

## 7 Interpersonal violence

Interpersonal violence is the term used to describe injury purposely inflicted by one or more persons on another person (WHO 1977, WHO 1996). WHO classifies the cause of interpersonal violence deaths by the method used to inflict the injury on another person. These methods include using of a *sharp or blunt object* to hit, cut or stab another person causing bleeding or other type of injury, shooting by *firearm (gun)*, *struck by/struck against* a person or object, *hanging, strangulation or suffocation* and *poisoning*. It is not possible to specifically identify domestic violence from the ICD codes.

Interpersonal violence death data from 1986 to 2002 were used to describe the demographic profile of interpersonal violence in NSW. Death data during 1998–2002 were used for the majority of the analyses, but trend analyses used death data from 1986 to 2002.

Interpersonal violence was the fifth leading cause of injury death from 1998–2002 and accounted for 4% of all injury deaths (see Table 2). During these years, 513 people died from interpersonal violence at an overall rate of 1.6/100,000 population and approximately 70% were male. Approximately 111 people died each year from 1986 to 2002 as the result of interpersonal violence.

Figure 12 shows the yearly trend in death rates from interpersonal violence from 1986 to 2002. There was a statistically significant decline in the interpersonal violence death rate between 1986 and 2002.

**Figure 12. Yearly trend in death rates for interpersonal violence: NSW, 1986–2002**

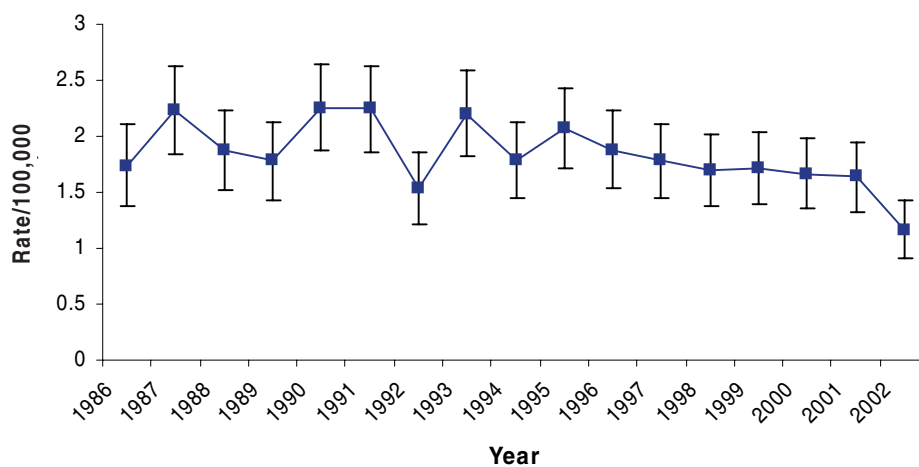


Figure 13 shows the age-specific death rates for interpersonal violence between 1998 and 2002. People 30–34 years had the highest rate of death due to interpersonal violence and this group accounted for almost 15% of all interpersonal violence deaths between 1998 and 2002. Children under age five years

also experienced high interpersonal violence rates. These children were most likely to be the recipients of interpersonal violence and accounted for 6% of interpersonal violence deaths between 1998 and 2002.

The pattern of age-specific death rates for interpersonal violence in Figure 13 is similar to that for the period from 1995 to 1999 (Schmertmann and Williamson, 2002) with one exception. People aged 25–29 years had the highest interpersonal violence death rate during 1995 to 1999.

**Figure 13. Age-specific death rates for interpersonal violence: NSW, 1998–2002**

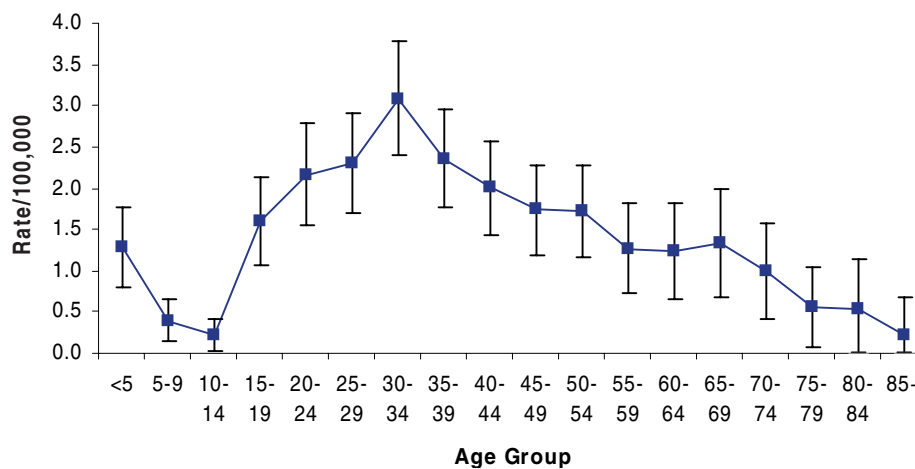


Table 11 shows the number of interpersonal violence deaths and death rates by the method used for all persons, males and females, during 1998–2002. *Sharp or blunt object* and *firearms* were the methods used that led to an interpersonal violence death most often and accounted for 43% and 21% of all interpersonal violence deaths respectively. Males accounted for 69% of all interpersonal violence deaths by *sharp or blunt object* and 83% of all interpersonal violence deaths by *firearm*.

*Sharp or blunt object* was the leading method of male interpersonal violence death and accounted for 42% of all male interpersonal violence deaths. The rate for male interpersonal violence deaths exceeded the corresponding rate for females for each type of method in Table 11 except for interpersonal violence by *hanging, strangulation or suffocation*. Male interpersonal violence death rates were also significantly higher than those in females for the following types of methods:

- sharp or blunt object
- firearm
- struck by/struck against.

Male death rates were at least four times the corresponding female death rates for *firearms* and *struck by/struck against* interpersonal violence methods. *Sharp or blunt object* was also the leading

type of female interpersonal violence death during 1998–2002 and accounted for 44% of all female interpersonal violence deaths. Females had a higher death rate than males for interpersonal violence by *hanging, strangulation or suffocation* and the rate was 2.3 times the male rate.

**Table 11. Number of interpersonal violence deaths and death rates/100,000\* by method used: NSW, 1998–2002**

Method	All persons		Males		Females		Ratio <sup>‡</sup>
	N	Rate <sup>†</sup>	N	Rate <sup>†</sup> (CI) <sup>††</sup>	N	Rate <sup>†</sup> (CI)	
Sharp or blunt object	220	0.67	153	0.94 (0.79–1.09)	67	0.41 (0.31–0.51)	2.30
Firearm	110	0.34	91	0.55 (0.44–0.67)	19	0.12 (0.06–0.17)	4.76
Struck by/struck against	71	0.22	60	0.37 (0.28–0.47)	11	0.07 (0.03–0.11)	5.45
Other and unspecified	54	0.17	34	0.21 (0.14–0.28)	20	0.12 (0.07–0.18)	1.68
Hanging, strangulation or suffocation	43	0.13	13	0.08 (0.04–0.12)	30	0.18 (0.12–0.25)	0.43
Poisoning	15	0.05	9	0.05 (0.02–0.09)	6	0.04 (0.01–0.06)	1.52
All interpersonal violence	513	1.57	360	2.21 (1.98–2.44)	153	0.94 (0.79–1.08)	2.36

\* Death rates have been age-adjusted using the 2001 Australian census population. † Rate/100,000. ‡ Mortality ratio for male/female. ††95% confidence interval

Table 12 shows interpersonal violence deaths by age group and method used in NSW for 1998–2002. *Sharp or blunt object* was the leading method used in interpersonal violence deaths in people aged 10+ years, with the exception of people aged 15–24 years. The majority of deaths in this age group were caused by firearms. The results in Table 12 are similar to data from 1995 to 1999 for interpersonal violence deaths (Schmertmann and Williamson, 2002), with one exception. Sharp or blunt object was the leading cause of interpersonal violence death in people aged 15–24.

Children under age one year died most often as the result of interpersonal violence by being *struck by/struck against* another person or object and children aged one to nine years died most often as a result of *hanging, strangulation or suffocation*.

## SUMMARY

Interpersonal violence was a leading cause of injury death for people in NSW, accounting for approximately 111 deaths each year from 1986 to 2002. Analysis of the trend for interpersonal violence death rates showed a statistically significant decline between 1986 and 2002.

Compared to data on interpersonal violence deaths from 1995 to 1999 (Schmertmann and Williamson 2002), the pattern of age-specific rates has remained unchanged. People 30–34 years had the highest rate of death due to interpersonal violence in NSW during 1998–2002. Children under age five years also had high interpersonal violence rates.

*Sharp or blunt object* and *firearms* were the methods used that led to an interpersonal violence death most often during 1998–2002 in NSW. *Sharp or blunt object* was the leading method used in interpersonal violence deaths in people aged 10+ years, with the exception of people aged 15–24 years. The majority of deaths in this age group were caused by *firearms*. Children under age one year died most often as the result of interpersonal violence by *struck by/struck against* and children aged one to nine years died most often as a result of *hanging, strangulation or suffocation*.

Males accounted for nearly 70% of all interpersonal violence deaths in NSW during 1998–2002. Males accounted for 69% of all interpersonal violence deaths by *sharp or blunt object* and 83% of all interpersonal violence deaths by *firearm*. Male interpersonal violence death rates were also significantly higher for several interpersonal violence methods—*sharp or blunt object, firearms* and *struck by/struck against*.

These results indicate that interpersonal violence is a serious public health problem for people in NSW. Males are at increased risk of death due to interpersonal violence compared to females and the reasons for this need to be better understood. Most deaths were caused by the use of firearms and knives, which often result in more serious wounds. The high numbers of firearms deaths should be investigated given recent government action to reduce the availability of firearms.

**Table 12. Interpersonal violence deaths\* by age group and method used: NSW, 1998–2002**

Rank	Age group										Total
	<1	1–4	5–9	10–14	15–24	25–34	35–44	45–54	55–64	65+	
1	Struck by/struck against #	Hanging, strangulation or suffocation 6	Hanging, strangulation or suffocation #	Sharp or blunt object #	Firearm 31	Sharp or blunt object 56	Sharp or blunt object 57	Sharp or blunt object 36	Sharp or blunt object 20	Sharp or blunt object 16	Sharp or blunt object 220
2	Hanging, strangulation or suffocation #	Struck by/struck against 5	Other and unspecified means #	Other and unspecified means #	Sharp or blunt object 29	Firearm 36	Firearm 26	Struck by/struck against 15	Struck by/struck against 12	Struck by/struck against 6	Firearm 110
3	Other and unspecified means #	Poisoning #	Struck by/struck against #	Poisoning #	Other and unspecified means 9	Other and unspecified means 13	Struck by/struck against 11	Firearm 12	Firearm #	Other and unspecified means 6	Struck by/struck against 71
4	#	Sharp or blunt object #	Sharp or blunt object #	Firearm #	Struck by/struck against 8	Hanging, strangulation or suffocation 12	Other and unspecified means 8	Other and unspecified means 9	Hanging, strangulation or suffocation #	Hanging, strangulation or suffocation 5	Other and unspecified means 54
5	#	Other and unspecified means #	#	#	Hanging, strangulation or suffocation #	Struck by/struck against 9	Hanging, strangulation or suffocation 5	Hanging, strangulation or suffocation #	Other and unspecified means #	Firearm #	Hanging, strangulation or suffocation 43
6	#	#	#	#	Poisoning #	Poisoning 5	Poisoning #	Poisoning #	Poisoning #	Poisoning #	Poisoning 15

\* Numbers represent the number of cases. † See Appendix 4 for interpersonal violence method codes. # Cell size less than five cases