

3 All causes of death

Chapter highlights

During the period 2002–04, there were 132,322 deaths annually. Just over half (54%) were male; 63% were in Major Cities, 35% in regional and 2% in remote areas.

Overall, death rates for Indigenous Australians were 3.2 times higher than the rates for non-Indigenous Australians in Major Cities.

In regional areas:

Death rates for males in Inner Regional and Outer Regional areas were 10% (1.10 times) and 15% (1.15 times) higher than in Major Cities, while for females they were 5% and 10% higher than in Major Cities.

For 0–64 year olds, death rates for males in Inner Regional and Outer Regional areas were 15% and 30% higher than in Major Cities, while for females they were 10% and 25% higher than in Major Cities.

For non-Indigenous Australians the comparison between Inner Regional areas and Major Cities was similar to that for the total population. Death rates in Outer Regional areas for males and females were 15% and 5% higher than in Major Cities, while rates for 0–64 year old males and females were 25% and 15% higher than in Major Cities.

Annually there are 31,194 and 14,703 deaths in Inner Regional and Outer Regional areas; about 54% were male.

Annually there were 2,134 and 1,589 ‘excess’ deaths in Inner Regional and Outer Regional areas. About two-thirds (66%) of the ‘excess’ were male. ‘Excess’ deaths occur in all age groups. Most (80%) of the excess occurred amongst those 45 years and older with, in Inner Regional areas, strong contribution from those 75 years and older, while in Outer Regional areas the excess was spread relatively evenly amongst the oldest three age groups. Annually in regional areas, there were almost 80 excess deaths of children younger than 5 years.

Compared with the previous reporting period (1997–99), there were 1,089 more deaths of males and 1,713 more deaths of females annually in 2002–04.

The 12-year trend (AIHW 2006a) is for decreasing death rates for males and females. Rates for males in Inner Regional areas are declining slightly slower than in Major Cities.

Between 1997–99 and 2002–04, the number of ‘excess’ deaths in regional areas declined (as estimated using 2002–04 Major Cities rates as the standard). For example, in 1997–99 there were 2,930 more deaths of Inner Regional males annually than if 2002–04 Major Cities age-specific rates had applied; in 2002–04, this number had reduced to 1,350 more deaths than if 2002–04 Major Cities age-specific rates had applied.

Death rates¹ were lower in the more recent (2002–04) reporting period in all areas (for example, SMRs for Inner Regional males were 1.2 in 1997–99, and became 1.1 in 2002–04 compared with 1.0 for Major Cities males in 2002–04).

¹ As expressed by SMRs calculated for both periods using Major Cities age- and sex-specific rates in 2002–04 as the standard.

However, the relative differences² between Major Cities and regional areas remained. For example, the SMRs for Inner Regional males were 1.1 in 1997–99 (compared with 1.0 for Major Cities males in 1997–99), and 1.1 in 2002–04 (compared with 1.0 for Major Cities males in 2002–04).

In remote areas:

Death rates in Remote and Very Remote areas were 1.2 and 1.7 times those in Major Cities.

For 0–64 year olds, death rates in Remote and Very Remote areas were 1.5 and 2.7 times those in Major Cities.

Death rates for remote area non-Indigenous Australians tended to be similar to those in Major Cities, but specifically, with rates in remote areas 5% higher than in Major Cities, and rates for 0–64 year olds in Very Remote areas being 15% higher than in Major Cities.

Clearly, elevated rates in remote areas are largely influenced by the large proportion of the population in those areas who are Indigenous Australians, coupled with the high mortality experienced by Indigenous Australians generally.

Annually there are 1,801 and 1,019 deaths in Remote and Very Remote areas; about 60% were male.

Annually there were 278 and 417 ‘excess’ deaths in Remote and Very Remote areas. About two-thirds (62%) of the ‘excess’ were male. Excess deaths were distributed mainly among the 25–44 and 45–64 year olds, with contributions from 65–74 year olds, 15–24 year olds and children under 5 years.

Compared with the previous reporting period (1997–99), there were 6 fewer deaths of males and 57 more deaths of females annually in 2002–04.

The 12-year trend (AIHW 2006a) is for decreasing death rates for males and females, with rates in Remote areas declining at about the same rate as in Major Cities, and rates in Very Remote areas declining substantially faster than in Major Cities.

Between 1997–99 and 2002–04, the number of ‘excess’ deaths in remote areas declined (as estimated using 2002–04 Major Cities rates as the standard). For example, in 1997–99 there were 304 more deaths of Remote area males annually than if 2002–04 Major Cities age-specific rates had applied; in 2002–04, this number had reduced to 178 more deaths than if 2002–04 Major Cities age-specific rates had applied.

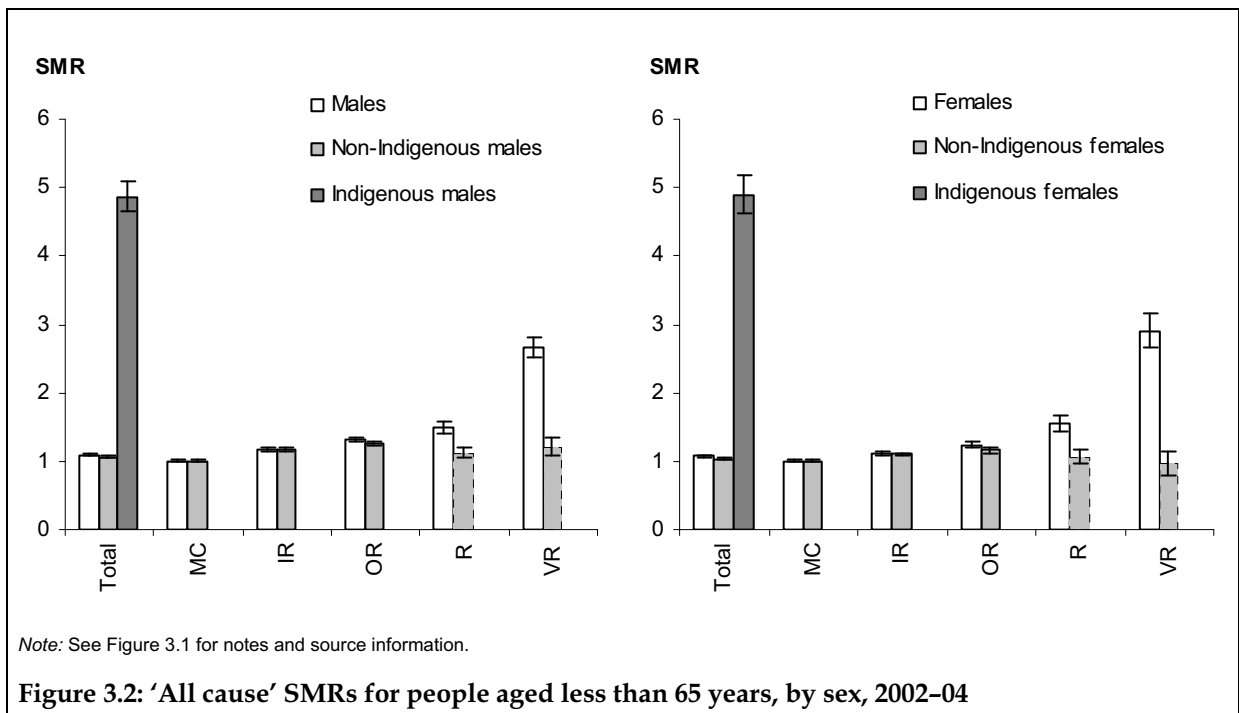
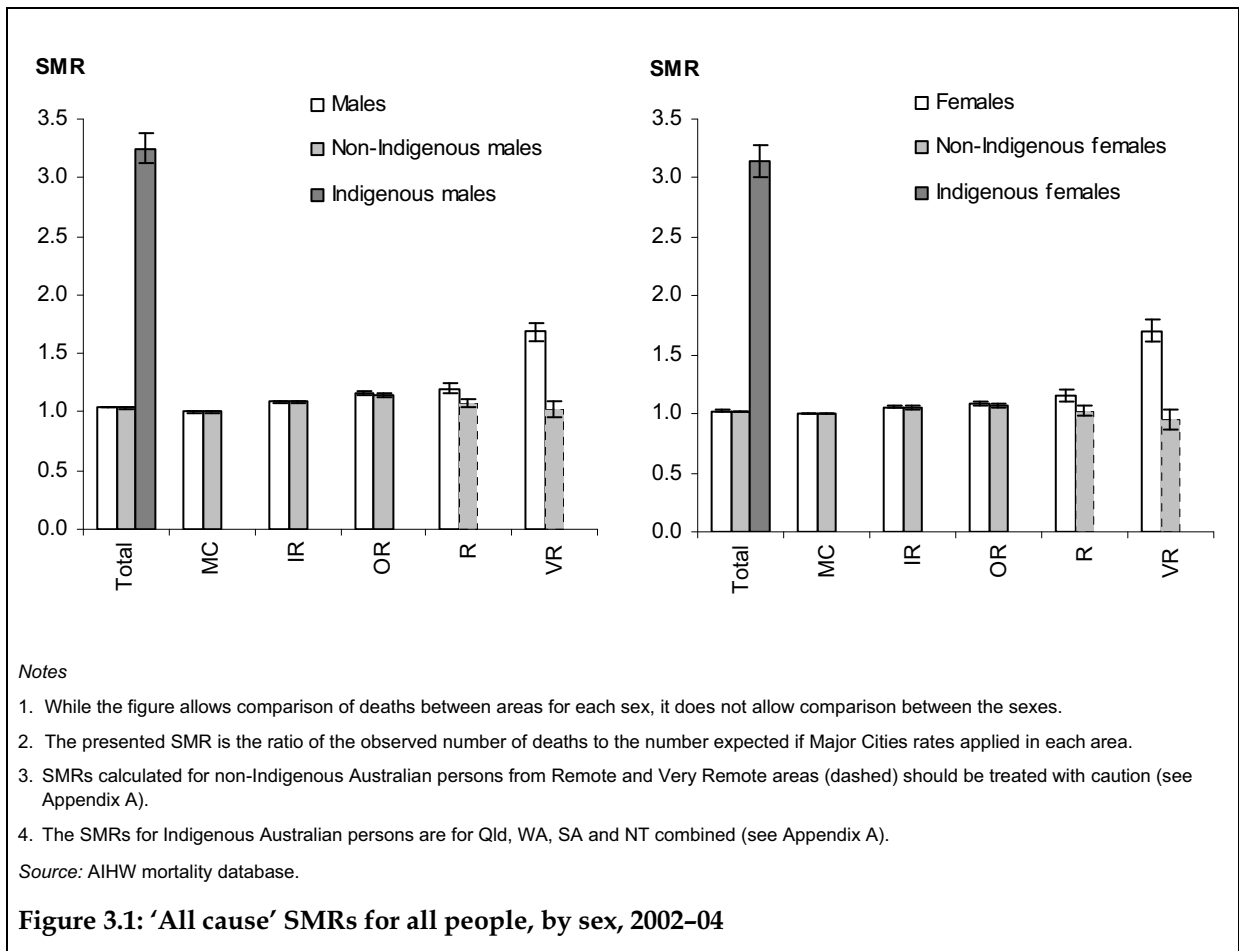
Death rates³ were lower in the more recent (2002–04) reporting period in all areas (for example, SMRs for Remote area males were 1.4 in 1997–99, and became 1.2 in 2002–04 compared with 1.0 for Major Cities males in 2002–04).

However, the relative differences⁴ between Major Cities and regional areas remained. For example, the SMRs (calculated in this way) for Remote area males were 1.2 in 1997–99 (compared with 1.0 for Major Cities males in 1997–99), and 1.2 in 2002–04 (compared with 1.0 for Major Cities males in 2002–04).

² As expressed by SMRs calculated for each period using Major Cities age- and sex-specific rates in each period as the standard.

³ As expressed by SMRs calculated for both periods using Major Cities age- and sex-specific rates in 2002–04 as the standard.

⁴ As expressed by SMRs calculated for each period using Major Cities age- and sex-specific rates in each period as the standard.



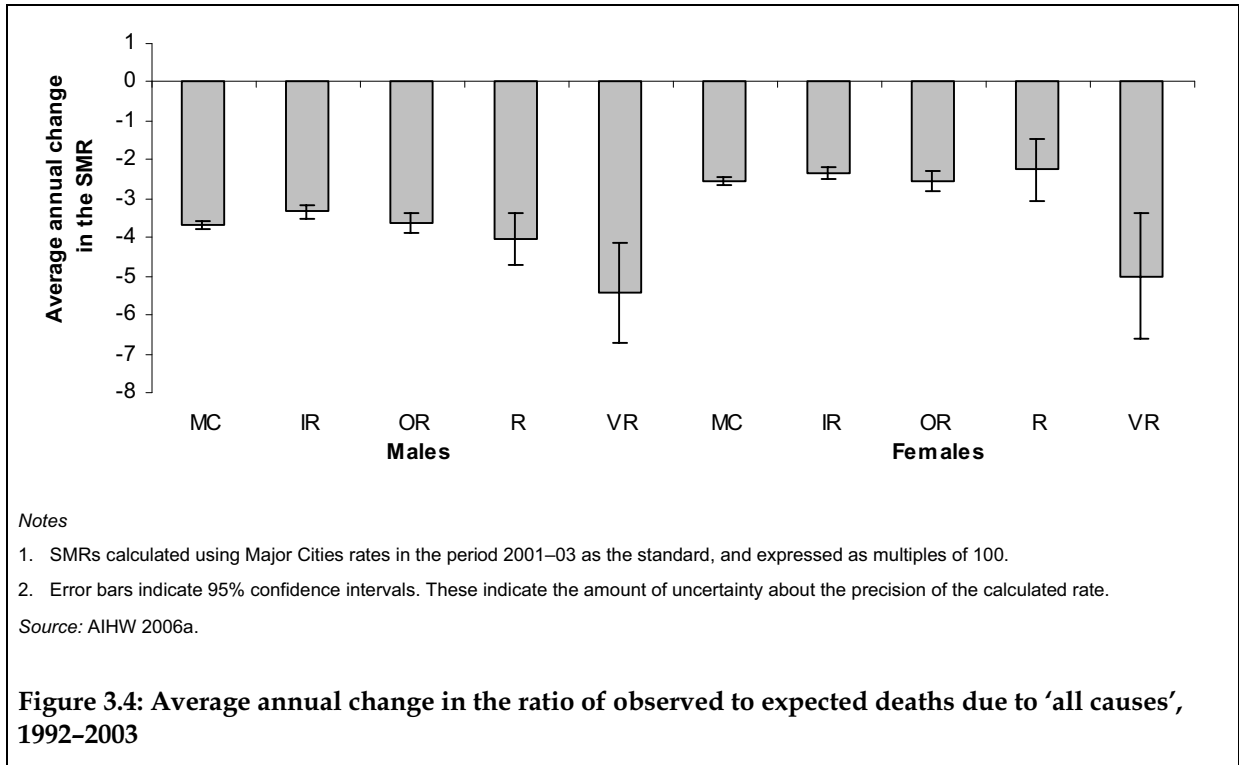
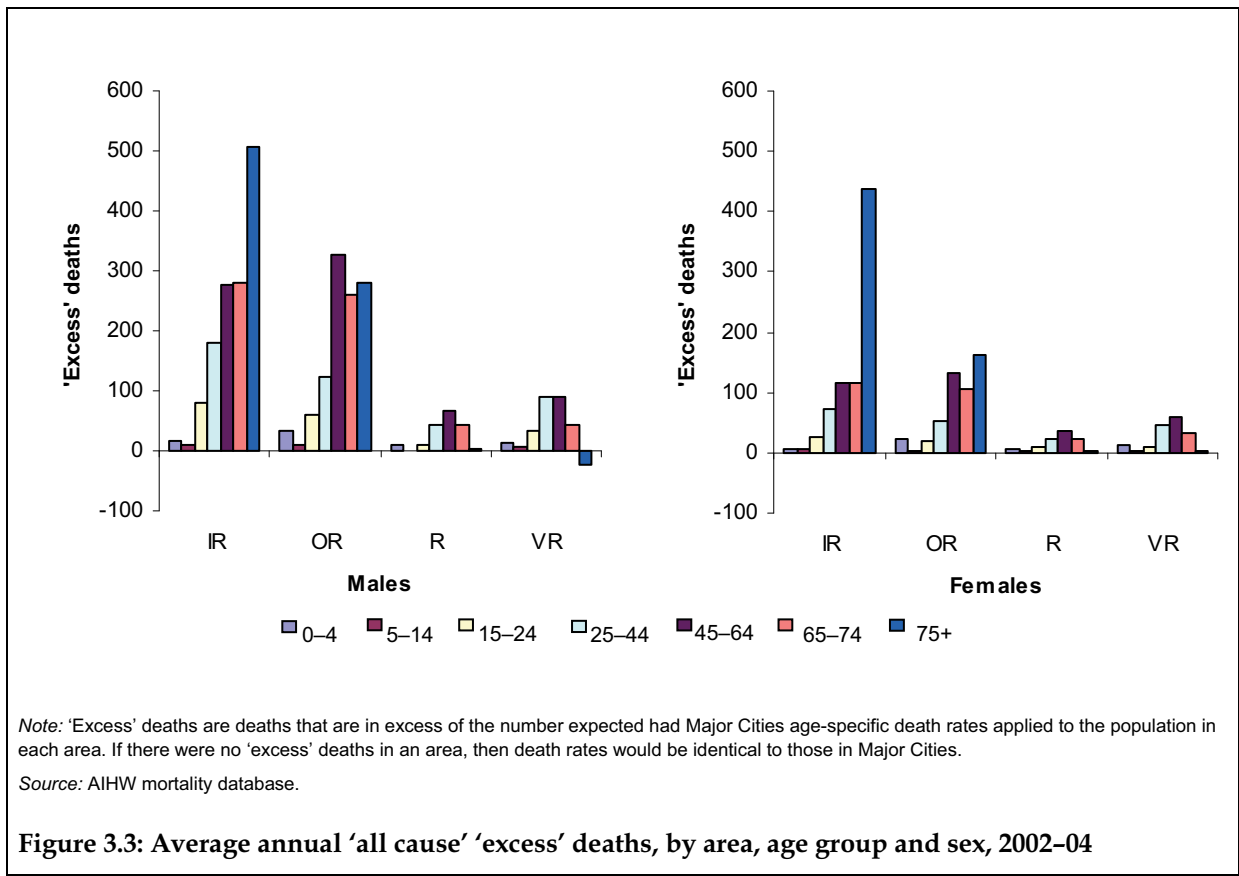


Table 3.1: SMRs, average annual deaths and 'excess' deaths due to all causes, 2002-04 and 1997-99

	Males						Females						Persons									
	Rate			Ratio			Rate			Ratio			Rate			Ratio						
	MC	IR	OR	R	VR	MC	IR	OR	R	VR	MC	IR	OR	R	VR	MC	IR	OR	R	VR		
2002-04																						
0-4	118	*1.10	*1.39	*1.57	*2.46	96	1.05	*1.35	*1.51	*2.67	107	*1.08	*1.37	*1.55	*2.55							
5-14	12	*1.26	*1.51	1.52	*4.15	9	*1.27	1.17	*2.67	*2.43	10	*1.26	*1.37	*2.00	*3.44							
15-24	59	*1.52	*1.82	*1.91	*4.87	25	*1.44	*1.67	*2.84	*3.94	42	*1.50	*1.78	*2.15	*4.62							
25-44	110	*1.30	*1.39	*1.74	*3.65	55	*1.23	*1.32	*1.83	*4.17	82	*1.27	*1.37	*1.77	*3.80							
45-64	450	*1.12	*1.27	*1.36	*2.04	279	*1.08	*1.19	*1.39	*2.45	364	*1.10	*1.24	*1.37	*2.17							
65-74	2,028	*1.09	*1.17	*1.22	*1.58	1,169	*1.06	*1.13	*1.24	*1.97	1,579	*1.08	*1.15	*1.23	*1.70							
75+	7,641	*1.06	*1.07	1.01	*0.86	6,332	*1.04	*1.04	1.00	1.01	6,843	*1.05	*1.05	1.01	*0.93							
Total	644	*1.09	*1.16	*1.20	*1.68	625	*1.06	*1.08	*1.16	*1.70	635	*1.07	*1.12	*1.18	*1.69							
Total <65	177	*1.17	*1.32	*1.48	*2.66	107	*1.11	*1.24	*1.55	*2.91	142	*1.15	*1.29	*1.50	*2.74							
1997-99																						
Total	643	*1.07	*1.12	*1.20	*1.62	600	*1.03	*1.08	*1.12	*1.66	621	*1.05	*1.10	*1.17	*1.64							
Total <65	191	*1.13	*1.25	*1.48	*2.41	109	*1.09	*1.18	*1.48	*2.86	150	*1.12	*1.23	*1.48	*2.55							
Total†	*1.16	*1.23	*1.29	*1.39	*1.90	*1.07	*1.10	*1.16	*1.21	*1.81	*1.11	*1.17	*1.23	*1.32	*1.87							
Total <65†	*1.18	*1.33	*1.47	*1.74	*2.89	*1.12	*1.22	*1.32	*1.67	*3.29	*1.16	*1.29	*1.42	*1.72	*3.02							

(continued)

Table 3.1 (continued): SMRs, average annual deaths and 'excess' deaths due to all causes, 2002-04 and 1997-99

	Males						Females						Persons						
	MC	IR	OR	R	VR	Ratio	MC	IR	OR	R	VR	Ratio	MC	IR	OR	R	VR	Ratio	
	Rate						Rate						Rate						
Average annual number of excess deaths																			
2002-04																			
0-4	0	16	32	9	15		0	6	22	6	13		0	22	55	15	27		
5-14	0	10	9	2	6		0	7	2	4	2		0	17	12	5	8		
15-24	0	81	61	11	33		0	27	19	8	9		0	108	80	19	42		
25-44	0	180	125	44	90		0	74	51	22	46		0	253	176	66	135		
45-64	0	277	327	67	89		0	115	133	36	60		0	392	460	103	149		
65-74	0	280	259	42	42		0	117	107	23	34		0	397	365	65	76		
75+	0	507	279	3	-22		0	438	162	1	2		0	945	441	5	-21		
Excess total	0	1,350	1,093	178	252		0	783	496	100	165		0	2,134	1,589	278	417		
Deaths total	41,935	16,439	8,133	1,063	620		41,670	14,755	6,570	738	399		83,605	31,194	14,703	1,801	1,019		
Excess <65	0	563	555	133	232		0	229	228	76	129		0	792	783	209	361		
Deaths <65	10,249	3,923	2,266	407	372		6,125	2,248	1,193	215	197		16,374	6,171	3,458	622	569		
1997-99																			
Excess total	0	983	850	181	236		0	388	477	78	149		0	1372	1327	259	385		
Excess total†	5,631	2,930	1,802	304	291		2,698	1,262	875	124	168		8,329	4,192	2,677	428	460		
Deaths total	41,820	15,561	7,922	1,075	614		40,005	13,321	6,291	705	375		81,825	28,882	14,212	1,780	989		
Excess <65	0	457	471	148	220		0	183	183	71	129		0	640	654	219	349		
Excess <65†	1,702	983	755	195	246		682	393	289	87	139		2,384	1,376	1,044	282	384		
Deaths <65	11,054	3,963	2,358	457	376		6,235	2,177	1,183	218	199		17,289	6,140	3,541	675	575		

Notes

1. The first half of the table reports death rates (as SMRs) for the period 2002-04. The first two rows (shaded) in this section use Major Cities age-and sex-specific rates in 1997-99 as the standard and compare death rates in each of the areas with those in Major Cities in the same year (1997-99). The second two (unshaded) rows (marked with a †) use Major Cities age-and sex-specific rates in 2002-04 as the standard and compare death rates in each of the areas (including Major Cities) in 1997-99 with death rates in Major Cities in 2002-04.
2. The second half of the table describes the actual number of deaths and 'excess deaths' that occurred in each population. Shaded rows 1 and 4 have used 1997-99 Major Cities rates of death as the basis for calculating the number of excess deaths. Unshaded rows 2 and 5 (marked with a †) have used 2002-04 Major Cities rates of death as the basis for calculating the number of excess deaths in 1997-99.
3. For further explanation, refer to section 2.3.

Table 3.2: SMRs, average annual deaths and 'excess deaths' due to all causes, for Indigenous Australians and non-Indigenous Australians, 2002-04 and 1997-99

	Males						Females						Persons						
	Non-Indigenous			Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indigenous			
	MC	IR	OR	R	VR	Rate	MC	IR	OR	R	VR	Rate	MC	IR	OR	R	VR	Rate	
2002-04																			
0-4	108	1.08	*1.29	1.29	0.86	*3.22	89	1.02	*1.24	1.18	0.96	*2.95	99	1.05	*1.26	1.24	0.90	*3.10	
5-14	11	*1.31	*1.54	1.44	*4.14	*2.96	9	1.16	1.00	*2.16	2.53	*2.61	10	*1.25	*1.31	*1.75	*3.44	*2.81	
15-24	55	*1.57	*1.87	*1.73	*2.59	*3.99	23	*1.48	*1.52	1.41	1.68	*4.62	39	*1.55	*1.77	*1.65	*2.39	*4.18	
25-44	103	*1.29	*1.29	1.10	*1.34	*6.13	52	*1.20	*1.19	0.86	0.99	*6.56	77	*1.26	*1.26	1.03	*1.24	*6.28	
45-64	435	*1.11	*1.23	1.08	1.08	*4.92	269	*1.07	*1.14	1.07	0.88	*5.04	351	*1.09	*1.19	*1.08	1.02	*4.97	
65-74	1,974	*1.08	*1.16	*1.14	1.11	*2.85	1,133	*1.06	*1.10	1.08	1.00	*3.90	1,535	*1.07	*1.14	*1.12	1.08	*3.28	
75+	7,458	*1.06	*1.08	1.01	*0.84	1.04	6,164	*1.04	*1.04	1.00	0.94	*1.27	6,669	*1.05	*1.06	1.01	*0.88	*1.16	
Total	630	*1.09	*1.14	*1.07	1.02	*3.25	612	*1.05	*1.07	1.03	0.95	*3.14	621	*1.07	*1.11	*1.05	1.00	*3.20	
Total <65	170	*1.16	*1.27	*1.12	*1.21	*4.86	103	*1.10	*1.16	1.07	0.95	*4.90	136	*1.14	*1.23	*1.10	*1.13	*4.87	
1997-99																			
Total	675	*1.07	*1.11	*1.09	*1.08	*3.13	628	*1.04	*1.08	1.00	0.94	*3.24	652	*1.06	*1.10	*1.05	1.03	*3.17	
Total <65	197	*1.14	*1.20	*1.20	*1.24	*4.62	112	*1.10	*1.11	1.06	1.15	*4.90	155	*1.12	*1.17	*1.16	*1.22	*4.73	
Total†	*1.19	*1.26	*1.31	*1.30	*1.29	n.p.	*1.12	*1.15	*1.20	*1.11	1.05	n.p.	*1.16	*1.21	*1.26	*1.22	*1.20	n.p.	
Total <65†	*1.23	*1.39	*1.47	*1.47	*1.53	n.p.	*1.17	*1.28	*1.29	*1.24	*1.35	n.p.	*1.20	*1.35	*1.41	*1.39	*1.47	n.p.	

(continued)

Table 3.2 (continued): SMRs, average annual deaths and 'excess' deaths due to all causes, for Indigenous Australians and non-Indigenous Australians, 2002-04 and 1997-99

	Males						Females						Persons								
	Non-Indigenous			Indigenous	Non-Indigenous			Indigenous	Non-Indigenous			Indigenous	Non-Indigenous			Indigenous					
	MC	IR	OR	R	VR	MC	IR	OR	R	VR	MC	IR	OR	R	VR	MC	IR	OR	R	VR	
	Rate			Rate			Rate			Rate			Rate			Rate					
Average annual number of excess deaths																					
2002-04																					
0-4	0	11	20	3	-1	43	0	2	13	2	0	30	0	14	32	5	-1	74			
5-14	0	10	8	1	2	8	0	4	0	2	1	5	0	15	8	3	3	12			
15-24	0	80	56	7	6	40	0	27	12	1	1	21	0	107	69	8	7	61			
25-44	0	164	84	5	7	191	0	59	27	-3	0	110	0	223	110	2	7	301			
45-64	0	255	258	14	5	227	0	96	92	6	-3	168	0	352	350	20	2	395			
65-74	0	259	238	25	6	80	0	114	84	7	0	90	0	373	323	32	6	171			
75+	0	490	284	6	-19	4	0	403	171	2	-6	26	0	893	455	7	-25	29			
Excess total	0	1,271	949	60	7	595	0	705	398	16	-8	449	0	1,976	1,347	76	-1	1,044			
Deaths total	40,587	15,847	7,683	867	274	859	40,346	14,204	6,216	597	150	659	80,933	30,051	13,899	1,464	424	1,518			
Excess <65	0	521	427	30	20	510	0	189	143	8	-2	333	0	710	570	38	18	843			
Deaths <65	9,727	3,690	2,010	269	113	643	5,823	2,096	1,034	127	38	419	15,550	5,786	3,045	397	151	1,061			
1997-99																					
Excess total	0	1,053	763	76	22	569	0	496	424	0	-9	430	0	1,549	1,187	76	13	999			
Excess total†	6,491	3,197	1,803	206	65	n.p.	4,315	1,756	989	60	7	n.p.	10,806	4,953	2,791	266	71	n.p.			
Deaths total	40,866	15,280	7,593	903	289	836	39,058	13,099	6,043	580	147	622	79,924	28,379	13,636	1,483	436	1,458			
Excess <65	0	461	354	55	26	498	0	190	104	8	6	324	0	651	458	63	32	821			
Excess <65†	1,980	1,075	679	106	45	n.p.	855	460	237	27	12	n.p.	2,836	1,535	915	133	58	n.p.			
Deaths <65	10,657	3,822	2,130	332	131	635	6,017	2,102	1,043	138	48	407	16,674	5,924	3,173	470	179	1,042			

Notes

- The first half of the table reports death rates (as SMRs) for the period 2002-04. The first two rows (shaded) in this section use Major Cities age-and sex-specific rates in 1997-99 as the standard and compare death rates in each of the areas with those in Major Cities in the same year (1997-99). The second two (unshaded) rows (marked with a †) use Major Cities age-and sex-specific rates in 2002-04 as the standard and compare death rates in each of the areas (including Major Cities) in 1997-99 with death rates in Major Cities in 2002-04.
- The second half of the table describes the actual number of deaths and 'excess deaths' that occurred in each population. Shaded rows 1 and 4 have used 1997-99 Major Cities rates of death as the basis for calculating the number of excess deaths. Unshaded rows 2 and 5 (marked with a †) have used 2002-04 Major Cities rates of death as the basis for calculating the number of excess deaths in 1997-99.
- For further explanation, refer to section 2.3.

3.1 Broad causes of death

Causes of morbidity and mortality have been categorised in the International Classification of Diseases 10th revision (ICD-10AM). Table 3.3 below provides a key to the ICD-10 chapters described in this section.

Table 3.3: ICD-10 chapters

ICD-10 Chapter abbreviation	ICD-10 Chapter name
Infectious diseases (Ch 1)	Certain infectious and parasitic diseases
Neoplasms (Ch 2)	Neoplasms
Blood (Ch 3)	Diseases of blood and blood-forming organs and certain disorders involving the immune mechanism
Endocrine (Ch 4)	Endocrine, nutritional and metabolic diseases
Mental (Ch 5)	Mental and behavioural disorders
Nervous system (Ch 6)	Diseases of the nervous system
Eye (Ch 7)	Diseases of the eye and adnexa
Ear (Ch 8)	Diseases of the ear and mastoid process
Circulatory Ch 9)	Diseases of the circulatory system
Respiratory (Ch 10)	Diseases of the respiratory system
Digestive (Ch 11)	Diseases of the digestive system
Skin (Ch 12)	Diseases of the skin and subcutaneous tissue
Musculoskeletal (Ch 13)	Diseases of the musculoskeletal system and connective tissue
Genitourinary (Ch 14)	Diseases of the genitourinary system
Pregnancy (Ch 15)	Pregnancy, childbirth and the puerperium
Perinatal (Ch 16)	Certain conditions originating in the perinatal period
Congenital (Ch 17)	Congenital malformations, deformations and chromosomal abnormalities
Not elsewhere classified (NEC) (Ch 18)	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
Injury (Ch 20)	Injury and poisoning (external causes)

Note: Chapters refer to those for the WHO International Classification of Diseases, 10th revision.

Source: WHO 1992.

For Australia as a whole, four broad disease groupings accounted for over 80% of deaths:

- diseases of the circulatory system 37%
- neoplasms 29%
- diseases of the respiratory system 9%
- external causes of injury and poisoning (referred to as injury) 6%.

In addition, 'endocrine, nutritional and metabolic disorders' and 'diseases of the digestive system' together account for another 7% of all deaths. Between them, these six major causes account for approximately 88% of all deaths.

Compared with the previous reporting period (1997–99), circulatory diseases (37%) are proportionally less important than they were (41%), while neoplasms (29%) and respiratory disease are proportionally more important than they were (28% and 8%).

For males, neoplasms (32%) and injury (8%) are proportionally more important while circulatory diseases (34%) are proportionally less important than for persons. For females, neoplasms (26%) and injury (4%) are proportionally less important, while circulatory diseases (40%) are proportionally more important than for persons.

Tables 3.4–3.15 describe the numbers of deaths and excess deaths in each area due to each major cause of death.

Males

In Major Cities, a similar proportion of males died as a result of neoplasms (32%) and circulatory diseases (34%), and 9% and 7% died as a result of respiratory diseases and injury. This pattern was similar in regional areas, but in Remote and Very Remote areas, neoplasms were relatively less common (27% and 19%), as were circulatory diseases (32% and 27%), and injury was proportionally more common (12% and 20% of deaths).

Excess deaths provide another perspective. The main contributors to higher death rates:

- in regional areas were circulatory diseases (37% and 32% of excess deaths), neoplasms (29% and 23%), injury (21% and 22%), respiratory diseases (6% and 9%), diseases of the digestive system (4% and 5%), and endocrine etc. diseases (2% and 7%)
- in remote areas were injury (32% and 34%), circulatory diseases (29% and 21%), respiratory diseases (12% and 11%), endocrine etc. diseases (13% and 9%) and diseases of the digestive system (10% and 6%).

Indigenous Australian males

The main causes of death for Indigenous Australian males in Queensland, Western Australia South Australia and the Northern Territory and were circulatory diseases (27%), injury (19%), neoplasms (14%), respiratory diseases (9%), endocrine etc. diseases (7%) and diseases of the digestive system (6%). For males younger than 65 years, the order (for the first three causes at least) was the same as for the total population.

Circulatory diseases (27%) and injury (20%) were the leading contributors to the higher rates of death (excess deaths) for Indigenous Australian males, with substantial contributions from respiratory diseases (9%), endocrine etc. diseases (9%), neoplasms (8%) and diseases of the digestive system (7%). The pattern was similar also for those younger than 65 years.

Non-Indigenous Australian males

For non-Indigenous Australian males, the main causes of death in each of the areas were similar to those for all males in Major Cities (see above), with the exception that injury and neoplasms increased in relative importance in remote areas.

The main contributors to higher death rates (excess deaths) in regional areas were similar to those for all males in regional areas (see above). In Remote areas, injury (56%), circulatory diseases (32%), endocrine etc. diseases (16%) and respiratory diseases (15%) were the main contributors to higher death rates. In Very Remote areas, almost all excess deaths were due to injury (364%).

However, excess deaths in remote areas (particularly) are strongly influenced by death rates for the elderly, which were low relative to those of their Major Cities peers (possibly due to the migration of the frail aged to less remote areas). The major contributors to the higher death rates (excess deaths) amongst regional non-Indigenous Australian males younger than 65 years were injury (48% and 44%), neoplasms (28% and 24%) and circulatory diseases (16% and 18%). In remote areas, injury (100% and 107%) was also overwhelmingly the most important contributor, with circulatory diseases (17% and 24%) having a comparatively small impact on total excess deaths.

Females

In Major Cities, 40% of females died as a result of circulatory diseases, while 26% died as a result of neoplasms. Another 9%, 4% and 4% died as a result of respiratory diseases, injury and endocrine, nutritional and metabolic diseases (for example, diabetes). These proportions are about the same in regional areas, but in remote areas, neoplasms (26% and 20%) and circulatory diseases (35% and 31%) tend to be less important, while injury (6% and 9%) and endocrine, nutritional and metabolic diseases (for example, diabetes – 6% and 9%) tend to be relatively more important than in the less remote populations.

Excess deaths provide another perspective. The main contributors to higher death rates:

- in regional areas were circulatory diseases (54% and 44% of excess deaths), neoplasms (17% and 19%), injury (12% and 14%), endocrine etc. diseases (4% and 15%), and diseases of the musculoskeletal system (6% and 5%)
- in remote areas were circulatory diseases (27% and 27%), endocrine etc. diseases (23% and 18%), injury (15% and 14%), diseases of the digestive system (9% and 8%), neoplasms (9% and 4%) and respiratory diseases (3% and 9%).

Indigenous Australian females

The main causes of death for Indigenous Australian females in Queensland, Western Australia, South Australia and the Northern Territory were circulatory diseases (27%), neoplasms (17%), injury (11%), endocrine etc. diseases (11%) and respiratory diseases (8%). For females younger than 65 years, the order (for the first three causes at least) was the same as for the total population.

Circulatory diseases (26%), endocrine etc. diseases (14%), injury (13%), respiratory diseases (10%) and neoplasms (10%) were the leading contributors to the higher rates of death (excess deaths) for Indigenous Australian females. The pattern was similar also for those younger than 65 years.

Non-Indigenous Australian females

For non-Indigenous Australian females, the main causes of death in each of the areas were roughly similar to those for all females in Major Cities (see above).

The main contributors to higher death rates (excess deaths) in regional areas were similar to those for all females in regional areas (see above). There were very few excess deaths in remote areas.

However, excess deaths in remote areas (particularly) are strongly influenced by death rates for the elderly, which are low relative to those of their Major Cities peers (possibly due to the migration of the frail aged to less remote areas). The major contributors to the higher death

rates amongst regional females younger than 65 years were injury (41% and 26%), circulatory diseases (29% and 17%), neoplasms (12% and 34%) and respiratory diseases (12% and 6%). In remote areas there were very few excess deaths (a very small excess was contributed by endocrine etc. diseases, injury, respiratory diseases and diseases of the digestive system).

3.2 Specific causes of death

- Table 3.14 describes the main causes of excess death outside Major Cities organised by specific cause rather than ICD chapter.
- The main causes of higher death rates outside Major Cities are coronary heart disease, other circulatory disease, motor vehicle traffic accidents (MVTA), chronic obstructive pulmonary disease (COPD), 'other' neoplasms and 'other' causes not elsewhere classified (n.e.c.). These account for 70% of all excess deaths outside Major Cities.
- For males in regional areas, prostate cancer was also a large contributor to excess deaths.
- For females in regional areas, diabetes was also a large contributor to excess deaths.
- In remote areas, the largest contributors were 'other' circulatory diseases, 'other causes not elsewhere classified', diabetes, coronary heart disease and motor vehicle traffic accidents.
- For males in remote areas, suicide and 'other' injuries were also large contributors.
- Table 3.15 describes the main causes of excess death for those younger than 65 years living outside Major Cities.
- The main causes of higher death rates for people younger than 65 years living outside Major Cities are motor vehicle traffic accidents, coronary heart disease, suicide, 'other' causes not elsewhere classified and 'other' neoplasms.
- In remote areas 'other' circulatory disease and diabetes are also substantial contributors to excess deaths amongst people younger than 65 years.
- Lung cancer also made a notable contribution to excess deaths amongst regional females younger than 65 years.

Table 3.4: Average annual deaths and 'excess' deaths, by ICD-10 chapter, 2002-04

ICD-10 chapter	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Deaths										
Infectious disease (Ch 1)	648	176	94	14	9	592	154	65	14	6
Neoplasms (Ch 2)	13,332	5,272	2,544	285	119	11,006	3,893	1,753	194	79
Blood (Ch 3)	121	48	22	3	2	160	62	28	4	1
Endocrine (Ch 4)	1,476	565	322	55	36	1,462	520	287	45	38
Mental (Ch 5)	776	303	132	17	14	1,352	473	177	19	9
Nervous (Ch 6)	1,296	484	215	20	16	1,626	566	243	21	7
Eye (Ch 7)	1	0	0	0	0	3	0	1	0	0
Ear (Ch 8)	3	0	1	0	0	2	1	0	0	0
Circulatory (Ch 9)	14,337	5,712	2,747	340	168	16,529	5,935	2,584	260	124
Respiratory (Ch 10)	3,788	1,460	730	95	57	3,700	1,252	541	57	34
Digestive (Ch 11)	1,356	539	285	48	27	1,435	521	223	31	21
Skin (Ch 12)	79	25	9	3	1	143	43	15	3	3
Musculoskeletal (Ch1)	189	94	43	3	3	403	183	84	8	4
Genitourinary (Ch	873	304	134	16	10	1,118	349	148	15	14
Pregnancy (Ch 15)	0	0	0	0	0	6	2	1	1	0
Perinatal (Ch 16)	210	70	43	8	10	173	51	34	6	4
Congenital (Ch 17)	186	76	39	5	4	174	67	27	4	4
n.e.c. (Ch 18)	266	88	71	19	19	220	87	63	13	14
Injury (Ch 20)	2,998	1,222	704	130	125	1,565	594	294	43	37
Total	41,935	16,439	8,133	1,063	620	41,670	14,755	6,570	738	399
Excess deaths										
Infectious disease (Ch 1)	0	-53	-14	0	3	0	-44	-21	5	3
Neoplasms (Ch 2)	0	389	249	-3	2	0	134	93	9	7
Blood (Ch 3)	0	5	2	1	1	0	9	5	1	0
Endocrine (Ch 4)	0	26	71	24	23	0	28	74	23	30
Mental (Ch 5)	0	27	5	1	7	0	27	-14	0	2
Nervous (Ch 6)	0	20	-1	-7	5	0	23	7	-4	-2
Eye (Ch 7)	0	0	0	0	0	0	-1	1	0	0
Ear (Ch 8)	0	-1	0	0	0	0	0	0	0	0
Circulatory (Ch 9)	0	495	346	51	53	0	423	220	27	45
Respiratory (Ch 10)	0	76	99	21	28	0	8	5	3	15
Digestive (Ch 11)	0	51	54	19	14	0	39	14	9	13
Skin (Ch 12)	0	-3	-4	2	0	0	-4	-6	1	2
Musculoskeletal (Ch 13)	0	26	11	-1	1	0	48	26	2	2
Genitourinary (Ch 14)	0	-13	-10	0	4	0	-24	-12	0	9
Pregnancy (Ch 15)	0	0	0	0	0	0	1	0	0	0
Perinatal (Ch 16)	0	3	8	1	6	0	-4	6	1	1
Congenital (Ch 17)	0	16	8	0	1	0	11	0	0	2
n.e.c. (Ch 18)	0	1	28	12	15	0	16	31	8	12
Injury (Ch 20)	0	286	240	57	86	0	94	68	15	24
Total	0	1,350	1,093	178	252	0	783	496	100	165

Note: A key to the chapters can be found in Table B1.

Table 3.5: Average annual deaths and 'excess' deaths of non-Indigenous Australians, by ICD-10 chapter, 2002-04

ICD-10 chapter	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
	Deaths									
Infectious disease (Ch 1)	626	170	87	10	1	575	149	59	9	1
Neoplasms (Ch 2)	12,988	5,108	2,452	259	78	10,700	3,762	1,676	172	40
Blood (Ch 3)	118	47	21	3	1	156	61	27	3	0
Endocrine (Ch 4)	1,429	541	293	38	12	1,414	500	257	30	8
Mental (Ch 5)	742	292	122	11	6	1,308	458	170	14	3
Nervous (Ch 6)	1,252	468	202	16	5	1,574	547	232	18	4
Eye (Ch 7)	1	0	0	0	0	3	0	1	0	0
Ear (Ch 8)	3	0	0	0	0	2	1	0	0	0
Circulatory (Ch 9)	13,908	5,521	2,610	285	78	16,020	5,723	2,471	226	52
Respiratory (Ch 10)	3,669	1,411	686	77	23	3,573	1,203	512	45	11
Digestive (Ch 11)	1,302	516	261	33	11	1,385	498	209	20	8
Skin (Ch 12)	77	25	9	3	0	139	42	14	2	1
Musculoskeletal (Ch 13)	181	92	41	3	1	391	175	81	6	2
Genitourinary (Ch 14)	845	295	127	13	3	1,082	334	136	11	5
Pregnancy (Ch 15)	0	0	0	0	0	6	2	1	0	0
Perinatal (Ch 16)	194	61	34	4	0	159	45	27	4	0
Congenital (Ch 17)	170	70	34	5	1	162	60	24	3	1
n.e.c. (Ch 18)	243	77	60	12	3	205	82	57	8	4
Injury (Ch 20)	2,838	1,153	644	96	48	1,493	562	263	26	9
Total	40,587	15,847	7,683	867	274	40,346	14,204	6,216	597	150
	Excess deaths									
Infectious disease (Ch 1)	0	-51	-16	-3	-3	0	-43	-24	0	-1
Neoplasms (Ch 2)	0	361	240	-7	-10	0	117	83	3	-9
Blood (Ch 3)	0	5	1	1	1	0	9	4	1	0
Endocrine (Ch 4)	0	20	52	10	3	0	26	54	10	3
Mental (Ch 5)	0	29	3	-3	1	0	27	-13	-3	-1
Nervous (Ch 6)	0	20	-4	-9	-3	0	22	6	-5	-2
Eye (Ch 7)	0	0	0	0	0	0	-1	1	0	0
Ear (Ch 8)	0	-1	0	0	0	0	0	0	0	0
Circulatory (Ch 9)	0	468	303	19	-7	0	389	197	11	-3
Respiratory (Ch 10)	0	72	80	9	2	0	3	-1	-4	-2
Digestive (Ch 11)	0	48	42	6	2	0	34	9	0	2
Skin (Ch 12)	0	-3	-4	1	0	0	-4	-6	0	1
Musculoskeletal (Ch 13)	0	26	11	0	0	0	43	25	0	1
Genitourinary (Ch 14)	0	-12	-10	-3	-2	0	-26	-17	-4	1
Pregnancy (Ch 15)	0	0	0	0	0	0	0	0	0	0
Perinatal (Ch 16)	0	1	5	-1	-2	0	-4	2	0	-1
Congenital (Ch 17)	0	16	7	0	0	0	9	0	-1	0
n.e.c. (Ch 18)	0	-1	22	6	1	0	16	27	5	3
Injury (Ch 20)	0	273	217	34	24	0	87	52	2	1
Total	0	1,271	949	60	7	0	705	398	16	-8

Note: A key to the chapters can be found in Table B1.

Table 3.6: Average annual deaths and 'excess' deaths of persons aged 64 years and under, by ICD-10 chapter, 2002-04

ICD-10 chapter	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Deaths										
Infectious disease (Ch 1)	212	56	30	6	8	85	25	17	7	4
Neoplasms (Ch 2)	3,396	1,314	702	92	50	3,061	1,064	547	74	34
Blood (Ch 3)	35	10	7	2	1	27	9	4	1	1
Endocrine (Ch 4)	311	112	69	19	18	164	57	41	13	20
Mental (Ch 5)	130	40	22	4	8	57	17	8	2	3
Nervous (Ch 6)	305	99	62	6	11	221	80	36	7	4
Eye (Ch 7)	0	0	0	0	0	0	0	0	0	0
Ear (Ch 8)	2	0	0	0	0	0	0	0	0	0
Circulatory (Ch 9)	2,199	848	502	93	85	774	326	173	34	47
Respiratory (Ch 10)	344	147	94	18	22	275	119	60	15	14
Digestive (Ch 11)	444	165	97	24	17	204	76	43	12	13
Skin (Ch 12)	7	3	1	1	0	8	2	2	1	2
Musculoskeletal (Ch 13)	32	12	6	0	1	45	19	12	3	2
Genitourinary (Ch 14)	52	20	13	2	4	45	15	11	3	6
Pregnancy (Ch 15)	0	0	0	0	0	6	2	1	1	0
Perinatal (Ch 16)	210	70	43	8	10	173	51	34	6	4
Congenital (Ch 17)	167	63	33	5	4	147	54	21	4	4
n.e.c. (Ch 18)	187	56	45	14	17	99	27	24	6	10
Injury (Ch 20)	2,217	910	540	110	116	733	304	159	29	31
Total	10,249	3,923	2,266	407	372	6,125	2,248	1,193	215	197
Excess deaths										
Infectious disease (Ch 1)	0	-13	-5	1	5	0	-3	3	5	3
Neoplasms (Ch 2)	0	151	112	2	7	0	35	59	6	2
Blood (Ch 3)	0	-1	1	1	0	0	1	0	0	1
Endocrine (Ch 4)	0	7	15	10	14	0	3	15	9	18
Mental (Ch 5)	0	0	1	1	6	0	0	-1	1	2
Nervous (Ch 6)	0	0	11	-2	6	0	8	2	2	1
Eye (Ch 7)	0	0	0	0	0	0	0	0	0	0
Ear (Ch 8)	0	-1	0	0	0	0	0	0	0	0
Circulatory (Ch 9)	0	98	122	34	57	0	65	49	16	39
Respiratory (Ch 10)	0	29	34	9	18	0	25	15	9	11
Digestive (Ch 11)	0	15	21	12	11	0	8	11	8	11
Skin (Ch 12)	0	0	0	1	0	0	-1	0	0	1
Musculoskeletal (Ch 13)	0	1	1	-1	1	0	3	5	2	1
Genitourinary (Ch 14)	0	2	4	1	3	0	0	4	2	5
Pregnancy (Ch 15)	0	0	0	0	0	0	1	0	0	0
Perinatal (Ch 16)	0	3	8	1	6	0	-4	6	1	1
Congenital (Ch 17)	0	11	6	0	1	0	7	-2	0	1
n.e.c. (Ch 18)	0	-2	15	9	14	0	-4	8	3	9
Injury (Ch 20)	0	263	208	53	83	0	84	52	13	22
Total	0	563	555	133	232	0	229	228	76	129

Note: A key to the chapters can be found in Table B1.

Table 3.7: Average annual deaths and 'excess' deaths of non-Indigenous Australians aged 64 years and under, by ICD-10 chapter, 2002-04

ICD-10 chapter	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Deaths										
Infectious disease (Ch 1)	201	52	26	3	1	81	22	13	2	1
Neoplasms (Ch 2)	3,281	1,263	661	76	27	2,965	1,012	510	60	12
Blood (Ch 3)	34	9	6	2	0	25	8	3	0	0
Endocrine (Ch 4)	293	103	54	10	4	152	53	31	6	3
Mental (Ch 5)	119	36	17	2	2	54	16	6	0	0
Nervous (Ch 6)	290	93	53	4	2	208	77	31	5	2
Eye (Ch 7)	0	0	0	0	0	0	0	0	0	0
Ear (Ch 8)	2	0	0	0	0	0	0	0	0	0
Circulatory (Ch 9)	2,093	795	435	58	25	723	298	138	17	6
Respiratory (Ch 10)	323	135	76	9	2	257	110	50	7	2
Digestive (Ch 11)	415	154	83	10	5	193	68	35	4	2
Skin (Ch 12)	6	3	1	1	0	7	2	1	0	0
Musculoskeletal (Ch 13)	29	10	6	0	0	43	16	12	1	0
Genitourinary (Ch 14)	49	20	11	1	0	42	14	7	0	1
Pregnancy (Ch 15)	0	0	0	0	0	6	2	1	0	0
Perinatal (Ch 16)	194	61	34	4	0	159	45	27	4	0
Congenital (Ch 17)	151	58	28	4	1	135	47	18	2	1
n.e.c. (Ch 18)	166	46	35	8	3	88	23	18	2	2
Injury (Ch 20)	2,079	852	486	78	41	685	281	132	16	6
Total	9,727	3,690	2,010	269	113	5,823	2,096	1,034	127	38
Excess deaths										
Infectious disease (Ch 1)	0	-12	-6	-2	-1	0	-4	1	0	0
Neoplasms (Ch 2)	0	145	102	-6	-5	0	22	49	0	-8
Blood (Ch 3)	0	-2	0	1	0	0	0	0	0	0
Endocrine (Ch 4)	0	4	4	3	1	0	3	8	3	2
Mental (Ch 5)	0	0	-2	-1	0	0	0	-1	-1	0
Nervous (Ch 6)	0	-1	6	-3	-1	0	9	0	0	0
Eye (Ch 7)	0	0	0	0	0	0	0	0	0	0
Ear (Ch 8)	0	-1	0	0	0	0	0	0	0	0
Circulatory (Ch 9)	0	84	79	5	5	0	55	24	2	1
Respiratory (Ch 10)	0	25	21	1	-1	0	23	9	2	1
Digestive (Ch 11)	0	15	13	0	1	0	5	5	0	0
Skin (Ch 12)	0	1	0	1	0	0	-1	0	0	0
Musculoskeletal (Ch 13)	0	0	1	-1	0	0	2	5	0	0
Genitourinary (Ch 14)	0	3	3	-1	0	0	0	1	0	1
Pregnancy (Ch 15)	0	0	0	0	0	0	0	0	0	0
Perinatal (Ch 16)	0	1	5	-1	-2	0	-4	2	0	-1
Congenital (Ch 17)	0	12	5	0	0	0	5	-2	-1	0
n.e.c. (Ch 18)	0	-5	10	4	1	0	-4	6	0	2
Injury (Ch 20)	0	252	186	30	21	0	77	37	2	1
Total	0	521	427	30	20	0	189	143	8	-2

Note: A key to the chapters can be found in Table B1.

Table 3.8: Percentage of deaths and 'excess' deaths by ICD-10 chapter, 2002-04

ICD-10 chapter	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Per cent of deaths										
Infectious disease (Ch 1)	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0
Neoplasms (Ch 2)	32.0	32.0	31.0	27.0	19.0	26.0	26.0	27.0	26.0	20.0
Blood (Ch 3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Endocrine (Ch 4)	4.0	3.0	4.0	5.0	6.0	4.0	4.0	4.0	6.0	9.0
Mental (Ch 5)	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	2.0
Nervous (Ch 6)	3.0	3.0	3.0	2.0	3.0	4.0	4.0	4.0	3.0	2.0
Eye (Ch 7)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ear (Ch 8)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Circulatory (Ch 9)	34.0	35.0	34.0	32.0	27.0	40.0	40.0	39.0	35.0	31.0
Respiratory (Ch 10)	9.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0	8.0	8.0
Digestive (Ch 11)	3.0	3.0	3.0	5.0	4.0	3.0	4.0	3.0	4.0	5.0
Skin (Ch 12)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Musculoskeletal (Ch 13)	0.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
Genitourinary (Ch 14)	2.0	2.0	2.0	2.0	2.0	3.0	2.0	2.0	2.0	4.0
Pregnancy (Ch 15)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perinatal (Ch 16)	1.0	0.0	1.0	1.0	2.0	0.0	0.0	1.0	1.0	1.0
Congenital (Ch 17)	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0
n.e.c. (Ch 18)	1.0	1.0	1.0	2.0	3.0	1.0	1.0	1.0	2.0	3.0
Injury (Ch 20)	7.0	7.0	9.0	12.0	20.0	4.0	4.0	4.0	6.0	9.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Per cent of excess deaths										
Infectious disease (Ch 1)	n.a.	-4.0	-1.0	0.0	1.0	n.a.	-6.0	-4.0	5.0	2.0
Neoplasms (Ch 2)	n.a.	29.0	23.0	-2.0	1.0	n.a.	17.0	19.0	9.0	4.0
Blood (Ch 3)	n.a.	0.0	0.0	0.0	0.0	n.a.	1.0	1.0	1.0	0.0
Endocrine (Ch 4)	n.a.	2.0	7.0	13.0	9.0	n.a.	4.0	15.0	23.0	18.0
Mental (Ch 5)	n.a.	2.0	0.0	1.0	3.0	n.a.	3.0	-3.0	0.0	1.0
Nervous (Ch 6)	n.a.	1.0	0.0	-4.0	2.0	n.a.	3.0	1.0	-4.0	-1.0
Eye (Ch 7)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	0.0	0.0
Ear (Ch 8)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	0.0	0.0
Circulatory (Ch 9)	n.a.	37.0	32.0	29.0	21.0	n.a.	54.0	44.0	27.0	27.0
Respiratory (Ch 10)	n.a.	6.0	9.0	12.0	11.0	n.a.	1.0	1.0	3.0	9.0
Digestive (Ch 11)	n.a.	4.0	5.0	10.0	6.0	n.a.	5.0	3.0	9.0	8.0
Skin (Ch 12)	n.a.	0.0	0.0	1.0	0.0	n.a.	-1.0	-1.0	1.0	1.0
Musculoskeletal (Ch 13)	n.a.	2.0	1.0	0.0	0.0	n.a.	6.0	5.0	2.0	1.0
Genitourinary (Ch 14)	n.a.	-1.0	-1.0	0.0	2.0	n.a.	-3.0	-2.0	0.0	5.0
Pregnancy (Ch 15)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	0.0	0.0
Perinatal (Ch 16)	n.a.	0.0	1.0	1.0	2.0	n.a.	-1.0	1.0	1.0	0.0
Congenital (Ch 17)	n.a.	1.0	1.0	0.0	0.0	n.a.	1.0	0.0	0.0	1.0
n.e.c. (Ch 18)	n.a.	0.0	3.0	7.0	6.0	n.a.	2.0	6.0	8.0	7.0
Injury (Ch 20)	n.a.	21.0	22.0	32.0	34.0	n.a.	12.0	14.0	15.0	14.0
Total	n.a.	100.00	100.00	100.00	100.00	n.a.	100.00	100.00	100.00	100.00

Note: A key to the chapters can be found in Table B1.

Table 3.9: Percentage of non-Indigenous Australian deaths and 'excess' deaths by ICD-10 chapter, 2002-04

ICD-10 chapter	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Per cent of deaths										
Infectious disease (Ch 1)	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Neoplasms (Ch 2)	32.0	32.0	32.0	30.0	29.0	27.0	26.0	27.0	29.0	26.0
Blood (Ch 3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Endocrine (Ch 4)	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0
Mental (Ch 5)	2.0	2.0	2.0	1.0	2.0	3.0	3.0	3.0	2.0	2.0
Nervous (Ch 6)	3.0	3.0	3.0	2.0	2.0	4.0	4.0	4.0	3.0	3.0
Eye (Ch 7)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ear (Ch 8)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Circulatory (Ch 9)	34.0	35.0	34.0	33.0	29.0	40.0	40.0	40.0	38.0	35.0
Respiratory (Ch 10)	9.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0	8.0	7.0
Digestive (Ch 11)	3.0	3.0	3.0	4.0	4.0	3.0	4.0	3.0	3.0	5.0
Skin (Ch 12)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Musculoskeletal (Ch 13)	0.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
Genitourinary (Ch 14)	2.0	2.0	2.0	1.0	1.0	3.0	2.0	2.0	2.0	3.0
Pregnancy (Ch 15)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perinatal (Ch 16)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Congenital (Ch 17)	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0
n.e.c. (Ch 18)	1.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0
Injury (Ch 20)	7.0	7.0	8.0	11.0	18.0	4.0	4.0	4.0	4.0	6.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Per cent of excess deaths										
Infectious disease (Ch 1)	n.a.	-4.0	-2.0	-5.0	-44.0	n.a.	-6.0	-6.0	2.0	10.0
Neoplasms (Ch2)	n.a.	28.0	25.0	-12.0	-154.0	n.a.	17.0	21.0	20.0	115.0
Blood (Ch3)	n.a.	0.0	0.0	2.0	8.0	n.a.	1.0	1.0	5.0	3.0
Endocrine (Ch4)	n.a.	2.0	6.0	16.0	44.0	n.a.	4.0	13.0	60.0	-37
Mental (Ch5)	n.a.	2.0	0.0	-5.0	22.0	n.a.	4.0	-3.0	-17.0	17.0
Nervous (Ch6)	n.a.	2.0	0.0	-15.0	-46.0	n.a.	3.0	2.0	-29.0	24.0
Eye (Ch7)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	0.0	0.0
Ear (Ch8)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	0.0	0.0
Circulatory (Ch9)	n.a.	37.0	32.0	32.0	-112.0	n.a.	55.0	49.0	70.0	40.0
Respiratory (Ch10)	n.a.	6.0	8.0	15.0	28.0	n.a.	0.0	0.0	-27	23.0
Digestive (Ch11)	n.a.	4.0	4.0	10.0	28.0	n.a.	5.0	2.0	3.0	-33
Skin (Ch12)	n.a.	0.0	0.0	2.0	-2.0	n.a.	-1.0	-2.0	0.0	-10
Musculoskeletal	n.a.	2.0	1.0	0.0	-1.0	n.a.	6.0	6.0	1.0	-8.0
Genitourinary (Ch14)	n.a.	-1.0	-1.0	-4.0	-29.0	n.a.	-4.0	-4.0	-23.0	-11.0
Pregnancy (Ch15)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	2.0	0.0
Perinatal (Ch16)	n.a.	0.0	0.0	-1	-23.0	n.a.	-1.0	1.0	-1.0	16.0
Congenital (Ch17)	n.a.	1.0	1.0	1.0	-6.0	n.a.	1.0	0.0	-4.0	1.0
n.e.c. (Ch18)	n.a.	0.0	2.0	10.0	21.0	n.a.	2.0	7.0	29.0	-38
Injury (Ch20)	n.a.	21.0	23.0	56.0	364.0	n.a.	12.0	13.0	10.0	-14
Total	n.a.	100.0	100.0	100.0	100.0	n.a.	100.0	100.0	100.0	100.0

Note: A key to the chapters can be found in Table B1.

Table 3.10: Percentage of annual deaths and 'excess' deaths of persons aged 64 years and under, by ICD-10 chapter, 2002-04

ICD-10 chapter	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Per cent of deaths										
Infectious disease (Ch 1)	2.0	1.0	1.0	2.0	2.0	1.0	1.0	1.0	3.0	2.0
Neoplasms (Ch 2)	33.0	33.0	31.0	23.0	14.0	50.0	47.0	46.0	34.0	17.0
Blood (Ch 3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Endocrine (Ch 4)	3.0	3.0	3.0	5.0	5.0	3.0	3.0	3.0	6.0	10.0
Mental (Ch 5)	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	2.0
Nervous (Ch 6)	3.0	3.0	3.0	2.0	3.0	4.0	4.0	3.0	3.0	2.0
Eye (Ch 7)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ear (Ch 8)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Circulatory (Ch 9)	21.0	22.0	22.0	23.0	23.0	13.0	15.0	15.0	16.0	24.0
Respiratory (Ch 10)	3.0	4.0	4.0	4.0	6.0	4.0	5.0	5.0	7.0	7.0
Digestive (Ch 11)	4.0	4.0	4.0	6.0	5.0	3.0	3.0	4.0	6.0	6.0
Skin (Ch 12)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Musculoskeletal (Ch 13)	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
Genitourinary (Ch 14)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0
Pregnancy (Ch 15)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perinatal (Ch 16)	2.0	2.0	2.0	2.0	3.0	3.0	2.0	3.0	3.0	2.0
Congenital (Ch 17)	2.0	2.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0
n.e.c. (Ch 18)	2.0	1.0	2.0	4.0	5.0	2.0	1.0	2.0	3.0	5.0
Injury (Ch 20)	22.0	23.0	24.0	27.0	31.0	12.0	14.0	13.0	14.0	16.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Per cent of excess deaths										
Infectious disease (Ch 1)	n.a.	-2.0	-1.0	0.0	2.0	n.a.	-1.0	2.0	6.0	3.0
Neoplasms (Ch 2)	n.a.	27.0	20.0	1.0	3.0	n.a.	15.0	26.0	8.0	2.0
Blood (Ch 3)	n.a.	0.0	0.0	1.0	0.0	n.a.	0.0	0.0	0.0	0.0
Endocrine (Ch 4)	n.a.	1.0	3.0	8.0	6.0	n.a.	1.0	7.0	12.0	14.0
Mental (Ch 5)	n.a.	0.0	0.0	1.0	3.0	n.a.	0.0	0.0	1.0	2.0
Nervous (Ch 6)	n.a.	0.0	2.0	-1.0	3.0	n.a.	3.0	1.0	2.0	1.0
Eye (Ch 7)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	0.0	0.0
Ear (Ch 8)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	0.0	0.0
Circulatory (Ch 9)	n.a.	17.0	22.0	26.0	24.0	n.a.	28.0	22.0	22.0	30.0
Respiratory (Ch 10)	n.a.	5.0	6.0	7.0	8.0	n.a.	11.0	7.0	12.0	8.0
Digestive (Ch 11)	n.a.	3.0	4.0	9.0	5.0	n.a.	4.0	5.0	10.0	8.0
Skin (Ch 12)	n.a.	0.0	0.0	1.0	0.0	n.a.	0.0	0.0	1.0	1.0
Musculoskeletal (Ch 13)	n.a.	0.0	0.0	-1.0	0.0	n.a.	1.0	2.0	3.0	1.0
Genitourinary (Ch 14)	n.a.	0.0	1.0	1.0	1.0	n.a.	0.0	2.0	2.0	4.0
Pregnancy (Ch 15)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	1.0	0.0
Perinatal (Ch 16)	n.a.	1.0	1.0	1.0	2.0	n.a.	-2.0	2.0	1.0	0.0
Congenital (Ch 17)	n.a.	2.0	1.0	0.0	1.0	n.a.	3.0	-1.0	0.0	1.0
n.e.c. (Ch 18)	n.a.	0.0	3.0	7.0	6.0	n.a.	-2.0	4.0	5.0	7.0
Injury (Ch 20)	n.a.	47.0	37.0	40.0	36.0	n.a.	37.0	23.0	17.0	17.0
Total	n.a.	100.0	100.0	100.0	100.0	n.a.	100.0	100.0	100.0	100.0

Note: A key to the chapters can be found in Table B1.

Table 3.11: Percentage annual deaths and 'excess' deaths of non-Indigenous Australians aged 64 years and under, by ICD chapter, 2002-04

ICD-10 chapter	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Per cent of deaths										
Infectious disease (Ch 1)	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0
Neoplasms (Ch 2)	34.0	34.0	33.0	28.0	24.0	51.0	48.0	49.0	47.0	32.0
Blood (Ch 3)	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Endocrine (Ch 4)	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	5.0	8.0
Mental (Ch 5)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0
Nervous (Ch 6)	3.0	3.0	3.0	1.0	2.0	4.0	4.0	3.0	4.0	4.0
Eye (Ch 7)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ear (Ch 8)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Circulatory (Ch 9)	22.0	22.0	22.0	21.0	22.0	12.0	14.0	13.0	13.0	16.0
Respiratory (Ch 10)	3.0	4.0	4.0	3.0	2.0	4.0	5.0	5.0	5.0	6.0
Digestive (Ch 11)	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	5.0
Skin (Ch 12)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Musculoskeletal (Ch 13)	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0
Genitourinary (Ch 14)	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	0.0	3.0
Pregnancy (Ch 15)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perinatal (Ch 16)	2.0	2.0	2.0	2.0	0.0	3.0	2.0	3.0	3.0	0.0
Congenital (Ch 17)	2.0	2.0	1.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0
n.e.c. (Ch 18)	2.0	1.0	2.0	3.0	2.0	2.0	1.0	2.0	2.0	6.0
Injury (Ch 20)	21.0	23.0	24.0	29.0	36.0	12.0	13.0	13.0	12.0	15.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Per cent of excess deaths										
Infectious disease (Ch 1)	n.a.	-2.0	-1.0	-8.0	-5.0	n.a.	-2.0	1.0	6.0	3.0
Neoplasms (Ch 2)	n.a.	28.0	24.0	-21.0	-25.0	n.a.	12.0	34.0	3.0	401.0
Blood (Ch 3)	n.a.	0.0	0.0	4.0	0.0	n.a.	0.0	0.0	-3.0	6.0
Endocrine (Ch 4)	n.a.	1.0	1.0	11.0	7.0	n.a.	2.0	6.0	36.0	-100.0
Mental (Ch 5)	n.a.	0.0	0.0	-4.0	2.0	n.a.	0.0	-1.0	-11.0	10.0
Nervous (Ch 6)	n.a.	0.0	2.0	-11.0	-5.0	n.a.	5.0	0.0	4.0	-11.0
Eye (Ch 7)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	0.0	0.0
Ear (Ch 8)	n.a.	0.0	0.0	1.0	0.0	n.a.	0.0	0.0	0.0	0.0
Circulatory (Ch 9)	n.a.	16.0	18.0	17.0	24.0	n.a.	29.0	17.0	26.0	-72.0
Respiratory (Ch 10)	n.a.	5.0	5.0	2.0	-4.0	n.a.	12.0	6.0	22.0	-36.0
Digestive (Ch 11)	n.a.	3.0	3.0	-1.0	4.0	n.a.	2.0	3.0	3.0	-22.0
Skin (Ch 12)	n.a.	0.0	0.0	2.0	1.0	n.a.	0.0	0.0	2.0	2.0
Musculoskeletal (Ch 13)	n.a.	0.0	0.0	-2.0	0.0	n.a.	1.0	3.0	3.0	14.0
Genitourinary (Ch 14)	n.a.	1.0	1.0	-2.0	-2.0	n.a.	0.0	0.0	-6.0	-37.0
Pregnancy (Ch 15)	n.a.	0.0	0.0	0.0	0.0	n.a.	0.0	0.0	4.0	2.0
Perinatal (Ch 16)	n.a.	0.0	1.0	-3.0	-8.0	n.a.	-2.0	2.0	-3.0	62.0
Congenital (Ch 17)	n.a.	2.0	1.0	1.0	-1.0	n.a.	3.0	-1.0	-11.0	18.0
n.e.c. (Ch 18)	n.a.	-1.0	2.0	13.0	6.0	n.a.	-2.0	4.0	1.0	-89.0
Injury (Ch 20)	n.a.	48.0	44.0	100.0	107.0	n.a.	41.0	26.0	24.0	-50.0
Total	n.a.	100.0	100.0	100.0	100.0	n.a.	100.0	100.0	100.0	100.0

Note: A key to the chapters can be found in Table B1.

Table 3.12: Average annual deaths and 'excess' deaths of Indigenous Australians in Qld, WA, SA and NT, by broad cause of death, 2002-04

ICD-10 chapter	Males		Females	
	Total population	0-64 years	Total population	0-64 years
Infectious disease (Ch 1)	18	16	15	12
Neoplasms (Ch 2)	120	71	111	68
Blood (Ch 3)	2	2	3	2
Endocrine (Ch 4)	62	39	70	34
Mental (Ch 5)	21	14	14	6
Nervous (Ch 6)	25	20	12	10
Eye (Ch 7)	0	0	0	0
Ear (Ch 8)	1	1	0	0
Circulatory (Ch 9)	232	160	180	97
Respiratory (Ch 10)	74	44	60	32
Digestive (Ch 11)	50	40	37	29
Skin (Ch 12)	1	1	4	3
Musculoskeletal (Ch 13)	4	3	8	6
Genitourinary (Ch 14)	15	8	24	12
Pregnancy (Ch 15)	0	0	1	1
Perinatal (Ch 16)	23	23	15	15
Congenital (Ch 17)	11	11	9	9
n.e.c. (Ch 18)	35	33	21	18
Injury (Ch 20)	165	159	74	65
Total	859	643	659	419
		Excess deaths		
Infectious disease (Ch 1)	14	13	12	11
Neoplasms (Ch 2)	47	39	45	35
Blood (Ch 3)	2	1	3	2
Endocrine (Ch 4)	55	36	64	32
Mental (Ch 5)	16	12	9	5
Nervous (Ch 6)	17	16	5	7
Eye (Ch 7)	0	0	0	0
Ear (Ch 8)	1	1	0	0
Circulatory (Ch 9)	160	138	120	89
Respiratory (Ch 10)	56	40	45	29
Digestive (Ch 11)	42	36	31	27
Skin (Ch 12)	1	1	4	3
Musculoskeletal (Ch 13)	4	2	6	6
Genitourinary (Ch 14)	11	8	20	11
Pregnancy (Ch 15)	0	0	1	1
Perinatal (Ch 16)	15	15	8	8
Congenital (Ch 17)	7	7	5	5
n.e.c. (Ch 18)	31	30	18	16
Injury (Ch 20)	123	121	58	52
Total	601	515	453	337

Note: A key to the chapters can be found in Table B1. Deaths and excess deaths in this table refer to annual deaths in Qld, WA, SA and NT, whose population of 274,000 Indigenous Australians is 60% of the national Indigenous Australian population of 458,000. If death rates in the other states and territories were comparable to those in Qld, WA, SA and NT, the numbers of deaths and excess deaths nationally may be approximately 1.7 times greater than that indicated for Qld, WA, SA and NT in this table.

Table 3.13: Percentage of deaths and 'excess' deaths of Indigenous Australians in Qld, WA, SA and NT, by broad cause of death, 2002–04

ICD-10 chapter	Males		Females	
	Total population	0–64 years	Total population	0–64 years
	Per cent of deaths			
Infectious disease (Ch 1)	2.0	2.0	2.0	3.0
Neoplasms (Ch 2)	14.0	11.0	17.0	16.0
Blood (Ch 3)	0.0	0.0	0.0	0.0
Endocrine (Ch 4)	7.0	6.0	11.0	8.0
Mental (Ch 5)	2.0	2.0	2.0	1.0
Nervous (Ch 6)	3.0	3.0	2.0	2.0
Eye (Ch 7)	0.0	0.0	0.0	0.0
Ear (Ch 8)	0.0	0.0	0.0	0.0
Circulatory (Ch 9)	27.0	25.0	27.0	23.0
Respiratory (Ch 10)	9.0	7.0	9.0	8.0
Digestive (Ch 11)	6.0	6.0	6.0	7.0
Skin (Ch 12)	0.0	0.0	1.0	1.0
Musculoskeletal (Ch 13)	0.0	0.0	1.0	1.0
Genitourinary (Ch 14)	2.0	1.0	4.0	3.0
Pregnancy (Ch 15)	0.0	0.0	0.0	0.0
Perinatal (Ch 16)	3.0	4.0	2.0	4.0
Congenital (Ch 17)	1.0	2.0	1.0	2.0
n.e.c. (Ch 18)	4.0	5.0	3.0	4.0
Injury (Ch 20)	19.0	25.0	11.0	16.0
Total	100.0	100.0	100.0	100.0
	Per cent of excess deaths			
Infectious disease (Ch 1)	2.0	3.0	3.0	3.0
Neoplasms (Ch 2)	8.0	8.0	10.0	10.0
Blood (Ch 3)	0.0	0.0	1.0	1.0
Endocrine (Ch 4)	9.0	7.0	14.0	9.0
Mental (Ch 5)	3.0	2.0	2.0	1.0
Nervous (Ch 6)	3.0	3.0	1.0	2.0
Eye (Ch 7)	0.0	0.0	0.0	0.0
Ear (Ch 8)	0.0	0.0	0.0	0.0
Circulatory (Ch 9)	27.0	27.0	26.0	26.0
Respiratory (Ch 10)	9.0	8.0	10.0	9.0
Digestive (Ch 11)	7.0	7.0	7.0	8.0
Skin (Ch 12)	0.0	0.0	1.0	1.0
Musculoskeletal (Ch 13)	1.0	0.0	1.0	2.0
Genitourinary (Ch 14)	2.0	2.0	4.0	3.0
Pregnancy (Ch 15)	0.0	0.0	0.0	0.0
Perinatal (Ch 16)	2.0	3.0	2.0	2.0
Congenital (Ch 17)	1.0	1.0	1.0	1.0
n.e.c. (Ch 18)	5.0	6.0	4.0	5.0
Injury (Ch 20)	20.0	23.0	13.0	15.0
Total	100.0	100.0	100.0	100.0

Note: A key to the chapters can be found in Table B1. Deaths and excess deaths in this table refer to annual deaths in Qld, WA, SA and NT, whose population of 274,000 Indigenous Australians is 60% of the national Indigenous Australian population of 458,000. If death rates in the other states and territories were comparable to those in Qld, WA, SA and NT, the numbers of deaths and excess deaths nationally may be approximately 1.7 times greater than that indicated for Qld, WA, SA and NT in this table.

Table 3.14: Percentage of leading causes of 'excess' death outside Major Cities, 2002–04

Cause of death	Males			Females			Persons		
	Regional	Remote	Regional and remote	Regional	Remote	Regional and remote	Regional	Remote	Regional and remote
Per cent									
Coronary heart disease	20.0	13.0	19.0	21.0	10.0	19.0	21.0	12.0	19.0
Other circulatory disease	13.0	12.0	13.0	30.0	20.0	28.0	19.0	15.0	18.0
MVTA	10.0	11.0	10.0	8.0	7.0	8.0	9.0	10.0	9.0
COPD	11.0	9.0	10.0	6.0	5.0	6.0	9.0	7.0	9.0
Other neoplasms	9.0	2.0	8.0	7.0	8.0	7.0	8.0	4.0	7.0
Other causes n.e.c.	4.0	14.0	5.0	7.0	18.0	9.0	5.0	15.0	7.0
Diabetes	3.0	9.0	4.0	8.0	17.0	9.0	5.0	12.0	6.0
Other injuries	5.0	8.0	5.0	5.0	5.0	5.0	5.0	7.0	5.0
Suicide	6.0	9.0	6.0	0.0	0.0	0.0	4.0	6.0	4.0
Prostate cancer	8.0	-1.0	6.0	0.0	0.0	0.0	5.0	0.0	4.0
Lung cancer	4.0	1.0	4.0	5.0	2.0	4.0	4.0	1.0	4.0
Total	92.0	87.0	92.0	96.0	91.0	95.0	95.0	89.0	93.0

Table 3.15: Percentage of leading causes of 'excess' death outside Major Cities for persons aged 64 years and under, 2002–04

Cause of death	Males			Females			Persons		
	Regional	Remote	Regional and remote	Regional	Remote	Regional and remote	Regional	Remote	Regional and remote
Per cent									
MVTA	20.0	13.0	18.0	20.0	8.0	16.0	20.0	11.0	18.0
Coronary heart disease	13.0	15.0	14.0	12.0	12.0	12.0	13.0	14.0	13.0
Suicide	12.0	10.0	12.0	2.0	1.0	2.0	9.0	7.0	9.0
Other causes n.e.c.	5.0	15.0	7.0	6.0	21.0	11.0	5.0	17.0	8.0
Other neoplasms	11.0	2.0	9.0	3.0	5.0	3.0	9.0	3.0	7.0
Other circulatory disease	4.0	7.0	5.0	7.0	12.0	8.0	5.0	9.0	6.0
Lung cancer	5.0	2.0	4.0	9.0	2.0	7.0	6.0	2.0	5.0
COPD	4.0	3.0	4.0	7.0	3.0	6.0	5.0	3.0	4.0
Diabetes	1.0	6.0	2.0	5.0	11.0	6.0	2.0	8.0	4.0
Liver disease	2.0	5.0	3.0	2.0	6.0	3.0	2.0	5.0	3.0
Other LTA	2.0	2.0	2.0	1.0	0.0	1.0	2.0	2.0	2.0
Total	80.0	81.0	80.0	73.0	82.0	76.0	78.0	81.0	79.0