

8 Trends in avoidable and amenable mortality: Australia, 1987-2001

8.1 Change in total avoidable and unavoidable mortality

Of all deaths at ages 0 to 74 years in 2001, 70.6% were considered to have been avoidable, a smaller proportion than in 1987 (77.4%). Over one quarter (28.7%) of the total deaths at ages 0 to 74 in 2001 are considered to have been amenable to health care, compared to one third (33.3%) in 1987 (Table 8.1, Figure 8.1). This sub-set of amenable mortality is shown in brackets in Table 8.1.

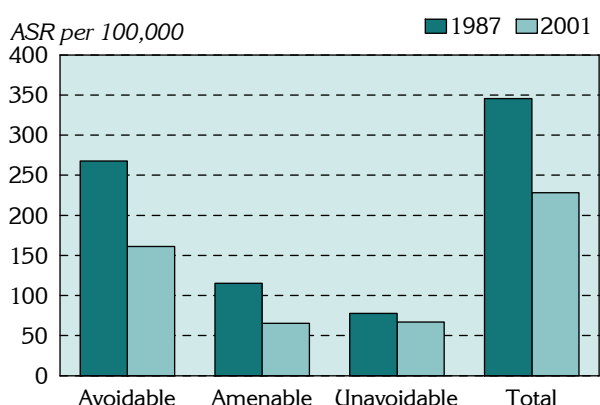
The age-standardised death rate (ASR) from avoidable mortality in 2001 was 161.3 deaths per

100,000 population, 40% lower than the 1987 rate of 267.6. Within the overall rate of avoidable mortality in 2001, 65.3 deaths per 100,000 population were estimated to have been amenable to health care, again notably lower (43.4%) than the rate of 115.3 in 1987. Death rates from the remaining, or 'unavoidable' deaths, were 67.0 per 100,000 population in 2001, compared to 77.9 in 1987 (a decline of 14% over the period). The rates for all deaths at these ages were 228.3 deaths per 100,000 population in 2001, and 345.5 in 1987.

Table 8.1: Change in avoidable mortality (0 to 74 years), Australia, 1987 and 2001

Mortality category	Number		Per cent of total		ASR per 100,000		Per cent change
	1987	2001	1987	2001	1987	2001	
Avoidable mortality (Amenable mortality)	47,087 (20,257)	35,893 (14,582)	77.4 (33.3)	70.6 (28.7)	267.6 (115.3)	161.3 (65.3)	-39.7 (-43.4)
Unavoidable mortality	13,718	14,931	22.6	29.4	77.9	67.0	-14.0
Total mortality	60,805	50,824	100.0	100.0	345.5	228.3	-33.9

Figure 8.1: Change in avoidable mortality (0 to 74 years), Australia, 1987 and 2001



There were approximately 629,200 years of life lost (YLL) due to deaths from avoidable causes in 2001, a decrease of almost one quarter (23.4%) on the 821,000 years of YLL in 1987 (Table 8.2). YLL from amenable mortality showed a higher relative

decline (28.6%), falling from approximately 350,000 in 1987 to 249,800 in 2001. At the same time, there was an increase in YLL from unavoidable causes of death of 6.1% over the period, from 242,500 YLL in 1987 to 257,300 in 2001. Total mortality at ages 0 to 74 years accounted for approximately 1.06 million YLL in 1987 and 886,500 years in 2001, a decline of 16.6%.

However, given the growth in population over the 14 year period also impacting on the number of deaths, it is useful to examine the change in proportion of YLL in each category of mortality. In 1987, YLL from avoidable mortality accounted for 77.2% of total YLL, declining to 71.0% in 2001 (a ratio of 0.92**). Similarly, YLL from amenable mortality fell from 32.9% of total YLL in 1987 to 28.2% in 2001 (a ratio of 0.86**). At the same time there was an increase in the proportion of YLL for unavoidable mortality, from 22.8% in 1981 to 29.0% in 2001.

Table 8.2: Change in years of life lost (0 to 74 years), Australia, 1987 and 2001

Mortality category	Number		Per cent change	Per cent of total YLL		Ratio 2001:1987
	1987	2001		1987	2001	
Avoidable mortality	820,970	629,168	-23.4	77.2	71.0	0.92**
(Amenable mortality)	(350,008)	(249,808)	(-28.6)	(32.9)	(28.2)	(0.86)**
Unavoidable mortality	242,537	257,333	6.1	22.8	29.0	1.27**
Total mortality	1,063,508	886,501	-16.6	100.0	100.0	..

8.2 Change in avoidable and amenable mortality by age and sex

By sex

Rates in all categories of mortality were higher for males than for females over the 14 year period (Table 8.3, Figure 8.2). For avoidable mortality, the 1987 rate for males was 357.6 deaths per 100,000 males, twice the female rate of 177.8 (a rate ratio of 2.01**). ASRs in 2001 were 210.1 deaths per 100,000 for males and 112.4 for females, a slightly lower differential of 1.87**.

For amenable mortality, the 1987 rate for males was 133.4 deaths per 100,000 males, 37% higher than the female rate of 97.3 (a rate ratio of 1.37**).

In 2001, the differential was marginally lower, with the rate of male deaths (73.5 deaths per 100,000 males) being 1.29** times the female rate (57.1).

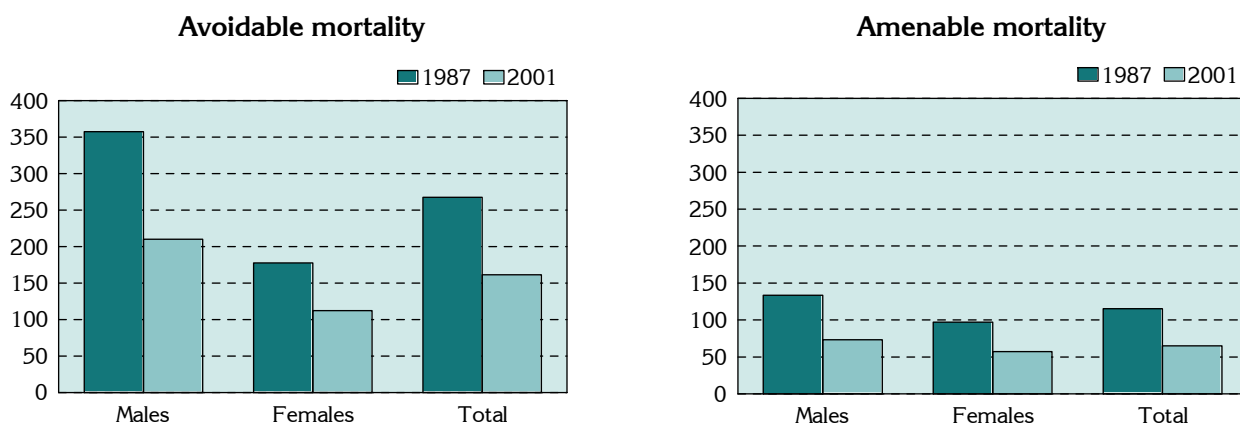
For unavoidable mortality, the rate for males in 1987 was 96.6 deaths per 100,000 population, almost two thirds (63%) higher than the female rate of 59.3 deaths per 100,000 population. In 2001, the rate for males was 81.2 deaths per 100,000 population, just over one and a half times the female rate of 52.7 deaths per 100,000 population (a rate ratio of 1.54**).

Table 8.3: Change in avoidable mortality (0 to 74 years) by sex, Australia, 1987 and 2001

Mortality category	Males			Females			Rate ratio	
	ASR per 100,000		Per cent change	ASR per 100,000		Per cent change	Males:Females	
	1987	2001		1987	2001		1987	2001
Avoidable mortality	357.6	210.1	-41.2	177.8	112.4	-36.8	2.01**	1.87**
(Amenable mortality)	(133.4)	(73.5)	(-44.9)	(97.3)	(57.1)	(-41.3)	(1.37)**	(1.29)**
Unavoidable mortality	96.6	81.2	-15.9	59.3	52.7	-11.1	1.63**	1.54**
Total mortality	454.3	291.3	-35.9	237.1	165.1	-30.4	1.92**	1.76**

Figure 8.2: Change in avoidable and amenable mortality by sex, Australia, 1987 and 2001

ASR per 100,000 population



By age

Rates of death from avoidable causes declined in all of the age groups under study (Table 8.4). The largest decline (51.5%) was in the 0 to 14 year age group, with rates decreasing from 56.1 deaths per 100,000 population in 1987 to 27.2 in 2001. The decline in rates in this age group for deaths from amenable causes was similar (51.7%), falling from 44.9 deaths per 100,000 population in 1987 to 21.7 in 2001.

Rates in the oldest age groups fell by more than 40% over the period for both avoidable and amenable causes of death. In the 45 to 64 year age group, the rate for avoidable causes fell from 503.1 deaths per 100,000 population in 1987 to 288.8 in 2001, and from amenable causes from 219.3 deaths in 1987 to 121.9 in 2001. In the 65

to 74 year age group, the rate for avoidable causes declined from 2,074.9 deaths per 100,000 population in 1987 to 1,210.2 in 2001, and for amenable mortality, from 913.5 deaths per 100,000 population in 1987 to 516.9 in 2001.

In the 15 to 24 year age group, the decline in rates of death from avoidable causes (35.9%; from 70.2 deaths per 100,000 population in 1987 to 45.0 in 2001) was slightly lower than for amenable mortality (37.8%: from 8.2 deaths per 100,000 population to 5.1). The smallest decreases in death rates between 1987 and 2001 from avoidable causes (15.3%; from 89.5 deaths per 100,000 population to 75.8) and amenable causes (29.2%; from 27.7 deaths per 100,000 population to 19.6) were in the 25 to 44 year age group.

Table 8.4: Change in avoidable and amenable mortality by age, Australia, 1987 and 2001

Age (years)	Number		Per cent change	Rate per 100,000 ¹		Per cent change
	1987	2001		1987	2001	
Avoidable mortality						
0-14	2,045	1,050	-48.7	56.1	27.2	-51.5
15-24	1,921	1,204	-37.3	70.2	45.0	-35.9
25-44	4,509	4,490	-0.4	89.5	75.8	-15.3
45-64	16,692	12,864	-22.9	503.1	288.8	-42.6
65-74	21,920	16,285	-25.7	2,074.9	1,210.2	-41.7
Total (0 to 74)	47,087	35,893	-23.8	267.6	161.3	-39.7
Amenable mortality						
0-14	1,631	834	-48.9	44.9	21.7	-51.7
15-24	223	136	-39.0	8.2	5.1	-37.8
25-44	1,384	1,196	-13.6	27.7	19.6	-29.2
45-64	7,262	5,423	-25.3	219.3	121.9	-44.4
65-74	9,758	6,994	-28.3	913.5	516.9	-43.4
Total (0 to 74)	20,257	14,582	-28.0	115.3	65.3	-43.4

¹ Rates are age standardised within age categories

By age and sex

Rates of death from avoidable causes declined for both males and females in all age groups (Table 8.5, Figure 8.3). Overall, the percentage change for males was similar (41% to 46%) across the age groups studied, with the exception of the lower relative change (13.1%) in the 25 to 44 year age group. For females, the percentage reduction was most marked at ages 0 to 24 years (just below 50%), and, as with males, lowest in the 25 to 44 year age group.

Between 1987 and 2001, the rate of deaths from avoidable causes for males aged 0 to 24 years declined by 41.5% (from 78.8 deaths per 100,000 males to 46.1) and by 47.3% for deaths from amenable mortality (from 33.8 deaths per 100,000 males to 17.8).

Over the same period, the rate of deaths from avoidable causes for females aged 0 to 24 years decreased by half (49.4%; from 44.1 deaths per 100,000 females to 22.3) and by just over half for amenable mortality (from 27.3 deaths per 100,000 females to 12.7).

For males aged 25 to 44 years, the relative decline in death rates from avoidable causes was substantially lower, at 13.1% (from 120.8 deaths per 100,000 males to 105.0), and 27.6% for deaths from amenable causes (from 26.1 deaths per 100,000 males to 18.9). The decrease in death rates from avoidable causes for females was also substantially lower, with a decline of 20.2% (from 58.3 deaths per 100,000 females to 46.5), and 31.3% for deaths from amenable causes (from 29.4 deaths per 100,000 females to 20.2).

Table 8.5: Change in avoidable and amenable mortality by age and sex, Australia, 1987 and 2001

Age (years)	Males			Females		
	Rate per 100,000 ¹		Per cent change ¹	Rate per 100,000 ¹		Per cent change
	1987	2001		1987	2001	
Avoidable mortality						
0-24	78.8	46.1	-41.5	44.1	22.3	-49.4
25-44	120.8	105.0	-13.1	58.3	46.5	-20.2
45-64	676.1	367.7	-45.6	329.6	209.9	-36.3
65-74	2,780.5	1,568.4	-43.6	1,376.0	849.7	-38.2
Total (0 to 74)	357.6	210.1	-41.3	177.8	112.4	-36.8
Amenable mortality						
0-24	33.8	17.8	-47.3	27.3	12.7	-53.5
25-44	26.1	18.9	-27.6	29.4	20.2	-31.3
45-64	253.5	132.1	-47.9	184.6	111.7	-39.5
65-74	1,105.4	616.6	-44.2	722.5	416.8	-42.3
Total (0 to 74)	133.4	73.5	-44.9	97.3	57.1	-41.3

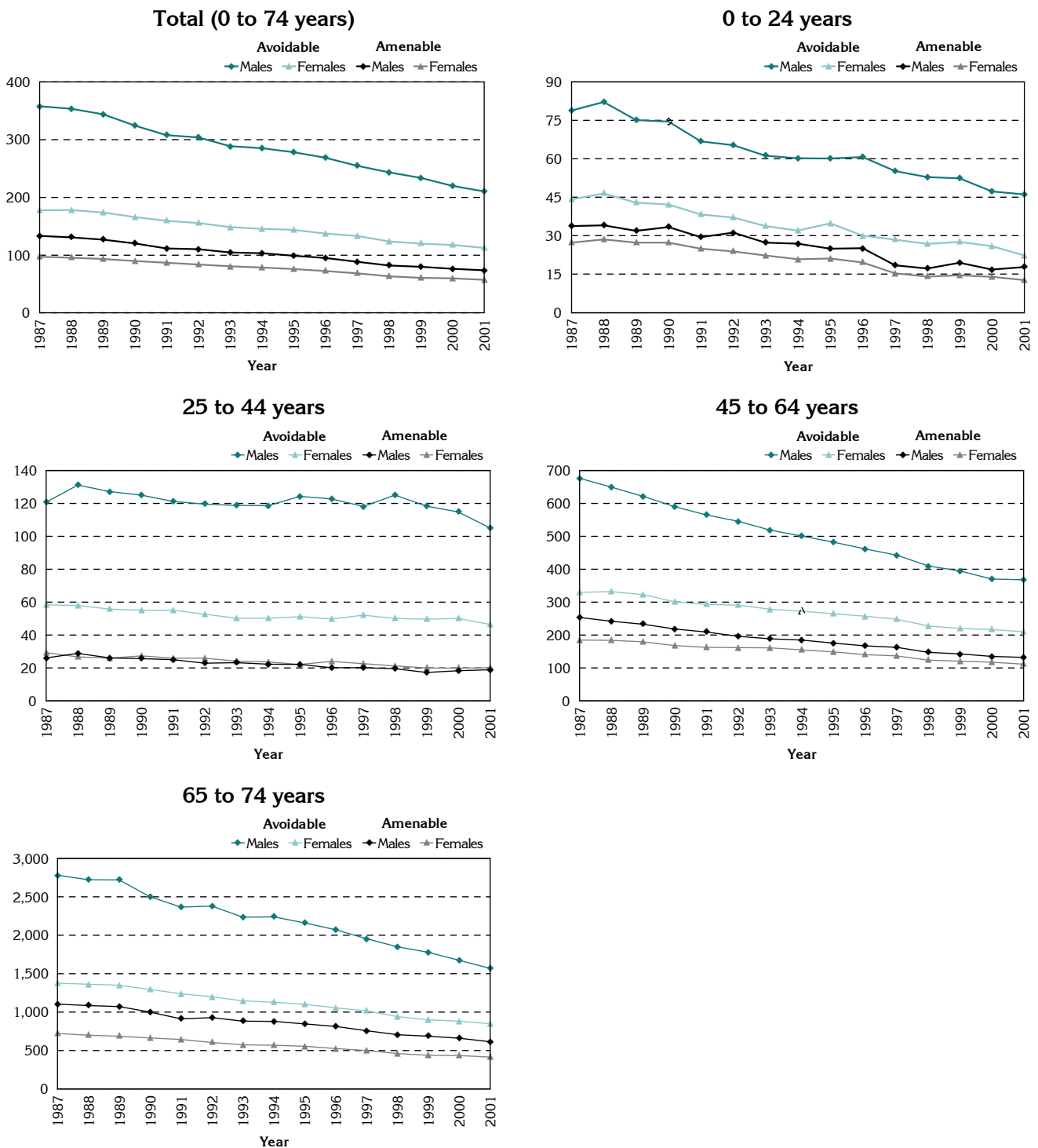
¹ Rates are age standardised within age categories

Rates of death from avoidable causes for males aged 45 to 64 years fell by 45.6% between 1987 and 2001 (from 676.1 deaths per 100,000 males to 367.7) and by 47.9% for amenable causes of death (from 253.5 deaths per 100,000 males to 132.1). The decrease in rates over this period for females was lower, with falls of 36.3% for deaths from avoidable causes (from 329.6 deaths per 100,000 females in 1987 to 209.9 in 2001) and 39.5% for deaths from amenable causes (from 184.6 deaths per 100,000 females to 111.7).

Males in the 65 to 74 year age group experienced 43.6% fewer deaths from avoidable causes over this 14 year period (from 2,780.5 deaths per 100,000 males to 1,568.4) and a similar decrease (44.2%) in deaths from amenable causes (from 1,105 deaths per 100,000 males to 616.6). The decline in death rates for females between 1987 and 2001 was slightly lower, at 38.2%, for deaths from avoidable causes (from 1,376.0 deaths per 100,000 females to 849.7) and 42.3% for deaths from amenable causes (from 722.5 deaths per 100,000 females to 416.8).

Figure 8.3: Trends in avoidable and amenable mortality by age and sex, Australia, 1987 to 2001

Rate per 100,000 population: note the different scales



8.3 Change in avoidable mortality by cause

By major condition group

Rates of death from avoidable causes declined for 10 of the 12 major condition groups between 1987 and 2001, remained unchanged for one group (neurological disorders) and increased for another (infection) (Table 8.6, Figure 8.4). There were falls of more than 50% for cardiovascular diseases (58.3%), digestive disorders (58.0%) and maternal and infant causes (50.4%) over the period. ASRs for cardiovascular diseases (the highest rate of all the condition groups) fell from 108.2 deaths per 100,000 population in 1987 to 45.1 in 2001; for digestive disorders the decline was from 5.0 deaths per 100,000 population to 2.1; and for maternal and infant causes, from 11.9 deaths per 100,000 population to 5.9.

There were also substantial declines in ASRs for genitourinary disorders of 46.4% (from 2.8 deaths per 100,000 population to 1.5) and drug use disorders of 40.3% (from 7.7 deaths per 100,000 population to 4.6) between 1987 and 2001.

There was a smaller relative decrease in the ASR from respiratory diseases of 37.5%, from 14.4 deaths per 100,000 population in 1987 to 9.0 in 2001. Death rates from unintentional injuries fell by just under one third (29.8%) over the 14 year period, from 20.8 deaths per 100,000 population in 1987 to 14.6 in 2001. ASRs for deaths from cancer declined from 71.5 deaths per 100,000 population in 1987 (the second highest ASR after cardiovascular diseases) to 54.2 in 2001, a fall of just less than one quarter (24.2%). Intentional injuries resulted in proportionately fewer (11.6%) deaths over the period, falling from an ASR of 15.5 deaths per 100,000 population in 1987 to 13.7 in 2001.

Rates of death from neurological disorders (1.1 deaths per 100,000 population) remained unchanged between 1987 and 2001. Infection was the only major condition group to record an increase in ASR, rising from 3.9 deaths per 100,000 population in 1987 to 4.1 in 2001.

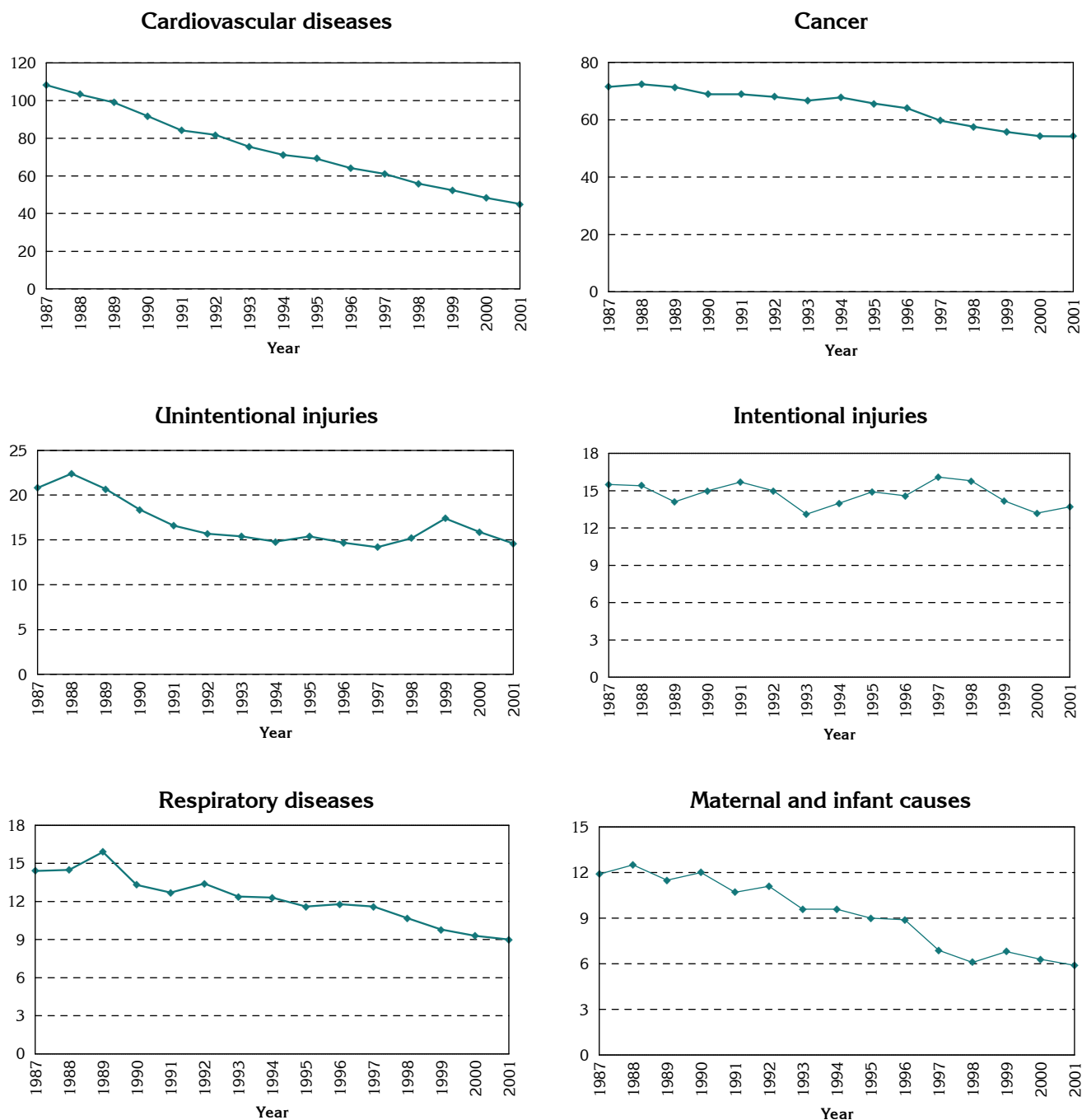
Table 8.6: Change in avoidable mortality (0 to 74 years) by major condition group, Australia, 1987 and 2001

Major condition group	Number		Per cent change	ASR per 100,000		Per cent change
	1987	2001		1987	2001	
Infection	663	891	34.4	3.9	4.1	5.1
Cancers (malignant neoplasms)	12,607	12,569	-0.3	71.5	54.2	-24.2
Nutritional, endocrine and metabolic conditions	989	1,230	24.4	5.4	5.2	-3.7
Drug use disorders	1,275	997	-21.8	7.7	4.6	-40.3
Neurological disorders	171	210	22.8	1.1	1.1	-
Cardiovascular diseases	19,821	10,685	-46.1	108.2	45.1	-58.3
Genitourinary disorders	512	365	-28.7	2.8	1.5	-46.4
Respiratory diseases	2,659	2,160	-18.8	14.4	9.0	-37.5
Digestive disorders	890	486	-45.4	5.0	2.1	-58.0
Maternal and infant causes	1,629	894	-45.1	11.9	5.9	-50.4
Unintentional injuries	3,354	2,739	-18.3	20.8	14.6	-29.8
Intentional injuries	2,517	2,667	6.0	15.5	13.7	-11.6
Total avoidable mortality	47,107	35,893	-23.8	267.6	161.3	-39.7

Note: the avoidable mortality causes which comprise each major condition group are detailed in Appendix 1.1

Figure 8.4: Trends in avoidable mortality (0 to 74 years) by selected major condition group, Australia, 1987 to 2001

ASR per 100,000 population: note the different scales



By cause

Of the major avoidable mortality conditions, ischaemic heart disease had the highest age-standardised death rate in each year of period from 1987 to 2001. The ASR decreased from 81.9 deaths per 100,000 population in 1987 to 32.8 in 2001, a decline of 60.0%: the number of deaths also showed a substantial fall of 48.2% (Table 8.7, Figure 8.5).

Deaths from lung cancer, which was the second ranked condition each year over the 14 year period, fell by 21.5%, from an ASR of 23.3 deaths per 100,000 population in 1987 to 18.3 in 2001.

There was little change in the number of deaths of lung cancer.

Cerebrovascular diseases had a decline of more than half (53.5%) in ASR between 1987 and 2001, falling from 20.2 deaths per 100,000 population in 1987 to 9.4 in 2001, and a notable decrease of 40% in the number of deaths.

There was also a substantial decline (45.0%) in the rate of avoidable mortality as a result of road traffic injuries, from an ASR of 16.0 in 1987 (the fourth ranked cause of deaths) to 8.8 in 2001 (ranked sixth), with a fall in number of deaths of 38.2%.

Colorectal cancer, the fifth rated cause of deaths in 1987 with an ASR of 14.2, was rated fourth in 2001 with an ASR of 10.9, a decrease of 23.2% in the rate of deaths over the period, although with no change in the number of deaths.

Although the rate of deaths from suicide and self inflicted injuries declined by one tenth (9.6%) over the period, from an ASR of 13.5 deaths per 100,000 population in 1987 to 12.2 in 2001, the rank increased from sixth to third, and the number of deaths increased by 7.4%.

Both the ASR and number of deaths from COPD declined over this period (by 37.1% and 19.5%, respectively), from an ASR of 12.4 deaths per 100,000 population in 1987 to 7.8 in 2001.

While breast cancer (which was ranked eighth in each year of the period) resulted in a similar number of deaths in both 1987 and 2001, the ASR

declined by one fifth (20.2%), from 9.4 deaths per 100,000 population to 7.5.

While deaths from alcohol related disease fell by 38.1% between 1987 and 2001 (from 6.3 deaths per 100,000 to 3.9), the rank changed only marginally, from ninth to tenth. The number of deaths fell by 17.5% over the period.

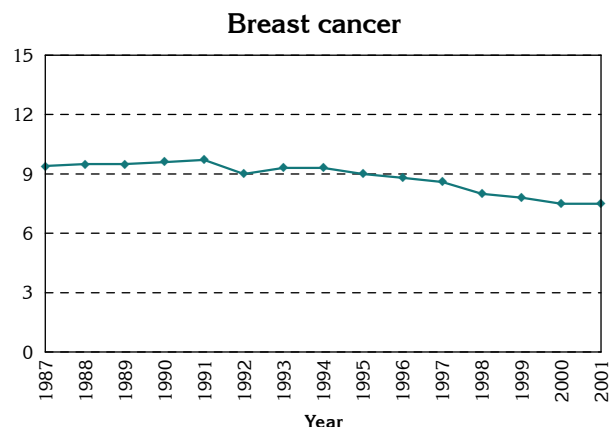
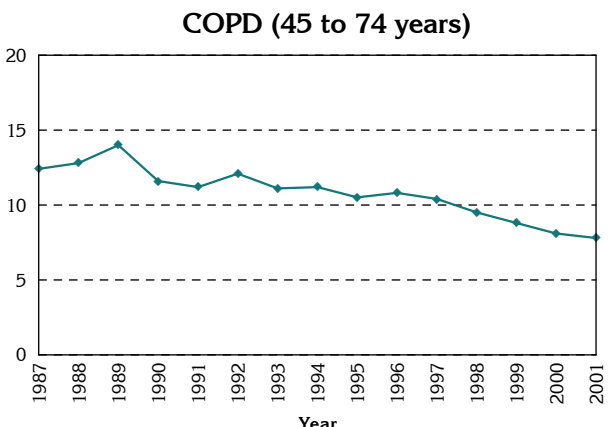
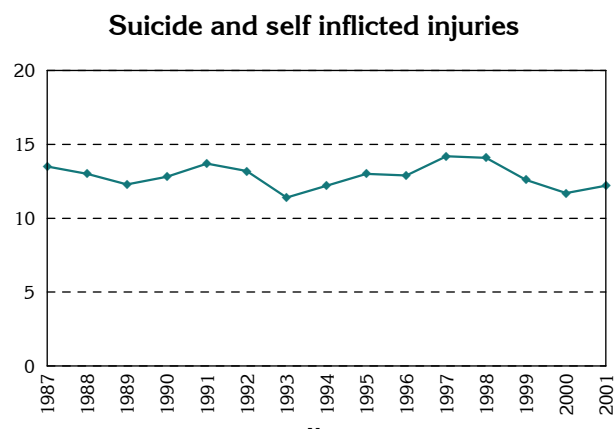
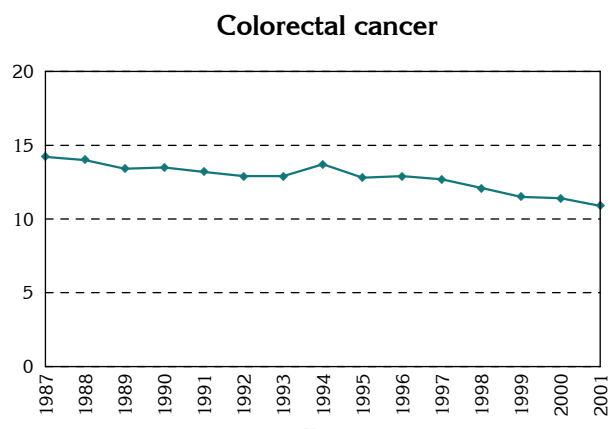
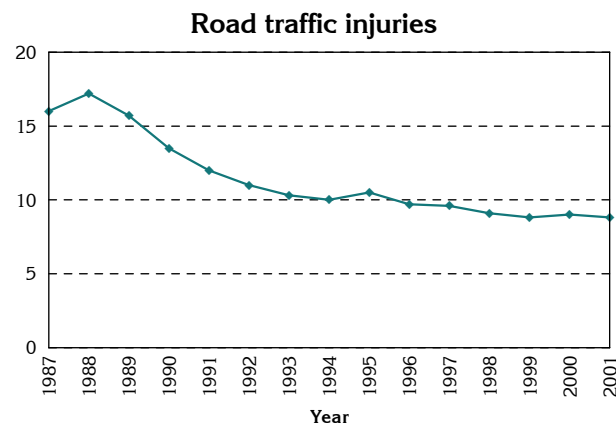
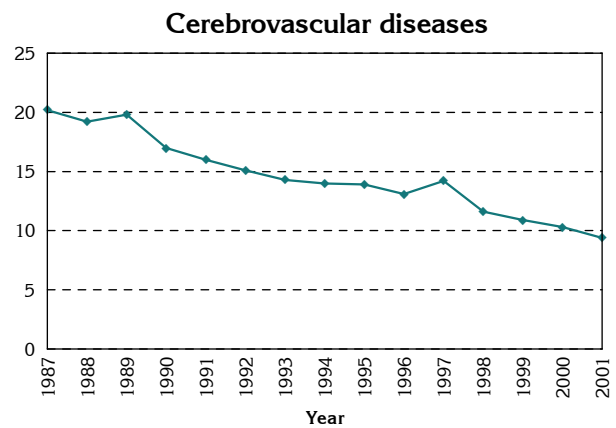
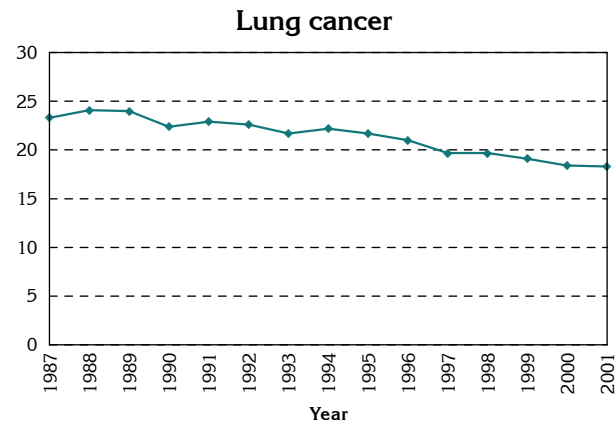
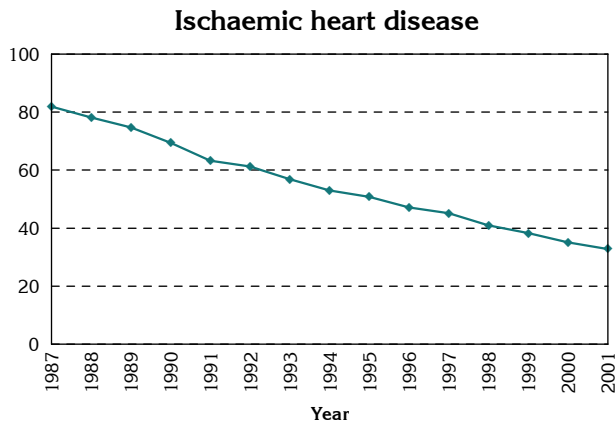
Complications of the perinatal period resulted in 6.1 deaths per 100,000 in 1987 (a rank of tenth), and declined to 2.1 in 2001 (ranked nineteenth), a fall of two thirds (65.6%). There was a similar decrease in the number of deaths (63.2%).

The rate of deaths from diabetes declined marginally (3.8%) over this 14 year period, with the number of deaths increased by one quarter (25.4%). There was a corresponding rise in rank from twelfth in 1987 to ninth in 2001.

Table 8.7: Change in major causes of avoidable mortality (0 to 74 years), Australia, 1987 and 2001

Cause	Number		Per cent change	ASR per 100,000		Per cent change	Rank	
	1987	2001		1987	2001		1987	2001
Ischaemic heart disease	15,004	7,778	-48.2	81.9	32.8	-60.0	1	1
Lung cancer	4,185	4,271	2.1	23.3	18.3	-21.5	2	2
Cerebrovascular diseases	3,774	2,263	-40.0	20.2	9.4	-53.5	3	5
Road traffic injuries	2,581	1,596	-38.2	16.0	8.8	-45.0	4	6
Colorectal cancer	2,546	2,543	-0.1	14.2	10.9	-23.2	5	4
Suicide and self inflicted injuries	2,208	2,371	7.4	13.5	12.2	-9.6	6	3
COPD (45-74 years)	2,349	1,891	-19.5	12.4	7.8	-37.1	7	7
Breast cancer	1,633	1,698	4.0	9.4	7.5	-20.2	8	8
Alcohol related disease	1,058	873	-17.5	6.3	3.9	-38.1	9	10
Complications of the perinatal period	816	300	-63.2	6.1	2.1	-65.6	10	19
Diabetes	966	1,211	25.4	5.3	5.1	-3.8	12	9
All causes	47,107	35,893	-23.8	267.6	161.3	-39.7	..	..

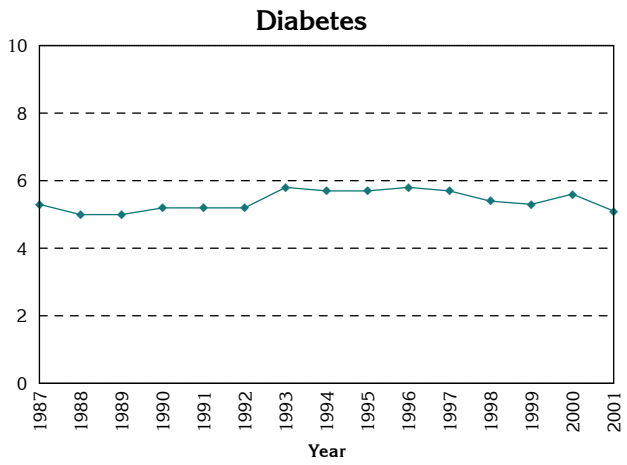
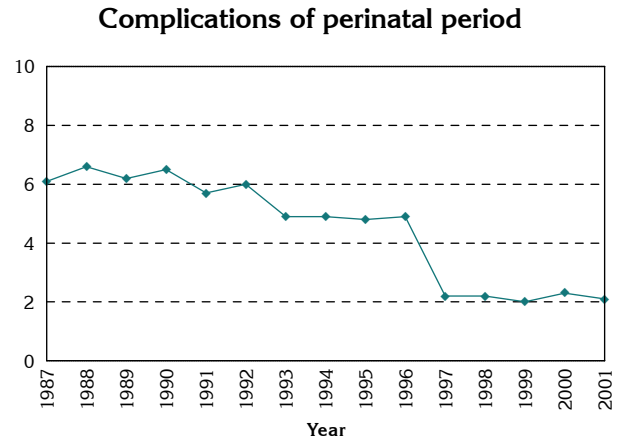
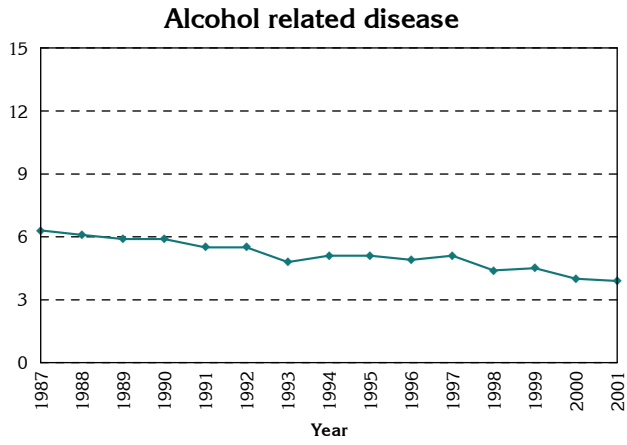
Figure 8.5: Trends in major causes of avoidable mortality (0 to 74 years), Australia, 1987 to 2001
ASR per 100,000 population: note the different scales



... continued

Figure 8.5: Trends in major causes of avoidable mortality (0 to 74 years), Australia, 1987 to 2001
... continued

ASR per 100,000 population: note the different scales



8.4 Change in avoidable and amenable mortality by State/ Territory

The overall decline in rates for deaths from avoidable causes between 1987 and 2001 in all states and territories was around 40.0% (Table 8.8). Victoria recorded the highest decrease in ASRs (41.9%), falling from 264.4 deaths per 100,000 population in 1987 to 153.5 in 2001. Northern Territory (with the highest rates) recorded the lowest decline in ASR, 20.1%, from 410.6 deaths per 100,000 population in 1987 to 328.2 in 2001.

New South Wales experienced a similar rate of decline in avoidable mortality (41.5%) to Victoria over the period, falling from 272.5 deaths per 100,000 population to 159.5.

Deaths from avoidable causes in Western Australia fell by just under the average for all areas (39.4%), from a rate of 248.1 deaths per 100,000 population in 1987 to 150.4 in 2001. Rates in Tasmania declined by 38.1%, from 300.8 deaths per 100,000 population in 1987 to 186.3 deaths in 2001. The fall in ASR in the Australian Capital Territory was 37.7%, declining from 230.9 deaths per 100,000 population in 1987 to 143.9 in 2001.

In South Australia, the ASR for deaths from avoidable causes fell by 36.6% between 1987 and 2001, from 255.0 deaths per 100,000 population to 161.6. The decline in Queensland (36.4%) was similar to that for South Australia, falling from 271.0 deaths per 100,000 population to 172.4.

The change in rates of death from amenable mortality over the 14 year period showed a different pattern to the fall in ASRs from avoidable causes, declining an average of 43.4%, with the largest decrease in Western Australia (46.2%) and the smallest in the Northern Territory (23.8%) (Table 8.8). In Western Australia the ASR fell from 111.5 deaths per 100,000 population in 1987 to 60.0 in 2001, while in the Northern Territory (which had the highest rates) the rate declined from 162.7 deaths per 100,000 population to 124.0.

New South Wales and Tasmania both recorded a decline of 45.5% in ASRs from amenable causes, from 117.4 and 128.9 deaths per 100,000 population, respectively, in 1987 to 64.0 and 70.2 in 2001. The relative decline in ASRs in Victoria (43.7%) and the Australian Capital Territory (42.7%) were similar, reflecting falls from 111.9 and 104.6 deaths per 100,000 population in 1987 to 63.0 and 59.9, respectively, in 2001.

South Australia's ASR for deaths from amenable causes declined by 39.7% over the period, falling from 110.2 deaths per 100,000 population in 1987 to 66.5 in 2001. In the Northern Territory the ASR decreased by 23.8%, falling from 162.7 deaths per 100,000 population in 1987 to 124.0 in 2001.

Table 8.8: Change in avoidable and amenable mortality (0 to 74 years) by state/ territory and sex, Australia, 1987 and 2001

State/ Territory	Males			Females			Total		
	ASR		Per cent change	ASR		Per cent change	ASR		Per cent change
	1987	2001		1987	2001		1987	2001	
Avoidable mortality									
New South Wales	364.9	209.8	-42.5	180.5	109.1	-39.6	272.5	159.5	-41.5
Victoria	354.6	198.1	-44.1	174.6	108.6	-37.8	264.4	153.5	-41.9
Queensland	360.6	223.4	-38.0	181.6	121.4	-33.1	271.0	172.4	-36.4
South Australia	340.7	209.9	-38.4	169.6	113.1	-33.3	255.0	161.6	-36.6
Western Australia	330.4	198.1	-40.0	165.9	102.7	-38.1	248.1	150.4	-39.4
Tasmania ¹	..	..	..	..	..	..	300.8	186.3	-38.1
Northern Territory ¹	..	..	..	..	..	..	410.6	328.2	-20.1
ACT ¹	..	..	..	..	..	..	230.9	143.9	-37.7
All areas	357.6	210.1	-41.2	177.8	112.4	-36.8	267.6	161.3	-39.7
Amenable mortality									
New South Wales	135.9	72.6	-46.6	99.0	55.3	-44.1	117.4	64.0	-45.5
Victoria	129.3	70.3	-45.6	94.7	55.7	-41.2	111.9	63.0	-43.7
Queensland	135.6	80.3	-40.8	100.2	61.4	-38.7	117.9	70.8	-39.7
South Australia	128.3	73.8	-42.5	92.3	59.1	-36.0	110.2	66.5	-39.7
Western Australia	130.8	66.8	-48.9	92.4	53.2	-42.4	111.5	60.0	-46.2
Tasmania ¹	..	..	..	..	..	..	128.9	70.2	-45.5
Northern Territory ¹	..	..	..	..	..	..	162.7	124.0	-23.8
ACT ¹	..	..	..	..	..	..	104.6	59.9	-42.7
All areas	133.4	73.5	-44.9	97.3	57.1	-41.3	115.3	65.3	-43.4

¹ Not shown by sex for Tasmania, Northern Territory and Australian Capital Territory due to the small numbers of death

By sex¹

The largest proportional decline in ASR for avoidable causes between 1987 and 2001 for males was in Victoria (44.1%) and for females in New South Wales (39.6%) (Table 8.8, Figure 8.6). The decline in ASR for females in Victoria was 37.8% and for males in New South Wales was 42.5%.

In Western Australia, the ASRs for avoidable causes fell 40.0% for males over the 14 year period, and 38.1% for females. Queensland recorded a decline in deaths from avoidable causes of 38.0% for males and 33.1% for females.

The decline in ASRs for deaths from avoidable causes in South Australia between 1987 and 2001 was 38.4% for males and 33.3% for females. Queensland's reduction in ASRs over the 14 year period was 38.0% for males and slightly lower at 33.1% for females.

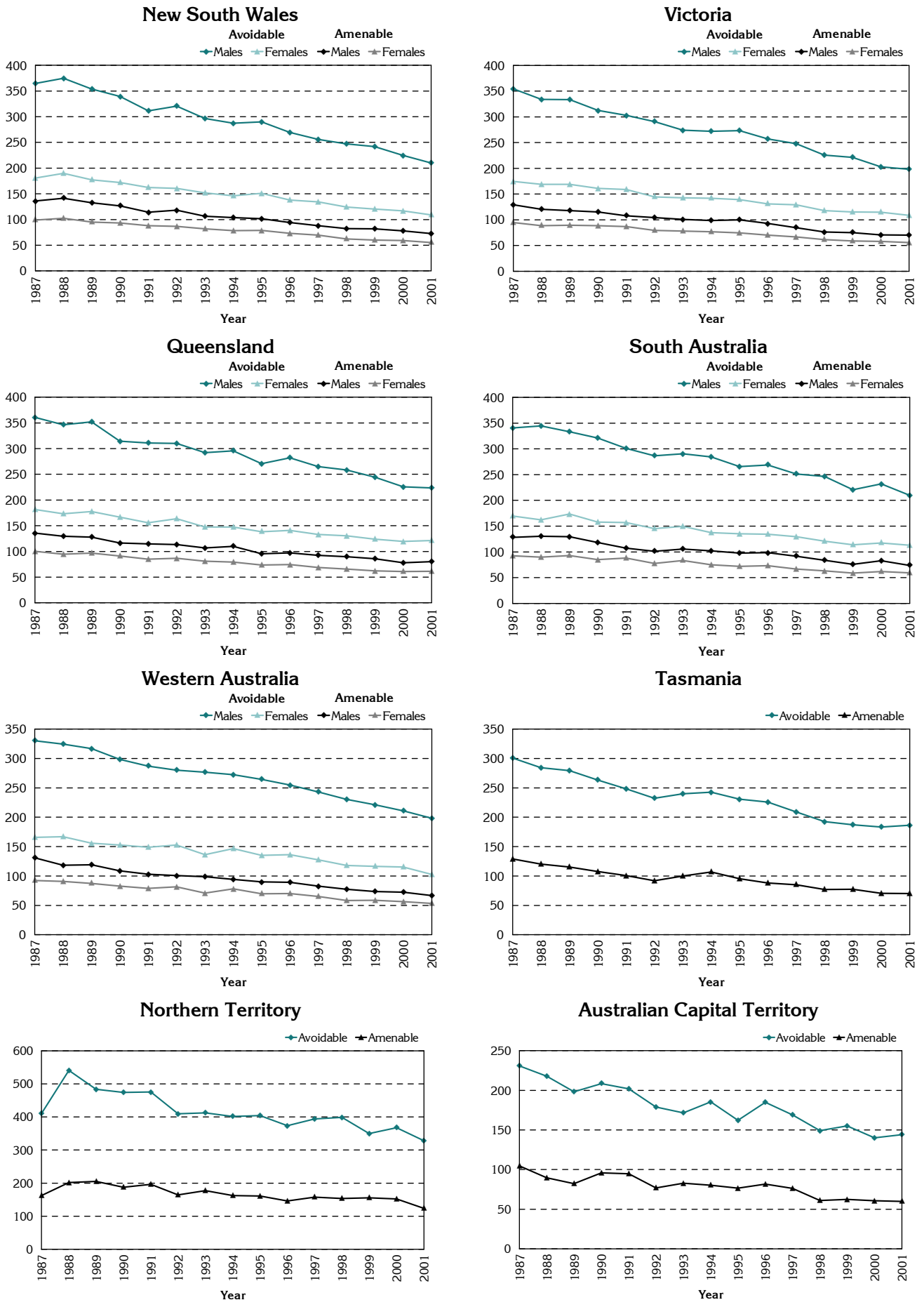
For deaths from amenable mortality, the decrease in ASR for males (an average of 44.9%) was higher than that for females (an average of 41.3%) in each of the states over the period. Western Australia recorded the highest relative decrease in ASR for males (48.9%), while the highest fall in rate for females (44.1%) was in New South Wales. The decrease in ASR over the period for females in Western Australia was 42.4%, and for males in New South Wales was 42.5%.

In Victoria, the decline in deaths from amenable causes between 1987 and 2001 was 45.6% for males and 41.2% for females. The decline in ASR for males in South Australia over the period was 42.5%, compared to a 36.0% fall in ASR for females. Queensland recorded declines in rates of death from amenable causes of 40.8% for males and 38.7% for females.

¹ Not shown by sex for Tasmania, Northern Territory and Australian Capital Territory due to the small numbers of death

Figure 8.6: Trends in avoidable and amenable mortality (0 to 74 years) by state/ territory and sex¹, Australia, 1987 to 2001

ASR per 100,000 population: note the different scales



¹ ASRs are not shown by sex for Tasmania, NT and ACT due to the small numbers of death