

Injury and poisoning

All injury and poisoning

This group includes death resulting from all injuries and poisoning (also known as ‘external cause of death’). It includes, for example, motor vehicle accidents, suicide, homicide, falls, burns and drowning. It includes ‘farm accidents’ but frequently such accidents are included under motor vehicle accidents, falls etc, and the denominator population can be hard to define, making calculation of rates difficult.

ICD-9 and ICD-10 codes used here are, respectively, E800–E999 and V01–Y98.

Reporting here is for the period 1992–2003. The comparability factor (see page 5) for this cause is 1.06.

For perspective, Table 39 describes the number of deaths in each area in 2003.

Table 39: Number of deaths due to injury and poisoning in 2003

	MC	IR	OR	R	VR	Total
Males	3,046	1,179	698	125	134	5,182
Females	1,509	577	288	40	34	2,448

Note: 119 records were missing details of geographic location and have been lost from the analysis.

Between 1992 and 2003, death rates from these causes in Major Cities declined significantly by 2 points p.a. for males and 1 point p.a. for females (Table 40, Figure 44 and Figure 45).

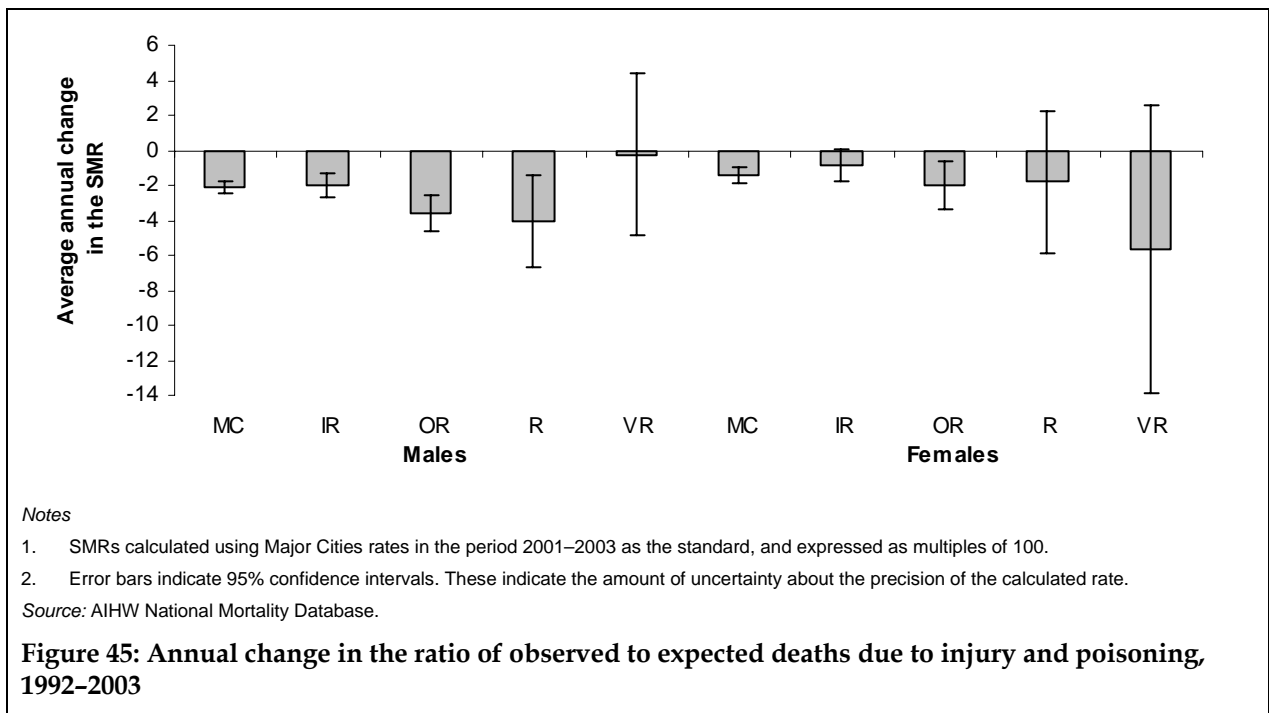
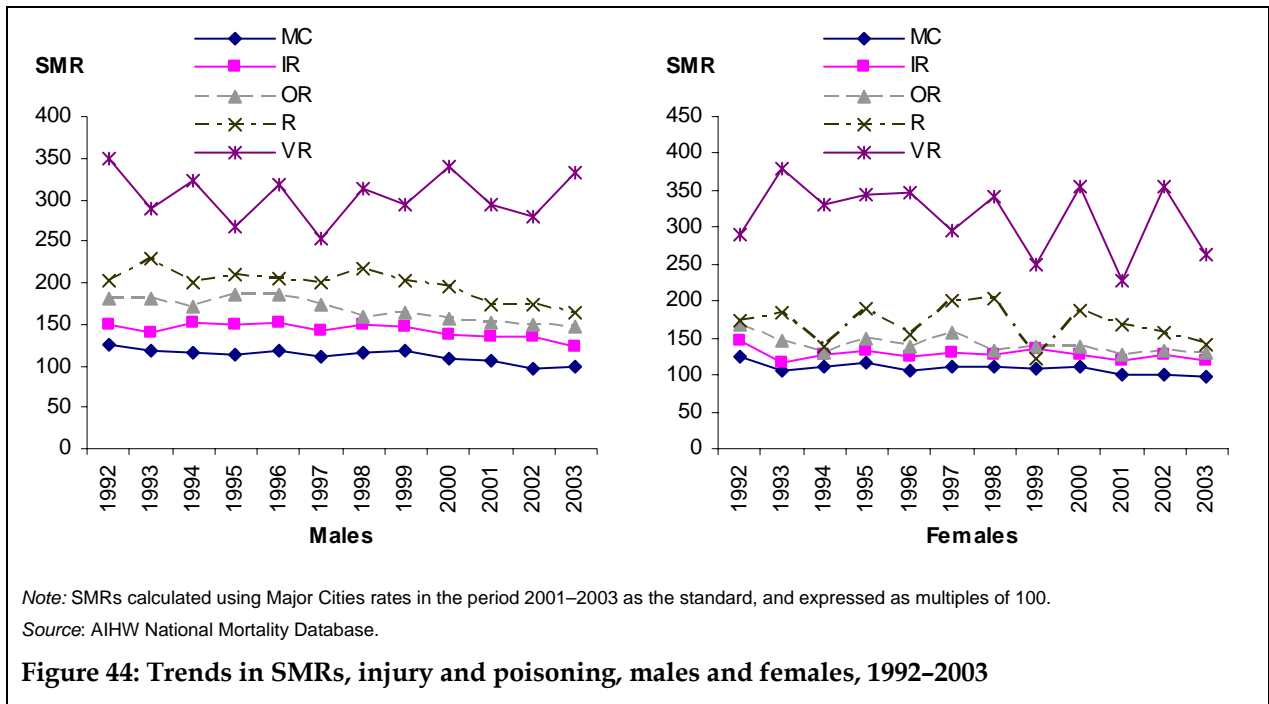
For males in Inner Regional areas and females in Inner and Outer Regional areas, death rates declined at about the same rate as in Major Cities. For males in Outer Regional areas, rates declined at 4 points p.a., significantly faster than in Major Cities.

In remote areas, the rate of decrease was not significantly different from that in Major Cities.

Table 40: Annual change in SMRs, injury and poisoning, 1992–2003

	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Average annual change	-2.1	-2.0	*-3.6	-4.1	-0.3	-1.4	-0.9	-2.0	-1.8	-5.7

Note: Changes are based on the slope of the curve, calculated using the weighted least squares method. Changes that are significantly different from those in Major Cities are bold and marked with an asterisk. Positive changes signify an increase in mortality; negative changes signify a decrease in mortality.



Suicide

Suicide, or intentional death from self-inflicted causes, is a concern because it is largely avoidable and affects people in a wide range of age groups (not just the older age groups). It is sometimes associated with mental illness, such as depression, but there is a range of other reasons why people may decide to take their own lives. It is likely that the incidence of suicide is under-reported, because it is sometimes difficult to know whether a death from injury was intentional or accidental.

Suicide here is defined by the ICD-9 and ICD-10 codes E950–E959 and X60–X84, respectively.

Reporting here is for the period 1992–2003. The comparability factor (see page 5) for this cause is 0.97.

For perspective, Table 41 describes the number of deaths in each area in 2003.

Table 41: Number of deaths due to suicide in 2003

	MC	IR	OR	R	VR	Total
Males	1,056	394	202	40	29	1,721
Females	330	102	35	4	<3	472

Note: 19 records were missing details of geographic location and have been lost from the analysis.

Between 1992 and 2003, death rates from this cause in Major Cities declined significantly by 1 point p.a. for males, while for females there was a non-significant decrease of about 1 point p.a. (i.e. there has been negligible change for females) (Table 42, Figure 46 and Figure 47).

For males in Inner and Outer Regional areas there were non-significant decreases in the suicide death rate.

For females from Inner Regional areas, rates increased by 2 points p.a., but were unchanged in Outer Regional areas.

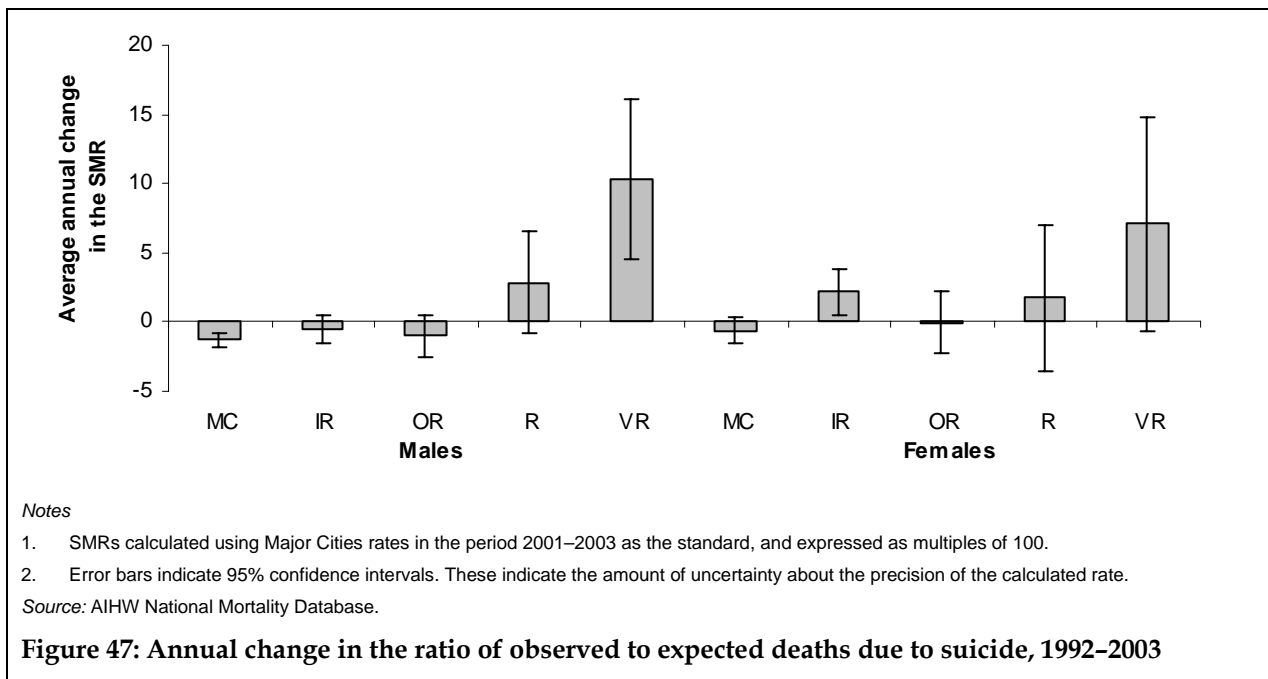
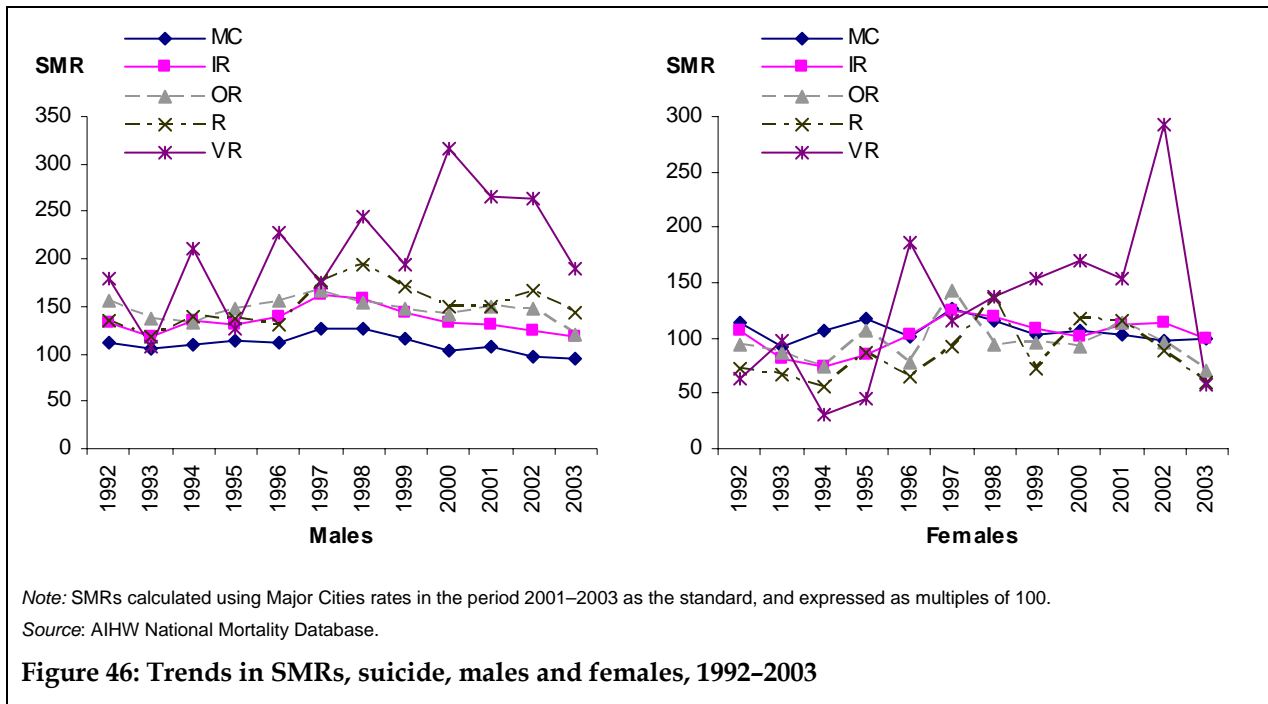
For both males and females, there were non-significant increases in the suicide death rate in Remote areas, while in Very Remote areas there was a significant increase for males of 10 points p.a., and a non-significant increase of about 7 points p.a. for females.

It should be noted that the straight trend line used here simplifies the tendency for rates in Major Cities and regional areas to peak in 1997, and to decrease thereafter. Even so, the general patterns described by the trend lines appear to reflect the overall non-linear pattern.

Table 42: Annual change in SMRs, suicide, 1992–2003

	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Average annual change	-1.3	-0.5	-1.0	2.8	*10.3	-0.7	*2.2	0.0	1.7	7.1

Note: Changes are based on the slope of the curve, calculated using the weighted least squares method. Changes that are significantly different from those in Major Cities are bold and marked with an asterisk. Positive changes signify an increase in mortality; negative changes signify a decrease in mortality.



Interpersonal violence

Interpersonal violence includes the killing of one person by another in an act of homicide (which includes situations in which the intent may, or may not, have been to kill the person).

ICD-9 and ICD-10 codes used here are, respectively, E960–E978 and X85–Y09.

Reporting here is for the period 1992–2003. The comparability factor (see page 5) for this cause is 1.02.

For perspective, Table 43 describes the number of deaths in each area in 2003.

Table 43: Number of deaths due to interpersonal violence in 2003

	MC	IR	OR	R	VR	Total
Males	96	40	21	6	12	175
Females	49	10	13	3	<3	77

Note: 5 records were missing details of geographic location and have been lost from the analysis.

Between 1992 and 2003, death rates from this cause in Major Cities declined significantly by 3 points p.a. for males and 5.5 points p.a. for females (Table 44, Figure 48 and Figure 49).

For males in regional and remote areas, there was no significant change in the rate of death due to interpersonal violence, except in Outer Regional areas where rates declined by about 6 points p.a.

For females in regional areas, the rate of decline was not significantly different from zero, but was also not significantly different from the decline experienced by females from Major Cities.

Death rates declined by about 51 points p.a. for females in Very Remote areas, or by about 28 points p.a. for females from remote areas generally.

Table 44: Annual change in SMRs, interpersonal violence, 1992–2003

	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Average annual change	-3.2	0.6	-5.6	-6.5	-1.4	-5.5	-2.9	-2.8	-14.7	-50.8

Note: Changes are based on the slope of the curve, calculated using the weighted least squares method. Changes that are significantly different from those in Major Cities are bold and marked with an asterisk. Positive changes signify an increase in mortality; negative changes signify a decrease in mortality.

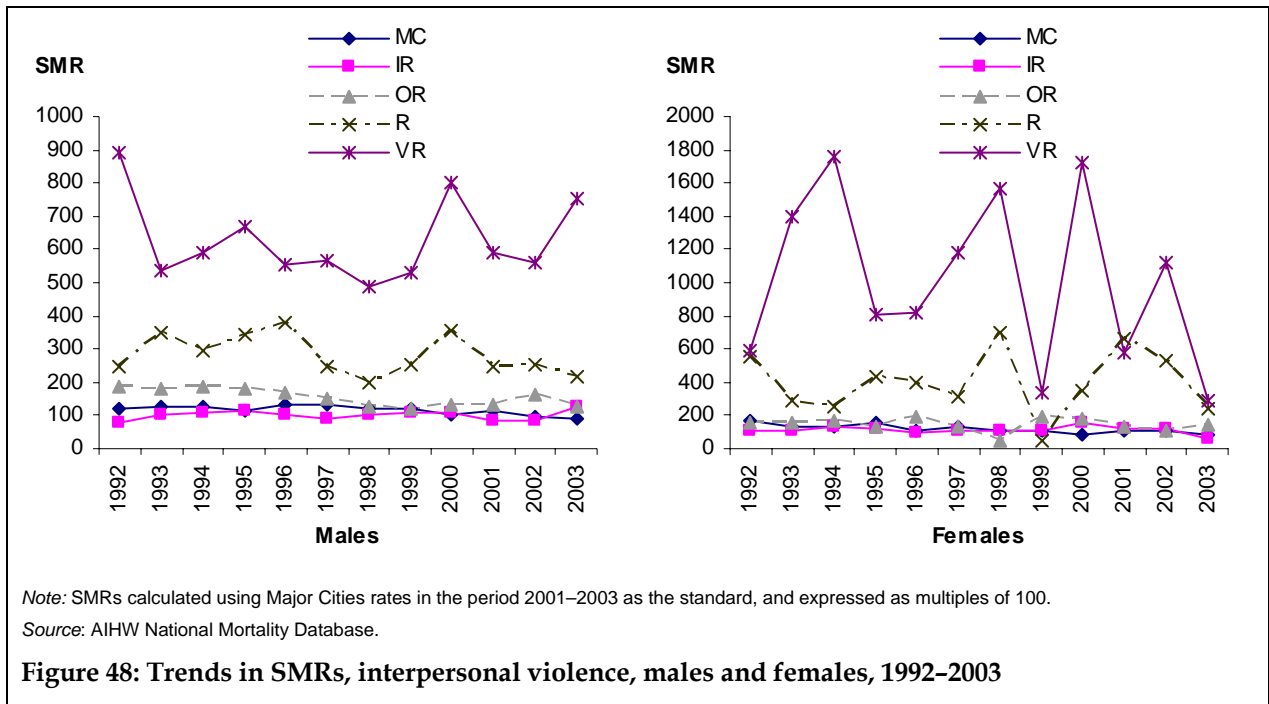


Figure 48: Trends in SMRs, interpersonal violence, males and females, 1992-2003

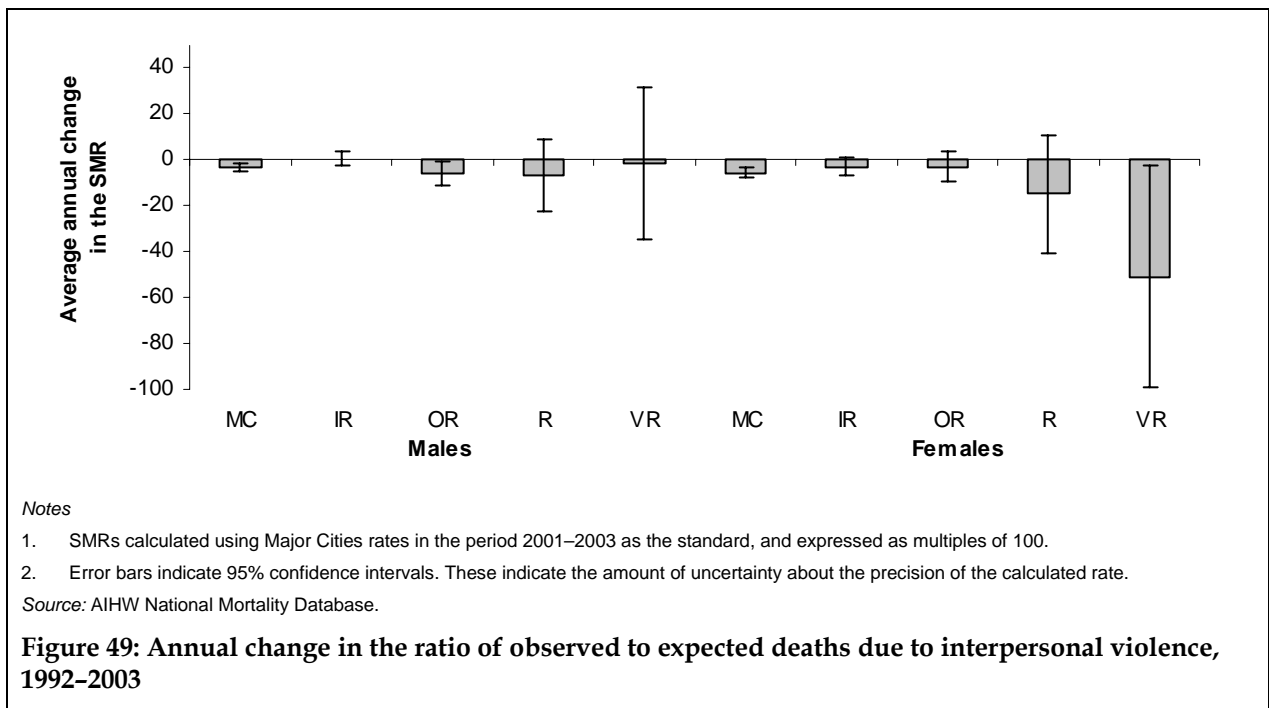


Figure 49: Annual change in the ratio of observed to expected deaths due to interpersonal violence, 1992-2003

Motor vehicle traffic accidents

Motor vehicle traffic accidents include accidents that occur on public roads and that involve a motor vehicle. For example, a car occupant, pedestrian or cyclist struck by a motor vehicle on a public road would be included, as would a car occupant killed in a collision with a train. However, a car occupant killed in an off-road accident or a cyclist killed after falling off a bicycle are not included. Motor vehicles include motorcycles, cars, vans and utilities, trucks and buses.

The ICD-9 codes used here are E810–E819, but the ICD-10 codes used are too complicated to list here – see page 5, where they are listed in Table 1.

Reporting here is for the period 1992–2003. The comparability factor (see page 5) for this cause is 0.95.

For perspective, Table 45 describes the number of deaths in each area in 2003.

Table 45: Number of deaths due to motor vehicle traffic accidents in 2003

	MC	IR	OR	R	VR	Total
Males	551	294	179	34	49	1,107
Females	190	127	69	14	14	414

Note: 36 records were missing details of geographic location and have been lost from the analysis.

Between 1992 and 2003, death rates from these causes in Major Cities declined significantly by 3 points p.a. for males and 8 points p.a. for females (Table 46, Figure 50 and Figure 51).

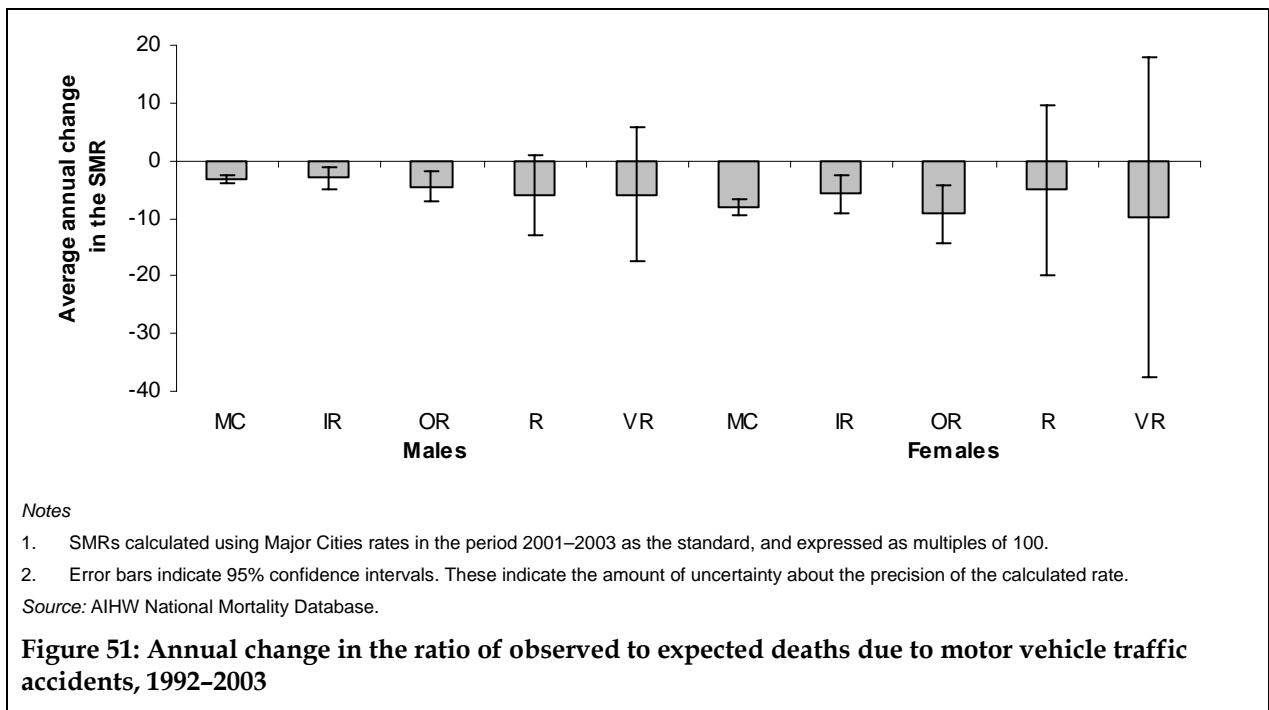
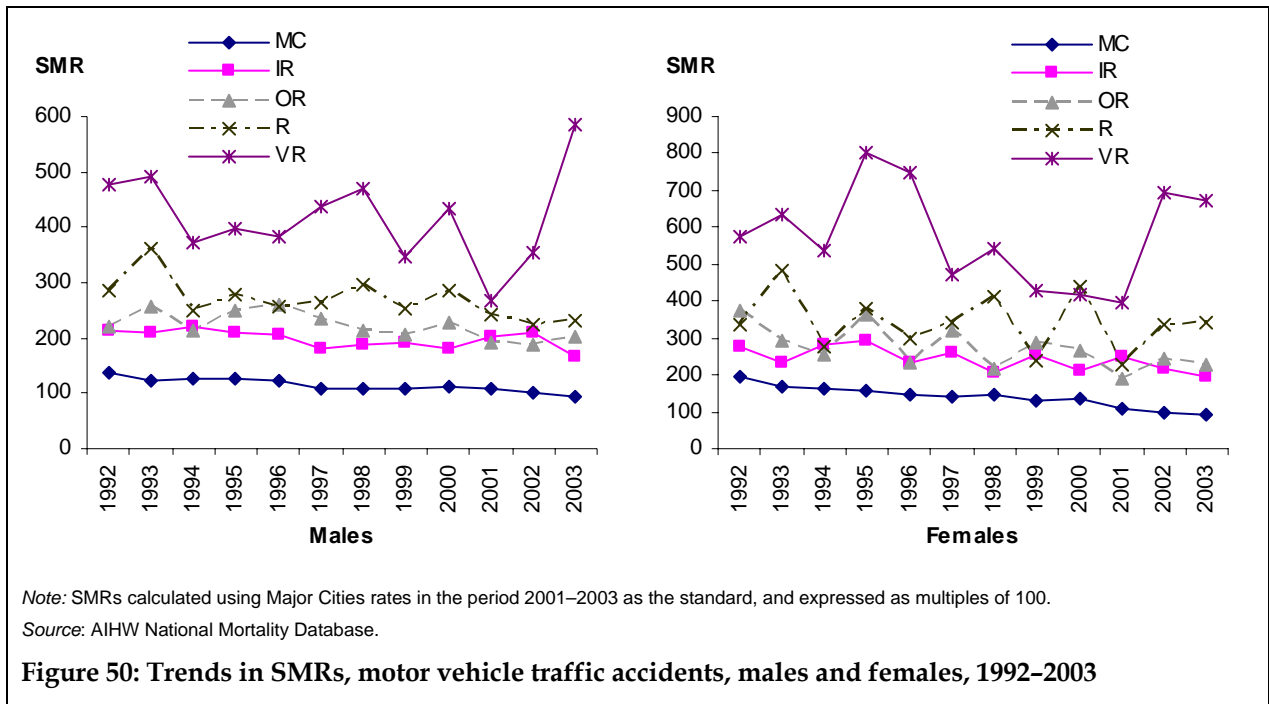
Rates for males and females in Inner and Outer Regional areas also declined, at a rate that was not significantly different from rates in Major Cities (i.e. about 3 points p.a. for males and 8 points p.a. for females).

Rates for males and females in Remote and Very Remote areas appeared to decline also, but the decreases were not significantly different from zero, while also being not significantly different from the decline apparent in Major Cities.

Table 46: Annual change in SMRs, motor vehicle traffic accidents, 1992–2003

	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Average annual change	-3.2	-3.0	-4.5	-5.9	-5.9	-8.1	-5.8	-9.2	-5.1	-9.9

Note: Changes are based on the slope of the curve, calculated using the weighted least squares method. Changes that are significantly different from those in Major Cities are bold and marked with an asterisk. Positive changes signify an increase in mortality; negative changes signify a decrease in mortality.



‘Other’ land transport accidents

This group includes all land transport accidents that were off-road or did not involve a motor vehicle. The most commonly occurring causes included in this group were pedestrians injured by a range of motor vehicles and non-motor vehicles (37%), off-road motorcyclists (14%) and pedal cyclists (4%), occupants of cars involved in non-traffic accidents (11%), drivers or occupants of all-terrain vehicles (5%) and agricultural vehicles (10%), and occupants of trains (3%). Injuries involving ridden animals accounted for about 1% of these deaths.

ICD-10 codes are V01.0–V89.9 but exclude those for motor vehicle traffic accidents (see previous section and Table 1 on page 5).

Reporting here is for 1997–2003 only. Before 1997, coding of deaths used the 9th revision of the International Classification of Diseases (ICD-9). Compatibility for this cause of death between ICD-9 and ICD-10 is very poor, and so reporting has been restricted to the period from 1997 to 2003, using ICD-10 only.

For perspective, Table 47 describes the number of deaths in each area in 2003.

Table 47: Number of deaths due to ‘other’ land transport accidents in 2003

	MC	IR	OR	R	VR	Total
Males	41	30	24	8	6	109
Females	19	8	3	<3	<3	32

Note: 4 records were missing details of geographic location and have been lost from the analysis.

Interpretation is complicated by the fact that the category includes a broad range of causes.

Death rates from these causes have declined significantly over the period in Major Cities, at a rate of about 10 points p.a. for both males and females (Table 48, Figure 52 and Figure 53).

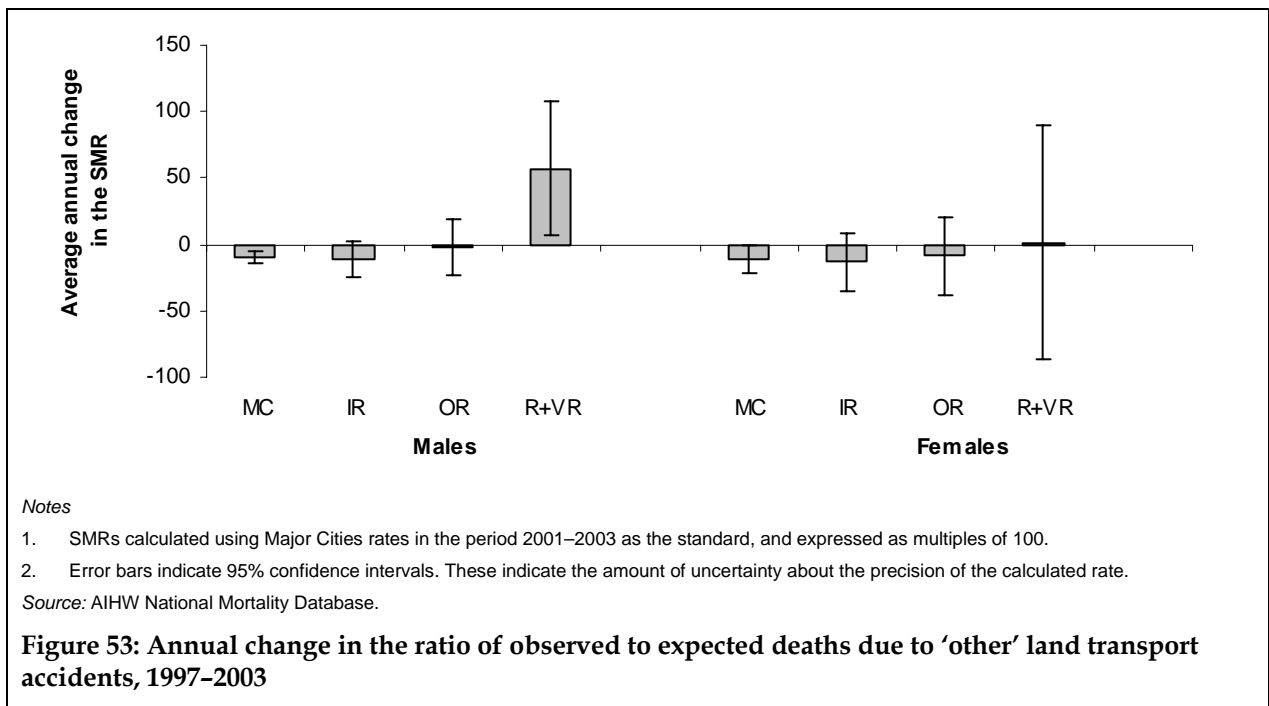
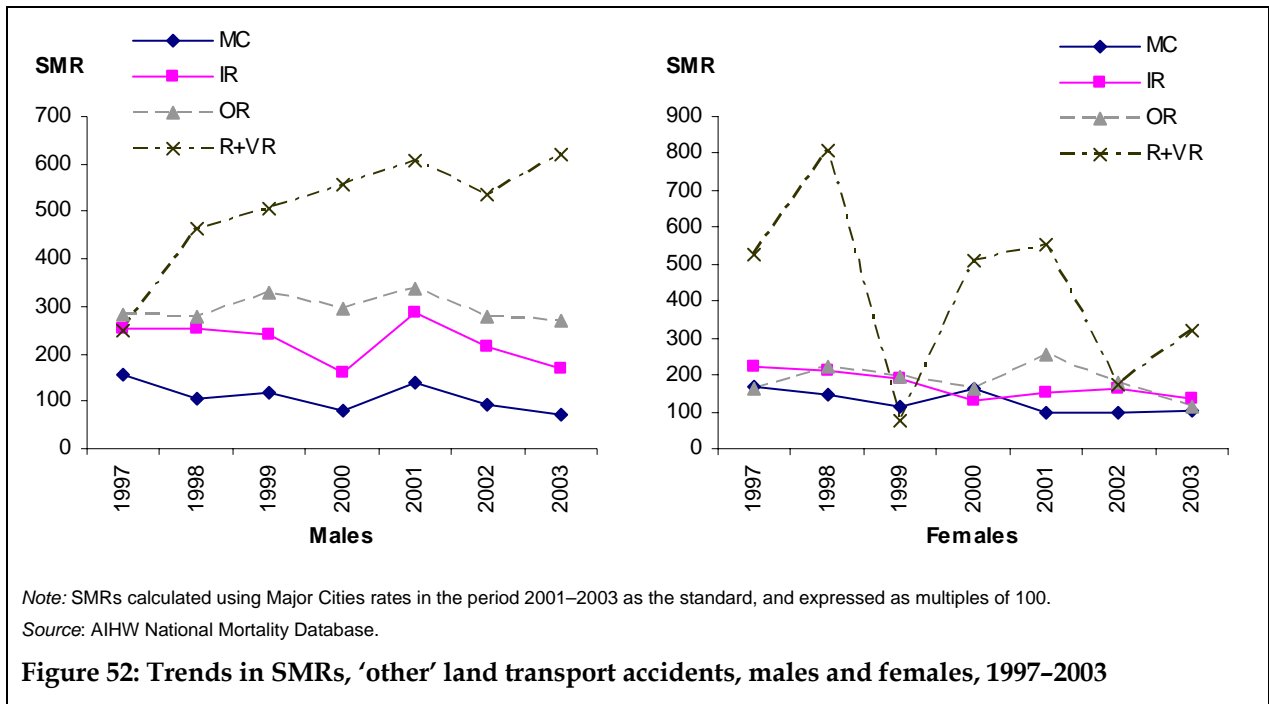
Changes in death rates in Inner and Outer Regional areas were not significantly different from zero however, for both males and females, the apparent change was a decline in death rates of approximately 10 points p.a. (similar to Major Cities), except for males in Outer Regional areas where the apparent decrease appeared smaller (but with wide confidence intervals).

Because of the relatively small numbers of deaths in Remote and Very Remote areas, the data for these areas has been aggregated. In remote areas generally, death rates for males have increased by about 60 points p.a., while those for females appear to have remained unchanged.

Table 48: Annual change in SMRs, ‘other’ land transport accidents, 1997–2003

	Males				Females			
	MC	IR	OR	R+VR	MC	IR	OR	R+VR
Average annual change	-9.4	-11.2	-1.8	*56.8	-10.8	-13.0	-8.8	1.3

Note: Changes are based on the slope of the curve, calculated using the weighted least squares method. Changes that are significantly different from those in Major Cities are bold and marked with an asterisk. Positive changes signify an increase in mortality; negative changes signify a decrease in mortality.



‘Other’ injuries and poisoning

This group includes all injuries and poisonings not already described in this report (i.e. not including land transport accidents, suicide or interpersonal violence).

ICD-9 and ICD-10 codes used here are, respectively, E800–E999 and V01–Y98, minus those specific causes of injury-related death described earlier.

Reporting here is for the period 1992–2003. The numbers of observed deaths were calculated by subtraction of the observed number for each of the reported specific causes from the total observed number due to all injury and poisoning.

For perspective, Table 49 describes the number of deaths in each area in 2003.

Table 49: Number of deaths due to ‘other’ injuries and poisoning in 2003

	MC	IR	OR	R	VR	Total
Males	1,302	420	273	37	38	2,070
Females	920	330	169	16	15	1,450

Note: 57 records were missing details of geographic location and have been lost from the analysis.

Between 1992 and 2003, death rates from these causes in Major Cities declined significantly by 2 points p.a. for males and remained essentially unchanged for females (Table 50, Figure 54 and Figure 55).

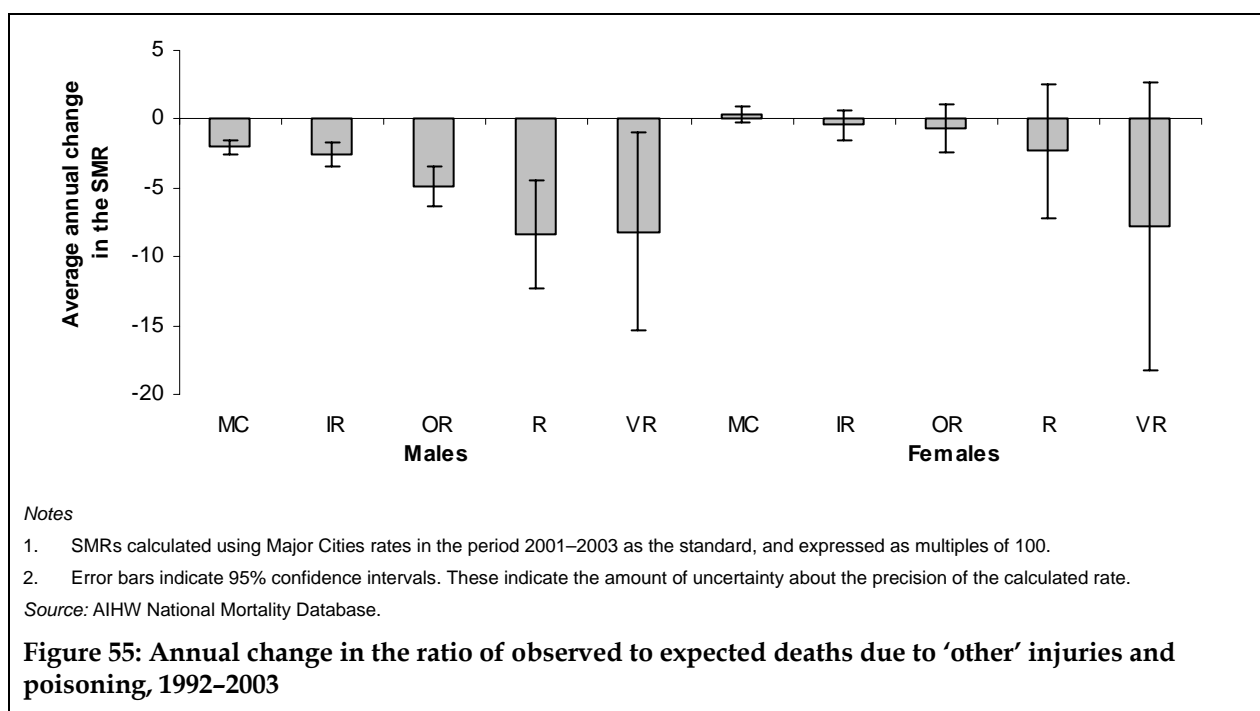
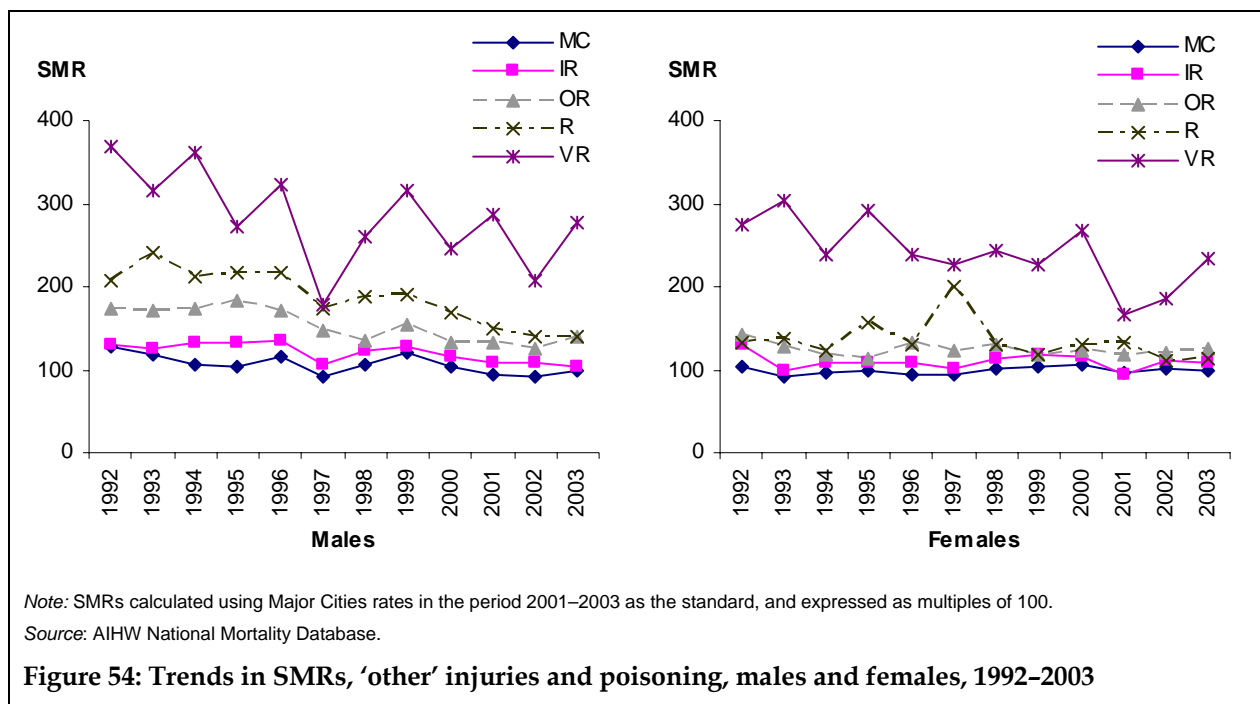
Rates for males in Inner Regional areas declined by about 3 points p.a. (not significantly different from males in Major Cities). Death rates for males from Outer Regional and Remote areas declined, respectively, by 5 points p.a. and 8 points p.a. between 1992 and 2003.

Rates for females in each individual area declined in regional and remote areas, but not at a rate significantly different from zero, and at a rate not significantly different from that in Major Cities (i.e. wide confidence intervals).

Table 50: Annual change in SMRs, ‘other’ injuries and poisoning, 1992–2003

	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Average annual change	-2.0	-2.6	*-4.9	*-8.4	-8.2	0.3	-0.4	-0.7	-2.3	-7.8

Note: Changes are based on the slope of the curve, calculated using the weighted least squares method. Changes that are significantly different from those in Major Cities are bold and marked with an asterisk. Positive changes signify an increase in mortality; negative changes signify a decrease in mortality.



Other causes

All other causes

This group includes all causes of death other than those due to neoplasms, circulatory diseases, respiratory diseases, and injury and poisoning. It includes diabetes mellitus and renal failure, with all the other causes of death reported as a heterogenous group.

ICD-9 and ICD-10 codes used here are all those not reported elsewhere in this report.

Reporting here is for the period 1992–2003.

For perspective, Table 51 describes the number of deaths in each area in 2003.

Table 51: Number of deaths due to other causes in 2003

	MC	IR	OR	R	VR	Total
Males	7,431	2,702	1,390	191	157	11,871
Females	8,676	3,087	1,405	176	119	13,463

Note: 90 records were missing details of geographic location and have been lost from the analysis.

Between 1992 and 2003, death rates from these causes in Major Cities declined by 2 points p.a. for males and by less than 1 point p.a. for females (Table 52, Figure 56 and Figure 57).

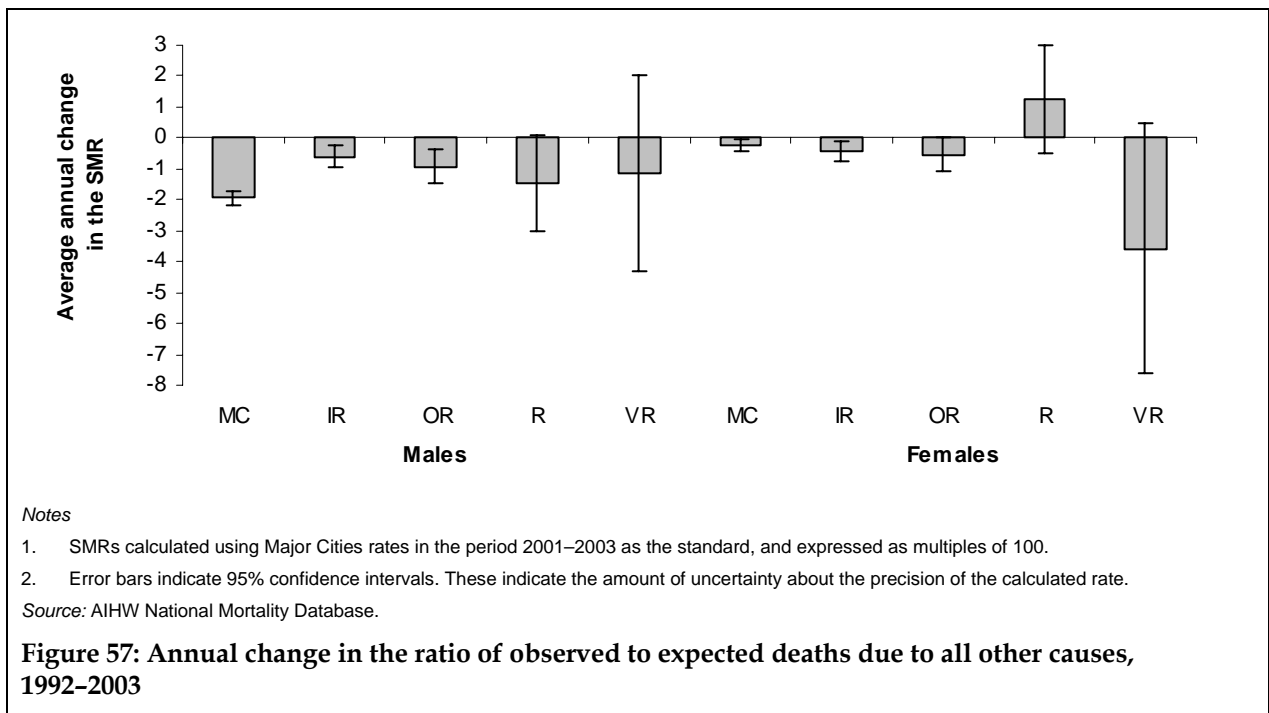
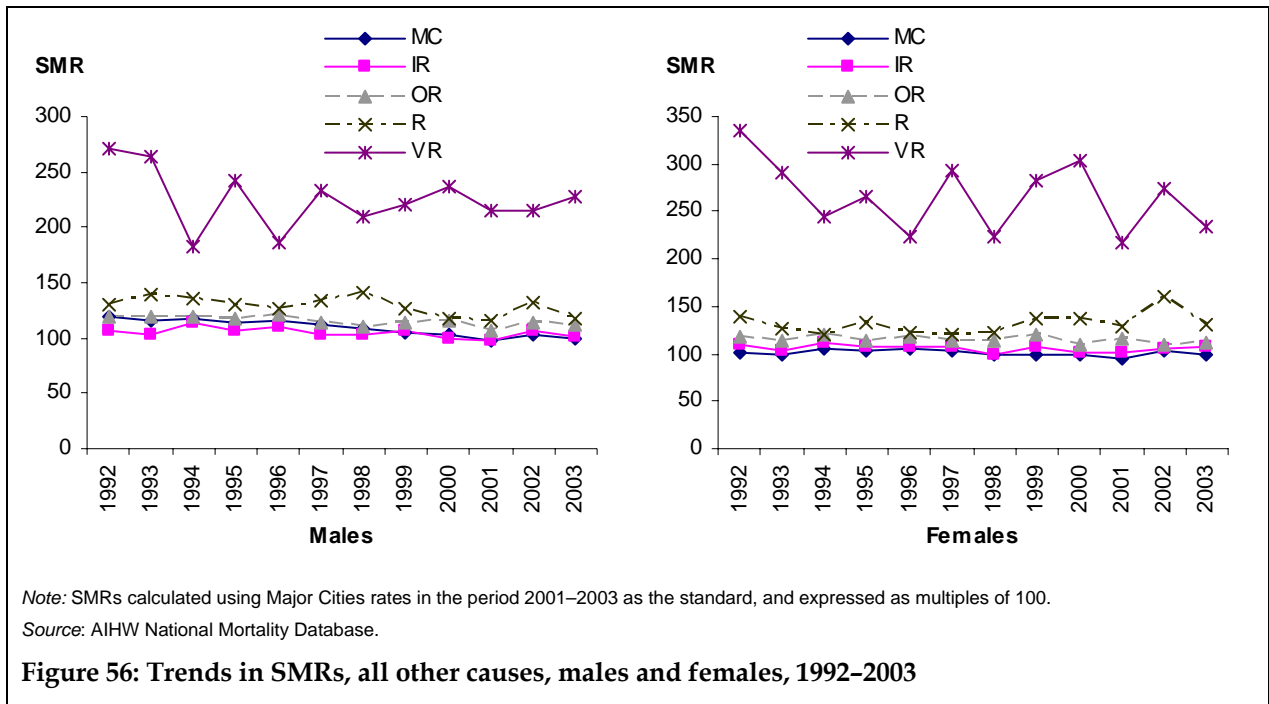
Rates in regional areas declined for males by about 1 point p.a., a significantly lower rate of decline than for those in Major Cities. For females from regional areas, the rate of decline was not significantly different from the rate of decline for females from Major Cities.

In remote areas, declines tended not to be significantly different from those in Major Cities while not being clearly different from zero (i.e. different from no change). However, the rate of decline for males from Remote areas and for females from Very Remote areas was significantly different from zero at a slightly lower level of confidence than the 95% level.

Table 52: Annual change in SMRs, all other causes, 1992–2003

	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Average annual change	-1.9	*-0.6	*-0.9	-1.5	-1.1	-0.3	-0.4	-0.5	1.2	-3.6

Note: Changes are based on the slope of the curve, calculated using the weighted least squares method. Changes that are significantly different from those in Major Cities are bold and marked with an asterisk. Positive changes signify an increase in mortality; negative changes signify a decrease in mortality.



Diabetes

Diabetes mellitus is a major cause of illness and disability in Australia. It is also a leading cause of blindness and lower limb amputations, and can lead to pregnancy-related complications for both the mother and foetus or newborn child. Diabetes is an important risk factor for several other chronic diseases including heart disease, stroke and renal disease (AIHW 2002). Risk factors include genetic factors and obesity, low birth weight, increasing age, physical inactivity and poor diet (AIHW 2002).

ICD-9 and ICD-10 codes used here are, respectively, 250 and E10-E14.

Reporting here is for the period 1992–2003. The comparability factor (see page 5) for this cause is 0.99.

For perspective, Table 53 describes the number of deaths in each area in 2003.

Table 53: Number of deaths due to diabetes in 2003

	MC	IR	OR	R	VR	Total
Males	1,092	402	239	41	29	1,803
Females	958	384	184	32	22	1,580

Note: 6 records were missing details of geographic location and have been lost from the analysis.

Between 1992 and 2003, death rates from this cause in Major Cities changed little for males and declined by about 2 points p.a. for females (Table 54, Figure 58 and Figure 59).

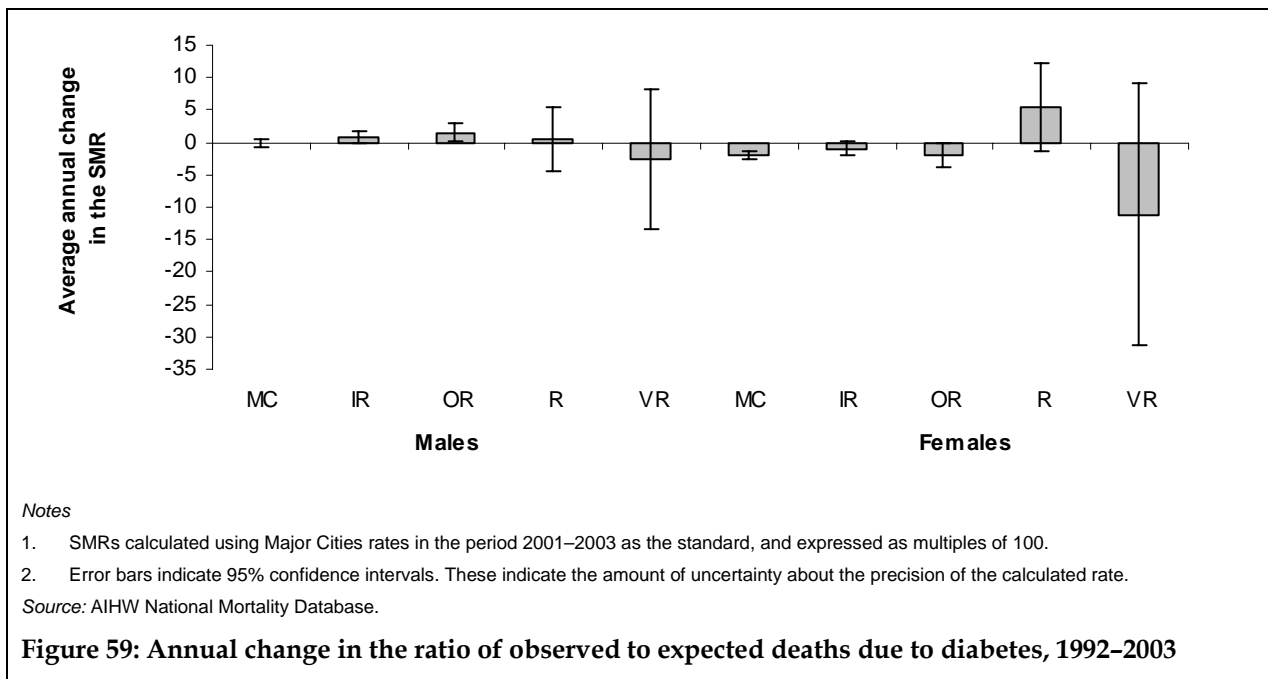
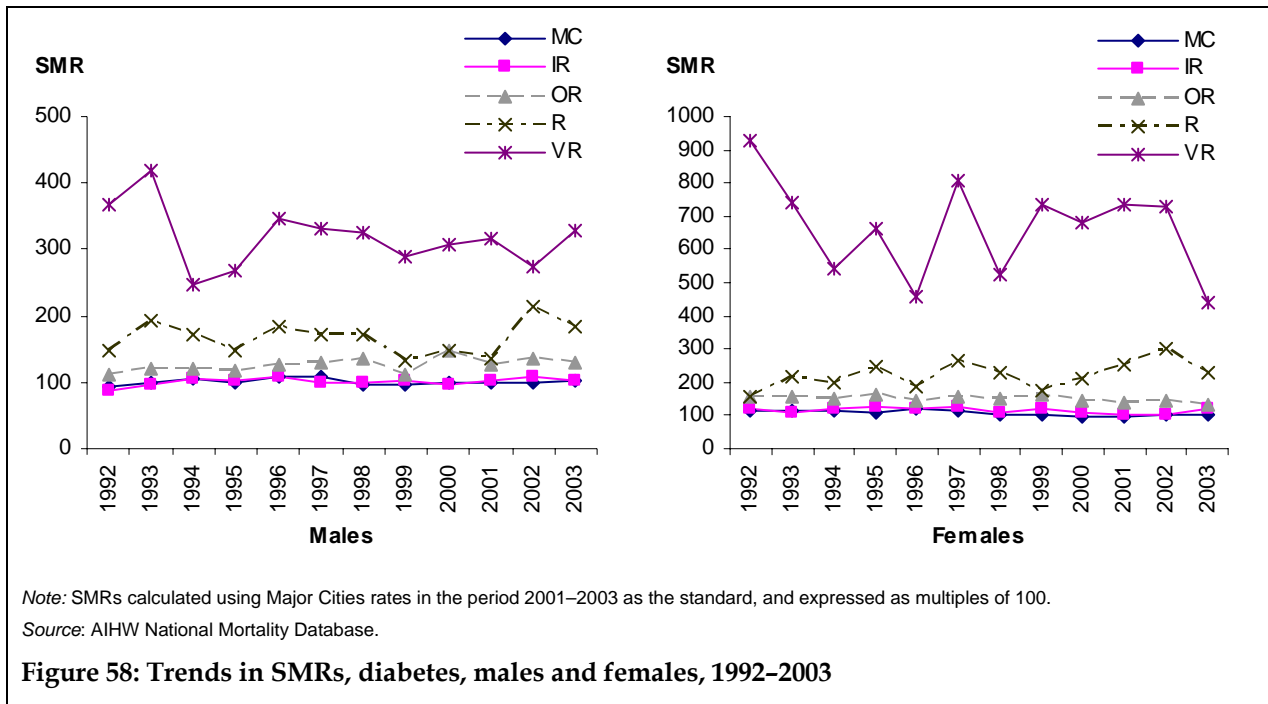
Rates in regional areas increased significantly for males by about 1 point p.a. and declined significantly for females by about 1 point p.a. (although changes in Inner and Outer Regional areas separately did not reach statistical significance).

Rates in remote areas did not appear to change significantly between 1992 and 2003.

Table 54: Annual change in SMRs, diabetes, 1992–2003

	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Average annual change	-0.1	0.7	1.6	0.5	-2.7	-1.9	-1.0	-1.9	5.5	-11.2

Note: Changes are based on the slope of the curve, calculated using the weighted least squares method. Changes that are significantly different from those in Major Cities are bold and marked with an asterisk. Positive changes signify an increase in mortality; negative changes signify a decrease in mortality.



Renal failure

Renal failure has been included because of its importance as a cause of death for Indigenous people. Renal failure can be a result of damage to kidneys caused by high blood pressure, diabetes, infections and long-term use of analgesics (AIHW 2002).

ICD-9 and ICD-10 codes used here are, respectively 584–586 and N17–N19.

Reporting here is for the period 1992–2003. The comparability factor (see page 5) for this cause is 1.05.

For perspective, Table 55 describes the number of deaths in each area in 2003.

Table 55: Number of deaths due to renal failure in 2003

	MC	IR	OR	R	VR	Total
Males	641	209	91	8	11	960
Females	677	227	97	9	13	1,023

Note: 3 records were missing details of geographic location and have been lost from the analysis.

Between 1992 and 2003, death rates from this cause for males in Major Cities increased by about 1 point p.a. (significantly at a slightly lower level of confidence, but not at the 95% level of confidence) while rates for females in Major Cities increased significantly by about 1 point p.a. (Table 56, Figure 60 and Figure 61).

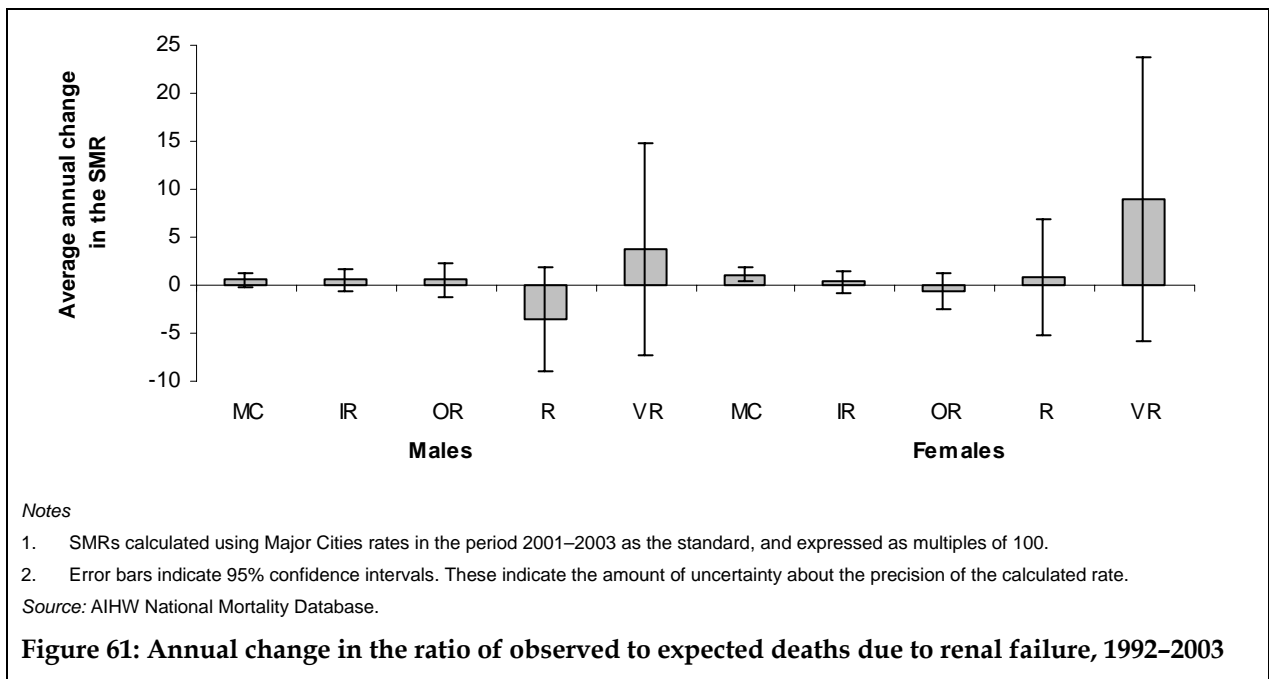
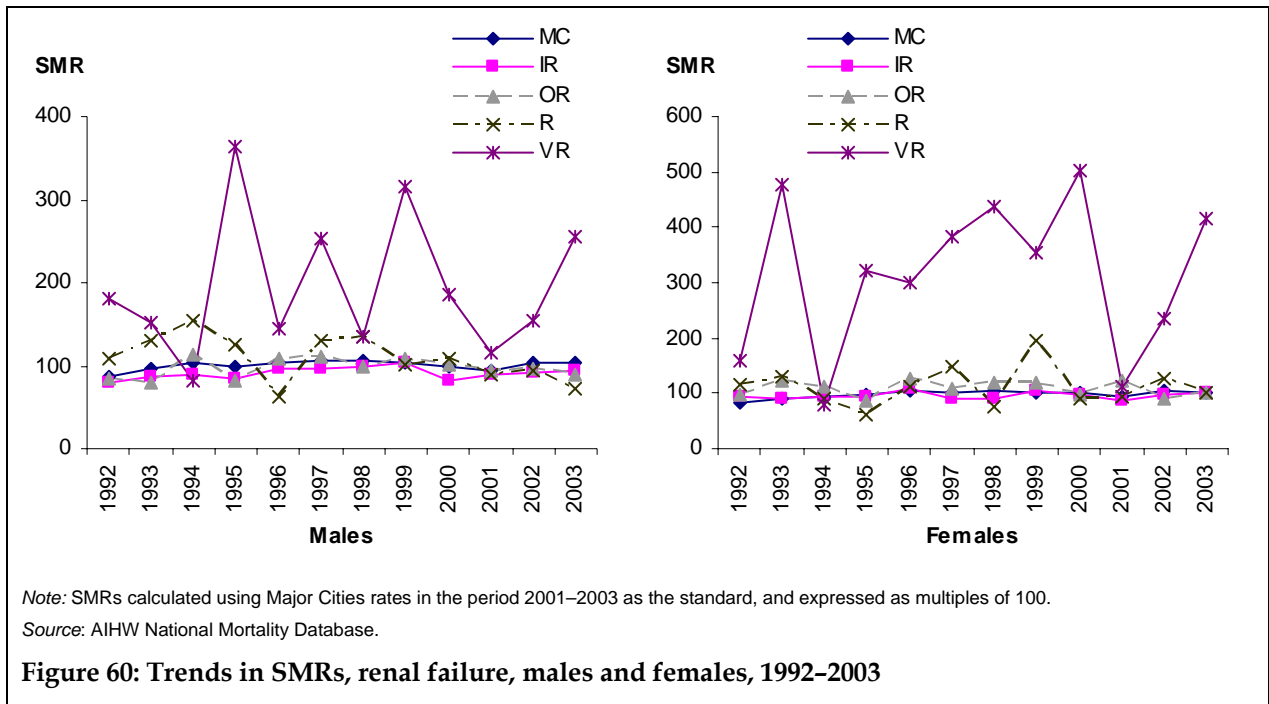
It is not clear whether there have been substantial changes in the rates of death due to renal failure in regional and remote areas, as confidence intervals in all cases overlap those for Major Cities. In other words, it is not clear that rates of change in regional and remote areas have been different from those in Major Cities over the period.

The analysis was also repeated for males and females from the aggregated areas regional (Inner Regional plus Outer Regional) and remote (Remote plus Very Remote); and also for persons (males plus females) from each of the five areas. No significant differences from the changes apparent in Major Cities were discernable.

Table 56: Annual change in SMRs, renal failure, 1992–2003

	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Average annual change	0.6	0.5	0.5	-3.6	3.8	1.1	0.3	-0.6	0.8	8.9

Note: Changes are based on the slope of the curve, calculated using the weighted least squares method. Changes that are significantly different from those in Major Cities are bold and marked with an asterisk. Positive changes signify an increase in mortality; negative changes signify a decrease in mortality.



All other causes not elsewhere described (n.e.d.)

All other causes n.e.d., comprises all causes of death not otherwise described in this report. It excludes deaths due to neoplasms, circulatory diseases, respiratory diseases, injury and poisoning, diabetes and renal failure.

Reporting here is for the period 1992–2003.

For perspective, Table 57 describes the number of deaths in each area in 2003.

Table 57: Number of deaths due to all other causes n.e.d. in 2003

	MC	IR	OR	R	VR	Total
Males	5,698	2,091	1,061	141	117	9,108
Females	7,041	2,475	1,123	134	84	10,857

Note: 84 records were missing details of geographic location and have been lost from the analysis.

Between 1992 and 2003, death rates from these causes for males in Major Cities declined significantly by about 2.5 points p.a. while rates for females in Major Cities changed little (Table 58, Figure 60 and Figure 63).

Rates for males in Inner and Outer Regional areas also declined, but at a significantly lower rate (about 1 point p.a.). Rates for females from Inner and Outer Regional areas, respectively, declined by less than 1 point p.a. and changed little.

In remote areas, declines tended not to be significantly different from those in Major Cities while not being clearly different from zero (i.e. different from no change). However, the rate of decline for males from Remote areas and for females from Very Remote areas was significantly different from zero at a slightly lower level of confidence, although not at the 95% level.

Table 58: Annual change in SMRs, all other causes n.e.d., 1992–2003

	Males					Females				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Average annual change	-2.5	*-1.0	*-1.5	-1.6	-1.2	-0.1	-0.4	-0.3	0.8	-4.0

Note: Changes are based on the slope of the curve, calculated using the weighted least squares method. Changes that are significantly different from those in Major Cities are bold and marked with an asterisk. Positive changes signify an increase in mortality; negative changes signify a decrease in mortality.

