

## Introduction

This chapter contains information about the health of the Victorian population. The World Health Organisation (WHO) has defined health as a state of complete physical, mental and social well-being, rather than merely the absence of disease or infirmity. This definition of health is reflected in changing attitudes to health care where much greater emphasis is now being placed on preventative measures to protect people's health, and the identification and avoidance of health risk factors. A framework for health statistics comprises two components, namely health services (provision and use of health services and health finance) and health status (sickness and disease, disability, occupational health and safety, mortality, etc.).

Data in this chapter is sourced from the Australian Institute of Health and Welfare (AIHW), the Victorian Department of Human Services (DHS), the Health Insurance Commission, VicRoads, and from surveys conducted by the ABS.

The number of patient separations is a commonly used measure of the level of health care provision. A patient separation occurs when an admitted patient: is discharged; is transferred to another institution; leaves against medical advice; dies while in care; changes status, e.g. from acute care to nursing home care; or, leaves hospital for a period of seven days or more.

## Health care provision

During 1998–99 there were 237 public and private hospitals in Victoria, providing acute and psychiatric care, with 17,995 available beds (tables 8.1 and 8.2). There were more than 1.4 million separations reported from these hospitals, an increase of 6% compared with 1997–98. The number of same day separations has increased over recent years. In 1998–99 same day separations accounted for 51% of all separations in Victoria (48% for Australia). The separation rate per 1,000 population was 298.9 in Victoria compared with 294.5 for Australia.

## Public hospitals

During 1998–99, recurrent expenditure (excluding depreciation) by the 142 Victorian public hospitals was \$3,268m, with wages and salaries (\$2,113m) the largest component (65%) (table 8.1). Total revenue (excluding general revenue payments received from the State and Federal governments) for Victorian public hospitals was \$349m.

Victoria's public hospitals recorded 970,200 patient separations during 1998–99, an increase of 4% compared with the previous year. The average length of stay continued to decline, decreasing to 3.8 days in 1998–99. When same day separations are excluded, the average length of stay was 6.5 days.

There were 11,638 beds available in public hospitals, a reduction of almost 6% compared with the previous year. The number of available beds per 1,000 population ranged from 2.3 in the metropolitan area to 3.2 in rural areas.

After a decrease in staff during 1997–98, staffing numbers increased by 2% to 39,840 during 1998–99. The number of nurses increased by 3% over this period.

#### 8.1 PUBLIC HOSPITALS, Selected Characteristics

	Unit	1996–97	1997–98	1998–99
<b>Hospitals</b>				
Acute	no.	120	146	140
Psychiatric	no.	2	1	2
<i>Total</i>	<i>no.</i>	<i>122</i>	<i>147</i>	<i>142</i>
<b>Available beds(a)</b>				
Acute	no.	12 076	12 284	11 565
Psychiatric	no.	58	53	73
<i>Total</i>	<i>no.</i>	<i>12 134</i>	<i>12 337</i>	<i>11 638</i>
Separations	'000	899.9	928.8	970.2
Patient days	'000	3 711.7	3 728.5	3 710.7
Average stay in days	no.	4.1	4.0	3.8
Recurrent expenditure	\$'000	2 904 048	3 093 020	3 267 590
Revenue	\$'000	291 318	322 874	349 038
<b>Staff(b)</b>				
Salaried medical officers	no.	3 454	3 511	3 767
Nurses	no.	17 211	16 714	17 214
Other personal care staff	no.	1 929	1 405	723
Diagnostic and allied health professionals	no.	6 042	5 993	6 408
Administrative and clerical	no.	6 333	6 383	6 616
Domestic and other staff	no.	5 613	5 192	5 112
<i>Total</i>	<i>no.</i>	<i>40 582</i>	<i>39 198</i>	<i>39 840</i>

(a) Average for the year. (b) Average full-time equivalents.

Source: Australian Institute of Health and Welfare, Australian Hospital Statistics.

## Private hospitals

The number of private hospitals in Victoria continued to decline (from 101 in 1996–97 to 95 in 1998–99) (table 8.2). The number of available beds, however, increased to 6,357 during the same period. Average length of stay in hospital has decreased over recent years. In 1984–85, average length of stay in a private hospital was 7.1 days, this decreased to 3.6 days in 1998–99. The number of separations increased by 10% between 1997–98 and 1998–99 while the number of patient days increased by 5%.

Total recurrent expenditure in Victorian private hospitals was \$1,050.6m in 1998–99, and total revenue was \$1,097.3m. Wages and salaries; and drugs, medical and surgical supplies were the largest expense items (58% and 14% respectively).

Total staffing levels in private hospitals increased by 3%. While there was a 4% increase in nursing staff, the number of salaried medical officers and other diagnostic staff decreased by 12%.

**8.2 PRIVATE ACUTE AND PSYCHIATRIC HOSPITALS, Selected Characteristics**

	Unit	1996–97	1997–98	1998–99
<b>Hospitals</b>				
Acute	no.	96	92	89
Psychiatric	no.	5	5	6
<i>Total</i>	<i>no.</i>	<i>101</i>	<i>97</i>	<i>95</i>
<b>Available beds(a)</b>				
Acute	no.	5 843	5 826	6 031
Psychiatric	no.	315	307	326
<i>Total</i>	<i>no.</i>	<i>6 158</i>	<i>6 133</i>	<i>6 357</i>
<b>Separations</b>				
Patient days	'000	1 631.5	1 628.9	1702.6
Average stay in days	no.	3.9	3.7	3.6
Recurrent expenditure	\$'000	874 615	927 852	1 050 625
Revenue	\$'000	960 061	1 008 711	1 097 348
<b>Average recurrent expenditure</b>				
Per separation	\$	2 100	2 119	2 189
Per patient day	\$	536	570	617
<b>Staff(b)</b>				
Nursing staff	no.	6 420	6 697	6 981
Salaried medical officers and other diagnostic health professionals	no.	655	848	750
Administrative and clerical	no.	1 425	1 412	1 606
Domestic and other staff	no.	2 773	2 629	2 596
<i>Total</i>	<i>no.</i>	<i>11 273</i>	<i>11 585</i>	<i>11 933</i>

(a) Average for the year. (b) Average full-time equivalents.

Source: *Private Hospitals, Australia* (Cat. no. 4390.0).

## Diseases

### Public hospitals: patient diagnoses

Kidney and urinary tract diseases was the diagnosed condition which was most prevalent in public hospitals during 1998–99, with 158,036 separations (16%), of these, 60% were male (table 8.3). In 1997–98, this diagnosis group accounted for 14% of all separations. The average length of stay for patients in this diagnosis group was relatively short (1.5 days).

Disorders of the digestive system were the second most prevalent medical condition treated during 1998–99 (10% of separations). Separations for this condition increased only marginally between 1997–98 and 1998–99 (by 471 to 96,158).

Alcohol and drug use, and induced mental disorders were more prevalent amongst men (2,640 separations) than women (1,288 separations), however, the average length of stay for women with these disorders was higher.

Most separations for females were for pregnancy, childbirth and the puerperium (85,057). Average length of stay in hospital for this diagnosis group continued to decline, decreasing from 3.0 days in 1997–98 to 2.9 days in 1998–99.

## 8.3 PUBLIC HOSPITALS, Separations and Average Length of Stay — 1998–99(a)

Major diagnosis group	Males		Females		Persons	
	Separations	Average length of stay	Separations	Average length of stay	Separations	Average length of stay
	no.	days	no.	days	no.	days
Alcohol/drug use/induced mental disorders	2 640	3.6	1 288	4.1	3 928	3.8
Burns	821	6.8	403	5.5	1 224	6.3
Blood/blood organs and immunological disorders	8 110	2.2	7 956	2.3	16 066	2.3
Circulatory system	42 406	4.5	33 799	4.6	76 205	4.5
Digestive system	48 271	2.8	47 887	2.8	96 158	2.8
Ear, nose, mouth and throat	23 583	1.8	19 977	1.7	43 560	1.7
Eye	9 018	1.3	10 597	1.4	19 615	1.3
Female reproductive system	1	1.0	39 849	2.0	39 850	2.0
Hepatobiliary system and pancreas	8 331	5.3	10 631	4.2	18 962	4.7
Kidney and urinary tract	95 543	1.4	62 493	1.6	158 036	1.5
Male reproductive system	13 129	2.5	—	—	13 129	2.5
Musculoskeletal system and connective tissue	36 161	3.9	35 754	5.1	71 915	4.5
Nervous system	25 789	6.9	23 706	7.6	49 495	7.2
Respiratory system	30 254	5.3	24 108	5.6	54 362	5.4
Skin, subcutaneous tissue and breast	14 081	3.3	20 654	3.4	34 735	3.4
Endocrine, nutritional and metabolic	5 018	4.5	6 610	4.6	11 628	4.5
Factors influencing health status	21 013	9.0	25 650	10.5	46 663	9.8
Infectious and parasitic diseases	5 613	5.9	4 731	5.8	10 344	5.8
Injuries, poisonings and toxic effects of drugs	12 488	2.9	11 074	3.0	23 562	2.9
Mental diseases and disorders	12 837	10.1	15 863	9.0	28 700	9.5
Myeloproliferative, poorly differentiated neoplasms	25 710	1.8	24 490	1.8	50 200	1.8
Newborns and other neonates	27 380	4.8	24 957	4.6	52 337	4.7
Pregnancy, childbirth and the puerperium	—	—	85 057	2.9	85 057	2.9
<b>Total</b>	<b>468 197</b>	<b>3.7</b>	<b>537 534</b>	<b>3.8</b>	<b>1005 731</b>	<b>3.8</b>

(a) Separations for non-acute care (e.g. rehabilitation and palliative care) and care for newborn babies of less than one day are excluded from this table.

Source: Victorian Department of Human Services.

### External causes for admitted patients

External causes are those events or conditions associated with injury, poisoning or violence. The leading causes of hospital separations due to external causes were falls (29.0% of all external causes), and complications of medical and surgical care (18.5%) (table 8.4). Exposure to mechanical forces (including workplace-related accidents) accounted for 15.3% of hospital separations.

In 1998–99 intentional self-harm accounted for 5,192 (5.8%) of hospital separations, a decrease from 5,403 in 1997–98.

External causes accounted for 2,059 deaths (6.5% of all deaths in Victoria) during 1999 (table 8.14).

## 8.4 SEPARATIONS BY EXTERNAL CAUSE, Public and Private Hospitals — 1998–99

	Public	Private	Total	
			no.	%
Transport accidents	9 852	1 145	10 997	12.2
Falls	21 204	4 913	26 117	29.0
Exposure to mechanical forces	11 523	2 288	13 811	15.3
Accidental drowning and submersion	56	2	58	0.1
Other accidental threats to breathing	131	29	160	0.2
Exposure to electricity, radiation, extreme temperature/pressure	186	92	278	0.3
Exposure to smoke, fire, flames, hot substances	1 101	96	1 197	1.3
Exposure to venomous plants, animals, forces of nature	528	39	567	0.6
Accidental poisoning	2 760	115	2 875	3.2
Other external causes of accidental injury	4 168	3 725	7 893	8.8
Intentional self-harm	5 060	132	5 192	5.8
Assault	2 958	73	3 031	3.4
Events of undetermined intent	777	433	1 210	1.3
Legal intervention and operations of war	12	1	13	0.0
Complications of medical and surgical care	11 551	5 107	16 658	18.5
Sequelae and supplementary factors	69	64	133	0.1
<b>Total</b>	<b>71 936</b>	<b>18 254</b>	<b>90 190</b>	<b>100.0</b>

Source: Australian Institute of Health and Welfare, Australian Hospital Statistics.

## Infectious diseases

One vital aspect of health care is the prevention and containment of disease. In order to monitor the incidence and spread of infectious diseases, medical workers involved in the diagnosis of disease are required to notify the Communicable Diseases Section of the Victorian Department of Human Services, of any new occurrences of specified diseases.

The number of notifications of infectious diseases has increased over recent years. Between 1998 and 1999, the number of cases notified increased from 17,862 to 19,078, while the rate of infection per 100,000 of the population increased from 383.7 to 409.8 (table 8.5). Reported notifications of campylobacter infection (generally associated with poultry) increased from 2,964 cases in 1995 to 4,798 cases in 1999, a 60% increase. Similarly, notifications of Hepatitis C increased by 42% over this period.

To the end of 1999, there was a cumulative total of 4,215 cases of HIV infection diagnosed in Victoria accounting for 21% of all reported cases of HIV across Australia. In 1999, there were 141 new notifications of HIV, of whom over 90% were male. To the end of 1999, there was a cumulative total of 1,800 AIDS diagnoses notified in Victoria. There were 24 new AIDS diagnoses notified in 1999. In December 1999 there were an estimated 385 people with AIDS living in Victoria.

There was a further increase in the number of cases of chlamydia trachomatis notified in 1999. The gender distribution of notified cases was unchanged, with 60% of reported infections occurring in females. There were 702 gonorrhoea notifications in 1999 (14.9 per 100,000 population), double the number reported in 1997 and the highest incidence of infection since 1987. The highest incidence of gonorrhoea, and the greatest recent increase, affected men aged 20 to 40 years.

## 8.5 NOTIFICATIONS OF SELECTED INFECTIOUS DISEASES

Disease	1998		1999	
	no.	rate(a)	no.	rate(a)
<b>Food and water-borne diseases</b>				
Campylobacter infections	r 4 064	r 87.3	4 798	103.1
Giardiasis (Giardia)	r 1 009	r 21.7	933	20.0
Listeriosis	15	0.3	12	0.3
Salmonellosis (Salmonella)	r 1 113	r 24.3	1 198	25.7
Shigellosis	r 119	2.6	107	2.3
Cryptosporidium	266	5.7	104	2.2
Other	181	3.9	321	6.9
<b>Hepatitis</b>				
Hepatitis A	r 169	r 3.6	260	5.6
Hepatitis B — Acute	92	2.0	94	2.0
Hepatitis B — Chronic/Unknown	2 111	45.3	2 293	49.3
Hepatitis C	r 6 369	r 136.9	6 390	137.3
<b>Other</b>				
Amoebiasis	84	1.8	113	2.4
Arbovirus infection	174	3.7	332	7.1
Legionellosis (Legionnaires' Disease)	64	1.4	64	1.4
Malaria	r 88	1.9	81	1.7
Measles	r 38	0.8	111	2.4
Meningococcal infection	r 61	1.3	137	2.9
Mumps	r 56	1.2	73	1.6
Pertussis (whooping cough)	r 1 141	24.5	998	21.4
Rubella	r 189	r 4.1	123	2.6
Tuberculosis	r 238	r 5.1	324	7.0
Other	201	4.3	212	4.6
<b>Total</b>	<b>17 862</b>	<b>383.7</b>	<b>19 078</b>	<b>409.8</b>
<b>Sexually transmitted infections(b)</b>				
Acquired Immune Deficiency Syndrome (AIDS)	46	1.0	24	0.6
Chlamydia	2 495	67.3	2 952	76.9
Gonorrhoea	558	15.1	702	18.3
Human Immunodeficiency Virus (HIV)	149	3.2	141	3.7
Syphilis	r 212	r 5.7	145	3.8
<i>Total sexually transmitted infections</i>	<i>3 460</i>	<i>92.3</i>	<i>3 964</i>	<i>103.3</i>

(a) Notifications per 100,000 of the estimated mid-year population. (b) Rate quoted is for population over 15 years of age.

Source: Victorian Department of Human Services.

### Allied health care providers

During 1998, selected health service industries were surveyed by the ABS. This survey included practitioners working in private practice, and excluded practitioners solely engaged in the public health system. This survey showed that there were 1,188 private dental practices in Victoria, with 1,708 dental practitioners (table 8.6), who generated a total income of \$403.8m during 1997–98. Dental practitioners conducted an average of 62 consultations per week. This compares to an average of 53 consultations per week for physiotherapists, 49 consultations per osteopath, and 93 per week for chiropractic practitioners.

## 8.6 ALLIED HEALTH SERVICE INDUSTRIES, Selected Characteristics — 1997–98

Industry	Practices	Locations	Total number of practitioners	Number of consultations per week(a)	Population per practitioner
	no.	no.			
Physiotherapy	875	1 151	1 273	66 850	3 661
Chiropractic	477	646	591	54 896	7 886
Osteopathic	116	155	114	5 596	40 885
Dental	1 188	1 511	1 708	106 044	2 729
Optometry/Optical Dispensing	n.a.	n.a.	558	23 008	8 353

(a) Based on an average working week.

Source: Chiropractic and Osteopathic Services, Australia (Cat. no. 8550.0); Dental Services, Australia (Cat. no. 8551.0); Physiotherapy Services, Australia (Cat. no. 8552.0); Optometry and Optical Dispensing Services, Australia (Cat. no. 8553.0).

## Mental health

Measuring mental health in the community through household surveys is a complex task because mental disorder is usually determined through clinical diagnoses. For the 1997 Survey of Mental Health and Wellbeing, a comprehensive interview of adults was used to assess current and lifetime prevalence of mental disorders through the measurement of symptoms and their impact on day-to-day activities. Anxiety disorders include conditions such as phobias which involve feelings of tension, distress or nervousness. Affective disorders (mood disturbance) include mania and depression.

The survey indicated that 37% of Victorians had a physical condition and 17% had a mental disorder at some time during the 12 months preceding the survey (table 8.7). Prevalence rates of mental disorders were similar for men and women in Victoria, however there were differences with respect to the type of disorder experienced and prevalence associated with age. Men were more than twice as likely to have a substance abuse disorder, while women were more likely to have an anxiety disorder. The most common affective disorder was depression, women were twice as likely to have experienced depression (6%) than men (3%).

In Victoria, the prevalence of mental disorders, including substance use disorders, was higher amongst those persons who lived outside the capital city. However, the prevalence of anxiety disorders was higher in the capital city.

## 8.7 PREVALENCE OF DISORDERS(a) — 1997

	Unit	Capital city		Rest of state		Total	
		Males	Females	Males	Females	Males	Females
Physical conditions	%	32.5	38.0	38.2	44.9	34.1	39.9
Mental disorders							
Anxiety disorders	%	8.0	10.8	6.0	11.5	7.4	11.0
Affective disorders	%	4.3	6.3	*2.9	7.7	3.9	6.7
Substance use disorders(b)	%	10.6	3.7	12.6	5.2	11.1	4.1
Total mental disorders(c)	%	17.4	16.5	17.6	19.0	17.4	17.2
No mental disorder or physical condition	%	55.9	52.7	51.6	46.5	54.8	51.0
Total	%	100.0	100.0	100.0	100.0	100.0	100.0
<b>Total persons</b>	<b>'000</b>	<b>1 210.5</b>	<b>1 271.7</b>	<b>452.7</b>	<b>464.8</b>	<b>1 663.2</b>	<b>1 736.5</b>

(a) During the 12 months prior to interview. (b) Includes harmful use and dependence. (c) A person may have more than one mental disorder, therefore the sum of components may be greater than the total number of mental disorders.

Source: Mental Health and Wellbeing: Profile of Adults, Victoria (Cat. no. 4326.2.40.001).

## Disability, ageing and carers

### Disability

Disability is defined as any restriction or lack (resulting from an impairment) of ability to perform an action in the manner or within the range considered normal for a person, which has lasted or is likely to last, for six months or more, and restricts everyday activities.

In 1998, nearly one-fifth (834,700) of Victoria's population had a disability (table 8.8). Of those with a disability, 88% (736,900) had specific restrictions in core activities (communication, mobility and self-care) and/or schooling or employment. Participation in education and the labour force contribute to a person's development and independence: 44% (290,100 persons) of those with a core restriction activity also experienced restrictions in schooling or employment. Depending on the level of assistance needed, or difficulty experienced, restriction in core activities was profound/severe in 5.8% of the Victorian population.

Disability rates tend to increase with age, from 2.9% for children aged 0–4 years to 81.3% for adults aged 85 years and over. Of the 834,700 persons with a disability, 85% had a physical disability and 15% had a mental or behavioural disorder. Of those persons with a disability, 18% lived alone, 76% lived with at least one other person and 5% lived in non-private cared accommodation. Arthritis and related disorders accounted for the largest proportion (17%) of physical conditions.

**8.8 DISABILITY STATUS — 1998**

	'000	%
Disability		
With core restriction activity	665.2	14.3
With schooling or employment restrictions		
With core activity and schooling or employment restrictions	290.1	6.2
With schooling or employment restrictions only	71.7	1.5
Total	361.8	7.8
All with specific restrictions(a)	736.9	15.9
Without specific restrictions(b)	97.8	2.1
All with disability	834.7	18.0
No disability		
With impairment or long-term condition	765.4	16.5
Without impairment or long-term condition	3 044.8	65.6
All with no disability	3 810.2	82.0

(a) Totals may be less than the sum of components as persons may have both a core activity restriction and a schooling or employment restriction. (b) Includes persons who need assistance with health care, paperwork, transport, housework, property maintenance or meal preparation.

Source: *Disability, Ageing and Carers, Summary tables, Victoria (Cat. no. 4430.2.40.001)*.

### Carers

Caring is a response to a need arising from the family or community, and contributes to the cohesion of a society. Any person who provides informal (unpaid) assistance, in terms of help or supervision, to an older person or a person with a disability, because of their age or condition, can be defined as a carer.

In 1998, there were 577,000 Victorians who provided some assistance to those who needed help because of disability or ageing (table 8.9). Over half (56.5%) of all carers were female. The highest proportion (35.9%) of carers were in the 35–54 age range.



Primary carers are those who provide most informal assistance with personal activities to a person with a disability, and therefore caring plays a major part in their lives. In 1998, 104,500 (18.1%) of all carers in Victoria were identified as primary carers, of whom 62.1% were female.

### 8.9 CARER STATUS, By Age — 1998

	Age group (years)								Total
	Less than 18 years of age	18–24	25–34	35–44	45–54	55–64	65–74	75 years and over	
	'000	'000	'000	'000	'000	'000	'000	'000	'000
MALES									
Carer									
Primary carer	n.p.	n.p.	n.p.	*7.5	10.9	*6.3	*6.1	*5.5	39.6
Not a primary carer	18.8	20.9	28.4	30.5	32.1	32.9	29.3	18.8	211.5
Total	20.0	22.4	29.1	37.9	43.0	39.2	35.4	24.2	251.2
Not a carer	562.6	218.3	331.5	315.3	256.6	162.2	119.8	62.2	2 028.4
Total	582.6	240.6	360.6	353.3	299.6	201.3	155.3	86.4	2 279.6
FEMALES									
Carer									
Primary carer	n.p.	n.p.	*2.9	17.3	15.0	11.3	14.5	**	64.9
Not a primary carer	26.3	29.9	36.4	49.2	44.5	44.1	18.7	11.9	261.0
Total	26.9	30.5	39.3	66.5	59.5	55.4	33.3	14.4	325.8
Not a carer	539.6	190.5	327.4	292.2	241.5	147.1	139.7	114.4	1 992.3
Total	566.5	221.0	366.7	358.7	301.0	202.5	172.9	128.8	2 318.2
PERSONS									
Carer									
Primary carer	**	**	*3.6	24.8	25.9	17.6	20.6	7.9	104.5
Not a primary carer	45.1	50.7	64.8	79.7	76.6	77.0	48.0	30.6	472.5
Total	47.0	52.9	68.4	104.5	102.5	94.6	68.7	38.6	577.0
Not a carer	1 102.2	408.7	658.9	607.6	498.1	309.2	259.5	176.6	4 020.8
Total	1 149.1	461.6	727.3	712.0	600.6	403.8	328.2	215.1	4 597.8

Source: *Disability, Ageing and Carers, Summary Tables, Victoria (Cat. no. 4430.2.40.001).*

## Health insurance

### Medicare

Australia's public health insurance scheme, Medicare, was introduced in 1984. Funded by a levy on taxable income, Medicare is available to all Australians and allows a wide range of health-related goods and services to be accessed.

In 1999–2000, over 53 million Medicare services were processed in Victoria (table 8.10), accounting for just under a quarter of all Medicare services nationally. To put this into context, Victoria accounted for an equivalent proportion of the Australian estimated resident population in June 2000.

The value of Medicare services in Victoria during 1999–2000 was \$1,765m, with an average value of benefit per service of \$33.30. Average value of benefit per service by general practitioners (i.e. unreferred attendances to vocationally registered general practitioners) was \$24.48, while the average value of benefit per pathology service was \$18.04.

Unreferred consultations by general practitioners accounted for over 22 million services, the largest proportion (42.1%) of total Medicare services, followed by pathology services with 27.6% of the total. Between 1997–98 and 1999–2000, the proportion of pathology and diagnostic imaging services increased. During the same period there was a decrease in the proportion of services provided by general practitioners.

#### 8.10 MEDICARE, By Broad Type of Service — 1997–98(a)

Type of service	Number of services		Value of services	
	'000	%	\$m	%
Unreferred attendances				
General practitioner/VRGP	22 363.0	42.1	547.4	31.0
Other	3 244.7	6.1	71.9	4.1
Specialist attendance	5 276.2	9.9	274.0	15.5
Obstetrics	440.1	0.8	16.6	0.9
Anaesthetics	505.7	1.0	37.5	2.1
Pathology	14 646.1	27.6	264.2	15.0
Diagnostic imaging	2 908.6	5.5	277.5	15.7
Operations	1 216.2	2.3	148.1	8.4
Assistance at operations	60.1	0.1	6.4	0.4
Optometry	993.1	1.9	37.8	2.1
Radio and nuclear therapy	156.6	0.3	15.1	0.9
Miscellaneous	1 266.7	2.4	68.5	3.9
<b>Total(b)</b>	<b>53 077.1</b>	<b>100.0</b>	<b>1 765.0</b>	<b>100.0</b>

(a) For services rendered during 1998–99 and processed by the Health Insurance Commission prior to 30 June 2000. (b) Sum of components may not equal totals due to rounding.

Source: Health Insurance Commission, Medicare Statistical Tables.

## Private health insurance

Private Health Insurance is cover provided by organisations registered under the National Health Act, to reimburse all or part of the cost of hospital or ancillary health services. Private health insurance is not permitted for services provided by medical practitioners outside hospitals. In January 1999, the Federal government introduced new arrangements under which all persons with private health insurance were entitled to a 30% rebate on their insurance premiums.

At 30 June 1999, 47.3% of Victorians held private hospital insurance, the same proportion as in 1998. The actual number of persons covered by private hospital insurance increased by 24,000 (1%) to 2,232,000 between June 1998 and June 1999 (table 8.11). 22 per cent of Victorians held some ancillary insurance. The growth in the number of persons with private health insurance between 1998 and 1999 was primarily due to an increase in the number of single memberships. Single memberships with hospital insurance only, increased by 3% (11,000), while single memberships with hospital and ancillary insurance increased by 4% (7,000).

**8.11 PRIVATE HEALTH INSURANCE, Membership and Persons Covered(a)**

	Unit	1997	1998	1999
HOSPITAL INSURANCE				
Membership				
Single	'000	340	334	345
Family	'000	359	342	342
<i>Total members</i>	'000	698	675	687
Persons covered	'000	1 444	1 381	1 398
Population covered	%	31.4	29.6	29.6
HOSPITAL INSURANCE PLUS ANCILLARY				
Membership				
Single	'000	183	176	183
Family	'000	217	203	204
<i>Total members</i>	'000	400	380	387
Persons covered	'000	381	827	834
Population covered	%	19.1	17.7	17.7
ANCILLARY INSURANCE ONLY				
Membership				
Single	'000	31	31	32
Family	'000	45	45	49
<i>Total members</i>	'000	76	76	80
Persons covered	'000	287	193	202
Population covered	%	4.1	4.1	4.3

(a) As at June. Figures in this table do not add to total number of people covered as an individual or family may have ancillary and hospital cover with different insurance companies.

Source: *Private Health Insurance Administration Council*.

### Household expenditure on health and medical care

The Household Expenditure Survey (HES) provides estimates of total household expenditure, including details of expenditure on health and medical care nett of any refunds and rebates received from Medicare, private health insurance, or employers.

In the 12 months to June 1999, Victorian households spent an average of \$718.19 each week on goods and services (table 8.12). Of this amount, 4.7% (\$33.90) was spent on health and medical care.

Expenditure on accident and health insurance accounted for the largest percentage of total expenditure on health and medical care in Victorian households, accounting for 34.6% in 1998–99. The proportion of total expenditure on nett health practitioners' fees increased from 25% in 1993–94 to 35.2% in 1998–99, mainly attributable to increases in the proportion of expenditure on dental fees (from 11.2% to 16.6%) and specialist doctors' fees (from 4.8% to 8.8%).

## 8.12 AVERAGE WEEKLY HOUSEHOLD EXPENDITURE ON HEALTH

	1993-94		1998-99	
	\$	%	\$	%
Accident and health insurance				
Hospital, medical and dental	11.56	43.8	11.73	34.6
Ambulance	0.51	1.9	0.43	1.3
Sickness and personal accident	0.93	3.5	1.29	3.8
<i>Total</i>	13.00	49.2	13.44	39.6
Health practitioners' fees				
General practitioner doctors	0.70	2.7	0.86	2.5
Specialist doctors	1.26	4.8	2.98	8.8
Dental	2.97	11.2	5.62	16.6
Opticians	0.87	3.3	1.21	3.6
Physiotherapy and chiropractic(a)	n.a.	n.a.	0.92	2.7
Health practitioners n.e.c.(a)	0.82	3.1	*0.35	1.0
<i>Total</i>	6.61	25.0	11.94	35.2
Medicines, pharmaceutical products, therapeutic appliances and equipment				
Medicines, pharmaceutical products, therapeutic appliances n.f.d.	0.66	2.5	0.75	2.2
Prescriptions	2.41	9.1	2.67	7.9
Non-prescribed pain relievers	0.48	1.8	0.50	1.5
Non-prescribed ointments and lotions	0.54	2.0	0.82	2.4
Medicines and pharmaceutical products n.e.c.	1.61	6.1	2.23	6.6
Surgical dressings	0.15	0.6	0.18	0.5
First aid supplies, therapeutic appliances and equipment n.e.c.	0.42	1.6	*0.12	0.4
<i>Total</i>	6.26	23.7	7.62	22.5
Other medical care and health expenses				
<i>Total</i>	0.53	2.0	*0.90	2.7
<b>Total expenditure on medical and health expenses</b>	<b>26.41</b>	<b>100.0</b>	<b>33.90</b>	<b>100.0</b>
Total goods and services expenditure	601.76	0.0	718.19	0.0

(a) For the 1993-94 survey, physiotherapy and chiropractic fees were included in the "Health practitioners n.e.c." category.

Source: Household Expenditure Survey: Detailed Expenditure Items (Cat. no. 6535.0).

## Occupational health and safety

The Victorian WorkCover Authority (WorkCover) is the manager of Victoria's workplace safety system. WorkCover's business encompasses health and safety in the workplace and for the public, workers' compensation in the event of work-related injury or illness, and the return to work of injured workers. In 1998-1999, there were 31,340 claims reported to WorkCover.

Between 1997-98 and 1998-99, the number of claims in respect to work-related deaths increased by five, to 125.

## Road accidents

VicRoads, the Transport Accident Commission (TAC), and Victoria Police have combined to adopt a number of strategies aimed at reducing road fatalities and injuries, including: research and education; the design and safety of roads and vehicles; and enforcement of road laws. In recent years, the TAC media campaign focussed on issues such as drink driving, speeding and fatigue, with the specific aim of reducing the road toll.

The number of persons killed in road traffic accidents decreased by 2%, and the number injured decreased by 3%, from 1998 to 1999 (table 8.13). The only category of road user to record an increase in fatalities between 1998 and 1999 was drivers of motor vehicles.

**8.13 ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES**

Category of road user	1997		1998		1999	
	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	159	2 701	148	3 096	191	3 036
Motor cyclists	37	677	45	654	34	695
Passengers (any type)	95	1 315	105	1 424	72	1 304
Pedestrians	78	689	79	751	76	730
Pedal cyclists	8	363	13	363	10	301
Other	—	19	—	7	—	16
<b>Total</b>	<b>377</b>	<b>5 764</b>	<b>390</b>	<b>6 295</b>	<b>383</b>	<b>6 082</b>

Source: VicRoads, Information Services Department.

## Causes of death

In 1999, 31,918 Victorian residents died (table 8.14), the lowest number since 1993 (31,197), and a decrease of 99 deaths compared with 1998. External causes of death, and deaths caused by diseases of the nervous system, increased significantly during this period (by 326 and 293 respectively).

The main cause of death for Victorian residents in 1999 was diseases of the circulatory system (including heart attack and stroke) with over 12,200 deaths, followed by neoplasms (cancer) with over 9,000 deaths. Together, these conditions accounted for 67% of deaths during 1999.

The number of deaths caused by diseases of the circulatory system has been in decline for some years. In 1999, deaths due to this cause accounted for 38% of all deaths compared with 44% in 1989. In 1999, the most common cause of death under the broad category of circulatory diseases was ischaemic heart disease, which accounted for 21% of male and 20% of female deaths.

The number of deaths caused by neoplasms have increased over the last decade, from 8,288 in 1989 to 9,227 in 1999. Neoplasms accounted for 31% of male and 27% of female deaths, and was the major cause of death for males aged 45–74 years, and for females aged 35–74 years during 1999.

In 1999, there were 39 deaths attributable to AIDS, a decline from the 50 deaths recorded in 1998. Males comprised the overwhelming majority of deaths from AIDS.

## 8.14 CAUSES OF DEATH — 1999(a)

Cause of death and ICD code	Number	Proportion of total	Rate(b)
Certain infectious and parasitic diseases (A00-B99)	396	1.2	84
Neoplasms (C00-D48)	9 227	28.9	1 958
Diseases of the blood & blood-forming organs (incl. disorders involving immune mechanism) (D50-D89)	113	0.4	24
Endocrine, nutritional and metabolic diseases (E00-E90)	1 285	4.0	273
Mental and behavioural disorders (F00-F99)	734	2.3	156
Diseases of the nervous system (G00-G99)	1 022	3.2	217
Diseases of the eye and adnexa (H00-H59)	1	–	–
Diseases of the circulatory system (I00-I99)	12 206	38.2	2 590
Diseases of the respiratory system (J00-J99)	2 338	7.3	496
Diseases of the digestive system (K00-K93)	1 024	3.2	217
Diseases of the skin and subcutaneous tissue (L00-L99)	67	0.2	14
Diseases of the musculoskeletal system and connective tissue (M00-M99)	241	0.8	51
Diseases of the genitourinary system (N00-N99)	766	2.4	163
Pregnancy, childbirth and the puerperium (O00-O99)	2	–	–
Certain conditions originating in the perinatal period (P00-P96)	157	0.5	33
Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	176	0.6	37
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)	104	0.3	22
External causes of morbidity and mortality (V01-Y98)	2 059	6.5	437
<b>Total</b>	<b>31 918</b>	<b>100.0</b>	<b>6 774</b>

(a) The classification used is the International Classification of Diseases, Tenth Revision (ICD-10 CM), aggregated at the class level.

(b) Per 1,000,000 of the estimated mid-year population.

Source: *Causes of Death, Australia* (Cat. no. 3303.0).

### Infant mortality

Infant mortality, defined as deaths of children under one year of age, has been traditionally viewed as an indicator of the general level of mortality, health, wellbeing, and social development of a population.

In 1999, the main cause of infant death was 'certain conditions originating in the perinatal period' (ICD classes P00–P96), which includes prematurity, birth injury and respiratory conditions present from birth (table 8.15). The proportion of infant deaths attributed to this group of causes has increased over recent years, from 34% of deaths in 1989 to 47% of deaths in 1999.

Over the past two decades the number of infant deaths registered in Victoria has generally been in decline, however, between 1998 and 1999 the number of infant deaths increased by 17%. Consequently, the infant mortality rate (deaths per 1,000 live births) increased for the first time in nearly a decade, from 4.7 in 1998 to 5.6 in 1999. This increase in the infant mortality rate was primarily due to an increase in the incidence of congenital anomalies, particularly of the heart and circulatory system (from 14 in 1998, to 34 in 1999).

Infant deaths due to Sudden Infant Death Syndrome (SIDS), declined almost 80% from 1989, when there were 133 deaths, to 29 in 1999.

## 8.15 LEADING CAUSES OF INFANT DEATH

Cause of death and ICD code	1989		1994		1999	
	no.	rate(a)	no.	rate(a)	no.	rate(a)
<b>Congenital malformations</b>						
Congenital malformations of the nervous system (Q01-Q04,Q06,Q07)	10	0.2	7	0.1	10	0.2
Congenital malformations of the heart and circulatory system (Q20-Q28,P29)	25	0.4	29	0.5	34	0.6
<i>Total congenital malformations (Q00-Q99)</i>	<i>103</i>	<i>1.6</i>	<i>111</i>	<i>1.7</i>	<i>113</i>	<i>1.9</i>
<b>Certain conditions originating in the perinatal period</b>						
Disorders relating to short gestation and low birth weight (P07)	32	0.5	37	0.6	10	0.2
Hypoxia, birth asphyxia and other respiratory conditions (P20-P28)	65	1.0	62	1.0	28	0.5
<i>Total certain conditions originating in the perinatal period (P00-P96)</i>	<i>141</i>	<i>2.2</i>	<i>142</i>	<i>2.2</i>	<i>155</i>	<i>2.6</i>
Sudden infant death syndrome (R95)	133	2.1	36	0.6	29	0.5
Other causes	46	0.7	38	0.6	34	0.6
<b>Total(b)</b>	<b>414</b>	<b>6.5</b>	<b>327</b>	<b>5.1</b>	<b>331</b>	<b>5.6</b>

(a) Rate per 1,000 live births. (b) Sum of components may not equal totals due to rounding.

Source: *Causes of Death, Australia* (Cat. no. 3303.0); *Demography, Victoria* (Cat. no. 3311.2).

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