

Overview of current trends

Australia

Cardiovascular mortality continues to decline with annual rates of change marginally greater among males than females (3.5% per year and 3.2% per year respectively). The decline is more rapid than for mortality from all causes which is declining by 1.9% per year among males and 1.6% per year among females (Table 1).

The decline in cardiovascular mortality is occurring at all ages, but is proportionally greatest between the ages of 35 and 69. For age groups within this range, cardiovascular mortality is declining at more than 4.5% per year among males and females (pp. 20–21).

Ischaemic (coronary) heart disease continues to account for the majority of deaths from cardiovascular diseases, and mortality from this cause is decreasing by 3.7% per year among males and 2.9% per year among females (Table 1). Mortality attributed to acute myocardial infarction (heart attack), the most common manifestation of ischaemic heart disease, is declining at a faster rate (4.9% and 3.8%). Death rates from heart attacks are declining fastest for the age group 45 to 54 years (8.7% and 10.5%, Figure 1). Mortality from cerebrovascular disease (stroke) is declining at just under 4% per year among males and females (Table 1). There are significant rates of declines at all ages but the rates are least among people aged over 75 years (pp. 36–37).

Mortality from heart failure, the third leading cardiovascular cause of death (contributing about 5% of cardiovascular deaths), is also declining significantly, at 3.2% per year among males and 2.4% per year among females. Rates of decline for mortality from congestive heart failure are greater at 5.0% and 4.4% respectively.

Mortality attributed to atherosclerosis is decreasing by over 9% per year among both sexes. The size of this rate of decrease suggests that at least part is due to changes in certification practice. Peripheral vascular disease (not specified as atherosclerotic) is the only cardiovascular cause of death for which mortality is not decreasing. The slight increase of 0.5% per year among females is primarily due to an average annual increase of 1.2% among women aged 85 or older (p. 41).

National targets for cardiovascular disease are that rates for premature mortality from ischaemic heart disease among adults aged 25–74 be reduced to 110 deaths per 100,000 population among men, and 40 deaths per 100,000 population among women, by the year 2000 (Commonwealth Department of Human Services and Health 1994). Current levels, averaged over 1992 to 1994 are 168.3 and 62.4 deaths per 100,000 population. These will decrease to 117 and 43 deaths per 100,000 population respectively in the year 2000 if current rates of decline continue (Table 2).

For each cardiovascular disease, annual rates of decline for the age group 25–74 are generally greater than those for all ages reflecting slower declines in mortality rates at older ages. Most cardiovascular diseases are declining at 5% per year or greater among people aged 25–74 (Figure 2).

States and Territories

Death rates from cardiovascular disease are highest in the Northern Territory (Figure 3), which mainly reflects the higher proportion of Aboriginal and Torres Strait Islander people in the Territory (26.1%) compared with the rest of Australia (1.3%). Aboriginal people are known to die from cardiovascular disease at approximately twice the rate of the total Australian population (Australian Institute of Health and Welfare 1994). Of the remaining States and Territories, death rates are highest in Tasmania and lowest in the Australian Capital Territory (males) and Western Australia (females).

Cardiovascular mortality is declining among both males and females in all States and Territories except the Northern Territory, where death rates are increasing among males at an average annual rate of 1.2%, and decreasing among females at 1.7% per year (Figure 3). The lowest rates of decline in the rest of Australia occur in South Australia where rates are 2.9% per year among males and 2.5% per year among females. In the States and Territories where cardiovascular mortality is declining, change is more rapid for cardiovascular mortality than for mortality from all causes (Table 3).

Rates of change in mortality from ischaemic heart disease are again atypical in the Northern Territory where it is increasing at 0.6% per year among males and decreasing by 0.5% among females. In all other

States and Territories, the annual rate of decline is at least 3% among males and 2.4% among females. There is no clear association between the magnitude of the death rates and the annual rate of decline (Figure 4). Mortality attributed to acute myocardial infarction is generally declining at a faster rate. The Australian Capital Territory is experiencing the greatest rates of decline, at 5.7% per year for males and 4.9% for females (Figure 5). The relatively low rate of fatal heart attacks among females in the Northern Territory reflects low rates among the elderly population. These rates are estimated from a relatively small elderly female population and are unstable. The Northern Territory has the highest rate of fatal heart attacks among women aged 25–74 (Figure 9).

The Northern Territory has the highest mortality from cerebrovascular disease and is the only State or Territory where death rates are not declining (Figure 6). Cerebrovascular mortality is also high among males in Tasmania and the decline is slower than in other States at 1.8% per year. Males in the Australian Capital Territory have the lowest cerebrovascular death rate and the greatest annual rate of decline (4.5%). Among females, the Australian Capital Territory has a relatively high death rate and a high annual rate of decline (4.7%).

For each State and Territory, annual rates of decline for the age group 25–74 are generally greater than for all ages for each cardiovascular disease (Figures 7–10). Rates of decline for this age group are generally around 5% or greater for both ischaemic heart disease and cerebrovascular disease in most States and Territories.

At current rates of decline, only Victoria and the Australian Capital Territory will reach the national targets set for premature mortality (between ages 25 and 74) from ischaemic heart disease of 110 per 100,000 population for males and 40 per 100,000 for females, by the year 2000 (Table 2).

Table 1: Proportion of cardiovascular deaths in 1994, and annual rate of change in the age-standardised death rate (all ages) from 1983 to 1994, by sub-category, Australia

Sub-category	Males			Females		
	Proportion of CVD (%)	Annual rate of change (%)	95% confidence limits	Proportion of CVD (%)	Annual rate of change (%)	95% confidence limits
Ischaemic heart disease	61.1	-3.7	-3.6, -3.8	50.5	-2.9	-2.8, -3.0
<i>Acute myocardial infarction</i>	37.9	-4.9	-4.8, -5.0	31.4	-3.8	-3.7, -3.9
<i>Other ischaemic heart disease</i>	23.2	-1.1	-1.0, -1.2	19.0	-0.9	-0.7, -1.1
Cerebrovascular disease	19.5	-3.7	-3.5, -3.8	27.2	-3.9	-3.8, -4.1
Heart failure	4.0	-3.2	-2.9, -3.5	6.6	-2.4	-2.1, -2.7
<i>Congestive heart failure</i>	2.4	-5.0	-4.7, -5.3	4.0	-4.4	-4.0, -4.7
Peripheral vascular disease	4.5	-0.9	-0.7, -1.2	3.2	+0.5	+0.1, +1.0
Hypertensive disease	1.6	-4.2	-3.7, -4.7	2.5	-2.9	-2.4, -3.4
Atherosclerosis	1.2	-9.2	-8.7, -9.6	1.8	-9.4	-9.0, -9.9
Rheumatic heart disease	0.4	-3.7	-2.8, -4.6	0.8	-4.0	-3.3, -4.7
Other cardiovascular disease	7.8	-1.8	-1.6, -2.0	7.4	-2.1	-1.8, -2.3
Cardiovascular disease	100.0	-3.5	-3.5, -3.6	100.0	-3.2	-3.1, -3.2
All causes		-1.9	-1.9, -2.0		-1.6	-1.6, -1.7

Table 2: Year 2000 projections^(a) for ischaemic heart disease, age-standardised death rates for ages 25–74, States and Territories

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia	Target 2000
	(per 100,000 population)									
Males	118	105	125	114	129	113	96	193	117	110
Females	45	37	49	38	43	47	27	115	43	40

(a) Projections based on the average level for 1992 to 1994 and the average annual rate of change for the period 1983–94.

Table 3: Annual rate of change in the age-standardised death rate (all ages) from 1983 to 1994 for selected cardiovascular diseases and all causes, States and Territories

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Males								
Ischaemic heart disease	-3.8	-3.9	-3.5	-3.6	-3.0	-4.3	-3.6	+0.6
<i>Acute myocardial infarction</i>	-5.2	-5.1	-4.0	-5.5	-4.4	-4.5	-5.7	-0.9
Cerebrovascular disease	-4.4	-3.8	-3.1	-2.2	-2.7	-1.8	-4.5	+0.3
Cardiovascular disease	-3.7	-3.7	-3.3	-3.3	-2.9	-3.2	-3.0	+1.2
All causes	-2.0	-2.0	-1.9	-2.1	-1.5	-1.5	-1.7	-0.9
Females								
Ischaemic heart disease	-3.0	-3.0	-2.4	-3.1	-2.5	-3.0	-3.0	-0.5
<i>Acute myocardial infarction</i>	-4.2	-3.6	-2.9	-4.6	-3.7	-2.6	-4.9	-2.4
Cerebrovascular disease	-4.1	-4.3	-4.0	-2.4	-3.1	-4.3	-4.7	+1.0
Cardiovascular disease	-3.3	-3.4	-2.9	-3.1	-2.5	-3.3	-2.8	-1.7
All causes	-1.8	-1.6	-1.5	-1.4	-1.0	-1.4	-2.1	-1.2

Note: 95% confidence limits for annual rates of change are all within 0.2 of the estimated rate.

Age group (years)

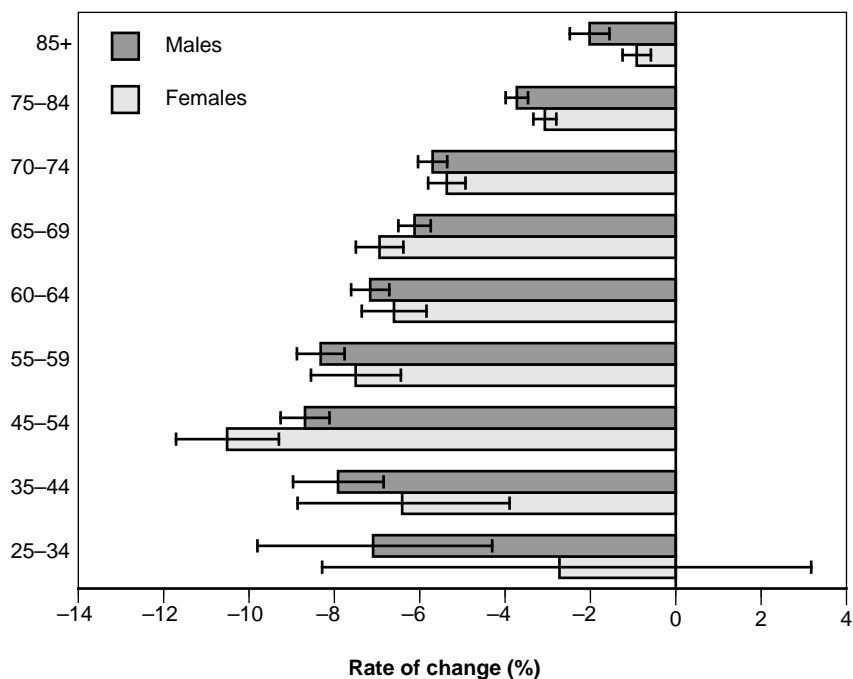


Figure 1: Annual rate of change in age-specific death rates, acute myocardial infarction, Australia, 1983–1994

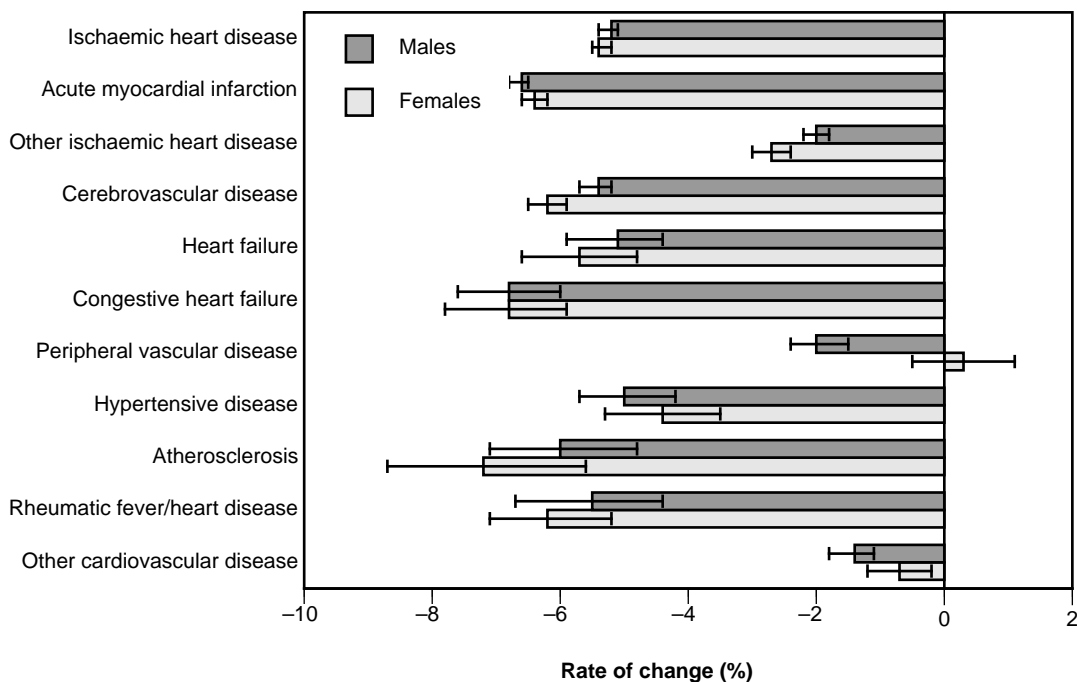


Figure 2: Annual rate of change in age-standardised death rates, cardiovascular diseases, ages 25–74, Australia, 1983–1994

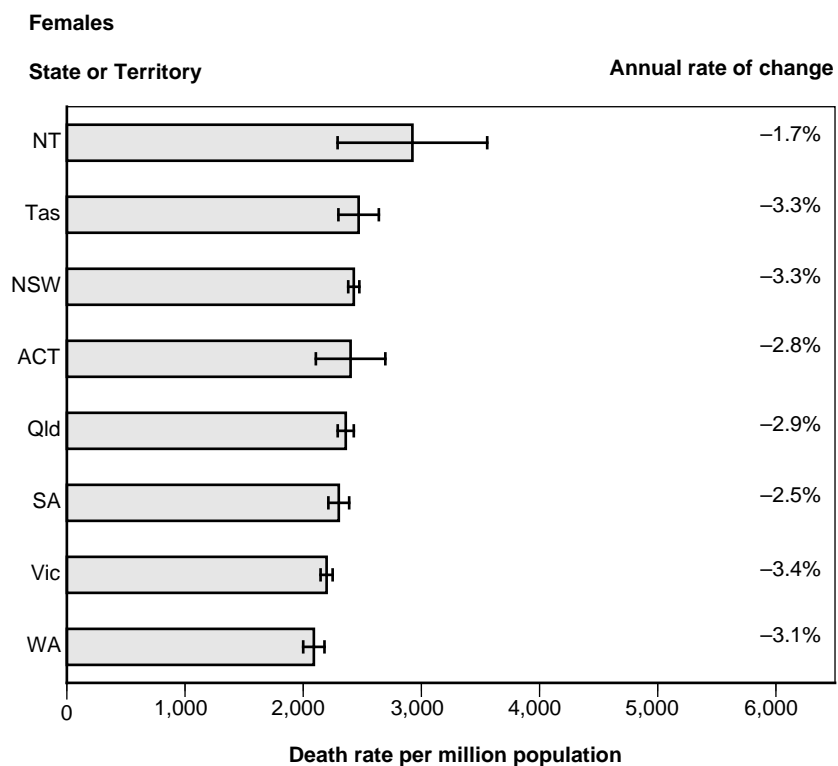
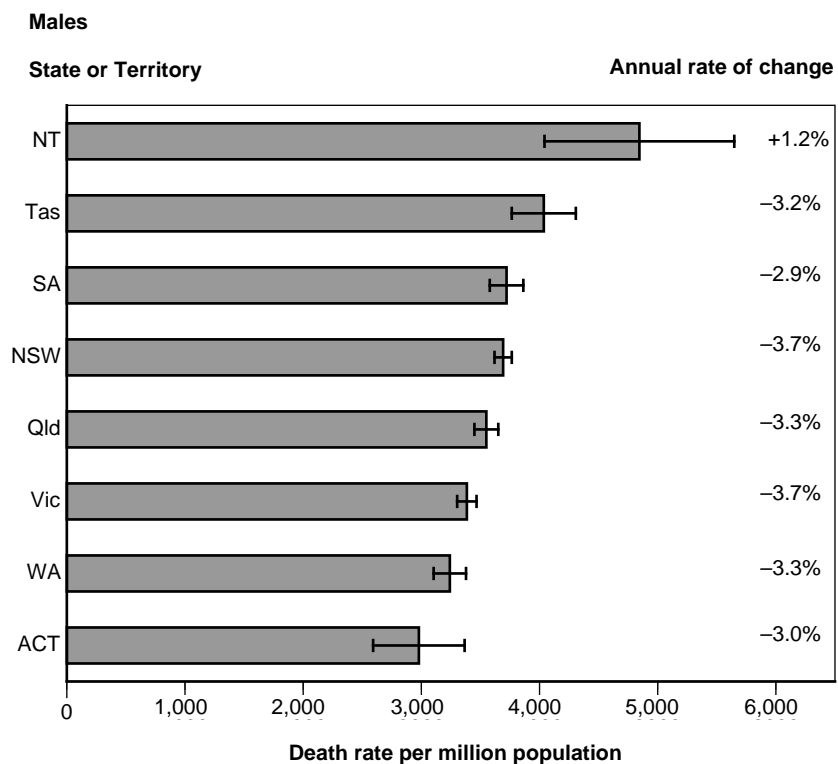


Figure 3: Cardiovascular disease, age-standardised death rates (1994) and annual rate of change (1983–1994), all ages

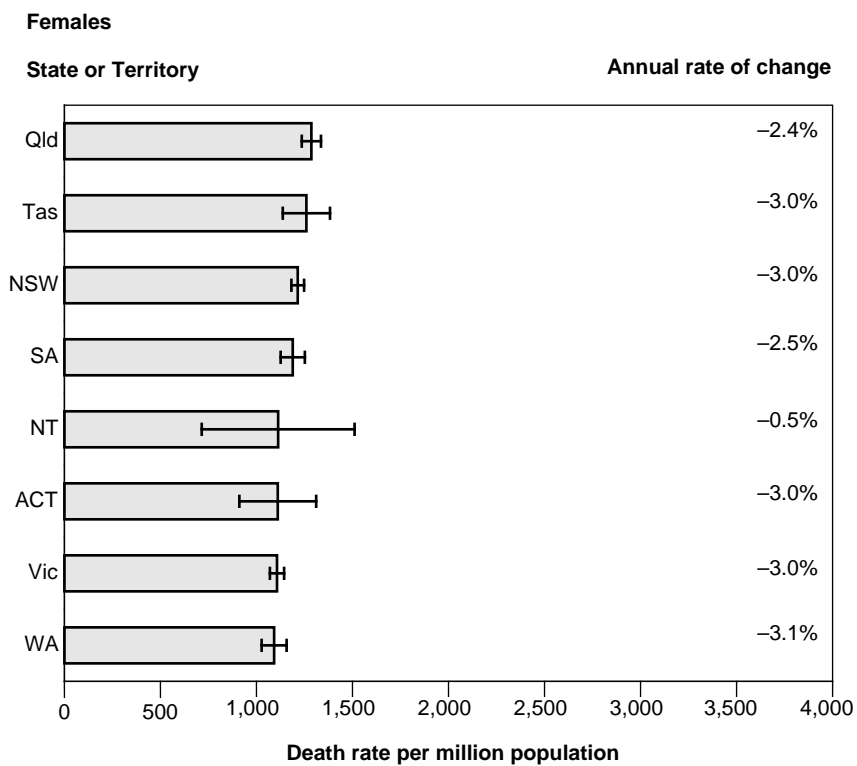
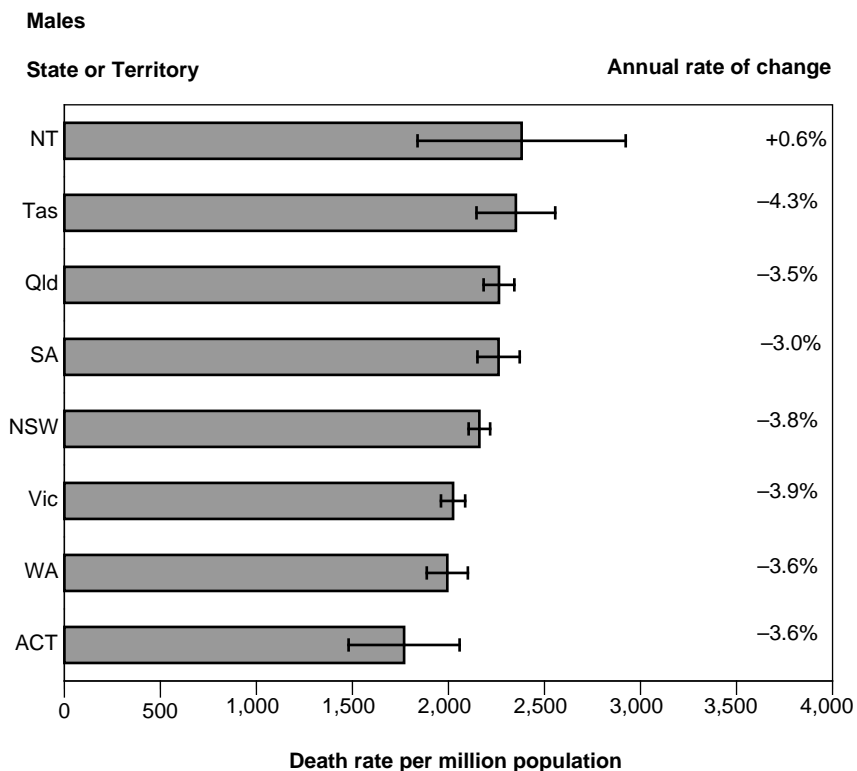


Figure 4: Ischaemic heart disease, age-standardised death rates (1994) and annual rate of change (1983–1994), all ages

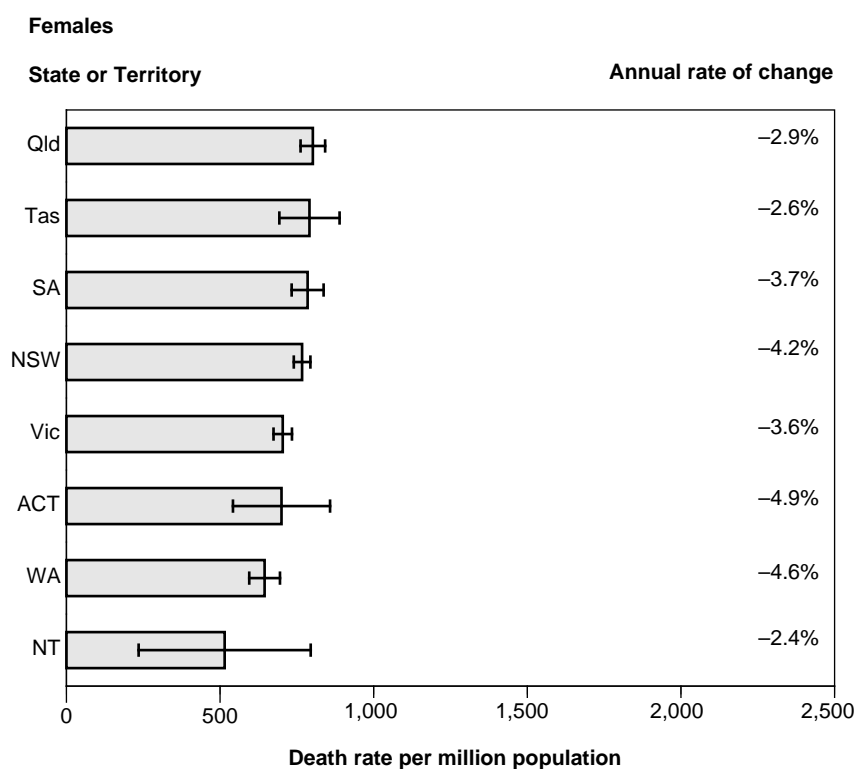
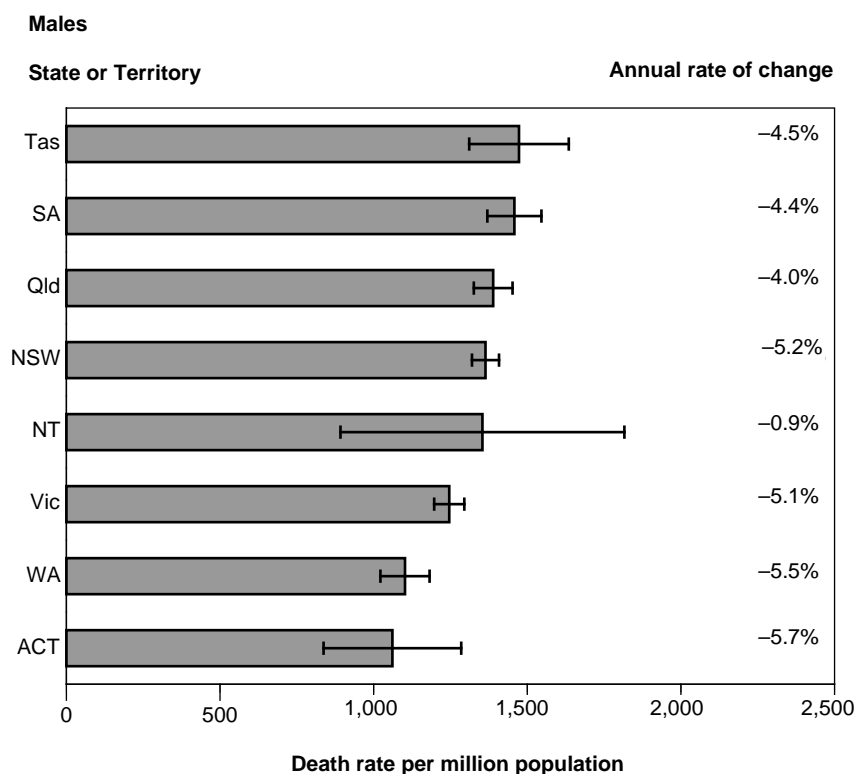


Figure 5: Acute myocardial infarction, age-standardised death rates (1994) and annual rate of change (1983-1994), all ages

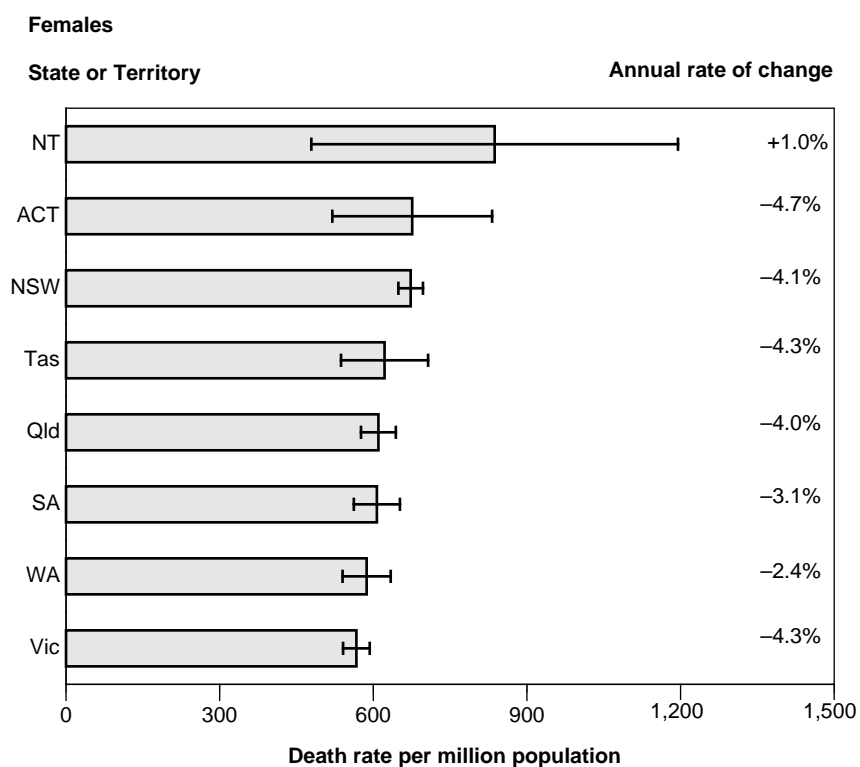
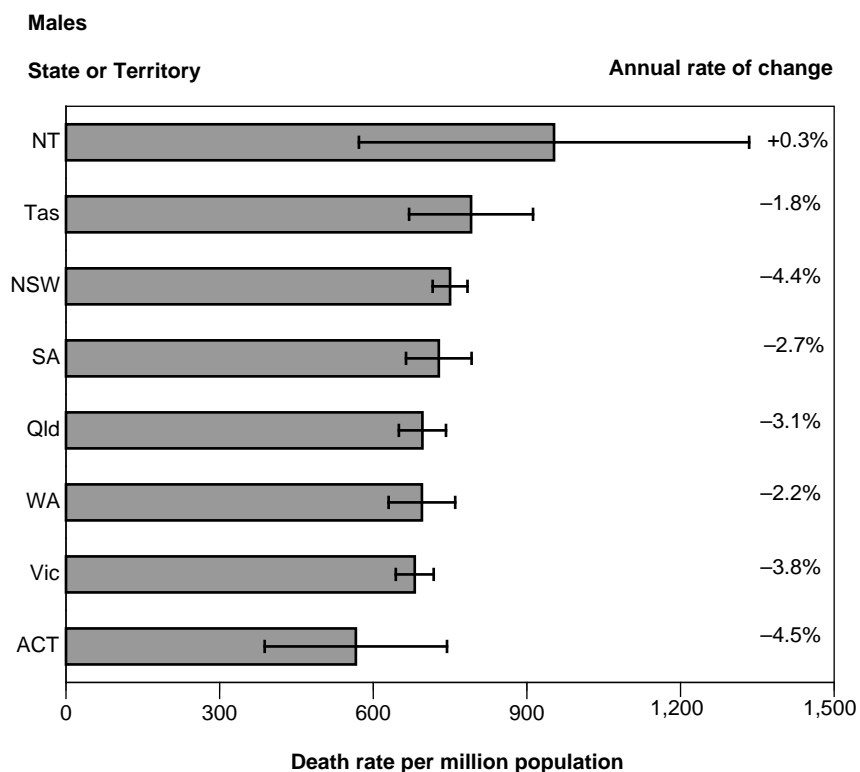


Figure 6: Cerebrovascular disease, age-standardised death rates (1994) and annual rate of change (1983–1994), all ages

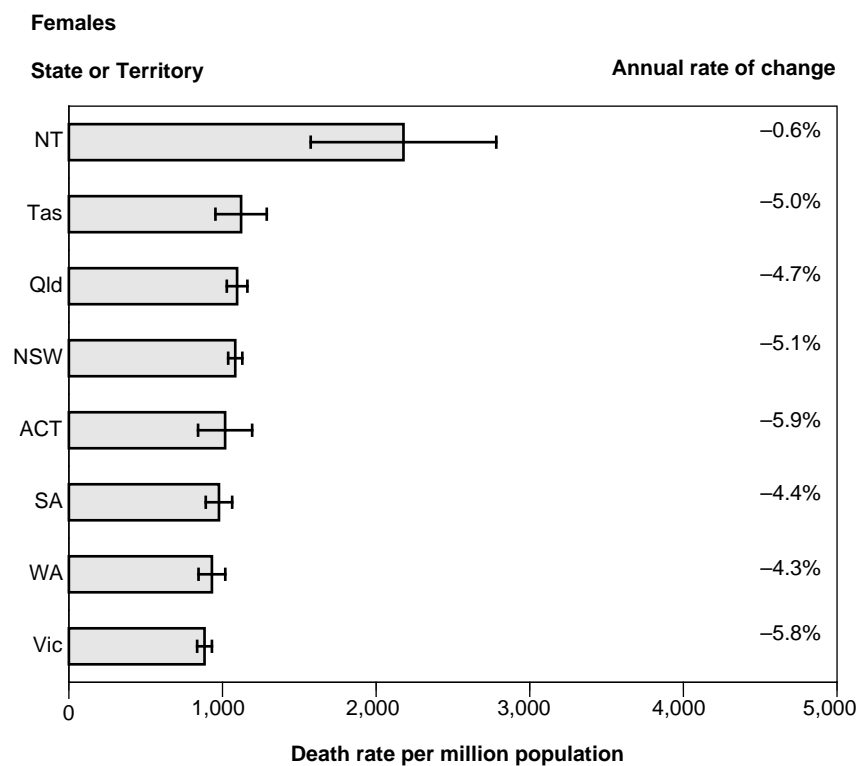
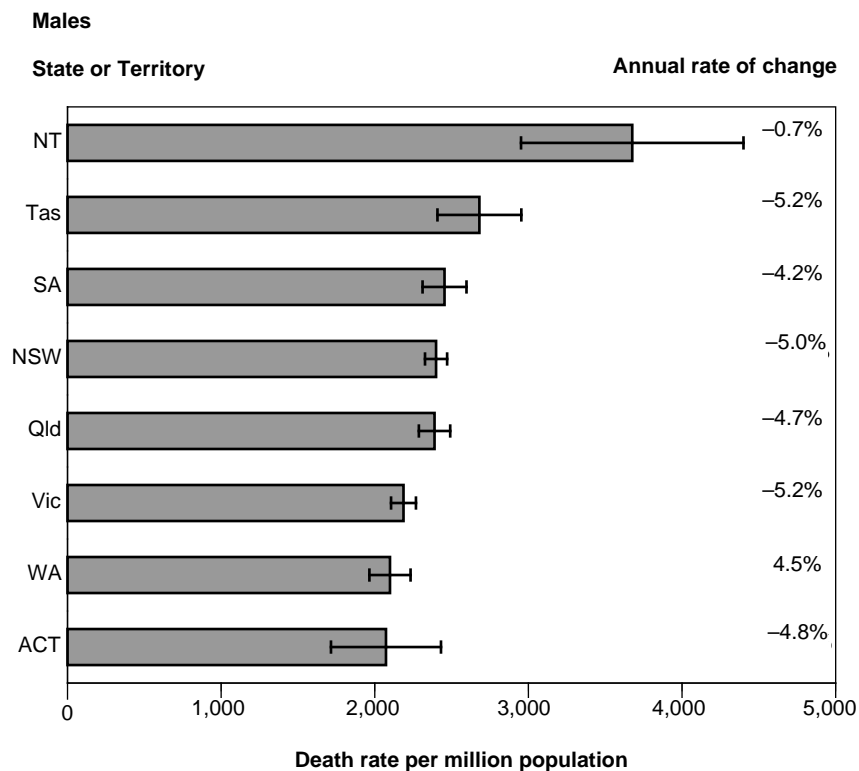


Figure 7: Cardiovascular disease, age-standardised death rates (1994) and annual rate of change (1983-1994), ages 25-74

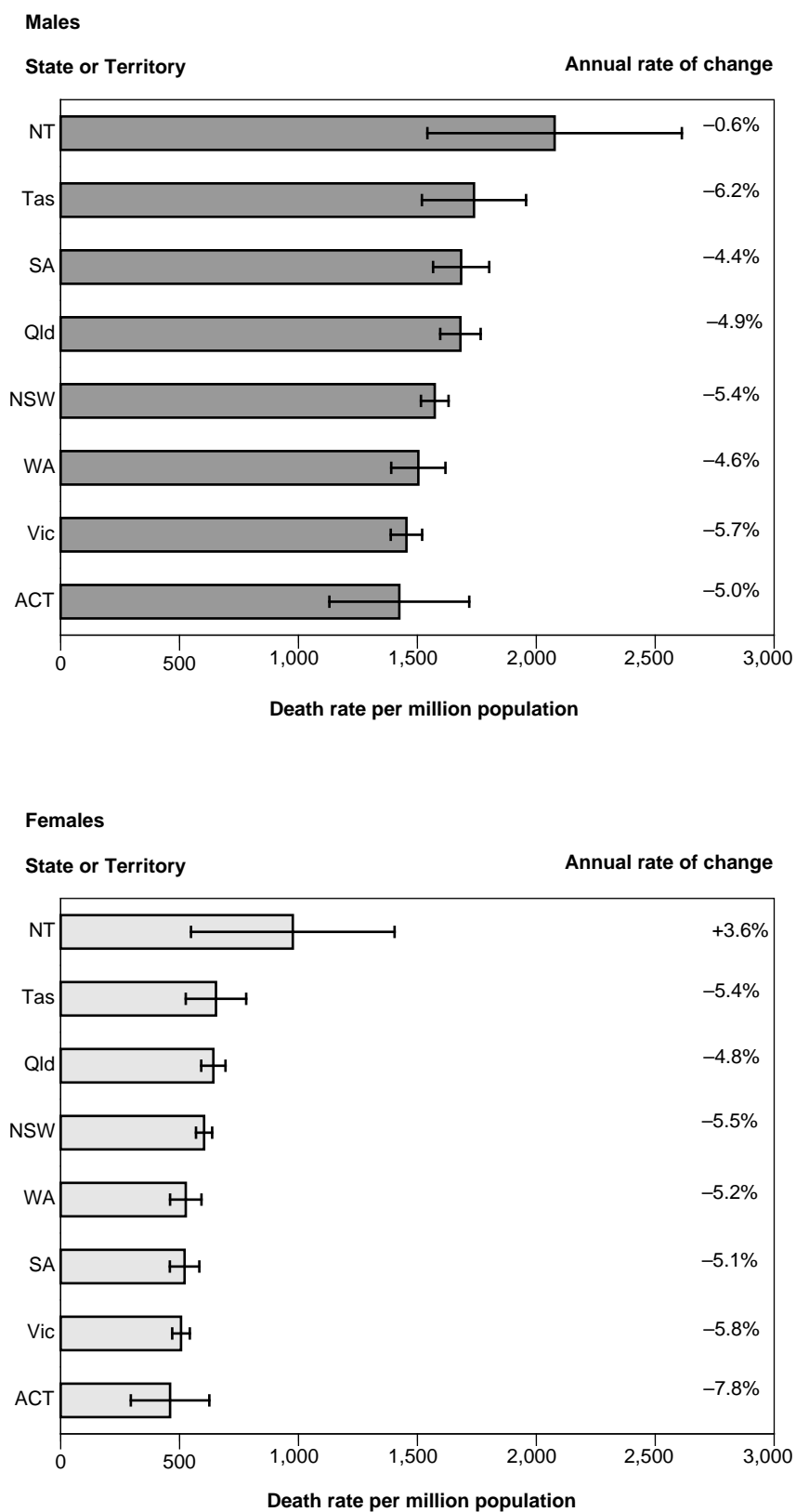


Figure 8: Ischaemic heart disease, age-standardised death rates (1994) and annual rate of change (1983–1994), ages 25–74

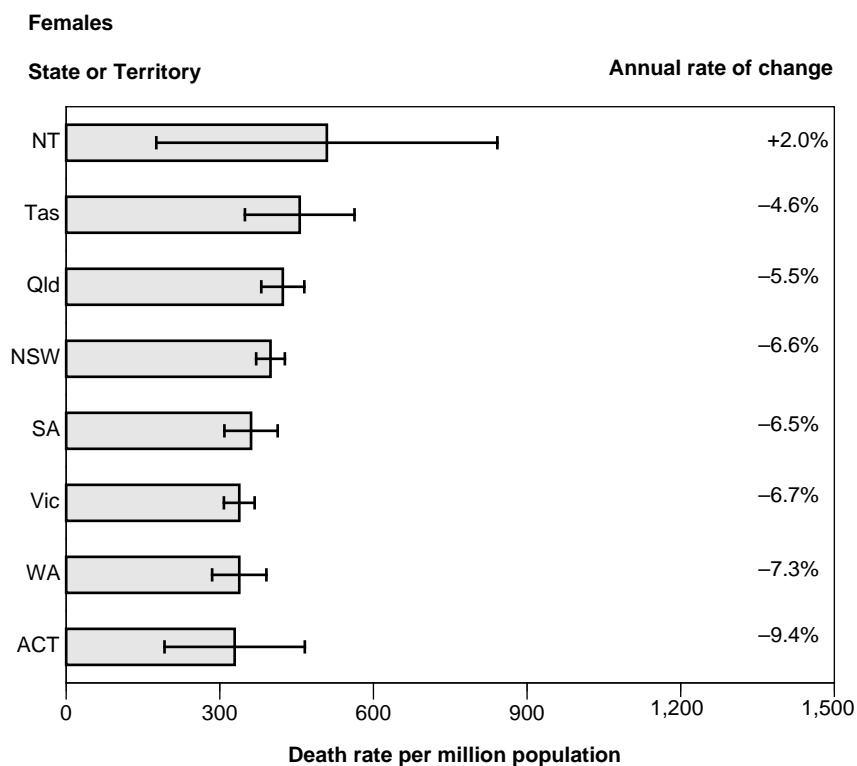
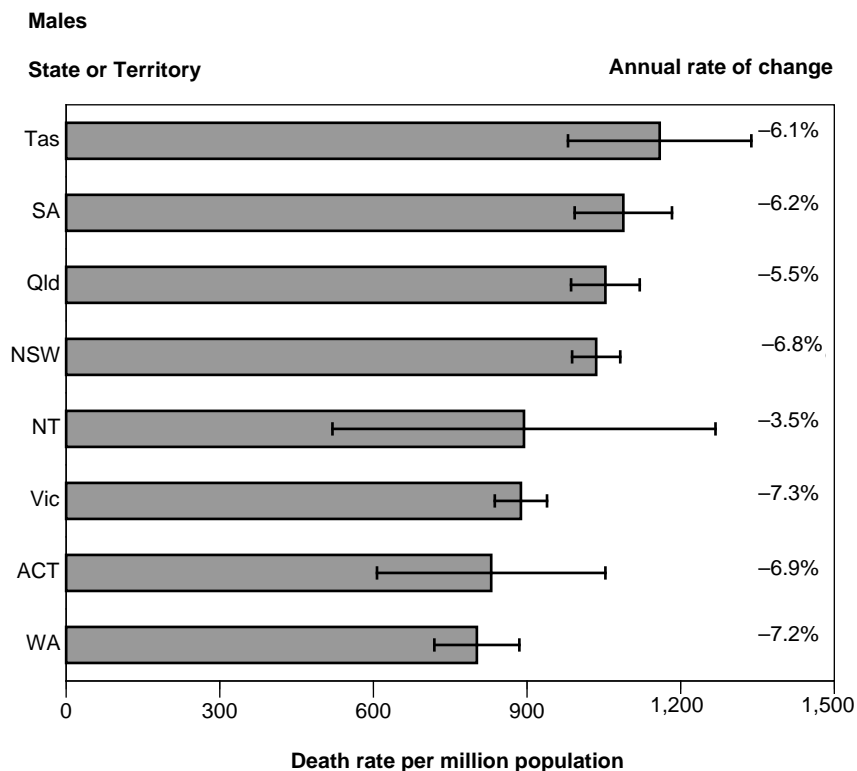


Figure 9: Acute myocardial infarction, age-standardised death rates (1994) and annual rate of change (1983–1994), ages 25–74

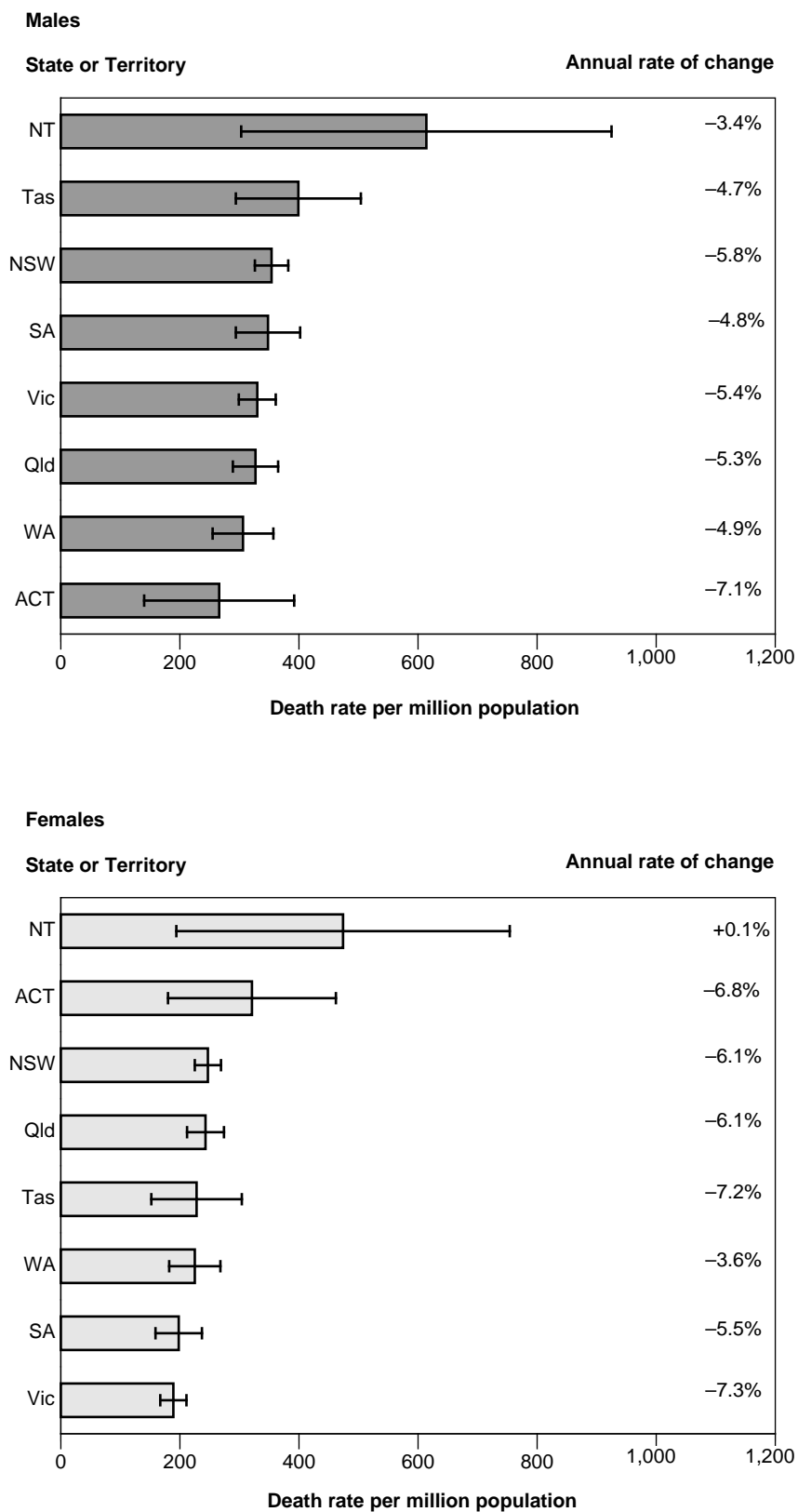


Figure 10: Cerebrovascular disease, age-standardised death rates (1994) and annual rate of change (1983–1994), ages 25–74