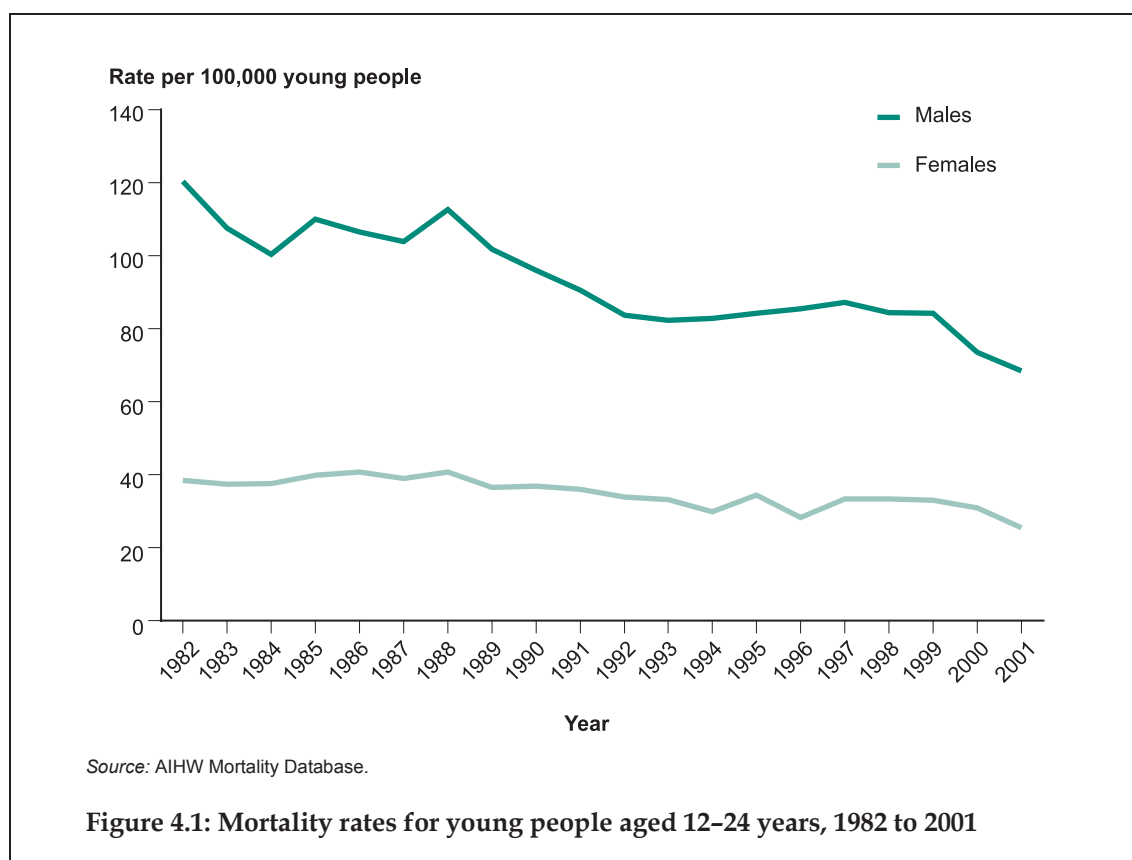


4. Mortality

Death rates are one of the most widely used measures of health in a population. Identifying the causes of mortality provides a basis for setting priorities for public health action, for providing health services and for research.

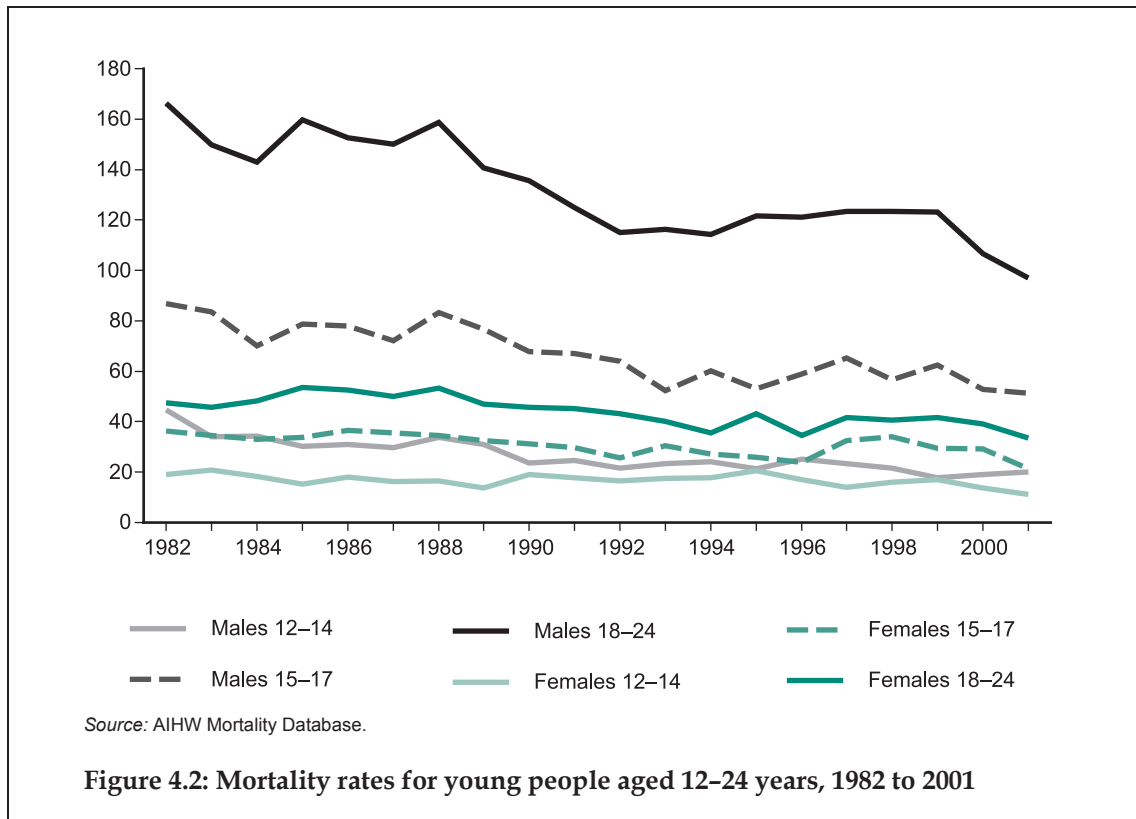
This chapter provides an overview of mortality of young people, covering trends in mortality over the last two decades, age-specific death rates and the underlying causes of death by age groups (based on the 9th and 10th Revisions of the International Classification of Diseases and Related Health Problems, ICD-9 and ICD-10). Selected specific causes of death by age group are also covered in this chapter.

Trends in mortality



- In 2001, there were 1,637 deaths of young people aged 12–24 years, an age-specific death rate of 47 per 100,000. This represented 1% of all deaths in that year. Almost three-quarters of all deaths of persons aged 12–24 years were of males.
- Death rates for both males and females declined between 1982 and 2001. Rates for males declined by 43%, from 120.4 per 100,000 (2,091 deaths) to 68.3 per 100,000 (1,205 deaths). Rates for females declined by 34%, from 38.4 per 100,000 (642 deaths) to 25.4 per 100,000 (432 deaths).
- Because mortality rates for males declined faster than the rates for females, the difference between males and females decreased between 1982 and 2001. In 1982, rates for males were 3.1 times those for females; in 2001, the ratio was 2.7.

Age-specific death rates



- Death rates for all age groups (12–14, 15–17 and 18–24 years) declined between 1982 and 2001.
- For males, the greatest decline was for those aged 12–14 years (55%). For those aged 15–17 years and 18–24 years, rates decreased by 41% and 42%, respectively.
- For females, the greatest decline was among those aged 15–17 years (42%). Rates for females aged 12–14 years decreased by 41%, and rates for those aged 18–24 years decreased by 29%.
- Males aged 18–24 years had the highest death rates, followed by males aged 15–17 years.

Causes of deaths of young people aged 12–24 years are presented in Table 4.1.

Causes of death

Table 4.1: Causes of death of young people aged 12–24 years, 2001

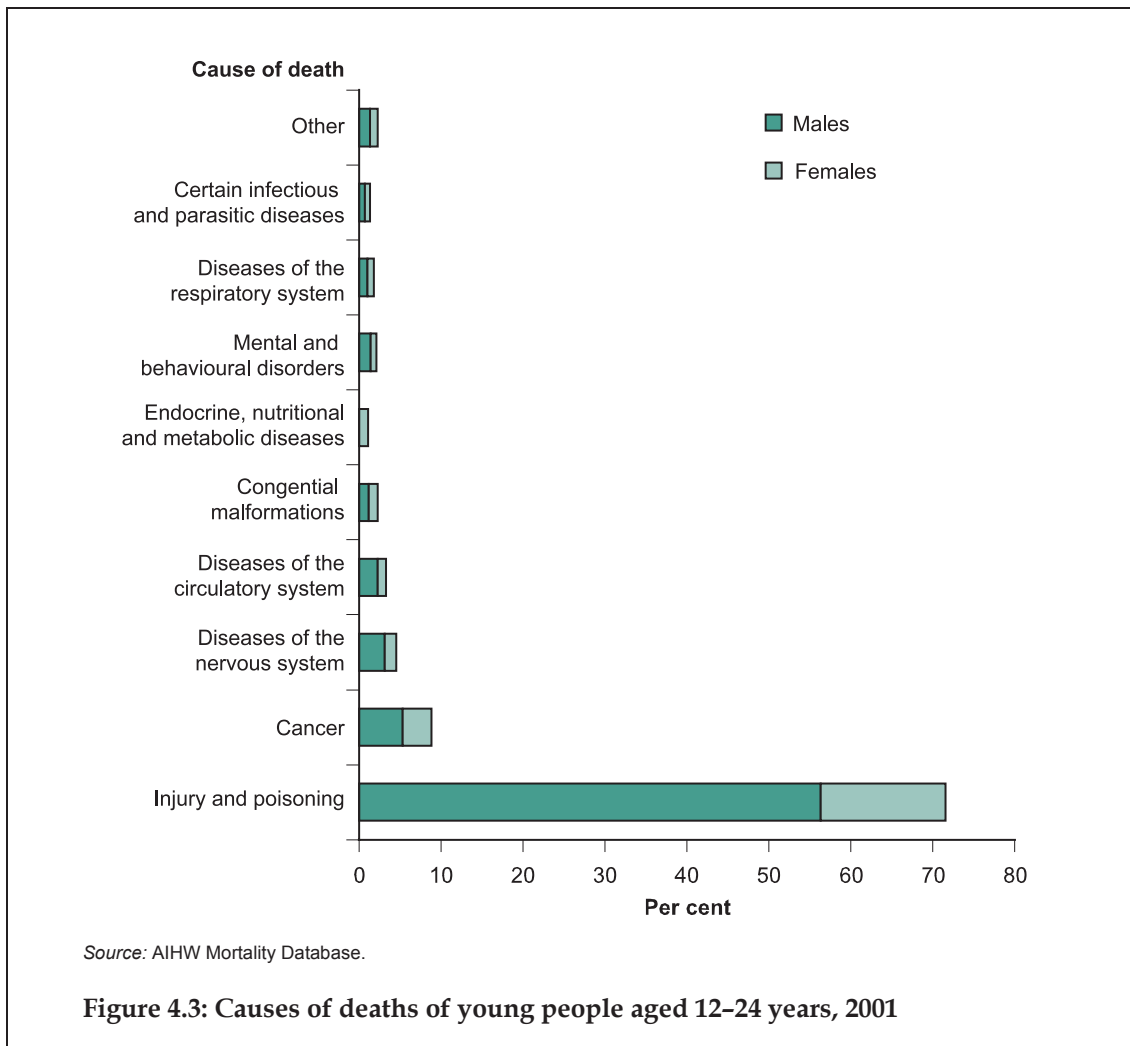
Cause of death	Number			Rate per 100,000 young people		
	Males	Females	Persons	Males	Females	Persons
Injury and poisoning	921	249	1,170	52.2	14.7	33.8
Cancer	87	57	144	4.9	3.4	4.2
Diseases of the nervous system	50	23	73	2.8	1.4	2.1
Diseases of the circulatory system	37	16	53	2.1	0.9	1.5
Congenital malformations	20	18	38	1.1	1.1	1.1
Endocrine, nutritional and metabolic diseases	19	18	37	1.1	1.1	1.1
Mental and behavioural disorders	23	11	34	1.3	0.6	1.0
Diseases of the respiratory system	16	13	29	0.9	0.8	0.8
Certain infectious and parasitic diseases	11	10	21	0.6	0.6	0.6
Other ^(a)	21	17	38	1.2	1.0	1.1
Total	1,205	432	1,637	68.3	25.5	47.3

(a) 'Other' includes: diseases of the digestive system, diseases of blood and blood-forming organs and certain disorders involving the immune mechanisms, diseases of the genitourinary system, benign neoplasms, diseases of the musculoskeletal system and connective tissue, diseases of the skin and subcutaneous tissue, certain conditions originating in the perinatal period, and symptoms, signs and abnormal findings not elsewhere classified.

Source: AIHW Mortality Database.

- Among young people aged 12–24 years, injuries and poisoning were the predominant causes of death in 2001 – 34 per 100,000 (1,170 deaths).
- Cancer was the next most common cause of death (144 deaths, or 4.2 per 100,000).

Causes of deaths of young people aged 12–24 years as a proportion of all deaths among young people are shown in Figure 4.3.



- Injury and poisoning were responsible for over 70% of deaths in this age group. This category includes suicide (see Chapter 8). Suicide was responsible for 21% of all deaths, with suicide by males representing 17% of all deaths (and 23% of deaths among males).
- Cancer was responsible for 9% of deaths of young people.
- Diseases of the nervous system were responsible for 5% of deaths.

The most frequent specific causes of death for each age group are shown in Table 4.2.

Table 4.2: Most frequent specific causes of death of young people aged 12–17 and 18–24 years, 2001

Age (years)	Cause of death	Number	Rate per 100,000 young people	Proportion of deaths in age group
12–17	Intentional self-harm by hanging, strangulation and suffocation	38	2.4	9.0
	Car passenger injured in collision with fixed or stationary object, traffic accident	24	1.5	5.7
	Pedestrian injured in collision with car, pick-up truck or van, traffic accident	15	0.9	3.5
	Car driver injured in collision with fixed or stationary object, traffic accident	14	0.9	3.3
18–24	Intentional self-harm by hanging, strangulation and suffocation	162	8.8	13.4
	Car driver injured in collision with fixed or stationary object, traffic accident	77	4.2	6.3
	Car passenger injured in collision with fixed or stationary object, traffic accident	41	2.2	3.4
	Accidental poisoning by and exposure to narcotics and hallucinogens, not elsewhere classified	40	2.2	3.3

Note: ICD-10 codes in order of presentation —X70, V47.6, V03.1, V47.5, X70, V47.5, V47.6, and X42.

Source: AIHW Mortality Database.

- For young people in all age groups, intentional self-harm (suicide) by hanging, strangulation and suffocation was the most frequent specific cause of death. Rates for those aged 18–24 were 1.5 times those for young people aged 12–17 years.
- For young people aged 12–17 years, the most frequent causes of death were suicide and car accidents (as passengers, drivers and pedestrians).
- For young people aged 18–24 years, suicide, car driver and passenger accidents, and deaths from accidental poisoning from drugs were the most frequent causes of death.

In 2001, the top four broad causes of deaths of young people aged 12–24 years were the same as those for young people in 1982 – injuries and poisoning, cancer, diseases of the nervous system, and diseases of the circulatory system. However, the specific causes of deaths from injury and poisoning were very different.

In 1982, the most frequent specific causes of deaths of young people from injury and poisoning were motor cycle rider injured from collision with another motor vehicle, car driver injured after colliding with other motor vehicles, car driver injured after collision on a public street or highway (e.g. with a guard rail or island) and car passenger injured in collision with other motor vehicle. In 2001, the most frequent specific causes of death of young people from injury were suicide by hanging, strangulation and suffocation, car driver colliding with fixed objects, car passenger involved in collisions with fixed objects, and accidental poisoning by narcotics and hallucinogens.

The change in the rank order of causes of death in the last two decades is because motor vehicle accident deaths have decreased significantly (a reduction of 64%). Suicide deaths increased by 10% over the same period.

