

# CAUSES OF DEATH

AUSTRALIA

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- For further information about these and related statistics, contact the National Information Service on 1300 135 070, or Peter Burke on Brisbane 07 3222 6069.

## NOTES

### ABOUT THIS PUBLICATION

This publication brings together statistics and indicators for deaths, including perinatal deaths registered in Australia. These statistics have been compiled from data made available to the Australian Bureau of Statistics (ABS) by the Registrar of Births, Deaths and Marriages in each state or territory.

Deaths from external causes are attributed to the event leading to the fatal injury as described in Chapter XX of International Classification of Diseases Revision 10 (ICD-10). Data relating to Chapter XIX, Injury, poisoning and certain other consequences of external causes refer to nature of injury and are not relevant to underlying causes of death.

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### CHANGES IN THIS ISSUE

This issue contains a new section and new tables as well as modifications and extensions to existing tables.

Table 1.1 has been extended to show more selected causes and data for the last three years.

Table 1.2 now shows rates instead of percentages.

Table 1.7 has been introduced as a new table. Previously some Years of Potential Life Lost (YPLL) data were only included in the Technical Note.

Table 2.2 no longer shows data for males and females.

Table 4.1 has been introduced as a new table. It details selected causes of deaths on a year of occurrence basis.

Explanatory and Technical Notes reflect the above and other minor changes made in this publication.

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### SYMBOLS AND OTHER USAGES

ABS	Australian Bureau of Statistics
ACS	Automated Coding System
AIDS	Acquired Immune Deficiency Syndrome
HIV	Human Immunodeficiency Virus
ICD	International Classification of Diseases (published by the World Health Organisation)
ICD-9	International Classification of Diseases Revision 9
ICD-9 CM	International Classification of Diseases Revision 9 Clinically Modified
ICD-10	International Classification of Diseases Revision 10
NCHS	National Center for Health Statistics (USA)
np	not available for publication but included in totals where applicable
WHO	World Health Organization
YPLL	Years of Potential Life Lost
..	not applicable
—	nil or rounded to zero (including null cells)

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# SECTION 1

## UNDERLYING CAUSE OF DEATH .....

### INTRODUCTION

All deaths registered in 2001 have been coded using the tenth revision of the International Classification of Diseases (ICD-10). Data from 1997 onwards are available coded to ICD-10 and data from years 1979 to 1996 are coded to ICD-9 which is generally comparable at the broad Chapter level to deaths coded to ICD-10. Further explanation on the comparability between ICD-9 and ICD-10 as detailed in this publication is provided in Appendix 5.

### TRENDS IN LEADING CAUSES

There were 128,544 deaths registered in 2001, consisting of 66,835 male and 61,709 female deaths, which was a slight increase of 0.2% on the corresponding figure for 2000 (128,291 deaths). While there has been a 7.9% increase in the number of deaths between 1991 and 2001, in the same period there has been a corresponding decrease in the standardised death rate of 21%, from 689.3 in 1991 to 542.2 in 2001, which is consistent with continuing improvements in life expectancy in Australia.

The leading underlying causes of death in 2001 are generally consistent with 2000 data with respect to standardised death rates and relative proportions. However, there have been some changes in these relative proportions since 1991. In 2001, Malignant neoplasms and Ischaemic heart diseases, with contributions of 29% and 20% respectively, were responsible for 49% of all deaths, while in 1991 these two causes contributed equally (26%) and were responsible for 52% of all deaths.

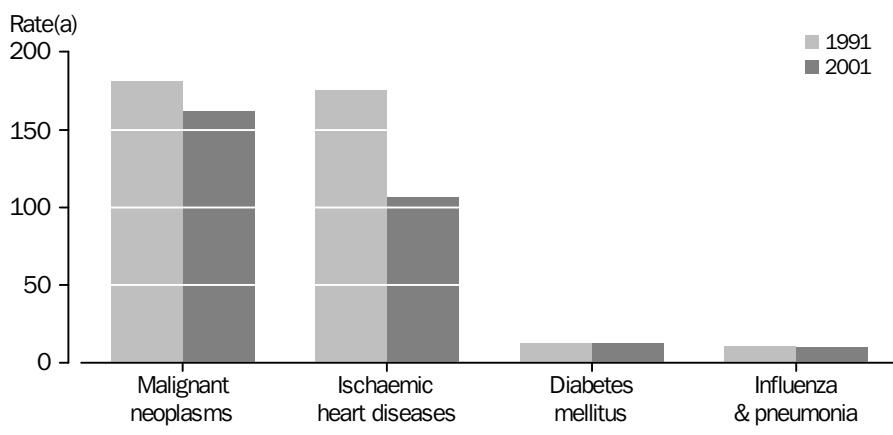
### LEADING CAUSES OF DEATH

Cause of death and ICD code	Males no.	Females no.	Persons no.	Proportion of total deaths %
				100.0
<b>All causes</b>	<b>66 835</b>	<b>61 709</b>	<b>128 544</b>	<b>100.0</b>
Malignant neoplasms (cancer) (C00–C97)	20 753	15 997	36 750	28.5
Ischaemic heart diseases (I20–I25)	13 906	12 328	26 234	20.4
Cerebrovascular diseases (stroke) (I60–I69)	4 852	7 294	12 146	9.4
Chronic lower respiratory diseases (including asthma, emphysema and bronchitis) (J40–J47)	3 419	2 497	5 916	4.6
Accidents (V01–X59)	3 155	1 685	4 840	3.8
Diabetes mellitus (E10–E14)	1 639	1 439	3 078	2.4
Influenza and pneumonia (J10–J18)	1 184	1 518	2 702	2.1
Diseases of arteries, arterioles and capillaries (including atherosclerosis and aortic aneurysm) (I70–I79)	1 381	1 244	2 625	2.0
Heart failure (I50)	982	1 630	2 612	2.0
Intentional self-harm (X60–X84)	1 935	519	2 454	1.9
All other causes	13 629	15 558	29 187	22.7

TRENDS IN LEADING CAUSES *continued*

All leading causes of death showed a decrease in standardised death rates between 1991 and 2001 except for Diabetes mellitus and Influenza and pneumonia where the standardised death rates remained relatively unchanged at 13.0 and 10.4 per 100,000 respectively in 2001.

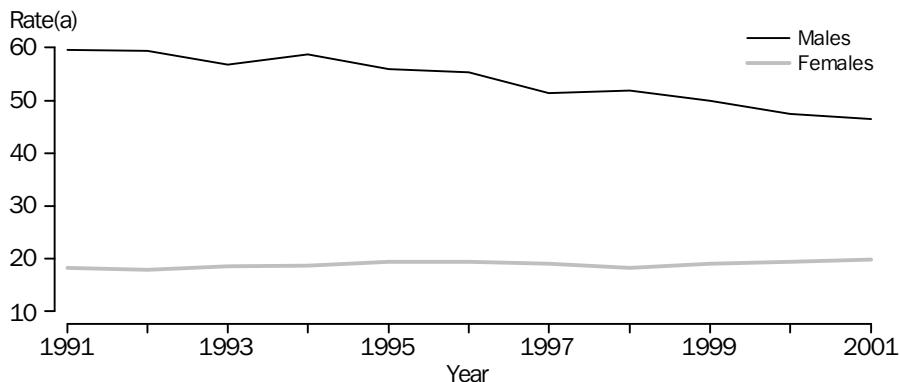
## STANDARDISED DEATH RATES, Selected underlying causes



(a) Per 100,000 estimated resident population.

In 2001, the 7,038 deaths caused by Malignant neoplasms of the trachea, bronchus and lung (lung cancer) were responsible for 19% of all deaths caused by Malignant neoplasms.

For males, there was a 1.2% increase in the number of deaths in the twelve months, but a decrease of 2.1% in the standardised death rate in the same period. This continues a downward trend which has seen the standardised male death rate decrease 22% from 59.6 in 1991 to 46.5 per 100,000 in 2001. In contrast, for females, there were only marginal increases in both the numbers of deaths and standardised death rate between 2000 and 2001. The death rate has increased 8.7% since 1991.

STANDARDISED DEATH RATES,  
Malignant neoplasm of trachea, bronchus and lung

(a) Per 100,000 estimated resident population.

**EXTERNAL CAUSES**

External causes relate to deaths from accidents, poisonings and violence and were responsible for 7,876 deaths or 6.1% of all deaths registered in 2001. Since 1991 there has been a 14% decrease in the standardised death rate for deaths from External causes, mainly due to a 29% decrease in the death rate for Transport accidents.

The standardised death rate in 2001 from Intentional self-harm (suicide) for all ages was 20.1 for males and 5.1 for females which was a 2.6% increase for males and no change for females from the 2000 rates. There were 2,454 deaths attributed to suicide registered in 2001, 91 (3.9%) higher than the 2000 figure. Most of this increase occurred in the 45–54 age group, with 20 males and 39 females more than the previous year. However, the number of deaths registered in 2001 from Intentional self-harm is 10% lower than the record 2,723 deaths registered in 1997.

**DRUG-INDUCED DEATHS**

Drug-induced deaths (excluding alcohol, tobacco and volatile solvents) comprises any death where the underlying cause was attributed to an acute episode of poisoning or toxicity due to drugs and any acute condition caused by drug use where the deceased person was identified as drug dependent. More information on these definitions is given in the ABS Information Paper *Drug-Induced Deaths—A Guide to ABS Causes of Death Data* (cat. no. 4809.0). In 2001, the total number of drug-induced deaths was 1,038 which represents a 34% decrease on the number reported in 2000.

**DRUG-INDUCED DEATHS**

Cause of death and ICD code	1997	1998	1999	2000	2001
<b>Total Drug-Induced Deaths</b>	<b>1 323</b>	<b>1 645</b>	<b>1 739</b>	<b>1 569</b>	<b>1 038</b>
Accidental (F11–F16, F19, F55, X40–X44)(a)	916	1 243	1 403	1 274	710
Intentional self-harm (X60–X84)	309	310	278	273	285
Assault (X85)	4	6	2	1	4
Undetermined (Y10–Y14)	94	86	56	21	39

(a) Includes two components: Mental and behavioural disorders due to drug use (F11–F16, F19, F55) and Accidental poisoning by drugs (X40–X44).

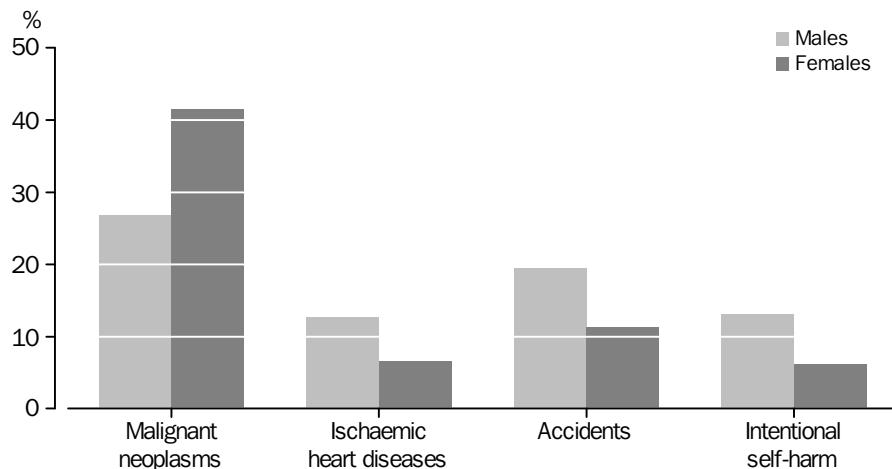
**DEATHS OF ABORIGINAL AND TORRES STRAIT ISLANDER PERSONS**

While deaths of Aboriginal and Torres Strait Islander Australians are considered to be underenumerated (see Appendix 6), the comparison of causes of Indigenous deaths with non-Indigenous deaths highlights some major differences. The two leading causes of deaths for Indigenous and non-Indigenous are the same with Ischaemic heart diseases causing 18% and Malignant neoplasms 16% of all recorded Indigenous deaths, compared to 21% and 29% respectively for the non-Indigenous population. External causes account for 17% of Indigenous deaths compared to 6% of non-Indigenous deaths. Diabetes mellitus accounts for 7% of Indigenous deaths compared to 2% of non-Indigenous deaths.

**YEARS OF POTENTIAL LIFE LOST (YPLL)**

A measure of premature mortality is years of potential life lost for deaths occurring between the ages of 1 and 75 years inclusive. (Refer to the Technical Note on page 77 for further detail).

In 2001, an estimate of YPLL was 528,594 years for males and 273,945 years for females for all causes of death. Malignant neoplasms as the underlying cause was reported in 37% of deaths for males aged 1–75 years. This represented 27% of the years of potential life lost. For females, Malignant neoplasms were reported in 45% of deaths of females aged 1–75 years and represented 41% of years of potential life lost. An estimated 182,642 and 53,706 years of potential years of life lost for males and females respectively occurred in 2001 due to all External causes. Deaths as a result of External causes were 14% and 8% of all deaths aged 1–75 years for males and females, which represented 35% and 20% for males and females respectively of the total number of years of potential life lost.

**PERCENTAGE OF YEARS OF POTENTIAL LIFE LOST, Selected underlying causes**

**1.1 UNDERLYING CAUSE, Selected causes**

Cause of death and ICD code	1999.....		2000.....		2001.....	
	Males	Females	Males	Females	Males	Females
<b>All causes</b>	<b>67 227</b>	<b>60 875</b>	<b>66 817</b>	<b>61 474</b>	<b>66 835</b>	<b>61 709</b>
Chapter I Certain infectious and parasitic diseases (A00–B99)						
Septicaemia (A40, A41)	842	761	867	779	887	788
Human immunodeficiency virus (HIV) disease (B20–B24)(a)	401	460	454	486	442	531
Chapter II Neoplasms (C00–D48)	20 283	15 573	20 545	15 829	21 126	16 371
Malignant neoplasms (C00–C97)	19 866	15 187	20 153	15 475	20 753	15 997
Digestive organs (C15–C26)	5 600	4 312	5 676	4 379	5 918	4 462
Oesophagus (C15)	641	299	667	287	711	333
Stomach (C16)	754	447	775	414	750	461
Colon (C18)	1 771	1 557	1 753	1 665	1 760	1 582
Rectosigmoid junction, rectum, anus and anal canal (C19–C21)	734	514	780	514	855	548
Liver and intrahepatic bile ducts (C22)	449	234	510	227	538	240
Pancreas (C25)	868	850	864	873	950	859
Trachea, bronchus and lung (C33, C34)	4 655	2 148	4 587	2 291	4 642	2 396
Melanoma of skin (C43)	631	359	624	356	686	383
Breast (C50)	22	2 505	19	2 511	27	2 585
Female genital organs (C51–C58)	..	1 300	..	1 402	..	1 506
Ovary (C56)	..	737	..	774	..	833
Male genital organs (C60–C63)	2 546	..	2 700	..	2 753	..
Prostate (C61)	2 499	..	2 663	..	2 711	..
Urinary tract (C64–C68)	1 112	605	1 076	579	1 162	662
Kidney, except renal pelvis (C64)	482	320	469	295	496	346
Bladder (C67)	587	252	574	247	629	275
Brain (C71)	588	430	622	435	631	448
Lymphoid, haematopoietic and related tissue (C81–C96)	1 962	1 596	2 062	1 682	1 997	1 663
Leukaemia (C91–C95)	768	578	772	582	803	582
In situ and benign neoplasms and neoplasms of uncertain or unknown behaviour (D00–D48)	417	386	392	354	373	374
Chapter III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	195	255	190	223	183	225
Chapter IV Endocrine, nutritional and metabolic diseases (E00–E90)	2 001	2 099	2 141	2 016	2 223	2 091
Diabetes mellitus (E10–E14)	1 485	1 462	1 594	1 412	1 639	1 439
Chapter V Mental and behavioural disorders (F00–F99)	1 256	1 552	1 358	1 716	1 073	1 631
Organic, including symptomatic, mental disorders (F00–F09)	648	1 296	668	1 439	683	1 454
Chapter VI Diseases of the nervous system (G00–G99)	1 818	2 072	1 839	2 200	1 894	2 310
Alzheimer's disease (G30)	493	1 023	455	1 104	497	1 110
Chapter VII Diseases of the eye and adnexa (H00–H59)	—	5	—	1	2	1
Chapter VIII Diseases of the ear and mastoid process (H60–H95)	—	6	4	5	3	4
Chapter IX Diseases of the circulatory system (I00–I99)	24 824	26 479	23 756	25 931	23 602	25 724
All heart disease (I05–I09, I11, I13, I20–I25, I26, I27, I30–I52)	18 116	17 229	17 172	16 747	17 027	16 620
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	84	177	101	164	82	160
Hypertensive diseases (I10–I15)	432	745	449	753	443	780
Ischaemic heart diseases (I20–I25)	14 865	12 744	14 052	12 469	13 906	12 328
Acute myocardial infarction (I21)	8 028	7 124	7 586	7 030	7 484	6 959
Pulmonary heart disease and diseases of pulmonary circulation and other forms of heart disease (I26–I52)	2 955	3 896	2 795	3 713	2 824	3 747
Heart failure (I50)	989	1 725	982	1 662	982	1 630
Cerebrovascular diseases (I60–I69)	4 894	7 372	4 913	7 387	4 852	7 294
Diseases of arteries, arterioles and capillaries (I70–I79)	1 476	1 388	1 321	1 296	1 381	1 244
Atherosclerosis (I70)	229	423	187	324	175	282
Aortic aneurysm and dissection (I71)	882	568	798	539	793	545

(a) See Explanatory Notes, paragraph 17 for further information.

**1.1 UNDERLYING CAUSE, Selected causes *continued***

Cause of death and ICD code	1999.....		2000.....		2001.....	
	Males	Females	Males	Females	Males	Females
Chapter X Diseases of the respiratory system (J00–J99)	5 296	4 317	5 923	4 984	5 725	4 901
Influenza and pneumonia (J10–J18)	765	1 133	1 312	1 625	1 184	1 518
Chronic lower respiratory diseases (J40–J47)	3 609	2 487	3 514	2 448	3 419	2 497
Emphysema (J43)	575	312	490	231	408	270
Asthma and status asthmaticus (J45, J46)	160	264	169	285	175	247
Chapter XI Diseases of the digestive system (K00–K93)	2 111	2 110	2 063	2 078	2 036	2 053
Diseases of oesophagus, stomach and duodenum (K20–K31)	313	335	331	360	301	333
Gastric and duodenal ulcer (K25–K27)	215	231	232	245	203	237
Diseases of liver (K70–K77)	863	380	805	357	822	374
Chapter XII Diseases of the skin and subcutaneous tissue (L00–L99)	108	181	99	153	106	159
Chapter XIII Diseases of the musculoskeletal system and connective tissue (M00–M99)	300	562	279	573	285	611
Arthropathies and systemic connective tissue disorders (M00–M36)	208	360	187	388	186	375
Chapter XIV Diseases of the genitourinary system (N00–N99)	1 232	1 536	1 186	1 506	1 242	1 570
Renal failure (N17–N19)	842	919	802	913	813	891
Chapter XV Pregnancy, childbirth and the puerperium (O00–O99)	..	11	..	15	..	12
Chapter XVI Certain conditions originating in the perinatal period (P00–P96)	377	264	360	282	395	286
Fetus & newborn affected by maternal factors & by complications of pregnancy, labour & delivery (P00–P04)	214	147	177	137	197	189
Chapter XVII Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	392	323	326	284	335	279
Congenital malformations of the circulatory system (Q20–Q28)	133	118	115	97	117	98
Chapter XVIII Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	324	276	364	318	272	263
Chapter XX External causes of morbidity and mortality (V01–Y98)	5 868	2 493	5 517	2 581	5 446	2 430
Accidents (V01–X59)	3 486	1 801	3 299	1 839	3 155	1 685
Transport accidents (V01–V99)	1 441	570	1 459	556	1 495	509
Falls (W00–W19)	309	211	308	257	354	280
Accidental drowning and submersion (W65–W74)	203	75	179	50	210	51
Intentional self-harm (X60–X84)	2 002	490	1 860	503	1 935	519
Hanging, strangulation and suffocation (X70)	868	160	807	182	855	195
Assault (X85–Y09)	204	96	197	116	192	108

**1.2 UNDERLYING CAUSE, Selected causes and age at death—Numbers and rates(a)**

Cause of death and ICD code	NUMBER OF DEATHS			RATES(a).....		
	Males	Females	Persons	Males	Females	Persons
<b>Under 1 year</b>						
Certain conditions originating in the perinatal period (P00–P96)	<b>751</b>	<b>558</b>	<b>1 309</b>	<b>5.95</b>	<b>4.65</b>	<b>5.31</b>
Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00–P04)	392	285	677	3.10	2.37	2.75
Disorders related to short gestation and low birthweight, not elsewhere classified (P07)	197	189	386	1.56	1.57	1.57
Respiratory and cardiovascular disorders specific to the perinatal period (P20–P29)	31	20	51	0.25	0.17	0.21
Infections specific to the perinatal period (P35–P39)	87	38	125	0.69	0.32	0.51
Haemorrhagic and haematological disorders of fetus and newborn (P50–P61)	18	9	27	0.14	0.07	0.11
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	8	7	15	0.06	0.06	0.06
Congenital malformations of the nervous system (Q00–Q07)	186	146	332	1.47	1.22	1.35
Congenital malformations of circulatory system (Q20–Q28)	14	22	36	0.11	0.18	0.15
Congenital malformations of the respiratory system (Q30–Q34)	60	42	102	0.48	0.35	0.41
Sudden infant death syndrome (R95)	12	4	16	0.10	0.03	0.06
61	40	101	0.48	0.33	0.41	
<b>1–14 years</b>	<b>359</b>	<b>243</b>	<b>602</b>	<b>18.7</b>	<b>13.3</b>	<b>16.1</b>
Malignant neoplasms (C00–C97)	72	44	116	3.7	2.4	3.1
Brain (C71)	26	18	44	1.4	1.0	1.2
Lymphoid, haematopoietic and related tissue (C81–C96)	30	14	44	1.6	0.8	1.2
Leukaemia (C91–C95)	25	11	36	1.3	0.6	1.0
Diseases of the nervous system (G00–G99)	28	32	60	1.5	1.8	1.6
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	26	25	51	1.4	1.4	1.4
External causes of morbidity and mortality (V01–Y98)	150	81	231	7.8	4.4	6.2
Transport accidents (V01–V99)	67	33	100	3.5	1.8	2.7
Accidental drowning and submersion (W65–W74)	28	16	44	1.5	0.9	1.2
<b>15–24 years</b>	<b>1 122</b>	<b>388</b>	<b>1 510</b>	<b>82.6</b>	<b>29.7</b>	<b>56.6</b>
Malignant neoplasms (C00–C97)	69	47	116	5.1	3.6	4.3
Lymphoid, haematopoietic and related tissue (C81–C96)	22	14	36	1.6	1.1	1.3
Leukaemia (C91–C95)	14	9	23	1.0	0.7	0.9
Mental and behavioural disorders due to psychoactive substance use (F10–F19)	20	6	26	1.5	0.5	1.0
Diseases of the nervous system (G00–G99)	46	19	65	3.4	1.5	2.4
External causes of morbidity and mortality (V01–Y98)	881	234	1 115	64.8	17.9	41.8
Transport accidents (V01–V99)	405	101	506	29.8	7.7	19.0
Intentional self-harm (X60–X84)	276	63	339	20.3	4.8	12.7
<b>25–34 years</b>	<b>1 641</b>	<b>606</b>	<b>2 247</b>	<b>114.6</b>	<b>41.7</b>	<b>77.9</b>
Malignant neoplasms (C00–C97)	134	132	266	9.4	9.1	9.2
Digestive organs (C15–C26)	24	20	44	1.7	1.4	1.5
Melanoma of skin (C43)	14	17	31	1.0	1.2	1.1
Breast (C50)	..	23	23	..	1.6	0.8
Brain (C71)	22	10	32	1.5	0.7	1.1
Lymphoid, haematopoietic and related tissue (C81–C96)	35	23	58	2.4	1.6	2.0
Mental and behavioural disorders due to psychoactive substance use (F10–F19)	49	17	66	3.4	1.2	2.3
Diseases of the circulatory system (I00–I99)	137	59	196	9.6	4.1	6.8
Ischaemic heart diseases (I20–I25)	67	10	77	4.7	0.7	2.7
Acute myocardial infarction (I21)	27	6	33	1.9	0.4	1.1
Diseases of the digestive system (K00–K93)	13	12	25	0.9	0.8	0.9
Diseases of liver (K70–K77)	7	5	12	0.5	0.3	0.4
External causes of morbidity and mortality (V01–Y98)	1 135	259	1 394	79.3	17.8	48.3
Transport accidents (V01–V99)	308	61	369	21.5	4.2	12.8
Intentional self-harm (X60–X84)	486	108	594	33.9	7.4	20.6

(a) Deaths per 100,000 of the estimated mid-year population for each age group other than age under 1 year; deaths per 1,000 live births for age under 1 year.  
See Glossary for further explanation.

**1.2 UNDERLYING CAUSE, Selected causes and age at death—Numbers and rates(a) *continued***

Cause of death and ICD code	NUMBER OF DEATHS			RATES(a).....		
	Males	Females	Persons	Males	Females	Persons
<b>35–44 years</b>						
Malignant neoplasms (C00–C97)	<b>2 280</b>	<b>1 312</b>	<b>3 592</b>	<b>154.2</b>	<b>87.2</b>	<b>120.4</b>
Digestive organs (C15–C26)	440	557	997	29.8	37.0	33.4
Melanoma of skin (C43)	113	98	211	7.6	6.5	7.1
Breast (C50)	54	24	78	3.7	1.6	2.6
Brain (C71)	1	189	190	0.1	12.6	6.4
Lymphoid, haematopoietic and related tissue (C81–C96)	55	31	86	3.7	2.1	2.9
Mental and behavioural disorders due to psychoactive substance use (F10–F19)	50	46	96	3.4	3.1	3.2
Diseases of the circulatory system (I00–I99)	399	184	583	27.0	12.2	19.5
Ischaemic heart diseases (I20–I25)	256	61	317	17.3	4.1	10.6
Acute myocardial infarction (I21)	126	28	154	8.5	1.9	5.2
Diseases of the digestive system (K00–K93)	102	49	151	6.9	3.3	5.1
Diseases of liver (K70–K77)	80	35	115	5.4	2.3	3.9
External causes of morbidity and mortality (V01–Y98)	946	298	1 244	64.0	19.8	41.7
Transport accidents (V01–V99)	204	73	277	13.8	4.9	9.3
Intentional self-harm (X60–X84)	447	118	565	30.2	7.8	18.9
<b>45–54 years</b>						
Malignant neoplasms (C00–C97)	<b>4 049</b>	<b>2 560</b>	<b>6 609</b>	<b>303.8</b>	<b>191.4</b>	<b>247.5</b>
Digestive organs (C15–C26)	1 400	1 449	2 849	105.0	108.3	106.7
Colon (C18)	494	298	792	37.1	22.3	29.7
Trachea, bronchus and lung (C33, C34)	112	101	213	8.4	7.6	8.0
Breast (C50)	256	189	445	19.2	14.1	16.7
Lymphoid, haematopoietic and related tissue (C81–C96)	2	447	449	0.2	33.4	16.8
Diseases of the circulatory system (I00–I99)	127	97	224	9.5	7.3	8.4
Ischaemic heart diseases (I20–I25)	1 123	350	1 473	84.3	26.2	55.2
Acute myocardial Infarction (I21)	778	151	929	58.4	11.3	34.8
Cerebrovascular diseases (I60–I69)	354	63	417	26.6	4.7	15.6
Diseases of the respiratory system (J00–J99)	133	95	228	10.0	7.1	8.5
Disease of the digestive system (K00–K93)	112	96	208	8.4	7.2	7.8
Diseases of liver (K70–K77)	218	91	309	16.4	6.8	11.6
External causes of morbidity and mortality (V01–Y98)	171	66	237	12.8	4.9	8.9
Transport accidents (V01–V99)	726	268	994	54.5	20.0	37.2
Intentional self-harm (X60–X84)	177	66	243	13.3	4.9	9.1
	311	106	417	23.3	7.9	15.6
<b>55–64 years</b>						
Malignant neoplasms (C00–C97)	<b>7 515</b>	<b>4 210</b>	<b>11 725</b>	<b>812.2</b>	<b>461.4</b>	<b>638.0</b>
Digestive organs (C15–C26)	3 384	2 305	5 689	365.7	252.6	309.6
Colon (C18)	1 087	530	1 617	117.5	58.1	88.0
Trachea, bronchus and lung (C33, C34)	316	197	513	34.2	21.6	27.9
Breast (C50)	859	419	1 278	92.8	45.9	69.5
Female genital organs (C51–C58)	6	481	487	0.6	52.7	26.5
Male genital organs (C60–C63)	..	259	259	..	28.4	14.1
Diseases of the circulatory system (I00–I99)	169	..	169	18.3	..	9.2
Ischaemic heart diseases (I20–I25)	2 253	799	3 052	243.5	87.6	166.1
Acute myocardial infarction (I21)	1 564	416	1 980	169.0	45.6	107.7
Cerebrovascular diseases (I60–I69)	795	211	1 006	85.9	23.1	54.7
Diseases of the respiratory system (J00–J99)	291	184	475	31.4	20.2	25.8
Chronic lower respiratory diseases (J40–J47)	369	292	661	39.9	32.0	36.0
Diseases of the digestive system (K00–K93)	241	220	461	26.0	24.1	25.1
External causes of morbidity and mortality (V01–Y98)	319	147	466	34.5	16.1	25.4
	459	172	631	49.6	18.9	34.3

(a) Deaths per 100,000 of the estimated mid-year population for each age group other than age under 1 year; deaths per 1,000 live births for age under 1 year.

See Glossary for further explanation.

**1.2 UNDERLYING CAUSE, Selected causes and age at death—Numbers and rates(a) *continued***

Cause of death and ICD code	NUMBER OF DEATHS			RATES(a).....		
	Males	Females	Persons	Males	Females	Persons
<b>65–74 years</b>						
Malignant neoplasms (C00–C97)	<b>14 570</b>	<b>8 935</b>	<b>23 505</b>	<b>2 278.9</b>	<b>1 309.4</b>	<b>1 778.4</b>
Digestive organs (C15–C26)	6 190	3 856	10 046	968.2	565.1	760.1
Colon (C18)	1 823	1 039	2 862	285.1	152.3	216.5
Trachea, bronchus and lung (C33, C34)	543	383	926	84.9	56.1	70.1
Breast (C50)	1 668	757	2 425	260.9	110.9	183.5
Prostate (C61)	7	557	564	1.1	81.6	42.7
Lymphoid, haematopoietic and related tissue (C81–C96)	645	..	645	100.9	..	48.8
Endocrine, nutritional and metabolic diseases (E00–E90)	534	387	921	83.5	56.7	69.7
Diabetes mellitus (E10–E14)	571	368	939	89.3	53.9	71.0
Diseases of the nervous system (G00–G99)	420	261	681	65.7	38.2	51.5
Alzheimer's disease (G30)	335	283	618	52.4	41.5	46.8
Diseases of the circulatory system (I00–I99)	63	73	136	9.9	10.7	10.3
Ischaemic heart diseases (I20–I25)	4 749	2 626	7 375	742.8	384.8	558.0
Acute myocardial infarction (I21)	3 122	1 407	4 529	488.3	206.2	342.7
Cerebrovascular diseases (I60–I69)	1 727	830	2 557	270.1	121.6	193.5
Diseases of the respiratory system (J00–J99)	810	629	1 439	126.7	92.2	108.9
Chronic lower respiratory diseases (J40–J47)	1 267	834	2 101	198.2	122.2	159.0
Diseases of the digestive system (K00–K93)	910	625	1 535	142.3	91.6	116.1
Falls (W00–W19)	417	262	679	65.2	38.4	51.4
<b>75–84 years</b>						
Malignant neoplasms (C00–C97)	<b>21 395</b>	<b>18 980</b>	<b>40 375</b>	<b>5 992.0</b>	<b>3 829.1</b>	<b>4 734.7</b>
Digestive organs (C15–C26)	6 597	4 862	11 459	1 847.6	980.9	1 343.8
Colon (C18)	1 772	1 492	3 264	496.3	301.0	382.8
Trachea, bronchus and lung (C33, C34)	543	514	1 057	152.1	103.7	124.0
Breast (C50)	1 440	756	2 196	403.3	152.5	257.5
Male genital organs (C60–C63)	9	562	571	2.5	113.4	67.0
Prostate (C61)	1 208	..	1 208	338.3	..	141.7
Lymphoid, haematopoietic and related tissue (C81–C96)	1 200	..	1 200	336.1	..	140.7
Endocrine, nutritional and metabolic diseases (E00–E90)	635	581	1 216	177.8	117.2	142.6
Diabetes mellitus (E10–E14)	713	737	1 450	199.4	148.7	169.9
Organic, including symptomatic, mental disorders (F00–F09)	572	529	1 101	160.2	106.7	129.1
Diseases of the nervous system (G00–G99)	272	355	627	76.2	71.6	73.5
Alzheimer's disease (G30)	642	686	1 328	179.8	138.4	155.7
Diseases of the circulatory system (I00–I99)	202	320	522	56.6	64.6	61.2
Ischaemic heart diseases (I20–I25)	8 541	8 381	16 922	2 392.0	1 690.8	1 984.4
Acute myocardial infarction (I21)	4 852	4 148	9 000	1 358.9	836.8	1 055.4
Cerebrovascular diseases (I60–I69)	2 654	2 488	5 142	743.3	501.9	603.0
Diseases of arteries, arterioles and capillaries (I70–I79)	1 936	2 383	4 319	542.2	480.8	506.5
Diseases of the respiratory system (J00–J99)	573	436	1 009	160.5	88.0	118.3
Chronic lower respiratory diseases (J40–J47)	2 345	1 647	3 992	656.8	332.3	468.1
Diseases of the digestive system (K00–K93)	1 441	943	2 384	403.6	190.2	279.6
Diseases of the genitourinary system (N00–N99)	596	612	1 208	166.9	123.5	141.7
External causes of morbidity and mortality (V01–Y98)	546	550	1 096	152.9	111.0	128.5
Falls (W00–W19)	406	355	761	113.7	71.8	89.4

(a) Deaths per 100,000 of the estimated mid-year population for each age group

other than age under 1 year; deaths per 1,000 live births for age under 1 year.

See Glossary for further explanation.

**1.2 UNDERLYING CAUSE, Selected causes and age at death—Numbers and rates(a) *continued***

Cause of death and ICD code	NUMBER OF DEATHS			RATES(a).....		
	Males	Females	Persons	Males	Females	Persons
<b>85 years and over</b>						
Malignant neoplasms (C00–C97)	<b>13 140</b>	<b>23 914</b>	<b>37 054</b>	<b>16 031.8</b>	<b>12 980.8</b>	<b>13 920.2</b>
Digestive organs (C15–C26)	2 465	2 743	5 208	3 007.5	1 488.9	1 956.5
Colon (C18)	600	983	1 583	732.0	533.6	594.7
Pancreas (C25)	216	348	564	263.5	188.9	211.9
Trachea, bronchus and lung (C33, C34)	84	183	267	102.5	99.3	100.3
Breast (C50)	346	220	566	422.1	119.4	212.6
Male genital organs (C60–C63)	2	325	327	2.4	176.4	122.8
Prostate (C61)	676	..	676	824.8	..	254.0
Lymphoid, haematopoietic and related tissue (C81–C96)	673	..	673	821.1	..	252.8
Endocrine, nutritional and metabolic diseases (E00–E90)	232	324	556	283.1	175.9	208.9
Diabetes mellitus (E10–E14)	400	698	1 098	488.0	378.9	412.5
Organic, including symptomatic, mental disorders (F00–F09)	300	463	763	366.0	251.3	286.6
Diseases of the nervous system (G00–G99)	333	1 033	1 366	406.3	560.7	513.2
Alzheimer's disease (G30)	454	983	1 437	553.9	533.6	539.8
Diseases of the circulatory system (I00–I99)	214	702	916	261.1	381.1	344.1
Ischaemic heart diseases (I20–I25)	6 336	13 288	19 624	7 730.4	7 212.9	7 372.2
Acute myocardial infarction (I21)	3 257	6 134	9 391	3 973.8	3 329.6	3 528.0
Pulmonary heart disease and diseases of pulmonary circulation and other forms of heart disease (I26–I52)	1 798	3 333	5 131	2 193.7	1 809.2	1 927.6
Heart failure (I50)	915	2 072	2 987	1 116.4	1 124.7	1 122.1
Cerebrovascular diseases (I60–I69)	492	1 104	1 596	600.3	599.3	599.6
Diseases of arteries, arterioles and capillaries (I70–I79)	1 606	3 936	5 542	1 959.4	2 136.5	2 082.0
Diseases of the respiratory system (J00–J99)	401	624	1 025	489.3	338.7	385.1
Influenza and pneumonia (J10–J18)	1 501	1 926	3 427	1 831.3	1 045.5	1 287.4
Chronic lower respiratory diseases (J40–J47)	480	957	1 437	585.6	519.5	539.8
Diseases of the digestive system (K00–K93)	707	594	1 301	862.6	322.4	488.8
Diseases of the genitourinary system (N00–N99)	362	873	1 235	441.7	473.9	464.0
Renal failure (N17–N19)	461	807	1 268	562.5	438.0	476.4
External causes of morbidity and mortality (V01–Y98)	309	485	794	377.0	263.3	298.3
Falls (W00–W19)	342	568	910	417.3	308.3	341.9
	94	126	220	114.7	68.4	82.6

(a) Deaths per 100,000 of the estimated mid-year population for each age group

other than age under 1 year; deaths per 1,000 live births for age under 1 year.

See Glossary for further explanation.

**1.3 UNDERLYING CAUSE, Selected years—Standardised death rates(a)**

Cause of death and ICD code	1991.....			1996.....		
	Males	Females	Persons	Males	Females	Persons
<b>All causes</b>	<b>885.1</b>	<b>537.3</b>	<b>689.3</b>	<b>820.0</b>	<b>500.9</b>	<b>641.4</b>
Chapter I Certain infectious and parasitic diseases (A00–B99)	6.2	3.7	4.8	12.2	4.8	8.3
Septicaemia (A40, A41)	2.7	1.8	2.2	3.5	2.4	2.9
Human immunodeficiency virus (HIV) disease (B20–B24)(b)	6.4	0.3	3.4	5.8	0.2	3.0
Chapter II Neoplasms (C00–D48)	237.1	144.3	182.9	234.0	140.9	179.8
Malignant neoplasms (C00–C97)	234.8	142.7	181.0	230.2	138.6	177.0
Digestive organs (C15–C26)	64.5	39.7	50.7	62.3	38.3	49.1
Oesophagus (C15)	6.7	2.8	4.6	7.2	2.8	4.8
Stomach (C16)	10.6	5.0	7.4	8.8	4.2	6.2
Colon (C18)	21.1	15.5	17.9	21.7	15.1	18.0
Rectosigmoid junction, rectum, anus and anal canal (C19–C21)	8.6	4.8	6.5	7.5	3.8	5.5
Liver and intrahepatic bile ducts (C22)	3.8	1.4	2.5	4.7	1.7	3.1
Pancreas (C25)	9.6	6.7	7.9	9.0	7.3	8.2
Trachea, bronchus and lung (C33, C34)	59.6	18.3	36.3	55.4	19.4	35.3
Melanoma of skin (C43)	6.5	3.2	4.7	6.7	3.0	4.7
Breast (C50)	0.2	27.0	14.6	0.2	25.0	13.5
Female genital organs (C51–C58)	..	14.7	8.1	..	13.8	7.5
Ovary (C56)	..	7.6	4.1	..	7.6	4.1
Male genital organs (C60–C63)	31.7	..	12.5	33.7	..	13.4
Prostate (C61)	31.1	..	12.2	33.1	..	13.2
Urinary tract (C64–C68)	12.3	5.7	8.5	12.0	5.1	8.0
Kidney, except renal pelvis (C64)	5.1	3.1	4.0	5.0	2.8	3.8
Bladder (C67)	6.9	2.2	4.1	6.7	2.0	3.9
Brain (C71)	6.3	4.2	5.2	6.7	4.0	5.2
Lymphoid, haematopoietic and related tissue (C81–C96)	21.4	13.9	17.2	21.6	13.9	17.3
Leukaemia (C91–C95)	8.4	5.2	6.6	9.0	4.8	6.7
In situ and benign neoplasms and neoplasms of uncertain or unknown behaviour (D00–D48)	2.3	1.6	1.9	3.8	2.3	2.8
Chapter III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	7.8	2.3	5.0	2.6	1.8	2.1
Chapter IV Endocrine, nutritional and metabolic diseases (E00–E90)	19.9	15.0	17.0	23.4	16.3	19.4
Diabetes mellitus (E10–E14))	15.8	11.5	13.2	18.3	12.3	14.9
Chapter V Mental and behavioural disorders (F00–F99)	12.8	9.2	10.9	18.7	15.0	17.1
Organic, including symptomatic, mental disorders (F00–F09)	8.0	7.4	7.7	11.9	13.0	12.8
Class VI Disease of the nervous system (G00–G99)	16.1	11.8	13.6	18.5	12.7	15.2
Alzheimer's disease (G30)	4.7	4.3	4.5	4.8	4.9	4.9
Chapter VII Diseases of the eye and adnexa (H00–H59)	—	—	—	—	—	—
Chapter VIII Diseases of the ear and mastoid process (H60–H95)	—	—	—	0.1	0.1	0.1
Chapter IX Diseases of the circulatory system (I00–I99)	381.1	246.1	306.7	326.3	211.2	262.7
All heart disease (I05–I09, I11, I13, I20–I25, I26, I27, I30–I52)	280.4	164.9	216.4	238.1	139.2	183.3
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	1.8	2.6	2.3	1.5	2.0	1.7
Hypertensive diseases (I10–I15)	5.9	5.8	6.0	5.4	5.1	5.3
Ischaemic heart diseases (I20–I25)	235.4	127.9	175.4	195.5	105.5	145.4
Acute myocardial infarction (I21)	155.4	84.7	115.8	117.2	64.1	87.5
Pulmonary heart disease and diseases of pulmonary circulation and other forms of heart disease (I26–I52)	40.4	31.3	35.6	38.3	28.7	33.2
Heart failure (I50)	17.2	15.0	15.9	14.6	12.7	13.5
Cerebrovascular diseases (I60–I69)	72.3	64.9	68.8	65.5	57.7	61.5
Diseases of arteries, arterioles and capillaries (I70–I79)	23.7	12.4	17.2	18.6	10.9	14.2
Atherosclerosis (I70)	5.0	4.9	5.1	3.8	3.7	3.8
Aortic aneurysm and dissection (I71)	13.3	4.4	8.1	11.0	4.3	7.1

(a) Standardised death rate per 100,000 of the mid-year 1991 population.  
See Glossary for further explanation.

(b) See Explanatory Notes, paragraph 17 for further information.

**1.3 UNDERLYING CAUSE, Selected years—Standardised death rates(a) *continued***

Cause of death and ICD code	2000.....			2001.....		
	Males	Females	Persons	Males	Females	Persons
<b>All causes</b>	<b>707.9</b>	<b>444.9</b>	<b>562.1</b>	<b>680.8</b>	<b>430.0</b>	<b>542.2</b>
Chapter I Certain infectious and parasitic diseases (A00–B99)	9.2	5.7	7.3	9.0	5.5	7.1
Septicaemia (A40 A41)	4.9	3.3	3.9	4.6	3.5	3.9
Human immunodeficiency virus (HIV) disease (B20–B24)(b)	1.6	0.1	0.9	1.3	0.1	0.7
Chapter II Neoplasms (C00–D48)	213.7	129.0	165.1	212.2	129.7	165.1
Malignant neoplasms (C00–C97)	209.5	126.4	161.9	208.3	127.1	162.0
Digestive organs (C15–C26)	58.7	34.5	45.6	59.1	34.1	45.5
Oesophagus (C15)	6.9	2.1	4.3	7.0	2.5	4.6
Stomach (C16)	8.0	3.2	5.4	7.5	3.5	5.3
Colon (C18)	18.2	13.2	15.5	17.7	12.2	14.6
Rectosigmoid junction, rectum, anus and anal canal (C19–C21)	8.1	4.1	5.9	8.5	4.3	6.2
Liver and intrahepatic bile ducts (C22)	5.3	1.9	3.4	5.3	1.9	3.5
Pancreas (C25)	8.9	6.9	7.9	9.5	6.5	7.9
Trachea, bronchus and lung (C33, C34)	47.5	19.4	31.9	46.5	19.9	31.8
Melanoma of skin (C43)	6.4	3.0	4.5	6.8	3.1	4.8
Breast (C50)	0.2	21.2	11.4	0.3	21.3	11.5
Female genital organs (C51–C58)	..	11.8	6.4	..	12.2	6.6
Ovary (C56)	..	6.5	3.5	..	6.8	3.7
Male genital organs (C60–C63)	29.0	..	11.8	28.3	..	11.5
Prostate (C61)	28.6	..	11.6	27.8	..	11.3
Urinary tract (C64–C68)	11.2	4.5	7.4	11.7	5.0	7.9
Kidney, except renal pelvis (C64)	4.8	2.4	3.5	4.9	2.7	3.7
Bladder (C67)	6.1	1.8	3.6	6.4	1.9	3.8
Brain (C71)	6.2	3.9	5.0	6.2	3.9	5.0
Lymphoid, haematopoietic and related tissue (C81–C96)	21.4	13.6	17.0	20.1	13.0	16.1
Leukaemia (C91–C95)	8.0	4.8	6.2	8.1	4.6	6.1
In situ and benign neoplasms and neoplasms of uncertain or unknown behaviour (D00–D48)	4.2	2.6	3.2	3.8	2.6	3.1
Chapter III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	2.0	1.6	1.8	1.9	1.6	1.7
Chapter IV Endocrine, nutritional and metabolic diseases (E00–E90)	22.4	15.2	18.4	22.5	14.8	18.3
Diabetes mellitus (E10–E14))	16.8	10.6	13.3	16.5	10.2	13.0
Chapter V Mental and behavioural disorders (F00–F99)	14.8	11.0	13.1	11.2	9.5	10.5
Organic, including symptomatic, mental disorders (F00–F09)	7.4	8.5	8.2	7.2	8.1	7.9
Class VI Disease of the nervous system (G00–G99)	19.6	15.5	17.4	19.4	15.8	17.4
Alzheimer's disease (G30)	5.0	6.7	6.2	5.2	6.4	6.0
Chapter VII Diseases of the eye and adnexa (H00–H59)	—	—	—	—	—	—
Chapter VIII Diseases of the ear and mastoid process (H60–H95)	—	—	—	—	—	—
Chapter IX Diseases of the circulatory system (I00–I99)	253.7	170.2	208.1	240.9	161.2	197.5
All heart disease (I05–I09, I11, I13, I20–I25, I26, I27, I30–I52)	182.6	110.6	143.1	173.2	104.8	135.9
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	1.1	1.3	1.2	0.8	1.2	1.1
Hypertensive diseases (I10–I15)	4.8	4.9	5.0	4.5	4.8	4.8
Ischaemic heart diseases (I20–I25)	149.0	82.8	112.5	141.2	78.0	106.5
Acute myocardial infarction (I21)	80.7	47.1	62.1	76.2	44.3	58.7
Pulmonary heart disease and diseases of pulmonary circulation and other forms of heart disease (I26–I52)	30.1	23.9	26.8	29.0	23.3	26.0
Heart failure (I50)	10.9	9.9	10.3	10.3	9.3	9.7
Cerebrovascular diseases (I60–I69)	53.2	47.6	50.5	50.0	44.8	47.4
Diseases of arteries, arterioles and capillaries (I70–I79)	14.2	8.5	11.0	14.2	7.9	10.5
Atherosclerosis (I70)	2.1	1.9	2.0	1.8	1.5	1.7
Aortic aneurysm and dissection (I71)	8.5	3.9	5.9	8.1	3.8	5.6

(a) Standardised death rate per 100,000 of the mid-year 1991 population.  
See Glossary for further explanation.

(b) See Explanatory Notes, paragraph 17 for further information.

**1.3 UNDERLYING CAUSE, Selected years—Standardised death rates(a) *continued***

Cause of death and ICD code	1991.....			1996.....		
	Males	Females	Persons	Males	Females	Persons
Chapter X Diseases of the respiratory system (J00–J99)	78.2	34.2	51.5	71.1	37.5	50.7
Influenza and pneumonia (J10–J18)	12.7	9.0	10.5	10.0	7.8	8.8
Chronic lower respiratory diseases (J40–J47)	56.3	20.9	34.8	51.0	24.3	34.7
Emphysema (J43)	7.7	2.4	4.5	7.4	2.9	4.8
Asthma and status asthmaticus (J45, J46)	4.4	4.3	4.3	3.5	3.8	3.7
Chapter XI Diseases of the digestive system (K00–K93)	28.9	18.9	23.5	23.9	15.2	19.3
Diseases of oesophagus, stomach and duodenum (K20–K31)	6.4	4.5	5.3	3.9	2.9	3.3
Gastric and duodenal ulcer (K25–K27)	5.1	3.8	4.4	2.9	2.2	2.5
Diseases of liver (K70–K77)	10.5	3.8	7.0	9.3	3.5	6.3
Chapter XII Diseases of the skin and subcutaneous tissue (L00–L99)	0.6	0.7	0.7	0.8	0.9	0.8
Chapter XIII Diseases of the musculoskeletal system and connective tissue (M00–M99)	2.9	4.5	3.8	2.9	4.6	3.9
Arthropathies and systemic connective tissue disorders (M00–M36)	1.8	3.5	2.8	1.8	3.2	2.6
Chapter XIV Diseases of the genitourinary system (N00–N99)	13.9	10.2	11.4	12.9	9.7	10.8
Renal failure (N17–N19)	7.5	5.1	5.9	9.0	6.0	7.1
Chapter XV Pregnancy, childbirth and the puerperium (O00–O99)	..	0.2	0.1	..	0.1	0.1
Chapter XVI Certain conditions originating in the perinatal period (P00–P96)	5.0	4.2	4.6	4.3	3.6	4.0
Chapter XVII Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	4.8	4.2	4.5	3.9	3.4	3.6
Congenital malformations of the circulatory system (Q20–Q28)	1.7	1.4	1.6	1.5	1.3	1.4
Chapter XVIII Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	4.7	2.9	3.8	3.2	2.4	2.8
Chapter XX External causes of morbidity and mortality (V01–Y98)	64.8	24.9	44.6	61.2	20.6	40.5
Accidents (V01–X59)	39.2	16.6	27.7	36.2	14.1	25.0
Transport accidents (V01–V99)	21.3	8.0	14.6	18.2	6.2	12.1
Falls (W00–W19)	3.6	1.8	2.6	3.4	1.4	2.3
Accidental drowning and submersion (W65–W74)	2.4	0.7	1.6	2.1	0.6	1.4
Intentional self-harm (X60–X84)	21.7	5.9	13.7	21.3	4.9	13.0
Hanging, strangulation and suffocation (X70)	5.7	1.2	3.4	7.5	1.3	4.3
Assault (X85–Y09)	2.4	1.7	2.0	2.5	1.1	1.8

(a) Standardised death rate per 100,000 of the mid-year 1991 population.

See Glossary for further explanation.

**1.3 UNDERLYING CAUSE, Selected years—Standardised death rates(a) *continued***

Cause of death and ICD code	2000.....			2001.....		
	Males	Females	Persons	Males	Females	Persons
Chapter X Diseases of the respiratory system (J00–J99)	63.8	35.0	46.5	58.8	33.7	43.8
Influenza and pneumonia (J10–J18)	14.4	10.0	11.7	12.3	9.1	10.4
Chronic lower respiratory diseases (J40–J47)	37.6	18.8	26.3	35.0	18.8	25.2
Emphysema (J43)	5.2	1.9	3.2	4.2	2.1	2.9
Asthma and status asthmaticus (J45 ,J46)	1.8	2.4	2.1	1.8	1.9	1.9
Chapter XI Diseases of the digestive system (K00–K93)	21.4	14.6	17.8	20.4	13.9	17.0
Diseases of oesophagus, stomach and duodenum (K20–K31)	3.5	2.4	2.9	3.1	2.1	2.5
Gastric and duodenal ulcer (K25–K27)	2.5	1.7	2.0	2.1	1.5	1.8
Diseases of liver (K70–K77)	8.0	3.1	5.4	7.9	3.1	5.4
Chapter XII Diseases of the skin and subcutaneous tissue (L00–L99)	1.1	1.0	1.0	1.1	1.0	1.0
Chapter XIII Diseases of the musculoskeletal system and connective tissue (M00–M99)	3.0	4.2	3.7	2.9	4.2	3.7
Arthropathies and systemic connective tissue disorders (M00–M36)	2.0	3.0	2.5	1.9	2.8	2.4
Chapter XIV Diseases of the genitourinary system (N00–N99)	13.0	10.0	11.1	12.9	9.8	11.0
Renal failure (N17–N19)	8.8	5.9	7.0	8.4	5.4	6.5
Chapter XV Pregnancy, childbirth and the puerperium (O00–O99)	..	0.2	0.1	..	0.1	0.1
Chapter XVI Certain conditions originating in the perinatal period (P00–P96)	4.0	3.3	3.7	4.4	3.3	3.9
Chapter XVII Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	3.6	3.1	3.3	3.6	3.0	3.3
Congenital malformations of the circulatory system (Q20–Q28)	1.3	1.1	1.2	1.3	1.0	1.1
Chapter XVIII Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	3.8	2.5	3.2	2.8	2.0	2.4
Chapter XX External causes of morbidity and mortality (V01–Y98)	58.8	22.8	40.5	56.9	20.6	38.4
Accidents (V01–X59)	35.5	15.4	25.3	33.2	13.5	23.1
Transport accidents (V01–V99)	15.7	5.7	10.6	15.9	5.0	10.4
Falls (W00–W19)	3.3	1.8	2.5	3.6	1.9	2.7
Accidental drowning and submersion (W65–W74)	1.9	0.5	1.2	2.2	0.5	1.3
Intentional self-harm (X60–X84)	19.6	5.1	12.2	20.1	5.1	12.5
Hanging, strangulation and suffocation (X70)	8.7	1.9	5.2	9.1	2.0	5.5
Assault (X85–Y09)	2.1	1.2	1.7	2.0	1.1	1.6

(a) Standardised death rate per 100,000 of the mid-year 1991 population.

See Glossary for further explanation.

**1.4 UNDERLYING CAUSE, Age and state or territory of usual residence**

Cause of death and ICD code	NSW.....		Vic. .....		Qld.....		SA.....	
	Males	Females	Males	Females	Males	Females	Males	Females
<b>Under 1 year</b>	<b>251</b>	<b>198</b>	<b>166</b>	<b>118</b>	<b>164</b>	<b>118</b>	<b>36</b>	<b>43</b>
Certain conditions originating in the perinatal period (P00–P96)	143	100	91	68	86	58	17	24
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	58	48	49	35	37	28	9	16
Sudden infant death syndrome (R95)	18	14	11	4	16	13	3	—
<b>1–14 years</b>	<b>110</b>	<b>82</b>	<b>61</b>	<b>57</b>	<b>93</b>	<b>51</b>	<b>23</b>	<b>19</b>
Malignant neoplasms (C00–C97)	25	16	15	8	13	8	4	2
Diseases of the nervous system (G00–G99)	7	8	6	8	9	7	1	6
Diseases of the circulatory system (I00–I99)	8	4	1	5	4	6	1	—
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	9	14	1	4	7	5	—	1
External causes of morbidity and mortality (V01–Y98)	43	25	27	16	40	19	13	6
<b>15–24 years</b>	<b>339</b>	<b>133</b>	<b>243</b>	<b>82</b>	<b>254</b>	<b>78</b>	<b>74</b>	<b>21</b>
Malignant neoplasms (C00–C97)	29	21	11	9	9	6	12	4
Mental and behavioural disorders due to psychoactive substance use (F10–F19)	9	2	5	2	3	1	1	—
Diseases of the nervous system (G00–G99)	14	8	13	8	9	2	1	—
External causes of morbidity and mortality (V01–Y98)	251	71	191	48	209	48	57	15
Transport accidents (V01–V99)	119	34	98	21	88	20	22	7
Intentional self-harm (X60–X84)	75	18	51	16	70	13	27	4
<b>25–34 years</b>	<b>517</b>	<b>171</b>	<b>364</b>	<b>165</b>	<b>318</b>	<b>114</b>	<b>127</b>	<b>46</b>
Malignant neoplasms (C00–C97)	49	31	31	45	24	24	15	8
Mental and behavioural disorders due to psychoactive substance use (F10–F19)	24	7	10	4	9	1	3	2
Diseases of the circulatory system (I00–I99)	45	19	23	9	26	16	8	5
Diseases of the digestive system (K00–K93)	4	4	1	1	2	4	—	—
External causes of morbidity and mortality (V01–Y98)	344	75	258	70	224	43	86	20
Transport accidents (V01–V99)	95	20	76	15	60	6	22	9
Intentional self-harm (X60–X84)	138	31	112	34	91	21	38	4
<b>35–44 years</b>	<b>733</b>	<b>423</b>	<b>518</b>	<b>278</b>	<b>449</b>	<b>264</b>	<b>198</b>	<b>126</b>
Malignant neoplasms (C00–C97)	138	196	122	133	89	111	46	50
Mental and behavioural disorders due to psychoactive substance use (F10–F19)	26	8	9	3	10	2	1	—
Diseases of the circulatory system (I00–I99)	134	56	87	27	81	50	27	17
Diseases of the digestive system (K00–K93)	39	8	21	9	19	14	7	5
External causes of morbidity and mortality (V01–Y98)	295	85	194	63	193	54	90	31
Transport accidents (V01–V99)	49	19	48	13	47	18	21	5
Intentional self-harm (X60–X84)	137	35	95	30	87	16	50	13
<b>45–54 years</b>	<b>1 386</b>	<b>799</b>	<b>905</b>	<b>654</b>	<b>840</b>	<b>498</b>	<b>314</b>	<b>199</b>
Malignant neoplasms (C00–C97)	465	443	334	399	298	264	96	118
Trachea, bronchus and lung (C33, C34)	86	64	55	46	57	38	18	17
Breast (C50)	—	137	1	123	1	88	—	30
Diseases of the circulatory system (I00–I99)	396	121	260	79	219	78	85	25
Ischaemic heart diseases (I20–I25)	273	48	176	33	163	35	59	13
Cerebrovascular diseases (I60–I69)	37	38	39	18	29	21	8	6
Diseases of the respiratory system (J00–J99)	33	29	24	19	27	19	12	8
Disease of the digestive system (K00–K93)	77	22	41	23	39	24	22	4
External causes of morbidity and mortality (V01–Y98)	258	89	136	59	171	57	61	18
Transport accidents (V01–V99)	48	22	44	11	42	19	14	4
Intentional self-harm (X60–X84)	121	37	57	24	69	20	28	8

**1.4 UNDERLYING CAUSE, Age and state or territory of usual residence *continued***

Cause of death and ICD code	WA.....		Tas.....		NT.....		ACT.....	
	Males	Females	Males	Females	Males	Females	Males	Females
<b>Under 1 year</b>	<b>73</b>	<b>49</b>	<b>22</b>	<b>18</b>	<b>30</b>	<b>11</b>	<b>9</b>	<b>3</b>
Certain conditions originating in the perinatal period (P00–P96)	26	22	8	6	19	5	2	2
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	21	7	5	8	5	3	2	1
Sudden infant death syndrome (R95)	7	6	2	2	2	1	2	—
<b>1–14 years</b>	<b>52</b>	<b>17</b>	<b>9</b>	<b>3</b>	<b>6</b>	<b>11</b>	<b>5</b>	<b>3</b>
Malignant neoplasms (C00–C97)	10	4	3	2	1	3	1	1
Diseases of the nervous system (G00–G99)	2	1	1	—	—	2	2	—
Diseases of the circulatory system (I00–I99)	2	1	—	—	1	1	—	—
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	7	—	1	—	—	—	1	1
External causes of morbidity and mortality (V01–Y98)	20	10	3	—	3	4	1	1
<b>15–24 years</b>	<b>136</b>	<b>44</b>	<b>27</b>	<b>12</b>	<b>32</b>	<b>12</b>	<b>17</b>	<b>6</b>
Malignant neoplasms (C00–C97)	6	6	1	1	1	—	—	—
Mental and behavioural disorders due to psychoactive substance use (F10–F19)	—	—	—	—	2	1	—	—
Diseases of the nervous system (G00–G99)	3	—	1	1	2	—	3	—
External causes of morbidity and mortality (V01–Y98)	117	32	20	7	25	8	11	5
Transport accidents (V01–V99)	58	13	9	3	10	2	1	1
Intentional self-harm (X60–X84)	39	5	2	2	8	2	4	3
<b>25–34 years</b>	<b>176</b>	<b>74</b>	<b>46</b>	<b>10</b>	<b>60</b>	<b>15</b>	<b>33</b>	<b>11</b>
Malignant neoplasms (C00–C97)	11	20	2	1	—	—	2	3
Mental and behavioural disorders due to psychoactive substance use (F10–F19)	2	3	—	—	—	—	1	—
Diseases of the circulatory system (I00–I99)	15	7	3	—	14	3	3	—
Diseases of the digestive system (K00–K93)	1	2	1	—	3	1	1	—
External causes of morbidity and mortality (V01–Y98)	129	33	32	8	38	6	24	4
Transport accidents (V01–V99)	30	5	9	1	7	3	9	2
Intentional self-harm (X60–X84)	61	13	17	4	18	—	11	1
<b>35–44 years</b>	<b>232</b>	<b>141</b>	<b>51</b>	<b>36</b>	<b>71</b>	<b>32</b>	<b>28</b>	<b>12</b>
Malignant neoplasms (C00–C97)	29	46	5	16	7	3	4	2
Mental and behavioural disorders due to psychoactive substance use (F10–F19)	7	2	—	—	1	—	1	—
Diseases of the circulatory system (I00–I99)	36	20	7	5	22	6	5	3
Diseases of the digestive system (K00–K93)	9	8	3	1	3	3	1	1
External causes of morbidity and mortality (V01–Y98)	111	43	27	7	22	9	14	6
Transport accidents (V01–V99)	28	12	3	3	7	2	1	1
Intentional self-harm (X60–X84)	52	18	14	—	4	1	8	5
<b>45–54 years</b>	<b>351</b>	<b>235</b>	<b>118</b>	<b>86</b>	<b>69</b>	<b>44</b>	<b>66</b>	<b>45</b>
Malignant neoplasms (C00–C97)	130	139	40	39	12	17	25	30
Trachea, bronchus and lung (C33, C34)	27	13	6	6	1	4	6	1
Breast (C50)	—	45	—	13	—	3	—	8
Diseases of the circulatory system (I00–I99)	87	23	31	9	25	8	20	7
Ischaemic heart diseases (I20–I25)	61	10	18	4	18	6	10	2
Cerebrovascular diseases (I60–I69)	9	9	5	2	2	—	4	1
Diseases of the respiratory system (J00–J99)	9	10	6	7	1	3	—	1
Disease of the digestive system (K00–K93)	17	9	10	6	7	2	5	1
External causes of morbidity and mortality (V01–Y98)	61	22	21	14	9	5	9	4
Transport accidents (V01–V99)	16	2	8	4	3	4	2	—
Intentional self-harm (X60–X84)	23	12	5	3	4	—	4	2

**1.4 UNDERLYING CAUSE, Age and state or territory of usual residence *continued***

Cause of death and ICD code	NSW.....		Vic.....		Qld.....		SA.....	
	Males	Females	Males	Females	Males	Females	Males	Females
<b>55–64 years</b>								
Malignant neoplasms (C00–C97)	<b>2 618</b>	<b>1 450</b>	<b>1 725</b>	<b>1 010</b>	<b>1 487</b>	<b>792</b>	<b>609</b>	<b>353</b>
Digestive organs (C15–C26)	1 148	795	826	577	658	413	291	195
Trachea, bronchus and lung (C33, C34)	356	188	273	132	221	96	94	46
Breast (C50)	304	153	218	99	157	77	60	27
Female genital organs (C51–C58)	3	156	-	118	1	93	1	47
Male genital organs (C60–C63)								
Diseases of the circulatory system (I00–I99)	825	280	490	176	443	170	180	70
Ischaemic heart diseases (I20–I25)	572	156	322	75	325	90	114	31
Cerebrovascular diseases (I60–I69)	106	53	77	54	45	39	22	22
Diseases of the respiratory system (J00–J99)	124	112	80	61	71	46	30	29
Diseases of the digestive system (K00–K93)	120	52	64	30	62	23	33	17
External causes of morbidity and mortality (V01–Y98)	151	53	92	48	114	43	33	10
<b>65–74 years</b>								
Malignant neoplasms (C00–C97)	<b>5 187</b>	<b>3 160</b>	<b>3 613</b>	<b>2 254</b>	<b>2 618</b>	<b>1 582</b>	<b>1 282</b>	<b>792</b>
Digestive organs (C15–C26)	2 150	1 336	1 583	987	1 140	694	511	348
Trachea, bronchus and lung (C33, C34)	599	343	488	274	344	188	150	104
Breast (C50)	581	248	424	208	305	151	132	56
Female genital organs (C51–C58)	3	199	1	128	2	96	1	52
Male genital organs (C60–C63)	..	126	..	95	..	52	..	39
Endocrine, nutritional and metabolic diseases (E00–E90)	173	85	165	119	98	68	47	37
Diseases of the circulatory system (I00–I99)	1 749	1 004	1 129	627	845	455	444	239
Ischaemic heart diseases (I20–I25)	1 114	516	719	334	597	271	301	129
Cerebrovascular diseases (I60–I69)	314	242	198	151	136	103	68	62
Diseases of the respiratory system (J00–J99)	462	298	304	217	213	149	123	65
Chronic lower respiratory diseases (J40–J47)	320	224	228	161	162	110	82	51
Diseases of the digestive system (K00–K93)	163	87	97	59	72	46	41	24
<b>75–84 years</b>								
Malignant neoplasms (C00–C97)	<b>7 593</b>	<b>6 699</b>	<b>5 417</b>	<b>4 852</b>	<b>3 738</b>	<b>3 120</b>	<b>2 040</b>	<b>1 931</b>
Digestive organs (C15–C26)	2 383	1 656	1 643	1 405	1 131	742	621	464
Trachea, bronchus and lung (C33, C34)	618	497	460	442	289	232	180	138
Breast (C50)	532	262	340	223	257	93	128	83
Female genital organs (C51–C58)	2	196	3	151	1	96	2	45
Male genital organs (C60–C63)	..	128	..	136	..	70	..	39
Prostate (C61)	436	..	301	..	231	..	109	..
Diabetes mellitus (E10–E14)	431	..	299	..	230	..	109	..
Mental and behavioural disorders (F00–F99)	165	135	184	183	84	73	53	58
Diseases of the nervous system (G00–G99)	111	140	115	100	44	45	23	54
Diseases of the circulatory system (I00–I99)	232	258	168	180	106	101	42	52
Ischaemic heart diseases (I20–I25)	3 056	3 048	2 103	1 982	1 573	1 458	809	845
Acute myocardial infarction (I21)	1 650	1 434	1 221	1 003	920	765	503	435
Cerebrovascular diseases (I60–I69)	870	826	664	592	500	468	301	278
Diseases of arteries, arterioles and capillaries (I70–I79)	765	907	445	544	361	401	153	240
Diseases of the respiratory system (J00–J99)	209	146	125	103	114	71	46	44
Chronic lower respiratory diseases (J40–J47)	823	579	596	387	397	288	248	201
Diseases of the digestive system (K00–K93)	508	337	400	241	252	167	114	69
External causes of morbidity and mortality (V01–Y98)	198	205	172	157	97	105	57	56

**1.4 UNDERLYING CAUSE, Age and state or territory of usual residence *continued***

Cause of death and ICD code	WA.....		Tas.....		NT.....		ACT.....	
	Males	Females	Males	Females	Males	Females	Males	Females
<b>55–64 years</b>								
Malignant neoplasms (C00–C97)	<b>657</b>	<b>339</b>	<b>222</b>	<b>141</b>	<b>96</b>	<b>53</b>	<b>100</b>	<b>71</b>
Digestive organs (C15–C26)	294	193	85	73	36	16	45	43
Trachea, bronchus and lung (C33, C34)	104	41	21	14	9	4	9	9
Breast (C50)	76	29	24	22	12	5	8	7
Ischaemic heart diseases (I20–I25)	1	42	—	13	—	1	—	11
Cerebrovascular diseases (I60–I69)	196	62	65	18	25	13	29	9
Diseases of the circulatory system (I00–I99)	146	40	47	12	19	7	19	4
Diseases of the respiratory system (J00–J99)	22	12	10	1	4	1	5	2
Diseases of the digestive system (K00–K93)	31	19	13	15	14	5	6	5
External causes of morbidity and mortality (V01–Y98)	24	12	8	7	3	3	5	3
	35	7	20	6	8	2	6	3
<b>65–74 years</b>								
Malignant neoplasms (C00–C97)	<b>1 206</b>	<b>716</b>	<b>424</b>	<b>298</b>	<b>94</b>	<b>47</b>	<b>146</b>	<b>86</b>
Digestive organs (C15–C26)	537	314	176	118	27	16	66	43
Trachea, bronchus and lung (C33, C34)	169	78	45	35	8	4	20	13
Breast (C50)	150	66	52	19	7	5	17	4
Female genital organs (C51–C58)	—	57	—	15	—	2	—	8
Male genital organs (C60–C63)	..	25	..	9	..	—	..	5
Endocrine, nutritional and metabolic diseases (E00–E90)	44	..	21	..	3	..	8	..
Diseases of the circulatory system (I00–I99)	64	39	11	11	6	8	7	1
Ischaemic heart diseases (I20–I25)	355	190	151	81	29	16	47	14
Cerebrovascular diseases (I60–I69)	245	96	92	44	20	10	34	7
Diseases of the respiratory system (J00–J99)	59	44	26	22	5	2	4	3
Chronic lower respiratory diseases (J40–J47)	95	51	44	40	14	2	12	12
Diseases of the digestive system (K00–K93)	61	35	35	33	12	2	10	9
	34	32	7	10	1	—	2	4
<b>75–84 years</b>								
Malignant neoplasms (C00–C97)	<b>1 690</b>	<b>1 507</b>	<b>648</b>	<b>607</b>	<b>65</b>	<b>59</b>	<b>202</b>	<b>205</b>
Digestive organs (C15–C26)	547	389	186	149	17	8	69	49
Trachea, bronchus and lung (C33, C34)	156	110	45	50	3	4	21	19
Breast (C50)	117	62	50	28	5	—	11	5
Female genital organs (C51–C58)	—	53	1	17	—	—	—	4
Male genital organs (C60–C63)	..	41	..	6	..	—	..	4
Prostate (C61)	88	..	31	..	2	..	10	..
Diabetes mellitus (E10–E14)	88	..	31	..	2	..	10	..
Mental and behavioural disorders (F00–F99)	53	47	25	23	2	4	6	6
Diseases of the nervous system (G00–G99)	27	31	10	16	—	—	1	1
Diseases of the circulatory system (I00–I99)	61	64	22	22	3	2	8	7
Ischaemic heart diseases (I20–I25)	638	649	258	281	24	23	78	95
Acute myocardial infarction (I21)	357	331	142	127	11	11	48	42
Cerebrovascular diseases (I60–I69)	209	221	79	77	4	4	27	22
Diseases of arteries, arterioles and capillaries (I70–I79)	141	168	55	86	3	5	12	32
Diseases of the respiratory system (J00–J99)	49	48	19	19	2	1	9	4
Chronic lower respiratory diseases (J40–J47)	173	115	72	53	12	7	24	17
Diseases of the digestive system (K00–K93)	94	75	49	38	10	6	14	10
	52	61	12	16	3	4	5	8

**1.4 UNDERLYING CAUSE, Age and state or territory of usual residence *continued***

Cause of death and ICD code	NSW.....		Vic.....		Qld.....		SA.....	
	Males	Females	Males	Females	Males	Females	Males	Females
<b>85 years and over</b>								
Malignant neoplasms (C00–C97)	<b>4 452</b>	<b>8 245</b>	<b>3 420</b>	<b>6 387</b>	<b>2 291</b>	<b>3 987</b>	<b>1 320</b>	<b>2 338</b>
Digestive organs (C15–C26)	874	909	644	735	402	450	247	269
Female genital organs (C51–C58)	211	297	162	279	94	177	62	87
Male genital organs (C60–C63)	..	77	..	58	..	30	..	21
Diabetes mellitus (E10–E14)	237	..	190	..	105	..	75	..
90	134	97	154	47	81	29	30	
Mental and behavioural disorders (F00–F99)	122	314	112	359	55	158	28	101
Diseases of the circulatory system (I00–I99)	<b>2 116</b>	<b>4 772</b>	<b>1 616</b>	<b>3 396</b>	<b>1 186</b>	<b>2 299</b>	<b>642</b>	<b>1 267</b>
Ischaemic heart diseases (I20–I25)	1 022	2 171	830	1 511	657	1 125	357	597
Cerebrovascular diseases (I60–I69)	574	1 421	401	988	300	717	148	370
Diseases of arteries, arterioles and capillaries (I70–I79)	131	204	104	161	71	110	36	54
Diseases of the respiratory system (J00–J99)	499	624	393	506	232	311	189	274
Chronic lower respiratory diseases (J40–J47)	218	215	228	178	112	89	58	52
Diseases of the digestive system (K00–K93)	132	291	87	259	63	142	33	83
Diseases of the genitourinary system (N00–N99)	137	253	133	229	80	128	53	91
<b>All ages(a)</b>								
Chapter I Certain infectious and parasitic diseases (A00–B99)	<b>23 192</b>	<b>21 360</b>	<b>16 437</b>	<b>15 858</b>	<b>12 252</b>	<b>10 604</b>	<b>6 023</b>	<b>5 868</b>
364	304	188	193	136	114	81	84	
Chapter II Neoplasms (C00–D48)	7 383	5 526	5 314	4 407	3 828	2 771	1 874	1 497
Malignant neoplasms (C00–C97)	7 261	5 404	5 210	4 298	3 765	2 712	1 843	1 458
Trachea, bronchus and lung (C33, C34)	1 633	820	1 147	645	862	399	383	215
Melanoma of skin (C43)	283	158	130	79	149	69	50	22
Breast (C50)	8	872	7	658	6	474	4	233
Female genital organs (C51–C58)	..	511	..	422	..	237	..	146
Male genital organs (C60–C63)	960	..	710	..	516	..	265	..
Chapter III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	66	84	52	47	30	39	14	23
Chapter IV Endocrine, nutritional and metabolic diseases (E00–E90)	658	587	650	639	388	337	190	205
Diabetes mellitus (E10–E14)	475	361	495	474	272	237	139	124
Chapter V Mental and behavioural disorders (F00–F99)	389	519	304	505	165	223	72	163
Chapter VI Diseases of the nervous system (G00–G99)	671	821	492	635	317	349	133	169
Chapter VII Diseases of the eye and adnexa (H00–H59)	2	1	—	—	—	—	—	—
Chapter VIII Diseases of the ear and mastoid process (H60–H95)	—	2	1	—	2	1	—	1
Chapter IX Diseases of the circulatory system (I00–I99)	8 348	9 312	5 721	6 306	4 384	4 535	2 197	2 468
All heart disease (I05–I09, I11, I13, I20–I25, I26, I27, I30–I52)	5 909	5 967	4 126	4 095	3 195	2 943	1 646	1 613
Ischaemic heart diseases (I20–I25)	4 752	4 341	3 332	2 963	2 727	2 313	1 356	1 211
Acute myocardial infarction (I21)	2 506	2 373	1 760	1 644	1 499	1 317	774	753
Cerebrovascular diseases (I60–I69)	1 814	2 684	1 180	1 769	891	1 293	402	705
Chapter X Diseases of the respiratory system (J00–J99)	1 981	1 673	1 422	1 212	969	834	608	588
Influenza and pneumonia (J10–J18)	374	442	246	349	204	260	203	297
Chronic lower respiratory diseases (J40–J47)	1 161	888	938	652	605	423	281	209
Chapter XI Diseases of the digestive system (K00–K93)	736	674	484	538	356	359	193	189
Diseases of liver (K70–K77)	328	115	174	87	136	68	86	38
Chapter XII Diseases of the skin and subcutaneous tissue (L00–L99)	45	68	25	37	18	25	11	12
Chapter XIII Diseases of the musculoskeletal system and connective tissue (M00–M99)	93	195	77	179	53	95	23	49
Chapter XIV Diseases of the genitourinary system (N00–N99)	375	529	343	411	225	267	143	162
Chapter XV Pregnancy, childbirth and the puerperium (O00–O99)	..	5	..	1	..	2	..	1
Chapter XVI Certain conditions originating in the perinatal period (P00–P96)	145	100	91	68	87	59	17	24
Chapter XVII Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	107	99	74	60	71	65	24	21
Chapter XVIII Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	61	73	42	50	51	55	19	20
Chapter XX External causes of morbidity and mortality (V01–Y98)	1 768	788	1 157	570	1 172	474	424	192
Transport accidents (V01–V99)	438	158	359	133	331	98	119	41
Falls (W00–W19)	149	101	50	43	84	67	18	13
Intentional self-harm (X60–X84)	613	172	412	129	406	93	168	39

(a) Including age not stated.

**1.4 UNDERLYING CAUSE, Age and state or territory of usual residence *continued***

Cause of death and ICD code	WA.....		Tas.....		NT.....		ACT.....	
	Males	Females	Males	Females	Males	Females	Males	Females
<b>85 years and over</b>								
Malignant neoplasms (C00–C97)	<b>1 124</b>	<b>1 959</b>	<b>383</b>	<b>712</b>	<b>27</b>	<b>38</b>	<b>123</b>	<b>248</b>
Digestive organs (C15–C26)	202	252	72	89	2	5	22	34
Female genital organs (C51–C58)	42	86	22	46	1	2	6	9
Male genital organs (C60–C63)	..	23	..	2	..	—	..	3
Diabetes mellitus (E10–E14)	43	..	20	..	1	..	5	..
Mental and behavioural disorders (F00–F99)	27	39	7	17	1	3	2	5
Diseases of the circulatory system (I00–I99)	34	107	8	24	2	2	5	6
Ischaemic heart diseases (I20–I25)	529	1 005	183	390	11	16	53	143
Cerebrovascular diseases (I60–I69)	276	464	90	189	6	9	19	68
Diseases of arteries, arterioles and capillaries (I70–I79)	125	289	43	108	2	4	13	39
Diseases of the respiratory system (J00–J99)	33	54	18	27	—	2	8	12
Chronic lower respiratory diseases (J40–J47)	119	150	49	40	3	1	17	20
Diseases of the digestive system (K00–K93)	54	34	27	17	2	1	8	8
Diseases of the genitourinary system (N00–N99)	30	64	9	26	3	—	5	8
All ages(a)	<b>5 697</b>	<b>5 082</b>	<b>1 952</b>	<b>1 924</b>	<b>550</b>	<b>322</b>	<b>729</b>	<b>690</b>
Chapter I Certain infectious and parasitic diseases (A00–B99)	70	62	24	15	15	9	9	7
Chapter II Neoplasms (C00–D48)	<b>1 797</b>	<b>1 384</b>	<b>583</b>	<b>506</b>	<b>106</b>	<b>71</b>	<b>240</b>	<b>209</b>
Malignant neoplasms (C00–C97)	1 766	1 364	570	488	103	68	234	205
Trachea, bronchus and lung (C33, C34)	409	201	137	81	26	15	45	20
Melanoma of skin (C43)	54	43	11	9	3	1	6	2
Breast (C50)	1	236	1	69	—	7	—	36
Female genital organs (C51–C58)	..	139	..	25	..	6	..	20
Male genital organs (C60–C63)	186	..	81	..	8	..	27	..
Chapter III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	13	21	2	9	5	2	1	—
Chapter IV Endocrine, nutritional and metabolic diseases (E00–E90)	<b>219</b>	<b>193</b>	<b>71</b>	<b>76</b>	<b>24</b>	<b>35</b>	<b>23</b>	<b>19</b>
Diabetes mellitus (E10–E14)	171	139	51	58	17	29	19	17
Chapter V Mental and behavioural disorders (F00–F99)	99	161	27	44	8	5	9	11
Chapter VI Diseases of the nervous system (G00–G99)	<b>187</b>	<b>241</b>	<b>55</b>	<b>65</b>	<b>12</b>	<b>10</b>	<b>27</b>	<b>20</b>
Chapter VII Diseases of the eye and adnexa (H00–H59)	—	—	—	—	—	—	—	—
Chapter VIII Diseases of the ear and mastoid process (H60–H95)	—	—	—	—	—	—	—	—
Chapter IX Diseases of the circulatory system (I00–I99)	<b>1 860</b>	<b>1 961</b>	<b>701</b>	<b>784</b>	<b>153</b>	<b>86</b>	<b>236</b>	<b>271</b>
All heart disease (I05–I09, I11, I13, I20–I25, I26, I27, I30–I52)	1 359	1 279	497	494	123	59	172	169
Ischaemic heart diseases (I20–I25)	1 116	954	397	377	93	44	133	124
Acute myocardial infarction (I21)	605	568	214	212	49	22	77	69
Cerebrovascular diseases (I60–I69)	363	529	142	221	18	15	41	78
Chapter X Diseases of the respiratory system (J00–J99)	<b>444</b>	<b>361</b>	<b>189</b>	<b>156</b>	<b>52</b>	<b>22</b>	<b>60</b>	<b>55</b>
Influenza and pneumonia (J10–J18)	101	129	31	28	13	4	12	9
Chronic lower respiratory diseases (J40–J47)	240	170	125	105	32	17	37	33
Chapter XI Diseases of the digestive system (K00–K93)	<b>169</b>	<b>188</b>	<b>50</b>	<b>66</b>	<b>24</b>	<b>14</b>	<b>24</b>	<b>25</b>
Diseases of liver (K70–K77)	50	41	21	14	14	7	13	4
Chapter XII Diseases of the skin and subcutaneous tissue (L00–L99)	7	13	—	2	—	—	—	2
Chapter XIII Diseases of the musculoskeletal system and connective tissue (M00–M99)	29	62	7	22	1	2	2	7
Chapter XIV Diseases of the genitourinary system (N00–N99)	<b>104</b>	<b>113</b>	<b>38</b>	<b>51</b>	<b>8</b>	<b>14</b>	<b>6</b>	<b>23</b>
Chapter XV Pregnancy, childbirth and the puerperium (O00–O99)	..	2	..	1	..	—	..	—
Chapter XVI Certain conditions originating in the perinatal period (P00–P96)	26	22	8	6	19	5	2	2
Chapter XVII Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	39	13	9	11	5	4	6	6
Chapter XVIII Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	62	34	27	25	5	3	5	3
Chapter XX External causes of morbidity and mortality (V01–Y98)	<b>572</b>	<b>251</b>	<b>161</b>	<b>85</b>	<b>113</b>	<b>40</b>	<b>79</b>	<b>30</b>
Transport accidents (V01–V99)	156	43	45	15	31	16	16	5
Falls (W00–W19)	25	30	14	19	6	5	8	2
Intentional self-harm (X60–X84)	212	57	51	13	39	4	34	12

(a) Including age not stated.

**1.5 UNDERLYING CAUSE, Standardised death rates(a)**

Cause of death and ICD code	NSW	Vic.	Qld	SA
1991				
<b>All causes</b>	<b>695.2</b>	<b>687.4</b>	<b>674.7</b>	<b>692.3</b>
Malignant neoplasms (C00–C97)	177.3	191.7	174.6	180.2
Trachea, bronchus and lung (C33, C34)	35.7	37.6	33.7	37.3
Diabetes mellitus (E10–E14)	11.2	17.2	12.2	12.7
Mental and behavioural disorders (F00–F99)	11.3	12.6	10.1	8.6
Diseases of the nervous system (G00–G99)	13.8	13.9	12.1	12.4
Diseases of the circulatory system (I00–I99)	317.9	294.3	301.6	320.2
Ischaemic heart disease (I20–I25)	180.2	167.4	176.4	185.6
Acute myocardial infarction (I21)	120.0	106.7	119.4	129.3
Cerebrovascular diseases (I60–I69)	74.7	63.2	68.7	71.9
Diseases of arteries, arterioles and capillaries (I70–I79)	16.1	17.5	16.6	18.4
Diseases of the respiratory system (J00–J99)	51.2	50.4	48.1	52.7
Influenza and pneumonia (J10–J18)	7.6	7.7	10.6	20.1
Chronic lower respiratory diseases (J40–J47)	36.0	37.0	32.8	27.4
Diseases of the digestive system (K00–K93)	23.6	23.2	23.2	24.8
Accidents (V01–X59)	26.0	26.1	29.6	27.4
Transport accidents (V01–V99)	12.9	14.1	15.7	16.0
Intentional self-harm (X60–X84)	13.0	13.6	14.5	15.8
2001				
<b>All causes</b>	<b>537.7</b>	<b>529.6</b>	<b>553.4</b>	<b>554.5</b>
Malignant neoplasms (C00–C97)	159.9	164.7	162.5	164.0
Trachea, bronchus and lung (C33, C34)	31.7	31.9	32.3	29.9
Diabetes mellitus (E10–E14)	10.0	15.9	12.3	12.1
Mental and behavioural disorders (F00–F99)	10.4	11.9	8.8	9.7
Diseases of the nervous system (G00–G99)	17.6	18.1	15.9	14.6
Diseases of the circulatory system (I00–I99)	202.2	185.9	206.7	201.9
Ischaemic heart disease (I20–I25)	105.7	98.8	118.2	112.7
Acute myocardial infarction (I21)	56.7	53.3	66.1	67.0
Cerebrovascular diseases (I60–I69)	50.1	44.5	49.4	46.4
Diseases of arteries, arterioles and capillaries (I70–I79)	10.6	9.6	10.8	9.7
Diseases of the respiratory system (J00–J99)	43.1	42.0	43.1	52.2
Influenza and pneumonia (J10–J18)	9.1	8.7	10.4	20.0
Chronic lower respiratory diseases (J40–J47)	24.9	26.1	25.4	23.1
Diseases of the digestive system (K00–K93)	16.9	16.3	17.1	18.0
Accidents (V01–X59)	22.0	20.1	26.9	21.3
Transport accidents (V01–V99)	9.1	10.2	12.0	10.6
Intentional self-harm (X60–X84)	11.5	11.0	13.8	13.7

(a) Standardised death rate per 100,000 of the mid-year 1991 population.

See Glossary for further explanation.

**1.5 UNDERLYING CAUSE, Standardised death rates(a) *continued***

Cause of death and ICD code	WA	Tas.	NT	ACT
1991				
<b>All causes</b>	<b>649.4</b>	<b>765.6</b>	<b>1 105.9</b>	<b>635.0</b>
Malignant neoplasms (C00–C97)	174.1	186.9	213.8	183.9
Trachea, bronchus and lung (C33, C34)	39.0	35.9	60.8	30.5
Diabetes mellitus (E10–E14)	12.0	12.8	31.4	8.2
Mental and behavioural disorders (F00–F99)	9.0	10.8	2.2	6.3
Diseases of the nervous system (G00–G99)	15.2	16.3	10.0	9.9
Diseases of the circulatory system (I00–I99)	283.7	332.8	341.3	271.9
Ischaemic heart disease (I20–I25)	165.7	181.8	152.0	153.1
Acute myocardial infarction (I21)	102.2	125.3	96.7	95.6
Cerebrovascular diseases (I60–I69)	59.3	71.0	52.1	51.8
Diseases of arteries, arterioles and capillaries (I70–I79)	17.4	26.9	13.6	22.7
Diseases of the respiratory system (J00–J99)	48.5	72.8	194.2	52.3
Influenza and pneumonia (J10–J18)	11.7	24.5	66.5	22.9
Chronic lower respiratory diseases (J40–J47)	30.2	42.7	107.5	24.1
Diseases of the digestive system (K00–K93)	21.7	24.7	52.8	20.1
Accidents (V01–X59)	27.7	39.6	72.8	25.3
Transport accidents (V01–V99)	14.3	21.4	45.7	13.8
Intentional self-harm (X60–X84)	13.1	14.6	10.9	11.9
2001				
<b>All causes</b>	<b>519.7</b>	<b>621.4</b>	<b>806.1</b>	<b>505.6</b>
Malignant neoplasms (C00–C97)	156.4	176.1	168.9	156.0
Trachea, bronchus and lung (C33, C34)	31.3	37.8	41.2	23.4
Diabetes mellitus (E10–E14)	15.3	17.0	44.4	13.3
Mental and behavioural disorders (F00–F99)	11.6	10.4	13.7	7.2
Diseases of the nervous system (G00–G99)	19.9	19.0	22.9	16.8
Diseases of the circulatory system (I00–I99)	177.5	223.9	255.8	182.9
Ischaemic heart disease (I20–I25)	97.4	118.2	143.6	93.7
Acute myocardial infarction (I21)	55.7	65.4	69.5	52.7
Cerebrovascular diseases (I60–I69)	40.6	53.9	41.3	42.6
Diseases of arteries, arterioles and capillaries (I70–I79)	11.2	15.9	15.6	14.0
Diseases of the respiratory system (J00–J99)	38.4	54.9	84.1	43.5
Influenza and pneumonia (J10–J18)	10.4	8.7	13.9	7.8
Chronic lower respiratory diseases (J40–J47)	20.3	37.2	63.1	26.8
Diseases of the digestive system (K00–K93)	17.1	18.3	33.3	17.2
Accidents (V01–X59)	25.4	31.5	50.2	18.8
Transport accidents (V01–V99)	10.8	12.3	24.4	6.7
Intentional self-harm (X60–X84)	14.2	13.6	22.6	14.0

(a) Standardised death rate per 100,000 of the mid-year 1991 population.

See Glossary for further explanation.

**1.6 UNDERLYING CAUSE, Indigenous people(a) and usual residence(b)**

Cause of death and ICD code	INDIGENOUS.....				NON-INDIGENOUS.....			
	Males	Females	Persons	Proportion of total deaths	Males	Females	Persons	Proportion of total deaths
				%				%
NEW SOUTH WALES								
<b>All causes</b>	<b>276</b>	<b>205</b>	<b>481</b>	<b>100.0</b>	<b>22 207</b>	<b>20 391</b>	<b>42 598</b>	<b>100.0</b>
Malignant neoplasms (C00–C97)	45	50	95	19.8	7 035	5 172	12 207	28.7
Digestive organs (C15–C26)	11	6	17	3.5	1 907	1 393	3 300	7.7
Trachea, bronchus and lung (C33, C34)	17	11	28	5.8	1 579	776	2 355	5.5
Diabetes mellitus (E10–E14)	9	9	18	3.7	455	345	800	1.9
Mental and behavioural disorders (F00–F99)	10	5	15	3.1	367	498	865	2.0
Diseases of the circulatory system (I00–I99)	100	77	177	36.8	7 978	8 914	16 892	39.7
Ischaemic heart diseases (I20–I25)	74	44	118	24.5	4 505	4 130	8 635	20.3
Cerebrovascular diseases (I60–I69)	9	10	19	4.0	1 759	2 580	4 339	10.2
Diseases of the respiratory system (J00–J99)	26	20	46	9.6	1 895	1 580	3 475	8.2
Chronic lower respiratory diseases (J40–J47)	18	15	33	6.9	1 107	836	1 943	4.6
Diseases of the digestive system (K00–K93)	11	7	18	3.7	697	634	1 331	3.1
Diseases of the liver (K70–K77)	10	6	16	3.3	301	102	403	0.9
Certain conditions originating in the perinatal period (P00–P96)	8	5	13	2.7	131	92	223	0.5
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	6	—	6	1.2	95	94	189	0.4
All other medical conditions (remainder of A00–R99)	17	11	28	5.8	1 890	2 313	4 203	9.9
External causes of morbidity and mortality (V01–Y98)	44	21	65	13.5	1 664	749	2 413	5.7
Transport accidents (V01–V99)	10	4	14	2.9	409	148	557	1.3
Intentional self-harm (X60–X84)	13	5	18	3.7	585	165	750	1.8
Assault (X85–Y09)	5	3	8	1.7	65	34	99	0.2
Other external causes (remainder of V01–Y98)	16	9	25	5.2	605	402	1 007	2.4
VICTORIA								
<b>All causes</b>	<b>54</b>	<b>39</b>	<b>93</b>	<b>100.0</b>	<b>14 789</b>	<b>14 104</b>	<b>28 893</b>	<b>100.0</b>
Malignant neoplasms (C00–C97)	7	10	17	18.3	4 757	3 832	8 589	29.7
Digestive organs (C15–C26)	2	-	2	2.2	1 425	1 122	2 547	8.8
Trachea, bronchus and lung (C33, C34)	1	4	5	5.4	1 056	562	1 618	5.6
Diabetes mellitus (E10–E14)	4	2	6	6.5	444	428	872	3.0
Mental and behavioural disorders (F00–F99)	1	1	2	2.2	279	440	719	2.5
Diseases of the circulatory system (I00–I99)	18	11	29	31.2	5 133	5 612	10 745	37.2
Ischaemic heart diseases (I20–I25)	13	6	19	20.4	2 987	2 645	5 632	19.5
Cerebrovascular diseases (I60–I69)	4	3	7	7.5	1 057	1 567	2 624	9.1
Diseases of the respiratory system (J00–J99)	5	2	7	7.5	1 251	1 091	2 342	8.1
Chronic lower respiratory diseases (J40–J47)	5	2	7	7.5	813	593	1 406	4.9
Diseases of the digestive system (K00–K93)	—	2	2	2.2	431	476	907	3.1
Diseases of the liver (K70–K77)	—	2	2	2.2	160	78	238	0.8
Certain conditions originating in the perinatal period (P00–P96)	—	2	2	2.2	80	60	140	0.5
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	1	—	1	1.1	67	45	112	0.4
All other medical conditions (remainder of A00–R99)	5	4	9	9.7	1 330	1 614	2 944	10.2
External causes of morbidity and mortality (V01–Y98)	13	5	18	19.4	1 017	506	1 523	5.3
Transport accidents (V01–V99)	4	—	4	4.3	309	118	427	1.5
Intentional self-harm (X60–X84)	5	2	7	7.5	366	119	485	1.7
Assault (X85–Y09)	—	—	—	—	30	15	45	0.2
Other external causes (remainder of V01–Y98)	4	3	7	7.5	312	254	566	2.0

(a) Excludes Indigenous origin not stated.

(b) Coverage varies for states and territories Indigenous death registration data. See Appendix 6 for further explanation.

**1.6 UNDERLYING CAUSE, Indigenous people(a) and usual residence(b) *continued***

Cause of death and ICD code	INDIGENOUS.....				NON-INDIGENOUS.....			
	Males no.	Females no.	Persons no.	Proportion of total deaths %	Males no.	Females no.	Persons no.	Proportion of total deaths %
					Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
QUEENSLAND								
<b>All causes</b>	<b>326</b>	<b>239</b>	<b>565</b>	<b>100.0</b>	<b>11 782</b>	<b>10 221</b>	<b>22 003</b>	<b>100.0</b>
Malignant neoplasms (C00–C97)	47	57	104	18.4	3 678	2 619	6 297	28.6
Digestive organs (C15–C26)	13	6	19	3.4	1 031	747	1 778	8.1
Trachea, bronchus and lung (C33, C34)	17	11	28	5.0	835	381	1 216	5.5
Diabetes mellitus (E10–E14)	18	23	41	7.3	247	212	459	2.1
Mental and behavioural disorders (F00–F99)	7	2	9	1.6	154	216	370	1.7
Diseases of the circulatory system (I00–I99)	96	62	158	28.0	4 239	4 415	8 654	39.3
Ischaemic heart diseases (I20–I25)	68	35	103	18.2	2 629	2 248	4 877	22.2
Cerebrovascular diseases (I60–I69)	12	8	20	3.5	868	1 269	2 137	9.7
Diseases of the respiratory system (J00–J99)	33	23	56	9.9	926	796	1 722	7.8
Chronic lower respiratory diseases (J40–J47)	25	10	35	6.2	576	407	983	4.5
Diseases of the digestive system (K00–K93)	10	11	21	3.7	340	342	682	3.1
Diseases of the liver (K70–K77)	6	5	11	1.9	127	62	189	0.9
Certain conditions originating in the perinatal period (P00–P96)	10	10	20	3.5	76	48	124	0.6
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	7	2	9	1.6	62	60	122	0.6
All other medical conditions (remainder of A00–R99)	32	26	58	10.3	970	1 067	2 037	9.3
External causes of morbidity and mortality (V01–Y98)	66	23	89	15.8	1 090	446	1 536	7.0
Transport accidents (V01–V99)	8	2	10	1.8	318	95	413	1.9
Intentional self-harm (X60–X84)	34	8	42	7.4	369	84	453	2.1
Assault (X85–Y09)	2	6	8	1.4	35	17	52	0.2
Other external causes (remainder of V01–Y98)	22	7	29	5.1	368	250	618	2.8
SOUTH AUSTRALIA								
<b>All causes</b>	<b>74</b>	<b>51</b>	<b>125</b>	<b>100.0</b>	<b>5 789</b>	<b>5 655</b>	<b>11 444</b>	<b>100.0</b>
Malignant neoplasms (C00–C97)	10	8	18	14.4	1 798	1 423	3 221	28.1
Digestive organs (C15–C26)	2	2	4	3.2	524	397	921	8.0
Trachea, bronchus and lung (C33, C34)	1	—	1	0.8	373	214	587	5.1
Diabetes mellitus (E10–E14)	5	5	10	8.0	134	117	251	2.2
Mental and behavioural disorders (F00–F99)	3	1	4	3.2	66	156	222	1.9
Diseases of the circulatory system (I00–I99)	14	17	31	24.8	2 127	2 383	4 510	39.4
Ischaemic heart diseases (I20–I25)	10	8	18	14.4	1 313	1 177	2 490	21.8
Cerebrovascular diseases (I60–I69)	3	5	8	6.4	392	677	1 069	9.3
Diseases of the respiratory system (J00–J99)	6	6	12	9.6	584	565	1 149	10.0
Chronic lower respiratory diseases (J40–J47)	3	4	7	5.6	274	198	472	4.1
Diseases of the digestive system (K00–K93)	5	1	6	4.8	183	178	361	3.2
Diseases of the liver (K70–K77)	3	1	4	3.2	80	35	115	1.0
Certain conditions originating in the perinatal period (P00–P96)	1	—	1	0.8	16	24	40	0.3
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	—	—	—	—	24	20	44	0.4
All other medical conditions (remainder of A00–R99)	7	5	12	9.6	489	617	1 106	9.7
External causes of morbidity and mortality (V01–Y98)	23	8	31	24.8	368	172	540	4.7
Transport accidents (V01–V99)	9	1	10	8.0	103	37	140	1.2
Intentional self-harm (X60–X84)	5	3	8	6.4	150	36	186	1.6
Assault (X85–Y09)	4	—	4	3.2	8	5	13	0.1
Other external causes (remainder of V01–Y98)	5	4	9	7.2	107	94	201	1.8

(a) Excludes Indigenous origin not stated.

(b) Coverage varies for states and territories Indigenous death registration data. See Appendix 6 for further information.

**1.6 UNDERLYING CAUSE, Indigenous people(a) and usual residence(b) continued**

Cause of death and ICD code	INDIGENOUS.....				NON-INDIGENOUS.....			
	Males	Females	Persons	Proportion of total deaths	Males	Females	Persons	Proportion of total deaths
				%				
WESTERN AUSTRALIA								
<b>All causes</b>	<b>210</b>	<b>126</b>	<b>336</b>	<b>100.0</b>	<b>5 385</b>	<b>4 880</b>	<b>10 265</b>	<b>100.0</b>
Malignant neoplasms (C00–C97)	24	17	41	12.2	1 722	1 336	3 058	29.8
Digestive organs (C15–C26)	8	4	12	3.6	525	354	879	8.6
Trachea, bronchus and lung (C33, C34)	5	2	7	2.1	397	199	596	5.8
Diabetes mellitus (E10–E14)	15	21	36	10.7	155	114	269	2.6
Mental and behavioural disorders (F00–F99)	9	2	11	3.3	88	158	246	2.4
Diseases of the circulatory system (I00–I99)	60	26	86	25.6	1 772	1 905	3 677	35.8
Ischaemic heart diseases (I20–I25)	30	11	41	12.2	1 064	922	1 986	19.3
Cerebrovascular diseases (I60–I69)	17	5	22	6.5	342	521	863	8.4
Diseases of the respiratory system (J00–J99)	15	11	26	7.7	417	348	765	7.5
Chronic lower respiratory diseases (J40–J47)	4	3	7	2.1	229	167	396	3.9
Diseases of the digestive system (K00–K93)	12	11	23	6.8	153	172	325	3.2
Diseases of the liver (K70–K77)	5	6	11	3.3	44	33	77	0.8
Certain conditions originating in the perinatal period (P00–P96)	4	3	7	2.1	21	18	39	0.4
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	6	2	8	2.4	518	593	1 111	10.8
All other medical conditions (remainder of A00–R99)	22	18	40	11.9	135	34	169	1.6
External causes of morbidity and mortality (V01–Y98)	43	15	58	17.3	197	54	251	2.4
Transport accidents (V01–V99)	13	6	19	5.7	8	5	13	0.1
Intentional self-harm (X60–X84)	8	2	10	3.0	169	133	302	2.9
Assault (X85–Y09)	7	2	9	2.7	9	7	16	0.2
Other external causes (remainder of V01–Y98)	15	5	20	6.0	173	137	310	3.0
NORTHERN TERRITORY								
<b>All causes</b>	<b>259</b>	<b>170</b>	<b>429</b>	<b>100.0</b>	<b>288</b>	<b>148</b>	<b>436</b>	<b>100.0</b>
Malignant neoplasms (C00–C97)	28	20	48	11.2	75	47	122	28.0
Digestive organs (C15–C26)	11	6	17	4.0	17	10	27	6.2
Trachea, bronchus and lung (C33, C34)	7	3	10	2.3	19	11	30	6.9
Diabetes mellitus (E10–E14)	14	24	38	8.9	3	5	8	1.8
Mental and behavioural disorders (F00–F99)	7	4	11	2.6	1	1	2	0.5
Diseases of the circulatory system (I00–I99)	68	35	103	24.0	84	48	132	30.3
Ischaemic heart diseases (I20–I25)	36	17	53	12.4	57	27	84	19.3
Cerebrovascular diseases (I60–I69)	9	5	14	3.3	9	7	16	3.7
Diseases of the respiratory system (J00–J99)	30	13	43	10.0	22	9	31	7.1
Chronic lower respiratory diseases (J40–J47)	18	9	27	6.3	14	8	22	5.0
Diseases of the digestive system (K00–K93)	14	9	23	5.4	10	5	15	3.4
Diseases of the liver (K70–K77)	9	7	16	3.7	5	-	5	1.1
Certain conditions originating in the perinatal period (P00–P96)	11	4	15	3.5	8	1	9	2.1
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	1	3	4	0.9	4	1	5	1.1
All other medical conditions (remainder of A00–R99)	34	32	66	15.4	21	17	38	8.7
External causes of morbidity and mortality (V01–Y98)	52	26	78	18.2	60	14	74	17.0
Transport accidents (V01–V99)	14	10	24	5.6	17	6	23	5.3
Intentional self-harm (X60–X84)	16	2	18	4.2	23	2	25	5.7
Assault (X85–Y09)	7	10	17	4.0	3	-	3	0.7
Other external causes (remainder of V01–Y98)	15	4	19	4.4	17	6	23	5.3

(a) Excludes Indigenous origin not stated.

(b) Coverage varies for states and territories Indigenous death registration data. See Appendix 6 for further explanation.

**1.6 UNDERLYING CAUSE, Indigenous people(a) and usual residence(b) continued**

Cause of death and ICD code	INDIGENOUS.....				NON-INDIGENOUS.....			
	Males no.	Females no.	Persons no.	Proportion of total deaths %	Males no.	Females no.	Persons no.	Proportion of total deaths %
					INDIGENOUS.....	NON-INDIGENOUS.....		
AUSTRALIA(c)								
<b>All causes</b>	<b>1 218</b>	<b>845</b>	<b>2 063</b>	<b>100.0</b>	<b>62 826</b>	<b>57 924</b>	<b>120 750</b>	<b>100.0</b>
Malignant neoplasms (C00–C97)	163	166	329	15.9	19 845	15 101	34 946	28.9
Digestive organs (C15–C26)	47	25	72	3.5	5 640	4 232	9 872	8.2
Trachea, bronchus and lung (C33, C34)	49	33	82	4.0	4 430	2 241	6 671	5.5
Diabetes mellitus (E10–E14)	65	84	149	7.2	1 508	1 294	2 802	2.3
Mental and behavioural disorders (F00–F99)	37	15	52	2.5	990	1 522	2 512	2.1
Diseases of the circulatory system (I00–I99)	364	231	595	28.8	22 239	24 302	46 541	38.5
Ischaemic heart diseases (I20–I25)	238	124	362	17.5	13 062	11 638	24 700	20.5
Cerebrovascular diseases (I60–I69)	55	36	91	4.4	4 605	6 912	11 517	9.5
Diseases of the respiratory system (J00–J99)	117	77	194	9.4	5 336	4 591	9 927	8.2
Chronic lower respiratory diseases (J40–J47)	75	45	120	5.8	3 167	2 340	5 507	4.6
Diseases of the digestive system (K00–K93)	53	43	96	4.7	1 883	1 893	3 776	3.1
Diseases of the liver (K70–K77)	34	28	62	3.0	746	326	1 072	0.9
Certain conditions originating in the perinatal period (P00–P96)	35	24	59	2.9	341	251	592	0.5
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	22	7	29	1.4	296	246	542	0.4
All other medical conditions (remainder of A00–R99)	118	99	217	10.5	5 453	6 499	11 952	9.9
External causes of morbidity and mortality (V01–Y98)	244	99	343	16.6	4 935	2 225	7 160	5.9
Transport accidents (V01–V99)	58	23	81	3.9	1 351	458	1 809	1.5
Intentional self-harm (X60–X84)	83	22	105	5.1	1 768	485	2 253	1.9
Assault (X85–Y09)	25	21	46	2.2	154	80	234	0.2
Other external causes (remainder of V01–Y98)	78	33	111	5.4	1 662	1 202	2 864	2.4

(a) Excludes Indigenous origin not stated.

(b) Coverage varies for states and territories Indigenous death registration data.

See Appendix 6 for further explanation.

(c) Includes Tasmania and the Australian Capital Territory which are not published separately due to small numbers. Further information is available on request.

**1.7 UNDERLYING CAUSE, Years of potential life lost (YPLL)(a)**

Cause of death and ICD code	YEARS OF POTENTIAL LIFE LOST.....		PERCENTAGE OF DEATHS(b).....		PERCENTAGE OF YPLL.....	
	Males	Females	Males	Females	Males	Females
<b>All causes</b>	<b>528 594</b>	<b>273 945</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Chapter I Certain infectious and parasitic diseases (A00–B99)	9 541	4 624	1.4	1.2	1.8	1.7
Human immunodeficiency virus (HIV) disease (B20–B24)	3 102	334	0.3	0.1	0.6	0.1
Chapter II Neoplasms (C00–D48)	143 230	115 103	37.5	45.7	27.1	42.0
Malignant neoplasms (C00–C97)	141 760	113 410	37.1	45.1	26.8	41.4
Digestive organs (C15–C26)	40 938	23 201	11.2	10.8	7.7	8.5
Trachea, bronchus and lung (C33, C34)	29 053	15 605	9.1	7.6	5.5	5.7
Breast (C50)	200	26 424	0.1	8.9	—	9.6
Prostate (C61)	6 220	..	2.8	..	1.2	..
Lymphoid, haematopoietic and related tissue (C81–C96)	17 171	10 972	3.6	4.1	3.2	4.0
Chapter IV Endocrine, nutritional and metabolic diseases (E00–E90)	15 008	8 286	3.5	3.5	2.8	3.0
Diabetes mellitus (E10–E14)	8 921	4 915	2.4	2.5	1.7	1.8
Chapter V Mental and behavioural disorders (F00–F99)	8 819	3 298	1.2	0.9	1.7	1.2
Mental and behavioural disorders due to psychoactive substance use (F10–F19)	7 662	2 333	0.8	0.4	1.4	0.9
Chapter VI Diseases of the nervous system (G00–G99)	15 558	11 829	2.5	3.4	2.9	4.3
Chapter IX Diseases of the circulatory system (I00–I99)	103 634	41 817	28.1	23.1	19.6	15.3
Ischaemic heart diseases (I20–I25)	67 139	17 948	18.5	11.8	12.7	6.6
Cerebrovascular diseases (I60–I69)	14 008	9 946	4.4	5.7	2.7	3.6
Diseases of arteries, arterioles and capillaries (I70–I79)	3 974	1 866	1.4	1.0	0.8	0.7
Chapter X Diseases of the respiratory system (J00–J99)	19 599	14 708	6.1	7.5	3.7	5.4
Influenza and pneumonia (J10–J18)	3 641	2 724	0.9	1.0	0.7	1.0
Chronic lower respiratory diseases (J40–J47)	12 197	9 668	4.2	5.4	2.3	3.5
Chapter XI Diseases of the digestive system (K00–K93)	15 910	7 607	3.4	3.2	3.0	2.8
Diseases of liver (K70–K77)	10 957	4 322	2.0	1.3	2.1	1.6
Chapter XIV Diseases of the genitourinary system (N00–N99)	2 643	2 183	0.9	1.3	0.5	0.8
Chapter XVII Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	5 076	4 613	0.4	0.5	1.0	1.7
Chapter XX External causes of morbidity and mortality (V01–Y98)	182 642	53 706	14.0	7.7	34.6	19.6
Accidents (V01–X59)	103 184	31 091	7.6	4.4	19.5	11.3
Transport accidents (V01–V99)	59 870	17 157	4.1	2.2	11.3	6.3
Accidental poisoning by and exposure to noxious substances (X40–X49)	17 547	7 308	1.2	1.0	3.3	2.7
Intentional self-harm (X60–X84)	68 503	17 010	5.5	2.5	13.0	6.2

(a) YPLL measures the extent of premature mortality which is assumed to be any death at ages of 1–75 inclusive. See Technical Note for further explanation.

(b) Percentage of deaths aged 1–75 years.

## SECTION 2

## MULTIPLE CAUSES OF DEATH .....

### INTRODUCTION

Multiple causes of death include all causes and conditions reported on the death certificate (i.e. both underlying and associated causes; see Glossary for further details). Deaths due to External causes are those which occur as a result of accidents, poisonings and/or violence. They are classified according to the event, such as accidental fall, leading to the fatal injury. Multiple cause data for External causes include the nature of injury or poisoning, as well as any other causes reported on the death certificate.

### LEADING MULTIPLE CAUSES

In 2001, Malignant neoplasms, Ischaemic heart diseases and Cerebrovascular diseases, the leading underlying causes of death which are responsible for 58% of all deaths, were also the leading multiple causes of death and were reported either as the underlying or associated cause in 77% of all deaths. The fourth ranked multiple cause was Influenza and pneumonia which was reported in 14% of all deaths and was ranked as the seventh leading underlying cause and responsible for 2.1% of deaths.

The following table lists the ten leading multiple causes of death (underlying and associated causes) appearing on death certificates for deaths registered in 2001, and their corresponding ranking in terms of underlying causes.

### LEADING MULTIPLE CAUSES OF DEATH

Cause of death and ICD code	Multiple cause(a).....		Underlying cause		
	no.	%	rank	%	rank
Malignant neoplasms (C00–C97)	41 269	32.1	1	28.6	1
Ischaemic heart diseases (I20–I25)	37 761	29.4	2	20.4	2
Cerebrovascular diseases (I60–I69)	20 202	15.7	3	9.4	3
Influenza and pneumonia (J10–J18)	17 382	13.5	4	2.1	7
Heart failure (I50)	17 023	13.2	5	2.0	9
Chronic lower respiratory diseases (J40–J47)	13 508	10.5	6	4.6	4
Renal failure (N17–N19)	12 384	9.6	7	1.3	12
Injury, poisoning and certain other consequences of external causes (S00–T98)(b)	11 361	8.8	8	..	..
Diabetes mellitus (E10–E14)	10 325	8.0	9	2.4	6
Accidents (V01–X59)	7 248	5.6	10	3.8	5
<b>Deaths from all causes</b>	<b>128 544</b>	<b>100.0</b>	..	<b>100.0</b>	..

(a) Number of deaths and percentages may add to more than totals because a death certificate can report more than one leading multiple cause.

(b) Not coded as an underlying cause in accordance with ICD conventions.

## NUMBER OF MULTIPLE CAUSES

For the 128,544 deaths registered in 2001, there were 364,473 causes reported (including 15,827 injuries) giving a mean 2.8 causes per death. In 21% of all deaths, only one cause was reported. The average number of causes reported per death varies with age, sex and underlying cause of death. Deaths as a result of External causes recorded 3.4 causes (including injuries) per death in 2001, with deaths as a result of Accidental falls averaging 4.3 causes, reflecting the number of injuries sustained.

## RELATIONSHIP OF CAUSES

The following matrix illustrates relationships between the various causes of death in 2001. For example, malignant neoplasms, the leading underlying and multiple cause, was reported alone in 39% of cases and has a relatively low incidence of being reported with other leading causes. In contrast, of the 1,704 deaths caused by Renal failure, it was reported alone on only 8.3% of deaths but is often reported with Ischaemic heart diseases and Heart failure.

## LEADING MULTIPLE CAUSES WITH ASSOCIATED CAUSES

Leading multiple causes reported as the underlying cause	Total no. of deaths	Reported alone %	Reported with selected associated causes.....							
			Malignant neoplasms C00–C97 %	Ischaemic heart diseases I20–I25 %	Cerebro-vascular disease I60–I69 %	Influenza and pneumonia J10–J18 %	Heart failure I50 %	Chronic lower respiratory disease J40–J47 %	Renal failure N17–N19 %	
Malignant neoplasms (C00–C97)	36 750	38.8	—	7.1	3.6	8.3	3.6	5.6	5.5	
Ischaemic heart diseases (I20–I25)	26 234	13.4	5.8	—	9.2	5.5	23.6	9.8	9.7	
Cerebrovascular diseases (I60–I69)	12 146	26.2	4.4	10.2	—	16.1	5.5	3.5	3.8	
Influenza and pneumonia (J10–J18)	2 702	35.0	2.1	13.4	3.8	—	5.6	2.6	8.9	
Heart failure (I50)	2 612	12.9	5.9	0.5	8.1	28.9	—	10.2	19.2	
Chronic lower respiratory diseases (J40–J47)	5 916	7.9	6.7	17.1	4.9	31.4	18.1	—	6.9	
Renal failure (N17–N19)	1 704	8.3	4.8	26.5	8.1	12.4	29.0	5.8	—	

## 2.1 DISTRIBUTION OF DEATHS, Number of causes per death and age

### NUMBER OF CAUSES PER DEATH .....

	<i>Mean causes per death</i>	<i>Total deaths</i>	<i>Total</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6 or more</b>
<i>Age group (years)</i>		<i>no.</i>	<i>no.</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
MALES									
<b>All ages(a)</b>	<b>2.9</b>	<b>66 835</b>	<b>100.0</b>	<b>20.3</b>	<b>27.4</b>	<b>23.1</b>	<b>14.7</b>	<b>8.1</b>	<b>6.5</b>
Under 1	2.5	751	100.0	32.0	26.9	19.6	10.9	6.4	4.3
1-14	2.6	359	100.0	17.0	44.8	19.8	9.2	4.7	4.5
15-24	2.8	1 122	100.0	8.7	52.1	19.1	8.4	5.6	6.1
25-34	2.8	1 641	100.0	10.2	47.1	18.4	11.9	6.1	6.3
35-44	2.7	2 280	100.0	20.9	37.0	19.1	11.0	6.2	5.8
45-54	2.5	4 049	100.0	29.1	29.4	19.5	11.2	6.1	4.7
55-64	2.6	7 515	100.0	28.5	27.2	19.8	12.8	6.5	5.2
65-74	2.8	14 570	100.0	23.4	24.9	22.9	14.4	7.9	6.5
75-84	3.0	21 395	100.0	17.8	25.3	24.3	16.3	9.1	7.2
85 and over	3.0	13 140	100.0	15.0	26.1	26.6	16.5	9.1	6.7
FEMALES									
<b>All ages(a)</b>	<b>2.8</b>	<b>61 709</b>	<b>100.0</b>	<b>21.5</b>	<b>27.5</b>	<b>23.6</b>	<b>14.2</b>	<b>7.4</b>	<b>5.7</b>
Under 1	2.5	558	100.0	26.3	34.4	21.0	9.7	3.9	4.7
1-14	2.6	243	100.0	22.2	39.5	17.3	9.9	4.5	6.6
15-24	2.9	388	100.0	12.6	41.8	20.4	10.1	6.2	9.0
25-34	2.8	606	100.0	19.5	36.0	18.0	10.7	8.7	7.1
35-44	2.6	1 312	100.0	29.5	30.6	17.4	10.4	5.6	6.6
45-54	2.5	2 560	100.0	34.6	25.9	18.4	10.4	5.9	4.8
55-64	2.6	4 210	100.0	31.9	25.3	18.6	12.1	6.2	5.8
65-74	2.8	8 935	100.0	25.8	25.0	21.4	13.9	7.6	6.3
75-84	2.9	18 980	100.0	20.0	26.1	24.6	15.0	8.3	5.9
85 and over	2.8	23 914	100.0	17.5	29.2	25.7	15.0	7.2	5.4
PERSONS									
<b>All ages(a)</b>	<b>2.8</b>	<b>128 544</b>	<b>100.0</b>	<b>20.9</b>	<b>27.4</b>	<b>23.4</b>	<b>14.5</b>	<b>7.7</b>	<b>6.1</b>
Under 1	2.5	1 309	100.0	29.6	30.1	20.2	10.4	5.3	4.4
1-14	2.6	602	100.0	19.1	42.7	18.8	9.5	4.7	5.3
15-24	2.8	1 510	100.0	9.7	49.5	19.4	8.8	5.8	6.8
25-34	2.8	2 247	100.0	12.7	44.1	18.3	11.6	6.8	6.5
35-44	2.6	3 592	100.0	24.0	34.7	18.5	10.8	6.0	6.1
45-54	2.5	6 609	100.0	31.3	28.0	19.1	10.9	6.0	4.8
55-64	2.6	11 725	100.0	29.7	26.5	19.4	12.5	6.4	5.4
65-74	2.8	23 505	100.0	24.3	24.9	22.3	14.2	7.8	6.4
75-84	2.9	40 375	100.0	18.8	25.7	24.4	15.7	8.7	6.6
85 and over	2.9	37 054	100.0	16.6	28.1	26.0	15.5	7.8	5.8

(a) Including age not stated.

## 2.2 UNDERLYING AND NUMBER OF CAUSES OF DEATH REPORTED

Underlying cause of death and ICD code	Reported alone	REPORTED WITH.....					Mean number of causes
		One other cause	Two other causes	Three other causes	Four or more other causes		
<b>All causes</b>	<b>26 828</b>	<b>35 260</b>	<b>30 030</b>	<b>18 603</b>	<b>17 823</b>	<b>2.8</b>	
Chapter I Certain infectious and parasitic diseases (A00–B99)	237	336	388	320	394	3.4	
Septicaemia (A40, A41)	94	206	249	188	236	3.5	
Human immunodeficiency virus (HIV) disease (B20–B24)	66	23	14	10	5	1.9	
Chapter II Neoplasms (C00–D48)	14 360	9 458	6 995	3 582	3 102	2.3	
Malignant neoplasms (C00–C97)	14 261	9 266	6 803	3 460	2 960	2.3	
Digestive organs (C15–C26)	4 343	2 551	1 801	878	807	2.2	
Oesophagus (C15)	422	255	181	102	84	2.3	
Stomach (C16)	545	328	163	91	84	2.1	
Colon (C18)	1 351	798	637	287	269	2.3	
Rectosigmoid junction, rectum, anus and anal canal (C19–C21)	605	339	221	111	127	2.2	
Liver and intrahepatic bile ducts (C22)	230	219	181	87	61	2.4	
Pancreas (C25)	901	413	267	124	104	2.0	
Trachea, bronchus and lung (C33, C34)	2 616	1 901	1 323	651	547	2.3	
Melanoma of skin (C43)	493	258	160	87	71	2.1	
Breast (C50)	1 148	582	464	242	176	2.2	
Female genital organs (C51–C58)	687	374	255	108	82	2.1	
Ovary (C56)	422	199	129	46	37	1.9	
Male genital organs (C60–C63)	986	679	537	309	242	2.4	
Prostate (C61)	965	674	527	307	238	2.4	
Urinary tract (C64–C68)	678	457	359	177	153	2.3	
Kidney, except renal pelvis (C64)	351	201	162	73	55	2.2	
Bladder (C67)	302	235	182	93	92	2.5	
Brain (C71)	644	232	118	56	29	1.7	
Lymphoid, haematopoietic and related tissue (C81–C96)	1 000	931	821	470	438	2.7	
Leukaemia (C91–C95)	265	370	364	192	194	2.9	
In situ and benign neoplasms and neoplasms of uncertain or unknown behaviour (D00–D48)	99	192	192	122	142	3.2	
Chapter III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	19	69	104	90	126	3.9	
Chapter IV Endocrine, nutritional and metabolic diseases (E00–E90)	101	725	1 344	1 080	1 064	3.7	
Diabetes mellitus (E10–E14)	61	516	997	806	698	3.7	
Chapter V Mental and behavioural disorders (F00–F99)	315	975	701	387	326	2.9	
Organic, including symptomatic, mental disorders (F00–F09)	284	904	533	257	159	2.6	
Chapter VI Diseases of the nervous system (G00–G99)	676	1 540	1 039	552	397	2.7	
Alzheimer's disease (G30)	293	672	389	163	90	2.5	
Chapter VII Diseases of the eye and adnexa (H00–H59)	—	1	1	1	—	3.0	
Chapter VIII Diseases of the ear and mastoid process (H60–H95)	—	—	4	—	3	4.4	
Chapter IX Diseases of the circulatory system (I00–I99)	8 162	13 775	12 812	7 911	6 666	2.9	
All heart disease (I05–I09, I11, I13, I20–I25, I26, I27, I30–I52)	4 507	8 737	9 235	5 983	5 185	3.1	
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	5	26	61	53	97	4.3	
Hypertensive diseases (I10–I15)	208	354	337	182	142	2.8	
Ischaemic heart diseases (I20–I25)	3 520	6 940	7 215	4 651	3 908	3.0	
Acute myocardial infarction (I21)	1 777	4 453	4 040	2 392	1 781	2.9	
Pulmonary heart disease and diseases of pulmonary circulation and other forms of heart disease (I26–I52)	835	1 588	1 814	1 204	1 130	3.1	
Heart failure (I50)	336	741	749	416	370	3.0	
Cerebrovascular diseases (I60–I69)	3 188	4 065	2 662	1 321	910	2.4	
Diseases of arteries, arterioles and capillaries (I70–I79)	405	695	661	450	414	3.0	
Atherosclerosis (I70)	47	153	137	70	50	2.9	
Aortic aneurysm and dissection (I71)	321	404	280	197	136	2.6	

## 2.2 UNDERLYING AND NUMBER OF CAUSES OF DEATH REPORTED *continued*

### REPORTED WITH.....

<i>Underlying cause of death and ICD code</i>	<i>Reported alone</i>	<i>One other cause</i>	<i>Two other causes</i>	<i>Three other causes</i>	<i>Four or more other causes</i>	<i>Mean number of causes</i>
Chapter X Diseases of the respiratory system (J00–J99)	1 669	2 829	2 747	1 736	1 645	3.0
Influenza and pneumonia (J10–J18)	945	789	515	262	191	2.3
Chronic lower respiratory diseases (J40–J47)	470	1 513	1 695	1 126	1 112	3.3
Emphysema (J43)	62	205	200	112	99	3.1
Asthma and status asthmaticus (J45, J46)	90	85	124	68	55	2.9
Chapter XI Diseases of the digestive system (K00–K93)	368	888	964	817	1 052	3.5
Diseases of oesophagus, stomach and duodenum (K20–K31)	51	148	155	122	158	3.5
Gastric and duodenal ulcer (K25–K27)	46	126	105	74	89	3.3
Diseases of liver (K70–K77)	151	315	286	221	223	3.2
Chapter XII Diseases of the skin and subcutaneous tissue (L00–L99)	—	42	77	62	84	4.0
Chapter XIII Diseases of the musculoskeletal system and connective tissue (M00–M99)	20	139	252	181	304	4.0
Arthropathies and systemic connective tissue disorders (M00–M36)	16	94	156	113	182	3.9
Chapter XIV Diseases of the genitourinary system (N00–N99)	162	500	756	623	771	3.7
Renal failure (N17–N19)	141	332	472	358	401	3.5
Chapter XV Pregnancy, childbirth and the puerperium (O00–O99)	3	4	—	2	3	2.8
Chapter XVI Certain conditions originating in the perinatal period (P00–P96)	185	189	146	82	79	2.6
Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00–P04)	85	116	90	46	49	2.8
Chapter XVII Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	65	190	164	101	94	3.1
Congenital malformations of the circulatory system (Q20–Q28)	34	61	57	28	35	3.0
Chapter XVIII Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	426	74	20	13	2	1.3
Chapter XX External causes of morbidity and mortality (V01–Y98)	60	3 526	1 516	1 063	1 711	3.4
Accidents (V01–X59)	50	1 826	923	719	1 322	3.6
Transport accidents (V01–V99)	40	1 086	389	164	325	3.1
Falls (W00–W19)	—	110	132	140	252	4.3
Accidental drowning and submersion (W65–W74)	—	162	51	23	25	2.8
Intentional self-harm (X60–X84)	7	1 500	464	229	254	2.8
Hanging, strangulation and suffocation (X70)	1	705	204	85	55	2.5
Assault (X85–Y09)	3	150	63	41	43	3.0

## 2.3 UNDERLYING AND MULTIPLE CAUSE DEATH MENTIONS, Numbers and ratios

Cause of death and ICD code	UNDERLYING CAUSE..			MULTIPLE CAUSE(a)..			RATIO(b) Persons
	Males	Females	Persons	Males	Females	Persons	
<b>All causes</b>	<b>66 835</b>	<b>61 709</b>	<b>128 544</b>	<b>181 700</b>	<b>166 946</b>	<b>348 646</b>	<b>2.7</b>
Chapter I Certain infectious and parasitic diseases (A00–B99)	887	788	1 675	4 710	4 213	8 923	5.3
Septicaemia (A40, A41)	442	531	973	3 553	3 526	7 079	7.3
Human immunodeficiency virus (HIV) disease (B20–B24)	107	11	118	135	14	149	1.3
Chapter II Neoplasms (C00–D48)	21 126	16 371	37 497	29 168	22 161	51 329	1.4
Malignant neoplasms (C00–C97)	20 753	15 997	36 750	28 209	21 358	49 567	1.3
Digestive organs (C15–C26)	5 918	4 462	10 380	6 655	4 976	11 631	1.1
Oesophagus (C15)	711	333	1 044	758	372	1 130	1.1
Stomach (C16)	750	461	1 211	801	515	1 316	1.1
Colon (C18)	1 760	1 582	3 342	2 021	1 765	3 786	1.1
Rectosigmoid junction, rectum, anus and anal canal (C19–C21)	855	548	1 403	996	628	1 624	1.2
Liver and intrahepatic bile ducts (C22)	538	240	778	605	266	871	1.1
Pancreas (C25)	950	859	1 809	996	898	1 894	1.0
Trachea, bronchus and lung (C33, C34)	4 642	2 396	7 038	5 021	2 529	7 550	1.1
Melanoma of skin (C43)	686	383	1 069	778	423	1 201	1.1
Breast (C50)	27	2 585	2 612	43	3 178	3 221	1.2
Female genital organs (C51–C58)	..	1 506	1 506	..	1 709	1 709	1.1
Ovary (C56)	..	833	833	..	890	890	1.1
Male genital organs (C60–C63)	2 753	..	2 753	3 987	..	3 987	1.4
Prostate (C61)	2 711	..	2 711	3 929	..	3 929	1.4
Urinary tract (C64–C68)	1 162	662	1 824	1 515	792	2 307	1.3
Kidney, except renal pelvis (C64)	496	346	842	603	388	991	1.2
Bladder (C67)	629	275	904	866	355	1 221	1.4
Brain (C71)	631	448	1 079	649	463	1 112	1.0
Lymphoid, haematopoietic and related tissue (C81–C96)	1 997	1 663	3 660	2 498	2 009	4 507	1.2
Leukaemia (C91–C95)	803	582	1 385	1 009	712	1 721	1.2
In situ and benign neoplasms and neoplasms of uncertain or unknown behaviour (D00–D48)	373	374	747	959	803	1 762	2.4
Chapter III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	183	225	408	1 831	1 795	3 626	8.9
Chapter IV Endocrine, nutritional and metabolic diseases (E00–E90)	2 223	2 091	4 314	8 618	8 247	16 865	3.9
Diabetes mellitus (E10–E14)	1 639	1 439	3 078	5 614	4 713	10 327	3.4
Chapter V Mental and behavioural disorders (F00–F99)	1 073	1 631	2 704	6 391	6 248	12 639	4.7
Organic, including symptomatic, mental disorders (F00–F09)	683	1 454	2 137	2 293	4 088	6 381	3.0
Chapter VI Diseases of the nervous system (G00–G99)	1 894	2 310	4 204	5 315	5 546	10 861	2.6
Alzheimer's disease (G30)	497	1 110	1 607	996	2 033	3 029	1.9
Chapter VII Diseases of the eye and adnexa (H00–H59)	2	1	3	136	205	341	113.7
Chapter VIII Diseases of the ear and mastoid process (H60–H95)	3	4	7	34	48	82	11.7
Chapter IX Diseases of the circulatory system (I00–I99)	23 602	25 724	49 326	63 308	63 121	126 429	2.6
All heart disease (I05–I09, I11, I13, I20–I25, I26, I27, I30–I52)	17 027	16 620	33 647	47 826	44 600	92 426	2.7
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	82	160	242	244	399	643	2.7
Hypertensive diseases (I10–I15)	443	780	1 223	1 801	2 544	4 345	3.6
Ischaemic heart diseases (I20–I25)	13 906	12 328	26 234	25 931	21 447	47 378	1.8
Acute myocardial infarction (I21)	7 484	6 959	14 443	9 372	8 474	17 846	1.2
Pulmonary heart disease and diseases of pulmonary circulation and other forms of heart disease (I26–I52)	2 824	3 747	6 571	21 383	22 328	43 711	6.7
Heart failure (I50)	982	1 630	2 612	7 595	9 498	17 093	6.5
Cerebrovascular diseases (I60–I69)	4 852	7 294	12 146	9 687	12 875	22 562	1.9
Diseases of arteries, arterioles and capillaries (I70–I79)	1 381	1 244	2 625	3 139	2 506	5 645	2.2
Atherosclerosis (I70)	175	282	457	395	477	872	1.9
Aortic aneurysm and dissection (I71)	793	545	1 338	1 136	699	1 835	1.4

(a) Total mentions of cause on death certificates. See Glossary for further information.  
Excludes injury codes (ICD codes S000–T983).

(b) Ratio of multiple (underlying and associated) to underlying cause.

## 2.3 UNDERLYING AND MULTIPLE CAUSE DEATH MENTIONS, Numbers and ratios *continued*

Cause of death and ICD code	UNDERLYING CAUSE...			MULTIPLE CAUSE(a)...			RATIO(b)
	Males	Females	Persons	Males	Females	Persons	
Chapter X Diseases of the respiratory system (J00–J99)	5 725	4 901	10 626	26 801	22 125	48 926	4.6
Influenza and pneumonia (J10–J18)	1 184	1 518	2 702	8 802	8 597	17 399	6.4
Chronic lower respiratory diseases (J40–J47)	3 419	2 497	5 916	8 346	5 431	13 777	2.3
Emphysema (J43)	408	270	678	1 010	509	1 519	2.2
Asthma and status asthmaticus (J45, J46)	175	247	422	524	806	1 330	3.2
Chapter XI Diseases of the digestive system (K00–K93)	2 036	2 053	4 089	7 417	6 492	13 909	3.4
Diseases of oesophagus, stomach and duodenum (K20–K31)	301	333	634	1 140	1 025	2 165	3.4
Gastric and duodenal ulcer (K25–K27)	203	237	440	608	556	1 164	2.6
Diseases of liver (K70–K77)	822	374	1 196	2 854	1 375	4 229	3.5
Chapter XII Diseases of the skin and subcutaneous tissue (L00–L99)	106	159	265	560	820	1 380	5.2
Chapter XIII Diseases of the musculoskeletal system and connective tissue (M00–M99)	285	611	896	1 747	3 201	4 948	5.5
Arthropathies and systemic connective tissue disorders (M00–M36)	186	375	561	1 064	1 779	2 843	5.1
Chapter XIV Diseases of the genitourinary system (N00–N99)	1 242	1 570	2 812	8 834	8 360	17 194	6.1
Renal failure (N17–N19)	813	891	1 704	7 215	6 407	13 622	8.0
Chapter XV Pregnancy, childbirth and the puerperium (O00–O99)	..	12	12	..	24	24	2.0
Chapter XVI Certain conditions originating in the perinatal period (P00–P96)	395	286	681	1 128	829	1 957	2.9
Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00–P04)	197	189	386	451	395	846	2.2
Chapter XVII Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	335	279	614	604	509	1 113	1.8
Congenital malformations of the circulatory system (Q20–Q28)	117	98	215	206	182	388	1.8
Chapter XVIII Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)(c)	272	263	535	6 637	7 790	14 427	27.0
Chapter XX External causes of morbidity and mortality (V01–Y98)	5 446	2 430	7 876	8 461	5 212	13 673	1.7
Accidents (V01–X59)	3 155	1 685	4 840	4 495	3 052	7 547	1.6
Transport accidents (V01–V99)	1 495	509	2 004	1 509	514	2 023	1.0
Falls (W00–W19)	354	280	634	431	360	791	1.2
Accidental drowning and submersion (W65–W74)	210	51	261	222	58	280	1.1
Intentional self-harm (X60–X84)	1 935	519	2 454	2 009	549	2 558	1.0
Hanging, strangulation and suffocation (X70)	855	195	1 050	856	196	1 052	1.0
Assault (X85–Y09)	192	108	300	197	121	318	1.1

(a) Total mentions of cause on death certificates. See Glossary for further information.  
Excludes injury codes (ICD codes S000–T983).

(b) Ratio of multiple (underlying and associated) to underlying cause.

(c) Coding rules only allow this cause category to be the underlying cause when no other specific cause is recorded on the death certificate.

## 2.4 CAUSES OF DEATH, Underlying cause and most common associated causes

Underlying cause/associated cause and ICD code	Males.....		Females.....		Persons.....	
	no.	%	no.	%	no.	%
Malignant neoplasms (C00–C97)	20 753	100.0	15 997	100.0	36 750	100.0
Reported alone	7 697	37.1	6 564	41.0	14 261	38.8
Reported with						
Septicaemia (A40, A41)	817	3.9	614	3.8	1 431	3.9
Diabetes mellitus (E10–E14)	931	4.5	542	3.4	1 473	4.0
Ischaemic heart diseases (I20–I25)	1 736	8.4	856	5.4	2 592	7.1
Heart failure (I50)	727	3.5	594	3.7	1 321	3.6
Cerebrovascular diseases (I60–I69)	776	3.7	554	3.5	1 330	3.6
Influenza and pneumonia (J10–J18)	1 954	9.4	1 092	6.8	3 046	8.3
Chronic lower respiratory diseases (J40–J47)	1 414	6.8	638	4.0	2 052	5.6
Diseases of liver (K70–K77)	733	3.5	403	2.5	1 136	3.1
Renal failure (N17–N19)	1 246	6.0	765	4.8	2 011	5.5
Diabetes mellitus (E10–E14)	1 639	100.0	1 439	100.0	3 078	100.0
Reported alone	37	2.3	24	1.7	61	2.0
Reported with						
Septicaemia (A40, A41)	136	8.3	143	9.9	279	9.1
Organic, including symptomatic, mental disorders (F00–F09)	87	5.3	99	6.9	186	6.0
Ischaemic heart diseases (I20–I25)	890	54.3	689	47.9	1 579	51.3
Heart failure (I50)	265	16.2	265	18.4	530	17.2
Cerebrovascular diseases (I60–I69)	339	20.7	339	23.6	678	22.0
Influenza and pneumonia (J10–J18)	186	11.3	107	7.4	293	9.5
Chronic lower respiratory diseases (J40–J47)	122	7.4	61	4.2	183	5.9
Renal failure (N17–N19)	373	22.8	317	22.0	690	22.4
Organic, including symptomatic, mental disorders (F00–F09)	683	100.0	1 454	100.0	2 137	100.0
Reported alone	61	8.9	223	15.3	284	13.3
Reported with						
Ischaemic heart diseases (I20–I25)	55	8.1	59	4.1	114	5.3
Heart failure (I50)	37	5.4	93	6.4	130	6.1
Influenza and pneumonia (J10–J18)	349	51.1	637	43.8	986	46.1
Renal failure (N17–N19)	46	6.7	84	5.8	130	6.1
Diseases of the nervous system (G00–G99)	1 894	100.0	2 310	100.0	4 204	100.0
Reported alone	255	13.5	421	18.2	676	16.1
Reported with						
Ischaemic heart diseases (I20–I25)	182	9.6	146	6.3	328	7.8
Heart failure (I50)	86	4.5	101	4.4	187	4.4
Cerebrovascular diseases (I60–I69)	177	9.3	228	9.9	405	9.6
Influenza and pneumonia (J10–J18)	645	34.1	732	31.7	1 377	32.8
Ischaemic heart diseases (I20–I25)	13 906	100.0	12 328	100.0	26 234	100.0
Reported alone	2 041	14.7	1 479	12.0	3 520	13.4
Reported with						
Malignant neoplasms (C00–C97)	1 013	7.3	513	4.2	1 526	5.8
Diabetes mellitus (E10–E14)	1 439	10.3	1 160	9.4	2 599	9.9
Organic, including symptomatic, mental disorders (F00–F09)	357	2.6	711	5.8	1 068	4.1
Diseases of the nervous system (G00–G99)	673	4.8	710	5.8	1 383	5.3
Heart failure (I50)	2 823	20.3	3 381	27.4	6 204	23.6
Cerebrovascular diseases (I60–I69)	1 123	8.1	1 297	10.5	2 420	9.2
Influenza and pneumonia (J10–J18)	712	5.1	718	5.8	1 430	5.5
Chronic lower respiratory diseases (J40–J47)	1 602	11.5	970	7.9	2 572	9.8
Renal failure (N17–N19)	1 398	10.1	1 158	9.4	2 556	9.7
Heart failure (I50)	982	100.0	1 630	100.0	2 612	100.0
Reported alone	110	11.2	226	13.9	336	12.9
Reported with						
Diabetes mellitus (E10–E14)	74	7.5	78	4.8	152	5.8
Organic, including symptomatic, mental disorders (F00–F09)	71	7.2	151	9.3	222	8.5
Cerebrovascular diseases (I60–I69)	78	7.9	133	8.2	211	8.1
Influenza and pneumonia (J10–J18)	268	27.3	487	29.9	755	28.9
Chronic lower respiratory diseases (J40–J47)	144	14.7	123	7.5	267	10.2
Renal failure (N17–N19)	229	23.3	273	16.7	502	19.2

## 2.4 CAUSES OF DEATH, Underlying cause and most common associated causes *continued*

<i>Underlying cause/associated cause and ICD code</i>	<i>Males.....</i>		<i>Females.....</i>		<i>Persons.....</i>	
	<i>no.</i>	<i>%</i>	<i>no.</i>	<i>%</i>	<i>no.</i>	<i>%</i>
Cerebrovascular diseases (I60–I69)	4 852	100.0	7 294	100.0	12 146	100.0
Reported alone	1 121	23.1	2 067	28.3	3 188	26.2
Reported with						
Malignant neoplasms (C00–C97)	282	5.8	250	3.4	532	4.4
Diabetes mellitus (E10–E14)	405	8.3	431	5.9	836	6.9
Diseases of the nervous system (G00–G99)	543	11.2	678	9.3	1 221	10.1
Ischaemic heart diseases (I20–I25)	545	11.2	697	9.6	1 242	10.2
Heart failure (I50)	236	4.9	432	5.9	668	5.5
Influenza and pneumonia (J10–J18)	861	17.7	1 100	15.1	1 961	16.1
Diseases of arteries, arterioles and capillaries (I70–I79)	1 381	100.0	1 244	100.0	2 625	100.0
Reported alone	220	15.9	185	14.9	405	15.4
Reported with						
Septicaemia (A40, A41)	128	9.3	110	8.8	238	9.1
Hypertensive diseases (I10–I15)	116	8.4	96	7.7	212	8.1
Ischaemic heart diseases (I20–I25)	271	19.6	194	15.6	465	17.7
Heart failure (I50)	143	10.4	205	16.5	348	13.3
Cerebrovascular diseases (I60–I69)	128	9.3	99	8.0	227	8.6
Influenza and pneumonia (J10–J18)	76	5.5	106	8.5	182	6.9
Renal failure (N17–N19)	210	15.2	153	12.3	363	13.8
Influenza and pneumonia (J10–J18)	1 184	100.0	1 518	100.0	2 702	100.0
Reported alone	365	30.8	580	38.2	945	35.0
Reported with						
Septicaemia (A40, A41)	163	13.8	151	9.9	314	11.6
Diabetes mellitus (E10–E14)	74	6.3	77	5.1	151	5.6
Ischaemic heart diseases (I20–I25)	190	16.0	173	11.4	363	13.4
Heart failure (I50)	72	6.1	79	5.2	151	5.6
Renal failure (N17–N19)	124	10.5	116	7.6	240	8.9
Chronic lower respiratory diseases (J40–J47)	3 419	100.0	2 497	100.0	5 916	100.0
Reported alone	255	7.5	215	8.6	470	7.9
Reported with						
Malignant neoplasms (C00–C97)	272	8.0	126	5.0	398	6.7
Diabetes mellitus (E10–E14)	192	5.6	131	5.2	323	5.5
Ischaemic heart diseases (I20–I25)	613	17.9	397	15.9	1 010	17.1
Heart failure (I50)	611	17.9	461	18.5	1 072	18.1
Cerebrovascular diseases (I60–I69)	179	5.2	109	4.4	288	4.9
Influenza and pneumonia (J10–J18)	1 150	33.6	708	28.4	1 858	31.4
Renal failure (N17–N19)	260	7.6	151	6.0	411	6.9
Renal failure (N17–N19)	813	100.0	891	100.0	1 704	100.0
Reported alone	58	7.1	83	9.3	141	8.3
Reported with						
Septicaemia (A40, A41)	105	12.9	96	10.8	201	11.8
Diabetes mellitus (E10–E14)	68	8.4	66	7.4	134	7.9
Ischaemic heart diseases (I20–I25)	237	29.2	215	24.1	452	26.5
Heart failure (I50)	230	28.3	264	29.6	494	29.0
Cerebrovascular diseases (I60–I69)	59	7.3	79	8.9	138	8.1
Influenza and pneumonia (J10–J18)	114	14.0	98	11.0	212	12.4

## 2.5 CAUSES OF DEATH, Associated cause and underlying cause

Multiple cause/underlying cause and ICD code	Males.....		Females.....		Persons.....	
	no.	%	no.	%	no.	%
Septicaemia (A40–A41)	3 543	100.0	3 523	100.0	7 066	100.0
Reported as underlying cause	442	12.5	531	15.1	973	13.8
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	817	23.1	614	17.4	1 431	20.3
Diabetes mellitus (E10–E14)	136	3.8	143	4.1	279	3.9
Ischaemic heart diseases (I20–I25)	188	5.3	174	4.9	362	5.1
Cerebrovascular diseases (I60–I69)	124	3.5	120	3.4	244	3.5
Influenza and pneumonia (J10–J18)	163	4.6	151	4.3	314	4.4
Malignant neoplasms (C00–C97)	23 541	100.0	17 728	100.0	41 269	100.0
Reported as underlying cause	20 753	88.2	15 997	90.2	36 750	89.0
Reported in association with an underlying cause of						
Ischaemic heart diseases (I20–I25)	1 013	4.3	513	2.9	1 526	3.7
Cerebrovascular diseases (I60–I69)	282	1.2	250	1.4	532	1.3
Diabetes mellitus (E10–E14)	5 612	100.0	4 713	100.0	10 325	100.0
Reported as underlying cause	1 639	29.2	1 439	30.5	3 078	29.8
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	931	16.6	542	11.5	1 473	14.3
Ischaemic heart diseases (I20–I25)	1 439	25.6	1 160	24.6	2 599	25.2
Cerebrovascular diseases (I60–I69)	405	7.2	431	9.1	836	8.1
Organic, including symptomatic, mental disorders (F00–F09)	2 278	100.0	4 082	100.0	6 360	100.0
Reported as underlying cause	683	30.0	1 454	35.6	2 137	33.6
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	280	12.3	315	7.7	595	9.4
Ischaemic heart diseases (I20–I25)	357	15.7	711	17.4	1 068	16.8
Heart failure (I50)	71	3.1	151	3.7	222	3.5
Chronic lower respiratory diseases (J40–J47)	128	5.6	114	2.8	242	3.8
Diseases of the nervous system (G00–G99)	5 002	100.0	5 237	100.0	10 239	100.0
Reported as underlying cause	1 894	37.9	2 310	44.1	4 204	41.1
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	567	11.3	413	7.9	980	9.6
Ischaemic heart diseases (I20–I25)	673	13.5	710	13.6	1 383	13.5
Cerebrovascular diseases (I60–I69)	543	10.9	678	12.9	1 221	11.9
Hypertensive diseases (I10–I15)	1 786	100.0	2 523	100.0	4 309	100.0
Reported as underlying cause	443	24.8	780	30.9	1 223	28.4
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	509	28.5	538	21.3	1 047	24.3
Ischaemic heart diseases (I20–I25)	119	6.7	119	4.7	238	5.5
Diseases of arteries, arterioles and capillaries (I70–I79)	116	6.5	96	3.8	212	4.9
Chronic lower respiratory diseases (J40–J47)	122	6.8	116	4.6	238	5.5
Ischaemic heart diseases (I20–I25)	20 439	100.0	17 322	100.0	37 761	100.0
Reported as underlying cause	13 906	68.0	12 328	71.2	26 234	69.5
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	1 736	8.5	856	4.9	2 592	6.9
Diabetes mellitus (E10–E14)	890	4.4	689	4.0	1 579	4.2
Cerebrovascular diseases (I60–I69)	545	2.7	697	4.0	1 242	3.3
Chronic lower respiratory diseases (J40–J47)	613	3.0	397	2.3	1 010	2.7
Heart failure (I50)	7 562	100.0	9 461	100.0	17 023	100.0
Reported as underlying cause	982	13.0	1 630	17.2	2 612	15.3
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	727	9.6	594	6.3	1 321	7.8
Diabetes mellitus (E10–E14)	265	3.5	265	2.8	530	3.1
Ischaemic heart diseases (I20–I25)	2 823	37.3	3 381	35.7	6 204	36.4
Cerebrovascular diseases (I60–I69)	236	3.1	432	4.6	668	3.9
Chronic lower respiratory diseases (J40–J47)	611	8.1	461	4.9	1 072	6.3
Renal failure (N17–N19)	230	3.0	264	2.8	494	2.9

## 2.5 CAUSES OF DEATH, Associated cause and underlying cause *continued*

Multiple cause/underlying cause and ICD code	Males.....		Females.....		Persons.....	
	no.	%	no.	%	no.	%
Cerebrovascular diseases (I60–I69)	8 743	100.0	11 459	100.0	20 202	100.0
Reported as underlying cause	4 852	55.5	7 294	63.7	12 146	60.1
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	776	8.9	554	4.8	1 330	6.6
Diabetes mellitus (E10–E14)	339	3.9	339	3.0	678	3.4
Ischaemic heart diseases (I20–I25)	1 123	12.8	1 297	11.3	2 420	12.0
Diseases of arteries, arterioles and capillaries (I70–I79)	2 986	100.0	2 401	100.0	5 387	100.0
Reported as underlying cause	1 381	46.2	1 244	51.8	2 625	48.7
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	281	9.4	121	5.0	402	7.5
Ischaemic heart diseases (I20–I25)	567	19.0	366	15.2	933	17.3
Cerebrovascular diseases (I60–I69)	113	3.8	112	4.7	225	4.2
Influenza and pneumonia (J10–J18)	8 791	100.0	8 591	100.0	17 382	100.0
Reported as underlying cause	1 184	13.5	1 518	17.7	2 702	15.5
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	1 954	22.2	1 092	12.7	3 046	17.5
Organic, including symptomatic, mental disorders (F00–F09)	349	4.0	637	7.4	986	5.7
Diseases of the nervous system (G00–G99)	645	7.3	732	8.5	1 377	7.9
Ischaemic heart diseases (I20–I25)	712	8.1	718	8.4	1 430	8.2
Heart failure (I50)	268	3.0	487	5.7	755	4.3
Cerebrovascular diseases (I60–I69)	861	9.8	1 100	12.8	1 961	11.3
Chronic lower respiratory diseases (J40–J47)	1 150	13.1	708	8.2	1 858	10.7
Chronic lower respiratory diseases (J40–J47)	8 218	100.0	5 290	100.0	13 508	100.0
Reported as underlying cause	3 419	41.6	2 497	47.2	5 916	43.8
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	1 414	17.2	638	12.1	2 052	15.2
Ischaemic heart diseases (I20–I25)	1 602	19.5	970	18.3	2 572	19.0
Cerebrovascular diseases (I60–I69)	247	3.0	183	3.5	430	3.2
Diseases of liver (K70–K77)	2 363	100.0	1 176	100.0	3 539	100.0
Reported as underlying cause	822	34.8	374	31.8	1 196	33.8
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	733	31.0	403	34.3	1 136	32.1
Ischaemic heart diseases (I20–I25)	161	6.8	47	4.0	208	5.9
Renal failure (N17–N19)	6 546	100.0	5 838	100.0	12 384	100.0
Reported as underlying cause	813	12.4	891	15.3	1 704	13.8
Reported in association with an underlying cause of						
Malignant neoplasms (C00–C97)	1 246	19.0	765	13.1	2 011	16.2
Diabetes mellitus (E10–E14)	373	5.7	317	5.4	690	5.6
Ischaemic heart diseases (I20–I25)	1 398	21.4	1 158	19.8	2 556	20.6
Heart failure (I50)	229	3.5	273	4.7	502	4.1
Cerebrovascular diseases (I60–I69)	228	3.5	234	4.0	462	3.7
Chronic lower respiratory diseases (J40–J47)	260	4.0	151	2.6	411	3.3

## 2.6 NATURE OF INJURY, By external cause

### ACCIDENTS.....

Nature of injury or poisoning and ICD code	Transport accidents (V01-V99)	Accidental falls (W00-W19)	Accidental drowning and submersion (W65-W74)	Exposure to smoke, fire and flames (X00-X09)	Accidental poisonings (X40-X49)	Other	Total
MALES							
%							
<b>Total injuries (S00-T98)</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>
Injuries to the head (S00-S09)	29.4	52.8	3.3	—	—	11.1	23.3
Fracture of skull and facial bones (S02)	6.6	6.5	0.4	—	—	1.3	4.5
Injuries to the thorax (S20-S29)	19.2	7.7	0.4	—	0.1	9.7	12.6
Injuries to the abdomen, lower back, lumbar spine and pelvis (S30-S39)	8.8	4.0	0.4	0.0	0.0	6.1	6.1
Injuries to the hip and thigh (S70-S79)	1.4	8.8	—	—	—	24.3	5.7
Fracture of femur (S72)	1.3	8.3	—	—	—	23.8	5.4
Unspecified multiple injuries (T07)	19.7	4.5	0.4	—	—	2.1	11.3
Burns and corrosions (T20-T32)	0.8	0.2	—	32.1	—	1.1	0.9
Poisoning by drugs, medicaments and biological substances (T36-T50)	0.4	0.9	0.8	3.6	78.9	0.1	11.5
Poisoning by narcotics and psychodysleptics (hallucinogens) (T40)	0.2	0.4	0.8	3.6	39.7	0.1	5.8
Toxic effects of substances chiefly nonmedicinal as to source (T51-T65)	0.6	0.9	1.7	62.5	16.4	0.9	3.6
Toxic effect of carbon monoxide (T58)	—	—	0.4	8.9	1.9	—	0.4
Other and unspecified effects of external causes (T66-T78)	2.5	2.0	89.5	—	0.7	15.9	8.4
Asphyxiation (T71)	1.0	0.2	0.8	—	0.5	9.8	2.3
Certain early complications of trauma (T79)	1.7	3.1	—	1.8	0.8	6.4	2.4
FEMALES							
no.							
Total injuries	2 767	555	239	56	730	848	5 195
FEMALES							
%							
<b>Total injuries (S00-T98)</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>
Injuries to the head (S00-S09)	25.3	52.0	1.8	4.0	0.7	3.8	18.2
Fracture of skull and facial bones (S02)	5.6	3.6	—	—	—	0.2	2.6
Injuries to the thorax (S20-S29)	17.0	8.0	—	—	—	3.7	8.3
Injuries to the abdomen, lower back, lumbar spine and pelvis (S30-S39)	8.3	5.8	—	—	—	8.0	6.2
Injuries to the hip and thigh (S70-S79)	0.8	13.3	—	—	—	43.6	15.7
Fracture of femur (S72)	0.7	12.5	—	—	—	43.1	15.4
Unspecified multiple injuries (T07)	23.1	1.4	—	—	—	0.6	8.4
Burns and corrosions (T20-T32)	1.0	—	—	52.0	0.2	0.4	1.0
Poisoning by drugs, medicaments and biological substances (T36-T50)	0.5	0.2	5.3	—	81.9	—	13.5
Poisoning by narcotics and psychodysleptics (hallucinogens) (T40)	0.1	—	1.8	—	26.5	—	4.3
Toxic effects of substances chiefly nonmedicinal as to source (T51-T65)	0.4	—	—	44.0	13.4	0.5	2.9
Toxic effect of carbon monoxide (T58)	0.1	—	—	4.0	1.4	—	0.3
Other and unspecified effects of external causes (T66-T78)	1.8	1.4	93.0	—	0.2	3.6	4.0
Asphyxiation (T71)	0.9	0.2	1.8	—	—	2.3	1.1
Certain early complications of trauma (T79)	2.3	5.5	—	—	0.2	10.1	4.8
no.							
Total injuries	921	415	57	25	426	815	2 659

## 2.6 NATURE OF INJURY, By external cause *continued*

### INTENTIONAL INJURY AND OTHER.....

Nature of injury or poisoning and ICD code	Intentional self-harm (X60–X84)	Assault (X85–Y09)	Other	Total	External causes
<b>MALES</b>					
	%	%	%	%	%
<b>Total injuries (S00–T98)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Injuries to the head (S00–S09)	13.7	32.9	1.1	15.0	20.3
Fracture of skull and facial bones (S02)	1.2	3.5	—	1.4	3.3
Injuries to the thorax (S20–S29)	3.6	30.4	3.4	6.5	10.4
Injuries to the abdomen, lower back, lumbar spine and pelvis (S30–S39)	1.9	5.4	—	2.2	4.7
Injuries to the hip and thigh (S70–S79)	0.2	0.6	—	0.2	3.7
Fracture of femur (S72)	0.2	—	—	0.2	3.5
Unspecified multiple injuries (T07)	3.6	1.9	1.1	3.2	8.4
Burns and corrosions (T20–T32)	0.7	0.6	0.6	0.7	0.9
Poisoning by drugs, medicaments and biological substances (T36–T50)	11.9	1.9	16.4	11.1	11.3
Poisoning by narcotics and psychodysleptics (hallucinogens) (T40)	3.0	0.9	6.2	3.0	4.8
Toxic effects of substances chiefly nonmedicinal as to source (T51–T65)	19.9	1.9	2.8	16.9	8.4
Toxic effect of carbon monoxide (T58)	16.6	—	0.6	13.8	5.2
Other and unspecified effects of external causes (T66–T78)	36.4	3.5	9.0	31.2	16.6
Asphyxiation (T71)	34.8	1.6	4.5	29.4	12.0
Certain early complications of trauma (T79)	0.4	1.6	—	0.5	1.7
	no.	no.	no.	no.	no.
Total injuries	2 432	316	177	2 925	8 120
<b>FEMALES</b>					
	%	%	%	%	%
<b>Total injuries (S00–T98)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Injuries to the head (S00–S09)	4.8	29.6	5.3	9.4	15.8
Fracture of skull and facial bones (S02)	0.4	2.7	—	0.8	2.1
Injuries to the thorax (S20–S29)	1.7	16.1	—	4.1	7.1
Injuries to the abdomen, lower back, lumbar spine and pelvis (S30–S39)	1.7	8.6	—	2.7	5.2
Injuries to the hip and thigh (S70–S79)	—	—	—	—	11.3
Fracture of femur (S72)	—	—	—	—	11.1
Unspecified multiple injuries (T07)	3.3	2.2	—	2.7	6.8
Burns and corrosions (T20–T32)	1.9	1.1	—	1.6	1.1
Poisoning by drugs, medicaments and biological substances (T36–T50)	35.4	1.6	23.9	28.0	17.5
Poisoning by narcotics and psychodysleptics (hallucinogens) (T40)	5.1	1.1	6.2	4.5	4.4
Toxic effects of substances chiefly nonmedicinal as to source (T51–T65)	15.2	2.2	0.9	11.2	5.2
Toxic effect of carbon monoxide (T58)	11.2	0.5	0.9	8.1	2.5
Other and unspecified effects of external causes (T66–T78)	30.3	11.8	6.2	24.3	9.6
Asphyxiation (T71)	26.6	10.8	2.7	21.1	6.7
Certain early complications of trauma (T79)	0.6	0.5	—	0.5	3.6
	no.	no.	no.	no.	no.
Total injuries	725	186	113	1 024	3 683

**2.6 NATURE OF INJURY, By external cause *continued***

Nature of injury or poisoning and ICD code	ACCIDENTS.....							Other	Total		
	Transport accidents (V01–V99)	Accidental falls (W00–W19)	Accidental drowning and submersion (W65–W74)	Exposure to smoke, fire and flames (X00–X09)	Accidental poisonings (X40–X49)	Other					
PERSONS											
%											
<b>Total injuries (S00–T98)</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>		
Injuries to the head (S00–S09)	28.4	52.5	3.0	1.2	0.3	7.5	21.6				
Fracture of skull and facial bones (S02)	6.4	5.3	0.3	—	—	0.8	3.8				
Injuries to the thorax (S20–S29)	18.6	7.8	0.3	—	0.1	6.7	11.2				
Injuries to the abdomen, lower back, lumbar spine and pelvis (S30–S39)	8.6	4.7	0.3	—	—	7.0	6.1				
Injuries to the hip and thigh (S70–S79)	1.3	10.7	—	—	—	33.7	9.1				
Fracture of femur (S72)	1.1	10.1	—	—	—	33.3	8.8				
Unspecified multiple injuries (T07)	20.5	3.2	0.3	—	—	1.4	10.3				
Burns and corrosions (T20–T32)	0.8	0.1	—	38.3	0.1	0.7	1.0				
Poisoning by drugs, medicaments and biological substances (T36–T50)	0.4	0.6	1.7	2.5	80.0	0.1	12.1				
Poisoning by narcotics and psychodysleptics (hallucinogens) (T40)	0.2	0.2	1.0	2.5	34.9	0.1	5.3				
Toxic effects of substances chiefly nonmedicinal as to source (T51–T65)	0.5	0.5	1.4	56.8	15.3	0.7	3.4				
Toxic effect of carbon monoxide (T58)	—	—	0.3	7.4	1.7	—	0.4				
Other and unspecified effects of external causes (T66–T78)	2.4	1.8	90.2	—	0.5	9.9	6.9				
Asphyxiation (T71)	0.9	0.2	1.0	—	0.3	6.1	1.9				
Certain early complications of trauma (T79)	1.8	4.1	—	1.2	0.6	8.2	3.2				
no.											
Total injuries	3 688	970	296	81	1 156	1 663	7 854				

**2.6 NATURE OF INJURY, By external cause *continued***

## INTENTIONAL INJURY AND OTHER.....

<i>Nature of injury or poisoning and ICD code</i>	<i>Intentional self-harm (X60–X84)</i>	<i>Assault (X85–Y09)</i>	<i>Other</i>	<i>Total</i>	<i>External causes</i>
PERSONS					
	%	%	%	%	%
<b>Total injuries (S00–T98)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Injuries to the head (S00–S09)	11.7	31.7	2.8	13.5	18.9
Fracture of skull and facial bones (S02)	1.0	3.2	—	1.2	3.0
Injuries to the thorax (S20–S29)	3.2	25.1	2.1	5.9	9.4
Injuries to the abdomen, lower back, lumbar spine and pelvis (S30–S39)	1.9	6.6	—	2.3	4.9
Injuries to the hip and thigh (S70–S79)	0.2	0.4	—	0.2	6.1
Fracture of femur (S72)	0.2	—	—	0.1	5.9
Unspecified multiple injuries (T07)	3.5	2.0	0.7	3.1	7.9
Burns and corrosions (T20–T32)	1.0	0.8	0.3	0.9	0.9
Poisoning by drugs, medicaments and biological substances (T36–T50)	17.3	1.8	19.3	15.5	13.3
Poisoning by narcotics and psychodysleptics (hallucinogens) (T40)	3.5	1.0	6.2	3.4	4.7
Toxic effects of substances chiefly nonmedicinal as to source (T51–T65)	18.8	2.0	2.1	15.4	7.4
Toxic effect of carbon monoxide (T58)	15.4	0.2	0.7	12.4	4.4
Other and unspecified effects of external causes (T66–T78)	35.0	6.6	7.9	29.4	14.4
Asphyxiation (T71)	32.9	5.0	3.8	27.2	10.3
Certain early complications of trauma (T79)	0.4	1.2	—	0.5	2.3
.....					
	no.	no.	no.	no.	no.
Total injuries	3 157	502	290	3 949	11 803
.....					

## SECTION 3 PERINATAL DEATHS .....

### INTRODUCTION

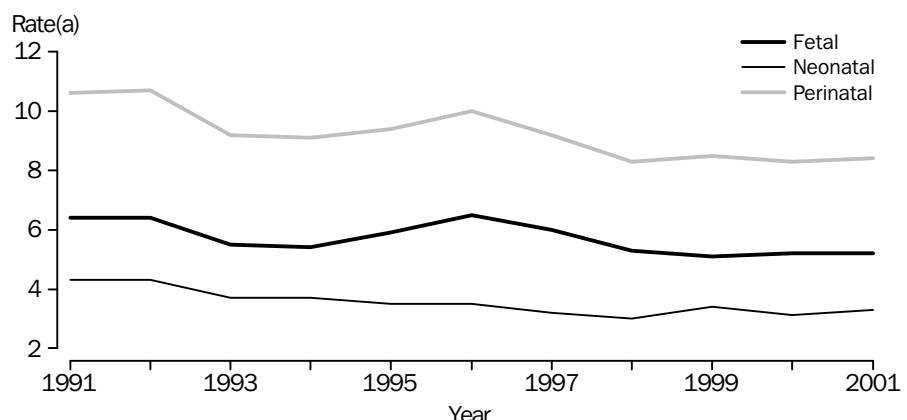
Perinatal deaths comprise stillbirths (fetal deaths) and deaths of infants within the first 28 days of life (neonatal deaths). In *Causes of Death* publications from 1997, these deaths have included infants and fetuses weighing at least 400 grams or having a gestational age of 20 weeks. To assist the reader and enable comparisons, table 3.1 is based on the World Health Organisation recommended definition which includes infants and fetuses weighing at least 500 grams or having a gestational age of 22 weeks (refer to Explanatory Notes, paragraphs 4–8 for further information on perinatal death statistics). Further tables based on this definition are available from the ABS. All other tables and this summary are based on the 400 g/20 weeks definition.

### TRENDS IN PERINATAL DEATHS

In 2001, there were 2,092 perinatal deaths registered in Australia, which represented a marginal increase over the 2,076 deaths registered in 2000. The perinatal death rate also slightly increased from 8.3 to 8.4 deaths per 1,000 total relevant births (see Glossary, death rates for further information). In 2001, there were 1,290 fetal deaths and 802 neonatal deaths. Fetal deaths decreased by 1% on the number registered in 2000 while neonatal deaths increased by 4%.

Between 1991 and 2001 the perinatal death rate declined from 10.6 to 8.4 deaths per 1,000 births. During this period the fetal rate declined by 19% (6.4 to 5.2 per 1,000 births) whilst the neonatal rate fell by 23% (4.3 to 3.3 per 1,000 births).

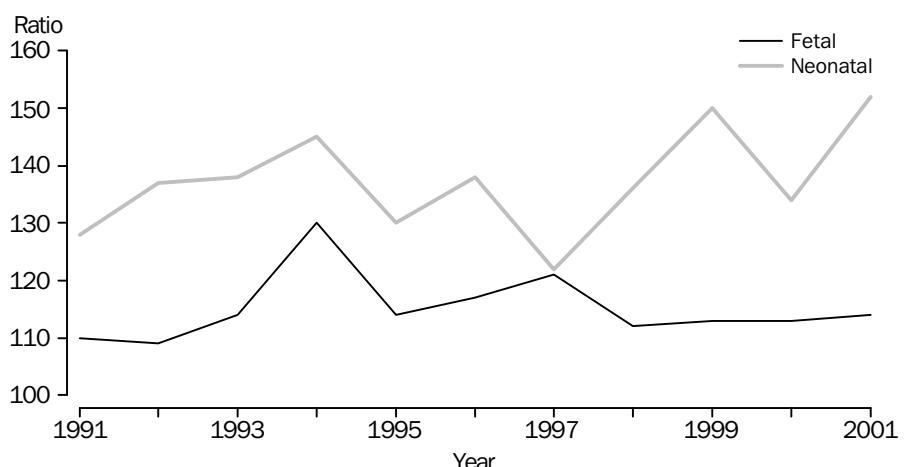
### TRENDS IN PERINATAL DEATHS



(a) Per 1,000 relevant births.

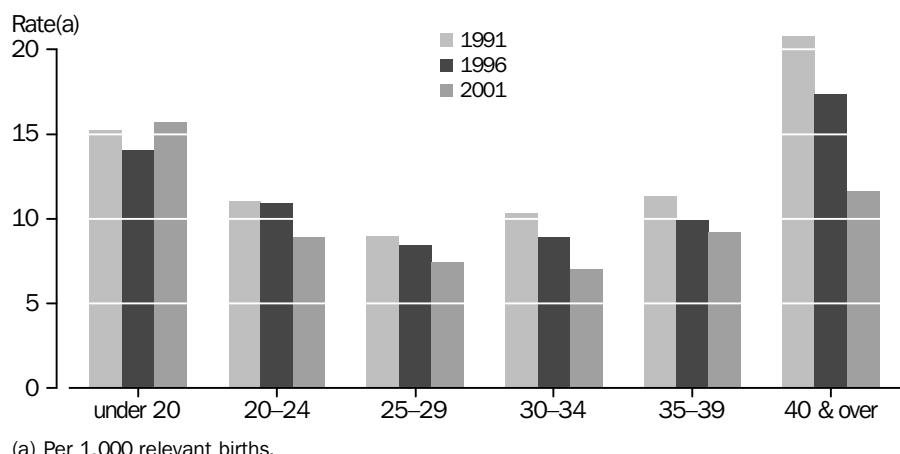
**SEX RATIO**

In 2001, the sex ratio of male fetal deaths for every 100 female fetal deaths was 114, while the sex ratio in neonatal deaths was 152 which is the highest reported in the time period 1991–2001.

**TRENDS IN SEX RATIOS****AGE OF MOTHER**

In 2001, 53% of total perinatal deaths were to mothers aged 25–29 and 30–34 years. While these age groups recorded the highest numbers of perinatal deaths, the death rates of 7.4 and 7.0 per 1,000 births respectively, were the lowest of all age groups. The highest rate is in mothers under 20 years (15.7), while for mothers aged 40 and over, the rate is 11.6.

In the last ten years, the overall perinatal death rate has decreased by 21%. The extent of this decrease, however, has not been uniform across all age groups. In particular, the perinatal death rate of 11.6 per 1,000 births for the 40 years and over age group is 44% lower than the 1991 rate of 20.8 per 1,000 births.

**PERINATAL DEATH, RATES, AGE OF MOTHER**

**CONDITION IN FETUS/INFANT**

In 2001, 43% of fetal deaths were not allocated to a specific cause of death. Medical certifiers are often unwilling or unable to provide an accurate cause of death without the assistance of an autopsy. The major specified conditions reported in fetal deaths registered in 2001 were intrauterine hypoxia (19% of total), congenital malformations, deformations and chromosomal abnormalities (13%) and disorders related to length of gestation and fetal growth (10%). Congenital malformations, deformations and chromosomal abnormalities accounted for 26% of total neonatal deaths registered in 2001, while respiratory and cardiovascular disorders, specific to the perinatal period (21%) and disorders related to length of gestation and fetal growth (20%) were the other major contributors.

**CONDITION IN MOTHER**

The underlying cause for perinatal deaths can be attributed to a condition relating to the fetus/infant, the mother or both. A maternal condition was reported in 1,431 (68%) of the 2,092 perinatal deaths recorded in 2001. Complications of placenta, cord and membranes was the most frequently reported maternal cause, accounting for 647 deaths or 31% of all perinatal deaths.

In 2001, maternal complications of pregnancy occurred in 452 perinatal deaths, an increase of 9.4% on last year. Multiple pregnancy is the most common maternal complication of pregnancy and was reported in 153 perinatal deaths which represents an increase of 28% on the number recorded in 2000, but is 21% lower than the peak that occurred in 1995.

**3.1 FETAL,NEONATAL AND PERINATAL DEATHS,500 grams/22 weeks(a)**

Year	FETAL DEATHS.....			NEONATAL DEATHS.....			PERINATAL DEATHS.....		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
NUMBER									
1991	777	701	1 478	571	441	1 012	1 348	1 142	<b>2 490</b>
1997	692	588	1 280	408	310	718	1 100	898	<b>1 998</b>
1998	590	532	1 122	395	284	679	985	816	<b>1 801</b>
1999	549	505	1 054	446	298	744	995	803	<b>1 798</b>
2000	570	506	1 076	396	274	670	966	780	<b>1 746</b>
2001	543	506	1 049	427	265	692	970	771	<b>1 741</b>
RATE(b)									
1991	5.9	5.6	5.7	4.3	3.5	3.9	10.2	9.1	<b>9.6</b>
1997	5.3	4.8	5.1	3.2	2.5	2.9	8.5	7.3	<b>7.9</b>
1998	4.6	4.4	4.5	3.1	2.3	2.7	7.7	6.7	<b>7.2</b>
1999	4.3	4.1	4.2	3.5	2.5	3.0	7.8	6.6	<b>7.2</b>
2000	4.4	4.2	4.3	3.1	2.3	2.7	7.5	6.4	<b>7.0</b>
2001	4.3	4.2	4.2	3.4	2.2	2.8	7.7	6.4	<b>7.0</b>

(a) See Explanatory Notes, paragraph 5 for further information.

(b) Rates are per 1,000 total relevant births. See Glossary for further information.

**3.2 FETAL,NEONATAL AND PERINATAL DEATHS,400 grams/20 weeks(a)**

Year	FETAL DEATHS.....			NEONATAL DEATHS.....			PERINATAL DEATHS.....		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
NUMBER									
1991	868	790	1 658	616	481	1 097	1 484	1 271	<b>2 755</b>
1997	829	687	1 516	443	362	805	1 272	1 049	<b>2 321</b>
1998	707	629	1 336	435	319	754	1 142	948	<b>2 090</b>
1999	682	602	1 284	510	339	849	1 192	941	<b>2 133</b>
2000	692	611	1 303	443	330	773	1 135	941	<b>2 076</b>
2001	686	604	1 290	484	318	802	1 170	922	<b>2 092</b>
RATE(b)									
1991	6.5	6.3	6.4	4.7	3.8	4.3	11.2	10.1	<b>10.6</b>
1997	6.4	5.6	6.0	3.4	3.0	3.2	9.8	8.5	<b>9.2</b>
1998	5.5	5.1	5.3	3.4	2.6	3.0	8.9	7.8	<b>8.3</b>
1999	5.3	4.9	5.1	4.0	2.8	3.4	9.3	7.7	<b>8.5</b>
2000	5.4	5.0	5.2	3.5	2.7	3.1	8.8	7.7	<b>8.3</b>
2001	5.4	5.0	5.2	3.8	2.6	3.3	9.2	7.6	<b>8.4</b>

(a) See Explanatory Notes, paragraph 4 for further information.

(b) Rates are per 1,000 total relevant births. See Glossary for further information.

**3.3 PERINATAL DEATHS(a), By state or territory of usual residence of mother**

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
NUMBER									
1991	969	644	492	178	264	82	66	60	<b>2 755</b>
1997	861	522	430	152	202	70	56	28	<b>2 321</b>
1998	695	470	452	131	186	59	48	49	<b>2 090</b>
1999	705	543	385	119	208	65	58	50	<b>2 133</b>
2000	675	472	421	147	212	61	54	34	<b>2 076</b>
2001	664	510	464	147	191	36	47	33	<b>2 092</b>
RATE(b)									
1991	11.0	9.8	11.1	9.0	10.3	11.9	18.2	12.5	<b>10.6</b>
1997	9.8	8.5	9.1	8.2	8.1	11.6	15.5	6.6	<b>9.2</b>
1998	8.1	7.7	9.6	7.2	7.5	9.8	13.1	12.2	<b>8.3</b>
1999	8.1	9.2	8.2	6.6	8.3	10.7	16.1	11.7	<b>8.5</b>
2000	7.7	7.9	8.9	8.2	8.4	10.6	14.5	8.3	<b>8.3</b>
2001	7.8	8.7	9.7	8.5	7.9	5.6	12.2	8.3	<b>8.4</b>

(a) Based on 400 grams/20 weeks definition. See Explanatory Notes, paragraph 4 for further information.

(b) Rates are per 1,000 total relevant births. See Glossary for further information.

**3.4 PERINATAL DEATHS(a), By age of mother**

AGE OF MOTHER (YEARS).....								
Year	Under 20	20-24	25-29	30-34	35-39	40 and over	Not stated	Total
NUMBER								
1991	226	570	831	739	272	76	41	<b>2 755</b>
1997	186	408	666	583	357	65	56	<b>2 321</b>
1998	155	357	605	524	330	74	45	<b>2 090</b>
1999	163	374	598	566	307	85	40	<b>2 133</b>
2000	165	355	584	561	309	61	41	<b>2 076</b>
2001	186	332	548	562	341	83	40	<b>2 092</b>
RATE(b)								
1991	15.2	11.0	9.0	10.3	11.3	20.8	..	<b>10.6</b>
1997	15.0	9.6	8.0	7.6	10.7	12.1	..	<b>9.2</b>
1998	13.0	8.9	7.4	6.9	9.6	12.6	..	<b>8.3</b>
1999	13.8	9.6	7.5	7.3	8.6	13.4	..	<b>8.5</b>
2000	14.3	9.4	7.4	7.1	8.4	9.2	..	<b>8.3</b>
2001	15.7	8.9	7.4	7.0	9.2	11.6	..	<b>8.4</b>

(a) Based on 400 grams/20 weeks definition. See Explanatory Notes, paragraph 4 for further information.

(b) Rates are per 1,000 total relevant births. See Glossary for further information.

### 3.5 MAIN CAUSES OF FETAL, NEONATAL AND PERINATAL DEATHS(a)

Cause of death and ICD code	FETAL DEATHS.....		NEONATAL DEATHS.....		PERINATAL DEATHS.....	
	Males	Females	Males	Females	Males	Females
TOTAL						
<b>All causes</b>	<b>686</b>	<b>604</b>	<b>484</b>	<b>318</b>	<b>1 170</b>	<b>922</b>
MAIN CONDITION IN FETUS/INFANT						
Certain conditions originating in the perinatal period (P00–P96)	566	539	325	220	891	759
Disorders related to length of gestation and fetal growth (P05–P08)	79	55	93	67	172	122
Extremely low birth weight (P07.0)	43	33	86	62	129	95
Respiratory and cardiovascular disorders specific to the perinatal period (P20–P29)	131	132	101	66	232	198
Intrauterine hypoxia (P20)	126	125	2	3	128	128
Birth asphyxia (P21)	—	—	16	11	16	11
Cardiovascular disorders originating in the perinatal period (P29)	3	4	11	12	14	16
Infections specific to the perinatal period (P35–P39)	11	8	28	28	39	36
Haemorrhagic and haematological disorders of fetus and newborn (P50–P61)	13	18	51	25	64	43
Intracranial nontraumatic haemorrhage of fetus and newborn (P52)	2	2	42	21	44	23
Other disorders originating in the perinatal period (P90–P96)	308	302	26	11	334	313
Fetal death of unspecified cause (P95)	108	132	—	—	108	132
Condition originating in the perinatal period, unspecified (P96.9)	161	149	4	2	165	151
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	114	59	126	86	240	145
Congenital malformations of the nervous system (Q00–Q07)	22	13	11	10	33	23
Anencephaly and similar malformations (Q00)	3	1	4	1	7	2
Congenital hydrocephalus (Q03)	6	6	1	1	7	7
Spina bifida (Q05)	4	—	3	2	7	2
Congenital malformations of the circulatory system (Q20–Q28)	23	9	36	21	59	30
Congenital malformations of the heart (Q20–Q24)	18	8	27	16	45	24
Congenital malformations of aortic and mitral valves (Q23)	3	1	10	7	13	8
Congenital malformations of lung (Q33)	1	—	10	7	11	7
Congenital malformations of the urinary system (Q60–Q64)	18	6	15	4	33	10
Congenital malformations and deformations of the musculoskeletal system (Q65–Q79)	13	3	19	10	32	13
Congenital diaphragmatic hernia (Q79.0)	4	—	9	5	13	5
Down's syndrome (Q90)	8	5	6	3	14	8
Edwards' syndrome and Patau's syndrome (Q91)	7	8	13	9	20	17
MAIN CONDITION IN MOTHER						
Maternal conditions that may be unrelated to present pregnancy (P00)	97	70	24	22	121	92
Maternal hypertensive disorders (P00.0)	28	19	8	8	36	27
Maternal complications of pregnancy (P01)	78	59	188	127	266	186
Incompetent cervix (P01.0)	9	5	14	11	23	16
Premature rupture of membranes (P01.1)	15	7	27	16	42	23
Multiple pregnancy (P01.5)	19	29	64	41	83	70
Complications of placenta, cord and membranes (P02)	246	238	92	71	338	309
Placenta praevia and other forms of placental separation and haemorrhage (P02.0–P02.1)	101	78	40	26	141	104
Other and unspecified morphological and functional abnormalities of placenta (P02.2)	50	35	3	—	53	35
Prolapsed cord (P02.4)	4	6	6	5	10	11
Other compression of umbilical cord (P02.5)	43	58	2	—	45	58
Chorioamnionitis (P02.7)	21	26	22	30	43	56
Complications of labour and delivery (P03)	38	18	28	18	66	36
Breech delivery and extraction (P03.0)	2	—	4	—	6	—
Noxious influences transmitted via placenta or breast milk (P04)	4	8	2	3	6	11
No maternal condition reported	223	211	150	77	373	288

(a) Based on 400 grams/20 weeks definition. See Explanatory Notes, paragraph 4 for further information.

**3.6 PERINATAL DEATHS(a), By birthweight**

Cause of death and ICD code	BIRTHWEIGHT (GRAMS).....							Total(b)
	400–499	500–999	1 000–1 999	2 000–2 999	3 000–3 999	4 000 or more		
<b>TOTAL</b>	<b>340</b>	<b>613</b>	<b>337</b>	<b>365</b>	<b>311</b>	<b>48</b>	<b>2 092</b>	
<b>All causes</b>								
Certain conditions originating in the perinatal period (P00–P96)	268	522	246	276	241	45	1 650	
Disorders related to length of gestation and fetal growth (P05–P08)	114	130	23	14	1	1	294	
Extremely low birth weight (P07.0)	107	112	—	—	—	—	224	
Respiratory and cardiovascular disorders specific to the perinatal period (P20–P29)	27	122	78	94	89	11	430	
Intrauterine hypoxia (P20)	17	32	51	75	68	9	256	
Birth asphyxia (P21)	1	2	1	6	14	1	27	
Cardiovascular disorders originating in the perinatal period (P29)	—	10	9	4	5	1	30	
Infections specific to the perinatal period (P35–P39)	9	39	10	7	9	1	75	
Haemorrhagic and haematological disorders of fetus and newborn (P50–P61)	5	60	15	8	15	3	107	
Intracranial nontraumatic haemorrhage of fetus and newborn (P52)	4	50	10	1	1	—	67	
Other disorders originating in the perinatal period (P90–P96)	112	138	102	137	115	16	647	
Fetal death of unspecified cause (P95)	30	42	44	59	45	7	240	
Condition originating in the perinatal period, unspecified (P96.9)	46	80	53	65	54	5	316	
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	70	85	82	71	53	3	385	
Congenital malformations of the nervous system (Q00–Q07)	13	11	14	5	7	—	56	
Anencephaly and similar malformations (Q00)	—	1	3	2	2	—	9	
Congenital hydrocephalus (Q03)	4	4	2	1	1	—	14	
Spina bifida (Q05)	3	2	1	1	0	—	9	
Congenital malformations of the circulatory system (Q20–Q28)	10	15	17	20	19	1	89	
Congenital malformations of the heart (Q20–Q24)	9	11	12	17	15	—	69	
Congenital malformations of aortic and mitral valves (Q23)	3	1	2	4	10	—	21	
Congenital malformations of lung (Q33)	—	5	3	7	3	—	18	
Congenital malformations of the urinary system (Q60–Q64)	7	11	10	7	3	—	43	
Congenital malformations and deformations of the musculoskeletal system (Q65–Q79)	9	5	7	13	9	—	45	
Congenital diaphragmatic hernia (Q79.0)	3	1	2	5	6	—	18	
Down's syndrome (Q90)	10	4	3	2	1	1	22	
Edwards' syndrome and Patau's syndrome (Q91)	4	10	12	8	3	—	37	
<b>MAIN CONDITION IN MOTHER</b>								
Maternal conditions that may be unrelated to present pregnancy (P00)	48	65	30	34	23	10	213	
Maternal hypertensive disorders (P00.0)	5	24	18	8	8	—	63	
Maternal complications of pregnancy (P01)	108	222	69	28	8	1	452	
Incompetent cervix (P01.0)	17	19	3	—	—	—	39	
Premature rupture of membranes (P01.1)	15	34	11	2	1	1	65	
Multiple pregnancy (P01.5)	36	74	24	11	5	—	153	
Complications of placenta, cord and membranes (P02)	84	199	107	124	103	14	647	
Placenta praevia and other forms of placental separation and haemorrhage (P02.0–P02.1)	35	82	39	48	30	6	245	
Other and unspecified morphological and functional abnormalities of placenta (P02.2)	8	24	24	16	14	1	88	
Prolapsed cord (P02.4)	3	8	1	4	4	1	21	
Other compression of umbilical cord (P02.5)	2	13	16	35	32	3	103	
Chorioamnionitis (P02.7)	28	42	11	7	8	—	99	
Complications of labour and delivery (P03)	34	32	9	9	9	5	102	
Breech delivery and extraction (P03.0)	—	—	3	3	—	—	6	
Noxious influences transmitted via placenta or breast milk (P04)	5	5	1	3	1	—	17	
No maternal condition reported	61	90	121	167	167	18	661	

(a) Based on 400 grams/20 weeks definition. See Explanatory Notes, paragraph 4 for further information.

(b) Including deaths of fetus/infants where birthweight is not stated but death meets gestation criterion.

### 3.7 PERINATAL DEATHS(a), By period of gestation

#### PERIOD OF GESTATION (COMPLETED WEEKS).....

Cause of death and ICD code	Under 22	22–27	28–31	32–36	37–41	42 and over	Total(b)
TOTAL							
<b>All causes</b>	<b>185</b>	<b>751</b>	<b>200</b>	<b>343</b>	<b>515</b>	<b>9</b>	<b>2 092</b>
MAIN CONDITION IN FETUS/INFANT							
Certain conditions originating in the perinatal period (P00–P96)	122	641	168	255	408	4	1 650
Disorders related to length of gestation and fetal growth (P05–P08)	61	177	15	19	13	2	294
Extremely low birth weight (P07.0)	59	158	2	—	—	—	224
Respiratory and cardiovascular disorders specific to the perinatal period (P20–P29)	10	141	42	80	142	1	430
Intrauterine hypoxia (P20)	7	45	26	69	107	—	256
Birth asphyxia (P21)	—	3	1	3	18	—	27
Cardiovascular disorders originating in the perinatal period (P29)	—	10	4	4	9	—	30
Infections specific to the perinatal period (P35–P39)	5	42	9	5	11	—	75
Haemorrhagic and haematological disorders of fetus and newborn (P50–P61)	—	63	11	10	18	—	107
Intracranial nontraumatic haemorrhage of fetus and newborn (P52)	—	56	3	2	2	—	67
Other disorders originating in the perinatal period (P90–P96)	43	183	76	126	200	1	647
Fetal death of unspecified cause (P95)	13	37	40	55	80	—	240
Condition originating in the perinatal period, unspecified (P96.9)	19	104	32	62	95	1	316
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	62	104	25	77	86	5	385
Congenital malformations of the nervous system (Q00–Q07)	12	17	3	10	10	1	56
Anencephaly and similar malformations (Q00)	—	1	—	2	4	1	9
Congenital hydrocephalus (Q03)	3	7	1	2	1	—	14
Spina bifida (Q05)	4	1	1	—	1	—	9
Congenital malformations of the circulatory system (Q20–Q28)	11	15	6	19	25	—	89
Congenital malformations of the heart (Q20–Q24)	9	11	4	14	21	—	69
Congenital malformations of aortic and mitral valves (Q23)	3	1	1	3	10	—	21
Congenital malformations of lung (Q33)	—	5	2	6	4	1	18
Congenital malformations of the urinary system (Q60–Q64)	7	17	2	8	5	1	43
Congenital malformations and deformations of the musculoskeletal system (Q65–Q79)	5	10	2	10	13	2	45
Congenital diaphragmatic hernia (Q79.0)	3	1	2	1	7	1	18
Down's syndrome (Q90)	7	8	2	2	3	—	22
Edwards' syndrome and Patau's syndrome (Q91)	2	8	1	12	12	—	37
MAIN CONDITION IN MOTHER							
Maternal conditions that may be unrelated to present pregnancy (P00)	14	102	15	43	39	—	213
Maternal hypertensive disorders (P00.0)	—	28	11	11	13	—	63
Maternal complications of pregnancy (P01)	54	276	34	42	21	1	452
Incompetent cervix (P01.0)	13	23	1	—	—	—	39
Premature rupture of membranes (P01.1)	7	43	4	5	4	—	65
Multiple pregnancy (P01.5)	13	92	7	21	11	—	153
Complications of placenta, cord and membranes (P02)	40	240	74	106	179	1	647
Placenta praevia and other forms of placental separation and haemorrhage (P02.0–P02.1)	17	104	24	36	60	—	245
Other and unspecified morphological and functional abnormalities of placenta (P02.2)	2	22	19	13	32	—	88
Prolapsed cord (P02.4)	1	10	1	3	6	—	21
Other compression of umbilical cord (P02.5)	—	13	9	32	49	—	103
Chorioamnionitis (P02.7)	17	57	7	3	12	1	99
Complications of labour and delivery (P03)	28	38	7	4	17	1	102
Breech delivery and extraction (P03.0)	—	1	2	—	3	—	6
Noxious influences transmitted via placenta or breast milk (P04)	3	7	1	2	3	—	17
No maternal condition reported	46	88	69	146	256	6	661

(a) Based on 400 grams/20 weeks definition. See Explanatory Notes, paragraph 4 for further information.

(b) Including deaths of fetus/infants where gestation is not stated but death meets birthweight criterion.

## SECTION 4

### YEAR OF OCCURRENCE .....

#### INTRODUCTION

Information contained in the preceding sections in this publication refers to deaths registered by the state and territory Registrars-General during the calendar year 2001. In this section, deaths statistics are based on a year of occurrence, i.e. the year in which the death actually occurred, irrespective of the year in which it was registered.

Some countries publish deaths statistics on a year of registration basis, some on a year of occurrence basis, and some on both bases. Although in practice some deaths are registered many years after their date of occurrence, it is common international practice when publishing on a year of occurrence basis to include deaths registered within the particular occurrence year and the year immediately following. Analysis of deaths in Australia has shown that the number of deaths registered after the second year are of little significance (less than 0.1%). Accordingly, this practice has been adopted for the presentation of year of occurrence data in this publication, to facilitate international comparisons.

Commencing with this year's edition of *Causes of Death, Australia*, the ABS will not only release the most recent data on a year of registration basis, but also summary data on a year of occurrence basis for the preceding year. Data on a year of occurrence basis are considered to be more accurate than data on a year of registration basis as it allows for seasonal analysis, and data are not distorted by the effects of late registrations or changes in time taken to process registrations. However, in those countries where registration systems are complete and timely, there is not an appreciable difference between year of registration tabulations and those on a year of occurrence basis, and the two can be used interchangeably. This is certainly the case in Australia where about 95% of deaths occurring in a particular year are registered in that year.

However, variations in this proportion can occur in certain sub-sets of the population and for particular causes of death. For instance, although 95% of the total 128,784 deaths that occurred in 2000 were registered in 2000, only 88% of the 2,111 Indigenous deaths and 93% of deaths due to External causes that occurred in 2000 were registered in that year.

## COMPARISON OF LEADING UNDERLYING CAUSES IN 2000

The following table shows there are negligible percentage differences between leading underlying causes of death presented on year of occurrence basis and year of registration basis in 2000. The two causes with the biggest differences are Accidents and Intentional self-harm. These deaths are subject to coronial enquiry which can cause delays in the registration process.

## LEADING UNDERLYING CAUSES OF DEATH

<i>Cause of death and ICD code</i>	<i>Year of Registration 2000</i>	<i>Year of occurrence 2000</i>	<i>Difference</i>
	<i>no.</i>	<i>no.</i>	<i>% (a)</i>
<b>All causes</b>	<b>128 291</b>	<b>128 784</b>	<b>0.38</b>
Malignant neoplasms (cancer) (C00–C97)	35 628	35 825	0.55
Ischaemic heart diseases (I20–I25)	26 521	26 606	0.32
Cerebrovascular diseases (stroke) (I60–I69)	12 300	12 346	0.37
Chronic lower respiratory diseases (including asthma, emphysema and bronchitis) (J40–J47)	5 962	5 998	0.60
Accidents (V01–X59)	5 138	5 191	1.03
Diabetes mellitus (E10–E14)	3 006	3 009	0.10
Influenza and pneumonia (J10–J18)	2 937	2 939	0.07
Diseases of arteries, arterioles and capillaries (including atherosclerosis and aortic aneurysm) (I70–I79)	2 617	2 612	-0.19
Heart Failure (I50)	2 644	2 633	-0.42
Intentional self-harm (X60–X84)	2 363	2 388	1.06
All other causes	29 175	29 237	0.21

(a) A positive percentage difference indicates that more deaths were reported on a year of occurrence basis.

#### 4.1 YEAR OF OCCURRENCE(a), Selected underlying causes

Cause of death and ICD code	1998.....		1999.....		2000.....	
	Males	Females	Males	Females	Males	Females
<b>All causes</b>	<b>67 131</b>	<b>60 227</b>	<b>67 185</b>	<b>60 894</b>	<b>67 058</b>	<b>61 726</b>
Chapter I Certain infectious and parasitic diseases (A00–B99)	793	670	834	756	871	787
Septicaemia (A40, A41)	337	414	406	457	454	494
Human immunodeficiency virus (HIV) disease (B20–B24)(b)	169	11	154	9	157	11
Chapter II Neoplasms (C00–D48)	20 219	15 456	20 300	15 580	20 665	15 902
Malignant neoplasms (C00–C97)	19 860	15 150	19 880	15 199	20 279	15 546
Digestive organs (C15–C26)	5 461	4 308	5 579	4 327	5 732	4 364
Oesophagus (C15)	646	330	645	294	683	288
Stomach (C16)	765	430	754	451	763	426
Colon (C18)	1 742	1 651	1 758	1 565	1 786	1 649
Rectosigmoid junction, rectum, anus and anal canal (C19–C21)	742	507	725	527	783	500
Liver and intrahepatic bile ducts (C22)	425	206	449	241	513	228
Pancreas (C25)	813	805	868	840	872	876
Trachea, bronchus and lung (C33, C34)	4 712	2 050	4 646	2 123	4 594	2 317
Melanoma of skin (C43)	623	343	641	364	617	354
Breast (C50)	19	2 541	21	2 512	21	2 521
Female genital organs (C51–C58)	..	1 379	..	1 304	..	1 405
Ovary (C56)	..	749	..	731	..	780
Male genital organs (C60–C63)	2 607	..	2 558	..	2 703	..
Prostate (C61)	2 570	..	2 512	..	2 665	..
Urinary tract (C64–C68)	1 040	596	1 130	605	1 070	583
Kidney, except renal pelvis (C64)	450	321	486	314	468	299
Bladder (C67)	553	245	602	257	570	249
Brain (C71)	569	441	587	420	633	455
Lymphoid, haematopoietic and related tissue (C81–C96)	1 911	1 625	1 971	1 608	2 085	1 669
Leukaemia (C91–C95)	772	560	765	592	794	569
In situ and benign neoplasms and neoplasms of uncertain or unknown behaviour (D00–D48)	359	306	420	381	386	356
Chapter III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	195	237	197	258	188	218
Chapter IV Endocrine, nutritional and metabolic diseases (E00–E90)	1 997	1 963	1 998	2 101	2 147	2 031
Diabetes mellitus (E10–E14)	1 480	1 393	1 485	1 472	1 591	1 418
Chapter V Mental and behavioural disorders (F00–F99)	1 378	1 476	1 279	1 561	1 351	1 726
Organic, including symptomatic, mental disorders (F00–F09)	615	1 196	648	1 303	670	1 455
Chapter VI Diseases of the nervous system (G00–G99)	1 727	1 989	1 830	2 075	1 848	2 208
Alzheimer's disease (G30)	491	980	491	1 023	457	1 106
Chapter VII Diseases of the eye and adnexa (H00–H59)	2	3	—	5	—	1
Chapter VIII Diseases of the ear and mastoid process (H60–H95)	4	5	1	6	3	5
Chapter IX Diseases of the circulatory system (I00–I99)	25 210	26 652	24 804	26 457	23 778	26 055
All heart disease (I05–I09, I11, I13, I20–I25, I26, I27, I30–I52)	18 520	17 482	18 121	17 217	17 196	16 821
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	66	153	89	176	98	161
Hypertensive diseases (I10–I15)	439	790	423	744	457	750
Ischaemic heart diseases (I20–I25)	15 228	13 076	14 901	12 731	14 069	12 537
Acute myocardial infarction (I21)	8 496	7 377	8 030	7 110	7 602	7 066
Pulmonary heart disease and diseases of pulmonary circulation and other forms of heart disease (I26–I52)	3 000	3 805	2 926	3 896	2 804	3 726
Heart failure (I50)	1 072	1 716	990	1 723	977	1 656
Cerebrovascular diseases (I60–I69)	4 939	7 356	4 890	7 372	4 909	7 437
Diseases of arteries, arterioles and capillaries (I70–I79)	1 428	1 306	1 460	1 381	1 316	1 296
Atherosclerosis (I70)	211	381	223	408	186	324
Aortic aneurysm and dissection (I71)	879	528	867	572	800	544

(a) For each year of occurrence, data are based on registrations in the year of occurrence and the year immediately following.

(b) See Explanatory Notes, paragraph 17 for further information.

**4.1 YEAR OF OCCURRENCE(a), Selected underlying causes *continued***

Cause of death and ICD code	1998.....		1999.....		2000.....	
	Males	Females	Males	Females	Males	Females
Chapter X Diseases of the respiratory system (J00–J99)	5 276	4 342	5 316	4 341	5 987	5 001
Influenza and pneumonia (J10–J18)	848	1 169	781	1 163	1 323	1 616
Chronic lower respiratory diseases (J40–J47)	3 623	2 510	3 617	2 486	3 535	2 463
Emphysema (J43)	535	271	576	305	486	234
Asthma and status asthmaticus (J45, J46)	186	292	156	270	172	280
Chapter XI Diseases of the digestive system (K00–K93)	2 029	1 978	2 112	2 103	2 062	2 083
Diseases of oesophagus, stomach and duodenum (K20–K31)	309	338	311	344	336	349
Gastric and duodenal ulcer (K25–K27)	212	241	214	235	234	237
Diseases of liver (K70–K77)	868	379	871	378	805	367
Chapter XII Diseases of the skin and subcutaneous tissue (L00–L99)	94	164	114	179	94	150
Chapter XIII Diseases of the musculoskeletal system and connective tissue (M00–M99)	234	524	300	563	278	578
Arthropathies and systemic connective tissue disorders (M00–M36)	161	368	209	359	186	392
Chapter XIV Diseases of the genitourinary system (N00–N99)	1 207	1 513	1 233	1 526	1 176	1 495
Renal failure (N17–N19)	802	883	835	919	803	901
Chapter XV Pregnancy, childbirth and the puerperium (O00–O99)	..	5	..	13	..	13
Chapter XVI Certain conditions originating in the perinatal period (P00–P96)	345	243	374	268	356	291
Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00–P04)	163	126	215	152	173	146
Chapter XVII Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	341	279	386	320	331	291
Congenital malformations of the circulatory system (Q20–Q28)	117	98	131	120	117	99
Chapter XVIII Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	334	276	323	282	337	304
Chapter XX External causes of morbidity and mortality (V01–Y98)	5 746	2 452	5 784	2 500	5 586	2 587
Accidents (V01–X59)	3 208	1 684	3 414	1 810	3 351	1 840
Transport accidents (V01–V99)	1 435	561	1 420	565	1 473	554
Falls (W00–W19)	278	194	308	210	315	262
Accidental drowning and submersion (W65–W74)	190	59	193	72	185	54
Intentional self-harm (X60–X84)	2 108	525	1 999	489	1 883	505
Hanging, strangulation and suffocation (X70)	986	184	878	160	812	184
Assault (X85–Y09)	201	94	199	95	189	114

a) For each year of occurrence, data are based on registrations in the year of occurrence and the year immediately following.

## EXPLANATORY NOTES .....

### INTRODUCTION

**1** This publication contains summary statistics on causes of death for the general population, together with selected statistics on perinatal deaths. The registration of deaths is the responsibility of the individual State and Territory Registrars of Births, Deaths and Marriages. As part of the registration process, information as to the cause of death is supplied by the medical practitioner certifying the death or by a coroner. Other information about the deceased is supplied by a relative or other person acquainted with the deceased, or by an official of the institution where the death occurred. This information is provided to the Australian Bureau of Statistics (ABS) by individual Registrars for coding and compilation into aggregate statistics shown in this publication. Statistics of perinatal deaths for years prior to 1994 were published separately in *Perinatal Deaths, Australia* (cat. no. 3304.0), which has been discontinued.

### SCOPE AND COVERAGE

**2** The statistics in sections 1, 2 and 3 relate to the number of deaths registered, not those which actually occurred, in the years shown. Usually about 5% to 6% of deaths occurring in one year are not registered until the following year or later. Statistics in section 4 relate to deaths by year of occurrence.

**3** These statistics include all deaths registered in Australia during the registration year, including deaths of persons whose usual residence is overseas. Deaths of Australian residents which occurred outside Australia are not included in the statistics.

### Perinatal death statistics

**4** The perinatal death statistics contained in this publication, unless otherwise stated, include all fetuses and infants delivered weighing at least 400 g or (when birthweight is unavailable) the corresponding gestational age (20 weeks), whether alive or dead. This definition recognises the availability of reliable 400 g/20 weeks data from all state and territory Registrars of Births, Deaths and Marriages and recommendations from major users that the ABS adopt the legal requirement for registration of a perinatal death as the statistical standard.

**5** For 1996 and previous editions of this publication, data relating to perinatal deaths were based upon the World Health Organization (WHO) recommended definition for compiling national perinatal statistics. The WHO definition of perinatal deaths included infants and fetuses weighing at least 500 g or having a gestational age of 22 weeks or body length of 25 cm crown-heel.

**6** The birth statistics used to calculate the perinatal and neonatal death rates in this publication are shown in Appendix 3. Appendix tables A3.1–A3.3 detail registered live birth statistics and stillbirth statistics adjusted to exclude infants who are known to have weighed under 400 g. Such births are identified from the medical certificate of perinatal death, which records birthweight. Appendix table A3.4 shows similar adjusted information but it is based on the 500 g definition.

Perinatal death statistics *continued*

**7** The adjusted live birth statistics differ from the live birth statistics used to derive the infant death rates in this publication. The statistics used to calculate infant death rates include all registered live births regardless of birthweight. These statistics are shown in tables A2.1 of Appendix 2.

**8** The adjusted birth statistics also differ from the statistics published in *Births, Australia* (cat. no. 3301.0), which are unadjusted for birthweight, i.e. have not had births known to have weighed less than 400 grams excluded. For years 1993 to 1996, births which occurred in Other Territories were excluded from adjusted live births used in calculating perinatal rates.

STATISTICS FOR STATES AND TERRITORIES

**9** Cause of death statistics for states and territories in this publication have been compiled in respect of the state or territory of usual residence of the deceased, regardless of where in Australia the death occurred and was registered. The state or territory of usual residence for a perinatal death is determined by the state or territory of usual residence of the mother. Statistics compiled on a state or territory of registration basis are available on request.

**10** The Australian Standard Geographical Classification versions used since 1993 have a category 'Other Territories' comprising Jervis Bay, Christmas Island and Cocos (Keeling) Islands. In the past, Jervis Bay was included with Australian Capital Territory and the two island Territories were included in Off-shore Areas and Migratory. From 1993 to 1996, statistics for 'Other Territories' have been excluded from this publication. However from 1997 they are included in the Australian totals.

CAUSE OF DEATH CLASSIFICATION USED

**11** The tenth revision of the International Classification of Diseases (ICD-10) was adopted for Australian use for deaths registered from 1 January 1999. However, to identify changes between the ninth and tenth revisions, deaths for 1997 and 1998 have been coded to both revisions. In this publication, underlying cause data for 1998, 1999, 2000 and 2001 have been coded to the tenth revision while previous years' data are coded to the ninth revision. All multiple cause data in this publication are coded to the tenth revision (see Glossary for definition of underlying and multiple cause). For underlying cause of death, accidental and violent deaths are classified according to the external cause, that is, to the circumstances of the accident or violence which produced the fatal injury rather than to the nature of the injury.

**12** The extensive nature of the ICD enables classification of causes of death at various levels of detail. For the purpose of this publication, two summary classifications are used. They are:

- the ICD at the Chapter level (with further disaggregation for major causes of death).
- main Causes of Death for age groups.

**13** Tables 1.1, 1.3, 2.2, 2.3 and 4.1 present statistics at the ICD Chapter level with further disaggregation for major causes of death. Background on this summary classification is given in Volume 1 of the ICD.

CAUSE OF DEATH CLASSIFICATION USED *continued*

**14** Tables 1.2 and 1.4 present data for main causes of death for age groups. For each age group, a summary classification of the main causes of death relevant to the age group has been used. These consist of causes of death significant in that age group, at the Chapter level, with further disaggregation below the Chapter level where appropriate.

**15** To enable the reader to see the relationship between the various summary classifications used in this publication, all tables show in brackets the ICD codes which constitute the causes of death covered.

**16** As ICD-9 did not directly accommodate the coding of Acquired Immune Deficiency Syndrome (AIDS) and AIDS-related deaths, cases where AIDS was the underlying cause were coded to ICD-9 deficiency of cell-mediated immunity (279.1), from 1988 to 1995. In 1996, ABS adopted ICD-9 Clinically Modified (CM) for coding of AIDS and AIDS-related deaths. Hence, for 1996 to 1998, all AIDS-related deaths (i.e. deaths where AIDS was mentioned in any place on the death certificate) were coded to HIV infection (042–044). ICD-10 adopted from 1999 allows for the coding of AIDS and AIDS-related deaths (B20-B24).

**17** All data in this publication refer to AIDS-related deaths rather than only those deaths where AIDS is the underlying cause. Hence in table 1.1 and 1.3, AIDS-related deaths differ from the data provided for all other causes in that table since for all other causes, only data for underlying cause are given.

## Perinatal statistics

**18** For perinatal deaths, both the main condition in the fetus/infant, and the main condition in the mother are coded to the full four-digit level of the tenth revision of ICD. Causes selected for publication in this issue are those categories which were responsible for a significant proportion of perinatal deaths.

## DATA QUALITY

**19** In compiling these statistics, the ABS employs a variety of quality control measures to ensure that the statistics are as reliable as possible. These measures include: seeking further information where necessary to enable accurate classification of the underlying cause of death; check-coding of cause of death; detailed computer editing of data; and checks on the statistical output, at the individual record and aggregate levels.

**20** To assist certifiers in providing accurate and comprehensive information for mortality coding, the ABS provides certification booklets for guidance in the completion of medical certificates of cause of death.

## Indigenous deaths

**21** This publication includes Indigenous deaths data for all states and territories with the exception of Tasmania and the Australian Capital Territory, where there are comparatively small numbers of Indigenous deaths. While all states and territories have provision for the identification of Indigenous deaths on their death registration forms, the coverage of Indigenous deaths varies greatly from state to state. Detailed information on coverage of Indigenous deaths is provided in Appendix 6.

## POPULATIONS

**22** Appendix 2 provides details of the number of live births registered and the estimated age population which have been used to calculate the rates shown in this publication. Appendix 3 provides data on adjusted births used for calculating perinatal death rates. These also enable further rates to be calculated.

## ACKNOWLEDGMENT

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

## RELATED PRODUCTS

**24** Other available ABS products which may be of interest include:

*AusStats — electronic data* (see Explanatory Note 25)  
*Australian Social Trends* cat. no. 4102.0 — issued annually  
*Births, Australia* cat. no. 3301.0 — issued annually  
*Causes of Infant and Child Deaths, Australia, 1982–96*  
 cat. no. 4398.0 — issued irregularly — discontinued  
*Deaths, Australia* cat. no. 3302.0 — issued annually  
*Deaths due to Diseases and Cancers of the Respiratory System, Australia, 1979–1994* cat. no. 3314.0 — issued irregularly  
*Drug Induced Deaths — A Guide to ABS Causes of Death Data*  
 cat. no. 4809.0 — issued irregularly  
*Firearms Deaths, Australia, 1980–1995* cat. no. 4397.0  
 — issued irregularly — discontinued  
*Suicides, Australia, 1921–1998* cat. no. 3309.0 — issued irregularly  
*Trends in Mortality by Causes of Death in Australia, the States and Territories during 1971–1992 and in Statistical Divisions and Sub-divisions during 1991–1992* cat. no. 3313.0  
 — issued irregularly — discontinued  
*Women's Health, 1994* cat. no. 4365.0 — issued irregularly — discontinued

**25** AusStats is a web based information service which provides the ABS full standard product range on-line. It also includes companion data in multidimensional datasets in SuperTable format, and time series spreadsheets.

**26** Current publications and other products released by the ABS are listed in the *Catalogue of Publications and Products* (cat. no. 1101.0). The Catalogue is available from any ABS office or the ABS Web site at <<http://www.abs.gov.au>>. The ABS also issues a daily Release Advice on the web site which details products to be released in the week ahead.

**27** As well as the statistics included in this and related publications, additional information is available from the ABS Web site at <<http://www.abs.gov.au>> by accessing Themes/Health.

DATA AVAILABLE ON REQUEST

**28** More detailed cause of death information is available upon request from the ABS. This information can comprise standard tables (see Appendix 1) or customised tabulations (by hardcopy or electronic media). Unit record files are available to approved users upon application. Generally, a charge is made for providing information upon request.

**29** Perinatal tabulations for Australia based on WHO national (see Explanatory Notes, paragraph 5) and international definitions are available upon request. The WHO international definition comprises all fetuses and infants (who die within seven days of birth) weighing at least 1,000 g or (when birthweight is unavailable) having the corresponding gestational age (28 weeks) or body length (35 cm crown-heel). A charge is made for providing this information.

**30** For more information about cause of death statistics or data concepts contact Peter Burke on 1800 620 963.

EFFECTS OF ROUNDING

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

# APPENDIX 1 DATA AVAILABLE ON REQUEST .....

## GENERAL

Causes of death data are available from calendar year 1964, through the ABS special data service. Please note that for comparability purposes the data conform to the different revisions of the ICD, namely:

- ICD-7 1964–1967
- ICD-8 1968–1978
- ICD-9 1979–1996
- ICD-10 1997–2001

Documentation is available detailing the relationship between the various revisions of ICD. Detailed data tables excluded from the national cause of death publication since 1984 are available on microfiche up to 1996 or through the special data service.

## DATA ITEMS FOR CROSS-TABULATION WITH CAUSES OF DEATH

The following variables relating to the deceased are available for both underlying and multiple causes of death:

- State or territory of registration of the death
- Month and year of registration of the death
- Place of usual residence
  - ◆ State or territory
  - ◆ Statistical Division
  - ◆ Statistical Local Area
- Occupation
  - ◆ From 1990
    - Males and females aged 15 years and over
  - ◆ Pre-1990
    - Males aged 15–64 years only
  - ◆ 1985–1990
    - Females aged 15–59 years only
- Sex
- Age
  - ◆ In completed days under one week
  - ◆ In completed days under one month
  - ◆ In completed months under one year
  - ◆ In completed years other ages
- Date of death
- Country of birth
- Duration of residence in Australia (where not Australian-born)
- Marital status
- Number of issue
- Indigenous status
- Post-mortem indicator (not available for all states)
- Drowning indicator (from 1992)
- AIDS indicator (where AIDS is mentioned on the death certificate, whether the underlying cause or not) (up to 1997)
- Certifier of cause of death (doctor or coroner)
- Cancer indicator (where cancer is mentioned on the death certificate, whether the underlying cause or not) (up to 1997)

**A1.1 STANDARD UNDERLYING CAUSE OF DEATH TABLES***Table      Description*

COD 1	Deaths by state and territory of usual residence by cause of death (ICD 3-digit) by sex
COD 2	Deaths by state and territory of usual residence by cause of death (ICD 3-digit) by sex by five-year age groups
COD 3	Deaths by state and territory of registration by cause of death (ICD 3-digit) by sex
COD 4	Deaths by state and territory of registration by cause of death (ICD 3-digit) by sex by five-year age groups
COD 5	Causes of death (ICD 3-digit) by country of birth by sex by age
COD 6	Causes of death (ICD 3-digit) by month of occurrence by state
COD 7	Causes of death (ICD 3-digit) by marital status by sex by age

## APPENDIX 2 DATA USED IN CALCULATING RATES .....

The following tables contain data used in calculating the various rates referred to in this publication. Table A2.1 is used to calculate infant death rates while table A2.2 is used to calculate age-specific death rates.

### A2.1 LIVE BIRTHS REGISTERED(a), By usual residence of mother

Sex	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.(b)
Males	43 529	29 943	24 377	8 730	12 329	3 376	1 997	1 995	126 298
Females	41 049	28 683	23 301	8 551	11 673	3 054	1 825	1 943	120 096
<b>Persons</b>	<b>84 578</b>	<b>58 626</b>	<b>47 678</b>	<b>17 281</b>	<b>24 002</b>	<b>6 430</b>	<b>3 822</b>	<b>3 938</b>	<b>246 394</b>

(a) Used to calculate infant death rates.

(b) Includes Other Territories. See Explanatory Notes, paragraph 10 for further information.

### A2.2 AGES OF ESTIMATED RESIDENT POPULATION AT 30 JUNE

AGE GROUPS(YEARS).....											
Under 1	1-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 and over	All ages	
MALES											
131 958	1 920 910	1 358 840	1 431 719	1 478 572	1 332 878	925 319	639 345	357 059	81 962	<b>9 658 562</b>	
FEMALES											
125 151	1 824 661	1 307 906	1 452 746	1 504 097	1 337 443	912 442	682 363	495 681	184 226	<b>9 826 716</b>	
PERSONS											
257 109	3 745 571	2 666 746	2 884 465	2 982 669	2 670 321	1 837 761	1 321 708	852 740	266 188	<b>19 485 278</b>	

## APPENDIX 3 DATA USED FOR PERINATAL DEATHS .....

### 400 GRAMS/20 WEEKS GESTATION

The following tables contain births data used in calculating perinatal death rates. Tables A3.1, A3.2 and A3.3 are used to calculate perinatal death rates based on the 400 g/20 weeks gestation definition for fetal deaths. This definition has been predominantly used since 1997 and will be used in future issues.

#### A3.1 ADJUSTED BIRTHS(a), By usual residence of mother

##### STATE OR TERRITORY OF USUAL RESIDENCE.....

		NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	<b>Aust.(b)</b>
Live births	Males	43 519	29 943	24 377	8 725	12 324	3 372	1 996	1 995	<b>126 273</b>
	Females	41 039	28 683	23 301	8 539	11 664	3 050	1 823	1 943	<b>120 059</b>
Stillbirths(c)	Males	195	188	158	43	72	9	10	11	<b>686</b>
	Females	180	142	133	58	55	9	12	15	<b>604</b>
Total	Males	43 714	30 131	24 535	8 768	12 396	3 381	2 006	2 006	<b>126 959</b>
	Females	41 219	28 825	23 434	8 597	11 719	3 059	1 835	1 958	<b>120 663</b>
	Persons	84 933	58 956	47 969	17 365	24 115	6 440	3 841	3 964	<b>247 622</b>

(a) Registered births adjusted to conform to WHO criteria for the calculation of perinatal death rates. See Glossary.

(c) Including those where it was not known if the heartbeat ceased before or after the delivery.

(b) Includes Other Territories. See Explanatory Notes, paragraph 10 for further information.

#### A3.2 ADJUSTED BIRTHS(a), By sex of child and age of mother

##### AGE OF MOTHER (YEARS).....

		Under 20	20-24	25-29	30-34	35-39	40 and over	Not stated	<b>Total</b>
Live births	Males	5 992	19 102	37 752	40 933	18 758	3 658	78	<b>126 273</b>
	Females	5 707	18 097	35 941	38 836	17 964	3 440	74	<b>120 059</b>
Stillbirths(b)	Males	77	113	160	188	107	35	6	<b>686</b>
	Females	45	96	160	159	110	25	9	<b>604</b>
Total	Males	6 069	19 215	37 912	41 121	18 865	3 693	84	<b>126 959</b>
	Females	5 752	18 193	36 101	38 995	18 074	3 465	83	<b>120 663</b>
	Persons	11 821	37 408	74 013	80 116	36 939	7 158	167	<b>247 622</b>

(a) Registered births adjusted to conform to WHO criteria for the calculation of perinatal death rates. See Glossary.

(b) Including those where it was not known if the heartbeat ceased before or after delivery.

**A3.3 ADJUSTED BIRTHS(a), By sex**

	LIVE BIRTHS.....			STILLBIRTHS(b).....			TOTAL.....		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1991	131 955	125 274	257 229	868	790	1 658	132 823	126 064	258 887
1997	129 143	122 631	251 774	829	687	1 516	129 972	123 318	253 290
1998	127 981	121 574	249 555	707	629	1 336	128 688	122 203	250 891
1999	127 346	121 493	248 839	682	602	1 284	128 028	122 095	250 123
2000	128 166	121 429	249 595	692	611	1 303	128 858	122 040	250 898
2001	126 273	120 059	246 332	686	604	1 290	126 959	120 663	247 622

(a) Registered births adjusted to conform to WHO criteria for the calculation of perinatal death rates. See Glossary.

(b) Including those where it was not known if the heartbeat ceased before or after delivery.

## 500 GRAMS/22 WEEKS GESTATION

Table A3.4 contains births data used in the calculation of perinatal death rates based on the WHO definition of 500 g/22 weeks gestation for fetal deaths. This definition was used by the ABS in publications up to and including 1996.

**A3.4 ADJUSTED BIRTHS(a), By sex**

	LIVE BIRTHS.....			STILLBIRTHS(b).....			TOTAL.....		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1991	131 941	125 253	257 194	777	701	1 478	132 718	125 954	258 672
1997	129 119	122 601	251 720	692	588	1 280	129 811	123 189	253 000
1998	127 954	121 541	249 495	590	532	1 122	128 544	122 073	250 617
1999	127 297	121 456	248 753	549	505	1 054	127 846	121 961	249 807
2000	128 139	121 406	249 545	570	506	1 076	128 709	121 912	250 621
2001	126 241	120 029	246 270	543	506	1 049	126 784	120 535	247 319

(a) Registered births adjusted to conform to WHO criteria for the calculation of perinatal death rates. See Glossary.

(b) Including those where it was not known if the heartbeat ceased before or after delivery.

## APPENDIX 4 ENHANCED DEATH DATA .....

### MULTIPLE CAUSES OF DEATH STATISTICS

Until 1997, the ABS produced causes of death statistics according to WHO recommendations, where each death was assigned a single underlying cause. The underlying cause is defined as the 'disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury'. The medical certificate of cause of death recommended by WHO for international use, was designed to facilitate the selection of the underlying cause. When more than one condition is entered on the death certificate the underlying cause is selected using the coding rules of the relevant version of the ICD. The underlying cause is selected so that preventive strategies can be instituted to address that particular cause. Since its adoption in 1948, statistics based on the underlying cause concept have served the purpose of summarising international cause-specific mortality statistics into a single index, which has been used to assess trends in causes of death.

The current leading causes of death are now very different from those that prevailed when the single underlying cause concept was adopted. The leading causes of death in most countries have shifted from infectious and parasitic diseases to chronic and degenerative diseases, and from infant and child deaths to deaths among the elderly. As the population continues to age, chronic diseases become increasingly prevalent. Deaths from chronic conditions occur with a number of concurrent or coexisting conditions, whose initiating condition is often difficult to isolate. Some deaths, it has been postulated, cannot occur without the influence of more than one cause. The ability of the single underlying cause statistics alone to accurately summarise the mortality pattern of a population has, therefore, been questioned.

When only a single underlying cause is selected for tabulating cause-specific statistics, other information provided on the death certificate is lost, for instance, immediate cause of death, causes and conditions that intervene between the underlying and immediate causes of death and many other contributory causes that were involved, but did not directly influence the death. The information lost may be important to the understanding of the process of death. Since the introduction of multiple cause coding, data suggest that on average 1.8 causes (and conditions) would be lost per death if only the single underlying cause was recorded. The loss of information is a particular problem for deaths attributed to external causes (injury, poisoning and violence) which are classified to the circumstances of death, rather than according to the nature of injury.

In response to this issue, ABS has from 1997 calendar year data coded and tabulated all causes and conditions reported on each death certificate using software developed by the National Center for Health Statistics (NCHS) of the United States of America. The NCHS software has three major components: MICAR (Medical Indexing, Classification and Retrieval System), ACME (Automatic Classification of Medical Entities) and TRANSAX (Translation of Axes). These three components have been developed to read the textual entries and convert them into a file containing multiple causes of death in accordance with ICD coding rules.

**MULTIPLE CAUSES OF DEATH STATISTICS *continued***

The automation of cause of death coding has brought a number of benefits, including improved data quality and timeliness. It will facilitate policy relevant epidemiological and demographic research by focusing on competing risks and disease interactions which are not possible from the cause of death statistics solely based on underlying cause.

However, there has been a break in the time series data due to the introduction of automatic coding of causes of death. This issue is addressed in Appendix 5 and comparability factors have been provided to assist with the linking of manually and automatically coded data.

## APPENDIX 5

## COMPARABILITY OF DATA OVER TIME .....

### INTRODUCTION

Comparability of mortality data over time is affected by a number of factors. These include issues relating to the collection, classification and processing of the data. In recent years there have been two major changes within Australia, namely, the introduction of the tenth revision of the International Classification of Diseases (ICD-10) for classifying deaths registered from 1 January 1999 and the introduction of the Automated Coding System (ACS) for processing deaths registered from 1 January 1997.

#### A5.1 INTRODUCTION OF AUTOMATED CODING AND ICD-10

Years	Coding method	ICD revision	Comments
1979–1996	Manual	ICD-9	Prior to 1979, manual coding under relevant ICD revisions.
1997–1998	Automated	ICD-9	Comparability factors between manual and automated ICD-9 coding were produced, based on a sample of dual coded 1997 data.
1997–1998	Automated	ICD-10	1997 and 1998 data coded to ICD-10 following its introduction.
1999–	Automated	ICD-10 only	Comparability factors between ICD-9 (manually coded) and ICD-10 (automatically coded) based on 1997 backcoded data.

### TIMES SERIES

As a consequence of the coding of deaths registered in 1997 and 1998 to ICD-10 as well as ICD-9, there is now a single break in time series outlined in table A5.2 below.

#### A5.2 TIME SERIES

Years	Coding method	ICD revision
1979–1996	Manual	ICD-9
1997–onwards	Automated	ICD-10

To support this single break in series table A5.3 provides concordances and comparability factors for all groupings in this publication. The concordance illustrates the conceptual differences between ICD-9 and ICD-10 classifications. The comparability factors are derived from the movements in the underlying causes of death coded in ICD-9 compared to ICD-10. Care should be taken for those groupings with very small numbers. These groupings have been annotated with an asterisk (\*).

TIMES SERIES *continued*

Additional concordance tables at the three and four digit level between records coded to ICD-9 and ICD-10 are available on request. Further information or clarification on the concordance between these revisions is available from the ABS on 1800 620 963.

## COMPARISON OF NINTH AND TENTH REVISIONS OF ICD

The introduction of ICD-10 has resulted in changes to the interpretation and resultant coding of a number of causes, as outlined in the WHO publication *International Statistical Classification of Diseases and Related Health Problems Tenth Revision, Volume 2*. Causes most affected are Asthma, Mental and behavioural disorders and Diseases of the nervous system.

Under ICD-10, Asthma more clearly links with Chronic obstructive airways diseases (COAD), especially Bronchitis and Emphysema. Where these conditions are present, COAD takes precedence, resulting in a decrease in the reporting of asthma as the underlying cause.

The Chapters covering Mental and behavioural disorders and Diseases of the nervous system have undergone compensatory changes between ICD-9 and ICD-10 due mainly to Alzheimer's disease and certain dementias moving between these Chapters.

**A5.3 CONCORDANCE AND COMPARABILITY FACTORS**

Cause of death	ICD-10 code	ICD-9 code	Comparability factor
<hr/>			
<b>All causes</b>	<b>A00-Y98</b>	<b>001-999</b>	<b>1.00</b>
Chapter I Certain infectious and parasitic diseases	A00-B99	001-139	1.25
Septicaemia	A40, A41	038	1.28
Human immunodeficiency virus (HIV) disease	B20-B24	042-044	1.03
Chapter II Neoplasms	C00-D48	140-239	1.00
Malignant neoplasms	C00-C97	140-208	1.00
Digestive organs	C15-C26	150-157, 159	0.99
Oesophagus	C15	150	1.00
Stomach	C16	151	0.99
Colon	C18	153	0.98
Rectosigmoid junction, rectum, anus and anal canal	C19-C21	154	0.98
Liver and intrahepatic bile ducts	C22	155	1.07
Pancreas	C25	157	0.99
Respiratory and intrathoracic organs	C30-C39	160-165	0.94
Trachea, bronchus and lung	C33, C34	162	0.97
Melanoma of skin	C43	172	0.98
Breast	C50	174, 175	0.98
Female genital organs	C51-C58	179-184	0.99
Ovary	C56	1830	0.98
Male genital organs	C60-C63	185-187	0.99
Prostate	C61	185	0.98
Urinary tract	C64-C68	188, 189	0.96
Kidney, except renal pelvis	C64	1890	0.96
Bladder	C67	188	0.95
Eye, brain and other parts of central nervous system	C69-C72	190-192	0.97
Brain	C71	191	0.97

**A5.3 CONCORDANCE AND COMPARABILITY FACTORS *continued***

Cause of death	ICD-10 code	ICD-9 code	Comparability factor
<b>Malignant neoplasms <i>continued</i></b>			
Lymphoid, haematopoietic and related tissue	C81–C96	200–208	0.97
Leukaemia	C91–C95	204–208	0.94
In situ and benign neoplasms and neoplasms of uncertain or unknown behaviour	D00–D48	210–239	1.18
Chapter III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50–D89	279, 280–289	1.07
Chapter IV Endocrine, nutritional and metabolic diseases	E00–E90	240–278	1.01
Diabetes mellitus	E10–E14	250	0.99
Chapter V Mental and behavioural disorders	F00–F99	290–319	0.78
Psychoactive substance use	F10–F19	291, 292, 303, 304, 305	1.09
Organic, including symptomatic, mental disorders	F00–F09	290	1.45
Chapter VI Diseases of the nervous system	G00–G99	320–359	1.20
Extrapyramidal and movement disorders			
Alzheimer's disease	G30	3310	1.48
Chapter VII Diseases of the eye and adnexa	H00–H59	360–379	*
Chapter VIII Diseases of the ear and mastoid process	H60–H95	380–389	*
Chapter IX Diseases of the circulatory system	I00–I99	390–459	1.00
All heart disease	I05–I09, I11, I13, I20–I25, I26, I27, I30–I52	393–398, 402, 404, 410–414, 415, 416, 420–429	1.01
Acute rheumatic fever and chronic rheumatic heart diseases	I00–I09	390–398	0.69
Hypertensive diseases	I10–I15	401–405	1.00
Ischaemic heart diseases	I20–I25	410–414	1.01
Acute myocardial infarction	I21	410	0.96
Pulmonary heart disease and diseases of pulmonary circulation and other forms of heart disease	I26–I52	415–429	1.06
Cerebrovascular diseases	I60–I69	430–438	0.97
Diseases of arteries, arterioles and capillaries	I70–I79	440–448	0.97
Atherosclerosis	I70	440	0.98
Aortic aneurysm	I71	441	0.97
Chapter X Diseases of the respiratory system	J00–J99	460–519	0.91
Influenza and pneumonia	J10–J18	480–487	0.87
Chronic lower respiratory diseases	J40–J47	490–496	0.91
Emphysema	J43	492	0.86
Asthma and status asthmaticus	J45, J46	493	0.75
Chapter XI Diseases of the digestive system	K00–K93	520–579	1.05
Diseases of oesophagus, stomach and duodenum	K20–K31	530–537	1.04
Gastric and duodenal ulcer	K25–K27	531–533	0.99
Diseases of liver	K70–K77	570–573	1.02
Chapter XII Diseases of the skin and subcutaneous tissue	L00–L99	680–709	1.06
Chapter XIII Diseases of the musculoskeletal system and connective tissue	M00–M99	710–739	1.15
Arthropathies and systemic connective tissue disorders	M00–M36	710–719	1.19

**A5.3 CONCORDANCE AND COMPARABILITY FACTORS *continued***

Cause of death	ICD-10 code	ICD-9 code	Comparability factor
Chapter XIV Diseases of the genitourinary system Renal failure	N00–N99 N17–N19	580–629 584–586	1.14 1.05
Chapter XV Pregnancy, childbirth and the puerperium	000–099	630–676	*
Chapter XVI Certain conditions originating in the perinatal period Disorders related to short gestation and low birthweight, not elsewhere classified	P00–P96 P07	760–779 765	0.96 *
Infections specific to the perinatal period	P35–P39	771	*
Haemorrhagic and haematological disorders of fetus and newborn	P50–P61	772–774, 776	*
Chapter XVII Congenital malformations, deformations and chromosomal abnormalities Congenital malformations of the nervous system	Q00–Q99 Q00–Q07	740–759 740–742	1.03 1.00
Congenital malformations of the circulatory system	Q20–Q28	745–747	1.12
Congenital malformations of the respiratory system	Q30–Q34	748	0.90
Chapter XVIII Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified Sudden infant death syndrome	R00–R99 R95	780–799 7980	0.76 0.94
Chapter XX External causes of morbidity and mortality Accidents Transport accidents	V01–Y98 V01–X59 V01–V99	E800–E999 E800–E949 E800–E848	1.06 1.05 1.03
Falls Accidental drowning and submersion	W00–W19 W65–W74	E880–E886, E888 E910	1.10 1.03
Intentional self-harm Hanging, strangulation and suffocation	X60–X84 X70	E950–E959 E953	0.97 0.97
Assault	X85–Y09	E960–E969	1.02

## APPENDIX 6 INDIGENOUS DEATHS .....

### INTRODUCTION

In 2001, there were 2,063 deaths registered where the Indigenous origin of the deceased person was identified. While it is considered likely that virtually all Indigenous deaths are registered, a significant proportion are not identified as Indigenous. Therefore, the number of Indigenous deaths registered in 2001 is an underestimate of the actual number of deaths.

### PROPENSITY TO IDENTIFY AS INDIGENOUS

Propensity to identify as Aboriginal and Torres Strait Islander is determined by a range of factors, including who provides the information (e.g. the person in question, a relative, or an official); the perception of how the information will be used; education programs about identifying as Indigenous; and cultural issues associated with identifying as Indigenous.

There are three estimates of the number of Indigenous deaths reproduced in table A6.1. Each is based on a different collection, with a different propensity to identify as Aboriginal and Torres Strait Islander:

- Deaths registered as Indigenous: This publication is based on the registration of deaths by each State or Territory Registrar of Births, Deaths and Marriages.
- 1991 Census-based projections: These data are estimated using mortality levels based on 1986–1991 Indigenous life tables, and the Indigenous population based on the 1991 Census. These are published in *Experimental Projections of the Aboriginal and Torres Strait Islander Population, 30 June 1991–30 June 2001* (cat. no. 3231.0).
- 1996 Census-based estimates and projections: Estimates prior to 1996 are derived by backdating estimates of the 1996 Indigenous population. The level of mortality is based on the 1991–1996 experimental life tables published in *Experimental Projections of the Aboriginal and Torres Strait Islander Population, 30 June 1996–30 June 2006* (cat. no. 3231.0). The 2001 projection data assumes no change in mortality and no increase in propensity to identify after 1996.

Propensity to identify in the Census can be seen as a social issue, primarily reflecting the social attitudes Indigenous people may have about making what amounts to public statements about their heritage. Propensity to identify on death certificates is considerably lower than in the Census because the person completing the death certificate (usually a funeral director or doctor) may not know if the deceased is of Aboriginal and Torres Strait Islander origin, and may be reluctant or unable to ask relatives.

The mismatch of the degree of identification propensity between the census and the death certificates represents a problem with data quality, indicating that the number of registered Indigenous deaths is an undercount of the actual number.

**A6.1 DEATHS OF INDIGENOUS PEOPLE, Summary**

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.(a)
DEATHS REGISTERED AS INDIGENOUS									
1991	206	50	—	135	401	np	412	np	1 208
1992	165	53	—	107	346	np	397	np	1 074
1993	194	50	—	111	386	6	376	9	1 134
1994	207	50	—	123	377	3	380	10	1 153
1995	224	50	—	121	384	3	387	9	1 182
1996	177	49	258	118	370	—	328	5	1 306
1997	88	93	531	132	351	5	458	4	1 662
1998	462	123	593	127	378	13	415	3	2 114
1999	435	130	529	116	350	11	399	6	1 976
2000	473	108	535	144	407	8	450	np	2 127
2001	481	93	565	125	336	32	429	np	2 063
PROJECTED INDIGENOUS DEATHS (1991 Census-based experimental projections)(b)									
1996	528	114	613	128	390	56	379	10	2 220
1997	537	116	623	131	394	57	386	11	2 257
1998	547	118	634	133	400	59	391	11	2 295
1999	556	121	644	135	406	61	397	12	2 334
2000	567	123	655	137	411	62	404	13	2 374
2001	578	125	667	140	418	63	411	13	2 417
PROJECTED INDIGENOUS DEATHS (1996 Census-based experimental estimates and projections)									
1996(c)	950	211	900	189	494	124	452	18	3 341
1997(d)	966	215	915	193	499	126	460	20	3 397
1998(d)	984	219	936	199	509	130	471	21	3 472
1999(d)	1 010	222	960	202	518	133	482	22	3 552
2000(d)	1 035	225	983	208	529	139	491	22	3 634
2001(d)	1 060	228	1 007	212	540	144	502	24	3 719
ESTIMATED COVERAGE OF INDIGENOUS DEATHS (1991 Census-based)(%)									
1996	34	43	42	92	95	—	87	50	59
1997	16	80	85	101	89	9	119	36	74
1998	84	104	94	95	95	22	106	27	92
1999	78	107	82	86	86	18	101	50	85
2000	83	88	82	105	99	13	111	np	90
2001	83	74	85	89	80	51	104	np	85
ESTIMATED COVERAGE OF INDIGENOUS DEATHS (1996 Census-based)(%)									
1996	19	23	29	62	75	—	73	28	39
1997	9	43	58	68	70	4	100	20	49
1998	47	56	63	64	74	10	88	14	61
1999	43	59	55	57	68	8	83	27	56
2000	46	48	54	69	77	6	92	np	59
2001	45	41	56	59	62	22	85	np	55

(a) Includes 'Other Territories' from 1993.

(b) Source: *Experimental Projections of the Aboriginal and Torres Strait Islander Population, 30 June 1991–30 June 2001* (cat. no. 3231.0), medium series.(c) Source: *Experimental Estimates of the Aboriginal and Torres Strait Islander Population, 1991–1996* (cat. no. 3230.0), data available on request.(d) Source: *Experimental Projections of the Aboriginal and Torres Strait Islander Population, 1996–2006* (cat. no. 3231.0), low series.

## INDIGENOUS STATUS

As can been seen from the information in Table A6.1 there is undercoverage of Indigenous deaths to some extent in all states and territories, which means the measures of mortality presented here are likely to be conservative estimates. In addition to those deaths identified as Indigenous, a number of deaths occur each year where the Indigenous status is not stated, as can be seen in Table A6.2. There were 5,731 deaths registered in Australia in 2001, representing 4.5% of total deaths, for which the Indigenous status was not stated. There is a likelihood that some Indigenous deaths would be included in this number, contributing to the undercoverage of Indigenous mortality in registered deaths data. Fluctuations in the level of Indigenous mortality over time partly reflect changing levels of identification and coverage of indigenous deaths. Given the volatility in measures of Indigenous mortality caution should be exercised in assessing trends in Indigenous mortality over time. The proposed ABS information paper *Experimental Estimates and Projections of Indigenous Australians, 1991 to 2016* (cat. no. 3238.0) will include analysis of these data quality issues and their impact on the interpretation of trends of these data.

**A6.2** DEATHS, Indigenous status, States and territories, 2001

	<i>Non indigenous</i>	<i>Indigenous</i>	<i>Not stated</i>	<i>Total</i>
New South Wales	42 598	481	1 473	44 552
Victoria	28 893	93	3 309	32 295
Queensland	22 003	565	288	22 856
South Australia	11 444	125	322	11 891
Western Australia	10 265	336	178	10 779
Tasmania	3 693	32	151	3 876
Northern Territory	436	429	7	872
Australian Capital Territory	1 414	n.p.	n.p.	1 419
<b>Australia(a)</b>	<b>120 750</b>	<b>2 063</b>	<b>5 731</b>	<b>128 544</b>

(a) Includes Other Territories. See Explanatory Notes, paragraph 10 for further information.

## TECHNICAL NOTE .....

### YEARS OF POTENTIAL LIFE LOST

YPLL measures the extent of 'premature' mortality, which is assumed to be any death at ages of 1–75 years inclusive, and aids in assessing the significance of specific diseases or trauma as a cause of premature death.

Estimates of YPLL were calculated for deaths of persons aged 1–75 years based on the assumption that deaths occurring at these ages are untimely. The inclusion of deaths under one would bias the YPLL calculation because of the relatively high mortality rate for that age and 76 was the median age at death when this series of YPLL was calculated using 1991 as the standard year. As shown below the calculation uses a standard population which is the 1991 census. This standard is revised every 10 years and next years YPLL will be calculated on the basis of the 2001 census.

A number of variables are used in these calculations, as described below.

YPLL is derived from:

$$YPLL = \sum_x (D_x (76 - A_x))$$

where:

$A_x$  = adjusted age at death. As age at death is only available in completed years the midpoint of the reported age was chosen (e.g. age at death 34 years was adjusted to 34.5).

$D_x$  = registered number of deaths at age  $x$  due to a particular cause of death.

YPLL was standardised for age using the following formula:

$$YPLL_s = \sum_x (D_x (76 - A_x) C_x)$$

where the age correction factor  $C_x$  is defined for age  $x$  as:

$$C_x = \frac{N_{xs}}{N_s} \cdot \frac{1}{N_x} \cdot N$$

where:

$N$  = number of persons aged 1–75 years in the 2001 population

$N_x$  = number of persons aged  $x$  years in the 2001 population

$N_{xs}$  = number of persons aged  $x$  years in the standard population

$N_s$  = number of persons aged 1–75 years in the standard population

The Australian population at 30 June 1991 was chosen as the standard population.

## GLOSSARY .....

<b>Adjusted births</b>	Registered births adjusted by removing all stillbirths and neonatal deaths where birthweight was known to be less than 400 g. This is the denominator used in calculating perinatal death rates in this publication. This adjustment is made in order to enable meaningful perinatal death rates to be calculated. See Explanatory Notes, paragraph 6.
<b>Associated causes</b>	All causes listed on a death certificate other than the underlying cause.
<b>Death rates</b>	Three forms of death rate are shown in the general deaths section in this publication. These are standardised death rates, age-specific death rates and infant death rates, as defined below: <ul style="list-style-type: none"><li>▪ <i>Standardised death rates</i> enable the comparison of death rates between populations with different age structures by relating them to a standard population, in this case all persons in the 1991 Australian population. They are expressed per 100,000 persons. The standardised death rates in this publication are calculated using the <i>direct method</i>, used when populations under study are large and the age-specific death rates are reliable. It is the overall death rate that would have prevailed in the standard population if it had experienced at each age the death rates of the population under study—see tables 1.3 and 1.5.</li><li>▪ <i>Age-specific death rates</i> relate to deaths for age groups other than under one year and are the number of deaths per 100,000 of the mid-year estimated resident population as at 30 June of that year in a particular age-sex group—see table 1.2.</li><li>▪ <i>Infant death rates</i> relate to deaths of children under one year of age and are the number of deaths per 1,000 births in the year—see table 1.2.</li></ul>
	For comparison and measuring purposes, perinatal deaths in this publication have also been expressed as rates. These rates are defined as follows: <ul style="list-style-type: none"><li>▪ for fetal deaths and total perinatal deaths, the rates represent the number of deaths per 1,000 live births and fetal deaths combined (where birthweight was at least 400 g).</li><li>▪ for neonatal deaths, the rates represent the number of deaths per 1,000 live births (where birthweight was at least 400 g).</li></ul>
<b>Fetal death</b>	A fetal death is the delivery of a child, who did not, at any time after delivery, breathe or show any other evidence of life such as a heartbeat. (A birthweight criterion applies. See Explanatory Notes, paragraphs 4–6).
<b>Infant death</b>	The death of a child before its first birthday.
<b>Live births</b>	A live birth is the birth of a child, who, after delivery, breathes or shows any other evidence of life such as a heartbeat. (A birthweight criterion applies. See Explanatory Notes, paragraphs 6–8).

<b>Multiple causes of death</b>	All morbid conditions, diseases and injuries entered on the death certificate. These include those involved in the morbid train of events leading to death which were classified as either the underlying cause, the immediate cause, or any intervening causes and those conditions which contributed to death, but were not related to the disease or condition causing death. For deaths where the underlying cause was identified as an external cause (injury or poisoning) multiple causes include circumstances of injury, the nature of injury as well as any other conditions reported on the death certificate.
<b>Neonatal death</b>	A neonatal death is the death within 28 days of birth of any child who, after delivery, breathed or showed any other evidence of life such as a heartbeat. (A birthweight criterion applies. See Explanatory Notes, paragraphs 4–6).
<b>Perinatal death</b>	A perinatal death is a fetal death or neonatal death. (A birthweight criterion applies. See Explanatory Notes, paragraphs 4–6).
<b>Period of gestation</b>	Period of gestation is measured from the first day of the last normal menstrual period to the date of birth and is expressed in completed weeks.
<b>Stillbirth</b>	See Fetal death.
<b>Underlying cause of death</b>	The disease or injury which initiated the train of morbid events leading directly to death. Accidental and violent deaths are classified according to the external cause, that is, to the circumstances of the accident or violence which produced the fatal injury rather than to the nature of the injury.
<b>Years of potential life lost (YPLL)</b>	YPLL measures the extent of 'premature' mortality, where 'premature' mortality is assumed to be any death at ages of 1–75 years inclusive. By estimating YPLL for deaths of people aged 1–75 years it is possible to assess the significance of specific diseases or trauma as a cause of premature death. See Technical Note for an explanation of the calculation of YPLL.

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