6 per cent of offenders acted alone;
- 53.2 per cent of rape offences occurred in a home, 11.1 per cent in the offender's car, 14.3 per cent on the streets and 9.2 per cent in open recreational areas such as parks; and
- 61 per cent of incidents involved people who were acquainted in some way prior to the rape.

## Homicide

The incidence of homicide in Australia has been relatively stable over the past two decades (Mukherjee & Dagger, 1990; ABS Causes of Death data).

In the majority of cases, offenders (includes suspects or alleged offenders) and victims of homicides were males. Table 9.6 shows that in the year 1991–92, for those cases where the information was available, nearly three fifths (58%) of victim–offender pairs involved both male victims and male offenders. Nearly a third (31%) of all pairs involved a female victim and a male offender and in only 11 per cent of pairs was the offender female. These findings were very similar to those for 1989–90 and 1990–1991 (Strang, 1991, 1992 and 1993).

**TABLE 9.6 HOMICIDES: VICTIM-OFFENDER RELATIONSHIPS BY SEX, AUSTRALIA, 1991-92**  
(Per cent)

<i>Relationship</i>		
Male victim	male offender	58
Female victim	male offender	31
Male victim	female offender	8
Female victim	female offender	3
<b>Total</b>		<b>100</b>

*Source: Australian Institute of Criminology, (unpublished data)*

The pattern of female homicides from 1989-1993 was consistent in a number of ways. Generally, the age group most at risk of homicide, for both males and females, during this time was 20-29 years. Women aged 20-29 years accounted for over a quarter (26.8%) of the total number of female homicide victims. Those in the 20-39 years age group accounted for almost half (46.3%) the total number of female homicide victims, and female victims aged 15-49 years constituted 68.0 per cent of the total (see Table 9.7).

**TABLE 9.7 FEMALE VICTIMS OF HOMICIDE: SELECTED AGE GROUPS BY YEAR, AUSTRALIA, 1989-1993**

	1989	1990	1991	1992	1993
Number of victims aged 20-29 years	26	36	40	39	31
<i>Per cent of total</i>	23.9	24.7	27.2	31.7	26.7
Number of victims aged 20-39 years	45	73	66	67	46
<i>Per cent of total</i>	41.3	50.0	44.9	54.5	39.7
Number of victims aged 15-49 years	65	106	103	89	73
<i>Per cent of total</i>	59.6	72.6	70.1	72.4	62.9
<b>Total number</b>	<b>109</b>	<b>146</b>	<b>147</b>	<b>123</b>	<b>116</b>

*Source: ABS Causes of Death data 1989-1993*

The main weapons/methods used in female homicides in Australia between 1989 and 1993 were cutting and piercing instruments, firearms and explosives, and hanging and strangulation. Together these three methods accounted for 63.8 per cent of female deaths due to homicide over this period (see Table 9.8).

**TABLE 9.8 FEMALE VICTIMS OF HOMICIDE: WEAPON/METHOD USED BY YEAR, AUSTRALIA, 1989-1993**

<i>Weapon/method used</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>
Cutting and piercing instruments	21	38	43	44	39
Firearms and explosives	20	34	38	34	22
Hanging and strangulation	18	17	18	9	14
Other weapons/methods	50	57	48	36	41
<b>Total number</b>	<b>109</b>	<b>146</b>	<b>147</b>	<b>123</b>	<b>116</b>

*Source: ABS Causes of Death data, 1989-1993*

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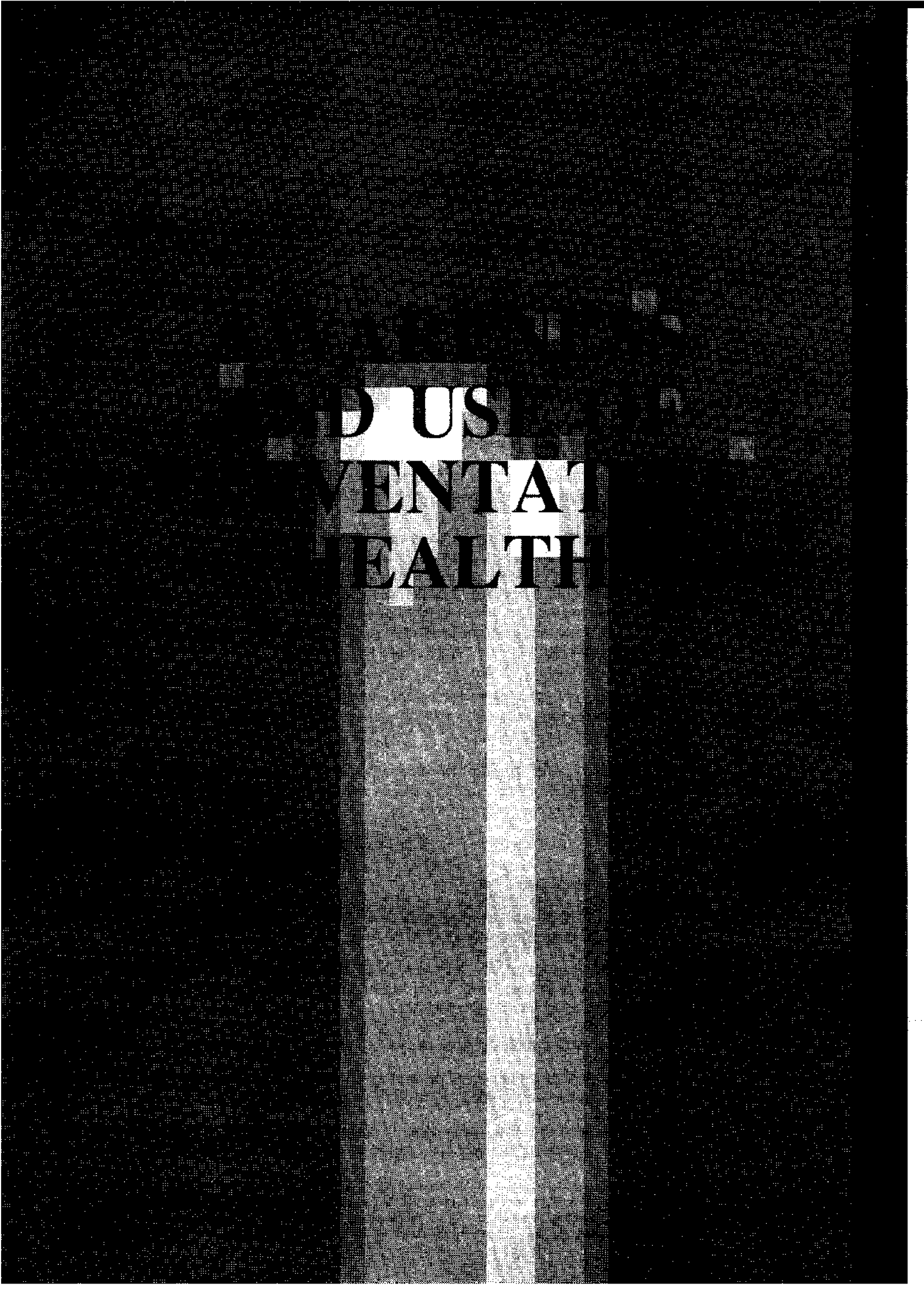
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**D USE**  
**VENTA**  
**HEALTH**

## **AWARENESS AND USE OF PREVENTATIVE HEALTH**

### **Main findings**

- Of women aged 18 to 64 years, 91.2 per cent reported having had some type of breast examination.
- Only 17.8 per cent of women had had a mammogram and, of those who had not, 23.3 per cent had not heard of the test.
- 85.5 per cent of women aged 18 to 64 years reported having had a pap smear, and 49.7 per cent of these women reported having had the test in the twelve months prior to interview.
- Women in older age groups, who are at a higher risk of developing cervical cancer, were less likely to have had pap smears as frequently as women in younger age groups.
- Women who had not had a pap smear were also less likely to have had any type of breast examination.
- Over 90 per cent of women aged 15 to 24 years were immunised against rubella. The proportion declined with age.

The following analysis does not attempt to cover all aspects of preventative health. Rather it aims to give a broad overview of the extent to which Australian women are aware of and use preventative techniques against health problems specific to women such as breast and cervical cancer screening techniques and immunisation against rubella. Details on the use of sunscreen, exercise and diet are presented in Chapter 5. For information on deaths from breast and cervical cancer, refer to Chapter 2.

### **Screening for breast and cervical cancer**

The objective of screening for cancer (or pre-cancerous cells) is to identify and/or diagnose abnormalities early enough to enable effective treatment to be given.

*Goals and Targets for Australia's Health in the Year 2000 and Beyond* (Nutbeam, Wise, Bauman, Harris and Leeder, 1993), states that major goals in relation to breast cancer are:

- to reduce breast cancer mortality (in particular) for women aged 50–69 years by 10 per cent by the year 2000 and by 15 per cent by the year 2005; and
- to increase the proportion of women aged 50–69 years who undergo regular mammographic screening.

Goals and targets adopted under the Organised Approach to Preventing Cancer of the Cervix being implemented by the Commonwealth, States and Territories from 1991 seek to:

- reduce mortality from cancer of the cervix by 30 per cent by the year 2000;
- increase the overall percentage of women who have been screened during a two year period to 75 per cent by 1995; and
- increase the percentage of women aged 50–69 years who have been screened in a two year period by 50 per cent by 1994<sup>(a)</sup>.

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(a) The information on the goals and targets adopted under the Organised Approach to Preventing Cancer of the Cervix was supplied by the Cervical Cancer Preventative Taskforce, Commonwealth Department of Health, Housing, Local Government and Community Services.



**Screening for breast cancer** There are three methods of breast cancer screening: breast self-examination, physical examination of the breasts by a trained health professional, and mammography. Most assessments have concluded that mammography is superior to physical examination in terms of sensitivity and specificity (Commonwealth Department of Community Services and Health, 1989, p35).

The efficiency of screening can be increased if it is directed towards the groups of women who have a particularly high risk of breast cancer e.g. older women, those with a previous history of breast cancer or a family history of the disease (Commonwealth Department of Community Services and Health, 1989, p35).

The National Program for the Early Detection of Breast Cancer aims to ensure that significant reductions can be achieved in morbidity and mortality attributed to breast cancer and to maximise the early detection of breast cancer in the target population (National Advisory Committee for the Early Detection of Breast Cancer, 1992, p8). The Breast Cancer Screening Evaluation Steering Committee recommended that screening be offered to women between 40 and 50 years of age, but that women over 50, for whom screening is most effective and who have the highest incidence of breast cancer, should be actively encouraged to participate in the Program (National Advisory Committee for the Early Detection of Breast Cancer, 1992, p5).

Over 250,000 women were screened within the National Program in its first 2 years (1 July 1991—30 June 1993). The rate of expansion is expected to increase more rapidly over the next year, with the inclusion of screening numbers from new services.

**National Health Survey data on breast examinations** Information from the ABS National Health Survey 1989–90 indicated that, of women aged 18 to 64 years, 91.2 per cent had had some type of breast examination. Breast examination by a health professional was reported by 70.9 per cent of women, and 62.8 per cent said they regularly examined their own breasts. Approximately 18 per cent of women (17.8%) had had a mammogram and, of those who had not, 23.3 per cent had not heard of the test. The National Health Survey did not make a distinction between diagnostic and screening mammography.

**State** Women in Tasmania and Queensland were the most likely to have reported having had a breast examination by a health professional (80.2%, and 77.4%). These States also had the highest proportions of women who reported examining their own breasts (68.7% and 65.3%).

New South Wales had the highest proportion of women who reported having had a mammogram (20.9%, with 36.9% of these being in the last year), followed by Queensland (18.8%, with 45.2% of these being in the last year). A lower proportion of women in the Northern Territory reported that they had used any of these screening techniques, possibly due to the greater proportion of younger people in that State (see Table 10.1).

**TABLE 10.1 WOMEN AGED 18-64 YEARS: TYPE OF BREAST CANCER SCREENING TECHNIQUE BY STATE, AUSTRALIA, 1989-90**  
(Per cent)

Type of screening for breast cancer	State								
	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Regularly examines own breasts	64.5	60.2	65.3	60.0	61.9	68.7	58.5	58.6	62.8
Has had breasts examined	71.5	67.3	77.4	67.6	68.2	80.2	61.2	72.0	70.9
Has had a mammogram	20.9	15.9	18.8	13.9	15.3	13.9	8.0	18.0	17.8
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Women may have had more than one type of breast cancer screening technique performed, therefore figures do not add to totals.

Source: ABS National Health Survey 1989-90

Overall, the proportion of women living in capital cities who had had a breast examination by a health professional was similar to that of women living in other areas of the country (70.8% and 71.1% respectively), but women in capital cities were less likely to examine their own breasts than were women living elsewhere (60.4% and 67.3% respectively). Conversely, a higher proportion of those living in capital cities (18.3%) reported having had a mammogram than women living in other areas (16.7%).

#### Age

The majority of women in all age groups reported they had had some form of breast examination. Women in the younger age groups were the least likely to have had a breast examination. The proportion of women who had had a breast examination by a health professional or who regularly examined their own breasts was similar for all ages, except the 18-24 years age group, where a markedly lower proportion participated in these methods of screening. The proportion of women who had had a mammogram increased with age, peaking at the 45-54 years age group (see Table 10.2).

**TABLE 10.2 WOMEN AGED 18-64 YEARS: TYPE OF BREAST CANCER SCREENING TECHNIQUE BY AGE, AUSTRALIA, 1989-90**  
(Per cent)

Type of screening for breast cancer	Age group (years)					
	18-24	25-34	35-44	45-54	55-64	Total
Regularly examines own breasts	48.8	61.7	68.7	68.4	67.0	62.8
Has had breasts examined	47.1	73.4	78.9	78.9	74.1	70.9
Has had a mammogram	3.3	9.4	21.8	32.9	28.1	17.8
Has had no breast examination	19.0	8.5	5.3	5.2	6.1	8.8
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Women may have had more than one type of breast screening technique performed, therefore figures do not add to totals.

Source: 1989-90 National Health Survey Screening for Breast and Cervical Cancer Australia (4378.0)

*Marital status*

Women who had never married were less likely to have had a breast examination by a health professional and less likely to examine their own breasts than women of other marital status. This pattern was similar across almost all age groups. Older women in each marital status group were more likely to have had a mammogram than younger women (see Table 10.3).

**TABLE 10.3 WOMEN AGED 18-64 YEARS: TYPE OF BREAST CANCER SCREENING TECHNIQUE BY AGE AND MARITAL STATUS, AUSTRALIA, 1989-90 (Per cent)**

Type of screening for breast cancer	Age group (years)					Total
	18-24	25-34	35-44	45-54	55-64	
MARRIED (INCLUDING DE FACTO)						
Regularly examines own breasts	58.3	63.9	70.2	69.4	70.3	67.3
Has had breasts examined	63.0	75.7	79.4	79.8	74.3	76.4
Has had a mammogram	5.0	10.0	21.8	34.0	28.5	20.4
SEPARATED/DIVORCED/WIDOWED						
Regularly examines own breasts	49.6	59.7	64.3	64.7	57.8	61.4
Has had breasts examined	68.6	76.4	80.6	75.5	75.0	76.7
Has had a mammogram	5.8	11.6	23.4	29.0	26.9	23.2
NEVER MARRIED						
Regularly examines own breasts	44.9	53.5	57.4	59.7	62.4	48.6
Has had breasts examined	40.3	62.6	67.4	74.8	63.3	48.9
Has had a mammogram	2.6	6.3	18.0	25.2	26.6	5.6
TOTAL						
Regularly examines own breasts	48.8	61.7	68.7	68.4	67.0	62.8
Has had breasts examined	47.1	73.4	78.9	78.9	74.1	70.9
Has had a mammogram	3.3	9.4	21.8	32.9	28.1	17.8

Source: 1989-90 National Health Survey Screening for Breast and Cervical Cancer Australia (4378.0)

*Education and employment*

The pattern of breast examination differed by education level. Women with post-school qualifications were more likely to have had a breast examination by a health professional (76.0%) than women without post-school qualifications (67.7%). The proportions of women who regularly examined their own breasts, or who had had a mammogram were similar for those with and without post-school qualifications. A higher proportion of women who left school at age 15 years or under reported having all types of breast examination than those women who left school aged 15 years or over (see Table 10.4). This may reflect the higher proportion of women in older age groups who left school aged 15 years or less.

**TABLE 10.4 WOMEN AGED 18-64 YEARS: TYPE OF BREAST CANCER SCREENING TECHNIQUE BY AGE LEFT SCHOOL AND WHETHER HAS POST-SCHOOL QUALIFICATIONS, AUSTRALIA, 1989-90**  
(Per cent)

<i>Type of screening for breast cancer</i>	<i>Age left school</i>		<i>Whether has qualifications</i>		<i>Total</i>
	<i>15 years or less(a)</i>	<i>Over 15 years</i>	<i>Has obtained post-school qualifications</i>	<i>Has no post-school qualifications</i>	
Regularly examines own breasts	65.0	61.6	63.3	62.9	62.8
Has had breasts examined	73.2	69.6	76.0	67.7	70.9
Has had a mammogram	22.5	14.7	18.9	17.1	17.8
Has had no breast examination	6.5	10.2	7.8	9.4	8.8
<b>Total(b)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes women who never went to school. (b) Women may have had more than one type of breast cancer screening technique performed, therefore figures do not add to totals.

Source: 1989-90 National Health Survey Screening for Breast and Cervical Cancer Australia (4378.0)

The use of breast cancer screening techniques also varied according to employment status. Higher proportions of women who were either employed or not in the labour force reported having had a mammogram, breast examination or examining their own breasts than unemployed women (see Table 10.5). This pattern may reflect differences in age distribution between employment status groups.

**TABLE 10.5 WOMEN AGED 18-64 YEARS: TYPE OF BREAST CANCER SCREENING TECHNIQUE BY EMPLOYMENT STATUS, AUSTRALIA, 1989-90**  
(Per cent)

<i>Type of screening for breast cancer</i>	<i>Employment status</i>			<i>Total</i>
	<i>Employed</i>	<i>Unemployed</i>	<i>Not in the labour force</i>	
Regularly examines own breasts	62.7	58.5	63.7	62.8
Has had breasts examined	71.3	62.7	71.3	70.9
Has had a mammogram	16.6	13.6	20.4	17.8

Source: 1989-90 National Health Survey Screening for Breast and Cervical Cancer Australia (4378.0)

#### *Birthplace and language*

A larger proportion of Australian born women, and of women born in other mainly English speaking countries had had a breast examination, or examined their own breasts, than women of other birthplaces. However, a higher proportion of overseas born women than Australian born women reported having had a mammogram (19.3% and 17.2% respectively). Overall, a higher proportion of North American born women (87.8%) had had a breast examination than women of other birthplaces. Asian born women were the

least likely to have examined their own breasts (47.1%), to have had a breast examination (45.5%) or to have had a mammogram (10.0%).

The likelihood of women having had any type of breast examination also differed according to language. Those women who spoke English at home were more likely to have examined their own breasts (64.0%) and to have had a breast examination (72.6%) than women who spoke another language at home (52.4% and 54.8% respectively). However, the difference was less marked for mammograms, with 17.9 per cent of those women who spoke English at home having had a mammogram compared with 16.5 per cent of women who spoke another language at home.

*Knowledge*

Among women aged 50 to 64 years, awareness of mammography was very much lower among women who did not speak English in the home than among women who did (see Table 10.6). Awareness of mammography also appears to be influenced by education level, family income and place of residence. For both women who spoke English at home and women who did not, awareness was higher amongst those with higher income, higher levels of education and those who resided in a metropolitan rather than non-metropolitan area.

**TABLE 10.6 WOMEN AGED 50-64 YEARS: PROPORTION WHO HAD NEVER HEARD OF MAMMOGRAPHY(a), FAMILY INCOME, EDUCATION LEVEL AND PLACE OF RESIDENCE BY LANGUAGE, AUSTRALIA, 1989-90 (Per cent)**

	<i>Language spoken at home</i>	
	<i>English</i>	<i>Other than English</i>
<i>Family income level</i>		
First quintile	4	34
Second quintile	8	34
Third quintile	10	31
Fourth quintile	12	37
Fifth quintile	14	40
<i>Education level(b)</i>		
High	5	20
Medium	11	36
Low	14	42
<i>Place of residence</i>		
Metropolitan	10	36
Non-metropolitan	11	39
<b>Total</b>	<b>10</b>	<b>36</b>

(a) Age-standardised to the 1988 female population. (b) For a definition of education level categories, see Glossary.

Source: AIHW, derived from ABS National Health Survey, 1989-90, in *Australia's Health, 1992*, p82

Screening for cervical cancer In 1991, all Australian health authorities endorsed a national policy for screening for pre-cancerous abnormalities of the cervix, as follows:

- Routine screening with Pap smears should be carried out every two years for women who have no symptoms or history suggestive of cervical pathology.
- All women who have ever been sexually active should commence having Pap smears between the ages of 18 to 20 years, or one to two years after first sexual intercourse, whichever is later. In some cases, it may be appropriate to commence screening before 18 years of age.

- Pap smears may cease at the age of 70 years for women who have had two normal Pap smears within the last five years. Women over 70 years who have never had a Pap smear, or who request a Pap smear, should be screened<sup>(a)</sup>.

#### National Health Survey data on pap smears

Information from the ABS National Health Survey 1989–90 indicated that overall, 85.5 per cent of women aged 18 to 64 years reported having had a pap smear and 49.7 per cent of these women reported having the test in the twelve months prior to the interview. A further 32.9 per cent reported having had a pap smear one year to less than three years ago, while the remainder, 17.4 per cent, reported having last been tested three years or more previously. Of those women who had not had a pap smear, 29.8 per cent reported they had not heard of the test.

#### State

Of the States and Territories, the Northern Territory had the highest proportion of women who reported having had a pap smear (90.6%) followed by Tasmania and Queensland (both 89.9%). Victoria had the lowest proportion of women who reported having had a pap smear (81.8%) (see Table 10.7).

**TABLE 10.7 WOMEN AGED 18–64 YEARS: WHETHER EVER HAD A PAP SMEAR BY STATE, AUSTRALIA, 1989–90 (Per cent)**

<i>Whether ever had pap smear</i>	<i>State</i>								
	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT</i>	<i>ACT</i>	<i>Aust.</i>
Tested	85.0	81.8	89.9	89.1	85.0	89.9	90.6	84.8	85.5
Not tested	15.0	18.2	10.1	10.9	15.0	10.1	9.4	15.2	14.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Source: ABS National Health Survey 1989–90*

A lower proportion of women in capital cities reported having had a pap smear (83.6%) than women in other areas of the country (89.1%), but the pattern of frequency of tests was similar.

#### Age and marital status

Over one third (36.0%) of women aged 18–24 years had not been tested for cervical cancer. Women in older age groups, who are at a higher risk of developing cervical cancer, were less likely to have pap smears as frequently as women in younger age groups (see Table 10.8). In all age groups a lower proportion of women who had never married reported having had a pap smear (60.9% overall) than women in other marital status categories. Divorced or separated women were the most likely to have had a pap smear (92.5%), followed by those who were married or in a de facto relationship (92.0%).

(a) National policy information for screening for pre-cancerous abnormalities of the cervix was supplied by the Cervical Cancer Preventative Taskforce, Commonwealth Department of Health, Housing, Local Government and Community Services

**TABLE 10.8 WOMEN AGED 18-64 YEARS: PERIOD SINCE LAST PAP SMEAR BY AGE, AUSTRALIA, 1989-90**  
(Per cent)

Period since last pap smear	Age group (years)					Total
	18-24	25-34	35-44	45-54	55-64	
Less than 1 year	45.4	54.6	44.0	34.6	21.8	42.5
1 year to less than 3 years	17.1	31.8	33.0	30.4	24.5	28.2
3 years to less than 5 years	1.3	4.1	7.8	8.8	10.1	6.1
5 years or more	0.3	1.8	8.2	16.3	25.8	8.8
Not tested(a)	36.0	7.8	6.9	9.9	17.8	14.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes women who had not heard of the pap smear test.

Source: 1989-90 National Health Survey Screening for Breast and Cervical Cancer Australia (4378.0)

#### Education and employment

In general, women who had obtained a qualification since leaving school were more likely to report having had a pap smear than those with no post-school qualification, and were more likely to have pap smears more frequently. Employed women and those not in the labour force were more likely to report having had a pap smear (86.3% and 85.3% respectively) than the unemployed (78.4%). Para-professionals, followed by Managers and administrators were most likely to report having had a pap smear (92.4% and 91.5% respectively). Plant and machine operators and drivers were least likely (76.6%) (see Table 10.9).

**TABLE 10.9 WOMEN AGED 18-64 YEARS: OCCUPATION BY WHETHER EVER HAD A PAP SMEAR, AUSTRALIA, 1989-90**  
(Per cent)

Occupation	Whether ever had a pap smear		Total
	Tested	Not tested	
Managers and administrators	91.5	8.5	100.0
Professionals	87.9	12.1	100.0
Para-professionals	92.4	7.6	100.0
Tradespersons	83.3	16.7	100.0
Clerks	88.0	12.0	100.0
Salespersons/personal service workers	82.3	17.7	100.0
Plant and machine operators and drivers	76.6	23.4	100.0
Labourers and related workers	83.6	16.4	100.0
<b>Total</b>	<b>85.5</b>	<b>14.5</b>	<b>100.0</b>

Source: ABS National Health Survey 1989-90

#### Birthplace and language

A higher proportion of Australian born women and of women born in predominantly English speaking countries reported having had a pap smear than did women of other birthplaces (see Table 10.10). In addition, a higher proportion of women who spoke English at home reported having had a pap smear (88.0%) than those who spoke another language at home (62.0%).

**TABLE 10.10 WOMEN AGED 18–64 YEARS: PROPORTION WHO HAD EVER HAD A PAP SMEAR BY COUNTRY OF BIRTH, AUSTRALIA, 1989–90 (Per cent)(a)**

<i>Country of birth</i>	
Australia	87.8
United Kingdom and Ireland	91.3
Europe(b)	74.4
Middle East and North Africa	68.1
Asia(c)	57.1
Other countries	87.2
<i>Total overseas born</i>	79.0
<b>Total</b>	<b>85.5</b>

(a) Per cent of women of each birthplace who had had a pap smear.

(b) Includes Eastern Europe and the U.S.S.R. (c) Includes Northeast, Southern and Southeast Asia.

Source: 1989–90 National Health Survey Screening for Cervical and Breast Cancer Australia (4378.0)

### Knowledge

Awareness of the pap smear test among overseas born women and those who spoke a language other than English at home was markedly lower than among their Australian born and English speaking counterparts. Only 2.0 per cent of Australian born women said they had not heard of the pap test, compared with 11.0 per cent of women born overseas. The difference in awareness between those who spoke English at home and those who did not was even more marked. Of women who spoke English at home 2.1 per cent had not heard of the pap test, compared with over a quarter (25.5%) of women who spoke a language other than English at home.

### Screening for both breast cancer and cervical cancer

Women who had not had a pap smear were also less likely to have had any type of breast examination, while those who had had a pap smear in the last three years were more likely to have regularly examined their own breasts and to have had a breast examination by a health professional (see Table 10.11).

**TABLE 10.11 WOMEN AGED 18–64 YEARS: TYPE OF BREAST CANCER SCREENING AND PERIOD SINCE LAST MAMMOGRAM BY PERIOD SINCE LAST PAP SMEAR, AUSTRALIA, 1989–90 (Per cent)**

<i>Type of screening for breast cancer and period since last mammogram</i>	<i>Pap smear less than 3 years ago</i>	<i>Pap smear 3 years or more ago</i>	<i>Have not had a pap smear(a)</i>	<i>Total</i>
Regularly examines own breasts	66.6	64.3	42.9	62.8
Has had breasts examined	79.4	71.2	28.9	70.9
Has had a mammogram —	19.2	22.1	6.3	17.8
less than 3 years ago	14.9	13.4	4.2	13.1
3 years or more ago	4.3	8.7	2.1	4.6
Has had no breast examination	6.3	8.6	21.1	8.8
<b>Total(b)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes women who have not heard of the pap smear test. (b) Women may have had more than one type of breast cancer screening technique performed, therefore figures do not add to totals.

Source: 1989–90 National Health Survey Screening for Cervical and Breast Cancer Australia (4378.0)



## Immunisation against rubella

If contracted during pregnancy, rubella (German measles) can cause birth defects such as hearing loss, congenital heart disease, congenital cataracts, microcephaly (a condition characterised by a small head), and developmental disability. A rubella immunisation program was introduced in Australia in 1970–71 targeting all girls aged 12 to 14 years. Most State and Territory health authorities have continued with the program.

Results from the ABS National Health Survey 1989–90 indicate that over 90 per cent of women aged 15 to 24 years were immunised against rubella. The proportion declined with age, with just under 85 per cent of women aged 25 to 34 years, and just over 50 per cent of women aged 35 to 44 years immunised (see Table 10.12). Of those women aged between 15 and 44 years who were not immunised against rubella, 66.9 per cent were aged 35 to 44 years, 21.3 per cent were aged 25 to 34 years and 11.8 per cent were aged 15 to 24 years. This may reflect the continuing program of immunising girls around the age of 14 years.

**TABLE 10.12 WOMEN AGED 15–44 YEARS: WHETHER IMMUNISED AGAINST RUBELLA BY AGE, AUSTRALIA, 1989–90 (Per cent)**

Immunisation status	Age group (years)			Total
	15–24	25–34	35–44	
Immunised	91.3	84.2	51.3	76.2
Not immunised	6.3	11.1	38.0	18.0
Not known if immunised	2.4	4.8	10.7	5.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: 1989–90 National Health Survey Summary of Results Australia (4364.0)

While 79.7 per cent of women aged 15 to 44 years born in English speaking countries had been immunised against rubella, the equivalent proportion of women born in non-English speaking countries was 52.7 per cent.

The rate of immunisation against rubella for women aged 15 to 34 years increased markedly between 1983 and 1989–90, from 70 to 85 per cent (see Table 10.13).

**TABLE 10.13 WOMEN AGED 15–34 YEARS: PROPORTION IMMUNISED AGAINST RUBELLA BY AGE, AUSTRALIA, 1983 AND 1989–90 (Per cent)**

Age group (years)	Year	
	1983	1989–90
15–19	86.9	91.9
20–24	81.7	90.7
25–29	62.6	88.8
30–34	46.0	79.4
<b>Total</b>	<b>69.5</b>	<b>84.6</b>

Sources: Rubella Immunisation Survey, March 1983 (4353.0). ABS National Health Survey 1989–90

## GLOSSARY

### Education level categories:

Low	Persons who did not receive any schooling. Persons who left school before age 15 years, and had not gained qualifications since.
Medium	Persons who left school before age 15 years but had gained qualifications since. Persons who left school at age 15 years or more and had gained no qualifications since.
High	Persons who left school at age 15 years or more and had gained qualifications since.

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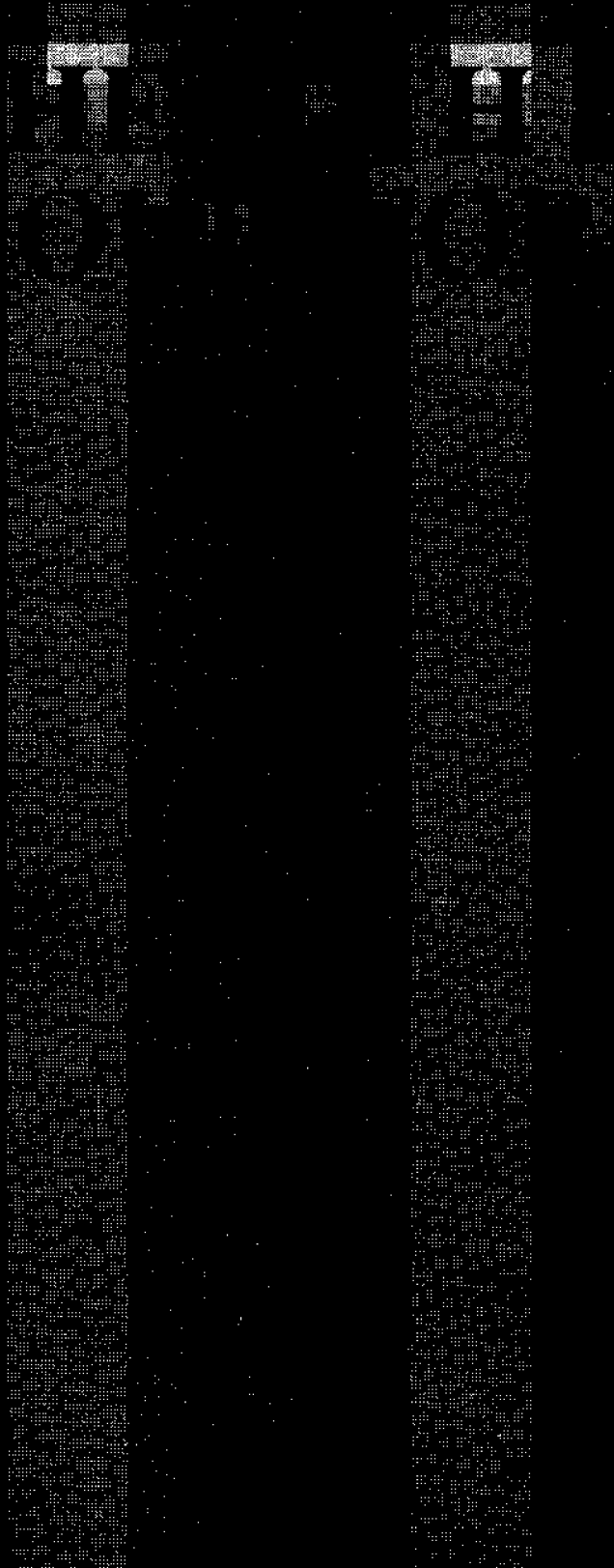
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## **HEALTH LABOUR FORCE**

### **Main findings**

- The percentage of graduating doctors in Australia who were female increased from 34 per cent to 42 per cent in the decade 1981–91.
- 74.6 per cent of all students enrolled in health-related courses in 1993 were female. 59.7 per cent of these female students were enrolled in nursing courses.
- In 1993, females comprised the largest number of students in all health related courses except medicine and dentistry.
- In 1991, 25.4 per cent of medical specialists and 30.3 per cent of general medical practitioners were female.
- In 1992, approximately one in every ten obstetricians and gynaecologists practising in Australia were female.

### **Training of health professionals**

The percentage of doctors who were females graduating from Australian medical schools has increased, from 34 per cent in 1981 to 42 per cent in 1991 (Australian Health Ministers' Advisory Council, Medical Workforce Data Review Committee, February 1992).

Table 11.1 shows that 74.6 per cent of all students undertaking health related courses in Australia in 1993 were female. Of these female students, 59.7 per cent were enrolled in the more traditional female health courses of nursing. In this year, females comprised a higher percentage of students in all of the health professional courses, except for dentistry and medicine.

In 1992, 37 per cent of students undertaking pre- and post-membership studies in Australia with the Royal Australasian College of Obstetricians and Gynaecologists were female.

**TABLE 11.1 STUDENTENROLMENTS IN HEALTH-RELATED COURSES IN HIGHER EDUCATION: FIELD OF STUDY BY SEX, AUSTRALIA, 1993**

<i>Field of study</i>	<i>Number</i>		<i>Per cent</i>	
	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>
Dental therapy	49	3	94.2	5.8
Dentistry	598	859	41.0	59.0
Health – general	665	348	65.6	34.4
Health administration	1,680	557	75.1	24.9
Health counselling	536	99	84.4	15.6
Health support – general	1,041	320	76.5	23.5
Health support – other	276	72	79.3	20.7
Health surveying and env. health	490	454	51.9	48.1
Medical radiography	738	390	65.4	34.6
Medical science	1,016	659	60.7	39.3
Medical technology	810	460	63.8	36.2
Medicine	4,871	5,932	45.1	54.9
Nurse, health education	512	70	88.0	12.0
Nursing – basic	21,437	3,435	86.2	13.8
Nursing – post – basic	9,855	1,007	90.7	9.3
Nutrition and dietetics	520	105	83.2	16.8
Occupational therapy	1,857	278	87.0	13.0
Optometry	452	309	59.4	40.6
Pharmacy	1,128	713	61.3	38.7
Physiotherapy	1,804	1,048	63.3	36.7
Podiatry	176	142	55.3	44.7
Rehabilitation – general	308	169	64.6	35.4
Rehabilitation – other	375	97	79.4	20.6
Science and technology – general	522	165	76.0	24.0
Science and technology – other	459	327	58.4	41.6
Speech pathology/audiology	1,078	74	93.6	6.4
<b>Total</b>	<b>53,253</b>	<b>18,092</b>	<b>74.6</b>	<b>25.4</b>

*Source: Australian Institute of Health and Welfare, unpublished data*

## Health personnel

The Australian Institute of Health and Welfare, at the request of the Australian Health Ministers' Advisory Council, is working on the development of a National Health Labourforce collection (Australian Institute of Health and Welfare, 1992). Annual figures for registered health occupations should be available progressively from 1994.

Table 11.2 shows the breakdown of persons employed in selected health occupations in Australia in 1991. In 1991, 77.5 per cent of persons employed in these selected health occupations were female, however only 25.4 per cent of medical specialists and 30.3 per cent of general medical practitioners were female.

Statistics from the Royal Australasian College of Obstetricians and Gynaecologists show that just over 10 per cent of Fellows practising in Australia in 1992 were female.

Of currently practising gynaecological specialists who completed a mail-out survey conducted by Permail Pty Ltd, as at September 1992, only 9.6 per cent were female.

**TABLE 11.2 PERSONS EMPLOYED IN SELECTED HEALTH OCCUPATIONS:  
OCCUPATION BY SEX, AUSTRALIA, 6 August 1991**

Occupation	Number		Per cent	
	Females	Males	Females	Males
Chiropractors/osteopaths	300	1,240	19.5	80.5
Dental nurses	9,480	110	98.9	1.1
Dental practitioners	1,150	5,570	17.1	82.9
Medical practitioners				
General practitioners —	7,700	17,750	30.3	69.7
Specialists	3,390	9,960	25.4	74.6
Nurses —				
Enrolled	36,490	3,180	92.0	8.0
Registered	128,640	10,730	92.3	7.7
Occupational therapists	3,430	230	93.7	6.3
Optometrists	530	1,280	29.3	70.7
Pharmacists	4,690	6,190	43.1	56.9
Physiotherapists	5,720	1,410	80.2	19.8
Podiatrists	750	390	65.8	34.2
Radiographers	3,120	1,630	65.7	34.3
Speech pathologists	1,700	50	97.1	2.9
Health diagnosis and treatment practitioners nfd	60	150	28.6	71.4
Other health diagnosis and treatment practitioners	4,190	1,350	75.6	24.4
<b>Total</b>	<b>211,350</b>	<b>61,220</b>	<b>77.5</b>	<b>22.5</b>

Source: *Characteristics of Persons Employed in Health Occupations, Australia, Census of Population and Housing (4346.0)*

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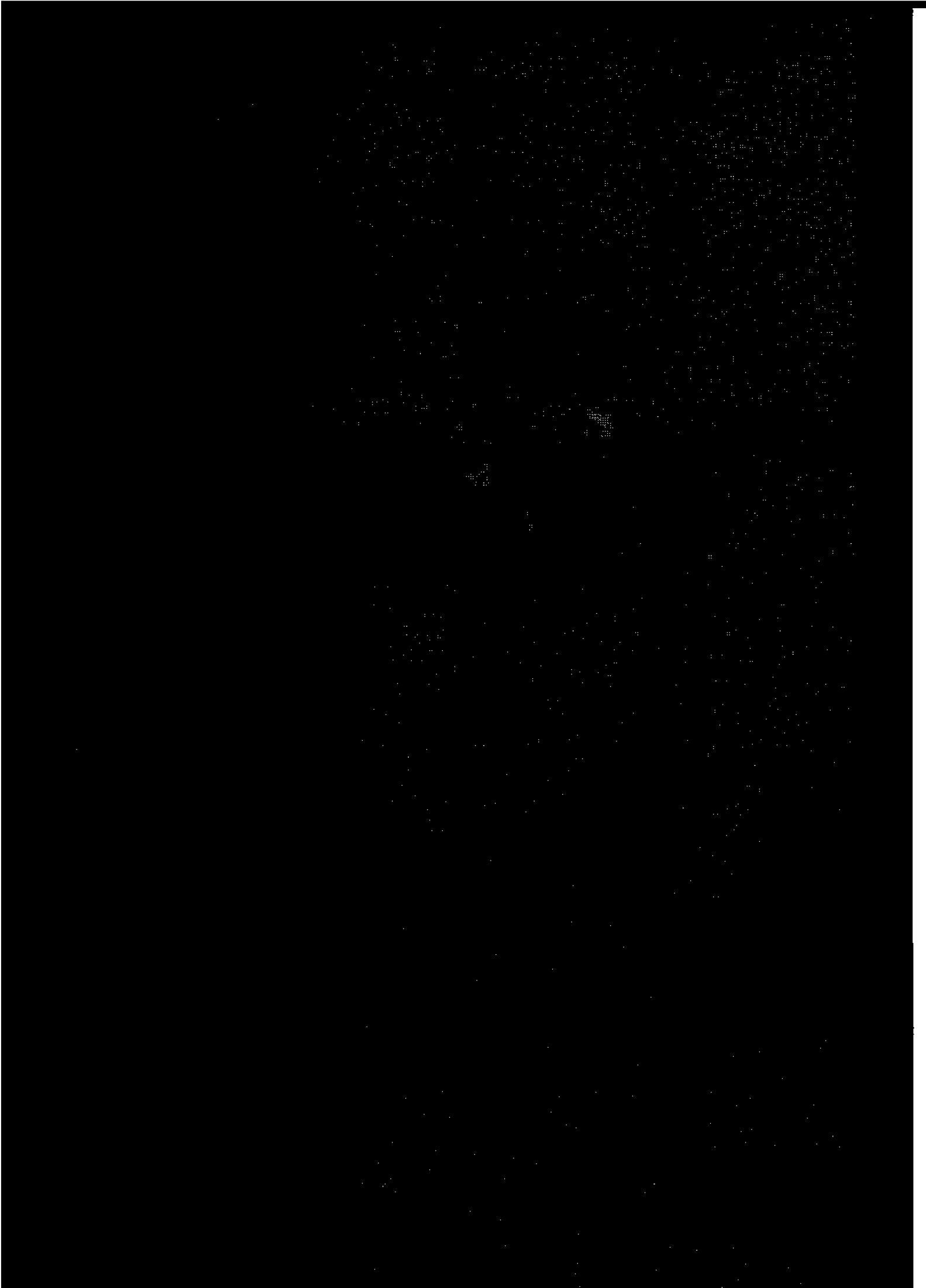
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## HEALTH EXPENDITURE ON WOMEN

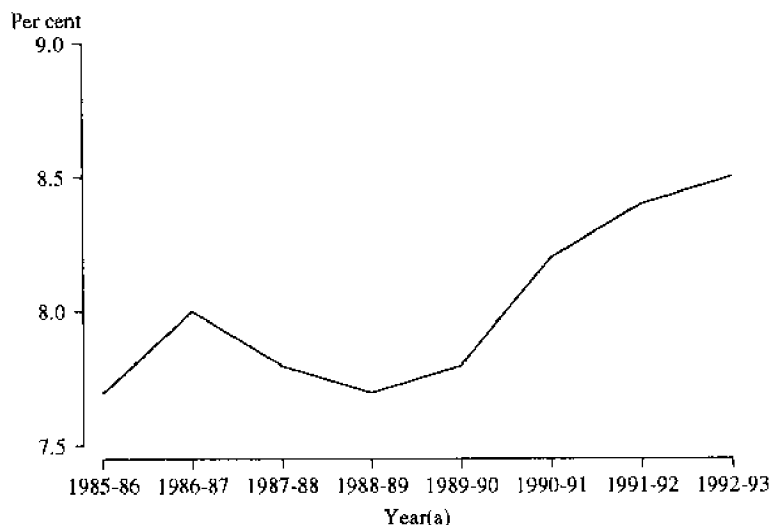
### Main Findings

- Total health expenditure by Australian governments and individuals in 1992–93 is estimated to have been \$34.3 billion or \$1,944 per person. This accounted for 8.6 per cent of gross domestic product (GDP) in that year.
- In 1992–93, the private sector contributed 32.2 per cent of health expenditure, the Commonwealth Government contributed 44.3 per cent and State and Local Governments contributed the remaining 23.5 per cent.
- It is estimated that females consumed in the vicinity of 60 per cent of health expenditure.
- Health research accounted for 1.4 per cent of total health expenditure in 1990–91.

### Introduction

Total health expenditure by Australian governments and individuals in 1992–93 is estimated to have been \$34.3 billion or \$1,944 per person. This accounted for 8.5 per cent of gross domestic product (GDP) in that year. Although health expenditure as a proportion of GDP has fluctuated since 1984–85, it has increased steadily since 1988–89, when it was 7.7 per cent of GDP. Chart 12.1 gives movements in the proportion of GDP accounted for by health expenditure during this time. By the year 2030–31, the Australian Institute of Health and Welfare (AIHW) estimates that health expenditure will account for \$55.2 billion.

CHART 12.1 HEALTH EXPENDITURE AS A PROPORTION OF GDP  
(CURRENT PRICES), AUSTRALIA, 1985-86 TO 1992-93(a)



(a) 1991-92 and 1992-93 figures are based on preliminary estimates.  
Source: Australian Institute of Health and Welfare (1994) *Australia's Health 1994*

The private sector's share of health expenditure increased from 28.2 per cent in 1984–85 to 32.2 per cent in 1992–93. The proportion of Commonwealth Government expenditure decreased during this time from 46.0 per cent in 1984–85 to 44.3 per cent in 1992–93 while the contribution from State and Local Governments fell from 25.8 per cent to 23.5 per cent.



### Estimating expenditure on women's health

Health expenditure is made up of capital expenditure and recurrent expenditure. Total recurrent expenditure has many components including:

#### Institutional sector

- Hospitals
  - recognised public
  - private
  - repatriation
  - public psychiatric
- Nursing homes
- Ambulance services

#### Non-institutional sector

- Medical services
- Dental services
- Other health professional services
- Community and public health
- Pharmaceutical
- Aids and appliances
- Research

It could be argued that many other items which are currently not included in the calculation of health expenditure (such as gym and sporting registration fees, relaxation classes, health promotion, special dietary foods, time spent caring for sick children and relatives) should be included but the majority of these items are difficult to quantify.

It is difficult to estimate the proportion of expenditure that was spent on females as opposed to males. Total figures are available for 1990–91 for the institutional and non-institutional components outlined above (see Table 12.2). However, sex splits are only available for total hospitals (excluding public psychiatric), total nursing homes, medical services and total pharmaceuticals for 1989–90 (see Table 12.1). These four items made up 75 per cent of total recurrent expenditure in 1989–90 (91% of total institutional and 57% of total non-institutional).

Females accounted for 61 per cent of the expenditure for which a sex split is available (75% of total recurrent expenditure). Expenditure on females was higher than males for each of the components (see Table 12.1).

**TABLE 12.1 EXPENDITURE ON ITEMS FOR WHICH A SEX SPLIT IS AVAILABLE, AUSTRALIA, 1989–90**

<i>Area of expenditure</i>	<i>Females (\$m)</i>	<i>Males (\$m)</i>	<i>Total (\$m)(a)</i>
Total hospitals(b)	5,866	4,396	(c)10,263
Total nursing homes	1,697	589	(c)2,286
Medical services	2,949	1,929	4,878
Total pharmaceuticals	1,572	939	2,510
Total of components	12,084	7,853	19,937
Total recurrent	n.a.	n.a.	26,707

(a) Components may not add to totals due to rounding. (b) Excluding public psychiatric. (c) This total differs to that presented in Table 12.2. The data in this table were aggregated from a number of sources and breaking the total into a sex-split resulted in a small loss of accuracy.

Source: Australian Institute of Health and Welfare (1993), *Health Expenditure, Health Expenditure Bulletin, Number 8, April 1993. Australian Institute of Health and Welfare — unpublished data*

TABLE 12.2 TOTAL HEALTH EXPENDITURE: AREA OF EXPENDITURE BY SOURCE OF FUNDS(a) 1990-91 (CURRENT PRICES)

Area of expenditure	Public sector			Private sector			Per cent of recurrent expenditure
	Commonwealth Govt (\$m)	State and Local Govts (\$m)	Total Govt (\$m)	Health insurance funds (\$m)	Indiv-iduals (\$m)	Other(b) (\$m)	
<b>Total health expenditure</b>	<b>13,219</b>	<b>7,992</b>	<b>21,211</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>9,921</b>
Capital expenditure	181	775	956	n.a.	n.a.	n.a.	(c)493
Capital consumption	47	474	521	(d)	(d)	(d)	521
<b>Total recurrent expenditure</b>	<b>12,991</b>	<b>6,743</b>	<b>19,734</b>	<b>3,491</b>	<b>5,096</b>	<b>841</b>	<b>9,428</b>
<i>Total institutional</i>	<i>6,070</i>	<i>5,526</i>	<i>11,596</i>	<i>2,075</i>	<i>858</i>	<i>328</i>	<i>3,262</i>
Total hospitals(e)	4,307	5,012	9,319	2,012	207	305	2,524
Recognised public	3,711	4,301	8,012	550	—	164	714
Private	86	—	86	1,451	152	132	1,734
Repatriation	494	3	497	11	—	8	19
Public psychiatric	17	707	724	—	55	1	56
Total nursing homes(e)	1,658	325	1,983	—	562	5	567
Other institutional services	105	189	294	63	89	19	171
Ambulance	38	189	227	63	89	19	171
Other institutional (nec)	67	—	67	—	—	—	—
<b>Total non-institutional</b>	<b>6,921</b>	<b>1,218</b>	<b>8,138</b>	<b>1,416</b>	<b>4,238</b>	<b>513</b>	<b>6,166</b>
Medical services(e)	4,384	8	4,392	173	636	297	1,107
Dental services	33	62	95	503	887	16	1,406
Other professional services	138	—	138	156	749	159	1,064
Community and public health	293	844	1,138	1	—	14	15
Total pharmaceuticals(e)	1,245	—	1,245	39	1,506	13	1,558
Benefits paid items	1,245	—	1,245	—	224	—	224
All other items	—	—	—	39	1,282	13	1,335
Aids and appliances	60	2	62	153	407	13	573
Administration	470	126	596	391	—	—	391
Research	279	98	378	—	53	—	53
Other non-institutional	17	77	94	—	—	—	—
<b>Total</b>	<b>31,132</b>	<b>31,132</b>	<b>31,132</b>	<b>31,132</b>	<b>31,132</b>	<b>31,132</b>	<b>31,132</b>

(a) This table records the amounts provided by Commonwealth, State and Local Governments and the private sector to fund expenditure on health. It does not give the actual amount spent directly on health goods and services by each sector. (b) Includes the health costs paid by workers compensation and motor vehicle third party insurance funds. (c) Capital expenditure for the private sector cannot be broken down by source of funds. (d) Capital consumption (depreciation) for the private sector is included in recurrent expenditure. (e) A female/male breakdown is available for 1989-90. See Table 12.1.

Source: Australian Institute of Health and Welfare (1994), *Australia's Health 1994*

- Research** Health research is an area which has particular potential to improve the health of women in the future. As outlined in Table 12.2, health research accounted for \$431 million or 1.4 per cent of total health expenditure. Unfortunately no sex split is available. Two studies which have been conducted specifically on women's health research are *A Sliver — Not Even A Slice: A Report of a Study on Expenditure on Women and Health Research* by the Melbourne District Health Council (1990) and *Researching Women's Health: An Issues Paper* by Penny Kane (1991).
- The National Women's Health Policy** A major Government initiative in relation to women's health has been the National Women's Health Policy. The goal of this policy is to improve the health and well-being of all women in Australia, with a focus on those most at risk, and to encourage the health system to be more responsive to the needs of women. Action towards the goal has begun with the implementation of the National Women's Health Program. This was proposed for an initial four year period as a Commonwealth-State-Territory cost shared program. The objective of the program is to provide funding for the promotion of primary health care for women, focusing on improvements related to the identified priority issues in the policy.
- The seven priority issues identified by the policy were reproductive health and sexuality; the health of ageing women; women's emotional and mental health; violence against women; occupational health and safety; the health needs of carers; and the health effects of sex role stereotyping.
- Expenditure outlayed as a result of the program is detailed in Appendix A (at the end of this Chapter). Between 1989–90 and 1992–93, a total of \$35,971,472 was allocated for the National Women's Health Program by the Commonwealth and States and Territories.
- The percentage of funding to and by each State/Territory reflects the different population sizes. The majority of funding was in New South Wales (34.5%) and Victoria (26.5%) while the lowest percentages were in the Northern Territory (1.2%) and the Australian Capital Territory (1.8%). Examples of projects funded under the National Women's Health Program are outlined in Appendix B (at the end of this Chapter).
- Other government spending on women's health** A number of Commonwealth and State Departments release Women's Budget Statements as part of the annual financial cycle. Budget statements relating to the health portfolio reveal further Government funding on women's health. Examples of Commonwealth and State/Territory expenditure are detailed in Appendix C (at the end of this Chapter).
- Out of pocket expenditure** Approximately \$25.9 billion was spent on health care in Australia in 1988–89, of which around \$6 billion came from direct out of pocket payments<sup>(a)</sup> by individuals. According to a National Health Strategy Paper (1991), females had higher out of pocket costs than males because they used more services. On average, females paid 37.4 per cent more than males (\$33.23 compared with \$24.19) and used 39.5 per cent more services.

(a) The following figures on out of pocket payments are for annual average payments per patient for all services.

The overall expenditure total is affected by the much larger amounts spent by women in their reproductive years. Women aged 20–44 years spent almost 90 per cent (89.0%) more than men of the same age (\$41.46 compared with \$21.94). Men spent more than women in the older age groups. Men aged 60–74 years spent 16.2 per cent more than women (\$34.80 compared with \$29.96) while men aged 75 years and over spent 16.1 per cent more than women (\$26.15 compared with \$22.52).

Although people in the older age groups used more services they did not necessarily have higher out of pocket costs, as the average payment per service was affected by the extent to which the relevant age group used direct billing. Females and males in the older age groups had much lower payments per service mainly because of relatively high direct billing rates. Females aged 75 years and over, who had 81.4 per cent of their services direct billed, had an average payment per service of \$1.27 compared with women aged 45–59 years, who had 55.2 per cent of services direct billed, and paid on average \$3.94 per service.

## APPENDIX A

## National Women's Health Program: Funding by Commonwealth and States/Territories, 1989-90 to 1992-93

State	Project	1989-90		1990-91		1991-92		1992-93		Total
		C'wealth	State	C'wealth	State	C'wealth	State	C'wealth	State	
NSW	Health Services	170,000	170,000	972,625	999,500	2,269,888	2,350,812	2,389,773	2,442,773	11,765,371
	Information/Education	42,000	42,000	30,000	30,000	45,273	45,273	46,021	46,021	326,588
	<b>Total</b>	<b>212,000</b>	<b>212,000</b>	<b>1,002,625</b>	<b>1,029,500</b>	<b>2,315,161</b>	<b>2,396,085</b>	<b>2,435,794</b>	<b>2,488,794</b>	<b>12,091,959</b>
Vic.	Health Services	183,436	237,436	675,750	714,000	1,765,649	1,827,611	1,794,617	1,829,437	9,007,936
	Information/Education	32,000	32,000	34,000	34,000	34,494	34,494	35,063	35,063	271,114
	<b>Total</b>	<b>195,436</b>	<b>269,436</b>	<b>709,750</b>	<b>748,000</b>	<b>1,800,143</b>	<b>1,862,105</b>	<b>1,829,680</b>	<b>1,864,500</b>	<b>9,279,050</b>
Qld	Health Services	80,000	128,500	(a)448,375	(a)474,635	(a)1,107,206	(a)1,178,164	1,159,206	1,184,206	(b)5,760,292
	Information/Education	18,500	18,500	(a)	(a)	(a)	(a)	22,444	22,444	(b)81,888
	<b>Total</b>	<b>98,500</b>	<b>147,000</b>	<b>448,375</b>	<b>474,635</b>	<b>1,107,206</b>	<b>1,178,164</b>	<b>1,181,650</b>	<b>1,206,650</b>	<b>5,842,180</b>
SA	Health Services	42,000	66,436	114,850	114,850	584,238	604,898	593,883	607,883	2,729,038
	Information/Education	4,564	4,564	5,150	5,150	10,779	10,779	10,957	10,957	62,900
	<b>Total</b>	<b>46,564</b>	<b>71,000</b>	<b>120,000</b>	<b>120,000</b>	<b>595,017</b>	<b>615,677</b>	<b>604,840</b>	<b>618,840</b>	<b>2,791,938</b>
WA	Health Services	(c)	(c)	(a)244,750	(a)244,750	(a)392,250	(a)392,250	(a)784,650	(a)784,650	(a)2,843,300
	Information/Education	(c)	(c)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
	<b>Total</b>	<b>(c)</b>	<b>(c)</b>	<b>244,750</b>	<b>244,750</b>	<b>392,250</b>	<b>392,250</b>	<b>784,650</b>	<b>784,650</b>	<b>2,843,300</b>
Tas.	Health Services	62,500	72,500	61,625	72,250	174,624	185,659	177,507	188,507	995,172
	Information/Education	5,000	5,000	5,300	5,300	5,390	5,390	5,479	5,479	42,338
	<b>Total</b>	<b>67,500</b>	<b>77,500</b>	<b>66,925</b>	<b>77,550</b>	<b>180,014</b>	<b>191,049</b>	<b>182,986</b>	<b>193,986</b>	<b>1,037,510</b>
NT	Health Services	35,000	45,000	37,188	47,813	(d)	58,200	(d)95,642	(a)58,974	(e)377,817
	Information/Education	5,000	5,000	5,313	5,313	(d)	5,390	(d)10,868	(a)	(e)36,884
	<b>Total</b>	<b>40,000</b>	<b>50,000</b>	<b>42,501</b>	<b>53,125</b>	<b>(d)</b>	<b>63,590</b>	<b>(d)106,510</b>	<b>58,974</b>	<b>414,701</b>
ACT	Health Services	35,000	45,000	37,188	48,313	97,013	114,226	98,615	109,615	584,970
	Information/Education	5,000	5,000	5,313	5,313	5,390	5,390	5,479	5,479	42,364
	<b>Total</b>	<b>40,000</b>	<b>50,000</b>	<b>42,501</b>	<b>53,625</b>	<b>102,403</b>	<b>119,616</b>	<b>104,094</b>	<b>115,094</b>	<b>627,334</b>
<b>Total(f):</b>	<b>Health Services</b>	<b>587,936</b>	<b>764,872</b>	<b>2,592,351</b>	<b>2,716,111</b>	<b>6,390,868</b>	<b>6,711,820</b>	<b>7,093,893</b>	<b>7,206,045</b>	<b>34,063,896</b>
	<b>Information/Education</b>	<b>112,064</b>	<b>112,064</b>	<b>85,076</b>	<b>85,076</b>	<b>101,326</b>	<b>106,716</b>	<b>136,311</b>	<b>125,443</b>	<b>864,076</b>
	<b>C'wealth and State</b>	<b>700,000</b>	<b>876,936</b>	<b>2,677,427</b>	<b>2,801,187</b>	<b>6,492,194</b>	<b>6,818,536</b>	<b>7,230,204</b>	<b>7,331,488</b>	<b>34,927,972</b>
	<b>Total:</b>	<b>1,576,936</b>	<b>1,576,936</b>	<b>5,478,614</b>	<b>5,478,614</b>	<b>13,310,730</b>	<b>13,310,730</b>	<b>14,561,692</b>	<b>14,561,692</b>	<b>34,927,972</b>
Professional Education (Commonwealth contribution)										
1989-90	\$300,000									
1990-91	\$133,500									
1991-92	\$275,000									
1992-93	\$185,000									

(a) Funding for Information/Education is included with funding for Health Services. Separate figures are not available. (b) For the years 1990-91 and 1991-92, funding for Information/Education is included with funding for Health Services. (c) Western Australia did not participate in the National Women's Health Program in 1989-90.

(d) Northern Territory 1991-92 Commonwealth figures are included in 1992-93 Commonwealth figures. (e) For the year 1992-93, State funding for Information/Education is included with State funding for Health Services. (f) Totals are distorted because funding could not be separated into project totals in Queensland and Western Australia for the years 1990-91 and 1991-92 and in Western Australia and the Northern Territory for the year 1992-93. Also, Commonwealth funding in the Northern Territory for the year 1991-92 is included in the year 1992-93.

Source: Department of Health, Housing, Local Government and Community Services

## **APPENDIX B**

### **THE NATIONAL WOMEN'S HEALTH PROGRAM**

The National Women's Health Program funds projects in the following categories:

- The provision of a diverse range of new or extended services to both major population centres and rural centres with an emphasis on illness prevention, counselling and support services, screening services and treatment. This component has received total funding of \$33.99 million.
- The provision of health information and education for women, emphasising the seven priority health issues. This component has received \$1.08 million.
- The provision of training and education for effective health care which expands continuing education courses on women's health for general practitioners and nurse practitioners, as well as developing curriculum modules for teachers on the health of young women. Funding for this component has been \$0.89 million.

Below is a selected outline of projects funded under the National Women's Health Program:

#### **New South Wales**

**Projects** and activities include ethnic obstetric liaison programs; community midwife programs; employment of an Aboriginal and Torres Strait Islander Health Education Officer and an Aboriginal and Torres Strait Islander outreach program; mobile interpreter services; services for older women and women of non-English speaking background; women's health nurse practitioner programs; consumer information and education; a review of sexual assault services; training related to domestic violence; and development of a Standards Manual for Women's Health Centres.

#### **Victoria**

Funds have provided for the development of regional women's health services; women's health centres; the expansion of the rural sexual assault program; and the implementation of a health information strategy for women of non-English speaking background.

#### **Queensland**

Projects funded have included a program to involve older women in the community as educators; PACT (Protect all Children Today) counselling for adult women and adolescent incest survivors; women's health centres; a women's health information network; and women's health nurses to provide a mobile clinical, health education, information and referral service.

#### **South Australia**

Programs funded to date include women's health services; community health nurses; women's health promotion projects; a women's health line telephone counselling and information service; a women's health newsletter; a support worker to assist in the development of women's health services in country South Australia; a childbirth information project; a sexual health arts production; health awareness for rural women; midlife and older women's health and well-being information project; sole parents awareness training; and a women's health training and development project.

#### **Western Australia**

Programs funded to date include a multicultural women's health centre; a post-natal depression project; women's health centres, sexual assault referral

centres and counselling services; a multicultural women's health information centre; regional women's health co-ordinators; a women's health information project; establishment of a women's health database; and a women's health services network.

**Tasmania**

Projects funded include an Older Women's Festival to encourage women to explore their health; women's health and information centres; non-English speaking background Women's Health Information Project to promote access to information and services; Emotional Responses to Trauma for women who have undergone a caesarean section; Women's Health in the Middle Years for rural and isolated women aged over 35 years; and Health for Women in the Workplace to improve access to health services and information.

**The Northern Territory**

Projects have included primary health care, counselling, screening and educational services for Aboriginal and Torres Strait Islander women; education on sexuality and reproduction for young women; health care concerns of women in mid-life who are from a non-English speaking background and/or are illiterate in English; and support for Aboriginal and Torres Strait Islander women who are exposed to domestic violence, mental distress and sexual abuse.

**The Australian Capital Territory**

Key activities have included a community based Women's Health Centre established to focus on education and information provision and provide a resource base for women and women's health groups; and a Consumer Information and Education Strategy, which has focused on reproductive health, and substance abuse.

**Training of health care providers**

Five projects have been funded under this component to address some of the issues identified in the policy and to meet the major recommendations under this key action area.

## APPENDIX C

### OTHER GOVERNMENT EXPENDITURE ON WOMEN'S HEALTH

Analysis of State and Commonwealth Women's Budget Statements and Health Department Annual Reports from 1989–90 to 1992–93 reveals a varied array of women's health projects. The following are examples of the projects which have been funded in each State/Territory and Commonwealth projects, and budget allocations where specified in the relevant budget statement(a):

#### Commonwealth

**Organised Approach to the Prevention of Cervical Cancer** \$23.4 million was allocated by the Commonwealth for the four year duration of this program, for new directions in cervical cancer screening. Of this money, \$17 million was directed to the States/Territories for development of cervical cytology registries and supplementary field services to meet the needs of special groups, with the balance going towards a comprehensive communication strategy directed at service providers and women; \$3.55 million was allocated for preliminary activities in 1991–92; in 1992–93 the Commonwealth allocated \$2 million to States/Territories for program development and \$1 million for the communications strategy.

**National Program for the Early Detection of Breast Cancer** In March 1990, the Prime Minister announced funding of \$64 million for the first three years of this five year program. The Commonwealth allocated \$20 million in the 1990–91 Budget for this program. In 1990–91 \$1 million was provided, and \$18.7 million was provided for 1991–92, of which \$17.7 million was for payment to the States. In 1991–92, \$15.6 million was spent, and expenditure of \$17 million was estimated for 1992–93.

**Alternative Birthing Services Program** \$6.44 million over four years has been made available to provide incentive to the States and Territories to provide a range of alternative birthing options. In 1990–91 \$2.08 million was allocated to the States and Territories; in 1991–92 \$1.32 million was provided by the Commonwealth to this program. The Commonwealth allocated \$2.95 million in 1992–93. Additional funding has been made by each State and Territory in a cost-shared arrangement.

#### New South Wales

**Women's Health Nurse Practitioner Program** Aims to provide an easily accessible gynaecological health care service to well women, in particular isolated and socially disadvantaged women. 1989–90 expenditure was \$1,628,500; 1990–91 \$1,600,000; 1991–92 \$2,500,000; and 1992–93 estimate was \$2,500,000.

**Women's Health Services** Thirty-eight non-Government Women's Health Services were to be funded during 1991–92 which provide health services in a wide range of areas such as cervical and breast cancer screening; menopause and osteoporosis; gynaecological health; family planning; substance abuse; sexual assault; violence against women; and emotional and mental health. 1989–90 expenditure was \$8,763,000; 1990–91 \$9,356,000; 1991–92 \$5,544,000; and 1992–93 \$5,218,000 (includes Commonwealth funding).

(a) The Budget Statements did not always outline whether the funding was State, Commonwealth or joint. Where it was specified, it is noted in the following examples of women's health projects.



**Victoria****Women in Industry,  
Contraception and Health**

Provides advice on occupational health and safety, contraception, reproductive health and preventative strategies for women with a special focus on women of non-English speaking background. 1989-90 expenditure was \$72,000; 1990-91 expenditure was \$135,240; and 1991-92 estimate was \$164,315 (includes Commonwealth funding).

**Aboriginal and Torres Strait  
Islander Women's Programs**

Funding has been provided for a project worker; a women's house and an Aboriginal and Torres Strait Islander sexual assault worker, antenatal programs, a health awareness program focusing on breast self-examination and cervical cancer education and a camp for women and their children who have recently returned from foster placement. 1990-91 expenditure was \$136,255; 1991-92 expenditure was \$140,000 (includes Commonwealth funding).

**Queensland****Women's Health Sexual  
Assault Program**

1991-92 expenditure was \$758,000; 1992-93 allocation was \$1.25 million. The program aimed to address the issue of sexual violence against women in Queensland and promote total health care through the provision of rape crisis/sexual assault services, community education and development of protocols and standards for service delivery.

**The Young Parents Program**

For women under 18 years of age who are pregnant or who have children. 1991-92 expenditure was \$100,113; 1992-93 allocation was \$120,000.

**South Australia****Women for Sobriety Groups**

Self-help for women who are alcohol/substance dependent. In 1991-92, 15 groups were operating in metropolitan Adelaide and major country centres. 1989-90 expenditure was \$40,000; 1990-91 \$42,000; 1991-92 \$28,500; and 1992-93 \$29,800.

**Services for Young Women**

Action taken includes the establishment of youth facilities in the community to address the health of young people, establishment of sexual health programs, ante-natal programs targeted at teenage sole parents and establishment of young mother's groups focusing on a wide range of activities from skills development for employment purposes to parenting skills.

**Aboriginal and Torres Strait  
Islander Health Services**

Aboriginal and Torres Strait Islander women have been encouraged to participate in the formulation of program content on women's committees and in Women's Business Clinics which focus specifically on indigenous women's health issues. The aim is a decrease in the perinatal death rate for Aboriginal and Torres Strait Islander births and general improvements in indigenous women's health.

**Western Australia**

The Western Australian Health Department's Annual Reports contain details of women's projects, which include the establishment of a number of pap smear clinics; funding for a Women's Cancer Prevention Program; and the work of the Women's Health Policy Unit including domestic violence and country sexual assault services, and input into the Ministerial Task Force Review of Obstetric, Neonatal and Gynaecological Services.

**Tasmania**

**Women in the Middle Years** Information for women to seek advice on issues related to menopause and women's health needs in the middle years. 1992-93 estimate was \$31,529.

**Post-natal Depression Action Group** Aims to increase community awareness and reduce the effects of post-natal depression on women and their families. 1991-92 expenditure was \$1,500; 1992-93 estimate was \$20,000.

**The Northern Territory**

Women's health projects outlined in the Annual Report of the Northern Territory Department of Health and Community Services include an Aboriginal and Torres Strait Islander Women's Health Centre, information sessions on topics relevant to women's health issues, and the establishment of the first Northern Territory Women's Health Policy which provides a philosophical framework for the development of women's health services in the Territory and incorporates the principles and key issues of the National Women's Health Policy.

**The Australian Capital Territory**

**Migrant Health Unit** The aim is to ensure overseas born ACT residents have effective access to health services and information about health promotion and ill health prevention. New initiatives in health education for migrant women will focus on reproductive health, nutrition, dental care, mental health, child health, and the Australian health system.

**ACT Health Promotion Fund** Has funded a number of projects relating to women's health including supported programs dealing with issues faced by survivors of domestic violence and incest and issues faced by older women and new parents, encouraging girls and women to participate in sport, discouraging young women from taking up smoking, and health and education programs relating to women and AIDS.

## GLOSSARY

<b>Capital</b>	Stock of plant, equipment and other productive resources held by a firm, organisation or individual.
<b>Capital consumption</b>	Depreciation on capital assets.
<b>Capital expenditure</b>	Expenditure on fixed assets, whether for additions or replacements.
<b>Gross Domestic Product</b>	The total market value of goods and services produced in Australia within a given period, after deduction of the cost of goods and services used up in the process of production, but before deducting all allowances for the consumption of fixed capital. GDP(1), the income approach, is the measure used in this chapter. It is the sum of factor incomes, consumption of fixed capital (depreciation) and net direct taxes.
<b>Recurrent expenditure</b>	Expenditure on goods that are consumed within a certain period. It is associated with ongoing running costs.

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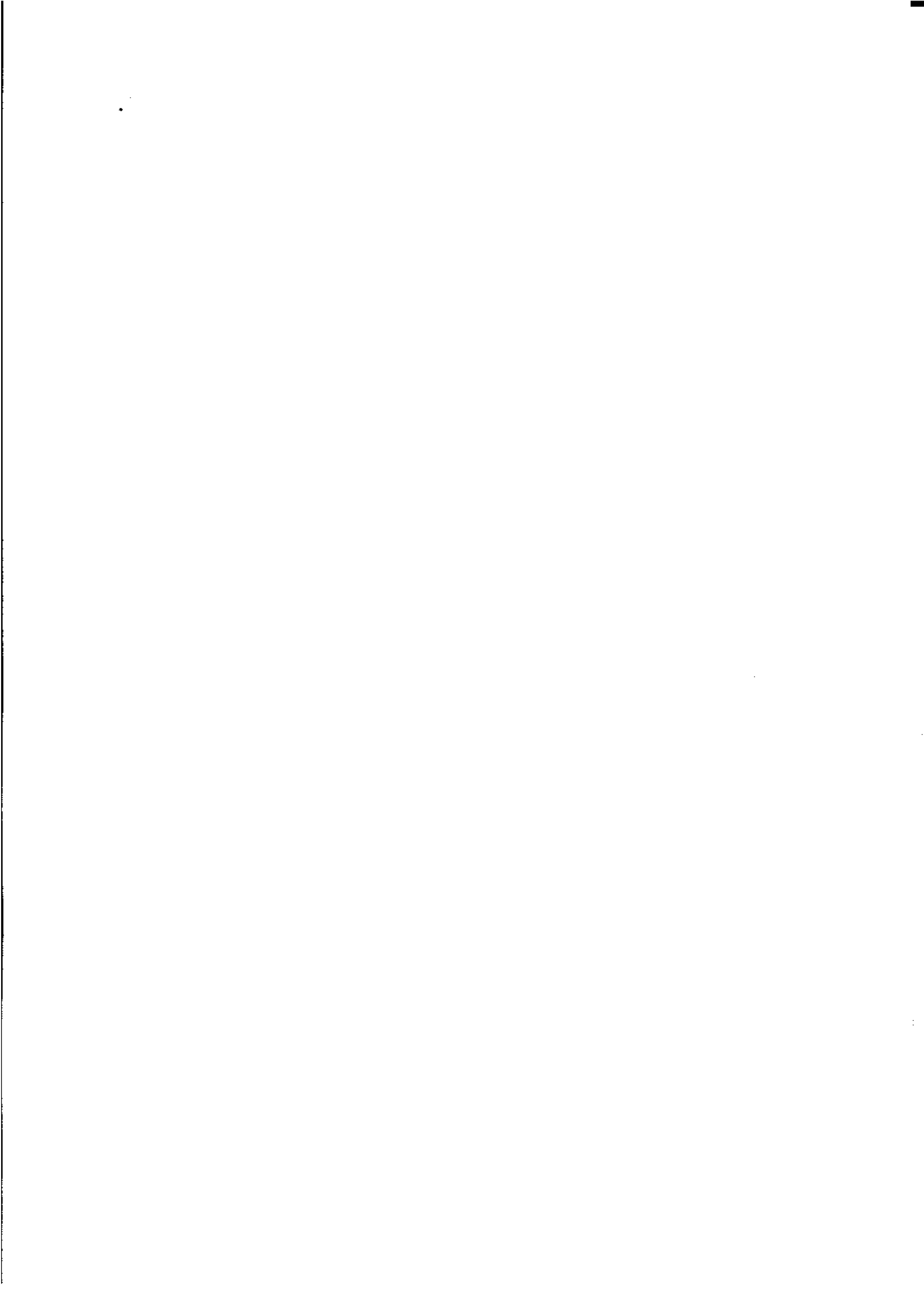
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**State/Territory and Commonwealth Women's Budget Statements.**



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## PRIVATE HEALTH INSURANCE

### Main findings

- Females were more likely to be covered by private health insurance than males (48.6% compared with 45.5%).
- The main reason for having private health insurance among females was that it offered security/protection/peace of mind (40.5%).
- The majority of females with private health insurance had both hospital and ancillary cover (70.6%), and most paid through a family rate of contribution (69.2%).
- The likelihood of being covered by private health insurance increased with age and income.
- Females in South Australia (55.1%) were the most likely to be covered by private health insurance, while females in Queensland were the least likely (40.1%).
- Married females were twice as likely to have private health insurance than those who were separated (56.5% compared with 27.0%).
- Married females with dependent children were 2.5 times more likely to have private health insurance than females who were single mothers with dependent children (54.3% compared with 21.5%).

### Introduction

In June 1992 the ABS conducted a Health Insurance Survey to obtain information about the levels of private health insurance cover in the Australian community. Similar surveys were conducted by the ABS in 1988 and 1990.

The survey included all persons aged 15 years and over, except:

- (a) members of the defence forces;
- (b) certain diplomatic personnel of overseas governments, customarily excluded from census and estimated populations;
- (c) overseas visitors holidaying in Australia;
- (d) members of non-Australian defence forces (and their dependents) stationed in Australia;
- (e) all persons in non-private dwellings (hotels, motels, hospitals, etc.);
- (f) visitors to private dwellings; and
- (g) persons staying at caravan parks.

Information on health insurance arrangements was obtained for each person in the sampled population, except for dependent full-time students aged 15 to 25 years. These persons were assumed to be covered by the health insurance arrangements of the contributor in the contributor unit to which they were attached.

### Those covered by private health insurance

The Health Insurance Surveys indicate that, in recent years, there has been a decrease in the proportion of the population covered by private health insurance, from 52.3 per cent in 1988 to 47.9 per cent in 1992. This downward trend has continued. Figures from the Private Health Insurance Administration

Council indicate that, at 30 June 1994, 42.9 per cent of people were covered by private health insurance.

The 1992 Health Insurance Survey showed that a higher proportion of females than males were covered by private health insurance (48.6% compared with 45.5%). However, the number of females covered by private health insurance, and the extent of coverage varied considerably when examined by such variables as income, age, State/Territory, marital status and whether or not there were dependent children. A summary of selected variables is presented in Table 13.1.

**TABLE 13.1 PERSONS AGED 15 YEARS AND OVER: WHETHER COVERED BY PRIVATE HEALTH INSURANCE, AUSTRALIA, 1992 ('000)**

	<i>Whether has private health insurance</i>					
	<i>Females</i>			<i>Males</i>		
	<i>Insured</i>	<i>Not insured</i>	<i>Total</i>	<i>Insured</i>	<i>Not insured</i>	<i>Total</i>
<i>Type of private health insurance</i>						
Hospital and ancillary	2,235.7	..	2,235.7	1,994.1	..	1,994.1
Hospital only	620.4	..	620.4	503.1	..	503.1
Ancillary only	259.8	..	259.8	214.0	..	214.0
Type not known	48.8	..	48.8	47.2	..	47.2
Not insured	..	3,343.1	3,343.1	..	3,298.4	3,298.4
<b>Total</b>	<b>3,164.6</b>	<b>3,343.1</b>	<b>6,507.7</b>	<b>2,758.3</b>	<b>3,298.4</b>	<b>6,056.8</b>
<i>Contribution rate</i>						
Single rate	973.9	..	973.9	621.2	..	621.2
Family rate	2,190.8	..	2,190.8	2,137.2	..	2,137.2
Not insured	..	3,343.1	3,343.1	..	3,298.4	3,298.4
<b>Total</b>	<b>3,164.6</b>	<b>3,343.1</b>	<b>6,507.7</b>	<b>2,758.3</b>	<b>3,298.4</b>	<b>6,056.8</b>
<i>Age group (years)</i>						
15-19	65.1	151.0	216.2	71.1	196.9	268.1
20-24	223.1	343.8	566.9	191.4	447.5	638.9
25-34	588.8	700.9	1,289.7	545.0	806.5	1,351.4
35-44	706.6	632.0	1,338.5	665.5	611.9	1,277.4
45-54	612.5	426.6	1,039.1	566.2	411.1	977.3
55-64	462.8	358.4	821.2	407.6	320.9	728.5
65 and over	505.7	730.4	1,236.0	311.4	503.6	815.0
<b>Total</b>	<b>3,164.6</b>	<b>3,343.1</b>	<b>6,507.7</b>	<b>2,758.3</b>	<b>3,298.4</b>	<b>6,056.8</b>
<i>Gross weekly unit income(\$)</i>						
Less than 160(a)	201.1	568.0	769.2	119.4	502.0	621.4
160-239	162.7	424.1	586.8	90.7	255.4	346.1
240-399	464.7	964.1	1,428.8	356.0	956.9	1,313.0
400-599	591.2	578.0	1,169.2	550.8	690.8	1,241.6
600-799	443.8	291.9	735.7	419.6	338.2	757.8
800 or more	1,102.5	392.8	1,495.3	1,042.4	414.0	1,456.4
Not stated	198.7	124.0	322.8	179.5	141.1	320.6
<b>Total</b>	<b>3,164.6</b>	<b>3,343.1</b>	<b>6,507.7</b>	<b>2,758.3</b>	<b>3,298.4</b>	<b>6,056.8</b>
<i>Source of unit income</i>						
Not applicable	31.1	62.0	93.1	29.0	75.9	104.9
Wages or salary	1,928.7	1,389.2	3,317.9	1,788.2	1,621.4	3,409.6
Government pension or cash benefit	429.3	1,511.0	1,940.3	231.6	1,147.8	1,379.5
Own business or share in partnership	410.7	243.4	654.1	423.0	309.4	732.4
Superannuation	118.9	34.4	153.3	93.8	35.2	129.1
Investment/interest	167.7	45.1	212.8	125.4	51.1	176.5
Other	28.2	27.8	56.0	20.7	28.7	49.4
Not stated	50.1	30.1	80.2	46.5	28.8	75.3
<b>Total</b>	<b>3,164.6</b>	<b>3,343.1</b>	<b>6,507.7</b>	<b>2,758.3</b>	<b>3,298.4</b>	<b>6,056.8</b>

(a) Includes persons who stated they received no income.

Source: ABS Health Insurance Survey 1992

### Reasons for having and ceasing private health insurance

The most commonly stated reason for having private health insurance amongst females was for security/protection/peace of mind (40.5%), followed by the facts that it allowed choice of a doctor (33.7%) and use of private hospitals (30.1%).

In comparison, of the females who ceased private health insurance in the two years prior to interview, the most commonly stated reason was financial: they could no longer afford private health insurance (69.3%). A further 10.8 per cent felt that Medicare provided sufficient cover.

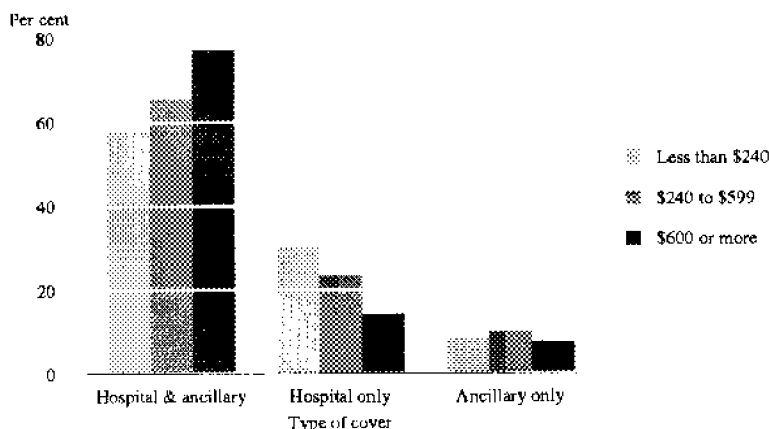
### Type of private health insurance

The majority of females with private health insurance had both hospital and ancillary cover (70.6%), while 19.6 per cent had hospital cover only and 8.2 per cent had ancillary cover only. The remaining 1.5 per cent did not know what type of cover they had.

Of the females who had hospital cover, the majority had a high rate of cover (80.5%), while 17.6 per cent had basic cover. The remaining 1.8 per cent did not know what type of hospital cover they had.

Income was a factor in the type of health cover held by females. As gross weekly unit income increased, so did the level of health cover. Of the females with private health insurance, the majority in each income group had hospital and ancillary cover. However the proportion who had hospital and ancillary cover increased with unit income. While 57.7 per cent of females with private health insurance and a gross weekly unit income of less than \$239 had hospital and ancillary cover, this increased to 77.2 per cent of females with private health insurance and a gross weekly unit income of \$600 or more (see Chart 13.1).

CHART 13.1 FEMALES AGED 15 YEARS AND OVER WITH PRIVATE HEALTH INSURANCE: GROSS WEEKLY UNIT INCOME BY TYPE OF COVER, AUSTRALIA, 1992

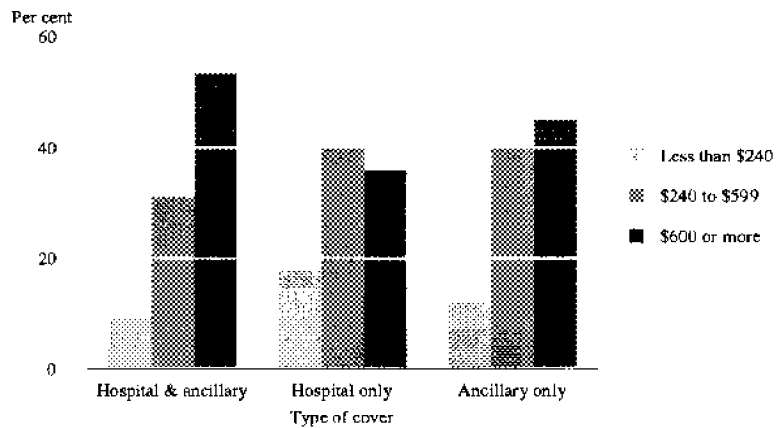


Source: ABS Health Insurance Survey 1992

The majority (53.4%) of females who had hospital and ancillary cover reported a gross weekly unit income of \$600 or more. In comparison, females with hospital cover only most commonly reported a gross weekly unit income of \$240 to \$599 (see Chart 13.2).



**CHART 13.2 FEMALES AGED 15 YEARS AND OVER WITH PRIVATE HEALTH INSURANCE: TYPE OF COVER BY GROSS WEEKLY UNIT INCOME, AUSTRALIA, 1992**



Source: ABS Health Insurance Survey 1992

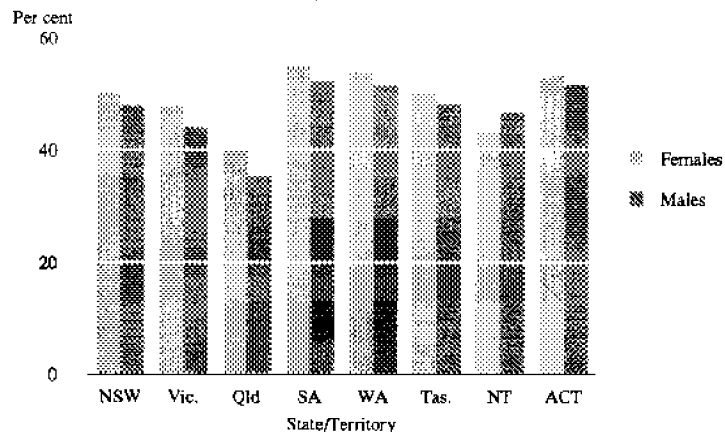
**Contribution rate**

The most common type of contribution rate amongst females with private health insurance was a family rate (69.2%). The remaining 30.8 per cent had a single rate of contribution. For males, the figures were 77.5 per cent and 22.5 per cent respectively.

**State**

Females from South Australia were the most likely to be covered by private health insurance (55.1%) followed by females from Western Australia (54.1%). Females from Queensland (40.1%) and the Northern Territory (43.4%) were the least likely to be covered. Males from South Australia were the most likely to be covered by private health insurance (52.3%) while males from Queensland were the least likely (35.4%) (see Chart 13.3).

**CHART 13.3 FEMALES AND MALES AGED 15 YEARS AND OVER: PROPORTION WITH PRIVATE HEALTH INSURANCE BY STATE/TERRITORY, AUSTRALIA, 1992**

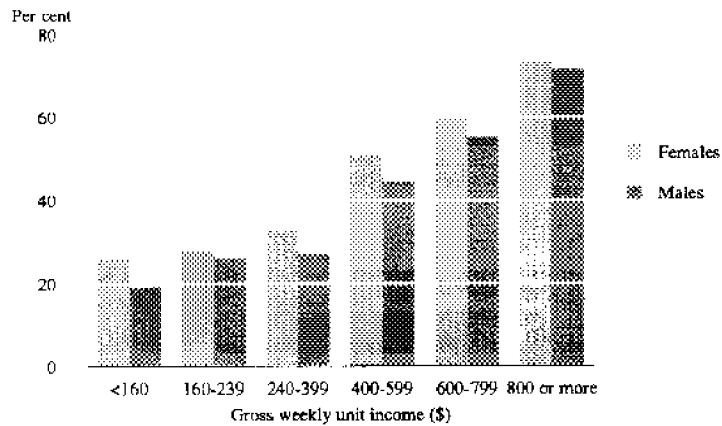


Source: ABS Health Insurance Survey 1992

**Income .**

The likelihood of being covered by private health insurance increased with gross weekly unit income. While just over one in four (26.1%) females with a gross weekly unit income of less than \$160 had private health insurance, this increased to almost three in four (73.7%) for females with a gross weekly unit income of \$800 or more per week (see Chart 13.4).

**CHART 13.4 FEMALES AND MALES AGED 15 YEARS AND OVER:  
PROPORTION WITH PRIVATE HEALTH INSURANCE BY GROSS WEEKLY  
UNIT INCOME, AUSTRALIA, 1992**



Source: ABS Health Insurance Survey 1992

Females whose main source of unit income came from investment/interest were the most likely to be insured (78.8%), followed by those whose main source of unit income came from superannuation (77.5%). In comparison, females whose main source of unit income came from a government pension or cash benefit were by far the least likely to have private health insurance (22.1%).

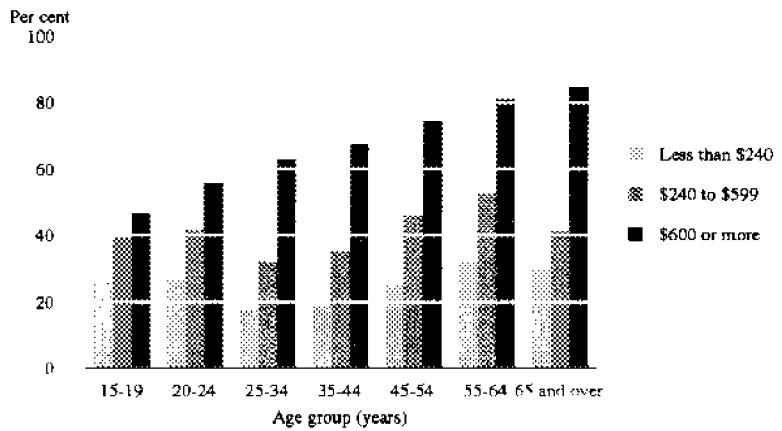
**Age**

The likelihood of females being covered by private health insurance increased with age until 45–54 years, after which it decreased. The proportion of females who were covered by private health insurance increased from 30.1 per cent in the 15–19 years age group to 58.9 per cent of those aged 45–54 years. After the latter age, however, the proportion decreased to 56.4 per cent of females aged 55–64 years and 40.9 per cent of females aged 65 years and over. The same trend was observed for males.

Of the females with private health insurance, approximately one in five were aged 35–44 years (22.3%) or 45–54 years (19.4%). Only 2.1 per cent were aged 15–19 years.

Income was also a factor in the proportion of females in each age group who were covered by private health insurance. In each age group examined, as income increased, so did the likelihood of being covered by private health insurance (see Chart 13.5).

**CHART 13.5 FEMALES AGED 15 YEARS AND OVER: PROPORTION WITH PRIVATE HEALTH INSURANCE BY AGE BY GROSS WEEKLY UNIT INCOME, AUSTRALIA, 1992**

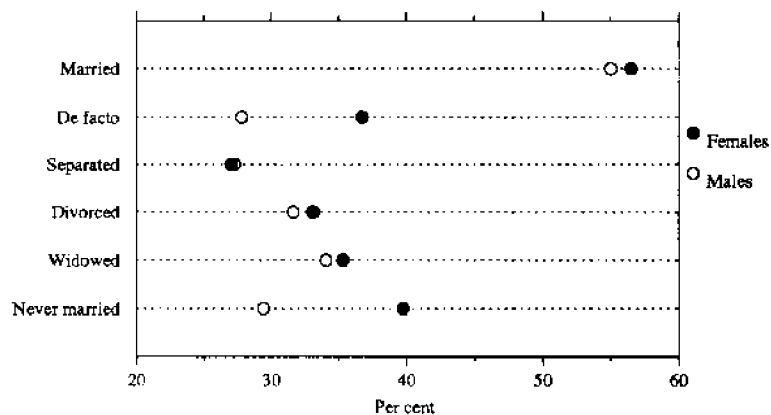


Source: ABS Health Insurance Survey 1992

**Marital status**

As well as being the most likely to be insured, females who were married (56.5%) were twice as likely to have private health insurance as females who were separated (27.0%), who were the least likely to be insured. This was also true of males (55.0% and 27.3% respectively) (see Chart 13.6).

**CHART 13.6 FEMALES AND MALES AGED 15 YEARS AND OVER: PROPORTION WITH PRIVATE HEALTH INSURANCE BY MARITAL STATUS, AUSTRALIA, 1992**



Source: ABS Health Insurance Survey 1992

**Dependent children**

Similar proportions of females with dependent children had private health insurance as those without dependent children (49.1% and 48.3% respectively). In comparison, males with dependent children were more likely

to have private health insurance than males without dependent children (51.7% compared with 41.6%).

Females who were married with dependent children were the most likely to have private health insurance (54.3%), followed by those who were married without dependent children (53.5%). In comparison, females who were single mothers with dependent children were the least likely to have private health insurance (21.5%). In fact, they were 2.5 times less likely to be privately insured than females who were married with dependent children.

Females who were single mothers with dependent children were also less likely to have private health insurance than males who were single fathers with dependent children (25.2%) (see Table 13.2).

**TABLE 13.2 PERSONS AGED 15 YEARS AND OVER: PROPORTION WITH PRIVATE HEALTH INSURANCE, MARITAL STATUS AND WHETHER HAVE DEPENDENT CHILDREN BY SEX, AUSTRALIA, 1992**  
(Per cent)

<i>Marital status and whether have dependent children</i>	<i>Proportion with private health insurance</i>		
	<i>Females</i>	<i>Males</i>	<i>Total</i>
Married with dependent children	54.3	52.9	53.6
Married without dependent children	53.5	48.3	50.9
Single parent with dependent children	21.5	25.2	22.2
Single parent without dependent children	39.2	26.6	33.5
Single person	39.5	29.9	34.8
<b>Total with dependant children</b>	<b>49.1</b>	<b>51.7</b>	<b>50.3</b>
<b>Total without dependant children</b>	<b>48.3</b>	<b>41.6</b>	<b>45.0</b>

*Source: ABS Health Insurance Survey 1992*

## GLOSSARY

- Contribution rate** All persons with private health insurance were asked their contribution rate. This allowed all privately insured contributor units and income units to be classified as having either single rate or family rate insurance cover.
- Contributor unit** Applies to families and the individual members or groups of members of families as defined by their private health insurance arrangements. The term applies to both insured units and to those without private health insurance. A contributor unit with private health insurance consists of a contributor and all persons in the same family who were covered by the health insurance arrangements of the contributor. The following persons were assumed to be covered by the health insurance arrangements of the contributor:
- all children under 15 years of age;
  - unmarried full-time students between 15 and 25 years of age without dependents of their own and who were living with their parents.
- For married couples, individual responses to the health insurance questions were used to determine whether the respective partners had separate health insurance arrangements and hence formed two separate contributor units, or had joint arrangements and hence formed one unit. Couples in which neither partner had private health insurance were defined as one contributor unit (without private health insurance).
- All other persons were automatically considered to form their own contributor units with or without private health insurance as appropriate.
- According to their composition, contributor units were classified as one of the following:
- (a) contributor only;
  - (b) contributor and dependent children;
  - (c) contributor and partner only;
  - (d) contributor, partner and dependent children.
- Gross weekly unit income** Is the gross weekly income, at the time of the survey and from all sources, of the contributor and spouse (if applicable). Income of any dependents was not included. In the case of married couples who had separate health insurance arrangements and hence formed two separate contributor units, unit income was still taken to be the gross weekly income of the two partners.
- Health insurance** Cover provided by private health insurance or other organisations to reimburse all or part of the cost of hospital or ancillary health services.
- Health insurance organisation** Any private insurance organisation which provides health insurance cover to insurers and their dependents.

<b>Income unit</b>	<p>Consists of one non-dependent member (i.e. head) plus all persons in the same family who are assumed to be dependent on the head. Persons who are considered to be dependent include:</p> <ul style="list-style-type: none"><li>• for married couples, the spouse;</li><li>• all children under 15 years of age;</li><li>• unmarried full-time students between 15 and 25 years of age without dependents of their own and who are living with their parents.</li></ul> <p>All other persons are considered to be non-dependent and to therefore form their own separate income units.</p>
<b>Level of hospital cover</b>	
Basic cover	Insures persons for the equivalent of charges for shared-ward accommodation when treated as a private patient in a public hospital. Basic cover also provides benefits for accommodation in private hospitals.
Higher cover	Insures people for higher levels of reimbursement than basic hospital cover.
<b>Type of health insurance</b>	
Hospital cover	Health insurance cover provided by private insurance organisations to cover the costs of private accommodation in a public hospital, charges for private hospital treatment and care in a public hospital by a doctor of the patient's choice.
Ancillary cover	Any cover provided by private health insurance organisations for health-related services other than medical or hospital cover (e.g. physiotherapy, dental, funeral benefits, ambulance).
Unknown type of cover	This category was used to describe the health insurance of contributor units who stated they had some form of cover but were unable to specify all types of cover they held (e.g. hospital, ancillary or both). This category includes contributor and income units who reported having hospital cover but did not know whether they also had ancillary cover.
No private health insurance	Contributor units without any private health insurance (i.e. entitled to Medicare coverage only).
<b>Unit income</b>	Gross weekly unit income.

## **REFERENCES**

### **Australian Bureau of Statistics**

- *Health Insurance Survey, Australia, 1988, 1990, 1992* (4335.0).

**Private Health Insurance Administration Council**, unpublished data.

## APPENDIX A MAJOR DATA GAPS AND DEFICIENCIES

The major data gaps/deficiencies identified during the production of this publication are detailed below.

No national data exist in relation to the following:

<b>Hospital morbidity data</b>	Due to differences in definitions and coverage deficiencies, there is currently no comprehensive set of hospital morbidity data. Standard definitions have been developed as part of the National Minimum Dataset for Institutional Care. As these definitions are progressively implemented in each State and Territory collection, it is expected that national data will become available.
<b>Aboriginal and Torres Strait Islander vitals data</b>	Registrars from each State/Territory, the AIHW and ABS have discussed the issue of a lack of data in relation to Aboriginal and Torres Strait Islanders at some length. Some work is currently being undertaken by Registrars to produce a consistent registration form for the collection of these data. The ABS has undertaken a study to evaluate the quality of Aboriginal and Torres Strait Islander vitals data. Data are currently of a reasonable quality for deaths in South Australia, Western Australia and the Northern Territory and for births in South Australia and the Northern Territory.
<b>Occupational health and safety</b>	Worksafe Australia have developed a National Minimum Dataset in relation to Occupational Health and Safety data. Data are expected for the first time late in 1994.
<b>Reproductive data</b>	
Caesareans	Data on caesareans are available from each individual State and Territory health authority and were aggregated for use in this publication. A central data source would have been preferable as problems of consistency and accuracy which arise when data are compiled from different sources would be minimised. National collection is currently viable.
Abortions	South Australia is the only State which has comprehensive data on abortions as it is a legal requirement that all abortions be notified. Some data on a national level are available from Medicare but these exclude information relating to public patients in public hospitals. Medicare data use the same schedule number to record legally induced abortions, miscarriages and a number of other procedures.
Home births	Comprehensive statistics are compiled by Homebirth Australia and published in conjunction with the AIHW National Perinatal Statistics unit. The data collection is based on voluntary participation of registered and unregistered practitioners known to Homebirth Australia. Data generally do not identify out-of-hospital births of Aboriginal and Torres Strait Islander women or women from ethnic communities. Data are also collected as part of the State and Territory perinatal data collections but definitions and data items collected are inconsistent. No current mechanism exists for compiling data on an ongoing basis.

Birth centres	Some statistics are available for birth centres which are attached to hospitals (but not all are). No national collection exists on birth centre usage.
Infertility	The nature of the condition does not lend itself easily to data collection. Some information is available for those couples who undertake IVF treatment. It relates however to the number of treatment cycles which result in a live birth rather than the number of people who have sought treatment and what the outcome was for each person.
Induced births	Similar to caesareans. Data are available but no national collection of data exists.
Post natal depression	This condition often goes undiagnosed. The nature of the condition means that data collection is difficult.
Pre menstrual syndrome	This condition often goes undiagnosed. The nature of the condition and the diverse symptoms means that data collection is difficult.
Age at and effect of menopause	Symptoms vary from woman to woman. The nature of menopause makes it difficult to determine when it begins or when it is complete. Much has been written on this topic but little statistical information is available.
Hormone replacement therapy	Some studies have been done in Australia but no national data currently exist.
Fertility control (i.e. contraceptives and sterilisation)	<p>Some basic information is available in relation to the oral contraceptive pill and IUDs (collected in the National Health Survey and the National Heart Foundation Risk Factor Prevalence Study). Information in relation to the use of condoms, diaphragms and other forms of contraceptives is difficult to collect due to its sensitivity. Some data are likely to be collected in the 1995 National Health Survey in relation to the use of some contraceptives (probably the oral contraceptive pill and IUDs).</p> <p>Sterilisation information which is available from the DHSS Medicare database excludes public patients in public hospitals. In addition, the Medicare database does not include figures for the number of vasectomies performed in Family Planning clinics as these patients are not charged through Medicare.</p>
Breastfeeding	Some data were collected in the NHS 1989/90. Major criticism of the way it was collected relates to the limited scope and coverage (only mothers of children aged less than 5 years were asked this question). The sample size resulted in data for some ethnic communities and the Aboriginal and Torres Strait Islander population experiencing very high standard errors. Information which would allow the user to distinguish between those mothers who fully or partially breastfed their babies was also not collected.
Sexually transmitted diseases	Some information is available from the Communicable Diseases Register kept by the Department of Human Services and Health. These data are, however, not complete and problems exist with reporting. There is no legislative requirement for doctors to notify the Department of these diseases. Data collection is hindered by the sensitivity of the topic.



<b>Mental health (stress/effect of dual roles/isolation)</b>	Data are difficult to collect due to sensitivity. Some information is being collected in the next National Health Survey (1995) by using the SF36. Information from the SF36 was also collected in the ABS Population Survey Monitor to be analysed by the AIHW and presented in their Health Indicators quarterly bulletin. Care available for psychiatric patients is varied. Since the 1970s Australia has moved away from institutional care for mental patients. The use of administrative by-product data is therefore not viable. Australian research on the prevalence of mental illness has been confined to community studies.
<b>Nutrition and eating disorders (body image)</b>	A national nutrition survey is to be run in conjunction with the 1995 NHS. This should rectify the current data gap. Data on eating disorders are difficult to collect due to the nature of the condition.
<b>Health of older women</b>	
Incontinence	No national studies have been undertaken. Some small areas studies have been completed. Information about the prevalence of incontinence in the nursing home resident population is available. Some information was collected about the disabled population in the Survey of Disability and Ageing undertaken in 1988. Data suffer because of the sensitivity of the topic.
Osteoporosis	Osteoporosis is difficult to detect. Often the sufferer is unaware that they have the condition until they experience a broken bone. Bone density testing is possible but often there is little to prompt the sufferer to undertake such testing. A bone density study is currently underway in Dubbo. National data will be difficult to achieve.
<b>Health of carers</b>	Limited data have been collected on this topic to date. Some information was collected on carers of the disabled and aged in the 1993 ABS Survey of Disability, Ageing and Carers. This included information about the effects of the caring role on the physical and emotional well-being of the principal carer.
<b>Resource allocation</b>	It is difficult from data relating to resource allocation to determine what proportion is allocated to women — often sex splits are not available.



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