

6 Falls

Falls are an unintentional cause of injury death (WHO 1977, WHO 1996). WHO classifies the cause of falls deaths by the circumstance in which they occur. The types of falls include same level (due to tripping, stumbling, etc.), from *one level to another*, *from a building or other structure*, *on stairs*, and on a *ladder/scaffolding* (WHO 1977, WHO 1996).

Falls death data from 1986 to 2002 were used to describe the demographic profile of falls deaths 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. These analyses did not include the late effects of falls.

Falls were the fourth leading cause of injury death from 1998–2002 and accounted for almost 9% of all injury deaths (see Table 2). During these years, 1093 people died from falls at an overall rate of 3.4/100,000 population and approximately 59% were male. Approximately 176 people died each year from 1986 to 2002 as the result of falls.

Figure 10 shows the yearly trend in death rates for falls from 1986 to 2002. There was no statistically significant trend in the falls death rate between 1986 and 2002.

Figure 10. Yearly trend in death rates for falls: NSW, 1986–2002

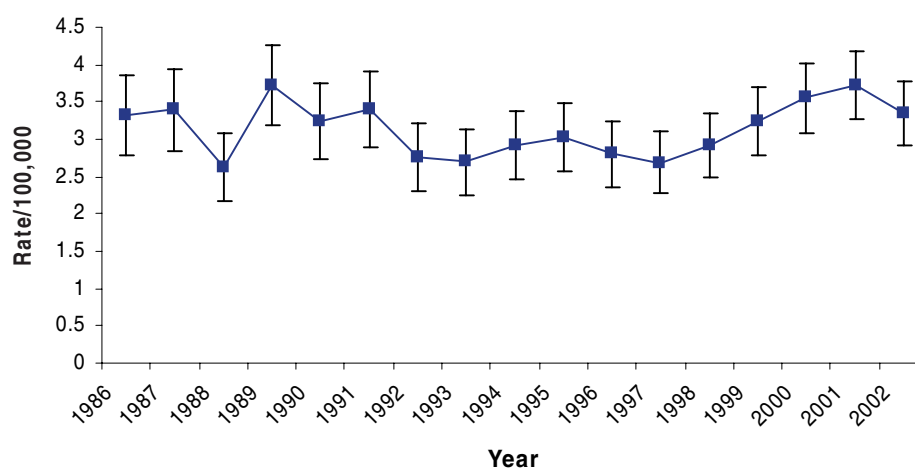
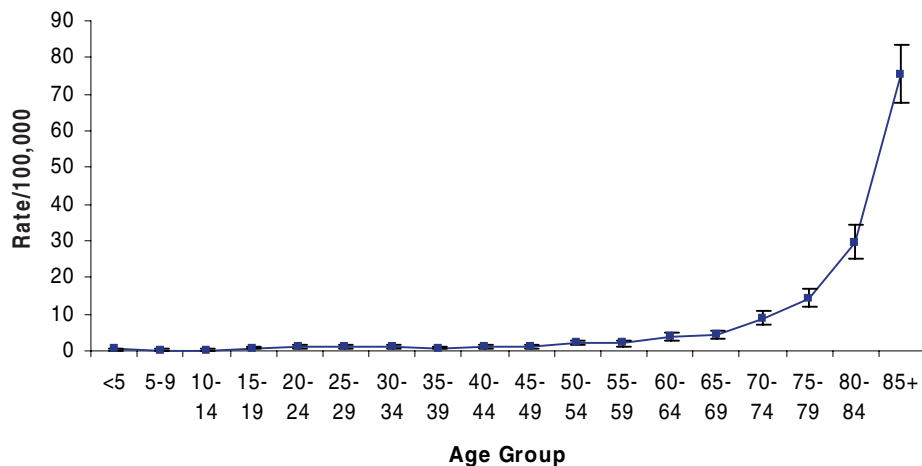


Figure 11 shows the age-specific death rates for falls between 1998 and 2002 and this is similar to the pattern of age-specific death rates for falls from 1995 to 1999 (Schmertmann and Williamson, 2002). People 70+ years had the highest rates of death due to falls. Falls deaths in people aged 70+ years accounted for 66% of all falls deaths between 1998 and 2002.

Table 9 shows the number of falls deaths and death rates by type of fall for all persons, males and females, during 1998–2002. *Other/unspecified* falls and falls on the *same level* were the types of falls that led to a falls death most often and accounted for 52% and 15% of all falls deaths respectively. Females accounted for 53% of all *other/unspecified* falls deaths and males accounted for 60% of all *same level* falls deaths.

Figure 11. Age-specific death rates for falls: NSW, 1998–2002



Other and unspecified falls were the leading type of male falls death and accounted for 42% of all male falls deaths. The rate for male falls deaths exceeded the corresponding rate for females for each type of fall in Table 9. Male falls death rates were also significantly higher for all types of falls. Male falls death rates were more than five times higher than the corresponding female falls death rates for falls from a *building or other structure*.

Table 9. Number of falls deaths and death rates/100,000* by type of fall: NSW, 1998–2002

Type of fall	All persons		Males		Females		Ratio [‡]
	N	Rate [†]	N	Rate [†] (CI) ^{††}	N	Rate [†] (CI)	
Other and unspecified	563	1.75	267	2.20 (1.93–2.47)	298**	1.47 (1.30–1.64)	1.50
Same level—tripped or pushed	168	0.52	100	0.72 (0.58–0.87)	68	0.35 (0.27–0.44)	2.04
One level to another	137	0.42	94	0.63 (0.50–0.76)	43	0.23 (0.16–0.30)	2.75
Building or other structure	95	0.29	80	0.50 (0.39–0.61)	15	0.09 (0.04–0.13)	5.74
Stairs	91	0.28	64	0.46 (0.34–0.57)	27	0.15 (0.09–0.20)	3.11
Ladder/scaffolding	39	0.12	37	0.24 (0.16–0.32)			–
All falls	1093	3.37	642	4.75 (4.38–5.13)	451	2.29 (2.08–2.50)	2.08

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

Other and unspecified falls were also the leading type of female falls death during 1998–2002 and accounted for 66% of all female falls deaths.

Table 10 shows falls deaths by age group and type of fall in NSW for 1998–2002. Fall *from a building or other structure* was the leading cause of falls death for children aged one to nine years and people aged 35–44 years. For people aged 10–34 years, fall *from one level to another* was the leading cause of falls death. Fall on the same level was the leading cause of falls death for children aged one to nine years and people aged 35–44 years. For people aged 55 and older, *other and unspecified* falls were the leading cause of falls death.

SUMMARY

Falls were a leading cause of injury death for people in NSW, accounting for approximately 176 deaths each year from 1986 to 2002. Analysis of the trend for falls death rates showed no statistically significant trend between 1986 and 2002. Compared to data on falls deaths from 1995 to 1999 (Schmertmann and Williamson, 2002), the pattern of age-specific rates has remained unchanged. People 70+ years had the highest rates of death due to falls in NSW during 1998–2002.

Other and unspecified falls and falls on the *same level* were the types of falls that led to a falls death most often during 1998–2002 in NSW. Fall *from a building or other structure* was the leading cause of falls death for children aged one to nine years and people aged 35–44 years. For people aged 10–34 years, falls *from one level to another* were the leading cause of falls death. *Same level* falls was the leading cause of falls death for children aged one to nine years and people aged 35–44 years. For people aged 55 and older, *other and unspecified* falls were the leading cause of falls death.

Males accounted for nearly 59% of all falls deaths in NSW during 1998–2002. Females accounted for 53% of all other/unspecified falls deaths and males accounted for 60% of all *same level* falls deaths. Male falls death rates were also significantly higher than those in females for all types of falls.

These results indicate that falls are a serious public health problem in NSW, especially in people aged 70+ years. However, the majority of elderly falls deaths were classified as *other and unspecified*, limiting the usefulness of these results. More information regarding the circumstances of these falls is needed in order to design effective prevention programs.

Future efforts should focus on improvements to the coding and data collection systems so that the number of cases coded as *other and unspecified* is greatly reduced. Until these changes can be made, an alternate data source (e.g. coronial data) should be used to investigate the nature of falls deaths coded as *other and unspecified*.

