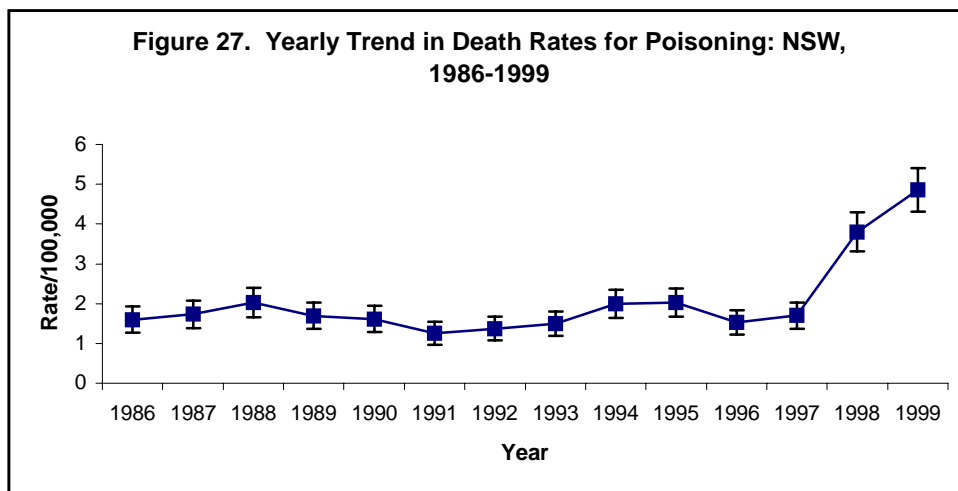


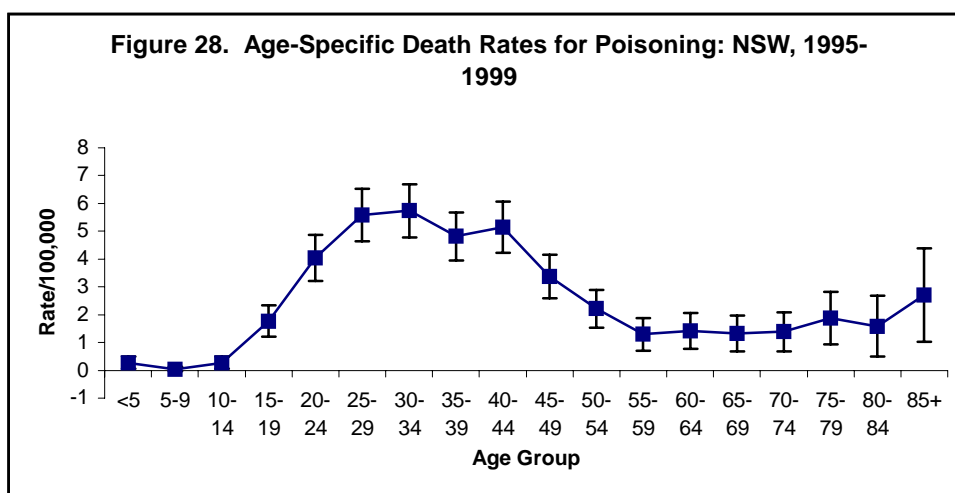
8.0 POISONING

8.1 Deaths due to Poisoning:

The poisoning death rate fluctuated between 1986 and 1997, but showed marked statistically significant increase from 1997 to 1998 and again from 1998 to 1999 (Figure 27). Between 1995 and 1999, 870 people died from poisonings, at a rate of 2.8 people /100,000 and 75 percent were male (Table 4).



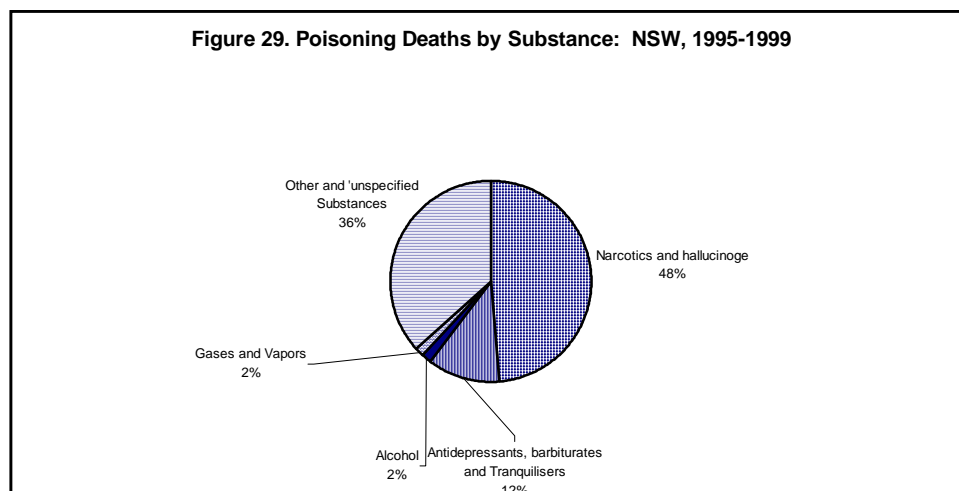
Of the 870 poisoning deaths in NSW between 1995 and 1999, approximately 59 percent of



these cases were between 25 and 44 years of age. Figure 28 illustrates the age-specific death rates for poisonings.

People aged 25-44 were at greatest risk of dying as a result of a poisoning between 1995 and 1999. Males were 2.1 times more likely than females to die as the result of a poisoning.

The following chart (Figure 29) shows the percentage of poisoning deaths for various substances.



Narcotics and hallucinogens were by far the most common substances causing poisoning deaths between 1995 and 1999, followed by antidepressants, barbiturates and tranquilizers. Approximately 36 percent involved substances that were either unspecified or classified as other types. Further analysis of the data showed that these unspecified cases accounted for 28 percent of all poisoning deaths and were coded as unspecified drugs, medicaments or biological substances.

Table 19. Number of Poisoning Deaths and Death Rates/100,000* by Type of Substance: NSW, 1995-1999

Injury Mechanism	Total Number	Rate /100,000	Number of Males	Male Rate /100,000	Number of Females	Female Rate /100,000
Narcotics and Hallucinogens	422	1.4	356	2.3	66	0.4
Other and Unspecified Substances	318	1.0	208	1.3	110	0.7
Antidepressants, Barbiturates and Tranquilisers	102	0.3	59	0.4	43	0.3
Alcohol	14	0.0	14	0.1	0	0.0
Gases and Vapors	14	0.0	12	0.1	2	0.0

*Death rates have been age-adjusted using the 1991 Australian census population

Table 19 shows the number of poisoning deaths and death rates by the substance used for all persons, males and females from 1995 to 1999. Males accounted for 84 percent of all deaths caused by narcotics poisoning between 1995 and 1999. For females, approximately one-third died as a result of a poisoning by a substance classified as other and unspecified.

Table 20 shows poisoning deaths by age group and type of substance used in NSW for 1995-1999. Three groups of substances accounted for the leading type of poisoning for all age groups- (i) narcotics and hallucinogens; (ii) antidepressants, barbiturates and tranquilisers; and (iii) other and unspecified substances. Narcotics and hallucinogens were the leading cause of poisoning deaths in people from age one to 44 years. Antidepressants, barbiturates and tranquilisers were the leading cause of poisoning in adults aged 55-64 years. Other and unspecified substances were the leading cause of poisoning in adults aged 45-54 years and adults age 65 years and older. Poisoning deaths were relatively rare for children under the age of 14 years.

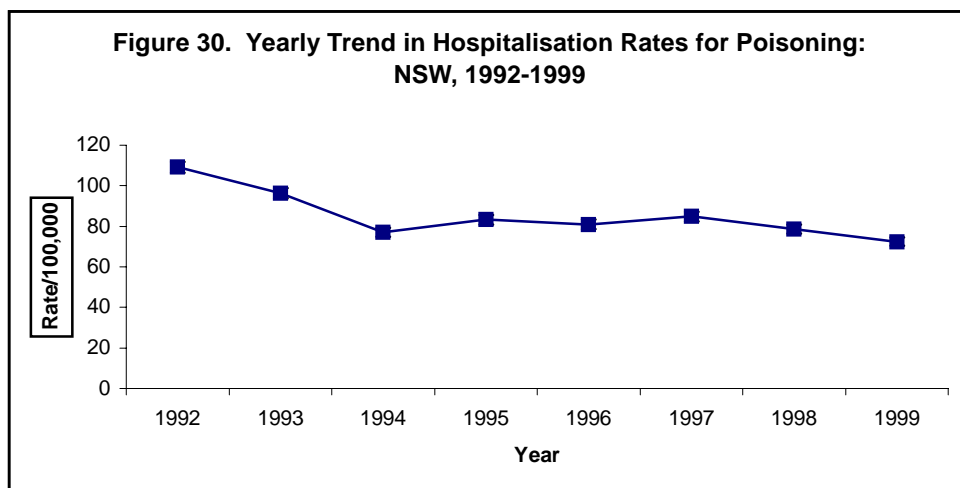
Table 20. Poisoning Deaths by Age Group and Substance Used: NSW, 1995-1999

	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Other and unspecified substances #	Narcotics and hallucinogens #	Narcotics and hallucinogens #	Narcotics and hallucinogens #	Narcotics and hallucinogens 76	Narcotics and hallucinogens 164	Narcotics and hallucinogens 119	Other and unspecified substances 43	Antidepressants, barbiturates and Tranquilisers 13	Other and unspecified substances 38	Narcotics and hallucinogens 422
2	Narcotics and hallucinogens #			Other and unspecified substances #	Other and unspecified substances 42	Other and unspecified substances 89	Other and unspecified substances 91	Narcotics and hallucinogens 41	Other and unspecified substances 11	Antidepressants, barbiturates and Tranquilisers 13	Other and unspecified substances 318
3	Antidepressants, barbiturates and Tranquilisers #			Antidepressants, barbiturates and Tranquilisers #	Antidepressants, barbiturates and Tranquilisers 6	Antidepressants, barbiturates and Tranquilisers 14	Antidepressants, barbiturates and Tranquilisers 27	Antidepressants, barbiturates and Tranquilisers 27	Narcotics and hallucinogens 8	Narcotics and hallucinogens 8	Antidepressants, barbiturates and Tranquilisers 102
4				Gases and Vapors #	Gases and Vapors #	Gases and Vapors 5	Alcohol #	Alcohol #	Alcohol #	Alcohol #	Alcohol 14
5					Alcohol #	Alcohol #		Gases and Vapors #	Gases and Vapors #	Gases and Vapors #	Gases and Vapors 14

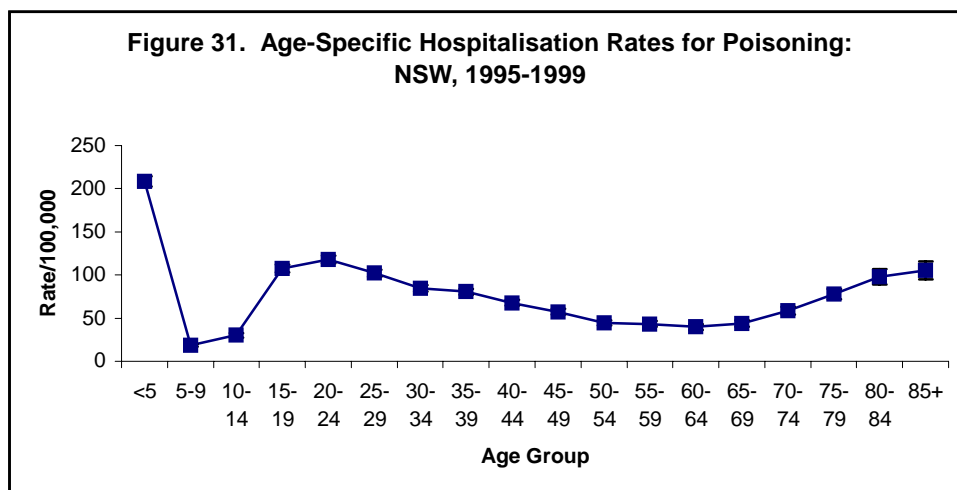
Cell size less than five cases

8.2 Hospitalisations due to Poisoning:

The poisoning hospitalisation rate showed a statistically significant decrease between 1992 and 1999. Since 1994, the rate has remained relatively stable, with a very small decrease between 1997 and 1999. (Figure 30). Between 1995 and 1999, 24,582 people were hospitalised for a poisonings, at a rate of 80.0 people /100,000 and 50 percent were male (Table 6).

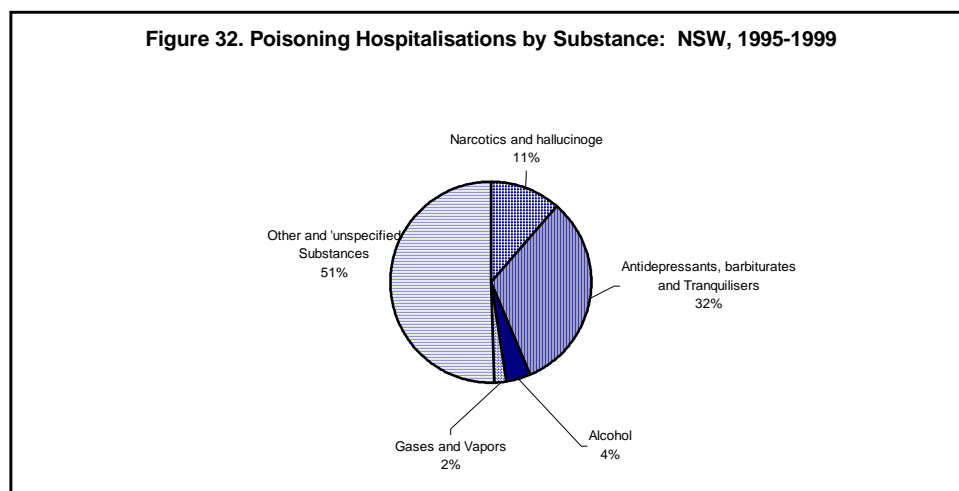


Of the 24,582 poisoning hospitalisations in NSW between 1995 and 1999, approximately 30 percent of these cases were between 15 and 29 years of age, 19 percent were under five years of age and 11 percent were above 65 years of age. Figure 31 illustrates the age-specific hospitalisation rates for poisonings.



People under age five were at greatest risk of being hospitalised as a result of a poisoning between 1995 and 1999. Smaller peaks were also seen for 15 to 35 year olds and for over 75 year olds. Males and females were hospitalised for poisoning at equivalent rates.

The following chart (see Figure 32) shows the percentage of poisoning hospitalisations for various substances.



For most cases of poisoning that were hospitalised, the substance used was coded as other and unspecified. . Further analysis of the data showed that these unspecified cases accounted for eight percent of all poisoning hospitalisations. For hospitalised cases where the substance used was known, the most common cause was antidepressants, barbiturates and tranquilisers, followed by narcotics and hallucinogens.

Table 21. Number of Poisoning Hospitalisations and Hospitalisation Rates/100,000* by Type of Substance: NSW, 1995-1999

Injury Mechanism	Total Number	Rate /100,000	Number of Males	Male Rate /100,000	Number of Females	Female Rate /100,000
Other and Unspecified Substances	12,425	40.3	5,950	38.9	6,475	41.9
Antidepressants, Barbiturates and Tranquilisers	7,948	25.7	3,587	23.4	4,361	28.1
Narcotics and Hallucinogens	2,795	9.3	1,862	12.4	933	6.2
Alcohol	900	3.0	529	3.5	371	2.5
Gases and Vapors	514	1.6	371	2.4	143	0.9

*Hospitalisation rates have been age-adjusted using the 1991 Australian census population

Table 21 shows the number of poisoning hospitalisations and hospitalisation rates by the substance used for all persons, males and females from 1995 to 1999. Females accounted for 55 percent of all cases hospitalised for poisoning by antidepressants, barbiturates and tranquilisers. Males were hospitalised more often than females for narcotics and hallucinogens poisoning.

Table 22 shows poisoning hospitalisations by age group and type of substance used in NSW for 1995-1999. Antidepressants, barbiturates and tranquilisers and Other and unspecified substances were the main types of substances accounting for hospitalisations for poisoning across all age groups. Antidepressants, barbiturates and tranquilisers were the leading cause of poisoning hospitalisation in adults aged 25-54 years. The largest group of hospitalised poisonings for the younger (under 25 year olds) and older age groups (over 55 year olds) involved a range of substances and was coded as Other and unspecified substances.

Table 22. Poisoning Hospitalisations by Age Group and Substance Used: NSW, 1995-1999

	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Other and unspecified 330	Other and unspecified 3,290	Other and unspecified 281	Other and unspecified 359	Other and unspecified 2,038	Antidepressants, barbiturates and Tranquilisers 1,851	Antidepressants, barbiturates and Tranquilisers 1,603	Antidepressants, barbiturates and Tranquilisers 906	Other and unspecified 614	Other and unspecified 1,825	Other and unspecified 12,425
2	Antidepressants, barbiturates and Tranquilisers 25	Antidepressants, barbiturates and Tranquilisers 710	Antidepressants, barbiturates and Tranquilisers 94	Antidepressants, barbiturates and Tranquilisers 143	Antidepressants, barbiturates and Tranquilisers 1,644	Other and unspecified 1,565	Other and unspecified 1,262	Other and unspecified 861	Antidepressants, barbiturates and Tranquilisers 375	Antidepressants, barbiturates and Tranquilisers 597	Antidepressants, barbiturates and Tranquilisers 7,948
3	Narcotics and hallucinogens 19	Narcotics and hallucinogens 109	Gases and Vapors 14	Alcohol 85	Narcotics and hallucinogens 925	Narcotics and hallucinogens 857	Narcotics and hallucinogens 461	Narcotics and hallucinogens 151	Narcotics and hallucinogens 67	Narcotics and hallucinogens 160	Narcotics and hallucinogens 2,795
4	Gases and Vapors 12	Alcohol 31	Alcohol 13	Narcotics and hallucinogens 39	Alcohol 295	Alcohol 150	Alcohol 148	Alcohol 84	Alcohol 45	Alcohol 46	Alcohol 900
5		Gases and Vapors 24	Narcotics and hallucinogens 7	Gases and Vapors 29	Gases and Vapors 94	Gases and Vapors 89	Gases and Vapors 104	Gases and Vapors 67	Gases and Vapors 40	Gases and Vapors 41	Gases and Vapors 514

Cell size less than five cases

8.3 Summary

The increase in poisoning death rates in 1998 and 1999 signal cause for concern. The same increase was not seen for hospitalisation rates which have actually decreased slightly since 1997. Poisoning deaths were three times more likely for males than females, with people in the 20 to 49 years age range with rates several times higher than other age groups. Male poisoning deaths were around five times more likely to involve narcotics and hallucinogens than other types of substances. Narcotics and hallucinogens were also more likely to be responsible for poisoning deaths for 15 to 44 year olds.

In contrast, hospitalised poisonings were most likely to involve children under five years of age, although 15 to 49 year olds had elevated rates as did over 75 year olds. Hospitalised poisonings were also much more likely to involve antidepressants, tranquilisers and barbiturates than other substances. There was very little difference between males and females except for the small percentage of hospitalisations for narcotics and hallucinogens who were again about twice as likely to be male.

The coding of the substance causing the poisoning is clearly a problem for analysis, especially for deaths where around half were coded as other and unspecified. This problem needs further attention as more information on the substances involved in unintentional poisoning is important for understanding the circumstances in which poisonings occur.