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# Health

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This chapter provides information on various aspects of the health of the Australian population and the activities of the Commonwealth relating to health. There is, however, government responsibility for health at the State/Territory and local levels. There are constitutional limits on the Commonwealth Government's role in the health care field, and the primary responsibility for planning and provision of health services is with the State and Territory Governments.

At the national level, health services in Australia are administered by the Commonwealth Government. The Government appoints three Ministers to the Portfolio of Health. The Minister for Health exercises overall responsibility over the Commonwealth Department of Human Services and Health, represents the portfolio in Cabinet and has particular responsibility for Budget matters and major policy decisions. The other two Ministers have responsibility for Family Services and Veterans' Affairs, respectively. The Commonwealth Government is primarily concerned with the formation of broad national policies, and influences policy making in health services through its financial arrangements with the State and Territory Governments, through the provision of benefits and grants to organisations and individuals, and through the regulation of health insurance.

The direct provision of health services, broadly speaking, is the responsibility of the State and

Territory Governments. Each has a Minister who is responsible to the Government of the particular State or Territory for the administration of its health authorities. In some, the responsibility for health services is shared by several authorities whilst in others, one authority is responsible for all these functions.

Health care is also delivered by local government, semi-voluntary agencies, and profit making non-governmental organisations.

Information on the activities of government and other bodies on health-related matters is provided later in this chapter.

## HEALTH STATUS

### Morbidity

**Recent and long-term conditions.** The 10 most prevalent medical conditions reported by Australians in the 1989-90 National Health Survey are presented in table 8.1. Disorders of refraction and accommodation ranked highest, affecting 31.7 per cent of the population, followed by headache due to unspecified or trivial cause (12.3%) and arthritis (11.4%). Overall, some 83.7 per cent of the population experienced at least one medical condition.

**8.1 PERSONS: SELECTED RECENT OR LONG-TERM CONDITIONS(a), 1989-90**  
(per cent)

	Age group (years)							Males	Fe- males	Persons	
	<5	5-14	15-24	25-44	45-64	65-74	>74			%	'000
Disorders of refraction & accommodation	0.5	6.5	15.8	24.3	67.5	70.6	63.9	28.6	34.8	31.7	5,390.3
Headache - due to unspecified or trivial cause	0.5	6.9	15.5	16.6	13.6	8.8	7.6	9.8	14.8	12.3	2,091.1
Arthritis	**	0.3	1.7	5.9	23.2	41.1	45.6	8.9	13.9	11.4	1,935.5
Hayfever	1.6	6.7	13.4	13.4	10.5	8.1	6.3	9.4	11.2	10.3	1,752.9
Common cold	22.7	12.8	10.4	8.0	6.3	6.0	5.7	9.8	9.5	9.6	1,633.1
Back trouble (unspecified)	**	0.5	7.4	13.4	14.2	9.2	7.1	9.8	8.5	9.1	1,552.9
Hypertension	**	**	0.6	3.3	19.8	37.0	36.6	7.6	10.5	9.0	1,537.3
Asthma	9.6	16.1	10.4	6.3	5.8	6.9	4.2	8.7	8.3	8.5	1,444.1
Injuries	7.1	9.3	10.4	7.5	6.0	6.4	7.1	8.8	6.8	7.8	1,328.8
Eczema, dermatitis	17.2	6.1	6.9	7.4	5.2	5.6	5.0	6.1	8.2	7.2	1,221.8

(a) Conditions experienced in the two weeks prior to interview or conditions which have lasted or are expected to last for six months or more.

Source: 1989-90 National Health Survey, *Health Status Indicators, Australia (4370.0)*, unpublished ABS data.

The pattern of conditions affecting males and females was similar. With the exception of the common cold, injuries, unspecified back trouble and asthma, however, females were slightly more likely than males to report the listed conditions.

As shown in table 8.1, prevalence of specific conditions differed markedly by age group. Disorders of refraction and accommodation, arthritis and hypertension were more prevalent in older age groups. The prevalence of disorders of refraction and accommodation and hypertension peaked in the 65 to 74 years age group, at 70.6 per cent and 37.0 per cent, respectively. Arthritis was most prevalent among those aged 75 years and over (45.6%).

The common cold, asthma, eczema and dermatitis were particularly prevalent among children. Of all age groups, children under 5

years of age were most likely to report the common cold (22.7%) and eczema or dermatitis (17.2%). Those aged 5 to 14 years were the most likely to report asthma (16.1%).

**Hospitalisation.** In 1989-90, an estimated 2.3 million people, representing 13.5 per cent of the Australian population, had at least one hospital episode in the last 12 months. Of these, two-thirds (66.7%) reported their most recent episode as being in a public hospital; the remaining third (33.0%) used private hospitals (table 8.2).

The most common reasons for the most recent hospital episode reported were diseases of the digestive system (13.7%), diseases of the genitourinary system (11.0%), pregnancy supervision/childbirth (10.5%) and injury and poisoning (10.2%).

## 8.2 PERSONS WHO HAD A HOSPITAL EPISODE, 1989-90(a) (per cent)

Reason for most recent episode(b)	Age group (years)								Persons		
	<5	5-14	15-24	25-44	45-64	65-74	>74	Males	Females	%	'000
Diseases of the digestive system	18.4	15.3	15.1	9.3	15.1	17.3	12.0	16.5	11.2	13.4	306.9
Diseases of the genitourinary system	3.9	5.8	6.4	12.6	16.0	11.6	10.0	7.1	13.7	11.0	250.9
Pregnancy supervision/childbirth	..	..	19.2	23.2	**	..	..	..	17.9	10.5	239.3
Injury and poisoning	10.2	18.4	18.8	7.5	8.1	6.6	7.8	16.1	6.1	10.2	234.0
Diseases of the respiratory system	30.1	27.7	9.6	4.9	5.7	7.5	8.5	12.1	8.0	9.7	221.8
Diseases of the musculoskeletal system and connective tissue	*2.3	6.6	8.1	8.9	12.5	11.5	11.0	12.9	6.8	9.3	213.8
Diseases of the circulatory system	*1.1	**	*1.2	4.1	15.7	20.9	21.4	10.7	7.2	8.7	198.4
Diseases of the nervous system and sense organs	14.2	15.2	3.3	2.8	6.1	8.6	14.2	6.8	6.6	6.7	153.3
Neoplasms	**	**	81.3	3.0	8.0	8.9	8.0	4.9	4.1	4.4	101.3
Complications of pregnancy, childbirth and the puerperium	..	..	4.2	7.5	**	..	..	..	5.3	3.1	71.6
Type of hospital											
Public	85.2	75.0	70.1	61.7	59.3	71.1	71.8	68.1	65.8	66.7	1,528.1
Private	14.8	24.9	29.5	38.1	40.5	28.5	27.9	31.5	34.0	33.0	755.3
Not known	**	**	*0.5	*0.2	**	**	**	*0.4	*0.2	0.3	5.9
<b>Total persons who had a hospital episode(c)</b>	<b>11.4</b>	<b>7.3</b>	<b>12.2</b>	<b>14.0</b>	<b>14.1</b>	<b>20.2</b>	<b>25.7</b>	<b>11.2</b>	<b>15.7</b>	<b>13.5</b>	<b>2,289.3</b>

(a) In the twelve months prior to interview. (b) Condition groups based on chapter headings of the International Classification of Diseases, Ninth Revision (ICD9). (c) Each person may have reported more than one reason for hospitalisation.

Source: 1989-90 National Health Survey, Health Related Actions, Australia (4375.0), unpublished ABS data.

More females (15.7%) than males (11.2%) reported having a hospital episode in the 12 months prior to survey interview. This difference is largely attributable to the number of female hospital episodes associated with pregnancy supervision or childbirth. For females, the most frequently cited reasons for most recent hospital episode were pregnancy supervision or childbirth (17.9%), diseases of the genitourinary system (13.7%) and diseases of the digestive system (11.2%). For males, diseases of the digestive system (16.5%), injury and poisoning (16.1%) and diseases of the musculoskeletal system and connective tissue (12.9%) were the most common reasons.

One in four people aged 75 years and over (25.7%) had a hospital episode in the 12 months prior to interview. With the exception of the under 5 years age group, the proportion of people reporting a hospital episode increased with age. Reasons for the most

recent hospital episode varied markedly with age. In particular, for those aged 65 years and over the most frequently cited reason was diseases of the circulatory system, and among those aged 15 to 44 pregnancy supervision and childbirth rated highest.

### Dental health

Based on results of the 1989-90 National Health Survey, approximately 4.2 million people (32.0%) aged 15 years and over had dentures or false teeth. Some 12.6 per cent had full sets in both jaws.

Females (35.6%) were more likely than males (28.3%) to report having dentures or false teeth and the likelihood of having dentures or false teeth increased markedly with age, up to 89.3 per cent of those aged 75 years and over (table 8.3).

#### 8.3 PERSONS AGED 15 YEARS AND OVER WHO HAD DENTURES OR FALSE TEETH, 1989-90 (per cent)

	Age group (years)					Males	Fe- males	Persons	
	15-24	25-44	45-64	65-74	>74			%	'000
Has dentures or false teeth									
Full sets in both jaws	**	2.6	19.3	40.5	60.4	9.3	15.8	12.6	1,672.9
Other(a)	1.5	14.0	34.3	38.7	28.9	19.0	19.8	19.4	2,571.8
Total with dentures or false teeth	1.5	16.6	53.6	79.2	89.3	28.3	35.6	32.0	4,244.7
Does not have dentures or false teeth	98.5	83.4	46.4	20.8	10.7	71.7	64.4	68.0	9,020.3
<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>13,265.0</b>

(a) Includes those who have a full set in upper or lower jaw, and those who have partial sets in either or both jaws.

Source: 1989-90 National Health Survey, Health Related Actions, Australia (4375.0), unpublished ABS data.

An estimated 0.9 million people aged two years and over had a dental consultation in the two weeks prior to survey interview. The most common types of treatments or services

provided were teeth filled (33.5%), check up (27.1%) and teeth/dentures cleaned or polished (25.0%) (table 8.4).



#### 8.4 PERSONS AGED 2 YEARS AND OVER WHO HAD A DENTAL CONSULTATION(a), 1989-90 (per cent)

Treatment/service	Age group (years)						Persons			
	2-14	15-24	25-44	45-64	65-74	>74	Males	Females	%	'000
Teeth extracted	4.0	6.3	7.9	9.3	*5.7	**	7.4	6.1	6.7	58.6
X-ray	6.4	16.8	23.5	19.3	12.3	**	16.0	16.0	16.0	140.4
Teeth/dentures cleaned or polished	*19.1	28.9	28.8	26.8	19.1	*22.4	25.0	25.0	25.0	219.3
Fluoride treatment or coating	15.9	14.1	9.7	3.7	*3.3	**	10.0	11.0	10.5	92.4
Teeth filled	17.3	27.3	46.5	44.2	28.8	*16.3	37.8	30.0	33.5	293.6
Check up	44.5	29.6	20.0	15.8	15.9	*11.6	25.5	28.4	27.1	237.4
Other treatment	22.8	30.9	21.7	33.8	46.5	61.9	25.8	29.7	27.9	244.8
No treatment	*1.3	**	*1.2	*1.1	**	**	*1.3	1.1	1.2	10.5
<b>Total who had a dental consultation(b)</b>	<b>7.5</b>	<b>4.8</b>	<b>5.1</b>	<b>4.9</b>	<b>4.6</b>	<b>2.0</b>	<b>4.8</b>	<b>5.8</b>	<b>5.3</b>	<b>876.0</b>

(a) In the two weeks prior to interview. (b) Each person may have reported more than one type of treatment or service and therefore components do not add to totals.

Source: 1989-90 National Health Survey, Health Related Actions, Australia (4375.0), unpublished ABS data.

Males (37.8%) were more likely to have had teeth filled than females (30.0%) and less likely to have had a check up (25.5% of males compared with 28.4% of females). Type of treatment or service provided varied with age. The most common treatment for those aged 2 to 24 years was a check up, for those aged 25 to 74 years, teeth filled and for those aged 75 years and over, teeth/dentures cleaned or polished.

There is a widely held perception that oral health has improved rapidly in recent decades, the result of successful approaches to the prevention of dental caries, as evidenced in contemporary child populations. However, this perception is narrow as it neglects the epidemiological profile of other ages and of other diseases and their consequences.

The burden of dental caries, although reduced in children and young adults, still has a significant impact on some children, most

adults and many older adults. Dental caries remains one of several prevalent oral diseases, while additional oral problems are also receiving increased attention within the community and the dental profession.

Indices are used to describe individuals' experience of dental caries (decayed, missing or filled teeth) in primary teeth (dmft) and permanent teeth (DMFT). The dmft and DMFT indices are counts of decayed, missing or filled teeth.

From table 8.5 it can be seen that there has been a reduction in mean caries experience in the primary dentition of 6 year olds and the permanent dentition of 12 year olds. In addition it can be seen that an increasing percentage of 6 and 12 year olds have no caries experience, as measured by the percentage who have a dmft or DMFT equal to zero.

### 8.5 CHILDREN AGED 6 YEARS AND 12 YEARS: MEAN NUMBER OF TEETH WITH CARIES EXPERIENCE, AND PERCENTAGE WITH NO CARIES EXPERIENCE

Year	Age 6 years		Age 12 years	
	dmft(a)	no dmft(b)	DMFT(a)	no DMFT(b)
1977	3.1	33.5	4.8	10.4
1992	2.0	52.9	1.2	53.8

Note: dmft — decayed, missing or filled deciduous teeth; DMFT — decayed, missing or filled permanent teeth.

(a) Mean number of teeth with caries experience. (b) Percentage of teeth with no caries experience.

Source: Child Dental Health Survey, Australian Institute of Health and Welfare, Dental Statistics and Research Unit 1992.

Caries experience in adults has remained widespread and extensive. Table 8.6 indicates that dental caries was experienced in more than half of the teeth of dentate (some natural teeth) adults aged 35 years and above. Caries experience increases rapidly across the younger age groups to reach approximately 19 teeth with caries experience in middle age. This

level of caries experience increases only slightly across older age groups.

Among young adults caries experience is dominated by filled teeth. However, missing teeth increase to be the dominant expression of caries experience by the 45 to 54 years age group. Untreated decayed teeth show minimal variation across adult age groups.

### 8.6 MEAN NUMBER OF TEETH IN DENTATE PERSONS WITH CARIES EXPERIENCE, 1987-88

DMFT	Age group (years)						
	<15	15-24	25-34	35-44	45-54	55-64	>64
Filled	0.8	4.1	9.1	10.6	9.2	7.5	6.0
Missing	—	0.4	3.1	6.8	9.9	13.6	16.8
Decayed	0.4	1.4	1.8	1.4	1.4	1.3	1.4
Total	1.2	5.9	13.9	18.8	20.4	22.4	24.2

Note: DMFT — decayed, missing or filled permanent teeth.

Source: National Oral Health Survey, 1987-88, Australian Institute of Health and Welfare, Dental Statistics and Research Unit.

The prevalence of edentulism (no natural teeth) is presented in table 8.7. There was a high rate of edentulism among adults and

older adults. However, edentulism has decreased markedly in all age cohorts, particularly among middle-aged adults.

### 8.7 PREVALENCE OF EDENTULISM (TOTAL TOOTH LOSS) (per cent)

Year	Age group (years)						
	<15	15-24	25-34	35-44	45-54	55-64	>74
1979	—	1.3	5.4	14.0	26.5	40.2	78.6
1989-90	—	0.6	1.4	5.7	14.9	28.9	63.4
1992-93	—	—	1.0	5.4	10.7	22.6	52.8

Source: 1979 Special Supplementary Survey; 1989-90 National Health Survey, Health Related Actions, Australia (4375.0); Australian Institute of Health and Welfare, Dental Statistics and Research Unit; 1992-93 Telephone Interview Survey, Australian Institute of Health and Welfare, Dental Statistics and Research Unit.

## Injury

Results of the 1989-90 National Health Survey show that 14.1 per cent of the population had an illness or injury due to an accident. 27.3 per cent of persons who had an illness or injury due to an accident said the accident occurred during sport, recreation or exercise. However, for males the highest proportion of accidents occurred at work (30.7%), while for

females 31.5 per cent reported the accident occurred at home or at the home of friends or relatives. Place of accident differed markedly by age group. Of all employed people aged 15 to 64 years, 16.3 per cent reported illness or injury resulting from an accident, and 29.4 per cent of these (representing 4.8% of all employed people) reported the accident occurred at work (table 8.8).

### 8.8 PERSONS WHO REPORTED ILLNESS/INJURY(a) RESULTING FROM AN ACCIDENT, 1989-90 (per cent)

Accident place	Age group (years)							Fe- males	Persons	
	<5	5-14	15-24	25-44	45-64	65-74	>74		%	'000
At work	..	..	14.9	26.1	35.7	22.6	11.2	30.7	11.7	22.7 541.9
During sport, recreation, or exercise	**	42.3	45.4	31.1	16.1	11.2	7.9	29.9	23.8	27.3 652.3
At home or home of friends/relatives	83.5	30.3	15.9	16.9	20.4	40.2	48.4	18.2	31.5	23.8 569.0
On path, road or highway	*6.6	8.9	17.2	23.1	24.1	18.8	24.6	16.3	26.0	20.4 487.4
At school or other educational institution	**	16.0	4.9	1.3	*0.8	0.4	0.5	2.4	3.5	2.9 68.3
None of these	9.9	*2.6	1.6	1.6	2.9	6.7	7.4	2.5	3.5	2.9 69.5
<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>	<b>100.0 2,388.4</b>

(a) Recent and/or long-term illness or injury.

Source: 1989-90 National Health Survey, Accidents, Australia (4384.0), unpublished ABS data.

At 7,489, the number of external causes of deaths registered in 1992 was three per cent lower than the number in 1991 and 16 per cent lower than the highest number on record (8,942 in 1971). Injury deaths accounted for 6.1 per cent of all deaths, and occurred at a crude rate of 42.8 per cent per 100,000 mean population, the lowest on record. Allowing for changes in the age and sex distribution of the Australian population, the rate for 1992 was 43 per cent below the equivalent rate in 1971.

The major external causes of death for males and females are shown in table 8.9. Suicides and motor vehicle traffic accidents were the leading external causes, accounting for 31 per cent and 28 per cent, respectively of all deaths due to external causes. Despite a slight decline in the number of deaths

registrations attributed to suicide in 1992, the proportion of all injury deaths due to suicide remained at 31 per cent. For the second year in succession, the number of registered deaths due to motor vehicle traffic accidents (2,066) was lower than the number of suicides (2,294). There are notable differences in the burden of injury deaths between the sexes. The overall crude death rate for males (60.0 per 100,000) is more than double the female rate (25.8 per 100,000). Suicide deaths account for a significantly greater proportion of all injury deaths in males and occur at a rate that is nearly four times the rate for females (table 8.10). In contrast, while accidental fall deaths occur at similar rates in both sexes, they are the second leading external cause of death in females (22.6% of deaths) but only account for 8.7 per cent of injury deaths in males.

## 8.9 EXTERNAL CAUSES OF DEATH, 1992

<i>Cause of death</i>	<i>Number</i>	<i>Percentage</i>	<i>Crude death rate(a)</i>
<b>MALES</b>			
Suicide	1,820	34.8	20.9
Motor vehicle traffic accidents	1,408	26.9	16.2
Accidental falls	455	8.7	5.2
Homicide	196	3.8	2.2
Drowning and submersion	216	4.1	2.5
Poisoning by drugs/medications	140	2.7	1.6
Other	995	19.0	11.4
<b>All external causes</b>	<b>5,230</b>	<b>100.0</b>	<b>60.0</b>
<b>FEMALES</b>			
Suicide	474	21.0	5.4
Motor vehicle traffic accidents	658	29.1	7.5
Accidental falls	511	22.6	5.8
Homicide	123	5.4	1.4
Drowning and submersion	75	3.3	0.9
Poisoning by drugs/medications	62	2.8	0.7
Other	356	15.8	4.1
<b>All external causes</b>	<b>2,259</b>	<b>100.0</b>	<b>25.8</b>
<b>PERSONS</b>			
Suicide	2,294	30.6	13.1
Motor vehicle traffic accidents	2,066	27.6	11.8
Accidental falls	966	12.9	5.5
Homicide	319	4.3	1.8
Drowning and submersion	291	3.9	1.7
Poisoning by drugs/medications	202	2.7	1.2
Other	1,351	18.0	7.7
<b>All external causes</b>	<b>7,489</b>	<b>100.0</b>	<b>42.8</b>

(a) Deaths per 100,000 mean population.

Source: Derived from ABS causes of death data.

## 8.10 AGE SPECIFIC SUICIDE DEATH RATES(a), 1992

	<i>Age group (years)</i>							<i>Total</i>
	<i>15-24</i>	<i>25-34</i>	<i>35-44</i>	<i>45-54</i>	<i>55-64</i>	<i>65-74</i>	<i>&gt;74</i>	
Males	27	30	25	26	23	27	30	21
Females	6	7	7	6	7	7	8	5
<b>Total</b>	<b>17</b>	<b>19</b>	<b>16</b>	<b>16</b>	<b>15</b>	<b>16</b>	<b>16</b>	<b>13</b>

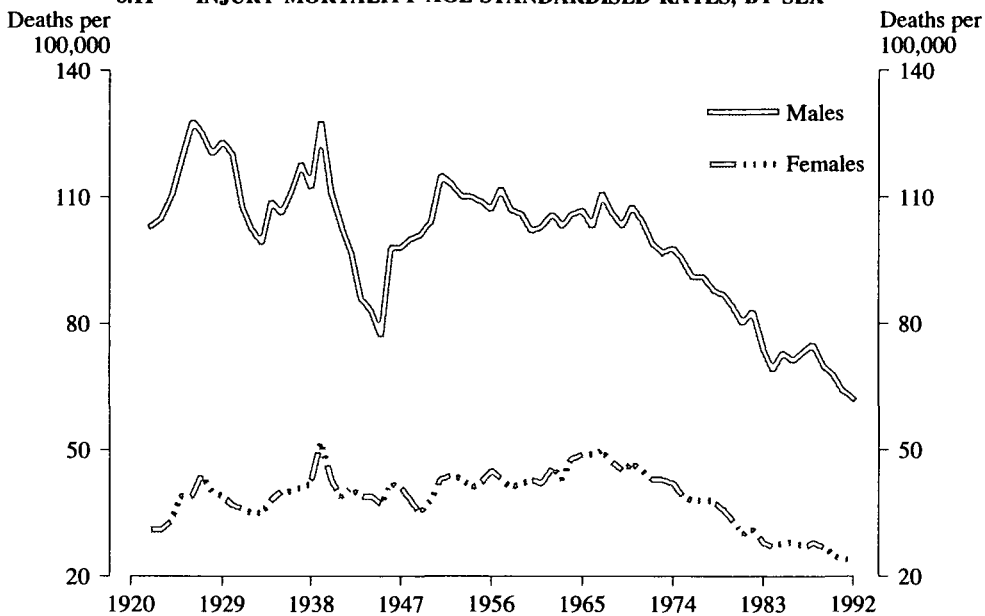
(a) Deaths per 100,000 mean population of same age and sex.

Source: Causes of Death, 1992 (3303.0).

Injury mortality rates over the period 1922 to 1992 are shown in graph 8.11. The rates have been standardised using the 1988 Australian population as the reference. Sustained reductions in both male and female rates have occurred since around 1970. Graph 8.12 tracks the proportion of all deaths that have been

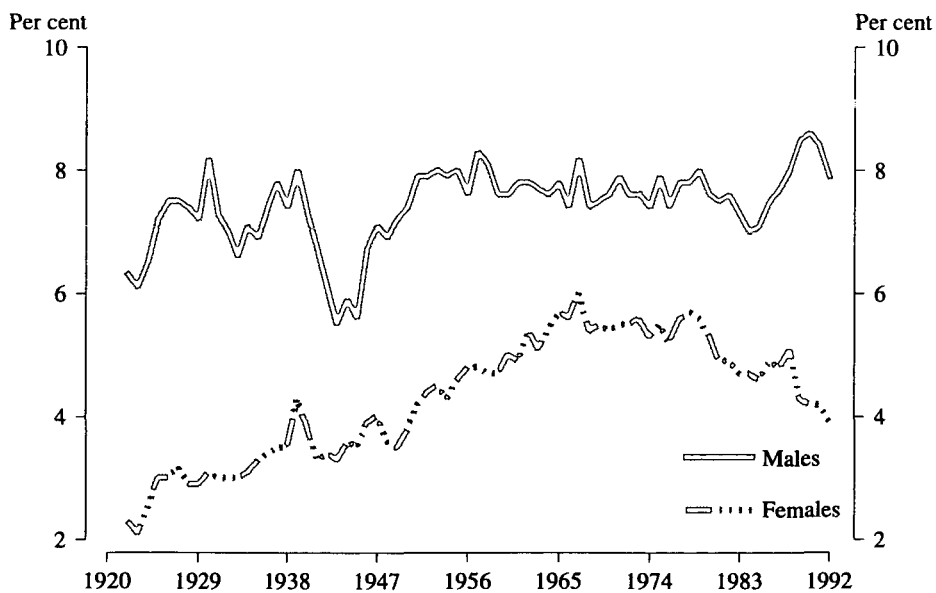
attributed to injury since 1922. For males, injury has consistently accounted for about six to eight per cent of all deaths. For females, there was a prolonged gradual increase in the proportion which turned around during the 1970s.

### 8.11 INJURY MORTALITY AGE-STANDARDISED RATES, BY SEX



Source: Australian Institute of Health and Welfare.

### 8.12 PROPORTIONS OF ALL DEATHS DUE TO INJURY, BY SEX



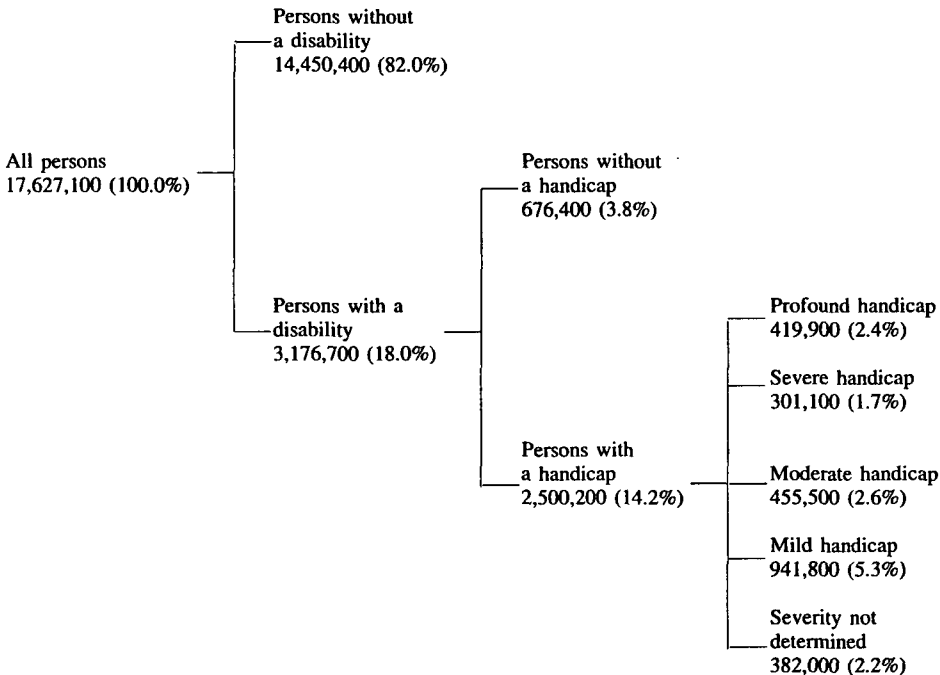
Source: Australian Institute of Health and Welfare.

## Disability

Based on the results of the Survey of Disability, Ageing and Carers conducted by the ABS in 1993, there were an estimated 3,176,700 persons, or 18.0 per cent of the

Australian population who had a disability and, of these, 2,500,200 or 78.7 per cent were also classified as having a handicap. The distribution of the population according to disability, handicap and severity of handicap is illustrated in the diagram 8.13.

**8.13 NUMBER OF PERSONS WITH A DISABILITY AND/OR HANDICAP, 1993**



It was estimated that 44.2 per cent of the 2,762,900 persons aged 60 years or more had a disability, showing the high correlation of age with disability.

The survey also found that there were 577,500 persons aged 15 years or more (4.2% of the Australian population aged 15 years or more) who were principal carers.

## Congenital malformations

Major congenital malformations include defects arising during embryonic development, such as spina bifida, congenital heart defects, cleft lip and palate, and also chromosomal abnormalities such as Down syndrome.

Among all births in Australia in 1991 and 1992, there were 4,588 (1.8%) and 4,500 (1.7%) infants, respectively, born with major congenital malformations detected at, or soon after, birth.

The most frequently notified groups of malformations were the musculoskeletal system, congenital heart defects, genital malformations and chromosomal abnormalities (table 8.14). The most common specific malformations were congenital dislocation of the hip, ventricular septal defect, hypospadias, Down syndrome, and cleft lip and palate.

## 8.14 MAJOR CONGENITAL MALFORMATIONS BY ANATOMICAL SYSTEM(a)

<i>Anatomical system</i>	<i>Number</i>		<i>Rate per 10,000 births</i>	
	<i>1991</i>	<i>1992</i>	<i>1991</i>	<i>1992</i>
Nervous system	403	384	15.6	14.5
Eye	104	79	4.0	3.0
Ear, face and neck	49	40	1.9	1.5
Heart	808	894	31.2	33.7
Circulatory system	367	377	14.2	14.2
Respiratory system	156	115	6.0	4.3
Cleft palate/lip	367	389	14.2	14.6
Digestive system	330	332	12.8	12.5
Genital organ	764	727	29.5	27.4
Urinary system	472	431	18.2	16.2
Limbs	429	408	16.6	15.4
Other musculoskeletal	1,166	1,006	45.1	37.9
Integument	33	29	1.3	1.1
Chromosomal	584	548	22.6	20.6
Other and unspecified	120	117	4.6	4.4
<b>All fetuses and infants</b>	<b>4,588</b>	<b>4,500</b>	<b>177.3</b>	<b>169.4</b>

(a) Infants may be included in more than one anatomical system.

Source: Australian Institute of Health and Welfare, National Perinatal Statistics Unit.

## Communicable diseases

Under the National Notifiable Diseases Surveillance System, State and Territory health authorities submit reports of communicable disease notifications for compilation by the Commonwealth Department of Human Services and Health. Case definitions for the diseases have varied from State to State and with time,

as have the diseases included in the system. Since 1991, 44 diseases have been included, as recommended by the National Health and Medical Research Council.

Campylobacteriosis, a bacterial disease transmitted by contaminated food or water, has been the most commonly reported disease in recent years (table 8.15).

## 8.15 NOTIFIABLE DISEASES, CASES NOTIFIED

<i>Disease</i>	<i>1988</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>
Arbovirus infection(a)	897	2,809	2,008	199	303
Dengue(b)	(c)	(c)	(c)	46	366
Ross River(b) infection	(c)	(c)	(c)	3,532	5,630
Botulism	(c)	(c)	(c)	(c)	—
Brucellosis	16	20	46	28	29
Campylobacteriosis	4,082	4,279	5,683	8,672	9,135
Chancroid	4	3	13	—	5
Cholera	2	—	1	—	3
Chlamydial infection(a)	268	504	5	4,044	6,293
Diphtheria	61	1	7	8	14
Donovanosis	133	99	91	72	78
Gonococcal infection	4,079	3,153	1,919	2,530	2,908
Haemophilus influenzae type b infection	(c)	(c)	(c)	549	501
Hepatitis A	600	460	530	2,195	2,109
Hepatitis B	1,683	3,017	2,970	3,652	5,219
Hepatitis C	(c)	(c)	(c)	4,116	8,812
Hepatitis(a)	69	43	707	338	70

For footnotes see end of table.

8.15 NOTIFIABLE DISEASES, CASES NOTIFIED — *continued*

<i>Disease</i>	<i>1988</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>
HIV infection(d)	(c)	(c)	(c)	53	n.a.
Hydatid infection	15	15	16	44	38
Legionellosis	67	104	90	110	185
Leprosy	20	34	31	13	16
Leptospirosis	104	99	121	169	159
Listeriosis	(c)	(c)	(c)	44	38
Lymphogranuloma venereum	—	—	—	—	3
Malaria	601	770	882	790	712
Measles	248	169	880	1,380	1,425
Meningococcal infections	126	204	295	285	292
Mumps	(c)	(c)	(c)	(c)	23
Ornithosis	21	25	23	136	94
Pertussis	153	614	862	337	739
Poliomyelitis	—	—	—	—	—
Q fever	424	353	431	595	543
Rabies	—	—	—	—	—
Rubella(e)	2	—	2	620	3,810
Salmonellosis(a)	3,484	4,492	4,564	5,440	4,614
Shigellosis	581	779	610	902	694
Syphilis	3,056	2,099	1,643	2,053	2,695
Tetanus	5	11	6	7	14
Tuberculosis	1,165	1,351	684	590	970
Typhoid	40	57	70	88	50
Viral haemorrhagic fever	—	—	—	—	—
Yellow fever	—	—	—	—	—
Yersiniosis(a)	172	241	433	515	567

(a) Not elsewhere classified. (b) Dengue and Ross River virus infection were included in 'Arbovirus infection' from 1988–90. (c) Not notifiable. (d) Data on diagnosis of HIV infections are included in tables 8.16 and 8.17. (e) Notified only as Congenital Rubella Syndrome from 1988–90.

Source: *National Notifiable Diseases Surveillance System of the Communicable Diseases Network of Australia and New Zealand.*

## HIV and AIDS

HIV and AIDS surveillance is conducted by the National Centre in HIV Epidemiology and Clinical Research in collaboration with the State and Territory health authorities and the Commonwealth of Australia.

A total of 17,475 HIV diagnoses had been reported to 30 June 1993. Of these, 4,258 cases had been diagnosed as having AIDS and

2,786 of those had died (table 8.16). 10,747 people who were diagnosed as having HIV reported the source of exposure to the virus. Of these, 81.7 per cent reported male homosexual/bisexual contact as the exposure category (table 8.17). There were a total of 1,177 reports of HIV diagnosis, 568 reports of AIDS and 472 deaths from AIDS in the 12 month period July 1992 to June 1993.



**8.16 DIAGNOSES OF HIV INFECTION AND AIDS, AND DEATHS FROM AIDS TO 30 JUNE 1993**

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
<b>HIV diagnoses</b>									
Female	485	129	71	37	42	3	6	10	783
Male	9,128	2,847	1,207	510	619	65	67	138	14,581
Sex not reported	2,028	65	—	—	—	—	—	—	2,093
<i>Total(a)</i>	<i>11,649</i>	<i>3,048</i>	<i>1,281</i>	<i>547</i>	<i>662</i>	<i>68</i>	<i>73</i>	<i>148</i>	<i>17,476</i>
<b>AIDS diagnoses</b>									
Female	87	20	16	11	9	2	—	2	147
Male	2,410	895	358	163	183	24	17	52	4,102
<i>Total(a)</i>	<i>2,502</i>	<i>918</i>	<i>375</i>	<i>174</i>	<i>192</i>	<i>26</i>	<i>17</i>	<i>54</i>	<i>4,258</i>
<b>AIDS deaths</b>									
Female	49	10	11	4	3	1	—	2	80
Male	1,536	629	253	101	121	15	9	36	2,700
<i>Total(a)</i>	<i>1,588</i>	<i>641</i>	<i>265</i>	<i>105</i>	<i>124</i>	<i>16</i>	<i>9</i>	<i>38</i>	<i>2,786</i>

(a) Persons whose sex was reported as transsexual are included in the totals.

Source: Communicable Diseases Intelligence, Department of Health, Housing and Community Services.

**8.17 DIAGNOSES OF HIV INFECTION FOR WHICH EXPOSURE CATEGORY WAS REPORTED TO 30 JUNE 1993**

<i>Exposure category</i>	<i>Male</i>	<i>Female</i>	<i>Total(a)</i>	<i>Per cent</i>
Male homosexual/bisexual contact	8,782	—	8,782	81.7
Male homosexual/bisexual contact and ID use	303	—	303	2.8
ID use	379	119	519	4.8
Heterosexual	29	18	49	0.5
Not further specified	350	101	470	4.4
Heterosexual contact	418	272	697	6.5
Sex with ID user	8	11	19	0.2
Sex with bisexual male	—	13	13	0.1
From specified country	16	13	29	0.3
Sex with person from specified country	21	11	32	0.3
Sex with person with medically acquired HIV	3	4	7	0.1
Sex with HIV-infected person, exposure not specified	13	10	23	0.2
Not further specified	357	210	574	5.3
Haemophilia/coagulation disorder	190	2	192	1.8
Receipt of blood transfusion, blood components or tissue	96	64	160	1.5
<i>Total adults/adolescents(a)</i>	<i>10,168</i>	<i>457</i>	<i>10,653</i>	<i>99.1</i>
<b>Children under 13 years at diagnosis of HIV</b>				
Mother with/at risk for HIV infection	12	11	24	0.2
Haemophilia/coagulation disorder	51	—	51	0.5
Receipt of blood transfusion, blood components or tissue	13	4	19	0.2
<i>Total children(a)</i>	<i>76</i>	<i>15</i>	<i>94</i>	<i>0.9</i>
<b>Total(a)</b>	<b>10,244</b>	<b>472</b>	<b>10,747</b>	<b>100.0</b>
Other/undetermined(b)	4,334	311	6,728	—

(a) Total column includes cases for which sex was not reported. (b) The 'other/undetermined' category includes 6,696 adults/adolescents and 32 children. Nineteen people whose sex was reported as transsexual are included with adults/adolescents. The 'other/undetermined' category was excluded from the calculation of the percentage of cases attributed to each exposure category.

Source: Australian HIV Surveillance Report, October 1993, National Centre in HIV Epidemiology/Clinical Research.

## Healthy lifestyles and risk factors

**Diet and nutrition.** Results of the 1989–90 National Health Survey show that an estimated five million Australians aged 18 years or over had changed their diet during the previous two years, representing 41 per cent of the adult population. Selected reasons for change in diet presented in table 8.18 show that the most frequently cited reason for change was to improve general health (29.8%). A further 15.1 per cent did so in order to lose weight, 5.6 per cent due to change in activity levels and 5.0 per cent due to ageing or physical growth. One in four (25.5%) of those who changed their diet did so due to specific conditions, high cholesterol (8.7%) chief among them.

While the pattern of reasons for change in diet was generally similar for males and females, females were markedly more likely to

cite losing weight (18.1%) than were males (11.6%). Reasons for change in diet differed with age, with specific conditions more frequently cited by older people while younger people appeared to be more concerned with improving their general health.

People reporting a dietary change were more likely to increase the amount of vegetables, fresh fruit, fish and breakfast cereals in their diets, while decreasing the amount of bread, fat on meat, fried foods, butter or margarine, cheese or cream, salt, sugar and cakes, pastries or desserts. Some 53.6 per cent of those who changed their diet reduced their intake of fried foods and 53.1 per cent reduced their intake of fat on meat (table 8.19).

Statistics on the apparent per capita consumption of main foodstuffs are contained in the chapter, Agriculture.

**8.18 PERSONS AGED 18 YEARS AND OVER WHO CHANGED THEIR DIET(a), BY REASON FOR CHANGE IN DIET(b), 1989–90 (per cent)**

Reason for change in diet	Age group (years)					Males	Fe- males	Persons	
	18–24	25–44	45–64	65–74	>74			%	'000
Medical condition									
High cholesterol	*0.6	5.4	16.7	15.4	7.6	9.4	8.1	8.7	439.6
Diabetes mellitus & high blood sugar	*0.4	0.8	2.7	5.4	6.2	2.0	1.8	1.9	94.9
Obesity	0.7	1.5	2.5	3.2	*1.9	1.6	2.0	1.8	92.5
Other diseases of digestive system	1.1	1.4	2.0	3.5	4.0	1.6	2.0	1.8	91.3
Hypertension	**	1.1	3.5	2.8	*1.3	2.0	1.5	1.7	88.0
Heart disease	**	0.4	2.4	3.9	4.2	2.0	0.7	1.3	66.2
Total(c)	8.9	18.7	38.8	43.4	37.6	25.8	25.2	25.5	1,290.5
Lose weight	15.1	16.7	15.1	10.6	7.2	11.6	18.1	15.1	763.1
Improve general health	31.1	36.7	24.6	17.4	12.6	28.9	30.6	29.8	1,507.7
Ageing/physical growth	6.7	1.3	4.3	12.8	26.2	5.8	4.3	5.0	252.1
Change in activity levels	10.7	4.5	4.2	5.3	6.7	7.5	4.0	5.6	284.7
Other reasons	27.6	22.0	13.0	10.4	9.7	20.2	17.8	18.9	957.9
Total(d)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	5,057.3

(a) Includes persons who had changed the kind and/or amount of food eaten and those who reported some other change(s) for their diet in the previous two years. (b) Provision was made in the survey to record only one reason for changing diet. (c) Includes other medical conditions. (d) Includes reason not stated.

Source: 1989–90 National Health Survey, *Lifestyle and Health, Australia* (4366.0).

**8.19 PERSONS AGED 18 YEARS AND OVER WHO CHANGED THEIR DIET(a), BY TYPE AND CHANGE IN AMOUNT OF FOOD, 1989-90**  
(per cent)

Type of food	Change in amount of food				Total
	Increased	Decreased	Stayed the same	Does not consume(b)	
Vegetables	49.2	7.4	43.1	0.3	100.0
Fresh fruit (incl. fruit juices)	49.8	6.6	42.1	1.5	100.0
Fish	35.1	9.8	47.5	7.6	100.0
Bread	16.4	27.1	55.4	1.1	100.0
Breakfast cereals	20.5	14.3	45.5	19.6	100.0
Fat on meat	1.9	53.1	18.8	26.2	100.0
Fried foods	5.2	53.6	25.9	15.2	100.0
Butter or margarine	4.2	35.9	55.6	4.3	100.0
Cream or cheese	10.1	38.2	44.6	7.1	100.0
Salt	3.1	43.9	35.2	17.9	100.0
Sugar	2.9	37.8	41.9	17.3	100.0
Cakes, pastries or desserts	5.9	44.2	36.6	13.3	100.0

(a) Includes persons who had changed the kind and/or amount of food eaten or those who reported some other change(s) to their diet in the previous two years. (b) Includes persons who reported they had ceased consuming selected foods during the previous two years.

Source: 1989-90 National Health Survey, Health Risk Factors, Australia (4380.0).

**Body mass.** Based on information provided by respondents to the 1989-90 National Health Survey about their height and weight, people were grouped according to body mass. According to standards adopted by the National Health and Medical Research Council, 48.2 per cent of Australian adults were of acceptable weight (table 8.20). 11.8 per cent were underweight, 27.8 per cent were overweight and 8.7 per cent were obese.

The proportions of people in various body mass categories differed by sex and age. Males (35.3%) were more likely to be overweight than females (20.5%); females (17.2%) were more likely to be underweight than males (6.2%). Those aged 45 to 74 years were more likely to be overweight or obese than those in other age groups. More than one in three people (35.2%) in this group were overweight and over one in ten (11.7%) were obese.

**Physical activity.** An estimated eight million persons aged 18 years and over engaged in some form of exercise for recreation, sport or fitness in the previous two weeks, representing 64.2 per cent of the adult population. The proportions of people who engaged in low, medium or high levels of exercise, classifications based on intensity, frequency and duration of exercise, are presented in table 8.20. Low level exercise (32.2%) was most commonly reported. A further 16.6 per cent reported medium level

exercise and 15.4 per cent, high level exercises. Males were more likely to engage in high (19.7%) or medium level exercise (17.0%) than females (11.2% and 16.3%, respectively).

Exercise patterns also differed by age. Younger people were more likely to engage in some form of exercise than those in the middle or older age groups. In particular, those aged 18 to 24 years were more likely to engage in high or medium level exercise than their older counterparts. For all age groups, except those aged 15 to 24 years, walking was the most common form of exercise.

**Use of tobacco and alcohol.** In 1989-90, over 3.5 million people aged 18 years and over smoked, representing 28.4 per cent of the adult population (table 8.20). A further 23.2 per cent reported that they were ex-smokers. More males than females smoked (32.1% and 24.7%, respectively) and of females, 57.4 per cent reported they had never smoked compared with 39.1 per cent of males. The proportion of smokers was highest in younger age groups; 36.0 per cent of those aged 18 to 24 reported being smokers compared with 26.0 per cent of those aged 45 to 64 years, and only 8.1 per cent of those aged 75 years and over.

Alcohol risk levels, based on average daily consumption during the week prior to interview in the 1989-90 National Health Survey, are presented in table 8.20. Some 11.1 per cent of the adult population rated as consuming at moderate or high risk levels. The majority (51.4%) consumed at levels regarded as constituting a low risk of health.

A further 37.5 per cent did not consume alcohol during the reference week. Males were markedly more likely to be in the high (7.1%) or medium (7.8%) risk categories than females (1.6% and 5.9%, respectively). The likelihood of being in a high/medium risk category decreased with age.

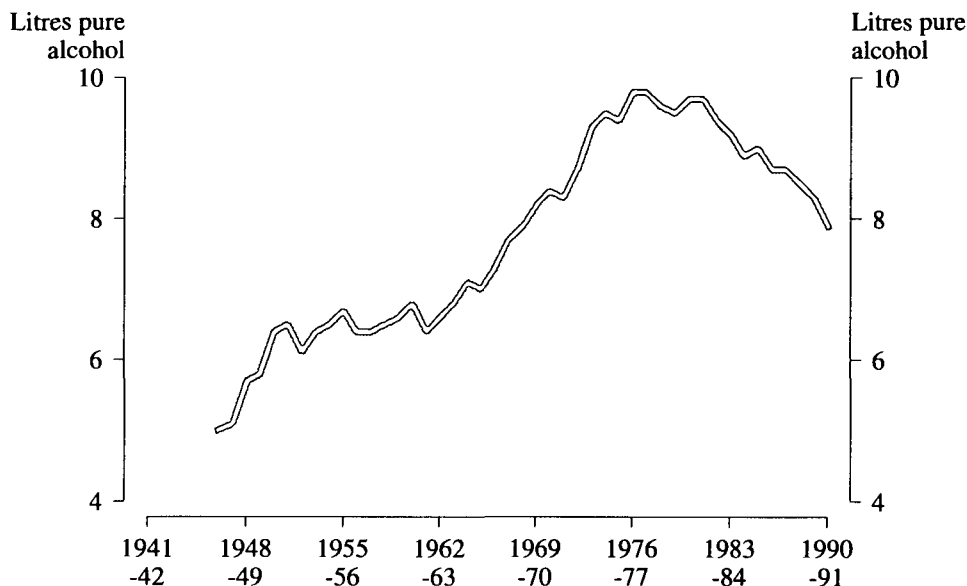
**8.20 SELECTED HEALTH RISK FACTORS OF PERSONS AGED 18 YEARS AND OVER, 1989-90 (per cent)**

Health risk factor	Age group (years)							Persons	
	18-24	25-44	45-64	65-74	>74	Males	Females	%	'000
<b>Body mass(a)</b>									
Underweight	22.1	11.8	6.2	8.6	15.2	6.2	17.2	11.8	1,467.9
Acceptable weight	53.0	50.9	43.2	43.7	45.6	47.7	48.7	48.2	5,999.1
Overweight	15.9	26.6	35.9	33.4	23.3	35.3	20.5	27.8	3,463.1
Obese	3.7	8.2	12.2	10.4	6.1	8.2	9.1	8.7	1,077.3
Not available	5.3	2.6	2.5	3.9	9.9	2.5	4.5	3.5	436.8
<b>Exercise level(b)</b>									
Did not exercise	25.3	34.4	40.6	37.0	51.3	35.4	36.2	35.8	4,454.0
Low	31.7	33.7	31.2	31.0	28.7	27.9	36.3	32.2	4,006.6
Medium	19.1	16.9	15.8	16.4	11.6	17.0	16.3	16.6	2,066.6
High	24.0	14.9	12.5	15.6	8.4	19.7	11.2	15.4	1,917.0
Total who exercised	74.7	65.6	59.5	63.0	48.7	64.6	63.8	64.2	7,990.2
<b>Smoker status</b>									
Smoker	36.0	32.3	26.0	16.5	8.1	32.1	24.7	28.4	3,530.7
Ex-smoker	10.4	21.0	28.1	36.0	31.2	28.8	17.8	23.2	2,891.2
Never smoked	53.7	46.6	45.9	47.5	60.7	39.1	57.4	48.4	6,022.2
<b>Alcohol risk level(c)</b>									
Did not consume alcohol	36.6	32.2	37.6	49.2	60.7	26.5	48.2	37.5	4,666.7
Low	49.6	55.9	50.9	43.4	37.0	58.6	44.3	51.4	6,392.6
Medium	7.9	7.4	7.0	5.0	1.9	7.8	5.9	6.8	848.9
High	6.0	4.5	4.5	2.3	*0.5	7.1	1.6	4.3	535.9
Total who consumed alcohol	63.4	67.8	62.4	50.8	39.3	73.5	51.8	62.5	7,777.5
<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>12,444.2</b>

(a) Derived from self-reported height and weight. (b) Based on intensity, frequency and duration of exercise undertaken for recreation, sport or fitness in the two weeks prior to interview. (c) Based on average daily consumption during week prior to interview.

Source: 1989-90 National Health Survey, Health Risk Factors, Australia (4380.0) and unpublished ABS data.

## 8.21 ESTIMATED PER CAPITA CONSUMPTION OF PURE ALCOHOL



Source: Department of Health, Housing and Community Services based on data from ABS Apparent Consumption of Foodstuffs, Australia (4315.0).

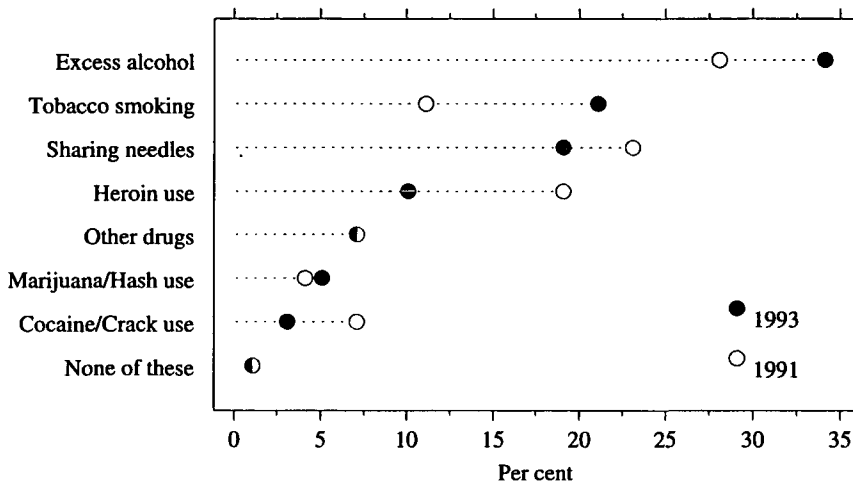
Since 1985, the legally obtained drugs — tobacco and alcohol, as opposed to the illicit drugs — have been recognised by the National Drug Strategy as areas of priority. This shift in emphasis has seen a marked increase in public awareness of the problems caused by both tobacco and alcohol and the importance of these substances in the public mind.

Between 1985 and 1993, the proportion of persons aged 16 years and over who

mentioned alcohol as being 'part of the drug problem' increased from 15 per cent to 41 per cent, while mentions of tobacco increased from 9 per cent to 24 per cent.

The 1991 and 1993 National Drug Strategy national drug household surveys provide another measure of the community's concern with 34 per cent and 21 per cent of respondents stating that 'excess alcohol' was the drug issue of most concern for the community in general (graph 8.22).

## 8.22 MAIN DRUGS OF MOST SERIOUS CONCERN FOR COMMUNITY



Source: 1991 and 1993 National Drug Household Surveys.

**Use of illicit drugs.** The prevalence of illicit drug use, since 1985, has remained relatively stable with the exception of amphetamine use which has increased marginally among some population groups as opposed to the community overall.

However, from 1985 to 1991, there was a marked decline in the proportion of persons believing 'use of illicit drugs' to be the most serious problem facing the Australian community today.

**Use of medications.** From information recorded in the 1989-90 National Health Survey, an estimated 70.4 per cent of the population used some form of medication during the previous two weeks (table 8.23). Pain relievers (35.4%), vitamin and mineral supplements (23.3%), skin ointments (18.2%), medication for cough or cold (12.0%) and medication for fluid, heart, blood pressure (10.8%) were the most commonly reported medications used.

While the pattern of medication types used by males and females was similar, females (76.2%) were markedly more likely than males (64.5%) to have used medication. Some 41.9 per cent of females reported using pain relievers, 27.5 per cent vitamin and mineral supplements and 19.2 per cent skin ointments, compared with 28.9 per cent, 19.1 per cent and 17.1 per cent, respectively for males.

With the exception of those under five years of age, the proportion of people who used medication increased with age from 54.8 per cent of 5 to 14 year olds to 91.2 per cent of those aged 75 years and over. The pattern of medication types used varied with age. For example, pain relievers were the most commonly reported medication for all age groups under 65 years. For those aged 65 years and over, medications for fluid, heart and blood pressure were the most commonly reported, with pain relievers ranked second.

### 8.23 PERSONS WHO USED MEDICATION, 1989-90 (per cent)

Type of medication	Age group (years)							Fe-		Persons	
	<5	5-14	15-24	25-44	45-64	65-74	>74	Male	male	%	'000
Vitamin and mineral supplements	14.7	18.1	22.4	26.2	26.1	25.1	22.7	19.1	27.5	23.3	3,960.0
Medication for cough or cold	26.6	15.0	12.1	9.8	9.1	9.1	9.4	11.9	12.0	12.0	2,030.9
Medication for allergy	3.7	7.0	5.5	6.4	6.3	5.9	3.2	5.4	6.5	6.0	1,010.8
Skin ointments	24.8	14.0	17.7	17.2	17.4	22.9	26.0	17.1	19.2	18.2	3,088.7
Stomach medicines or laxatives	2.7	2.1	3.9	6.5	11.9	19.1	22.7	6.4	9.1	7.8	1,317.0
Medications for fluid, heart, blood pressure	**	**	0.3	3.2	22.5	46.4	54.2	8.8	12.8	10.8	1,842.4
Pain relievers	27.9	20.7	34.4	40.3	40.2	38.6	40.8	28.9	41.9	35.4	6,021.2
Sleeping medications	2.7	0.2	1.1	2.7	8.1	17.2	23.4	3.4	6.5	5.0	844.8
Tranquillisers or sedatives	*0.2	*0.1	0.3	1.8	4.5	6.7	5.8	1.7	2.7	2.2	376.4
Other medications	12.4	12.0	14.6	14.7	25.3	39.5	43.8	16.1	22.0	19.1	3,242.2
<b>Total persons who used medication(a)</b>	<b>65.6</b>	<b>54.8</b>	<b>64.5</b>	<b>70.2</b>	<b>78.3</b>	<b>88.1</b>	<b>91.2</b>	<b>64.5</b>	<b>76.2</b>	<b>70.4</b>	<b>11,952.7</b>

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

Source: 1989-90 National Health Survey, Health Related Actions, Australia (4375.0), unpublished ABS data.

**Sun protection.** Results from the 1989-90 National Health Survey indicate that two-thirds of the population (66.3%) usually used some form of protection. Some 58.2 per cent usually used sunscreens, with those of SPF 15 or 15+ most commonly reported (table 8.24). Females were more likely to use SPF 15 or 15+ sunscreen (48.8%) than males (39.3%) and less likely to be unprotected from the sun (26.5% of females compared with 40.9% of males).

The proportion of people not usually protected from the sun increased with age, from 11.8 per cent of those aged under 5 years to 53.0 per cent of those aged 75 years and over, while the age groups most likely to use SPF 15 or 15+ sunscreen were those aged 5 to 14 years (69.4%) followed by those aged under 5 years (65.3%).

### 8.24 PERSONS WHO USUALLY USE SUNSCREEN, 1989-90 (per cent)

Sun protection factor	Age groups (years)							Males Females		Persons	
	<5	5-14	15-24	25-44	45-64	65-74	>74	Males	Females	%	'000
Usually uses sunscreen	**	**	*0.1	*0.1	*0.1	**	**	*0.1	0.1	0.1	11.9
SPF 2-3	*0.4	1.1	4.0	2.8	1.3	*0.4	**	1.6	2.4	2.0	340.0
SPF 4-7	2.6	4.9	7.2	5.5	2.7	1.1	*0.3	3.9	4.9	4.4	752.8
SPF 8-14	65.3	69.4	46.7	45.1	29.3	19.1	9.0	39.3	48.8	44.1	7,485.8
SPF 15, 15+	*0.3	0.8	1.7	1.2	0.8	*0.4	**	0.9	1.1	1.0	170.8
Depends/varies	5.5	7.1	7.0	6.3	7.0	7.4	5.1	6.2	7.1	6.6	1,127.5
Don't know	1.7	0.7	0.6	1.9	4.4	9.6	11.9	3.4	2.4	2.9	492.7
Protected by clothes, hat etc.	12.6	0.4	1.5	3.1	7.2	11.1	20.5	3.7	6.7	5.2	880.9
Not exposed to strong sun	11.8	15.5	31.3	34.0	47.2	50.9	53.0	40.9	26.5	33.7	5,726.5
Not protected											
<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>	<b>16,988.8</b>

Source: 1989-90 National Health Survey, Summary of Results, Australia (4364.0), unpublished ABS data.

**Childhood immunisation.** Immunisation is recommended for all Australian children as a protection against childhood diseases such as diphtheria, tetanus, whooping cough, poliomyelitis, rubella, measles and mumps. Immunisation programs are implemented in all States and Territories of Australia. The childhood immunisation schedule, as recommended by the National Health and Medical Research Council, is available from the Commonwealth Department of Human Services and Health. Hepatitis B vaccine is currently offered to neonates born to mothers belonging to community groups in which the carrier rate for Hepatitis B is estimated to exceed five per cent. In addition, four vaccines for the prevention of *Haemophilus influenzae* type b (Hib) infections have been approved for use in Australia.

Results of the 1989-90 National Health Survey show that of children aged six years and under, just over half (52.9%) were identified as being fully immunised at the time of the survey against all of the following conditions: diphtheria, tetanus, whooping cough, polio, measles and mumps, that is, they had received the recommended number of vaccinations for each of these conditions appropriate to their age. A further 29.5 per cent were recorded as being partly immunised (that is, they had received less than the recommended vaccinations for their age for at least one of the conditions), 3.6 per cent were not immunised (against any of the conditions) and the immunisation status was not known for a further 14.1 per cent (the immunisation status may be known for some but not all of the conditions). Table 8.25 shows the extent of different types of immunisation.

**8.25 CHILDREN AGED 0 TO 6 YEARS: TYPE OF CONDITION BY IMMUNISATION STATUS(a), 1989-90**  
(per cent)

<i>Type of immunisation</i>	<i>Immunisation status</i>				<i>Total</i>	<i>'000</i>
	<i>Fully immunised</i>	<i>Partly immunised</i>	<i>Not immunised</i>	<i>Not known if immunised</i>		
Diphtheria/tetanus	86.3	5.5	3.7	4.5	100.0	1,747.7
Whooping cough	70.9	19.3	5.4	4.5	100.0	1,747.7
Polio	72.1	15.9	5.8	6.1	100.0	1,747.7
Measles(b)	86.0	..	11.0	3.0	100.0	1,484.8
Mumps(b)	80.5	..	14.9	4.5	100.0	1,484.8

(a) Immunisation status is defined as the degree to which the recommended course of vaccinations for a particular disease has been received (as appropriate to the age of the children). (b) Excludes children aged less than one year.

Source: 1989-90 National Health Survey, *Children's Immunisation, Australia* (4379.0).

Immunisation status of children differed according to family characteristics (table 8.26). A higher proportion of children in married couple families were fully immunised than children in other family types. For all the conditions covered in the survey, children's immunisation status differed according to the

family's gross annual income, with lower income families tending to report lower proportions of fully immunised children. The highest proportions of fully immunised children were recorded by families with income in the range \$70,000 to \$119,999.



**8.26 FULLY IMMUNISED(a) CHILDREN AGED 0 TO 6 YEARS: TYPE OF CONDITION BY TYPE OF FAMILY AND GROSS ANNUAL INCOME OF FAMILY, 1989-90**  
(per cent)

Type of condition	Family type				'000
	Married couple families(b)	Single parent families	Other(c)	Total	
Diphtheria/tetanus	87.0	81.8	82.1	86.3	1,508.9
Whooping cough	71.9	63.7	61.3	70.9	1,238.7
Polio	73.1	65.3	63.8	72.1	1,260.8
Measles(d)	86.8	82.0	67.3	86.0	1,276.9
Mumps(d)	81.7	73.0	63.7	80.5	1,195.7

	Gross annual income of the family (\$)						Total	'000
	Less than 10,000	10,000-29,999	30,000-49,999	50,000-69,999	70,000-119,999	120,000 or more		
Diphtheria/tetanus	80.4	85.0	87.6	89.3	90.4	81.9	86.3	1,508.9
Whooping cough	62.3	68.7	73.3	73.0	76.8	67.2	70.9	1,238.7
Polio	60.4	69.5	74.0	77.3	77.4	71.3	72.1	1,260.8
Measles(d)	73.1	83.9	88.1	88.9	91.5	85.0	86.0	1,276.9
Mumps(d)	64.9	78.0	84.0	82.4	85.1	79.3	80.5	1,195.7

(a) Those children who had received all the vaccinations for a condition appropriate to their age. (b) Includes de facto relationships. (c) Includes children living with other relatives. (d) Excludes children aged less than one year.

Source: 1989-90 National Health Survey, Children's Immunisation, Australia (4379.0).

Immunisation status of children also differed according to characteristics of parents. Children of parents aged 25 to 34 years, and of parents born in Australia, were more likely to be fully immunised than children of parents in other age groups and of parents born overseas. Children of parents unemployed at the time of the survey were less likely to be fully immunised than those of employed parents or parents not in the labour force. In addition, parents who had obtained post-school qualifications reported slightly higher proportions of fully immunised children for all conditions.

## Mortality

**Causes of death.** Information relating to crude death rates and life expectancy is contained in the chapter, Demography.

Causes of death in Australia are classified according to the ninth revision of the International Classification of Diseases (ICD) produced by the World Health Organization.

The major causes of the 123,660 deaths in the community in 1992 remained diseases of the circulatory system (accounting for 44.4%), neoplasms (26.2%), diseases of the respiratory system (8.1%) and accidents, poisonings and violence (6.1%). In 1992, less than one per cent of all deaths were due to infectious and parasitic diseases (table 8.27).

## 8.27 CAUSES OF DEATH IN EACH AGE GROUP, 1992

Causes of death	Age group (years)									Total (a)
	<1	1-14	15-24	25-34	35-44	45-54	55-64	65-74	>74	
	NUMBER									
Infectious & parasitic diseases	17	26	13	32	44	43	93	177	449	894
Neoplasms	8	129	147	378	1,095	2,674	5,722	10,081	12,170	32,404
Endocrine, nutritional & metabolic diseases & immunity disorders	29	28	36	181	234	213	385	817	1,655	3,578
Diseases of the nervous system & sense organs	50	81	74	54	74	98	202	459	1,567	2,659
Diseases of the circulatory system	18	27	66	165	614	1,698	4,655	11,852	35,813	54,912
Diseases of the respiratory system	41	31	32	38	98	242	848	2,683	6,055	10,068
Diseases of the digestive system	3	7	8	54	148	308	523	841	2,070	3,962
Congenital anomalies	498	93	33	36	36	23	27	28	31	805
All other diseases(b)	839	18	84	201	128	147	291	799	3,669	6,176
Signs, symptoms & ill-defined conditions	298	23	31	33	27	27	34	38	201	712
Accidents, poisonings & violence	42	368	1,406	1,399	1,023	768	614	696	1,169	7,489
All causes	1,843	831	1,930	2,571	3,521	6,241	13,394	28,471	64,849	123,660
RATE(c)										
Infectious & parasitic diseases	6	1	—	1	2	2	6	15	56	5
Neoplasms	3	4	5	13	41	136	390	833	1,529	185
Endocrine, nutritional & metabolic diseases & immunity disorders	11	1	1	6	9	11	26	68	208	20
Diseases of the nervous system & sense organs	19	2	3	2	3	5	14	38	197	15
Diseases of the circulatory system	7	1	2	6	23	86	318	980	4,501	314
Diseases of the respiratory system	16	1	1	1	4	12	58	222	761	58
Diseases of the digestive system	1	—	—	2	6	16	36	70	260	23
Congenital anomalies	189	3	1	1	1	1	2	2	4	5
All other diseases(b)	318	1	3	7	5	7	20	66	461	35
Signs, symptoms & ill-defined conditions	113	1	1	1	1	1	2	3	25	4
Accidents, poisonings & violence	16	10	51	49	39	39	42	58	147	43
All causes	698	23	70	91	133	317	914	2,353	8,150	707

For footnotes see end of table.

8.27 CAUSES OF DEATH IN EACH AGE GROUP, 1992 — *continued*

Causes of death	Age group (years)									Total (a)
	<1	1-14	15-24	25-34	35-44	45-54	55-64	65-74	>74	
	PERCENTAGE(d)									
Infectious & parasitic diseases	0.9	3.1	0.7	1.2	1.2	0.7	0.7	0.6	0.7	0.7
Neoplasms	0.4	15.5	7.6	14.7	31.1	42.8	42.7	35.4	18.8	26.2
Endocrine, nutritional & metabolic diseases & immunity disorders	1.6	3.4	1.9	7.0	6.6	3.4	2.9	2.9	2.6	2.9
Diseases of the nervous system & sense organs	2.7	9.7	3.8	2.1	2.1	1.6	1.5	1.6	2.4	2.2
Diseases of the circulatory system	1.0	3.2	3.4	6.4	17.4	27.2	34.8	41.6	55.2	44.4
Diseases of the respiratory system	2.2	3.7	1.7	1.5	2.8	3.9	6.3	9.4	9.3	8.1
Diseases of the digestive system	0.2	0.8	0.4	2.1	4.2	4.9	3.9	3.0	3.2	3.2
Congenital anomalies	27.0	11.2	1.7	1.4	1.0	0.4	0.2	0.1	—	0.7
All other diseases(b)	45.5	2.2	4.4	7.8	3.6	2.4	2.2	2.8	5.7	5.0
Signs, symptoms & ill-defined conditions	16.2	2.8	1.6	1.3	0.8	0.4	0.3	0.1	0.3	0.6
Accidents, poisonings & violence	2.3	44.3	72.8	54.4	29.1	12.3	4.6	2.4	1.8	6.1
<b>All causes</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) Total includes 9 deaths where age is not known. (b) Includes 846 deaths from conditions originating in the perinatal period and 1,861 deaths from diseases of the genitourinary system. (c) Rates are per 100,000 of population at risk, except for children under one year of age which are per 100,000 live births registered. (d) Percentage of all deaths within each age group.

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

The relative importance of groups of causes of death varies with age. The majority of infant deaths (65.3% in 1992) occur within less than 28 days of birth. Most of these neonatal deaths are due to conditions present from birth. For those aged from 1 to 34 years external causes (accidents, poisonings and violence) predominate. In the 35 to 44 year old age group, neoplasms (31.1%) join external causes (29.1%) as a major cause of death. From 45 onwards neoplasms and diseases of the circulatory system are the two major causes of death, with the latter the major cause after the age of 65.

As well as differing by age, the relative importance of certain causes of death varies by sex, as exemplified in graph 8.12.

The perinatal death rate for Australia decreased from 9.63 per 1,000 total births in 1991 to 9.44 in 1992. The three main causes of perinatal deaths were Hypoxia, birth asphyxia and other respiratory conditions (36.2%), Other conditions originating in the perinatal period (27.6%) and Congenital anomalies (20.4%). 45.8 per cent of all perinatal deaths did not mention any condition in the mother as contributing to the death. Where maternal conditions were reported, 25.0 per cent of all perinatal deaths were reported as being due to Complications of placenta, cord and membranes.

## 8.28 CAUSE OF PERINATAL DEATHS, 1992

Cause of death	Number of deaths			Rate		
	Fetal	Neonatal	Perinatal	Fetal(a)	Neonatal (b)	Perinatal (a)
<b>Conditions in fetus/infant</b>						
Slow fetal growth, fetal malnutrition and immaturity	89	149	238	0.34	0.56	0.90
Birth trauma	2	17	19	0.01	0.06	0.07
Hypoxia, birth asphyxia and other respiratory conditions	651	258	909	2.45	0.98	3.42
Fetal and neonatal haemorrhage	12	46	58	0.05	0.17	0.22
Haemolytic disease of fetus or newborn	11	9	20	0.04	0.03	0.08
Other conditions originating in the perinatal period	569	124	693	2.14	0.47	2.61
Congenital anomalies	153	359	512	0.58	1.36	1.93
All other causes	7	53	59	0.02	0.20	0.22
<b>Conditions in mother</b>						
Maternal conditions which may be unrelated to present pregnancy	156	83	239	0.59	0.31	0.90
Maternal complications of pregnancy	153	303	456	0.58	1.15	1.72
Complications of placenta, cord and membranes	537	90	627	2.02	0.34	2.36
Other complications of labour and delivery	19	18	37	0.07	0.07	0.14
No maternal condition reported	628	521	1,149	2.37	1.97	4.33
<b>All causes</b>						
1992	1,493	1,015	2,508	5.62	3.84	9.44
1991	1,478	1,012	2,490	5.71	3.93	9.63
1990	1,590	1,122	2,712	6.02	4.27	10.27
1989	1,451	1,058	2,509	5.75	4.22	9.95
1988	1,473	1,164	2,637	5.95	4.73	10.65
1987	1,432	1,159	2,591	5.84	4.75	10.56

(a) Per 1,000 births registered (live births and stillbirths) weighing 500 grams or more at birth. (b) Per 1,000 live births registered weighing 500 grams or more at birth.

Source: *Perinatal Deaths, Australia (3304.0)*.

## HEALTH CARE DELIVERY

### Medicare

The Health Insurance Act provides for a Medicare Benefits Schedule which lists a schedule fee applicable to each medical service. The Schedule covers services attracting Medicare benefits rendered by legally qualified medical practitioners, certain prescribed services rendered by approved dentists and optometrical consultations by optometrists. Medical services in Australia are generally delivered by either private medical practitioners on a fee-for-service basis, or medical practitioners employed in hospitals and community health centres. The Schedule is constantly reviewed through ongoing consultations with the medical profession and

it is updated twice yearly to reflect current medical practice.

Medicare benefits are payable at the rate of 85 per cent of the schedule fee services except those for private in-patients in hospitals.

### Public hospitals

In 1991-92 there were 1,041 acute care hospitals, 50 public psychiatric hospitals, 1,444 nursing homes, and 1,198 hostels in Australia. A more important indicator of the supply of health care facilities is the number of beds per 1,000 population. Excluding beds in public psychiatric hospitals, there were 4.4 hospital beds available for acute care per 1,000 population in Australia in 1991-92. This followed a steady decline from 1985-86 to

1991–92, when the ratio of available beds fell by four per cent a year, from 4.1 to 3.1 beds per 1,000 population.

The number of beds available in public psychiatric hospitals in Australia decreased from 2.3 per 1,000 population in 1970 to 0.4 in 1991–92. During the 1970s and early 1980s, the supply contracted by six per cent per year. Between 1985–86 and 1987–88, the annual rate of decrease was almost 20 per cent. This rapid reduction in beds resulted from moves to de-institutionalise patients requiring both acute and long-term psychiatric care. Since 1987–88, the reduction in bed supply has continued at two per cent a year.

**Use of hospitals.** Rates of admission to acute hospitals have fluctuated over the last two decades, an increase during the 1970s was followed by a slight decline in the early 1980s. From 1982–83 to 1988–89, admissions per 1,000 persons fluctuated around 215, then increased substantially to 245 in 1991–92.

By international standards, Australia's rate of admission to acute care hospitals is high, but its comparatively short average length of stay, 4.8 days for 1991–92, is the lowest among the OECD countries.

The sustained reductions in length of hospital stay are reflected in falls in the number of bed-days used by patients in acute hospitals. Between 1982–83 and 1991–92, the number of bed-days per 1,000 population fell by 2.5 per cent per year, from 1,490 to 1,218.

**Same-day surgery.** In recent years, the increasing use of same-day treatments has accelerated the decline in length of stay. The proportion of same-day patients in public acute hospitals has increased from 20 per cent in 1987–88 to 28 per cent in 1991–92. In 1991–92, 43 per cent of admissions to private hospitals were same-day patients.

## Private hospitals

In 1992 the ABS conducted its first nationwide survey of all private hospitals. Information on facilities, patients, staffing and finances was collected from 319 private acute and psychiatric hospitals and 72 free standing day hospital facilities. Some of the findings were as follows:

- The number of beds available for in-patient overnight accommodation averaged 20,745 during the year in the acute and psychiatric hospitals included in the survey.
- There were 1,280,600 in-patient separations from private hospitals, of which 90.4 per cent were from acute and psychiatric hospitals and 9.6 per cent from free standing day hospital facilities.
- Occupied bed days for acute and private psychiatric hospitals totalled 4.9 million.
- The number of full-time equivalent staff engaged at all private hospitals was 31,257 of whom 59.5 per cent were nursing staff.
- Total operating expenditure for private acute and psychiatric hospitals during 1991–92 amounted to \$1,955 million of which 60.8 per cent was expended on salaries and wages (including on-costs). Revenue received during the year was \$2,177 million, nearly all (95.3%) of which was received as payments from or in respect of patients.

## Health work force

At the Census on 6 August 1991, 272,560 persons reported they were employed in a health occupation; 188,630 (69.2%) of these were nurses and 38,000 (14.2%) were medical practitioners. The overall number employed in health occupations has increased steadily since 1981 (table 8.29). However, while the rate of those employed in a health occupation per 10,000 population increased between 1981 and 1986, the 1991 rate of 161.8 represents a small decrease on the 1986 figure.

## 8.29 PERSONS EMPLOYED IN HEALTH OCCUPATIONS

<i>Health occupation</i>	<i>30 June 1981(a)</i>	<i>1986</i>	<i>6 August 1991</i>
— number —			
Medical practitioners	28,010	32,790	38,800
Dental practitioners	5,490	6,310	6,720
Other health practitioners(b)	27,020	32,640	38,200
Nurses	159,190	182,240	188,630
<i>Total health occupations(c)</i>	<i>219,810</i>	<i>253,970</i>	<i>272,560</i>
Total employed persons	6,292,630	6,513,520	7,109,340
Total persons	14,476,330	15,602,160	16,850,330
— rate per 10,000 population —			
Medical practitioners	19.3	21.0	23.2
Dental practitioners	3.8	4.0	4.0
Other health practitioners(b)	18.7	20.9	22.7
Nurses	110.0	116.8	111.9
<i>Total health occupations</i>	<i>151.8</i>	<i>162.8</i>	<i>161.8</i>
Total employed persons	4,346.0	4,174.7	4,219.1

(a) 1981 figures have been adjusted to reflect the distribution of a sample of 1986 occupation data. (b) Includes pharmacists, occupational therapists, optometrists, physiotherapists, speech pathologists, chiropractors and osteopaths, podiatrists, radiographers and other health diagnosis and treatment practitioners. (c) Each cell has been rounded to the nearest ten, and therefore components may not add to totals.

Source: *Characteristics of Persons Employed in Health Occupation, Australia, Census of Population and Housing, 6 August 1991 (4346.0)*.

Over half (51.2%) the persons employed in health occupations worked in the private sector. The majority of medical practitioners (66.3%), dental practitioners (85.4%) and other health professionals (67.9%) worked in the private sector, while the majority of nurses (55.0%) worked in the government sector (table 8.30).

Of all persons employed in health occupations 58.2 per cent worked in hospitals or nursing homes. Some 28.8 per cent of medical practitioners worked in hospitals or nursing homes, 27.6 per cent of general practitioners and 31.2 per cent of specialists.

8.30 PERSONS EMPLOYED IN HEALTH OCCUPATIONS, BY INDUSTRY SECTOR, AUGUST 1991  
(per cent)

<i>Government sector</i>						
<i>Health occupation</i>	<i>Australian</i>	<i>State and local</i>	<i>Total</i>	<i>Private sector</i>	<i>Not stated</i>	<i>'000(a)</i>
Medical practitioners	2.9	30.1	33.0	66.3	0.7	38,800
Dental practitioners	2.1	12.1	14.1	85.4	0.4	6,720
Other health practitioners(b)	2.8	28.6	31.4	67.9	0.7	38,200
Nurses	2.4	52.5	55.0	43.5	1.6	188,630
<b>Total</b>	<b>2.5</b>	<b>45.0</b>	<b>47.5</b>	<b>51.2</b>	<b>1.3</b>	<b>272,560</b>

(a) Each cell has been rounded to the nearest ten, and therefore components may not add to totals. (b) Includes pharmacists, occupational therapists, optometrists, physiotherapists, speech pathologists, chiropractors and osteopaths, podiatrists, radiographers and other health diagnosis and treatment practitioners.

Source: *Characteristics of Persons Employed in Health Occupations, Australia, Census of Population and Housing, 6 August 1991 (4346.0)*.

Of persons employed in health occupations, 77.5 per cent were female. This is largely because of the high proportion of female nurses. However, the proportion of females varied for different occupations, from 17.1 per cent of dental practitioners and 19.5 per cent of chiropractors and osteopaths to over 90 per cent of nurses, occupational therapists and speech pathologists (table 8.31).

Almost one-third (33.0%) of persons employed in health occupations were aged 25 to 34 years. This age group accounted for the highest proportion of people in most of the health occupations. Occupations with the highest proportion of persons in the older age groups, that is, 45 years and over, were specialist medical practitioners (44.3%), dental practitioners (36.2%) and pharmacists (44.2%). Dental nurses had a particularly young age profile, with 54.1 per cent in the 15 to 24 age group.

**8.31 PERSONS EMPLOYED IN HEALTH OCCUPATIONS, BY AGE AND SEX, AUGUST 1991**  
(per cent)

Occupation	Age group (years)					Males Females		Persons(a)	
	15-24	25-34	35-44	45-54	>54			%	'000
Health diagnosis and treatment practitioners									
General medical	3.8	36.5	28.4	15.7	15.7	69.7	30.3	100.0	25,450
Specialist medical	2.3	19.0	34.2	25.2	19.1	74.6	25.4	100.0	13,350
Total	3.3	30.5	30.4	19.0	16.9	71.4	28.6	100.0	38,800
Dental	3.9	29.6	30.5	18.2	18.0	82.9	17.1	100.0	6,720
Pharmacists	10.1	23.4	22.2	25.4	18.8	56.9	43.1	100.0	10,880
Occupational therapists	16.1	41.3	25.4	13.4	3.8	6.3	93.7	100.0	3,660
Optometrists	12.6	44.5	23.6	8.2	10.4	70.3	29.1	100.0	1,820
Physiotherapists	10.9	41.4	26.1	15.0	6.7	19.8	80.2	100.0	7,130
Speech pathologists	19.4	46.9	23.4	8.0	2.3	2.9	97.1	100.0	1,750
Chiropractors and osteopaths	4.5	35.1	27.9	18.2	13.6	80.5	19.5	100.0	1,540
Podiatrists	16.7	36.8	14.9	12.3	20.2	34.2	65.8	100.0	1,140
Radiographers	15.1	38.0	30.5	12.2	4.0	34.3	65.6	100.0	4,760
Other health	8.5	28.2	32.3	20.8	10.5	24.4	75.6	100.0	5,540
Total	7.2	32.0	28.3	18.3	14.2	56.2	43.8	100.0	83,930
Nurses									
Registered	10.0	33.6	32.3	18.0	6.2	7.7	92.3	100.0	139,370
Enrolled	21.4	34.6	27.6	12.8	3.6	8.0	92.0	100.0	39,670
Dental	54.1	26.9	12.9	4.6	1.5	1.1	98.9	100.0	9,590
Total	14.6	33.5	30.3	16.2	5.4	7.4	92.6	100.0	188,630
Total	12.4	33.0	29.7	16.9	8.1	22.5	77.5	100.0	272,560

(a) Each cell has been rounded to the nearest ten, and therefore components may not add to totals.

Source: *Characteristics of Persons Employed in Health Occupations, Australia, Census of Population and Housing, 6 August 1991 (4346.0).*

## HEALTH PROGRAMS

### National Health Advancement Program

NHAP replaces the National Health Promotion and the National Better Health Programs following completion of their terms of agreement and subsequent evaluation.

The NHAP aims to improve the health of all Australians, with specific emphasis on reducing the health status inequalities of the lower socio-economic groups, through the commitment of \$22.1 million in four target areas — a national health promotion infrastructure strategy; a national strategy to protect the health of all Australians from environmental impacts on their health and

well-being; implementation of the national food and nutrition policy to improve accessibility to affordable nutritious food, and programs for disadvantaged groups; and further development, refinement and application of the new set of national health goals and targets, including planning and development of a coordinated national injury control strategy.

## Women's health

**National Women's Health Program.** This program, which commenced in 1989-90, aims 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 health needs of women. A new four year phase of the Program with funding of \$30 million was announced in the 1993 Budget. The Program is cost shared with the States and Territories on a dollar for dollar basis. The Program provides funding for improvements in general health services for women and for the establishment of primary health care services specifically for women.

**Cancer screening programs.** In 1990, the Commonwealth Government committed \$64 million for the first three years of the National Program for the Early Detection of Breast Cancer which is being implemented over five years. The goal of the Program is to reduce mortality and morbidity from breast cancer which is a major cause of death amongst women.

A national network of dedicated and accredited breast cancer screening and assessment services is being established within each participating State or Territory to provide screening to women over 40 years of age.

Following a start-up phase in which the Commonwealth provided \$11.4 million to establish or expand screening services, the Program is being cost shared equally between

the Commonwealth Government and State/Territory Governments.

In April 1992, all health ministers endorsed an Organised Approach to Preventing Cervical Cancer, which promotes:

- regular biennial screening for all women in the age range 18 to 70 years;
- more reliable and accessible services for taking, interpreting and reporting Pap tests;
- improved management of screen-detected abnormalities; and
- monitoring and evaluation.

The Approach seeks to reduce mortality from cervical cancer from the current rate of 350 per year. Cervical cancer is largely preventable if detected and appropriately managed in its pre-cancerous stages.

Of the \$23 million allocated to this program over four years by the Commonwealth, \$17 million has been directed to the States/Territories for development of cervical cytology registries, education programs and supplementary field services to meet the needs of special groups. States/Territories are contributing a further \$9 million. The balance of the Commonwealth's contribution has gone towards a comprehensive communication strategy directed towards service providers and women, including media campaigns, review and implementation of strategies to improve quality assurance in cervical cytology and management of women with screen-detected abnormalities.

## Alternative Birthing Services Program.

In recognition of increased community desire for greater choice in birthing services, the Commonwealth introduced a \$6.4 million four year incentive package in 1989-90 to assist States and Territories to provide a range of alternative birthing services. A further \$8.9 million over four years was allocated in the 1993 Budget.



## Profile of women's health

The past three decades has seen an increased focus on women's health. This emerged from the historical concern with issues related to reproductive health, including family planning and maternal and child health, and broadened to include the much wider range of issues which affect women's health.

A National Women's Health Policy was launched by the Australian Government in 1989. One of its principles is that women's health policy must be based on accurate data. In response to this, the ABS released a publication entitled *Women's Health, Australia*. Subjects covered include health status, health actions, reproductive health, causes of death, life expectancy, violence against women, lifestyle (risk factors), preventative health, health of particular groups, medical work force, private health insurance and resources allocated to women's health.

Major findings of the report included the following:

- In 1989-90, females were more likely than males to report that they had experienced one or more recent conditions in the two weeks prior to being interviewed in the National Health Survey (75.4% compared with 66.2%).
- Women were less likely to smoke than males (24.7% compared with 32.1%) and the women who did smoke, on average, smoked fewer cigarettes per day and cigarettes of a lower tar content than men.
- Over 90 per cent of women aged 15 to 24 years were immunised against rubella in 1989-90.
- In 1989-90, women in older age groups, who are at a higher risk of developing cervical cancer, were less likely to have had a Pap smear within the last year than women in younger age groups.
- Almost one in four females (23.2%) consulted a doctor in the two weeks prior to being interviewed in the National Health Survey, compared with one in six males (16.8%).
- Women are waiting until they are older to have children and are having fewer children than in previous years.
- The majority of women who are victims of assault, sexual assault and rape do not report these crimes to the police.
- In the decade 1981-91, the percentage of graduating doctors who were female increased from 34 per cent to 42 per cent.

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%).

### Aboriginal health

Under the National Aboriginal Health Strategy (NAHS) the Government will provide up to \$232 million over five years to dramatically lift unacceptable health and infrastructure standards in Aboriginal communities.

The funds will be used to:

- address urgent needs in Aboriginal and Torres Strait Islander communities such as housing, water, sewerage, electricity, communications and roads;
- establish new, and enable upgrading of existing, Aboriginal community-controlled health services; and
- establish an Office of Aboriginal Health within the Aboriginal and Torres Strait Islander Commission (ATSIC) to oversee and coordinate implementation of the National Aboriginal Health Strategy.

The majority of the program funds available under the NAHS are dependent on the States and Territories making substantial contributions and are the subject of continuing negotiations between the Aboriginal and Torres Strait Islander Commission, the Department of Health, Housing and Local Government and Community Services and the State/Territory Governments.

Health-related subjects are being covered in a National Survey of Aboriginal and Torres Strait Islander people to be conducted by the ABS from April to June 1994, in order to improve the information base for developments in this area. Results from the Survey will be available from the end of 1994.

## **Programs for the aged and people with disabilities**

**The Home and Community Care Program (HACC)**, which commenced in 1985, is cost shared between the Commonwealth Government and State/Territory Governments. The objective of the Program is to provide a range of services to enhance the quality of life of frail aged and younger people with disabilities and to assist them to live as independently as possible in the community. Services are also provided to the carers of these people.

It is recognised that particular groups within the target population have special needs in gaining access to services including Aboriginal and Torres Strait Islander people, people from a non-English-speaking background, people with dementia, financially disadvantaged people and people living in rural and remote locations.

HACC services include home help or personal care, home maintenance and modification, community nursing, delivered meals, paramedical services, transport and respite care.

An organisation eligible for HACC funding is non-profit and incorporated, or complies with similar requirements in its State/Territory. Such organisations include State/Territory Governments, local governments and community organisations.

Approximately 2,107 organisations provide care services to the HACC target population throughout Australia. An estimated 215,000 HACC consumers receive HACC services each month provided through more than 3,500 outlets. An estimated 117,000 carers benefit directly or indirectly from the provision of services.

**The Commonwealth Respite for Carers (CRC) Program.** The objective of the Program is to extend respite services funded under other programs such as HACC, Disabilities and those funded by State Governments. The CRC Program aims to

assist carers to maintain their caring role by increasing and extending the reach of respite care services and encouraging the development of more flexible services designed to respond to individual carer needs.

**Community Aged Care Packages (CACP)** were introduced to provide a community alternative for frail older people whose dependency would qualify them for personal care in a hostel. The CACPs are funded under the *Aged or Disabled Personal Care Act 1954*.

A CACP provider is responsible for providing (or organising) a set of community services for a frail older person with complex care needs who prefers to remain at home rather than enter residential care. The package is planned and coordinated by the CACP provider, who provides or purchases the services found necessary in a comprehensive assessment.

**Australian Hearing Services (AHS)** is a statutory authority within the portfolio of Human Services and Health. Its role is to assist people with a hearing impairment and to reduce the incidence of hearing problems within the community. AHS fits the large majority of all hearing aids in Australia.

AHS provides hearing services to eligible people, who include holders of Pensioner Concession cards, Commonwealth Seniors Health cards (from July 1994), those under 21 years of age, eligible veterans, Commonwealth rehabilitation clients and certain compensation claimants. Services are delivered through a national network of 52 full-time Hearing Centres, some 70 visiting centres in rural and remote areas, and over 80 approved private hearing aid businesses across Australia.

In 1992-93, AHS provided services to over 145,000 adults and children and fitted in excess of 86,000 hearing aids.

AHS staff also conduct noise and audiological research, evaluate new devices and techniques, advise on measures to prevent hearing loss and report on environmental and occupational noise problems.

## **Homeless youth**

The Innovative Health Services for Homeless Youth Program was established in 1989 as part of the \$100 million strategy, 'Towards

Social Justice for Young Australians'. The Program develops and implements innovative primary health care services for homeless youth and a further \$8.8 million over the period 1993-94 to 1996-97 was allocated in the 1993 Budget (\$17.6 million when cost shared with States and Territories). Emphasis is being placed on community involvement in service delivery. The ultimate objective of the Program is to encourage a more positive attitude among homeless young people towards their personal health care.

## **Mental health**

The emphasis has shifted from institutions for care of people with mental illness to mental health services provided in the general health sector, such as psychiatric units in general hospitals, and a range of community-based services across the health, housing and community service sectors.

Commonwealth funding of \$135 million over six years was approved in the 1992 Budget to assist in implementing the National Mental Health Policy to accelerate the process of reform in the mental health sector. Of this, approximately \$107 million is available directly to the States and Territories, about \$22 million will be allocated to innovative projects of national significance, and \$5 million will be used to support a mental health research network.

The main objectives of the reform process include: expanding community-based mental health services; improving consumer rights; reforming mental health legislation; restructuring the mental health work force; and promoting mental health and community awareness of mental health problems and mental disorders.

## **Diet and nutrition**

The Food and Nutrition Program aims to implement projects which address the strategies of the Food and Nutrition Policy. The goal of the Policy is 'to improve health and reduce the burden of diet-related early death, illness and disability among Australians'.

Key issues are social justice, the quality and sustainability of the food supply, and intersector involvement including governments, industry and the community. It aims at improving the knowledge and skills for

Australians to choose a healthy diet, incorporating food and nutrition into the food system, improving the diet of people with special needs and establishing ongoing monitoring and surveillance.

Projects are being undertaken to develop nutrition curriculum material for all primary and secondary schools, supported by professional development for teachers; develop point-of-sale material to assist consumers to make healthy food choices in the retail environment; improve the nutritional quality of hotel meals; demonstrate the feasibility of reducing the level of fat from meat in the food supply; develop a video to assist older people to consume a healthy diet; local government to integrate food and nutrition issues into local planning and to improve the access and availability of nutritious food; develop resources to assist Aboriginal and Torres Strait Islander communities to address food and nutrition concerns, and to develop a national monitoring and surveillance strategy.

The need for national information about diet and nutrition has been recognised in many forums. This need is being addressed through the National Nutrition Survey, which is a joint project between the ABS and the Department of Human Services and Health, in association with other health agencies. The survey results will contribute to the development and monitoring of health goals and targets for nutrition and diet-related disease, as well as assist with the development of food policy and regulations associated with food safety and composition.

## **Drugs**

The National Drug Strategy is a major national effort to minimise the harmful effects of drug use on Australian society and has been in operation since 1985.

The broad range of strategies implemented under the National Drug Strategy (formerly the National Campaign Against Drug Abuse) has resulted in a number of significant achievements, particularly in relation to tobacco and alcohol where between 1985 and 1991, the death rates per 100,000 population attributable to tobacco and alcohol each declined by 12 per cent.

## Dental health

The 1993–94 Federal Budget included funding for the creation of a Commonwealth Dental Health Program. The aims of the Program are to reduce barriers, including economic, geographical and attitudinal barriers, to dental care for eligible persons; to ensure equitable access of eligible persons to appropriate dental services; to improve the availability of effective and efficient dental interventions with an emphasis on prevention and early management of dental problems; and to achieve high standards of program management, service delivery, monitoring and evaluation, and accountability.

The amount to be provided over the four years 1993–94 to 1996–97 will total \$278 million. Additional funds are provided for administration. Total funds are paid to the States in the form of grants. Allocation of Commonwealth funds between States is linked to the numbers of Health Card holders and, from 1 July 1994, Seniors Health Card Holders in each State. These two groups represent a combined population of about 4.3 million persons.

## Organ and tissue donation

Australia operates under an 'opting in' system for organ and tissue donation. In addition to the efforts of non-government organisations to increase the rate of donation, the Commonwealth and the States share the cost of the Australian Bone Marrow Donor Registry for recruiting and matching unrelated bone marrow donors, and the Australian Co-ordinating Committee on Organ Registries and Donation, an expert government committee established to develop and implement strategies to overcome the low donation rates in Australia — currently about 13 donations per million of population.

The Australian Coordinating Committee on Organ Registries and Donation was established in 1989 by the Australian Health Ministers Advisory Council. It has facilitated public and professional research surveys to identify reasons for the low donor rate in Australia. From the results of these surveys, strategies to increase the organ donor rate have been developed.

It aims to lift the Australian rate of organ donation to between 14 and 15 donors per

million population by December 1996 through concerted public and professional education and information programs.

## Family planning

Commonwealth funding is provided to approved non-government organisations to assist them to provide clinical and non-clinical services associated with family planning. Eligible activities may include medical practitioner and nursing services; training of health professionals in family planning techniques; counselling services for clients; preparation and dissemination of information and publicity; workshops; and research. The Commonwealth allocation for family planning in 1993–94 was \$14 million.

## HEALTH CARE FINANCING

### Health expenditure by governments

Health expenditure by Australian Governments in 1992–93 was \$34.3 billion or \$1,954 per person. Health expenditure per person increased at an average annual rate of 2.4 per cent in real terms between 1984–85 and 1992–93. Health expenditure as a proportion of gross domestic product (GDP) was estimated to be 8.5 per cent in 1992–93.

The average growth rate in real health expenditure for the period after the introduction of Medicare from 1984–85 to 1992–93 was 3.9 per cent. The growth rate in the last four years of 2.9 per cent was lower than during the first four years of the period when it averaged 5.0 per cent (table 8.32).

### Medicare financing

Details of the health financing arrangements under the Medicare program introduced by the Commonwealth Government in February 1984 are available in *Year Book Australia 1984*.

The Medicare levy was increased from 1 per cent to 1.25 per cent of taxable income on 1 December 1986 and increased to 1.4 per cent on 1 July 1993.

From 1 July 1993 no levy was payable by single people earning less than \$12,662 per annum or by sole parents and married couples with combined incomes of less than \$21,320 per annum with a further \$2,100 per annum allowed for each dependent child.

### 8.32 TOTAL HEALTH EXPENDITURE BY GOVERNMENTS (CURRENT AND CONSTANT 1989-90 PRICES) AND RATE OF GROWTH

Year	Amount (\$m)		Rate of growth (%)	
	Current prices	Constant 1989-90 prices(a)	Current prices	Constant 1989-90 prices(a)
1982-83	13,239	20,673		
1983-84	14,958	21,989	13.0	6.4
1984-85	16,546	22,862	10.6	4.0
1985-86	18,586	24,180	12.3	5.8
1986-87	21,115	25,341	13.6	4.8
1987-88	23,328	26,294	10.5	3.8
1988-89	26,154	27,748	12.1	5.5
1989-90	28,814	28,814	10.2	3.8
1990-91	31,132	29,358	8.0	1.9
1991-92(b)	32,758	30,020	5.2	2.3
1992-93(b)	34,338	31,068	4.8	3.5

(a) Health expenditure 1982-83 to 1992-93 deflated to constant prices using specific health deflators. (b) Based on preliminary AIHW and ABS estimates.

Source: Australian Institute of Health and Welfare, Health Expenditure Data Base.

### Commonwealth government funding of hospitals

In 1992-93, hospital funding grants by the Commonwealth Government, totalling \$3,930 million to the States and Territories, provided \$3,839 million for hospital and related services; \$45 million for incentives in the areas of post-acute and palliative care and day surgery procedures; and \$46 million towards hospital care for AIDS patients. Additionally, \$37 million was provided for hospital enhancement and provision of Magnetic Resonance Imaging services as well as \$7.7 million for National Diagnostic Related Groups (Casemix) projects.

### Household expenditure on medical care and health

The 1988-89 Household Expenditure Survey provides estimates of expenditure on medical care and health by households across Australia. Expenditure is net of any refunds and rebates received from Medicare, private health insurance companies, and employers.

Table 8.33 shows household expenditure on medical care and health expenses for 10 household types which represent simplified life cycle stages. (The 10 types together represented about 70% of all households in Australia in 1988-89.)

As can be seen, household expenditure on medical care and health expenses varies according to the life cycle stage of a household. These changes are associated with changes in household size, the amount of income earned and the age of household members. For the first group, which consists of single persons under 35 years, for whom household size and income is relatively low, expenditure is the lowest (\$9.30 per week). As the cycle progresses and household size and income peak at the stage when the household consists of a married couple with dependent and non-dependent children, health expenditure also peaks (\$33.83 per week). By the time a household comprises of one person only, aged 65 and over, expenditure has decreased to \$11.70 per week.

	Single person only, under 35	Married couple, husband and wife only, reference person under 35			Married with dependent children only			Married couple with dependent and non-dependent children only		Married couple, husband and wife only, reference person 55 to 64		Married couple, husband and wife only, reference person 65 and over	
		Eldest child under 5	Eldest child 5 to 14	Eldest child 15 to 20	Eldest child 15 to 20	Dependent children only	Non-dependent children only	Dependent children only	Non-dependent children only	reference person 55 to 64	reference person 65 and over	reference person 65 and over	reference person 65 and over
Average weekly household income (\$)	439.80	854.34	647.85	764.35	874.53	1,100.06	1,004.75	533.79	356.93	171.72	1.00		
Average number of persons in household	1.00	2.00	3.47	4.34	4.32	4.74	3.36	2.00	2.00				
— Average weekly household expenditure \$(a)(b) —													
Accident and health insurance													
Hospital, medical and dental insurance	3.14	8.77	10.41	10.87	13.14	14.09	14.72	11.47	7.85	3.14			
Ambulance insurance (separate insurance)	0.12	0.19	0.18	0.23	0.17	0.25	0.32	0.28	0.21	0.14			
Sickness and personal accident insurance*	0.87	1.30	0.87	1.06	0.93	0.98	1.01	0.58	0.06	0.04			
Total	4.13	10.26	11.46	12.15	14.24	15.32	16.06	12.33	8.12	3.33			
Practitioners fees													
General practitioner doctor's fees*	0.44	0.80	1.42	1.13	1.26	1.33	0.86	0.84	0.49	0.08			
Specialist doctor's fees*	0.53	1.96	1.77	1.68	1.92	1.89	1.85	1.21	1.35	0.55			
Dental charges*	0.80	2.23	2.42	4.56	5.39	4.67	4.01	2.25	1.40	0.77			
Optician's fees (including spectacles)*	0.25	0.68	0.60	0.77	1.71	2.55	1.99	1.96	1.73	0.66			
Practitioner's fees, n.e.c.*	0.40	0.73	0.86	0.87	1.06	0.97	1.06	0.49	0.48	0.58			
Total	2.42	6.39	7.07	9.02	11.34	11.40	9.76	6.76	5.45	2.65			
Medicines, pharmaceutical products, therapeutic appliances and equipment	1.70	3.12	5.76	4.64	5.93	6.22	5.85	5.04	4.45	4.15			
Other health charges**	n.p.	0.59	0.76	0.52	1.40	0.90	0.74	0.40	0.59	1.57			
Total medical care and health expenses	9.30	20.36	25.04	26.34	32.91	33.83	32.41	24.53	18.62	11.70			

(a) The average obtained when the total estimated expenditure for a particular expenditure item is divided by the estimated number of households within the scope of the survey in the relevant category of household type. (b) Net of refunds and rebates.

\* At least one of the estimates in this row has a relative standard error greater than 25 per cent. \*\* All of the estimates in this row have a relative standard error greater than 25 per cent.

Source: 1988-89 Household Expenditure Survey: Household Characteristics, Australia (6531.0), unpublished ABS data.

## Pharmaceutical Benefits Scheme

The Scheme was established under the provisions of the *National Health Act 1953*. It provides to the Australian community a large range of drugs and medicinal preparations prescribed by medical and dental practitioners. The medicines can be dispensed by an approved pharmacist upon presentation of a prescription.

Depending on the circumstances, the patient may pay as little as \$2.60 and need pay no more than \$16.00 for any prescription listed on the Pharmaceutical Benefits Schedule.

The safety net limit applies according to the patient's circumstances, but for most families it is \$400 each calendar year. (This figure is adjusted for inflation at the beginning of each calendar year.) Once the patient or his/her immediate family has spent \$400 on PBS medicines in a year, they need only pay \$2.60 for additional PBS items for the rest of the calendar year.

If the patient holds one of the special concession cards listed earlier, the safety net

limit is \$135.20 per calendar year (similarly adjusted for inflation). When the patient has spent \$135.20 on PBS medicines for themselves and/or his/her dependants they can get further PBS medicines free for the rest of the year. The provisions under the Scheme for pensioner and other concession card holders are described in the chapter, Social Security and Welfare.

In 1992-93 the total cost of the Scheme, including patient contribution of prescriptions processed for payment, was \$1,777 million. This figure does not include the cost of drugs supplied through special arrangements, such as the Royal Flying Doctor Services, methadone maintenance programs and hormone treatment programs.

## Health insurance coverage

There has been a steady decline in the proportion of the population covered by private health insurance from 53.1 per cent in March 1986 to 47.8 per cent in 1992 (table 8.34).

**8.34 NUMBER OF PERSONS WITH PRIVATE HEALTH INSURANCE**

	March 1986	June 1988	June 1990	June 1992
— '000 —				
With private health insurance	8,208.1	8,663.8	8,916.7	8,241.4
Without private health insurance	7,170.0	7,891.3	8,220.4	8,995.3
<b>Total(a)</b>	<b>15,457.2</b>	<b>16,573.3</b>	<b>17,160.2</b>	<b>17,259.0</b>
— per cent —				
With private health insurance	53.1	52.3	52.0	47.8
Without private health insurance	46.4	47.6	47.9	52.1
<b>Total(a)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes persons for whom details were unknown.

Source: *Health Insurance Survey, Australia (4335.0)*.

Results of the June 1992 Health Insurance Survey show that 44.1 per cent of contributor units were covered by private health insurance. 31.2 per cent had both hospital and ancillary cover, a further 8.5 per cent had hospital cover only and 3.6 per cent had ancillary cover only. However, health insurance coverage and what was covered fluctuated

across the different contributor units, ages and income (table 8.35).

Units composed of contributor, partner and dependent children were the most likely contributor unit type to be covered by private health insurance (55.7%), while less than one in four (23.3%) single parent units (contributor and dependent children) were covered.

Units with middle aged contributors were more likely to be covered than those with contributors of other ages. Of units where the contributor was aged 45 to 64 years, 54.9 per cent were covered, compared with 32.9 per cent of those with contributors aged under 24 years and 37.5 per cent of those with contributors more than 74 years of age.

Contributor units in the lowest income group (gross weekly income less than \$160) were the least likely to be covered by private health insurance (22.1%). The higher the income of the contributor unit the more likely it was to be covered. Of those contributor units with a gross weekly income of over \$800, 72.6 per cent were covered by private health insurance.

### 8.35 HEALTH INSURANCE COVERAGE OF CONTRIBUTOR UNITS, JUNE 1992(a)(b) (per cent)

	With private health insurance					Without private health insurance	Total	'000
	Hospital and ancillary	Hospital only	Ancillary only	Type not known	Total	insurance		
Composition of contributor unit								
Contributor only	25.7	7.8	3.2	1.2	37.9	62.1	100.0	4,305.3
Contributor & dependent children	14.9	3.3	4.2	0.9	23.3	76.7	100.0	465.7
Contributor and partner only(c)	37.1	11.5	2.6	0.4	51.6	48.4	100.0	1,776.4
Contributor, partner & dependent children(c)	41.7	8.4	5.3	0.3	55.7	44.3	100.0	2,007.5
Age of contributor (years)								
15-24	23.5	4.6	3.6	1.2	32.9	67.1	100.0	1,577.7
25-44	32.3	6.9	4.9	0.7	44.8	55.3	100.0	3,383.3
45-64	40.6	10.2	3.4	0.7	54.9	45.1	100.0	2,159.5
65-74	24.5	14.0	1.3	0.5	40.3	59.7	100.0	873.0
>74	20.9	14.5	0.8	1.2	37.4	62.5	100.0	561.2
Gross weekly income (\$)								
Less than 160(d)	13.1	6.0	1.8	1.1	22.0	77.9	100.0	1,316.8
160-239	15.5	7.9	2.2	0.6	26.2	73.9	100.0	835.9
240-399	19.3	8.4	3.1	0.6	31.4	68.6	100.0	1,843.1
400-599	33.3	8.6	4.6	0.6	47.1	52.9	100.0	1,640.2
600-799	42.7	8.6	5.6	0.8	57.7	42.4	100.0	898.6
800 or more	57.2	10.1	4.7	0.7	72.7	27.4	100.0	1,611.6
Not known	39.2	11.4	2.2	3.1	55.9	44.1	100.0	408.5
<b>Total ('000)</b>	<b>31.2</b>	<b>8.5</b>	<b>3.6</b>	<b>0.8</b>	<b>44.1</b>	<b>55.9</b>	<b>100.0</b>	<b>8,554.7</b>
	<b>2,670.2</b>	<b>727.6</b>	<b>309.7</b>	<b>69.3</b>	<b>3,776.8</b>	<b>4,777.9</b>		

(a) The term 'contributor unit' applies to families and the individual members or groups of families as defined by their private health insurance arrangements. (b) For couples, the male partner has been designated as the contributor. (c) Includes de facto relationships. (d) Includes units for which a source of income was not reported.

Source: Health Insurance Survey, Australia (4335.0), unpublished ABS data.

## HEALTH-RELATED ORGANISATIONS

### International

**World Health Organization.** The WHO is a specialised agency of the United Nations having as its objective the attainment by all peoples of the highest level of health.

Australia is assigned to the Western Pacific Region, the headquarters of which is at Manila, and is represented annually at both the World Health Assembly in Geneva and the Regional Committee Meeting in Manila. Australia's contribution to WHO for 1994 was \$8,593,791.



**International Agency for Research on Cancer.** The IARC was established in 1965 within the framework of the WHO. The headquarters of the agency are located in Lyons, France. The objectives and functions of the agency are to provide for planning, promoting and developing research in all phases of the causation, treatment and prevention of cancer. Australia's contribution to the IARC for 1993 was \$1,209,323.

## Australian Government

**Australian Health Ministers' Conference and the Australian Health Ministers' Advisory Council.** The Australian Health Ministers' Conference (AHMC) and its advisory body, the Australian Health Ministers' Advisory Council (AHMAC) provide a mechanism for the Commonwealth Government, State and Territory Governments to discuss matters of mutual interest concerning health policy, services and programs. The AHMC comprises the Commonwealth, State, Territory and New Zealand Health Ministers. Neither the Conference nor the Council has statutory powers, and decisions are reached on the basis of consensus. Their constitution rests on the formal agreement by the Commonwealth Government, and State and Territory Governments of the membership and functions.

In April 1993, Australia's Health Ministers announced the development of a National Health Policy, a major joint initiative of States/Territories and the Commonwealth.

The framework for development of the National Health Policy has been the implementation of national health goals and targets. Four focus areas were selected for development of strategic action plans — cardiovascular disease, mental health, injury and cancers.

**Department of Human Services and Health.** The Department is primarily a specialist body concerned with the planning and development of a range of health and welfare policies, including the national health insurance system, Medicare.

The Department is responsible for:

- the promotion of good health and reduction of illness through regulatory, promotional and funding programs;

- the provision of care and services appropriate to their needs for aged people and people with disabilities;
- ensuring that all Australians have access to necessary health services at reasonable cost through financial arrangements with the States and Territories, the direct provision of some health services and through appropriate health insurance;
- the provision of housing assistance including crisis and supported housing;
- assisting local governments to improve the well being of local communities; and
- improving the quality of life and the choices available for families and children at home, at work and in the general community.

**Australian Institute of Health and Welfare.** The Australian Institute of Health and Welfare (AIHW), is a statutory authority within the Commonwealth Human Services and Health portfolio. The Institute's mission is to inform community discussion and to support public policy-making on health and welfare issues by coordinating, developing, analysing and disseminating national statistics on the health of Australians and their health and welfare services, and by undertaking and supporting related research and analysis.

As part of its national role, the AIHW also provides support to the States and Territories in the health and welfare areas, primarily through the Australian Health Ministers' Advisory Council, the Standing Committee of Social Welfare Administrators and State and Territory housing authorities.

The Institute's major divisions are located in Canberra and its National Injury Surveillance Unit is located in Adelaide. The Institute also supports three external units: the AIHW National Perinatal Statistics Unit, located in Sydney; the AIHW Dental Statistics and Research Unit, located in Adelaide; and the AIHW National Reference Centre for Classification in Health, located in Brisbane.

**National Health and Medical Research Council.** The NHRMC advises the Commonwealth Government and State Governments on matters of public health administration and the development of appropriate standards and guidelines. It also advises the Commonwealth Government and State Governments on matters concerning the health of the community. The objective of the

NHMRC is to advise the Australian community on the achievement and maintenance of the highest practicable standards of individual and public health and to foster research in the interests of improving those standards. The NHMRC funds medical and public health research in Australia and supports many of the medical advances made by Australians.

The Council has nominees of State and Territory health authorities, professional and scientific colleges and associations, unions, universities, business, consumer groups, welfare organisations, the Commonwealth administration, including the Aboriginal and Torres Strait Islander Commission, and conservation groups.

#### **Private Health Insurance Administration**

**Council** is a statutory authority that was established in June 1989. The main powers and functions of the Council, which are set out in section 82G of the National Health Act, are as follow:

- to monitor the financial performance of health funds to ensure that the statutory reserve requirements are being met;
- to administer the reinsurance account arrangements;
- to collect and disseminate financial and statistical data, including tabling of an annual report to Parliament on the operations of health funds;
- to establish uniform reporting standards for funds;
- to impose levies to cover the operating costs of the Council and any unpaid claims of a collapsed fund; and
- to receive applications for the review of acute care certificates and application fees, and administer the funding arrangements for the operation of the Acute Care Advisory Committees.

PHIAC disseminates statistics through an annual report and through quarterly reports that are made available to health funds, the Federal Government and State Governments and other users with an interest in health insurance. The statistics are compiled from registered health benefits organisations' quarterly returns and provide data on membership and coverage, bed days, and benefit paid.

As at 30 June 1993, 39.4 per cent of the Australian population held private health insurance hospital cover. This is the lowest level recorded under the current arrangements that began with the introduction of Medicare in 1984. The trend of declining coverage has been evident for several years.

#### **Australian Quarantine and Inspection**

**Service.** The Australian Quarantine and Inspection Service (AQIS) carries significant health-related responsibilities in export inspection, quarantine administration and imported food.

Export inspection activities are derived from the *Export Control Act 1982*, which is the principal legislation for export activities, and subordinate legislation comprising regulations enabled under this Act and Ministerial Orders made under these regulations.

Inspection covers meat, fish, dairy products, processed foods and vegetables, dried fruit, fresh fruit and vegetables, grains, horticultural and plant products, live animals, and some animal products. The aims of the inspectorate are to assist the export of Australian agricultural, forestry and fishery products by providing information, services and facilities that enable exporters to comply with the animal and plant health requirements of importing countries. It also aims to provide effective inspection services for food and other products under AQIS control to ensure they are safe and wholesome, are informatively described, meet international requirements and facilitate trade.

In 1992-93 AQIS provided inspection for over \$3.3 billion worth of export meat to over eighty destinations. Inspection services are also provided by AQIS on behalf of State Governments in New South Wales, Victoria, South Australia, the Northern Territory and the Australian Capital Territory for meat produced for domestic consumption.

A range of non-prescribed goods are also inspected and certified on an ad hoc basis where overseas governments require this as a condition of entry of Australian goods.

AQIS quarantine activities derive from the *Quarantine Act 1908* and the *Biological Control Act 1984*. Programs are designed to address the risk of introduction of diseases and pests while enabling the importation of

cleared agricultural products. Animal and plant health requirements are negotiated with exporting countries involving the latest technology for assurance of quarantine safety.

Quarantine activities are contracted to State Departments of Agriculture on the Commonwealth's behalf, and include both monitoring and surveillance elements. Monitoring covers incoming passengers, live animals, cargo and mail as well as incoming ships and aircraft. AQIS provided quarantine supervision for \$49 billion worth of imports, which involved 644,000 containers, 200 million postal articles and 5.3 million passengers and crew from 26,000 international flights. Imports of biological materials for research, diagnosis and industry are also controlled.

The Australian Nature Conservation Agency coordinates and administers with AQIS the introduction and release of biological control agents aimed at combating existing pest and disease problems in Australia under the Biological Control Act.

Quarantine responsibilities include the administration of animal quarantine stations at Sydney, Melbourne, Adelaide and Perth and a high security quarantine station on the Cocos (Keeling) Islands, and the supervision of a range of plant quarantine stations and private facilities for both animal and plant quarantine.

Consignments of high and medium risk imported foods are also subject to food inspection under the provisions of the *Imported Foods Act of 1993*. In 1992-93 AQIS sampled over 3,700 consignments of risk-categorised foods with 230 failing to meet Australian food safety standards giving an overall failure rate of over six per cent. The major problems with imported food have been microbiological problems in cooked prawns and other crustaceans, molluscs, high aflatoxin levels in peanuts and heavy metals in fish. Of particular concern has been the incidence of failure in some canned foods, notably canned mushrooms. Where an overseas government's inspections system can be shown to provide equivalent safety assurances to Australia's food inspection system, food accompanied by that

agency's certification is allowed entry without additional routine testing on arrival. Three such agreements were finalised in 1992-93 making a total of six currently operating.

AQIS has significant international involvement in the development of international food safety standards and related aspects of hygiene and manufacturing practice.

**The National Food Authority.** The National Food Authority is a statutory authority established by the *National Food Authority Act 1991*. Its primary function is to develop, vary and review standards for food available in Australia.

The objectives of the Authority in relation to food standards are:

- to protect public health and safety;
- to provide consumers with information;
- to promote trade and commerce; and
- to promote the alignment of Australian food standards with international food standards.

The Authority coordinates on a national basis food recalls, the surveillance and monitoring of the food supply and food safety education programs. It also develops assessment policies for the inspection of imported food, conducts research and surveys and develops codes of practice for the food industry.

**The National Occupational Health and Safety Commission.** The National Occupational Health and Safety Commission (Worksafe Australia) is a tripartite body comprising representatives of the peak employee and employer bodies — the Australian Council of Trade Unions and the Australian Chambers of Commerce and Industry — as well as the Commonwealth Government, State and Territory Governments. The mission of the National Commission is to lead national efforts to provide healthy and safe working environments, and to reduce the incidence and severity of occupational injury and disease.

Worksafe Australia has primary Commonwealth responsibility for occupational health and safety statistics.

A report relating to workers' compensation cases reported in 1991-92 involving five days or more off work, based on information supplied by a substantial proportion of Commonwealth, State and Territory agencies which administer worker's compensation systems, contained the following main findings:

- Of all the cases included on the database, 76 per cent involved males and 24 per cent females.
- The incidence rate for males for all industries was 32 cases per 1,000 wage and salary earner; for females, 13 per 1,000 wage and salary earners; and for persons, 24 per 1,000 wage and salary earners.
- The frequency rate for males for all industries was 19 cases per million hours worked; for females, 10 per million hours worked; and for persons, 16 per million hours worked.
- Around one in forty workers sustained a work related injury or disease in 1991-92 which required at least one week off work.
- The average duration was nearly eight weeks per injury or disease case.
- In 1992-93 the total estimated cost of workers' compensation claims for all of Australia was \$4.8 billion. This direct cost alone represented 1.2 per cent of non-farm GDP, and 2.4 per cent of non-farm wages, salaries and supplements.

**Therapeutic Goods Administration.** The Therapeutic Goods Administration (TGA) is an organisation within the Department of Human Services and Health. Its role is to undertake activities with the goal of ensuring that therapeutic goods available in Australia are safe, effective and of high quality. Therapeutic goods include prescription drugs, non-prescription medicines, traditional remedies and all types of medical equipment (therapeutic devices).

TGA monitors the quality of therapeutic goods available in Australia by sampling products for testing and investigating problems and deficiencies. The various laboratories analyse therapeutic goods for acceptable quality and carry out developmental research associated with new or improved testing methods and development of standards.

In 1992-93 tests were performed on 1,013 selected products for human use to check compliance with official standards. A total of

217 of these products failed to comply. Investigations were also conducted on reported drug (124) and device (961) problems. These investigations resulted in the recall of 4 drug products and 24 device products.

**Australian Radiation Laboratory.** The Laboratory is concerned with the development of national policy relating to radiation health and:

- formulates policy by developing codes of practice and by undertaking other regulatory, compliance, surveillance and advisory responsibilities at the national level with respect to public and occupational health aspects of radiation;
- maintains national standards of radiation exposure and radioactivity;
- provides advice in relation to the quality and use of radio-pharmaceutical substances; and
- in support of the above activities, undertakes research and development in the fields of ionising and non-ionising radiations which have implications for public and occupational health.

**Cancer registries.** Cancer is a major cause of morbidity and mortality. Each year in Australia about 55,000 new cases of cancer are diagnosed and 27,500 people die from cancer. This equates to an average risk of 1 in 3 men and 1 in 4 women being directly affected by cancer in their lifetime.

Cancer is a notifiable disease in most States and Territories and is the only major disease category for which an almost complete coverage of incidence data is available. It is also the only major cause of death in Australia that is continuing to increase. If this situation is to be changed, good information on the occurrence of different types of cancer, on characteristics of patients, and on survival and mortality is essential to provide a sound basis for epidemiological studies and the initiation of prevention and treatment programs.

The only effective method of obtaining cancer incidence data is through universal registration of cancer cases. Cancer incidence data is available only from cancer registries which operate in each State and Territory except the Australian Capital Territory, where this is undertaken, at present, by the New South Wales registry. These registries are supported by a mix of State and Territory government and anti-cancer council funding.

The National Cancer Statistics Clearing House operated jointly by the Australian Institute of Health and Welfare and the Australasian Association of Cancer Registries compiles data produced by individual State and Territory registries on an ongoing basis and produces national statistics on the incidence of cancer.

#### **Communicable Diseases Network —**

**Australia.** The Communicable Diseases Network — Australia was established in 1990 to enhance the national capability in communicable disease control. Surveillance of communicable diseases is conducted using data derived from four major sources: notifiable diseases surveillance carried out by States and Territories; the Communicable Diseases Intelligence laboratory reporting schemes; reports from sentinel general practices (Australian Sentinel Practice Research Network of the RACGP); and from specialised schemes such as the Central Malaria Register.

#### **Australian non-government**

##### **National Heart Foundation of Australia.**

The Foundation is a voluntary organisation, supported almost entirely by public donations, established with the objective of reducing the toll of heart disease in Australia. It does this by programs sponsoring research in cardiovascular disease, community and

professional education directed to prevention, treatment and rehabilitation of heart disease and community service programs including rehabilitation of heart patients, risk assessment clinics and surveys, and documentation of various aspects of heart disease and treatment of heart disease in Australia.

The Foundation's income in 1992 was \$25.9 million of which \$16.4 million was from public donations and bequests. Since the inception of the Foundation, research has been a major function. With increasing opportunities for prevention and control of heart disease, the Foundation's education and community service activities are increasing significantly. In 1992 the expenditure on research, education and community service totalled \$18.3 million.

**The Australian Red Cross** runs the Blood Transfusion Service in Australia, based on donations of voluntary non-remunerated donors. The service is funded by the Commonwealth Government and State Governments (98%) and Red Cross (2%) approximately. Cost of providing the service in 1992–93 was \$86,320,187.

Plasma products are manufactured by Commonwealth Serum Laboratories from plasma from Red Cross blood donors, and distributed by Red Cross.

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**FOR MORE INFORMATION**

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.



