7 Mortality from bowel cancer

The Registrars of Births, Deaths and Marriages in each state and territory in Australia collect death data, and then pass it to the Australian Bureau of Statistics (ABS) where they are compiled and coded nationally according to the International Classification of Diseases (ICD). For bowel cancer, the relevant ICD-10 codes are C18–C20.

National mortality data, with cause of death information, are provided to the AIHW annually, and the AIHW National Mortality Database currently contains data on deaths up until the end of 2006. Bowel cancer mortality statistics in this chapter were analysed using these data.

Fast facts

In 2006:

- there were 3,801 deaths from bowel cancer in Australia (2,126 males; 1,675 females).
- Bowel cancer accounted for 9.7% of all deaths from invasive cancers, second only to lung cancer
- the age-standardised death rate was 22 per 100,000 males and 14 per 100,000 females
- the risk of dying from bowel cancer by age 85 years was 1 in 35 for males, 1 in 53 for females and 1 in 43 for persons
- bowel cancer was responsible for 48,538 potential years of life lost by age 85 years (30,050 for males; 18,488 for females).

Bowel cancer mortality

A major objective of the NBCSP is to reduce mortality from bowel cancer in Australia through early detection and treatment of bowel cancers, and through identifying and treating polyps and adenocarcinomas that might develop into cancer. These outcomes should result in a reduction in the number of people who die from bowel cancer; however, it may take many years for this effect to become apparent, as polyps and adenomas detected at screening now may not have become cancers resulting in death for many years.

Bowel cancer mortality by state and territory

Tasmania experienced the highest age-standardised rate of deaths from bowel cancer for 2002–2006 (23.6 deaths per 100,000 population) followed by Victoria (22.0); these were significantly higher that the Australian age-standardised rate (20.8) (tables A.9a–A.10c). Only New South Wales (18.3) had significantly lower age-standardised mortality rate than the Australian age-standardised rate for 2002–2006.

Bowel cancer mortality by age and sex

In 2006, death from bowel cancer was relatively rare before age 50 years (Figure 7.1). The highest age-specific death rates were in the oldest age groups—people aged 80–84 years
(148 per 100,000 population) and 85 years and over (214 per 100,000). There were 1,569 deaths in the 55–74 year age group, 41% of all bowel cancer deaths.

![Deaths per 100,000 persons](image)

Note: Rates age-standardised to the Australian 2001 population.
Source: AIHW Australian Cancer Database.

**Figure 7.1: Age-specific mortality rates for bowel cancer (ICD-10 C18–C20), Australia: 2006**

**Trends**

Between 1992 and 2006 the age-standardised death rate from bowel cancer fell by an average of 3.4% per year for males, 3.7% per year for females, and 3.4% per year for persons (Figure 7.2 and tables A.7a–A.8c). The expected effect of the NBCSP in time will be to accelerate this decline in the death rate.

It is not feasible to analyse NBCSP performance by looking at mortality rates of people aged 50, 55 and 65 years, as the mortality tables (in Appendix A) are enumerated by age of death, not age of diagnosis. The NBCSP target ages were included for illustrative purposes only.
Bowel cancer mortality by region

Age-standardised deaths from bowel cancer were highest in *Outer regional* (21.4 deaths per 100,000) and *Inner regional* (21.3) areas of Australia in 2002–2006 (tables A.11a–A.12c). Age-standardised death rates were significantly lower in *Very remote* areas (12.2 deaths per 100,000), *Remote* areas (17.1) and *Major cities* (19.3).

Bowel cancer mortality of Aboriginal and Torres Strait Islander peoples

Only Queensland, Western Australia, South Australia and the Northern Territory have Aboriginal and Torres Strait Islander death registration data considered to be of a publishable standard; therefore, data from these jurisdictions only were included in the analysis by Aboriginal and Torres Strait Islander status.

In Queensland, Western Australia, South Australia and the Northern Territory between 2002 and 2006, the age-standardised rate of deaths from bowel cancer was lower in Aboriginal and Torres Strait Islander peoples (17.9 deaths per 100,000) than in non-Indigenous people (19.8) (tables A.13a and A.13b).
Bowel cancer mortality to incidence

As shown in Figure 7.3, the ratio of bowel cancer mortality to incidence has been steadily dropping for many years, mainly due to improved treatments. Any changes in this rate due to the NBCSP would depend on the number of people screened, the number of pre-cancerous polyps removed and the stage of growth at which detected cancers were treated.

Note: Ratios calculated from rates, age-standardised to the Australian 2001 population.
Source: AIHW Australian Cancer Database.

Figure 7.3: Trends in mortality : incidence ratios for bowel cancer, Australia: 1982–2006