

**Comparison of deaths due to
alcohol, tobacco, and other drugs in
Western Australia and Australia**

Elizabeth Unwin & Jim Codde

Epidemiology and Analytical Services
Health Information Centre
Health Department of Western Australia

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Executive summary

This report estimates the number of deaths due to alcohol, tobacco, and other drugs in Western Australia (WA) and Australia, and compares the patterns and trends of drug-caused mortality. It updates and expands on an earlier report about drug-caused deaths.

In WA over the period 1985 to 1996, 19% of all deaths or an average of 1,903 deaths each year were due to drugs. The majority of deaths (73%) were in males.

- 79% or about 1,502 deaths each year were due to tobacco smoking (74% males)
- 17% or about 330 deaths each year were due to alcohol use (69% males)
- 3.8% or about 72 deaths each year were due to the use of drugs other than alcohol and tobacco (65% males).

In Australia over the period 1991 to 1996, 19% of all deaths or an average of 23,217 deaths each year were due to drugs. The majority of deaths (72%) were in males.

- 80% or about 18,529 deaths each year were due to tobacco smoking (73% males)
- 16% or about 3,694 deaths each year were due to alcohol use (67% males)
- 4.3% or about 994 deaths each year were due to the use of drugs other than alcohol and tobacco (67% males).

Age-standardised rates (ASRs) for all drug-caused deaths fell significantly in WA and Australia by an average of about 2% per year. There was a significant reduction in the ASRs for smoking-caused deaths (by an average of about 2.5% per year), and alcohol-caused deaths (by about 2% per year). However, the ASR for deaths caused by other drugs increased significantly, by an average of 4.8% per year for WA and 6.6% for Australia.

About half of all deaths caused by drug use in WA and Australia occurred among people aged 70 years or older, whilst only about 15% occurred among people under 50 years of age. Age-specific rates for tobacco-caused deaths increased with age, rising rapidly after the age of 45 years to peak in those aged 85 years and over. The age-specific rates for alcohol-caused deaths showed a minor peak in those aged 20 to 24 years then, from middle age, began to rise steadily, peaking in the oldest age group. However, for deaths attributable to drugs other than alcohol and tobacco, the age-specific rates were highest in young people, particularly those between the ages of 25 and 34 years.

These age differences are reflected in the person years of life lost (PYLL). Although tobacco caused nearly half of all drug-caused PYLL, alcohol about a third, and other drugs nearly a fifth, when the number of PYLL per death were calculated the importance of the different drugs was reversed. People who died from other drugs lost, on average, about 31 years of life, twice as many as people who died from alcohol-caused conditions and about six times the average number of PYLL per tobacco-caused death.

1 Introduction

Drug abuse is a significant problem in Australia, resulting in more than 23,000 deaths per year (19% of all deaths), and costing the community more than \$18 billion annually (Collins & Lapsley 1996). Although the Australian public perceives the ‘drug problem’ to be predominantly due to illicit drugs (Makkai & McAllister 1998^a), only about 4% of drug-caused deaths are due to drugs other than alcohol and tobacco. Tobacco is responsible for 80% of drug-caused deaths.

Since 1985, there have been major changes in the Australian government’s policies towards drugs, licit as well as illicit. Reducing tobacco use has been identified as a major health priority, alcohol abuse has been recognised as having significant health and social consequences, and there has been public debate about the legal status of marijuana. There has also been discussion about more innovative ways of dealing with addiction to other illicit drugs, and in reducing drug-related crime. These initiatives have resulted in a wide range of legislative changes, including: restrictions on the advertising and sponsorship of tobacco products; introduction of the 0.05% blood alcohol concentration legislation for drivers, and tougher restrictions on smoking in public places in WA; decriminalisation of possession of small amounts of marijuana in South Australia and the Australian Capital Territory; and changes to the criminal law to deal more effectively with trafficking (Makkai & McAllister 1998^a). Last year, both the Federal and WA State governments released new drug strategies.

This report updates and expands on an earlier report (Unwin 1996^a). It estimates the number of deaths due to alcohol, tobacco, and other drugs, and compares the patterns and trends of drug-caused mortality in WA (1985-1996) and Australia (1991-1996).

2 Method

Death data was extracted from the national and state mortality databases by year of registration. These databases, from the Australian Bureau of Statistics, are based on notifications of deaths to Registrar Generals’ offices.

The number of deaths due to tobacco smoking, alcohol consumption, and other drug use were estimated using the aetiologic fractions method^{1,2} developed in 1990 (Holman et al, 1990) and updated in 1995 (English et al, 1995). Details of the methodology and the revised aetiologic fractions which were used in this report are shown in Appendix A.

The reference to ‘other drugs’ in this report includes licit drugs, such as barbiturates, anti-depressants, sedatives, tranquillisers, and volatile substances as well as illicit drugs. This overcomes the limitations of the artificial distinction created by the terms illicit and licit. Deaths attributed to illicit drug use often involve combinations of pharmaceutical and non-pharmaceutical drugs. Even in cases where licit drugs are thought to be responsible for death, it may be difficult to determine whether they were obtained licitly.

Age-standardisation was used to eliminate the effects of differences in the age structures of the populations. Age-standardised rates (ASR) were calculated using the direct method (Rothman 1986),³ using the Australian 1991 population as the standard.⁴

Person years of life lost (PYLL) were used as an alternative measure of mortality to reflect the

¹ The use of aetiologic fractions may give estimated numbers of deaths which are not integers. All numbers are rounded for presentation which may result in some variation in the totals.

² In this study, the number of deaths caused by tobacco smoking, alcohol consumption and other drug use were estimated separately. When the separate totals are combined an interactive effect between alcohol use and tobacco smoking for cancers of the mouth, pharynx, larynx and oesophagus may result in an overestimation of up to 3%. (Holman & Armstrong, 1992).

³ A program called the Health Statistics Calculator (written by Dr J Codde, 1993) was used to calculate the age-standardised rates and the person years of life lost.

⁴ In a previous report (Unwin 1996^a) the World Standard Population was used, so the rates in the two reports are not

impact of deaths that occur at younger ages. The potential years of life lost for every drug-caused death under the age of 69 years were estimated using the method described in Hakulinen and Teppo (1976).³

3 Results

3.1 Overview

3.1.1 Western Australia

In WA, over the period 1985 to 1996, about 19% of all deaths were due to drugs. There were an estimated 22,840 drug-caused deaths (16,673 males; 6,167 females), or an average of 1,903 deaths each year [Appendix Table B1].

- 18,019 (79%) were due to tobacco smoking (13,386 males; 4,633 females) - an average of 1,502 deaths each year.
- 3,959 (17%) were due to alcohol use (2,727 males; 1,232 females) - an average of 330 deaths each year.
- 862 (3.8%) were due to the use of drugs other than alcohol and tobacco (560 males; 303 females) - an average of 72 deaths each year.

Males accounted for 74% of deaths caused by smoking, 69% of alcohol-caused deaths, and 65% of deaths attributable to other drugs [Appendix Table B1].

2,137 deaths (9%) were wholly attributable⁵ to the use of drugs. Of these, 1,305 (61%) were alcohol-caused and 832 (39%) were caused by other drugs. In addition to these deaths, a further 20,703 deaths (91%) were estimated to be caused by drugs: 18,019 by tobacco smoking, 2,654 by the use of alcohol, and 30 by the use of other drugs [Appendix Table B2].

3.1.2 Australia

In Australia, over the period 1991 to 1996, about 19% of all deaths were due to drugs. There were an estimated 139,303 drug-caused deaths (99,961 males; 39,342 females), or an average of 23,217 deaths each year [Appendix Table B3].

- 111,176 (80%) were due to tobacco smoking (81,058 males; 30,119 females) - an average of 18,529 deaths each year.
- 22,163 (16%) were due to alcohol use (14,917 males; 7,246 females) - an average of 3,694 deaths each year.
- 5,963 (4.3%) were due to the use of drugs other than alcohol and tobacco (3,986 males; 1,977 females) - an average of 994 deaths each year.

Males accounted for 73% of deaths caused by smoking, 67% of alcohol-caused deaths, and 67% of deaths attributable to other drugs [Appendix Table B3].

12,810 deaths (9%) were wholly attributable⁵ to the use of drugs. Of these, 7,126 (56%) were alcohol-caused and 5,684 (44%) were caused by other drugs. In addition to these deaths, a further 126,492 deaths (91%) were estimated to be caused by drugs: 111,176 by tobacco smoking, 15,037 by the use of alcohol, and 279 by the use of other drugs [Appendix Table B2].

3.2 Age-standardised death rates

3.2.1 Western Australia

Although the annual number of all drug-caused deaths increased slightly, from 1,768 in 1985 to 2,032 in 1996, the age-standardised rate (ASR) fell from 146 deaths per 100,000 population in 1985 to 119 in 1996 [Appendix Table B4]. This is a significant reduction of an average of

⁵ Wholly attributable deaths are deaths from conditions that are entirely drug-caused. The aetiologic fractions for

–2.2% per year. The ASRs for all drug-caused deaths were higher for males than for females, and the reduction in the rates over the period was also greater in males (–2.7% per year); than females (–0.9% per year) [Table 1; Figure 1].

There was a marked reduction in the ASR for smoking-caused deaths, from 117 deaths per 100,000 population in 1985 to 93 in 1996. This is a significant reduction of an average of –2.6% per year (males –3.2% per year; females –1.1% per year) [Table 1; Figure 2].

The ASR for alcohol-caused deaths dropped from 24 deaths per 100,000 population in 1985 to 20 in 1996, a significant change of an average of –1.8% per year. However, the change was only significant in males (–2.2%) [Table 1; Figure 3].

In contrast to the changes in the ASRs for tobacco and alcohol, the ASR for deaths caused by other drugs increased, from 4.4 deaths per 100,000 population in 1985 to 5.9 in 1996. This is a significant increase of an average of 4.8% per year. However, the change was only significant in males (6.2%) [Table 1; Figure 4].

Table 1: Average annual percentage change in age-standardised rates, by sex and drug type

Western Australia, 1985-1996; Australia 1991-1996

Drug type	Males		Females		Persons	
	WA	Australia	WA	Australia	WA	Australia
Tobacco	-3.2%	-3.1%	-1.1%	-1.2%	-2.6%	-2.4%
Alcohol	-2.2%	-1.9%	NS	-2.1%	-1.8%	-2.0%
Other drugs	6.2%	9.5%	NS	NS	4.8%	6.6%
All drugs	-2.7%	-2.5%	-0.9%	-1.2%	-2.2%	-2.0%

Note: NS = not significant

3.2.2 Australia

Although the annual number of all drug-caused deaths increased slightly, from 22,881 in 1991 to 23,616 in 1996, the ASR for all drug-caused deaths in Australia fell from 132 deaths per 100,000 population in 1991 to 121 in 1996 [Appendix Table B4]. This is a significant reduction of an average of –2.0% per year. The ASRs for all drug-caused deaths were higher for males than for females, and the reduction in the rates over the period was also greater in males (–2.5% per year) than females (–1.2% per year) [Table 1; Figure 1].

There was a marked reduction in the ASR for smoking-caused deaths, from 106 deaths per 100,000 population in 1991 to 95 in 1996. This is a significant reduction of an average of –2.4% per year (males –3.1% per year; females –1.2% per year) [Table 1; Figure 2].

Figure 1: Age-standardised rates for all drug-caused deaths, by sex and year, Western Australia 1985-1996, and Australia 1991-1996

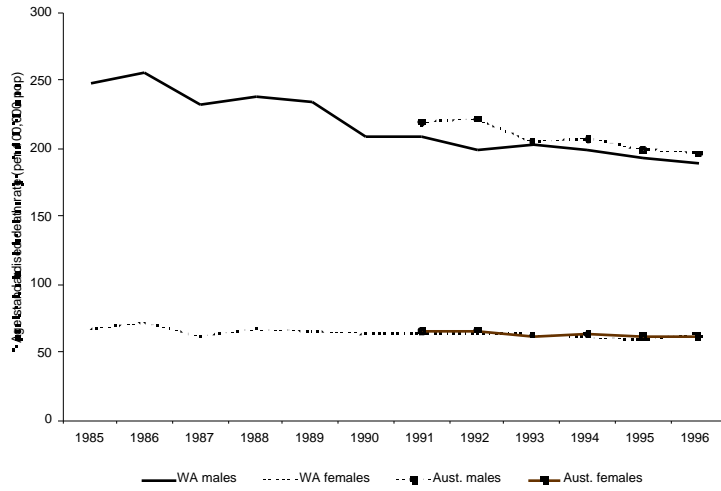


Figure 2: Age-standardised rates for tobacco-caused deaths, by sex and year, Western Australia 1985-1996, and Australia 1991-1996

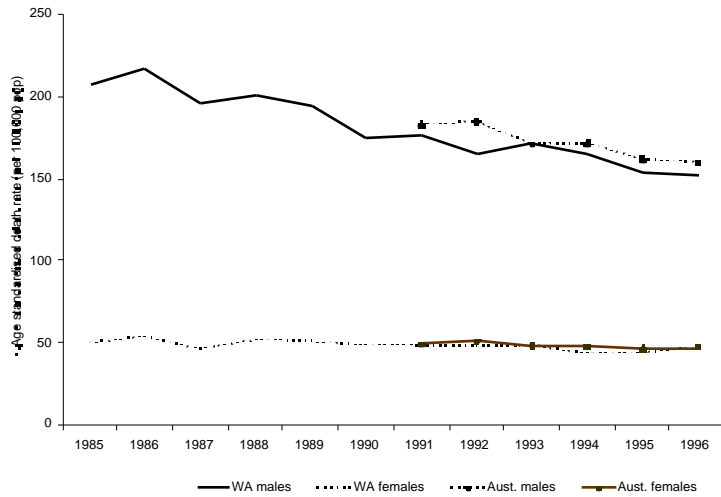
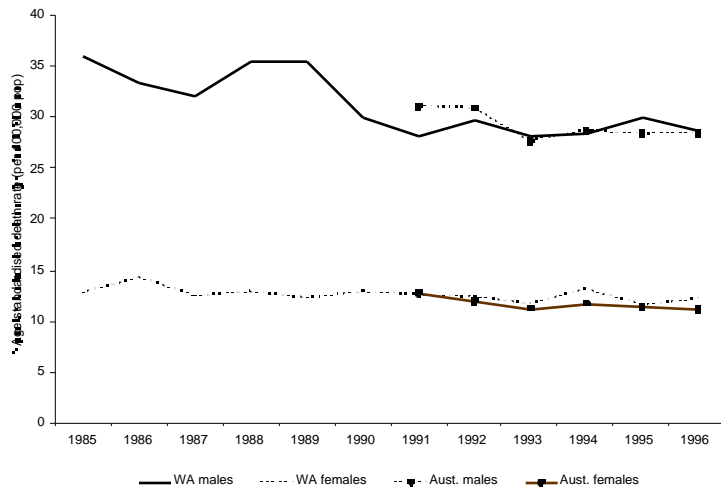


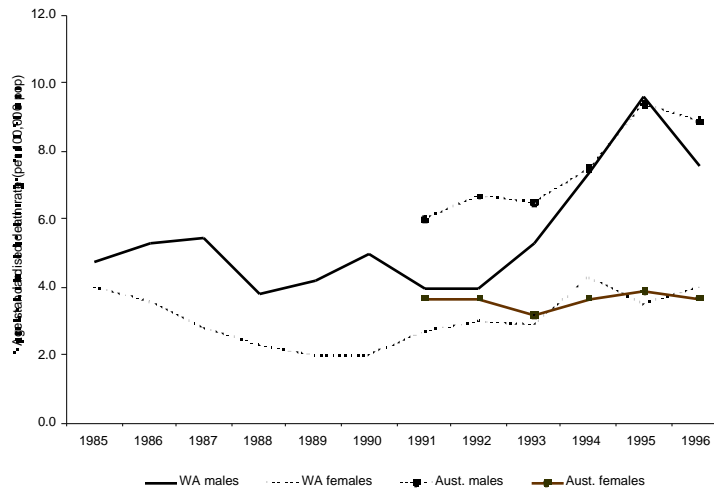
Figure 3: Age-standardised rates for alcohol-caused deaths, by sex and year, Western Australia 1985-1996, and Australia 1991-1996



The ASR for alcohol-caused deaths dropped from 22 deaths per 100,000 population in 1991 to 20 in 1996, a significant change of an average of -2.0% per year (males -1.9% per year; females -2.1% per year) [Table 1; Figure 3].

In contrast to the changes in the ASRs for tobacco and alcohol, the ASR for deaths caused by other drugs increased, from 4.8 deaths per 100,000 population in 1991 to 6.3 in 1996. This is a significant increase of an average of 6.6% per year. However, the change was only significant in males (9.5%) [Table 1; Figure 4].

Figure 4: Age-standardised rates for other drug-caused deaths, by sex and year, Western Australia 1985-1996, and Australia 1991-1996



3.3 Age pattern of deaths

3.3.1 Western Australia

Nearly half (48%) of all deaths caused by drug use in WA occurred among people aged 70 years or older, with the proportion of deaths in that age group increasing slightly over the period 1985 to 1996. Only 16% of drug-caused deaths occurred among people under 50 years of age [Appendix Table B5].

The age pattern for drug-caused deaths differed with the type of drug [Appendix Tables B5 & B6]. The age-specific rates for tobacco-caused deaths increased with age, rising rapidly after the age of 45 years to peak in those aged 85 years and over. The age-specific rates for alcohol-caused deaths showed a minor peak in those aged 20 to 24 years then, from middle age, began to rise steadily, peaking in the oldest age group. However, for deaths attributable to drugs other than alcohol and tobacco, the age-specific rates were highest in young people, particularly those between the ages of 25 and 34 years.

3.3.2 Australia

Just over half (51%) of all deaths caused by drug use in Australia occurred among people aged 70 years or older, with the proportion of deaths in that age group increasing slightly over the period 1991 to 1996. Only 14% of drug-caused deaths occurred among people under 50 years of age [Appendix Table B7].

The age pattern for drug-caused deaths in Australia followed that for WA [Appendix Tables B6 & B7].

3.4 Person years of life lost (PYLL)

Annually, there were an average of 16,116 PYLL caused by drugs in WA, and 171,883 in Australia. There were nearly three times as many PYLL caused by drugs among males than females [Table 2].

Table 2: Estimated number of drug-caused person years of life (to age 69), by sex and drug type

Western Australia and Australia, 1991-1996

Drug type		Males		Females		Persons	
		WA	Australia	WA	Australia	WA	Australia
Tobacco	Total PYLL	32,224	357,052	12,112	138,457	44,560	497,740
	PYLL/death	4.8	4.4	5.0	4.6	4.9	4.5
	% all cause	11.8	12.4	8.6	9.0	10.8	11.3
Alcohol	Total PYLL	27,010	262,589	8,191	75,490	35,404	340,755
	PYLL/death	20.0	17.6	12.5	10.4	17.6	15.4
	% all cause	9.9	9.1	5.8	4.9	8.6	7.7
Other drugs	Total PYLL	11,150	127,898	4,861	55,497	16,072	184,423
	PYLL/death	33.3	32.1	27.3	28.1	31.4	30.9
	% all cause	4.1	4.4	3.4	3.6	3.9	4.2
All drugs	Total PYLL	71,245	756,581	25,341	270,718	96,698	1,031,297
	PYLL/death	8.5	7.6	7.7	6.9	8.3	7.4
	% all cause	26.1	26.2	18.0	17.7	23.4	23.4
All cause	Total PYLL	273,218	2,884,565	140,911	1,531,171	413,715	4,415,735
	PYLL/death	8.2	7.3	5.0	4.4	6.7	5.9

Proportion of all cause PYLL due to drugs

About 19% of all deaths and 23% (males 26%; females 18%) of all PYLL were drug-caused in both WA and Australia. The differences by drug type were:

- 15% of all deaths were due to smoking, yet only 11% of all PYLL were tobacco-caused.
- 3% of all deaths were due to alcohol, but about 8% of all PYLL were alcohol-caused.
- Less than 1% of all deaths were due to the use of other drugs, but nearly 4% of all PYLL were caused by the use of other drugs.

Number of PYLL per death

The number of drug-caused PYLL per death was about 20% higher than the all cause PYLL per death and higher for males than for females.

The number of tobacco-caused PYLL per death was lower than the all cause PYLL per death. This is because tobacco deaths are mainly caused by chronic diseases that take many years to develop, resulting in deaths in the elderly.

The number of alcohol-caused PYLL per death was about 2.5 times higher than the all cause PYLL per death, because many alcohol deaths result from injuries in young people. Also, the number of alcohol-caused PYLL per death were higher for males than females, reflecting that young males are most at risk from alcohol-caused injuries than young women.

The number of other drug-caused PYLL per death was about 4.7 times higher than the all cause PYLL per death. This is because deaths due to the use of other drugs are often the result of experimentation with drugs among young people.

3.5 Summary of smoking-caused deaths

3.5.1 Western Australia

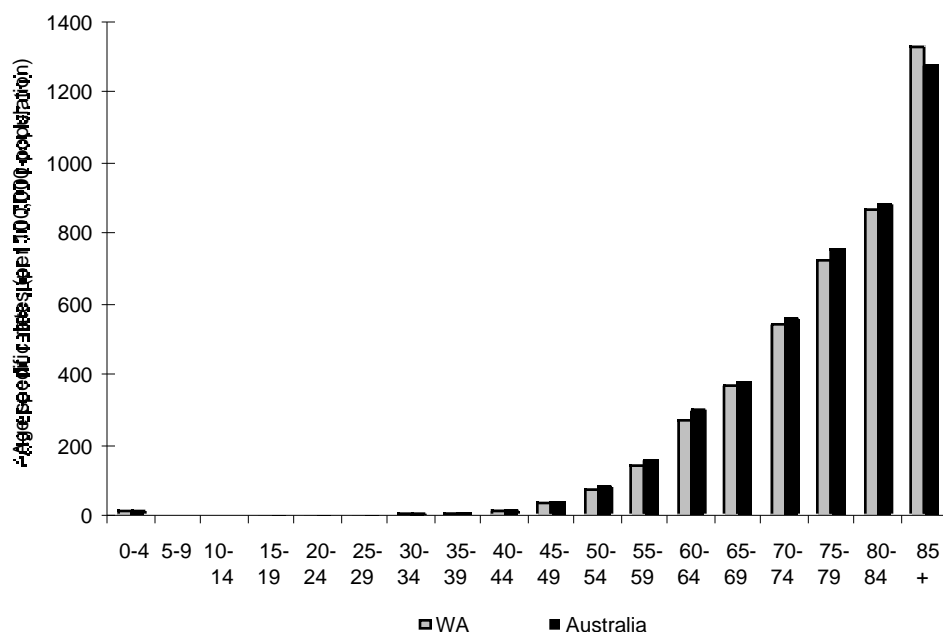
Tobacco smoking was responsible for an estimated 18,019 deaths (79% of all drug-caused deaths) in Western Australia from 1985 to 1996, an average of 1,502 deaths each year. There were nearly three times as many male deaths due to tobacco smoking than female deaths.

The ASRs for smoking-caused deaths decreased significantly by an average of -2.6% per year over the period 1985 to 1996: males by -3.2% per year, and females by -1.1% per year [Table 1; Figure 2]. Reflecting the greater decrease among males, the male:female rate ratio decreased from 4.1 in 1985 to 3.2 in 1996 [Appendix Table B4].

The estimated number of smoking-caused deaths increased with age. Eighty-one per cent of deaths due to smoking were among people aged 60 years and over, and 55% occurred among those aged 70 years and over [Appendix Table B8].

Age-specific death rates among those aged 85 years and above were higher in WA compared with Australia, but lower for most of the other age groups [Appendix Table B6; Figure 5].

Figure 5: Age-specific rates of smoking-caused deaths, by age group, Western Australia, and Australia 1991-1996



3.5.2 Australia

Tobacco smoking was responsible for an estimated 111,176 deaths (80% of all drug-caused deaths) in Australia from 1991 to 1996, an average of 18,529 deaths each year. There were 2.7 times as many male deaths due to tobacco smoking than female deaths.

The ASRs for smoking-caused deaths decreased significantly by an average of -2.4% per year over the period 1991 to 1996: males by -3.1% per year, and females by -1.2% per year [Table 1; Figure 2]. Reflecting the greater decrease among males, the male:female rate ratio decreased from 3.7 in 1991 to 3.3 in 1996 [Appendix Table B4].

The estimated number of smoking-caused deaths increased with age. Eighty-three per cent of deaths due to smoking were among people aged 60 years and over, and 58% occurred among those aged 70 years and over [Appendix Table B8; Figure 5].

3.6 Summary of alcohol-caused deaths

3.6.1 Western Australia

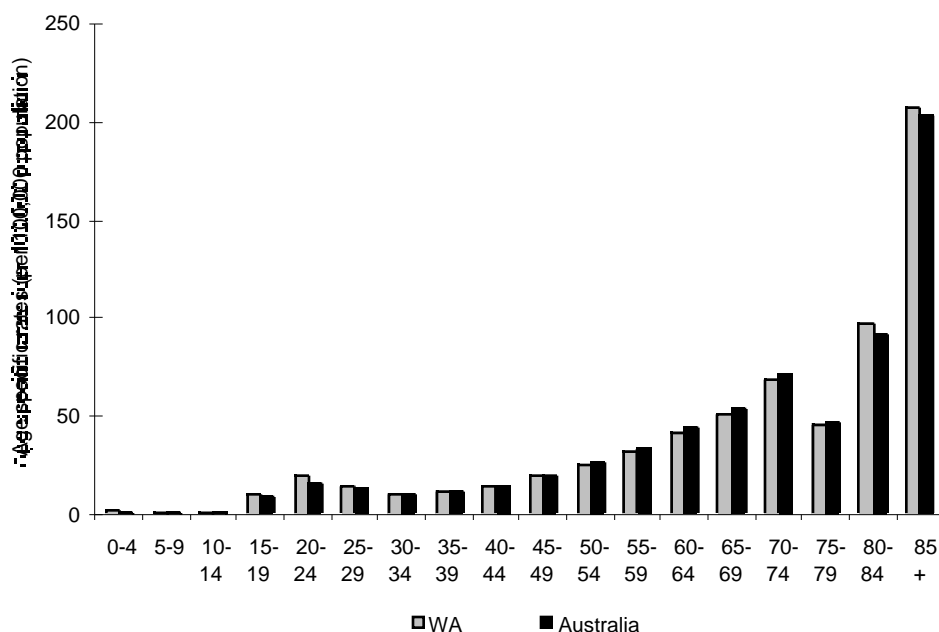
Alcohol consumption was responsible for an estimated 3,959 deaths (17% of all drug-caused deaths) in Western Australia from 1985 to 1996, an average of 330 deaths each year. There were more than twice as many male deaths due to alcohol use than female deaths.

The ASRs for alcohol-caused deaths decreased by an average of -1.8% per year over the period 1985 to 1996 (males -2.2% per year; females no significant change) [Table 1; Figure 3]. The male:female rate ratio decreased from 2.8 in 1985 to 2.4 in 1996 [Appendix Table B4].

The estimated number of alcohol-caused deaths increased steadily with age, apart from a minor peak among 20 to 29 year olds [Figure 6]. Twenty-eight percent of alcohol-caused deaths occurred among people aged 70 years and over, but the proportion of female deaths in this age group (46%) was much higher than the proportion of male deaths (20%). Deaths among people under the age of thirty accounted for 24% of alcohol-caused deaths in males and 12% of alcohol-caused deaths in females [Appendix Table B9].

Age-specific death rates among the young (less than 25 years) and the elderly (80 years and above) were slightly higher in WA compared with Australia, but lower for the other age groups [Appendix Table B6; Figure 6].

Figure 6: Age-specific rates for alcohol-caused deaths, by age group, Western Australia, and Australia 1991-1996



3.6.2 Australia

Alcohol consumption was responsible for an estimated 22,163 deaths (16% of all drug-caused deaths) in Australia from 1991 to 1996, an average of 3,694 deaths each year. There were twice as many male deaths due to alcohol use than female deaths.

The ASRs for alcohol-caused deaths decreased by an average of -2.0% per year over the period 1991 to 1996 (males -1.9% per year; females -2.1%) [Table 1; Figure 3]. The male:female rate ratio increased from 2.4 in 1991 to 2.6 in 1996 [Appendix Table B4].

The estimated number of alcohol-caused deaths increased steadily with age, apart from a minor peak among 20 to 24 year olds [Figure 6]. Nearly a third of alcohol-caused deaths occurred among people aged 70 years and over, but the proportion of female deaths in this age group (51%) was much higher than the proportion of male deaths (23%). Deaths among people under

the age of thirty accounted for 19% of alcohol-caused deaths in males and 9.3% of alcohol-caused deaths in females [Appendix Table B9].

3.7 Summary of deaths caused by the use of other drugs

3.7.1 Western Australia

The use of drugs other than alcohol and tobacco was responsible for an estimated 862 deaths (3.8% of all drug-caused deaths) in Western Australia from 1985 to 1996, an average of 72 deaths each year. There were 1.8 times as many male deaths due to other drug use than female deaths.

Although the ASRs for deaths caused by other drug use are low, they increased dramatically over the 12-year period, especially between 1992 to 1995. The ASR for deaths caused by other drugs increased significantly by an average of 4.8% per year between 1985 and 1996. However, the change was only significant in males (6.2%) [Table 1; Figure 4]. Reflecting the greater increase in male rates, the male:female rate ratio increased from 1.2 in 1985 to 2.7 in 1995, dropping to 1.9 in 1996 [Appendix Table B4].

In contrast to deaths caused by tobacco smoking and alcohol use, deaths resulting from the use of other drugs had the greatest impact on people aged between 20 and 39 years. Of the 862 deaths caused by the use of other drugs, 61% were among people in this age group, compared with only 4.3% among people aged 70 years and over.

Among 20 to 39 year olds there was a higher proportion of male deaths due to other drugs compared with females (67% of male deaths; 49% of female deaths). However, among those aged 40 years and above, there was a higher proportion of female deaths due to other drugs compared with males (27% of male deaths; 49% of female deaths) [Appendix Table B10].

The differences in the age patterns for male and female deaths due to other drugs is largely because of the types of drugs used. Opiates, a drug mainly used by young males (Makkai & McAllister 1998^b), were responsible for 54% of male deaths due to other drugs and 30% of female deaths. Deaths due to the use of tranquillisers, sedatives and anti-depressants, drugs which are more commonly used by older women (Makkai & McAllister 1998^b), accounted for 8.8% of male deaths and 21% of female deaths due to other drugs. Other or unspecified drugs accounted for a quarter of male deaths and 40% of female deaths [Appendix Table B11].

Age-specific rates for deaths due to other drugs were lower in WA compared with Australia for most age groups [Appendix Table B6; Figure 7].

3.7.2 Australia

The use of drugs other than alcohol and tobacco was responsible for an estimated 5,963 deaths (4.3% of all drug-caused deaths) in Australia from 1991 to 1996, an average of 994 deaths each year. There were twice as many male deaths due to other drug use than female deaths.

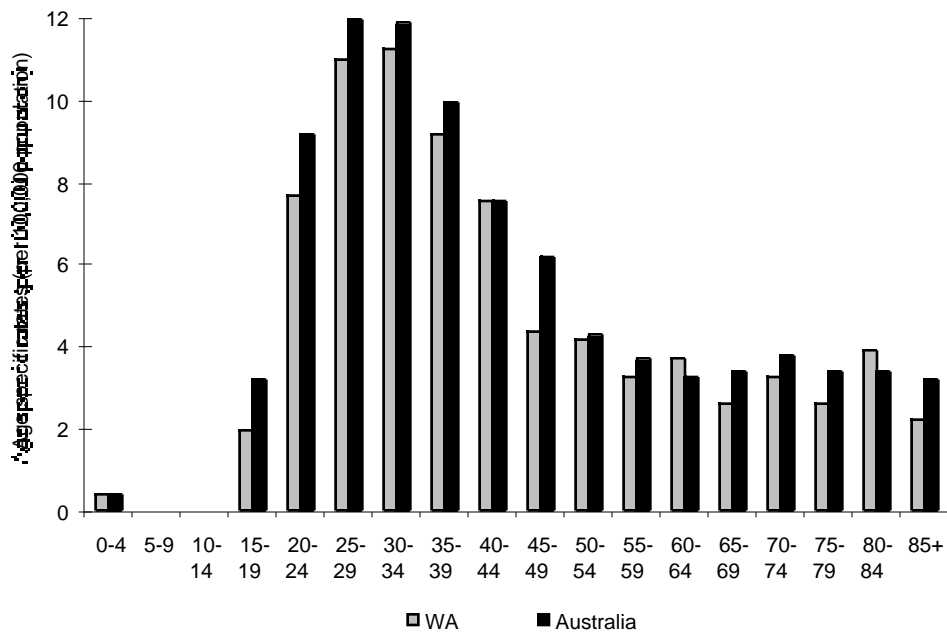
Although the ASRs for deaths caused by other drug use are low, they have increased over the six-year period, especially since 1993. The ASR for deaths caused by other drugs increased significantly by an average of 6.6% per year between 1991 and 1996. However, the change was only significant in males (9.5%) [Table 1; Figure 4]. Reflecting the greater increase in male rates, the male:female rate ratio increased from 1.6 in 1991 to 2.4 in 1996 [Appendix Table B4].

In contrast to deaths caused by tobacco smoking and alcohol use, deaths resulting from the use of other drugs had the greatest impact on people aged between 20 and 39 years [Figure 7]. Of the 5,963 deaths caused by the use of other drugs, 61% were among people in this age group, compared with only 5% among people aged 70 years and over.

Among 20 to 39 year olds there was a higher proportion of male deaths due to other drugs compared with females (67% of male deaths; 49% of female deaths). However, among those aged 40 years and above, there was a higher proportion of female deaths due to other drugs compared with males (28% of male deaths; 46% of female deaths) [Appendix Table B10].

The proportion of deaths due to other drugs caused by opiates was higher than for WA (males 63%; females 40%), while the proportion due to the use of tranquillisers, sedatives and anti-depressants was lower (males 4.2%; females 8.7%). Other or unspecified drugs accounted for nearly a quarter of male deaths and 42% of female deaths due to other drugs [Appendix Table B12].

Figure 7: Age-specific rates for deaths due to other drugs, by age group, Western Australia, and Australia 1991-1996



4 Discussion

Tobacco smoking and alcohol abuse are the largest sources of preventable mortality and morbidity in Australia. Although annual mortality rates for alcohol and tobacco-caused deaths decreased over the periods studied, there were still over 22,000 deaths per year attributable to these drugs in Australia (96% of all drug-caused deaths or 18% of all-cause deaths). While the number of deaths from other drugs (nearly 1,000 per year nationally) was small in comparison to alcohol and tobacco, a worrying trend is that death rates due to other drugs increased, by an average of 6.6% per year nationally (1991-1996), and by 4.8% per year in WA (1985-1996). The patterns and trends of drug-caused mortality in WA and Australia were shown in this report to be similar.

Costs

Despite encouraging trends in tobacco and alcohol-caused mortality, there has been no corresponding fall in the social cost of drug abuse from these drugs. The social cost of drug abuse in Australia during 1992 was conservatively estimated at \$18.8 billion, 27% higher than in 1988 (Collins & Lapsley 1996). As patterns and trends of drug-caused mortality in WA are very similar to Australia, the cost of drug abuse in WA can be roughly estimated at about 10% of this total,⁶ or \$1.88 billion per year.

Tobacco was found to be the most costly drug, incurring more than 67% of costs, whilst alcohol represented 24%, and illicit drugs less than 9% of the total costs. The cost of drug use can be separated into avoidable and unavoidable costs.⁷ Based on data from 1992, it was estimated that 53% of the cost of drug abuse could be eliminated by appropriate public policies. Alcohol had the highest proportion of avoidable costs (84%), followed by tobacco (45%), and illicit drugs (29%) (Collins & Lapsley 1996).

Age patterns

The pattern of age specific death rates differed according to the drug of use. Long term smoking results in chronic conditions (such as lung cancer) which have long latent periods and so cause death in elderly people. Long term alcohol abuse also causes chronic diseases that take a long time to develop and affect older people (such as alcoholic liver cirrhosis). However, nearly a fifth of alcohol-caused deaths occur in young people, particularly males, under the age of 30. These deaths are usually the result of injuries caused by intoxication. Deaths caused by other drug use are usually the result of short-term drug abuse by young adults, and as a consequence, over a third of such deaths occur in young people under the age of 30. Over 70% of deaths due to other drugs in this age group were caused by opioids.

These age differences are reflected in the PYLL. Although, tobacco caused nearly half of all drug-caused PYLL, alcohol about a third, and other drugs nearly a fifth, when the number of PYLL per death were calculated the importance of the different drugs was reversed. People who died from other drugs lost, on average, about 31 years of life, twice as many as people who died from alcohol-caused conditions, and about six times the average number of PYLL per tobacco-caused death.

Prevalence of use

In 1945, nearly three-quarters of Australian males and about a quarter of Australian females smoked. Since then the gender gap in smoking prevalences has been declining, until by 1995 the proportions were 30% and 25% respectively (Makkai & McAllister 1998^b). In WA, 25% of males and 22% of females smoked in 1995 (Unwin 1996^b). Although the prevalence of smoking among males has been declining since 1945 and since 1976 for females (Winstanley

⁶ Based on the proportion of the Australian population living in WA.

⁷ Unavoidable costs comprise costs relating to past drug use, plus the costs of future drug use, as it will never be

et al 1995), recent studies (Hill et al 1998; Mullins 1996) suggest that this downward trend in smoking prevalence has been arrested.

Although more people use alcohol regularly than any other drug, the proportion of non-drinkers in Australia has been steadily rising from around 15% in 1988 to about 20% in 1995. Also, the proportion of people reporting harmful or hazardous drinking patterns has declined slightly over this period (Makkai & McAllister 1998^b).

It is difficult to estimate the prevalence of illicit drug use by virtue of the fact that it is illegal, however some surveys have tried to quantify illicit drug use. The 1995 National Drug Strategy (NDS) survey found that cannabis, the most widely used drug after tobacco and alcohol, was used by 31% of the population, and that 13% of the population were recent users (Commonwealth Department of Health and Family Services (CDHFS) 1996). This is much higher than the prevalence for other illicit drugs, which generally have ever-tried rates of less than 5% and recent use rates of less than 2%. The same survey reported that 1.4% of the population had used heroin and 0.4% of the population were recent heroin users.

Government policies and public opinion

In 1985 the National Campaign Against Drug Abuse (NCADA) was introduced. The NCADA was designed to provide information and heighten public awareness about the harmful effects of drugs, particularly tobacco and alcohol. At the same time, the Commonwealth government initiated the NDS surveys which were designed to monitor changes in: public opinion towards drug policies; patterns of licit and illicit drug use in the population; and health beliefs and general awareness of available drug services and information (Makkai & McAllister 1998^a).

Public opinion towards the policy options for tobacco and alcohol are complicated by the fact that nearly a quarter of the population are regular smokers, and a large majority use alcohol on a regular basis. Since the NDS surveys began in 1985, Australians have consistently defined the 'drug problem' as predominantly an illicit drug problem. In 1995, when asked what drugs they thought of when people talked about 'a drug problem', 30% of respondents said heroin and 29% mentioned cannabis. Furthermore, only 38% of the population correctly recognised tobacco as being the major cause of drug-caused deaths in Australia (Makkai & McAllister 1998^a).

Since the inception of the NCADA there have been policy changes associated with some of the major drugs. These have included: public debate about the role of advertising in alcohol and tobacco use; introduction of the 0.05% blood alcohol concentration legislation for drivers in WA; tougher restrictions on public smoking; and public debates (and legislative changes in SA and the ACT) about the decriminalisation of marijuana. Health campaigns designed to reduce licit drug use have provided information about the safe levels of alcohol use for men and women and resources available to assist with quitting smoking. This has led to shifts in popular perceptions about which drugs constitute the most serious problems in the general community. In 1985, heroin was cited by 41% of respondents as being of most concern to the general community, but by 1995 the proportion had dropped to 11% and most people (31%) thought excessive alcohol use was the most serious problem in the community. Smoking was thought to be a community problem by only 6% of people in 1985, but by 1995 this proportion had risen to 23% (Makkai & McAllister 1998^a).

Other government initiatives related to drugs include: the National Health Policy on Tobacco in Australia (1991); the National Alcohol Action Plan (1995); and a new policy which is currently being formulated, the National Alcohol Strategic Plan. Last year, both the Federal and WA State governments released drug strategies. The national *Tough on Drugs* initiative targets illicit drugs, and the WA government's *Together Against Drugs* targets abuse of both legal and illegal drugs.

Medicinal drugs

Medicinal drugs can also be dangerous in certain circumstances. Concern about prescribed drugs has recently resulted in the formation of a National Prescribing Service to help control all aspects of the health care system, including education, research and services. Australian doctors

prescribe a script in two out of every three consultations, resulting in more than 180 million scripts a year, or about ten scripts per person per year. This costs taxpayers about \$2.5 billion per year in government subsidies (Malakunas 1998). Hospital admissions caused by adverse drug reactions have been estimated to cost between \$55 million and \$65 million each year and about 80% of these are avoidable (Hallstone 1998). In the USA, adverse drug reactions are thought to be responsible for the deaths of more than 100,000 hospital patients per year (Lazarou et al 1998).

Opioid-caused deaths more than doubled in Australia between 1991 and 1996. While some of this increase may be due to a rise in heroin overdoses, the medicinal use of oral opioids in Australia has more than trebled over the last decade (Bell 1997).

Over the counter drugs are also being used at alarmingly high rates. In a recent study of Queensland school children, 34% of Year 7 students had used painkillers in the past week. By Year 12, more than half the female students and 28% of male students had used painkillers in the past week (Aldred 1998).

Conclusion

Because illicit drug abuse harms mainly young people and is associated with criminal activities, illicit drugs are perceived by the majority of the public to be 'the drug problem'. However, in this report, drugs other than alcohol and tobacco were found to cause only 4% of drug-related deaths (less than 1% of all-cause deaths) and be responsible for less than 9% of the social costs of drug abuse. Alcohol was responsible for more deaths in young people (under 30 years) than all the other drugs put together.

Government policies need to continue to address a broad range of issues and drug types, including closer regulation of legal prescription and over the counter drugs, in addition to illicit drugs. Despite the apparent downward trend in mortality associated with tobacco and alcohol, these drugs are still responsible for high social costs and considerable mortality and morbidity. This suggests that strategies highlighting the negative impact of tobacco and alcohol on health need to be maintained.

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Appendix A:

The aetiologic fraction methodology

The aetiologic fractions method involves applying sex-, age-, and condition-specific fractions to the number of deaths from drug-related conditions. Some conditions are wholly attributable to the use of drugs, for example, alcoholic liver cirrhosis. In these cases, all deaths coded to these conditions will be directly caused by drug use, and the aetiologic fractions are 1.0.

However, most conditions cannot be attributed wholly to the use of drugs. In these cases, an indirect estimate of drug-caused mortality is obtained by applying the aetiologic fraction (which is less than 1.0) to the number of deaths from a particular condition. For example, 23% of male deaths from fire injuries can be attributed to cigarette smoking. By applying the aetiologic fraction (0.23) to the number of male deaths resulting from fire injuries (e.g. 100) we estimate that 23 of such deaths could be attributed to cigarette smoking.

The estimated numbers of deaths caused (or prevented⁸) by a drug were calculated by multiplying the number of sex- and age-specific deaths for each drug-related condition by the corresponding aetiologic fraction.

Tobacco

Apart from perinatal conditions, fire injuries, sudden infant death syndrome (SIDS), and tobacco abuse it is assumed that tobacco smoking does not cause deaths in children.

Five causes of death associated with smoking are specific to females: endometrial cancer, cervical cancer, vulvar cancer, ectopic pregnancy, and spontaneous abortion. A further four conditions: antepartum haemorrhage, hypertension in pregnancy, low birthweight, and premature rupture of membranes, are specific to females between the ages of 10 and 54, but fractions are applied to babies of both sexes. Penile cancer is the only condition specific to males.

Only one tobacco-caused condition, tobacco abuse, is wholly attributable to smoking.

Smoking is thought to have a protective effect against developing Parkinson's disease and ulcerative colitis (for younger people) for both males and females, and endometrial cancer and hypertension in pregnancy for females. The aetiologic fractions for these conditions are negative.

Alcohol

The main difference between the 1990 and 1995 methodologies relates to the aetiologic fractions for alcohol consumption. The revised 1995 methodology estimates the effects of hazardous and harmful alcohol consumption⁹ relative to low alcohol consumption, whereas the former model used abstinence as the reference category.

There are a number of alcohol-related conditions that are thought to cause deaths in children. These are: alcoholic psychosis, alcohol dependence, alcohol abuse, alcoholic polyneuropathy, alcoholic cardiomyopathy, alcoholic gastritis, alcoholic liver cirrhosis, road injuries, alcoholic poisoning, assault, child abuse and drowning.

The only alcohol-related cause of death specific to females is breast cancer.

A number of conditions are considered wholly attributable to alcohol use and have aetiologic fractions of 1.0. These are: alcoholic psychosis, alcohol dependence, alcohol abuse, alcoholic polyneuropathy, alcoholic cardiomyopathy, alcoholic gastritis, alcoholic liver cirrhosis, ethanol toxicity, methanol toxicity, alcoholic poisoning, other ethanol/methanol poisoning, and aspiration.

⁸ Some drugs are thought to have a protective effect against developing certain conditions. For these the aetiologic fractions are negative.

⁹

High alcohol consumption is considered to provide a protective effect against cholelithiasis for males and females, and a slight protective effect against stroke for females aged 75 to 79 years. The aetiologic fractions for these conditions are negative.

Other drugs

The 1995 methodology includes aetiologic fractions for the following groups of illicit drugs: cannabis; opiates; stimulants; hallucinogens; and anabolic steroids. To avoid underestimating mortality due to drugs other than alcohol and tobacco, and to be consistent with an earlier report (Unwin 1996a), the aetiologic fractions in this section were extended to include licit drugs, such as barbiturates, anti-depressants, sedatives, tranquillisers, and volatile substances.

The only conditions related to other drug use that are thought to cause death in children are low birthweight and newborn drug toxicity.

Two causes of death associated with other drug use are specific to females: antepartum haemorrhage and maternal drug toxicity. Low birthweight is specific to females between the ages of 25 and 39 years, but fractions are applied to babies of both sexes.

Most of the conditions connected with the use of these drugs are wholly attributable, but conditions such as antepartum haemorrhage, low birthweight, hepatitis, AIDS, and infective endocarditis have aetiologic fractions less than 1.0.

Table A5 Estimated age-specific aetiologic fractions of conditions in Australian males caused by other drug use

ICD9 codes	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Cause of death
304.3				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cannabis dependence
305.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cannabis abuse
304.0,304.7				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Opiate dependence
305.5				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Opiate abuse
E850.0-E850.2,E850.8				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.-opiates
E950.0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Suicide - opiates
E980.0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Poisoning - opiates
304.4				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Amphetamine dependence
305.7				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Amphetamine abuse
E854.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.-psychostimulants
304.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cocaine dependence
305.6				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cocaine abuse
640,641																			Antepartum haemorrhage
656.5,764,765	0.02																		Low birthweight
E855.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.-local anaesthetic
304.5				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Hallucinogen dependence
305.3				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Hallucinogen abuse
E854.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.-hallucinogens
304.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Barbiturate dependence
E851				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.-barbiturates
E950.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Suicide - barbiturates
E980.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Poisoning - barbiturates
305.8				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Antidepressant abuse
E852				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.- other sedatives
E853				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.- tranquilisers
E854.0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.- antidepressants
E950.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Suicide - other sedatives
E980.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Poisoning - other sedatives
304.6				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Vol. substance dependence
E862.0.,1.,4.,9,E866.6				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.- vol.substances
E951.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Suicide - vol.substances
E981.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Poisoning - vol.substances
304.8,304.9				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Dependence-comb/unspec.drugs
305.4				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Abuse-barb/sed/hypnotic drugs
305.9				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Other/unspec.drug abuse
E850.3-E850.7,E850.9				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.- other drugs
E950.3-E950.5				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Suicide - other drugs
E962.0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Assault by pois.with drugs
E980.3-E980.5				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Poisoning - other/unspec.drugs
070.2-070.3				0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	Hepatitis B
070.4-070.5				0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	Hepatitis non-A, non-B
279.1,042-044				0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	AIDS/HIV
421				0.14	0.14	0.14	0.14	0.14											Infective endocarditis
292				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Drug psychoses
648.3																			Maternal drug dependence
760.72-760.73,779.5	1																		Newborn drug toxicity.

Table A6 Estimated age-specific aetiologic fractions for conditions in Australian females caused by other drug use

ICD9 codes	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Cause of death
304.3				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cannabis dependence
305.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cannabis abuse
304.0,304.7				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Opiate dependence
305.5				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Opiate abuse
E850.0-E850.2,E850.8				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.-opiates
E950.0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Suicide - opiates
E980.0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Poisoning - opiates
304.4				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Amphetamine dependence
305.7				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Amphetamine abuse
E854.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.-psychostimulants
304.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cocaine dependence
305.6				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cocaine abuse
640,641				0.02	0.03	0.04		0.01											Antepartum haemorrhage
656.5,764,765	0.02			0.01	0.02	0.03		0.01											Low birthweight
E855.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.-local anaesthetic
304.5				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Hallucinogen dependence
305.3				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Hallucinogen abuse
E854.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.-hallucinogens
304.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Barbiturate dependence
E851				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.-barbiturates
E950.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Suicide - barbiturates
E980.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Poisoning - barbiturates
305.8				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Antidepressant abuse
E852				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.- other sedatives
E853				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.- tranquilisers
E854.0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.- antidepressants
E950.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Suicide - other sedatives
E980.2				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Poisoning - other sedatives
304.6				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Vol. substance dependence
E862.0.,1.,4.,9,E866.6				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.- vol.substances
E951.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Suicide - vol.substances
E981.1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Poisoning - vol.substances
304.8,304.9				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Dependence-comb/unspec.drugs
305.4				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Abuse-barb/sed/hypnotic drugs
305.9				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Other/unspec.drug abuse
E850.3-E850.7,E850.9				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Acc.pois.- other drugs
E950.3-E950.5				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Suicide - other drugs
E962.0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Assault by pois.with drugs
E980.3-E980.5				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Poisoning - other/unspec.drugs
070.2-070.3				0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	Hepatitis B
070.4-070.5				0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	Hepatitis non-A, non-B
279.1,042-044				0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	AIDS/HIV
421				0.14	0.14	0.14	0.14	0.14											Infective endocarditis
292				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Drug psychoses
648.3				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Maternal drug dependence
760.72-760.73,779.5	1																		Newborn drug toxicity

Table B1: Estimated numbers of drug-caused deaths, by year, sex and drug type*Western Australia, 1985-1996*

Sex/drug	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1985-96
Males													
Tobacco	1,058	1,172	1,089	1,147	1,146	1,077	1,116	1,072	1,148	1,136	1,105	1,120	13,386
Alcohol	227	221	218	242	253	214	208	224	217	223	240	239	2,727
Other drugs	35	40	43	31	35	41	34	35	46	65	85	70	560
All drugs	1,321	1,433	1,350	1,421	1,434	1,332	1,358	1,330	1,411	1,423	1,430	1,429	16,673
All cause	5,037	5,343	5,144	5,456	5,360	5,261	5,331	5,492	5,744	5,686	5,711	6,099	65,664
% drug-caused	26.2	26.8	26.2	26.0	26.8	25.3	25.5	24.2	24.6	25.0	25.0	23.4	25.4
Females													
Tobacco	335	372	331	384	392	383	392	399	416	386	396	448	4,633
Alcohol	85	100	90	97	97	106	103	106	103	119	109	117	1,232
Other drugs	27	26	20	18	16	17	22	26	26	37	31	37	303
All drugs	448	498	441	498	505	505	518	530	545	541	535	602	6,167
All cause	4,003	4,157	3,930	4,237	4,356	4,345	4,424	4,678	4,745	4,777	4,853	5,153	53,658
% drug-caused	11.2	12.0	11.2	11.8	11.6	11.6	11.7	11.3	11.5	11.3	11.0	11.7	11.5
Persons													
Tobacco	1,393	1,544	1,420	1,531	1,538	1,460	1,508	1,471	1,564	1,521	1,501	1,569	18,019
Alcohol	313	321	308	339	350	320	311	329	320	342	349	357	3,959
Other drugs	62	66	63	49	51	58	57	61	71	101	116	106	862
All drugs	1,768	1,930	1,791	1,919	1,939	1,838	1,876	1,861	1,956	1,965	1,966	2,032	22,840
All cause	9,040	9,500	9,074	9,693	9,716	9,606	9,755	10,170	10,489	10,463	10,564	11,252	119,322
% drug-caused	19.6	20.3	19.7	19.8	20.0	19.1	19.2	18.3	18.6	18.8	18.6	18.1	19.1

Table B2: Estimated numbers of drug-caused deaths, by drug type and year

Western Australia 1985-1996, Australia 1991-1996

Year	Wholly attributable deaths			Other deaths			Estimated total deaths			
	Tobacco	Alcohol	Other drugs	Tobacco	Alcohol	Other drugs	Tobacco	Alcohol	Other drugs	All Drugs
<i>Western Australia</i>										
1985	0	107	61	1,393	206	1	1,393	313	62	1,768
1986	0	109	64	1,544	212	2	1,544	321	66	1,930
1987	0	100	62	1,420	208	1	1,420	308	63	1,791
1988	0	116	47	1,531	223	2	1,531	339	49	1,919
1989	0	127	49	1,538	223	2	1,538	350	51	1,939
1990	0	101	56	1,460	219	2	1,460	320	58	1,838
1991	0	101	55	1,508	210	2	1,508	311	57	1,876
1992	0	109	59	1,471	220	2	1,471	329	61	1,860
1993	0	99	68	1,564	221	3	1,564	320	71	1,956
1994	0	109	98	1,521	233	3	1,521	342	101	1,965
1995	0	110	112	1,501	239	4	1,501	349	116	1,966
1996	0	117	101	1,569	240	5	1,569	357	106	2,032
1985-1996	0	1,305	832	18,019	2,654	30	18,019	3,959	862	22,840
<i>Australia</i>										
1991	0	1,206	805	18,287	2,553	30	18,287	3,759	835	22,881
1992	0	1,252	880	19,062	2,492	34	19,062	3,744	914	23,720
1993	0	1,073	805	18,202	2,415	53	18,202	3,488	858	22,549
1994	0	1,184	956	18,670	2,507	49	18,670	3,691	1,005	23,366
1995	0	1,209	1,139	18,246	2,516	60	18,246	3,725	1,199	23,170
1996	0	1,202	1,099	18,709	2,554	52	18,709	3,756	1,151	23,616
1991-1996	0	7,126	5,684	111,176	15,037	279	111,176	22,163	5,963	139,303

Note: 'Wholly attributable deaths' are the number of deaths from conditions for which the aetiologic fractions are equal to 1.0.
'Other deaths' are the estimated number of deaths from conditions for which the aetiologic fractions are not equal to 1.0.

Table B3: Estimated numbers of drug-caused deaths, by year, sex and drug type*Australia, 1991-1996*

Sex/drug	1991	1992	1993	1994	1995	1996	1991-96
Males							
Tobacco	13,485	13,957	13,265	13,642	13,260	13,448	81,058
Alcohol	2,536	2,563	2,338	2,457	2,484	2,540	14,917
Other drugs	519	582	572	670	839	804	3,986
All drugs	16,540	17,102	16,175	16,769	16,584	16,791	99,961
All cause	64,067	66,115	65,089	67,464	66,251	68,206	397,192
% drug-caused	25.8	25.9	24.9	24.9	25.0	24.6	25.2
Females							
Tobacco	4,801	5,105	4,937	5,028	4,985	5,261	30,119
Alcohol	1,223	1,181	1,150	1,234	1,241	1,217	7,246
Other drugs	317	332	286	335	360	347	1,977
All drugs	6,341	6,618	6,374	6,598	6,586	6,825	39,342
All cause	55,079	57,545	56,510	59,228	58,882	60,513	347,757
% drug-caused	11.5	11.5	11.3	11.1	11.2	11.3	11.3
Persons							
Tobacco	18,287	19,062	18,202	18,670	18,246	18,709	111,176
Alcohol	3,759	3,744	3,488	3,691	3,725	3,756	22,163
Other drugs	835	914	858	1,005	1,199	1,151	5,963
All drugs	22,881	23,720	22,549	23,366	23,170	23,616	139,303
All cause	119,146	123,660	121,599	126,692	125,133	128,719	744,949
% drug-caused	19.2	19.2	18.5	18.4	18.5	18.3	18.7

Table B4: Estimated age-standardised death rates, by year, sex and drug type

Sex / drug	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
<i>Western Australia</i>												
Males												
Tobacco	207	218	196	200	194	175	177	165	171	165	154	153
Alcohol	36	33	32	36	36	30	28	30	28	28	30	29
Other	4.8	5.3	5.5	3.8	4.2	5.0	4.0	4.0	5.3	7.4	9.6	7.6
All drugs	248	256	234	240	234	210	209	199	205	200	193	189
Females												
Tobacco	50	54	47	52	51	49	49	48	49	44	44	48
Alcohol	13	14	13	13	12	13	13	12	12	13	12	12
Other	4.0	3.6	2.8	2.3	2.0	2.0	2.7	3.0	2.9	4.3	3.5	4.0
All drugs	67	72	62	67	66	64	64	64	63	61	59	64
Persons												
Tobacco	117	124	110	115	112	103	104	98	101	96	92	93
Alcohol	24	24	22	24	24	21	20	21	20	21	21	20
Other	4.4	4.5	4.2	3.1	3.2	3.5	3.4	3.6	4.1	5.9	6.5	5.9
All drugs	146	153	137	142	140	128	127	123	125	122	119	119
<i>Australia</i>												
Males												
Tobacco	-	-	-	-	-	-	183	184	171	171	162	160
Alcohol	-	-	-	-	-	-	31	31	28	29	28	29
Other	-	-	-	-	-	-	6.0	6.7	6.5	7.5	9.4	8.9
All drugs	-	-	-	-	-	-	220	222	205	208	199	197
Females												
Tobacco	-	-	-	-	-	-	50	51	49	48	47	48
Alcohol	-	-	-	-	-	-	13	12	11	12	12	11
Other	-	-	-	-	-	-	3.7	3.7	3.2	3.7	3.9	3.7
All drugs	-	-	-	-	-	-	66	67	63	64	62	63
Persons												
Tobacco	-	-	-	-	-	-	106	108	100	100	96	95
Alcohol	-	-	-	-	-	-	22	21	19	20	20	20
Other	-	-	-	-	-	-	4.8	5.2	4.9	5.6	6.7	6.3
All drugs	-	-	-	-	-	-	132	134	125	126	122	121

Note: Age-standardised death rates were calculated using the Australian 1991 population as the standard. They are expressed per 100,000 population.

Table B5: Estimated numbers of drug-caused deaths, by year, age group and drug type

Western Australia, 1985-1996

Age group	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1985-1996
Tobacco													
0-9	19	21	24	25	20	26	22	14	17	13	13	16	231
10-19	0	1	1	0	1	0	2	0	1	0	1	1	9
20-29	10	3	5	4	7	7	5	5	5	3	4	4	62
30-39	11	20	19	16	17	20	15	18	27	17	16	18	213
40-49	52	57	65	63	62	62	59	52	56	65	62	67	721
50-59	199	203	188	184	187	172	187	166	171	172	171	161	2,159
60-69	359	431	371	423	421	422	391	387	399	375	373	372	4,723
70+	744	807	747	816	822	751	826	827	889	877	862	931	9,900
All ages	1,393	1,544	1,420	1,531	1,538	1,460	1,508	1,471	1,564	1,521	1,501	1,569	18,019
Alcohol													
0-9	3	6	4	3	5	2	3	5	5	4	4	3	48
10-19	16	16	15	21	20	17	14	16	14	17	14	13	195
20-29	50	44	40	51	51	52	49	49	40	42	44	47	559
30-39	30	16	31	28	28	29	26	30	33	34	33	35	353
40-49	32	38	35	38	32	27	43	31	37	39	46	51	449
50-59	51	64	44	39	49	39	39	53	38	48	42	43	549
60-69	56	63	58	63	69	61	55	62	60	53	56	48	703
70+	74	73	81	96	95	92	82	83	94	106	110	116	1,102
All ages	313	321	308	339	350	320	311	329	320	342	349	357	3,959
Other drugs													
0-9	0	0	0	1	0	0	0	0	0	0	0	1	5
10-19	1	3	8	3	4	3	2	1	4	4	2	2	37
20-29	25	21	17	16	12	10	20	18	15	31	33	33	254
30-39	15	20	10	15	16	20	16	22	23	30	44	35	269
40-49	9	7	13	5	3	12	4	9	12	20	21	23	141
50-59	4	3	8	3	8	6	7	4	8	7	5	4	68
60-69	4	5	3	5	6	5	3	4	3	5	5	4	51
70+	3	6	3	0	1	1	4	3	4	3	5	4	37
All ages	62	66	63	49	51	58	57	61	71	101	116	106	862
All drugs													
0-9	22	27	28	29	26	29	26	20	22	17	18	19	283
10-19	18	21	24	25	25	21	17	18	19	22	17	16	241
20-29	85	69	62	72	70	69	74	72	60	76	81	84	875
30-39	56	56	60	58	62	69	58	70	83	81	93	89	835
40-49	94	102	113	106	97	101	106	92	105	124	129	142	1,312
50-59	254	271	240	226	244	217	234	223	217	227	218	208	2,777
60-69	419	498	432	491	496	488	448	452	462	434	433	424	5,477
70+	821	886	832	912	919	844	912	913	987	985	977	1,051	11,039
All ages	1,768	1,930	1,791	1,919	1,939	1,838	1,876	1,861	1,956	1,965	1,966	2,032	22,840

Table B6: Estimated age-specific death rates, by drug type*Western Australia & Australia 1991-1996*

Age group	Tobacco		Alcohol		Other		All drugs	
	WA	Australia	WA	Australia	WA	Australia	WA	Australia
0-4	13	11	2	1.2	0.4	0.4	15	13
5-9	0.1	0.1	1.2	1.0	0	0.0	1.2	1.1
10-14	0.0	0.0	1.3	1.2	0	0.0	1.3	1.2
15-19	0.7	0.5	10	9.1	2	3.2	13	13
20-24	1.5	1.2	19	16	7.7	9.2	28	26
25-29	1.9	2.0	14	14	11	12	27	28
30-34	4.2	4.1	11	11	11	12	26	27
35-39	9.2	8.8	12	12	9.2	10	31	31
40-44	15	18	15	14	7.6	7.6	37	40
45-49	35	40	19	19	4.4	6.2	59	65
50-54	78	84	25	26	4.2	4.3	108	114
55-59	146	160	32	34	3.3	3.7	181	198
60-64	275	299	42	44	3.7	3.3	321	347
65-69	369	380	51	54	2.6	3.4	423	437
70-74	541	561	68	72	3.3	3.8	613	637
75-79	724	755	46	48	2.6	3.4	772	807
80-84	868	883	98	92	3.9	3.4	970	979
85+	1331	1274	208	203	2.2	3.2	1540	1481

Note: Age-specific death rates are expressed per 100,000 population.

Table B7: Estimated numbers of drug-caused deaths, by year, age group and drug type*Australia, 1991-1996*

Age group	1991	1992	1993	1994	1995	1996	1991-1996
Tobacco							
0-9	187	176	142	126	130	134	895
10-19	9	3	7	10	6	7	40
20-29	51	46	38	42	45	43	265
30-39	185	171	190	182	183	176	1,087
40-49	723	709	702	689	691	701	4,214
50-59	2,070	2,099	1,998	1,974	1,936	1,957	12,035
60-69	5,112	5,166	4,755	4,675	4,446	4,361	28,515
70+	9,951	10,692	10,370	10,972	10,808	11,332	64,125
All ages	18,287	19,062	18,202	18,670	18,246	18,709	111,176
Alcohol							
0-9	31	29	31	28	27	29	174
10-19	156	131	129	123	125	135	800
20-29	468	432	389	386	419	389	2,484
30-39	336	314	317	308	325	338	1,937
40-49	398	413	373	445	420	442	2,490
50-59	507	515	482	470	512	523	3,009
60-69	755	767	631	675	650	631	4,110
70+	1,108	1,143	1,135	1,256	1,248	1,269	7,158
All ages	3,758	3,744	3,488	3,691	3,725	3,756	22,163
Other drugs							
0-9	5	6	4	4	5	5	28
10-19	28	32	34	50	48	56	248
20-29	264	296	242	292	350	341	1,784
30-39	227	277	295	316	393	367	1,876
40-49	134	132	133	184	220	236	1,038
50-59	76	63	59	64	84	62	409
60-69	54	54	48	40	47	40	283
70+	48	54	44	55	53	44	298
All ages	835	914	858	1,005	1,199	1,151	5,963
All drugs							
0-9	222	211	177	157	162	167	1,097
10-19	193	166	170	183	179	198	1,088
20-29	783	774	669	720	814	772	4,533
30-39	748	762	802	807	901	882	4,900
40-49	1,255	1,254	1,207	1,317	1,331	1,379	7,742
50-59	2,653	2,678	2,539	2,508	2,532	2,542	15,453
60-69	5,921	5,987	5,435	5,390	5,143	5,032	32,907
70+	11,106	11,889	11,549	12,283	12,108	12,645	71,581
All ages	22,881	23,720	22,549	23,366	23,170	23,616	139,302

Table B8: Estimated numbers of smoking-caused deaths, by sex and age group*Western Australia, 1985-1996; Australia 1991-1996*

Age group	Males		Females		Persons	
	Number	%	Number	%	Number	%
<i>Western Australia</i>						
0-9	134	1.0	97	2.1	231	1.3
10-19	5	0.0	4	0.1	9	0.0
20-29	41	0.3	22	0.5	62	0.3
30-39	149	1.1	65	1.4	213	1.2
40-49	535	4.0	186	4.0	721	4.0
50-59	1,692	12.6	467	10.1	2,159	12.0
60-69	3,634	27.1	1,089	23.5	4,723	26.2
70+	7,197	53.8	2,703	58.3	9,900	54.9
All ages	13,386	100.0	4,633	100.0	18,019	100.0
<i>Australia</i>						
0-9	522	0.6	372	1.2	895	0.8
10-19	25	0.0	15	0.1	40	0.0
20-29	160	0.2	105	0.3	265	0.2
30-39	751	0.9	337	1.1	1,087	1.0
40-49	3,077	3.8	1,138	3.8	4,214	3.8
50-59	9,128	11.3	2,908	9.7	12,035	10.8
60-69	21,767	26.9	6,748	22.4	28,515	25.6
70+	45,629	56.3	18,496	61.4	64,125	57.7
All ages	81,058	100.0	30,119	100.0	111,176	100.0

Table B9: Estimated numbers of alcohol-caused deaths, by sex and age group*Western Australia, 1985-1996; Australia 1991-1996*

Age group	Males		Females		Persons	
	Number	%	Number	%	Number	%
<i>Western Australia</i>						
0-9	33	1.2	14	1.1	48	1.2
10-19	162	5.9	33	2.7	195	4.9
20-29	455	16.7	105	8.5	559	14.1
30-39	273	10.0	80	6.5	353	8.9
40-49	332	12.2	118	9.5	449	11.4
50-59	412	15.1	137	11.2	549	13.9
60-69	525	19.2	178	14.5	703	17.8
70+	536	19.6	566	46.0	1,102	27.8
All ages	2,727	100.0	1,232	100.0	3,959	100.0
<i>Australia</i>						
0-9	121	0.8	53	0.7	174	0.8
10-19	658	4.4	142	2.0	800	3.6
20-29	2,003	13.4	480	6.6	2,484	11.2
30-39	1,515	10.2	422	5.8	1,937	8.7
40-49	1,869	12.5	621	8.6	2,490	11.2
50-59	2,285	15.3	724	10.0	3,009	13.6
60-69	3,003	20.1	1,107	15.3	4,110	18.5
70+	3,463	23.2	3,695	51.0	7,158	32.3
All ages	14,916	100.0	7,246	100.0	22,163	100.0

Table B10: Estimated numbers of deaths caused by the use of other drugs, by sex and age group

Western Australia, 1985-1996; Australia 1991-1996

Age group	Males		Females		Persons	
	Number	%	Number	%	Number	%
<i>Western Australia</i>						
0-9	3	0.5	2	0.8	5	0.6
10-19	32	5.7	5	1.7	37	4.3
20-29	189	33.7	65	21.5	254	29.4
30-39	185	33.1	83	27.6	269	31.2
40-49	79	14.2	62	20.4	141	16.4
50-59	33	5.9	35	11.7	68	7.9
60-69	25	4.4	26	8.6	51	5.9
70+	14	2.5	24	7.8	37	4.3
All ages	560	100.0	303	100.0	862	100.0
<i>Australia</i>						
0-9	16	0.4	12	0.6	28	0.5
10-19	160	4.0	88	4.5	248	4.2
20-29	1,316	33.0	468	23.7	1,784	29.9
30-39	1,372	34.4	504	25.5	1,876	31.5
40-49	642	16.1	396	20.0	1,038	17.4
50-59	207	5.2	201	10.2	409	6.9
60-69	134	3.4	149	7.5	283	4.7
70+	140	3.5	158	8.0	298	5.0
All ages	3,986	100.0	1,977	100.0	5,963	100.0

Table B11: Estimated numbers of deaths caused by the use of other drugs, by year, sex and drug*Western Australia, 1985-1996*

Type of drug	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1985-96
Males													
Cannabis	0	0	0	0	0	0	0	0	0	0	0	0	0
Opiates	18	12	13	17	18	18	13	15	20	41	65	51	301
Amphetamines/psychostimulants	0	0	0	0	0	0	3	0	1	0	0	0	4
Cocaine	0	0	0	0	0	0	0	0	0	0	0	0	0
Hallucinogens	0	0	0	0	0	0	1	1	1	0	0	0	3
Barbiturates	3	3	2	0	2	0	1	1	0	0	1	1	14
Tranqs/seds/anti-depressants	5	4	4	3	1	3	2	4	6	11	4	2	49
Volatile substances	1	5	4	1	3	5	3	0	3	3	1	2	31
Other/unspecified drugs	7	15	19	9	10	14	10	13	13	8	12	10	140
*Other causes	1	1	1	1	1	1	1	1	2	2	2	4	18
Total	35	40	43	31	35	41	34	35	46	65	85	70	560
Females													
Cannabis	0	0	0	0	0	0	0	0	0	0	0	0	0
Opiates	9	8	3	8	5	2	3	11	8	5	14	15	91
Amphetamines/psychostimulants	0	0	0	0	0	1	0	0	0	0	0	0	1
Cocaine	0	0	0	0	0	0	0	0	0	0	0	0	0
Hallucinogens	0	0	0	0	0	0	0	0	0	0	0	0	0
Barbiturates	2	3	2	0	1	0	0	0	1	0	1	1	11
Tranqs/seds/anti-depressants	5	5	8	2	3	2	5	2	5	17	3	8	65
Volatile substances	0	0	0	0	0	0	0	1	0	0	0	0	1
Other/unspecified drugs	11	9	7	7	6	11	14	11	10	13	11	11	121
*Other causes	0	1	0	1	1	1	0	1	2	2	2	2	13
Total	27	26	20	18	16	17	22	26	26	37	31	37	303

* Other causes includes those conditions not wholly attributable to other drugs, ie. antepartum haemorrhage, low birthweight, hepatitis B, Hepatitis non-A nonB, AIDS/HIV, infective endocarditis.

Table B12: Estimated numbers of deaths caused by the use of other drugs, by year, sex and drug*Australia, 1991-1996*

Type of drug	1991	1992	1993	1994	1995	1996	1991-96
Males							
Cannabis	0	0	0	0	0	0	0
Opiates	252	345	352	412	580	585	2,526
Amphetamines/psychostimulants	3	2	6	2	4	3	20
Cocaine	0	0	1	0	0	0	1
Hallucinogens	1	1	1	0	0	0	3
Barbiturates	12	11	18	11	15	8	75
Tranqs/seds/anti-depressants	16	26	26	36	31	34	169
Volatile substances	13	11	12	15	11	11	73
Other/unspecified drugs	203	162	120	165	159	130	939
*Other causes	19	24	36	29	39	33	180
Total	519	582	572	670	839	804	3,986
Females							
Cannabis	0	0	0	0	0	0	0
Opiates	97	122	104	127	170	163	783
Amphetamines/psychostimulants	0	0	2	2	4	4	12
Cocaine	0	0	0	0	0	0	0
Hallucinogens	0	0	0	0	0	0	0
Barbiturates	16	10	14	7	6	9	62
Tranqs/seds/anti-depressants	15	23	30	49	28	27	172
Volatile substances	2	2	3	3	0	0	10
Other/unspecified drugs	175	165	116	127	131	125	839
*Other causes	12	10	17	20	21	19	99
Total	317	332	286	335	360	347	1,977

* Other causes includes those conditions not wholly attributable to other drugs, ie. antepartum haemorrhage, low birthweight, hepatitis B, Hepatitis non-A nonB, AIDS/HIV, infective endocarditis.

Table C1 Estimated total number of smoking-caused deaths, by year and condition

Western Australia, 1985-1996

ICD9 codes	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	22	25	24	23	22	21	18	28	27	24	27	21	Oropharyngeal cancer
150	17	29	20	26	25	22	30	32	24	29	32	32	Oesophageal cancer
151	13	11	11	13	9	12	11	13	9	13	12	10	Stomach cancer
154.2,154.3	1	0	0	1	0	1	1	1	1	2	1	1	Anal cancer
157	15	16	16	15	17	19	16	16	18	20	19	20	Pancreatic cancer
161	10	7	12	17	12	9	15	12	16	12	12	17	Laryngeal cancer
162	355	425	388	424	429	408	443	401	451	459	460	477	Lung cancer
179,182	-1	-2	-1	-2	-1	-1	-1	-1	-2	-2	-1	-2	Endometrial cancer
180,233.1	6	5	5	5	7	6	5	4	6	6	5	5	Cervical cancer
184.4	1	1	0	1	0	0	1	1	1	1	2	1	Vulvar cancer
187.1-187.4	0	0	0	0	1	0	1	0	0	1	0	0	Penile cancer
188	22	21	18	17	21	18	19	18	20	20	19	18	Bladder cancer
189.0	10	14	10	11	12	11	11	10	10	11	10	16	Renal parench. cancer
189.1	1	0	0	1	1	0	1	0	2	0	0	1	Renal pelvic cancer
231	0	0	0	0	0	0	0	0	0	0	0	0	Resp. carcinoma in-situ
305.1	0	0	0	0	0	0	0	0	0	0	0	0	Tobacco abuse
332	-10	-10	-11	-10	-9	-10	-11	-12	-11	-10	-11	-22	Parkinson's disease
410-414	386	415	386	392	388	368	359	349	356	342	343	338	Ischaemic heart disease
415-417	19	15	12	12	12	23	34	13	18	13	10	12	Pulmonary circ. disease
427	8	6	5	6	6	6	8	7	7	6	7	10	Cardiac dysrhythmias
428-429	20	23	19	21	21	24	20	18	24	18	19	16	Heart failure
430-438	104	115	111	107	116	106	100	113	114	121	114	112	Stroke
440-448	69	81	73	71	64	64	75	72	74	67	70	64	Atherosclerosis
480-487	19	19	16	22	27	19	22	23	22	21	23	26	Pneumonia
490-492,496	259	282	259	310	313	285	284	316	337	314	291	364	COPD
531-534	29	22	22	22	23	19	24	21	19	18	20	14	Peptic ulcer
555	0	0	1	0	2	0	0	1	1	1	1	0	Crohn's disease
556	0	0	0	0	0	0	0	0	0	0	0	0	Ulcerative colitis
633,761.4	0	0	0	0	0	0	0	0	0	0	0	0	Ectopic pregnancy
634,761.8	0	0	0	0	0	0	0	0	0	0	0	0	Spontaneous abortion
640,641,762.0,762.1	0	0	0	0	0	0	0	0	0	0	0	0	Antepartum haem.
642,760.0	0	0	0	0	0	0	0	0	0	0	0	0	Hypertension in preg.
656.5,764,765	4	2	5	6	5	6	5	5	5	4	4	6	Low birthweight
658.1,658.2,761.1	0	0	0	0	0	0	0	0	0	0	0	0	Prem. rupture of membs
798.0	14	19	19	19	15	21	17	9	12	9	8	9	SIDS
E890-E899	2	2	1	1	1	2	1	1	2	2	2	2	Fire injuries
All tobacco codes	1,393	1,544	1,420	1,531	1,538	1,460	1,508	1,471	1,564	1,521	1,501	1,569	Total tobacco-caused

Note: Use of aetiologic fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table C2 Estimated number of male smoking-caused deaths, by year and condition

Western Australia, 1985-1996

ICD9 codes	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	18	20	18	19	18	18	11	23	21	20	21	18	Oropharyngeal cancer
150	12	23	16	21	20	18	25	26	18	23	25	25	Oesophageal cancer
151	10	9	8	10	6	9	9	10	7	10	9	7	Stomach cancer
154.2,154.3	0	0	0	0	0	0	0	0	0	2	0	1	Anal cancer
157	10	11	11	11	11	13	10	10	12	14	13	14	Pancreatic cancer
161	8	6	11	15	11	9	12	10	14	11	11	15	Laryngeal cancer
162	292	336	306	322	326	310	340	296	328	356	351	347	Lung cancer
179,182	0	0	0	0	0	0	0	0	0	0	0	0	Endometrial cancer
180,233.1	0	0	0	0	0	0	0	0	0	0	0	0	Cervical cancer
184.4	0	0	0	0	0	0	0	0	0	0	0	0	Vulvar cancer
187.1-187.4	0	0	0	0	1	0	1	0	0	1	0	0	Penile cancer
188	19	18	14	13	18	14	17	15	17	16	15	14	Bladder cancer
189.0	7	10	7	7	8	9	7	8	7	9	7	11	Renal parench. cancer
189.1	0	0	0	1	1	0	0	0	0	0	0	0	Renal pelvic cancer
231	0	0	0	0	0	0	0	0	0	0	0	0	Resp. carcinoma in-situ
305.1	0	0	0	0	0	0	0	0	0	0	0	0	Tobacco abuse
332	-9	-9	-8	-7	-7	-8	-9	-11	-10	-7	-8	-19	Parkinson's disease
410-414	307	324	301	307	302	290	279	272	281	270	274	266	Ischaemic heart disease
415-417	6	10	4	6	4	12	16	4	9	3	4	6	Pulmonary circ. disease
427	6	4	3	5	3	3	4	5	4	4	5	8	Cardiac dysrhythmias
428-429	13	16	13	16	13	16	14	12	18	13	11	11	Heart failure
430-438	64	73	77	67	76	66	61	71	75	77	75	68	Stroke
440-448	44	59	53	52	48	42	54	50	53	48	50	42	Atherosclerosis
480-487	13	16	12	17	21	12	18	18	17	16	17	19	Pneumonia
490-492,496	208	218	214	237	235	216	219	230	249	230	203	249	COPD
531-534	18	16	12	14	16	12	16	12	13	10	13	9	Peptic ulcer
555	0	0	0	0	1	0	0	0	0	0	0	0	Crohn's disease
556	0	0	0	0	0	0	0	0	0	0	0	0	Ulcerative colitis
633,761.4	0	0	0	0	0	0	0	0	0	0	0	0	Ectopic pregnancy
634,761.8	0	0	0	0	0	0	0	0	0	0	0	0	Spontaneous abortion
640,641,762.0,762.1	0	0	0	0	0	0	0	0	0	0	0	0	Antepartum haem.
642,760.0	0	0	0	0	0	0	0	0	0	0	0	0	Hypertension in preg.
656.5,764,765	2	0	3	4	3	3	2	2	3	3	2	4	Low birthweight
658.1,658.2,761.1	0	0	0	0	0	0	0	0	0	0	0	0	Prem. rupture of membs
798.0	7	11	12	11	9	11	10	7	8	4	5	6	SIDS
E890-E899	1	2	1	1	1	2	0	0	1	1	1	1	Fire injuries
All tobacco codes	1,058	1,172	1,089	1,147	1,146	1,077	1,116	1,072	1,148	1,136	1,105	1,120	Total tobacco-caused

Note: Use of aetiological fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table C3 Estimated number of female smoking-caused deaths, by year and condition

Western Australia, 1985-1996

ICD9 codes	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	4	5	6	4	4	3	7	5	6	4	6	3	Oropharyngeal cancer
150	5	7	4	6	5	4	5	6	6	6	7	7	Oesophageal cancer
151	3	3	3	3	3	3	2	3	2	3	3	3	Stomach cancer
154.2,154.3	0	0	0	0	0	1	0	1	0	0	1	0	Anal cancer
157	5	5	5	4	6	6	6	6	7	7	6	6	Pancreatic cancer
161	1	1	0	2	1	0	3	2	2	1	1	3	Laryngeal cancer
162	64	90	82	102	102	99	103	105	123	103	109	129	Lung cancer
179,182	-1	-2	-1	-2	-1	-1	-1	-1	-2	-2	-1	-2	Endometrial cancer
180,233.1	6	5	5	5	7	6	5	4	6	6	5	5	Cervical cancer
184.4	1	1	0	1	0	0	1	1	1	1	2	1	Vulvar cancer
187.1-187.4	0	0	0	0	0	0	0	0	0	0	0	0	Penile cancer
188	4	3	3	4	3	4	2	2	3	3	4	4	Bladder cancer
189.0	2	4	3	3	4	3	4	2	4	2	4	4	Renal parench. cancer
189.1	0	0	0	0	1	0	1	0	1	0	0	1	Renal pelvic cancer
231	0	0	0	0	0	0	0	0	0	0	0	0	Resp. carcinoma in-situ
305.1	0	0	0	0	0	0	0	0	0	0	0	0	Tobacco abuse
332	-2	-2	-2	-3	-2	-2	-2	-2	-2	-3	-2	-3	Parkinson's disease
410-414	79	91	84	85	86	78	80	77	75	72	70	73	Ischaemic heart disease
415-417	13	5	8	6	8	11	18	9	9	9	6	6	Pulmonary circ. disease
427	2	2	1	2	2	3	4	2	3	2	2	2	Cardiac dysrhythmias
428-429	6	8	6	5	8	7	6	6	6	5	8	6	Heart failure
430-438	39	42	34	40	40	40	39	42	39	43	40	44	Stroke
440-448	26	22	20	20	16	22	21	22	21	20	20	22	Atherosclerosis
480-487	6	4	4	5	6	6	5	6	5	5	5	7	Pneumonia
490-492,496	51	64	44	74	77	69	64	86	87	84	88	115	COPD
531-534	10	5	10	8	6	8	7	8	6	7	7	5	Peptic ulcer
555	0	0	1	0	0	0	0	1	1	1	0	0	Crohn's disease
556	0	0	0	0	0	0	0	0	0	0	0	0	Ulcerative colitis
633,761.4	0	0	0	0	0	0	0	0	0	0	0	0	Ectopic pregnancy
634,761.8	0	0	0	0	0	0	0	0	0	0	0	0	Spontaneous abortion
640,641,762.0,762.1	0	0	0	0	0	0	0	0	0	0	0	0	Antepartum haem.
642,760.0	0	0	0	0	0	0	0	0	0	0	0	0	Hypertension in preg.
656.5,764,765	2	2	2	2	2	3	3	3	2	1	2	3	Low birthweight
658.1,658.2,761.1	0	0	0	0	0	0	0	0	0	0	0	0	Prem. rupture of membs
798.0	7	7	7	8	6	10	7	2	4	5	3	3	SIDS
E890-E899	1	1	0	1	0	1	1	0	1	0	1	0	Fire injuries
All tobacco codes	335	372	331	384	392	383	392	399	416	386	396	448	Total tobacco-caused

Note: Use of aetiological fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table C4 Estimated total number of alcohol-caused deaths, by year and condition

Western Australia, 1985-1996

ICD9 codes	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	5	7	6	6	6	5	5	7	7	7	7	5	Oropharyngeal cancer
150	3	5	3	4	4	3	5	5	4	5	5	5	Oesophageal cancer
155	4	3	3	3	4	5	4	4	5	6	5	5	Liver cancer
161	2	1	3	4	3	2	3	2	3	2	3	4	Laryngeal cancer
174	4	5	4	5	5	5	4	5	5	6	5	5	Female breast cancer
291	3	1	2	4	5	1	2	5	4	3	5	8	Alcoholic psychosis
303	14	19	12	19	9	15	21	18	27	12	19	31	Alcohol dependence
305.0	0	3	0	1	1	0	2	1	2	2	2	2	Alcohol abuse
345	2	1	3	3	3	2	3	3	3	2	3	2	Epilepsy
357.5	0	0	0	0	0	0	0	0	0	0	0	0	Alc. poly neuropathy
401-405	4	4	3	3	3	3	3	3	3	3	2	3	Hypertension
425.5	15	16	8	16	11	8	11	10	9	14	13	5	Alc. cardiomyopathy
427.0,427.2,427.3	1	1	0	0	1	0	1	1	1	1	1	1	SV cardiac dysrhyth.
430-438	56	61	59	56	61	55	52	59	58	63	60	60	Stroke
456.0-456.2	0	0	0	1	1	0	0	0	0	1	0	1	Oesophageal varices
530.7	0	0	0	0	0	0	0	0	0	1	0	0	Gastro-oes. haem.
535.3	1	0	0	0	0	0	0	0	0	0	0	2	Alcoholic gastritis
571.0-571.3	61	57	71	70	84	54	54	69	51	65	67	64	Alc. liver cirrhosis
574	0	0	0	0	0	0	0	0	0	0	0	0	Cholelithiasis
577.0	4	3	3	4	2	2	2	2	1	3	5	2	Acute pancreatitis
577.1	0	3	0	1	3	2	2	3	2	1	2	2	Chronic pancreatitis
696.1	0	0	0	0	0	0	0	0	0	0	0	0	Psoriasis
980.0	0	0	0	0	0	3	1	2	0	0	0	0	Ethanol toxicity
980.1	0	0	0	0	0	0	0	0	0	0	0	0	Methanol toxicity
E810-E819	61	65	57	70	67	60	60	58	57	58	57	64	Road injuries
E860.0	5	0	1	1	1	8	0	0	0	0	1	0	Alcoholic poisoning
E860.1-E860.2	0	0	0	0	0	0	0	0	0	2	0	0	Other eth./meth. pois.
E880-E888	20	18	19	23	22	29	18	21	21	25	29	36	Fall injuries
E890-E899	3	4	2	3	2	4	3	1	3	4	3	3	Fire injuries
E910	6	4	11	6	6	6	9	9	8	8	12	7	Drowning
E911	8	13	6	5	16	12	10	4	6	11	3	5	Aspiration
E919,E920	0	1	0	1	1	1	1	0	1	1	0	0	Occ./machine injuries
E950-E959	18	17	22	23	20	23	23	23	23	24	24	23	Suicide
E960,E965-6,E968-9	13	9	9	9	11	13	12	13	16	16	15	9	Assault
E967	0	0	0	0	0	0	0	0	0	0	0	0	Child abuse
All alcohol codes	313	321	308	339	350	320	311	329	320	342	349	357	Total alcohol-caused

Note: Use of aetiologic fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table C5 Estimated number of male alcohol-caused deaths, by year and condition

Western Australia, 1985-1996

ICD9 codes	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	5	6	5	6	5	5	4	6	6	6	6	4	Oropharyngeal cancer
150	2	4	2	4	3	3	4	4	3	4	4	4	Oesophageal cancer
155	3	2	3	2	3	3	3	3	4	4	4	4	Liver cancer
161	2	1	3	3	2	2	2	2	3	2	2	3	Laryngeal cancer
174	0	0	0	0	0	0	0	0	0	0	0	0	Female breast cancer
291	3	1	2	2	4	1	1	5	2	3	3	6	Alcoholic psychosis
303	13	15	8	18	7	12	14	17	18	11	14	25	Alcohol dependence
305.0	0	3	0	0	1	0	1	0	2	1	1	0	Alcohol abuse
345	2	1	2	2	2	1	2	2	1	1	2	1	Epilepsy
357.5	0	0	0	0	0	0	0	0	0	0	0	0	Alc. poly neuropathy
401-405	2	2	2	2	2	2	2	2	2	1	1	2	Hypertension
425.5	15	14	8	13	10	7	10	9	8	12	13	4	Alc. cardiomyopathy
427.0,427.2,427.3	0	0	0	0	0	0	0	0	0	0	0	1	SV cardiac dysrhyth.
430-438	25	27	30	25	28	24	22	26	28	28	27	24	Stroke
456.0-456.2	0	0	0	1	1	0	0	0	0	1	0	1	Oesophageal varices
530.7	0	0	0	0	0	0	0	0	0	1	0	0	Gastro-oes. haem.
535.3	1	0	0	0	0	0	0	0	0	0	0	1	Alcoholic gastritis
571.0-571.3	51	38	56	58	70	37	43	52	37	39	53	43	Alc. liver cirrhosis
574	0	0	0	0	0	0	0	0	0	0	0	0	Cholelithiasis
577.0	1	2	2	3	0	1	1	2	1	1	3	2	Acute pancreatitis
577.1	0	1	0	1	1	2	1	3	2	1	1	1	Chronic pancreatitis
696.1	0	0	0	0	0	0	0	0	0	0	0	0	Psoriasis
980.0	0	0	0	0	0	3	0	0	0	0	0	0	Ethanol toxicity
980.1	0	0	0	0	0	0	0	0	0	0	0	0	Methanol toxicity
E810-E819	53	54	48	61	57	50	50	44	49	48	47	57	Road injuries
E860.0	4	0	1	1	0	7	0	0	0	0	1	0	Alcoholic poisoning
E860.1-E860.2	0	0	0	0	0	0	0	0	0	2	0	0	Other eth./meth. pois.
E880-E888	10	7	6	10	10	13	8	10	10	11	14	18	Fall injuries
E890-E899	1	3	1	1	2	3	1	1	2	3	1	2	Fire injuries
E910	5	4	10	4	6	5	7	7	6	6	10	6	Drowning
E911	7	13	4	2	11	7	4	2	3	6	2	4	Aspiration
E919,E920	0	1	0	1	1	1	1	0	0	1	0	0	Occ./machine injuries
E950-E959	15	15	19	20	18	20	20	20	20	22	21	20	Suicide
E960,E965-6,E968-9	6	6	6	4	8	6	6	7	10	8	9	6	Assault
E967	0	0	0	0	0	0	0	0	0	0	0	0	Child abuse
All alcohol codes	227	221	218	242	253	214	208	224	217	223	240	239	Total alcohol-caused

Note: Use of aetiologic fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table C6 Estimated number of female alcohol-caused deaths, by year and condition

Western Australia, 1985-1996

ICD9 codes	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	1	1	1	1	1	0	1	1	1	1	1	0	Oropharyngeal cancer
150	1	1	1	1	1	0	1	1	1	1	1	1	Oesophageal cancer
155	1	0	0	1	1	1	1	1	1	2	2	1	Liver cancer
161	0	0	0	0	0	0	1	0	0	0	0	0	Laryngeal cancer
174	4	5	4	5	5	5	4	5	5	6	5	5	Female breast cancer
291	0	0	0	2	1	0	1	0	2	0	2	2	Alcoholic psychosis
303	1	4	4	1	2	3	7	1	9	1	5	6	Alcohol dependence
305.0	0	0	0	1	0	0	1	1	0	1	1	2	Alcohol abuse
345	1	1	1	1	1	1	1	1	1	1	1	1	Epilepsy
357.5	0	0	0	0	0	0	0	0	0	0	0	0	Alc. poly neuropathy
401-405	2	1	1	1	2	1	1	1	2	1	1	1	Hypertension
425.5	0	2	0	3	1	1	1	1	1	2	0	1	Alc. cardiomyopathy
427.0,427.2,427.3	1	0	0	0	0	0	0	1	1	1	1	1	SV cardiac dysrhyth.
430-438	31	34	29	31	33	31	30	33	30	36	34	37	Stroke
456.0-456.2	0	0	0	0	0	0	0	0	0	0	0	0	Oesophageal varices
530.7	0	0	0	0	0	0	0	0	0	0	0	0	Gastro-oes. haem.
535.3	0	0	0	0	0	0	0	0	0	0	0	0	Alcoholic gastritis
571.0-571.3	10	19	15	12	14	17	11	17	14	26	14	21	Alc. liver cirrhosis
574	0	0	0	0	0	0	0	0	0	0	0	0	Cholelithiasis
577.0	3	1	1	1	1	1	1	0	0	1	2	0	Acute pancreatitis
577.1	0	2	0	0	2	0	1	0	0	0	1	1	Chronic pancreatitis
696.1	0	0	0	0	0	0	0	0	0	0	0	0	Psoriasis
980.0	0	0	0	0	0	0	1	2	0	0	0	0	Ethanol toxicity
980.1	0	0	0	0	0	0	0	0	0	0	0	0	Methanol toxicity
E810-E819	8	11	9	9	10	10	9	13	8	9	9	7	Road injuries
E860.0	1	0	0	0	1	1	0	0	0	0	0	0	Alcoholic poisoning
E860.1-E860.2	0	0	0	0	0	0	0	0	0	0	0	0	Other eth./meth. pois.
E880-E888	10	11	13	13	12	16	10	11	12	14	15	18	Fall injuries
E890-E899	2	1	1	1	0	1	2	0	1	1	2	1	Fire injuries
E910	1	0	1	1	0	1	2	2	2	1	3	1	Drowning
E911	1	0	2	3	5	5	6	2	3	5	1	1	Aspiration
E919,E920	0	0	0	0	0	0	0	0	0	0	0	0	Occ./machine injuries
E950-E959	3	2	3	3	2	3	3	3	3	2	3	3	Suicide
E960,E965-6,E968-9	7	3	3	5	3	7	7	7	6	8	6	3	Assault
E967	0	0	0	0	0	0	0	0	0	0	0	0	Child abuse
All alcohol codes	85	100	90	97	97	106	103	106	103	119	109	117	Total alcohol-caused

Note: Use of aetiologic fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table C7 Estimated total number of deaths caused by other drug use, by year and condition
Western Australia, 1985-1996

ICD9 codes	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Cause of death
304.3	0	0	0	0	0	0	0	0	0	0	0	0	Cannabis dependence
305.2	0	0	0	0	0	0	0	0	0	0	0	0	Cannabis abuse
304.0,304.7	20	14	10	12	15	1	0	5	4	19	55	47	Opiate dependence
305.5	0	0	0	0	0	0	0	0	0	0	0	0	Opiate abuse
E850.0-E850.2,E850.8	7	2	2	11	3	15	14	16	22	25	18	16	Acc.pois.-opiates
E950.0	0	4	4	2	5	1	1	3	2	2	6	3	Suicide - opiates
E980.0	0	0	0	0	0	3	1	2	0	0	0	0	Poisoning - opiates
304.4	0	0	0	0	0	0	0	0	0	0	0	0	Amphetamine dependence
305.7	0	0	0	0	0	0	0	0	0	0	0	0	Amphetamine abuse
E854.2	0	0	0	0	0	1	3	0	1	0	0	0	Acc.pois.-psychostimulants
304.2	0	0	0	0	0	0	0	0	0	0	0	0	Cocaine dependence
305.6	0	0	0	0	0	0	0	0	0	0	0	0	Cocaine abuse
640,641	0	0	0	0	0	0	0	0	0	0	0	0	Antepartum haemorrhage
656.5,764,765	0	0	0	1	0	0	0	0	0	0	0	0	Low birthweight
E855.2	0	0	0	0	0	0	0	0	0	0	0	0	Acc.pois.-local anaesthetic
304.5	0	0	0	0	0	0	0	0	0	0	0	0	Hallucinogen dependence
305.3	0	0	0	0	0	0	0	0	0	0	0	0	Hallucinogen abuse
E854.1	0	0	0	0	0	0	1	1	1	0	0	0	Acc.pois.-hallucinogens
304.1	0	0	0	0	0	0	0	0	0	0	1	2	Barbiturate dependence
E851	0	0	0	0	0	0	0	0	0	0	0	0	Acc.pois.-barbiturates
E950.1	5	6	4	0	3	0	1	1	1	0	1	0	Suicide - barbiturates
E980.1	0	0	0	0	0	0	0	0	0	0	0	0	Poisoning - barbiturates
305.8	0	0	0	0	0	0	0	0	0	0	0	0	Antidepressant abuse
E852	3	3	2	1	0	1	0	0	0	4	0	1	Acc.pois.- other sedatives
E853	2	2	3	1	1	0	1	0	5	6	1	3	Acc.pois.- tranquillisers
E854.0	1	2	6	3	3	4	6	4	5	18	6	6	Acc.pois.- antidepressants
E950.2	4	2	1	0	0	0	0	2	1	0	0	0	Suicide - other sedatives
E980.2	0	0	0	0	0	0	0	0	0	0	0	0	Poisoning - other sedatives
304.6	1	4	3	1	3	5	3	0	0	1	0	2	Vol. substance dependence
E862.0,,1,,4,,9,E866.6	0	1	0	0	0	0	0	1	3	2	1	0	Acc.pois.- vol.substances
E951.1	0	0	1	0	0	0	0	0	0	0	0	0	Suicide - vol.substances
E981.1	0	0	0	0	0	0	0	0	0	0	0	0	Poisoning - vol.substances
304.8,304.9	1	7	2	3	0	0	0	0	0	2	3	4	Dependence-comb/unspec.drugs
305.4	0	0	0	0	0	0	0	0	0	0	0	0	Abuse-barb/sed/hypnotic drugs
305.9	0	0	0	0	0	0	0	0	0	0	0	0	Other/unspec.drug abuse
E850.3-E850.7,E850.9	1	1	1	0	0	0	2	7	1	1	0	0	Acc.pois.- other drugs
E950.3-E950.5	15	15	23	13	13	24	20	14	22	17	20	17	Suicide - other drugs
E962.0	0	0	0	0	0	1	0	0	0	0	0	0	Assault by pois.with drugs
E980.3-E980.5	1	1	0	0	3	0	2	3	0	1	0	0	Poisoning - other/unspec.drugs
070.2-070.3	1	1	1	1	1	1	1	1	1	1	1	1	Hepatitis B
070.4-070.5	0	0	0	0	0	0	0	0	1	1	3	3	Hepatitis non-A, non-B
279.1,042-044	0	0	0	0	1	0	1	0	0	1	0	0	AIDS/HIV
421	0	0	0	0	0	0	0	0	0	0	0	0	Infective endocarditis
292	0	0	0	0	0	0	0	0	0	0	0	0	Drug psychoses
648.3	0	0	0	0	0	0	0	0	0	0	0	0	Maternal drug dependence
760.72-760.73,779.5	0	0	0	0	0	0	0	0	0	0	0	0	Newborn drug toxicity.
All other drug codes	62	66	63	49	51	58	57	61	71	101	116	106	Total other drug-caused

Table C8 Estimated number of male deaths caused by other drug use, by year and condition
Western Australia, 1985-1996

ICD9 codes	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Cause of death
304.3	0	0	0	0	0	0	0	0	0	0	0	0	Cannabis dependence
305.2	0	0	0	0	0	0	0	0	0	0	0	0	Cannabis abuse
304.0,304.7	13	9	9	9	13	0	0	2	4	18	44	37	Opiate dependence
305.5	0	0	0	0	0	0	0	0	0	0	0	0	Opiate abuse
E850.0-E850.2,E850.8	5	2	2	7	2	15	12	11	16	21	15	13	Acc.pois.-opiates
E950.0	0	1	2	1	3	0	1	2	0	2	6	1	Suicide - opiates
E980.0	0	0	0	0	0	3	0	0	0	0	0	0	Poisoning - opiates
304.4	0	0	0	0	0	0	0	0	0	0	0	0	Amphetamine dependence
305.7	0	0	0	0	0	0	0	0	0	0	0	0	Amphetamine abuse
E854.2	0	0	0	0	0	0	3	0	1	0	0	0	Acc.pois.-psychostimulants
304.2	0	0	0	0	0	0	0	0	0	0	0	0	Cocaine dependence
305.6	0	0	0	0	0	0	0	0	0	0	0	0	Cocaine abuse
640,641	0	0	0	0	0	0	0	0	0	0	0	0	Antepartum haemorrhage
656.5,764,765	0	0	0	0	0	0	0	0	0	0	0	0	Low birthweight
E855.2	0	0	0	0	0	0	0	0	0	0	0	0	Acc.pois.-local anaesthetic
304.5	0	0	0	0	0	0	0	0	0	0	0	0	Hallucinogen dependence
305.3	0	0	0	0	0	0	0	0	0	0	0	0	Hallucinogen abuse
E854.1	0	0	0	0	0	0	1	1	1	0	0	0	Acc.pois.-hallucinogens
304.1	0	0	0	0	0	0	0	0	0	0	0	1	Barbiturate dependence
E851	0	0	0	0	0	0	0	0	0	0	0	0	Acc.pois.-barbiturates
E950.1	3	3	2	0	2	0	1	1	0	0	1	0	Suicide - barbiturates
E980.1	0	0	0	0	0	0	0	0	0	0	0	0	Poisoning - barbiturates
305.8	0	0	0	0	0	0	0	0	0	0	0	0	Antidepressant abuse
E852	1	0	0	1	0	0	0	0	0	0	0	0	Acc.pois.- other sedatives
E853	1	2	1	1	1	0	0	0	5	1	1	2	Acc.pois.- tranquillisers
E854.0	0	1	2	1	0	3	2	3	1	10	3	0	Acc.pois.- antidepressants
E950.2	3	1	1	0	0	0	0	1	0	0	0	0	Suicide - other sedatives
E980.2	0	0	0	0	0	0	0	0	0	0	0	0	Poisoning - other sedatives
304.6	1	4	3	1	3	5	3	0	0	1	0	2	Vol. substance dependence
E862.0.,1.,4.,9,E866.6	0	1	0	0	0	0	0	0	3	2	1	0	Acc.pois.- vol.substances
E951.1	0	0	1	0	0	0	0	0	0	0	0	0	Suicide - vol.substances
E981.1	0	0	0	0	0	0	0	0	0	0	0	0	Poisoning - vol.substances
304.8,304.9	0	5	2	3	0	0	0	0	0	1	2	4	Dependence-comb/unspec.drugs
305.4	0	0	0	0	0	0	0	0	0	0	0	0	Abuse-barb/sed/hypnotic drugs
305.9	0	0	0	0	0	0	0	0	0	0	0	0	Other/unspec.drug abuse
E850.3-E850.7,E850.9	1	0	1	0	0	0	2	5	1	1	0	0	Acc.pois.- other drugs
E950.3-E950.5	6	10	16	6	8	14	8	7	12	6	10	6	Suicide - other drugs
E962.0	0	0	0	0	0	0	0	0	0	0	0	0	Assault by pois.with drugs
E980.3-E980.5	0	0	0	0	2	0	0	1	0	0	0	0	Poisoning - other/unspec.drugs
070.2-070.3	1	1	1	1	1	1	1	1	0	1	0	1	Hepatitis B
070.4-070.5	0	0	0	0	0	0	0	0	1	0	1	2	Hepatitis non-A, non-B
279.1,042-044	0	0	0	0	0	0	0	0	0	0	0	0	AIDS/HIV
421	0	0	0	0	0	0	0	0	0	0	0	0	Infective endocarditis
292	0	0	0	0	0	0	0	0	0	0	0	0	Drug psychoses
648.3	0	0	0	0	0	0	0	0	0	0	0	0	Maternal drug dependence
760.72-760.73,779.5	0	0	0	0	0	0	0	0	0	0	0	0	Newborn drug toxicity.
All other drug codes	35	40	43	31	35	41	34	35	46	65	85	70	Total other drug-caused

Table C9 Estimated number of female deaths caused by other drug use, by year and condition
Western Australia, 1985-1996

ICD9 codes	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Cause of death
304.3	0	0	0	0	0	0	0	0	0	0	0	0	Cannabis dependence
305.2	0	0	0	0	0	0	0	0	0	0	0	0	Cannabis abuse
304.0,304.7	7	5	1	3	2	1	0	3	0	1	11	10	Opiate dependence
305.5	0	0	0	0	0	0	0	0	0	0	0	0	Opiate abuse
E850.0-E850.2,E850.8	2	0	0	4	1	0	2	5	6	4	3	3	Acc.pois.-opiates
E950.0	0	3	2	1	2	1	0	1	2	0	0	2	Suicide - opiates
E980.0	0	0	0	0	0	0	1	2	0	0	0	0	Poisoning - opiates
304.4	0	0	0	0	0	0	0	0	0	0	0	0	Amphetamine dependence
305.7	0	0	0	0	0	0	0	0	0	0	0	0	Amphetamine abuse
E854.2	0	0	0	0	0	1	0	0	0	0	0	0	Acc.pois.-psychostimulants
304.2	0	0	0	0	0	0	0	0	0	0	0	0	Cocaine dependence
305.6	0	0	0	0	0	0	0	0	0	0	0	0	Cocaine abuse
640,641	0	0	0	0	0	0	0	0	0	0	0	0	Antepartum haemorrhage
656.5,764,765	0	0	0	0	0	0	0	0	0	0	0	0	Low birthweight
E855.2	0	0	0	0	0	0	0	0	0	0	0	0	Acc.pois.-local anaesthetic
304.5	0	0	0	0	0	0	0	0	0	0	0	0	Hallucinogen dependence
305.3	0	0	0	0	0	0	0	0	0	0	0	0	Hallucinogen abuse
E854.1	0	0	0	0	0	0	0	0	0	0	0	0	Acc.pois.-hallucinogens
304.1	0	0	0	0	0	0	0	0	0	0	1	1	Barbiturate dependence
E851	0	0	0	0	0	0	0	0	0	0	0	0	Acc.pois.-barbiturates
E950.1	2	3	2	0	1	0	0	0	1	0	0	0	Suicide - barbiturates
E980.1	0	0	0	0	0	0	0	0	0	0	0	0	Poisoning - barbiturates
305.8	0	0	0	0	0	0	0	0	0	0	0	0	Antidepressant abuse
E852	2	3	2	0	0	1	0	0	0	4	0	1	Acc.pois.- other sedatives
E853	1	0	2	0	0	0	1	0	0	5	0	1	Acc.pois.- tranquilisers
E854.0	1	1	4	2	3	1	4	1	4	8	3	6	Acc.pois.- antidepressants
E950.2	1	1	0	0	0	0	0	1	1	0	0	0	Suicide - other sedatives
E980.2	0	0	0	0	0	0	0	0	0	0	0	0	Poisoning - other sedatives
304.6	0	0	0	0	0	0	0	0	0	0	0	0	Vol. substance dependence
E862.0,,1,,4,,9,E866.6	0	0	0	0	0	0	0	1	0	0	0	0	Acc.pois.- vol.substances
E951.1	0	0	0	0	0	0	0	0	0	0	0	0	Suicide - vol.substances
E981.1	0	0	0	0	0	0	0	0	0	0	0	0	Poisoning - vol.substances
304.8,304.9	1	2	0	0	0	0	0	0	0	1	1	0	Dependence-comb/unspec.drugs
305.4	0	0	0	0	0	0	0	0	0	0	0	0	Abuse-barb/sed/hypnotic drugs
305.9	0	0	0	0	0	0	0	0	0	0	0	0	Other/unspec.drug abuse
E850.3-E850.7,E850.9	0	1	0	0	0	0	0	2	0	0	0	0	Acc.pois.- other drugs
E950.3-E950.5	9	5	7	7	5	10	12	7	10	11	10	11	Suicide - other drugs
E962.0	0	0	0	0	0	1	0	0	0	0	0	0	Assault by pois.with drugs
E980.3-E980.5	1	1	0	0	1	0	2	2	0	1	0	0	Poisoning - other/unspec.drugs
070.2-070.3	0	0	0	1	0	1	0	0	1	0	0	0	Hepatitis B
070.4-070.5	0	0	0	0	0	0	0	0	0	1	1	1	Hepatitis non-A, non-B
279.1,042-044	0	0	0	0	0	0	0	0	0	1	0	0	AIDS/HIV
421	0	0	0	0	0	0	0	0	0	0	0	0	Infective endocarditis
292	0	0	0	0	0	0	0	0	0	0	0	0	Drug psychoses
648.3	0	0	0	0	0	0	0	0	0	0	0	0	Maternal drug dependence
760.72-760.73,779.5	0	0	0	0	0	0	0	0	0	0	0	0	Newborn drug toxicity.
All other drug codes	27	26	20	18	16	17	22	26	26	37	31	37	Total other drug-caused

Table D1 Estimated total number of smoking-caused deaths, by year and condition

Australia, 1991-1996

ICD9 codes	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	263	255	261	242	241	266	Oropharyngeal cancer
150	339	354	349	380	383	395	Oesophageal cancer
151	120	117	118	123	123	115	Stomach cancer
154.2,154.3	10	9	10	12	11	13	Anal cancer
157	208	217	225	221	229	228	Pancreatic cancer
161	176	176	172	151	153	163	Laryngeal cancer
162	4,976	5,059	5,023	5,275	5,238	5,338	Lung cancer
179,182	-18	-17	-19	-17	-21	-19	Endometrial cancer
180,233.1	51	48	48	51	51	45	Cervical cancer
184.4	10	7	10	9	10	9	Vulvar cancer
187.1-187.4	4	5	3	4	3	4	Penile cancer
188	232	238	253	237	267	257	Bladder cancer
189.0	164	167	161	175	175	176	Renal parench. cancer
189.1	7	6	5	7	10	6	Renal pelvic cancer
231	0	0	0	0	0	0	Resp. carcinoma in-situ
305.1	0	0	0	0	0	0	Tobacco abuse
332	-128	-144	-178	-176	-181	-193	Parkinson's disease
410-414	4,457	4,509	4,241	4,169	4,064	3,994	Ischaemic heart disease
415-417	169	170	161	152	143	151	Pulmonary circ. disease
427	86	91	99	107	108	133	Cardiac dysrhythmias
428-429	288	305	307	326	278	301	Heart failure
430-438	1,414	1,391	1,365	1,436	1,408	1,420	Stroke
440-448	895	976	911	912	894	853	Atherosclerosis
480-487	209	242	202	229	204	209	Pneumonia
490-492,496	3,887	4,435	4,094	4,286	4,103	4,514	COPD
531-534	242	238	208	199	192	164	Peptic ulcer
555	7	5	5	6	7	7	Crohn's disease
556	3	2	2	2	2	3	Ulcerative colitis
633,761.4	0	0	0	0	0	0	Ectopic pregnancy
634,761.8	0	0	0	0	0	0	Spontaneous abortion
640,641,762.0,762.1	0	0	0	0	0	0	Antepartum haem.
642,760.0	0	0	0	0	0	0	Hypertension in preg.
656.5,764,765	55	67	46	45	54	56	Low birthweight
658.1,658.2,761.1	0	0	0	0	0	0	Prem. rupture of membs
798.0	127	104	90	76	70	72	SIDS
E890-E899	33	31	28	31	28	30	Fire injuries
All tobacco codes	18,287	19,062	18,202	18,670	18,246	18,709	Total tobacco-caused

Note: Use of aetiologic fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table D2 Estimated number of male smoking-caused deaths, by year and condition

Australia, 1991-1996

ICD9 codes	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	207	208	202	195	194	211	Oropharyngeal cancer
150	255	277	268	291	298	300	Oesophageal cancer
151	90	88	91	95	95	86	Stomach cancer
154.2,154.3	5	5	7	9	7	8	Anal cancer
157	139	140	151	149	154	148	Pancreatic cancer
161	156	163	156	134	141	150	Laryngeal cancer
162	3,825	3,913	3,814	4,029	3,931	3,993	Lung cancer
179,182	0	0	0	0	0	0	Endometrial cancer
180,233.1	0	0	0	0	0	0	Cervical cancer
184.4	0	0	0	0	0	0	Vulvar cancer
187.1-187.4	4	5	3	4	3	4	Penile cancer
188	186	193	203	194	217	208	Bladder cancer
189.0	117	120	112	130	126	128	Renal parench. cancer
189.1	2	4	2	3	6	2	Renal pelvic cancer
231	0	0	0	0	0	0	Resp. carcinoma in-situ
305.1	0	0	0	0	0	0	Tobacco abuse
332	-105	-118	-153	-144	-152	-164	Parkinson's disease
410-414	3,433	3,443	3,258	3,201	3,144	3,093	Ischaemic heart disease
415-417	76	71	71	66	65	65	Pulmonary circ. disease
427	56	57	67	72	71	88	Cardiac dysrhythmias
428-429	189	195	209	220	182	206	Heart failure
430-438	881	861	845	913	888	896	Stroke
440-448	650	693	652	647	641	597	Atherosclerosis
480-487	144	174	145	162	144	141	Pneumonia
490-492,496	2,882	3,184	2,923	3,052	2,884	3,083	COPD
531-534	156	159	138	131	128	105	Peptic ulcer
555	3	2	2	3	2	3	Crohn's disease
556	2	2	2	1	1	2	Ulcerative colitis
633,761.4	0	0	0	0	0	0	Ectopic pregnancy
634,761.8	0	0	0	0	0	0	Spontaneous abortion
640,641,762.0,762.1	0	0	0	0	0	0	Antepartum haem.
642,760.0	0	0	0	0	0	0	Hypertension in preg.
656.5,764,765	31	37	25	25	31	32	Low birthweight
658.1,658.2,761.1	0	0	0	0	0	0	Prem. rupture of membs
798.0	82	63	53	42	41	41	SIDS
E890-E899	21	19	19	18	17	21	Fire injuries
All tobacco codes	13,485	13,957	13,265	13,642	13,260	13,448	Total tobacco-caused

Note: Use of aetiologic fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table D3 Estimated number of female smoking-caused deaths, by year and condition

Western Australia, 1991-1996

ICD9 codes	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	56	47	59	47	47	55	Oropharyngeal cancer
150	84	77	81	89	84	95	Oesophageal cancer
151	30	29	27	28	28	29	Stomach cancer
154.2,154.3	5	4	3	4	4	5	Anal cancer
157	69	77	75	72	76	81	Pancreatic cancer
161	20	14	16	16	13	14	Laryngeal cancer
162	1,151	1,146	1,209	1,246	1,307	1,345	Lung cancer
179,182	-18	-17	-19	-17	-21	-19	Endometrial cancer
180,233.1	51	48	48	51	51	45	Cervical cancer
184.4	10	7	10	9	10	9	Vulvar cancer
187.1-187.4	0	0	0	0	0	0	Penile cancer
188	47	46	50	43	50	49	Bladder cancer
189.0	47	47	49	45	48	48	Renal parench. cancer
189.1	5	2	3	4	4	3	Renal pelvic cancer
231	0	0	0	0	0	0	Resp. carcinoma in-situ
305.1	0	0	0	0	0	0	Tobacco abuse
332	-22	-26	-25	-33	-29	-29	Parkinson's disease
410-414	1,024	1,066	983	969	920	901	Ischaemic heart disease
415-417	93	99	90	85	78	86	Pulmonary circ. disease
427	30	34	32	35	37	45	Cardiac dysrhythmias
428-429	100	110	98	106	95	95	Heart failure
430-438	533	529	521	523	520	523	Stroke
440-448	245	283	259	265	253	256	Atherosclerosis
480-487	65	68	58	67	59	68	Pneumonia
490-492,496	1,005	1,250	1,170	1,234	1,219	1,431	COPD
531-534	86	79	70	67	64	59	Peptic ulcer
555	4	4	3	4	5	3	Crohn's disease
556	1	0	1	1	1	0	Ulcerative colitis
633,761.4	0	0	0	0	0	0	Ectopic pregnancy
634,761.8	0	0	0	0	0	0	Spontaneous abortion
640,641,762.0,762.1	0	0	0	0	0	0	Antepartum haem.
642,760.0	0	0	0	0	0	0	Hypertension in preg.
656.5,764,765	24	29	21	20	23	24	Low birthweight
658.1,658.2,761.1	0	0	0	0	0	0	Prem. rupture of membs
798.0	45	41	37	34	29	31	SIDS
E890-E899	12	12	9	13	11	10	Fire injuries
All tobacco codes	4,801	5,105	4,937	5,028	4,985	5,261	Total tobacco-caused

Note: Use of aetiologic fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table D4 Estimated total number of alcohol-caused deaths, by year and condition

Australia, 1991-1996

ICD9 codes	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	69	67	70	63	61	68	Oropharyngeal cancer
150	55	57	55	61	59	60	Oesophageal cancer
155	52	57	58	60	65	66	Liver cancer
161	37	38	35	30	31	32	Laryngeal cancer
174	60	57	61	62	61	61	Female breast cancer
291	38	41	41	73	71	57	Alcoholic psychosis
303	185	185	198	181	232	193	Alcohol dependence
305.0	10	15	13	10	16	18	Alcohol abuse
345	30	27	31	32	28	36	Epilepsy
357.5	0	0	0	0	0	0	Alc. poly neuropathy
401-405	40	40	41	40	40	39	Hypertension
425.5	155	148	120	134	116	109	Alc. cardiomyopathy
427.0,427.2,427.3	10	11	12	14	15	18	SV cardiac dysrhyth.
430-438	743	737	732	758	755	748	Stroke
456.0-456.2	3	1	3	2	2	3	Oesophageal varices
530.7	1	1	2	4	3	1	Gastro-oes. haem.
535.3	3	3	1	2	1	3	Alcoholic gastritis
571.0-571.3	683	720	617	687	670	695	Alc. liver cirrhosis
574	-1	-2	-1	-1	-1	-1	Cholelithiasis
577.0	30	36	32	38	38	33	Acute pancreatitis
577.1	10	12	14	13	18	19	Chronic pancreatitis
696.1	0	0	0	0	0	0	Psoriasis
980.0	33	48	24	25	48	63	Ethanol toxicity
980.1	1	3	0	0	0	1	Methanol toxicity
E810-E819	575	520	505	488	508	491	Road injuries
E860.0	4	7	0	0	1	3	Alcoholic poisoning
E860.1-E860.2	1	0	2	5	0	2	Other eth./meth. pois.
E880-E888	314	324	287	340	334	372	Fall injuries
E890-E899	53	49	41	48	40	48	Fire injuries
E910	73	75	80	73	68	67	Drowning
E911	93	82	57	67	54	58	Aspiration
E919,E920	6	5	4	6	4	5	Occ./machine injuries
E950-E959	246	241	219	237	250	250	Suicide
E960,E965-6,E968-9	147	138	130	140	135	139	Assault
E967	1	1	2	1	1	1	Child abuse
All alcohol codes	3,759	3,744	3,488	3,691	3,725	3,756	Total alcohol-caused

Note: Use of aetiologic fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table D5 Estimated number of male alcohol-caused deaths, by year and condition

Australia, 1991-1996

ICD9 codes	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	60	59	60	56	53	60	Oropharyngeal cancer
150	44	47	44	49	49	47	Oesophageal cancer
155	40	44	46	44	48	50	Liver cancer
161	33	35	32	27	29	29	Laryngeal cancer
174	0	0	0	0	0	0	Female breast cancer
291	33	36	32	66	58	46	Alcoholic psychosis
303	147	159	147	145	179	156	Alcohol dependence
305.0	7	12	10	6	11	12	Alcohol abuse
345	17	17	17	20	18	22	Epilepsy
357.5	0	0	0	0	0	0	Alc. poly neuropathy
401-405	21	19	21	21	21	21	Hypertension
425.5	138	136	113	116	105	103	Alc. cardiomyopathy
427.0,427.2,427.3	3	4	4	5	5	6	SV cardiac dysrhyth.
430-438	327	320	312	330	322	322	Stroke
456.0-456.2	1	1	3	2	1	2	Oesophageal varices
530.7	0	1	1	3	2	0	Gastro-oes. haem.
535.3	3	2	1	2	1	2	Alcoholic gastritis
571.0-571.3	530	572	477	510	524	539	Alc. liver cirrhosis
574	-1	-1	-1	-1	-1	-1	Cholelithiasis
577.0	17	18	18	20	21	17	Acute pancreatitis
577.1	8	10	8	8	11	12	Chronic pancreatitis
696.1	0	0	0	0	0	0	Psoriasis
980.0	19	35	19	19	37	47	Ethanol toxicity
980.1	0	1	0	0	0	1	Methanol toxicity
E810-E819	482	429	426	411	422	420	Road injuries
E860.0	4	7	0	0	1	3	Alcoholic poisoning
E860.1-E860.2	1	0	1	4	0	2	Other eth./meth. pois.
E880-E888	146	153	138	154	153	175	Fall injuries
E890-E899	35	32	28	28	25	33	Fire injuries
E910	61	58	67	63	54	56	Drowning
E911	54	56	29	46	30	38	Aspiration
E919,E920	6	5	4	5	4	4	Occ./machine injuries
E950-E959	209	207	191	208	214	218	Suicide
E960,E965-6,E968-9	89	88	88	91	87	96	Assault
E967	1	0	1	1	1	1	Child abuse
All alcohol codes	2536	2563	2338	2457	2484	2540	Total alcohol-caused

Note: Use of aetiologic fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table D6 Estimated number of female alcohol-caused deaths, by year and condition

Australia, 1991-1996

ICD9 codes	1991	1992	1993	1994	1995	1996	Cause of death
141,143-146,148,149	9	8	9	7	8	9	Oropharyngeal cancer
150	11	10	11	12	11	12	Oesophageal cancer
155	12	12	12	16	17	16	Liver cancer
161	4	3	3	3	2	3	Laryngeal cancer
174	60	57	61	62	61	61	Female breast cancer
291	5	5	9	7	13	11	Alcoholic psychosis
303	38	26	51	36	53	37	Alcohol dependence
305.0	3	3	3	4	5	6	Alcohol abuse
345	14	10	14	13	10	14	Epilepsy
357.5	0	0	0	0	0	0	Alc. poly neuropathy
401-405	19	20	21	19	19	19	Hypertension
425.5	17	12	7	18	11	6	Alc. cardiomyopathy
427.0,427.2,427.3	7	7	8	9	10	11	SV cardiac dysrhyth.
430-438	416	417	420	428	433	426	Stroke
456.0-456.2	2	0	0	1	1	1	Oesophageal varices
530.7	1	0	0	1	1	0	Gastro-oes. haem.
535.3	0	1	0	0	0	1	Alcoholic gastritis
571.0-571.3	153	148	140	177	146	156	Alc. liver cirrhosis
574	-1	-1	-1	-1	-1	-1	Cholelithiasis
577.0	13	18	15	18	17	16	Acute pancreatitis
577.1	2	2	6	5	7	8	Chronic pancreatitis
696.1	0	0	0	0	0	0	Psoriasis
980.0	14	13	5	6	11	16	Ethanol toxicity
980.1	1	2	0	0	0	0	Methanol toxicity
E810-E819	93	90	79	77	86	70	Road injuries
E860.0	0	0	0	0	0	0	Alcoholic poisoning
E860.1-E860.2	0	0	1	1	0	0	Other eth./meth. pois.
E880-E888	168	172	148	185	182	197	Fall injuries
E890-E899	18	18	13	20	15	15	Fire injuries
E910	12	17	14	10	14	11	Drowning
E911	39	26	28	21	24	20	Aspiration
E919,E920	0	0	0	0	0	0	Occ./machine injuries
E950-E959	37	33	28	30	36	32	Suicide
E960,E965-6,E968-9	57	50	42	48	48	43	Assault
E967	0	1	1	0	1	0	Child abuse
All alcohol codes	1223	1181	1150	1234	1241	1217	Total alcohol-caused

Note: Use of aetiologic fractions may give estimated numbers of deaths which are not integers, therefore, due to rounding errors, the sum of the columns may not equal the 'total'.

Table D7 Estimated total number of deaths caused by other drug use, by year and condition

Australia, 1991-1996

ICD9 codes	1991	1992	1993	1994	1995	1996	Cause of death
304.3	0	0	0	0	0	0	Cannabis dependence
305.2	0	0	0	0	0	0	Cannabis abuse
304.0,304.7	202	252	239	304	423	395	Opiate dependence
305.5	0	0	0	0	0	1	Opiate abuse
E850.0-E850.2,E850.8	52	93	149	127	179	178	Acc.pois.-opiates
E950.0	62	74	44	83	100	111	Suicide - opiates
E980.0	33	48	24	25	48	63	Poisoning - opiates
304.4	0	1	2	1	5	2	Amphetamine dependence
305.7	0	0	0	0	0	0	Amphetamine abuse
E854.2	3	1	6	3	3	5	Acc.pois.-psychostimulants
304.2	0	0	1	0	0	0	Cocaine dependence
305.6	0	0	0	0	0	0	Cocaine abuse
640,641	0	0	0	0	0	0	Antepartum haemorrhage
656.5,764,765	5	6	4	4	5	5	Low birthweight
E855.2	0	0	1	1	1	1	Acc.pois.-local anaesthetic
304.5	0	0	0	0	0	0	Hallucinogen dependence
305.3	0	0	0	0	0	0	Hallucinogen abuse
E854.1	1	1	1	0	0	0	Acc.pois.-hallucinogens
304.1	8	3	13	6	7	7	Barbiturate dependence
E851	0	0	0	0	0	0	Acc.pois.-barbiturates
E950.1	19	15	19	12	14	9	Suicide - barbiturates
E980.1	1	3	0	0	0	1	Poisoning - barbiturates
305.8	0	0	0	0	1	0	Antidepressant abuse
E852	4	3	1	7	0	2	Acc.pois.- other sedatives
E853	5	8	20	25	25	29	Acc.pois.- tranquillisers
E854.0	14	24	29	51	32	29	Acc.pois.- antidepressants
E950.2	6	10	6	1	1	1	Suicide - other sedatives
E980.2	2	4	0	1	0	0	Poisoning - other sedatives
304.6	5	1	1	9	1	4	Vol. substance dependence
E862.0,.1,.4,.9,E866.6	8	6	8	4	6	5	Acc.pois.- vol.substances
E951.1	2	4	6	4	4	2	Suicide - vol.substances
E981.1	0	2	0	1	0	0	Poisoning - vol.substances
304.8,304.9	10	6	14	13	15	14	Dependence-comb/unspec.drugs
305.4	0	0	0	1	0	0	Abuse-barb/sed/hypnotic drugs
305.9	1	0	1	1	2	2	Other/unspec.drug abuse
E850.3-E850.7,E850.9	4	10	7	8	2	7	Acc.pois.- other drugs
E950.3-E950.5	301	251	193	234	233	205	Suicide - other drugs
E962.0	3	0	1	3	0	3	Assault by pois.with drugs
E980.3-E980.5	59	60	19	31	37	23	Poisoning - other/unspec.drugs
070.2-070.3	11	10	18	12	16	11	Hepatitis B
070.4-070.5	7	11	21	22	29	27	Hepatitis non-A, non-B
279.1,042-044	7	7	10	10	10	8	AIDS/HIV
421	0	1	1	2	1	1	Infective endocarditis
292	0	0	0	0	0	0	Drug psychoses
648.3	0	0	0	0	0	0	Maternal drug dependence
760.72-760.73,779.5	0	0	0	0	0	0	Newborn drug toxicity.
All other drug codes	835	914	858	1,005	1,199	1,151	Total other drug-caused

Table D8 Estimated number of male deaths caused by other drug use, by year and condition

Australia, 1991-1996

ICD9 codes	1991	1992	1993	1994	1995	1996	Cause of death
304.3	0	0	0	0	0	0	Cannabis dependence
305.2	0	0	0	0	0	0	Cannabis abuse
304.0,304.7	153	198	193	241	340	325	Opiate dependence
305.5	0	0	0	0	0	1	Opiate abuse
E850.0-E850.2,E850.8	44	71	114	100	136	149	Acc.pois.-opiates
E950.0	36	41	26	52	67	63	Suicide - opiates
E980.0	19	35	19	19	37	47	Poisoning - opiates
304.4	0	1	2	0	4	0	Amphetamine dependence
305.7	0	0	0	0	0	0	Amphetamine abuse
E854.2	3	1	4	2	0	3	Acc.pois.-psychostimulants
304.2	0	0	1	0	0	0	Cocaine dependence
305.6	0	0	0	0	0	0	Cocaine abuse
640,641	0	0	0	0	0	0	Antepartum haemorrhage
656.5,764,765	3	3	2	2	3	3	Low birthweight
E855.2	0	0	1	0	1	1	Acc.pois.-local anaesthetic
304.5	0	0	0	0	0	0	Hallucinogen dependence
305.3	0	0	0	0	0	0	Hallucinogen abuse
E854.1	1	1	1	0	0	0	Acc.pois.-hallucinogens
304.1	2	1	7	4	6	4	Barbiturate dependence
E851	0	0	0	0	0	0	Acc.pois.-barbiturates
E950.1	10	9	11	7	9	3	Suicide - barbiturates
E980.1	0	1	0	0	0	1	Poisoning - barbiturates
305.8	0	0	0	0	0	0	Antidepressant abuse
E852	3	2	0	0	0	1	Acc.pois.- other sedatives
E853	3	6	13	8	19	22	Acc.pois.- tranquillisers
E854.0	7	13	11	27	12	10	Acc.pois.- antidepressants
E950.2	1	2	2	1	0	1	Suicide - other sedatives
E980.2	2	3	0	0	0	0	Poisoning - other sedatives
304.6	5	1	0	7	1	4	Vol. substance dependence
E862.0,.1,.4,.9,E866.6	7	5	8	4	6	5	Acc.pois.- vol.substances
E951.1	1	3	4	3	4	2	Suicide - vol.substances
E981.1	0	2	0	1	0	0	Poisoning - vol.substances
304.8,304.9	6	4	8	11	12	11	Dependence-comb/unspec.drugs
305.4	0	0	0	0	0	0	Abuse-barb/sed/hypnotic drugs
305.9	1	0	1	1	1	2	Other/unspec.drug abuse
E850.3-E850.7,E850.9	3	7	3	6	1	4	Acc.pois.- other drugs
E950.3-E950.5	161	120	96	128	118	95	Suicide - other drugs
E962.0	2	0	1	2	0	3	Assault by pois.with drugs
E980.3-E980.5	30	31	10	17	26	14	Poisoning - other/unspec.drugs
070.2-070.3	8	8	14	9	13	8	Hepatitis B
070.4-070.5	4	9	13	12	18	16	Hepatitis non-A, non-B
279.1,042-044	4	4	6	5	5	5	AIDS/HIV
421	0	0	1	1	0	0	Infective endocarditis
292	0	0	0	0	0	0	Drug psychoses
648.3	0	0	0	0	0	0	Maternal drug dependence
760.72-760.73,779.5	0	0	0	0	0	0	Newborn drug toxicity.
All other drug codes	519	582	572	670	839	804	Total other drug-caused

Table D9 Estimated number of female deaths caused by other drug use, by year and condition

Australia, 1991-1996

ICD9 codes	1991	1992	1993	1994	1995	1996	Cause of death
304.3	0	0	0	0	0	0	Cannabis dependence
305.2	0	0	0	0	0	0	Cannabis abuse
304.0,304.7	49	54	46	63	83	70	Opiate dependence
305.5	0	0	0	0	0	0	Opiate abuse
E850.0-E850.2,E850.8	8	22	35	27	43	29	Acc.pois.-opiates
E950.0	26	33	18	31	33	48	Suicide - opiates
E980.0	14	13	5	6	11	16	Poisoning - opiates
304.4	0	0	0	1	1	2	Amphetamine dependence
305.7	0	0	0	0	0	0	Amphetamine abuse
E854.2	0	0	2	1	3	2	Acc.pois.-psychostimulants
304.2	0	0	0	0	0	0	Cocaine dependence
305.6	0	0	0	0	0	0	Cocaine abuse
640,641	0	0	0	0	0	0	Antepartum haemorrhage
656.5,764,765	2	3	2	2	2	2	Low birthweight
E855.2	0	0	0	1	0	0	Acc.pois.-local anaesthetic
304.5	0	0	0	0	0	0	Hallucinogen dependence
305.3	0	0	0	0	0	0	Hallucinogen abuse
E854.1	0	0	0	0	0	0	Acc.pois.-hallucinogens
304.1	6	2	6	2	1	3	Barbiturate dependence
E851	0	0	0	0	0	0	Acc.pois.-barbiturates
E950.1	9	6	8	5	5	6	Suicide - barbiturates
E980.1	1	2	0	0	0	0	Poisoning - barbiturates
305.8	0	0	0	0	1	0	Antidepressant abuse
E852	1	1	1	7	0	1	Acc.pois.- other sedatives
E853	2	2	7	17	6	7	Acc.pois.- tranquillisers
E854.0	7	11	18	24	20	19	Acc.pois.- antidepressants
E950.2	5	8	4	0	1	0	Suicide - other sedatives
E980.2	0	1	0	1	0	0	Poisoning - other sedatives
304.6	0	0	1	2	0	0	Vol. substance dependence
E862.0.,1.,4.,9,E866.6	1	1	0	0	0	0	Acc.pois.- vol.substances
E951.1	1	1	2	1	0	0	Suicide - vol.substances
E981.1	0	0	0	0	0	0	Poisoning - vol.substances
304.8,304.9	4	2	6	2	3	3	Dependence-comb/unspec.drugs
305.4	0	0	0	1	0	0	Abuse-barb/sed/hypnotic drugs
305.9	0	0	0	0	1	0	Other/unspec.drug abuse
E850.3-E850.7,E850.9	1	3	4	2	1	3	Acc.pois.- other drugs
E950.3-E950.5	140	131	97	106	115	110	Suicide - other drugs
E962.0	1	0	0	1	0	0	Assault by pois.with drugs
E980.3-E980.5	29	29	9	14	11	9	Poisoning - other/unspec.drugs
070.2-070.3	3	2	3	3	3	3	Hepatitis B
070.4-070.5	3	2	7	10	11	11	Hepatitis non-A, non-B
279.1,042-044	3	3	5	5	5	3	AIDS/HIV
421	0	1	0	1	0	0	Infective endocarditis
292	0	0	0	0	0	0	Drug psychoses
648.3	0	0	0	0	0	0	Maternal drug dependence
760.72-760.73,779.5	0	0	0	0	0	0	Newborn drug toxicity.
All other drug codes	317	332	286	335	360	347	Total other drug-caused