2003 AUSTRALIAN BUREAU OF STATISTICS DATA ON ACCIDENTAL DRUG-INDUCED DEATHS DUE TO OPIOIDS

- This bulletin provides data on accidental opioid deaths in Australia among those aged 15-54 years.

- These data refer to accidental deaths in which opioids were determined to be the underlying cause of death - that is, that they were the *primary* factor responsible for the person's death. They are coded according to the International Statistical Classification of Diseases and Related Problems, 10th revision (ICD-10). The data presented here refer to deaths among those aged 15 to 54 years in 2003 which were attributed to the following:
  - **X42 and X44 - Accidental deaths due to poisoning by opioids;**
  - **F11 and F19 - Accidental deaths due to opioid use (usually opioid dependence).**

- There were a total of 357 deaths attributed to opioids in 2003 among those aged 15 to 54 years. Just less than half of these deaths (40%) occurred in New South Wales (n=143). Examination of jurisdictional trends revealed a slight increase in the number of opioid overdose deaths in Victoria, from 93 to 129; the rate increased from 33.2 to 45.9 per million persons. The number halved in Western Australia.

- Deaths in the 15 to 54 year age group made up 95% of all accidental deaths due to opioids in Australia.

- Males formed three quarters (74%) of the deaths among the 15 to 54 year age group.

- The rate of accidental deaths due to opioids in Australia was 31.5 per million persons aged 15 to 54 years, which is stable compared to 2002 (where the rate was 32.3 per million persons).

- Ten-year breakdowns of deaths attributable to opioids in 2003 showed that the largest proportion of deaths continued to be among the 25-34 year age group (42%), followed by the 35-44 age group (29%), 15-24 (15%) and 45-54 age groups (13%). This trend is similar to 2002.

- The number and rate of accidental deaths due to opioids for the 15-54 year age group remained relatively stable between 2002 and 2003.

IMPLICATIONS

- The number of opioid induced deaths in Australia remains lower than those recorded in 2000, with the dramatic reduction seen in 2001 being maintained. The trend in ABS opioid overdose deaths is entirely consistent with observed trends in ambulance calls to overdoses, and other indicators of heroin-related harms. These data suggest that the reduction in the scale of the heroin market in Australia has been sustained in 2003.

- Heroin supply reduction appeared to have mixed health effects upon different groups of heroin users. Younger (less entrenched) heroin users appeared to be particularly affected by the reduction in heroin supply, with many indicators suggesting that they might have ceased (or substantially reduced) heroin use (Degenhardt, Rendle, Hall, Gilmour, & Law, 2004), and switched to psychostimulants, but may not have been injecting these drugs (Degenhardt, Day, & Hall, 2004).

- Older, more entrenched users had smaller reductions in harms related to heroin use. They also seemed to shift to other risky forms of drug use, which particularly included the injection of pharmaceuticals such as benzodiazepines (Degenhardt, Day et al., 2004). Because harm reduction initiatives were in place, the harms associated with these risky forms of drug use may have been reduced. If the shortage had occurred in countries where harm reduction and treatment services were not in place, it is highly likely that these risk behaviours would have resulted in significant increases in drug related harm.

- This suggests that targeting supply may not affect older users as much as it does younger users, and that other efforts to reduce heroin use and its related harm are required. Opioid replacement treatments, which are known to reduce the risk of overdosing by a factor of four, as well as other treatment modalities such as counselling and residential treatment, may assist in reducing the extent of harm among this group. It is important to maintain these treatment opportunities for opioid dependent persons in Australia.

- Maintaining the reductions in opioid induced deaths through the integrated use of demand, supply and harm reduction strategies should be a continued aim. This policy approach to illicit drug use has been successfully in place for a number of years across Australia.

Figure 1: Rate of accidental deaths due to opioids per million population among those aged 15-54 years, Australia 1988-2002

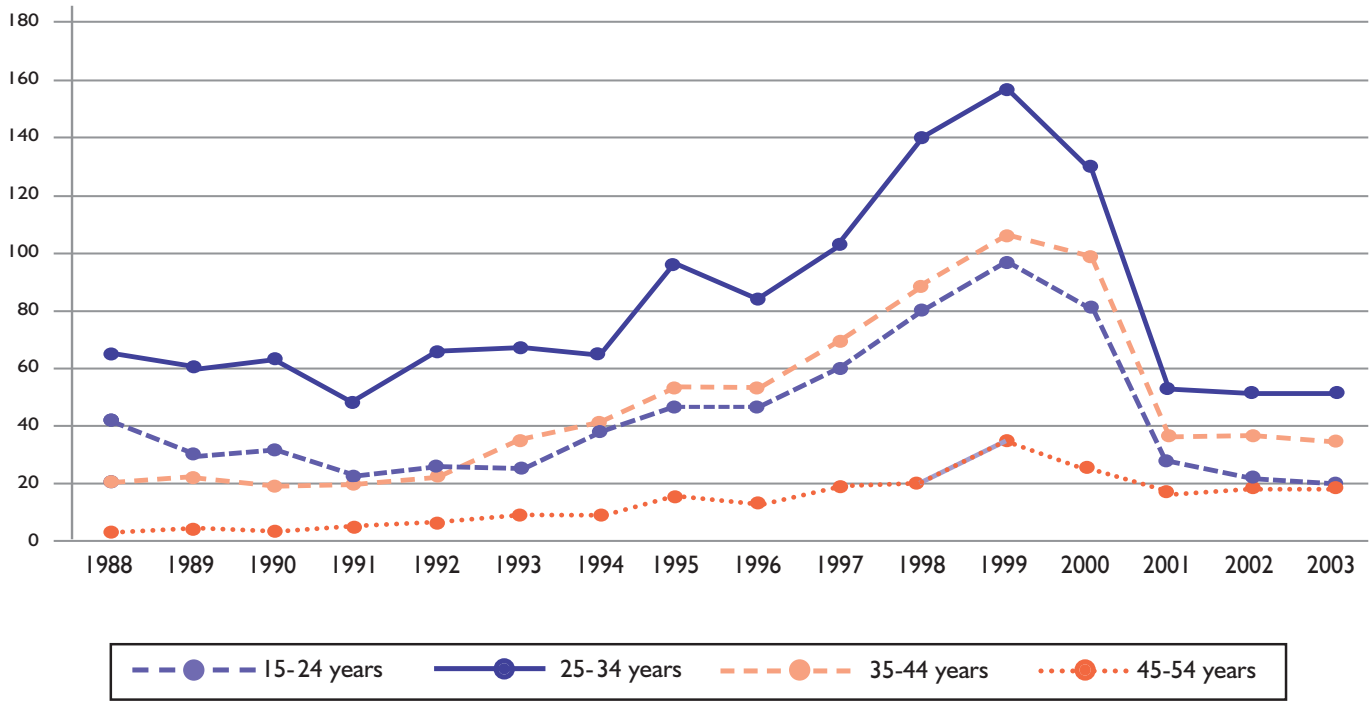


Table 1: Number of accidental deaths due to opioids among those aged 15-54 years by jurisdiction, 1988-2003

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	MISSING STATE	AUST
1988	204	99	16	12	18	0	0	2	-	**351**
1989	158	99	19	8	18	1	2	2	-	**307**
1990	196	79	8	19	14	5	0	0	-	**321**
1991	146	64	9	13	13	3	0	2	-	**250**
1992	182	79	18	30	22	0	1	4	-	**336**
1993	188	86	23	41	24	5	2	5	-	**374**
1994	209	97	37	32	38	4	5	3	-	**425**
1995	273	140	42	38	70	6	0	13	-	**582**
1996	260	145	32	32	64	5	2	17	-	**557**
1997	333	203	36	52	76	2	2	9	-	**713**
1998	452	243	64	53	78	10	13	14	-	**927**
1999	481	376	79	64	92	5	8	11	-	**1116**
2000	349	323	124	50	72	8	2	10	-	**938**
2001	177	73	58	18	35	8	5	12	-	**386**
2002	158	93	40	21	28	9	6	8	1	364
2003	**143**	**129**	**32**	**14**	**16**	**4**	**2**	**17**	**-**	**357**

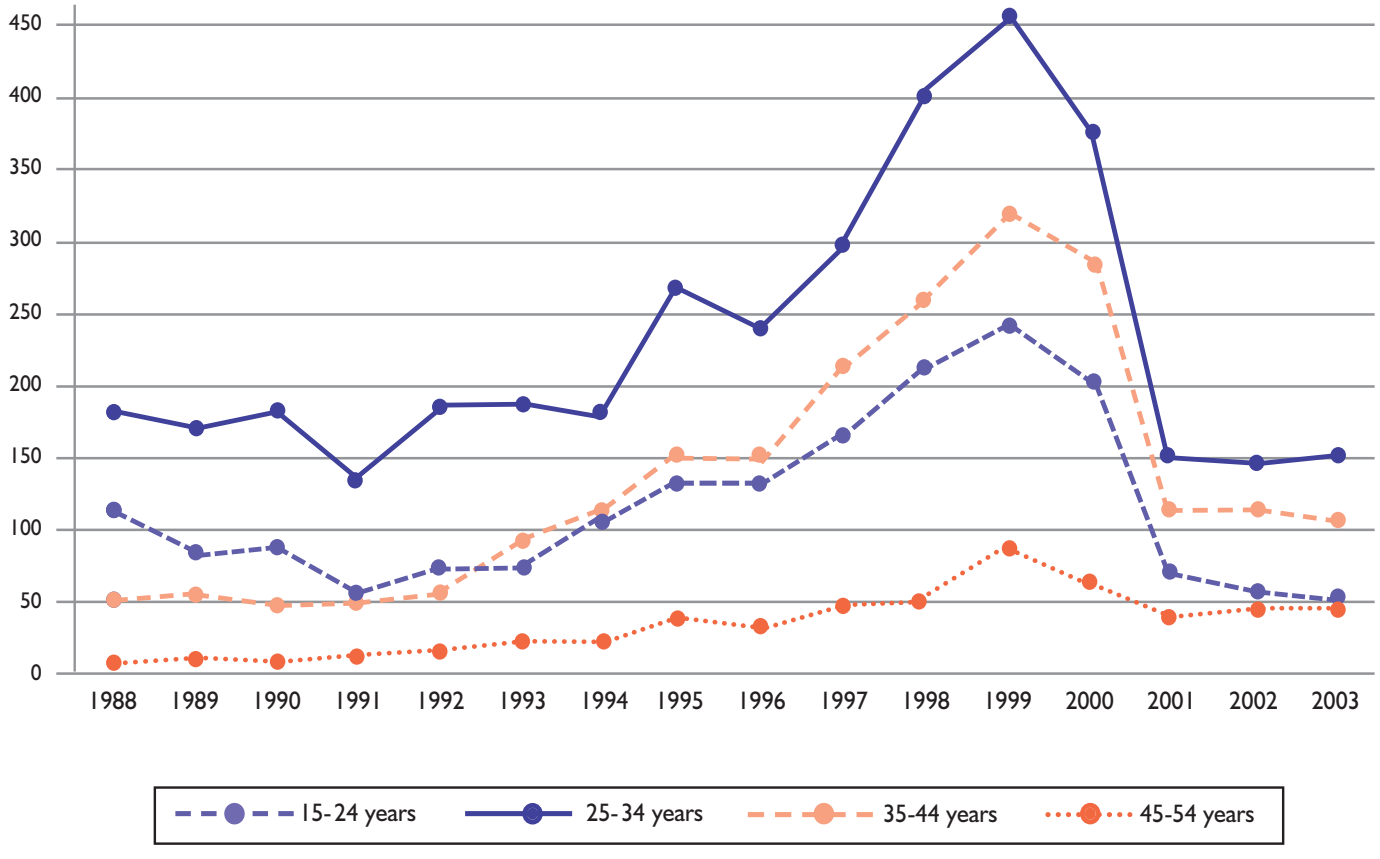
Table 2: Number of accidental deaths due to opioids among those aged 15- 54 years by gender and jurisdiction, 2003

New South Wales	Males	101	Females	42
Victoria	Males	98	Females	31
Queensland	Males	22	Females	10
South Australia	Males	14	Females	-
Western Australia	Males	14	Females	2
Tasmania	Males	2	Females	2
Northern Territory	Males	2	Females	-
ACT	Males	10	Females	7
Missing	Males	-	Females	-
TOTAL AUSTRALIA	Males	263	Females	94

Table 3: Rate of accidental deaths due to opioids per million persons among those aged 15-54 years by jurisdiction, 1988-2002

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
1988	62.5	39.9	10.1	14.9	19.7	-	-	11.4	36.6
1989	47.5	39.3	11.6	9.8	19.2	6.4	19.2	11.4	31.4
1990	58.2	30.8	4.7	23.1	14.6	19.1	0	0	32.3
1991	42.8	24.7	5.2	15.7	13.4	11.4	0	10.8	24.8
1992	52.9	30.3	10.1	35.9	22.4	0	9.2	21.1	32.9
1993	54.3	33.0	12.6	48.9	24.1	18.8	18.3	25.9	36.3
1994	59.9	37.1	19.7	38.1	37.7	15.0	45.5	15.4	40.9
1995	76.9	53.4	21.8	45.1	68.1	22.5	0	66.2	55.3
1996	72.7	54.8	16.2	37.9	61.2	18.7	17.7	85.6	52.2
1997	92.2	76.1	18.1	61.8	71.3	7.5	16.5	45.8	66.3
1998	124.1	90.4	31.7	62.7	72.1	37.8	106.1	71.3	85.4
1999	130.9	138.8	38.7	75.5	84.1	19.0	64.4	55.9	101.9
2000	94.1	118.1	60.1	58.9	65.2	30.6	15.9	50.5	84.9
2001	47.2	26.4	27.8	21.2	31.3	30.8	39.6	60.2	34.6
2002	41.9	33.2	18.8	24.7	24.8	34.9	47.8	40.1	32.3
2003	**37.8**	**45.9**	**14.7**	**16.5**	**14.1**	**15.4**	**15.9**	**85.3**	**31.5**

Figure 2: Number of accidental deaths due to opioids among those aged 15-54 years, Australia 1988-2003



ABS DATA ON ACCIDENTAL DEATHS DUE TO OPIOIDS IN AUSTRALIA

The Australian Bureau of Statistics (ABS) is responsible for collecting data every year on persons who have died across Australia. Data on accidental deaths are collected from the Medical Certificates of Cause of Death submitted to each State or Territory's Registrar of Births, Deaths and Marriages and from the National Coroners Information System.

Death certificates typically state the sequence of events that led to a person's death. The ABS then uses its coding rules to establish the *underlying* cause of death, that is 'the disease or injury that initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury'. The ABS also lists the diseases, injuries and health-related factors that *contributed* to the death but which were not the main cause of death.

The ABS uses an international classification system for classifying deaths, developed by the World Health Organization (WHO). This is called the International Statistical Classification of Diseases and Related Problems (ICD). The ICD edition currently used is the 10th edition (ICD-10). This edition of the classification system has been used since 1997 and provides more detailed information on accidental drug-induced deaths than previous versions. It is important to note that the introduction of ICD-10 has resulted in a break in time series. Prior to 1997, the COD data were coded according to ICD-9, and opioid deaths were based on the following codes: 3040 (opioid dependence), 3070 (opioid dependence in combination with another drug), E8500 (accidental poisoning by heroin) and E8501 (accidental poisoning by methadone).

All data on accidental opioid deaths used in this report refer to deaths in which opioids were considered to be the *underlying* cause of death. This means that the deaths recorded here only include those in which it was considered that opioids such as heroin, morphine, pethidine, methadone and codeine were *primarily responsible* for the person's death. There are more deaths each year in which opioids are considered to have *contributed* to a person's death (e.g. general medical conditions, suicides, other accidental deaths), but these deaths are not included.

In this report, the following ICD-10 codes have been used:

- F11 - Accidental deaths due to opioid use disorder (including opioid dependence);
- F19 with F11 - Accidental deaths due to multiple drug use disorder which included an opioid use disorder;
- X42 with T40.0-T40.4, T40.6 - Accidental deaths due to poisoning which included opioid poisoning;
- X44 with T40.0-T40.4, T40.6 - Accidental deaths due to multiple drug poisoning which included opioid poisoning; and
- F19 with T40.0-T40.4, T40.6 - Accidental deaths due to multiple drug use disorder which included opioid poisoning.

Related links:

For more information on NDARC research, go to: **www.med.unsw.edu.au/ndarc**
For more information about the ABS, go to: **www.abs.gov.au**
For more information on ICD-10, go to: **www.who.int/whosis/icd10/**

References:

Degenhardt, L., Day, C., & Hall, W. (Eds.). (2004). *The causes, course and consequences of the heroin shortage in New South Wales, South Australia and Victoria.* NDLERF Monograph No. 3. Adelaide: Australasian Centre for Policing Research.

Degenhardt, L., Rendle, V., Hall, W., Gilmour, S., & Law, M. (2004). *Estimating the number of heroin users in NSW and Australia, 1997-2002. NDARC Technical Report No. 198.* Sydney: National Drug and Alcohol Research Centre, University of NSW.

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National Drug and Alcohol Research Centre University of New South Wales Sydney NSW 2052
Ph: (02) 9385 0333 Fax: (02) 9385 0222 www.med.unsw.edu.au/ndarc

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