



## South Australia 2007 figures

number of cases

number of deaths

incidence/100,000 (ASR\* Aust 2001 population)

mortality/100,000 (ASR\* Aust 2001 population)

risk of developing cancer (by age 75 years)

	males	females	persons
number of cases	88	34	122
number of deaths	59	36	95
incidence/100,000 (ASR* Aust 2001 population)	10.5	3.7	6.9
mortality/100,000 (ASR* Aust 2001 population)	6.9	3.7	5.2
risk of developing cancer (by age 75 years)	1 in 117	1 in 362	1 in 178

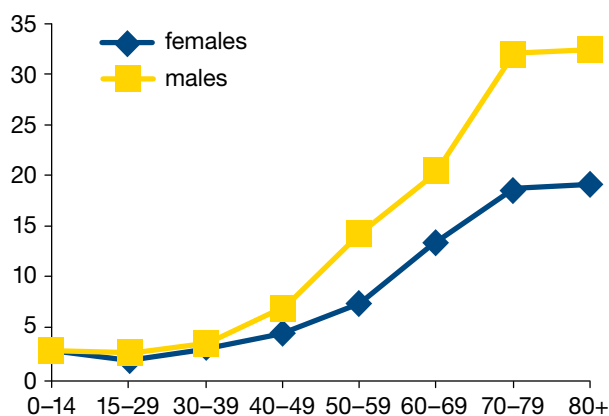
\*ASR – Age Standardised Rate

## Patterns in incidence and mortality

### Age

The incidence of brain cancer increases with increasing age. While the incidence is relatively low among those under 30 years of age, brain cancer is one of the leading cancers in young people.

**Age specific brain cancer incidence (annual average rate/100,000, SA 1997–2007)**



### Gender

The incidence of brain cancers is higher among males than females across all age groups. The predominance of brain cancers in males has been observed nationally and internationally.

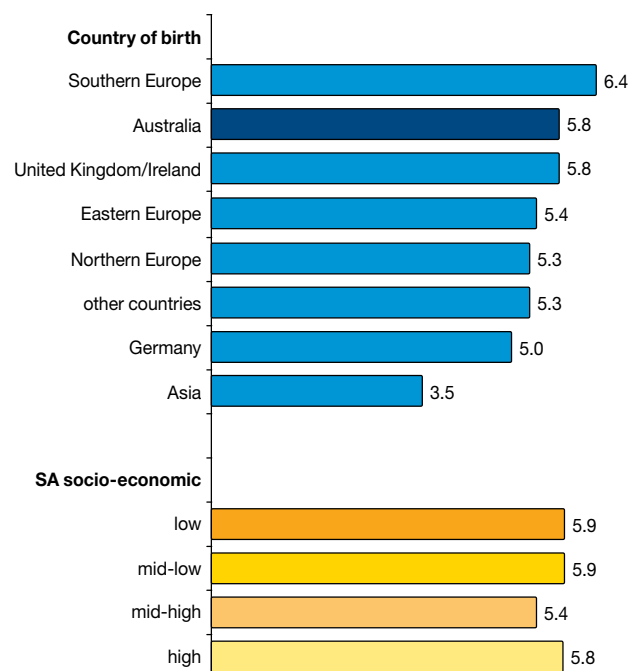
### Country of birth

Within South Australia, residents born in Asia had an incidence about 40% lower than the Australian born during 1977–2000.

### SES/region

There is no evidence of any socio-economic gradient in incidence of brain cancers in South Australia for the period 1977–2001. The incidence of brain cancer appeared to be about 13% higher in Adelaide than in country regions generally, where the Far North showed a particularly low incidence. By contrast Kangaroo Island appears to have a particularly high incidence of brain cancer. However differences by region may reflect chance events.

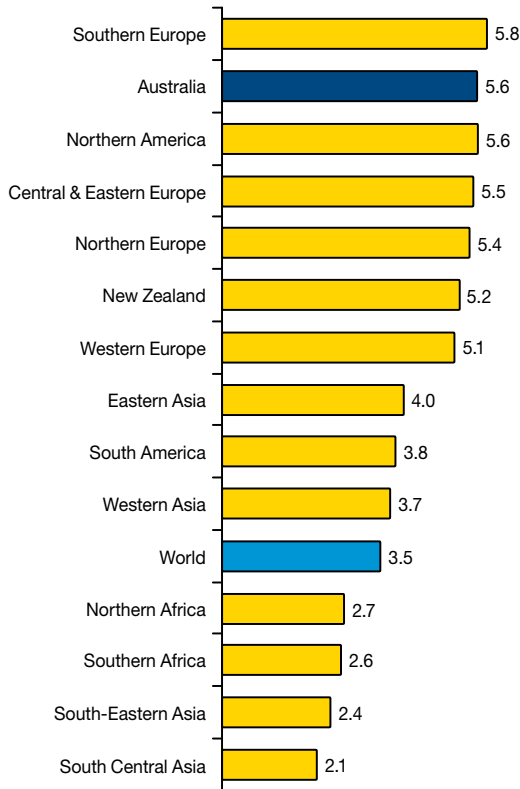
**Brain cancer incidence by country of birth and SES (annual rate/100,000, SA 1977–2001, ASR World population)**



# Global comparisons

Brain cancers present threefold variation in incidence around the world, with Australia having one of the highest incidence rates. Other regions that have high incidence of brain cancer include Southern Europe and Northern America. The lowest incidence rates were observed in Africa and Asia. Reasons for the variation are unknown.

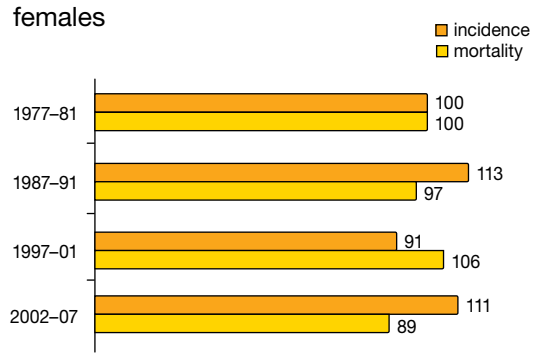
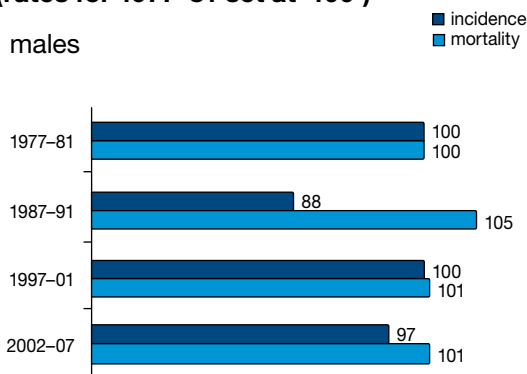
## Brain cancer incidence rate by regions of the world (rate/100,000 ASR World population, Globocan 2008)



# Trends

Little change in incidence or mortality was evident between 1977–81 and 2002–2007. Fluctuations over time are likely to be the result of random variations.

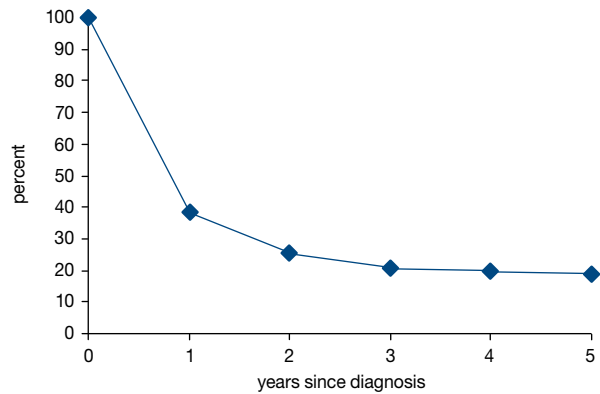
## Trends in brain cancer incidence and mortality in SA (rates for 1977–81 set at '100')



# Survival

Survival outcomes from brain cancer are relatively poor. Only 19% survive their disease for five years or more. There has been no improvement in survival in the period since cancer registration began.

## Survival from brain cancer SA, 1997–2003



# Risk factors

Risk factors include:

- high-dose exposure to ionising radiation, as occurring from atomic explosions
- possibly occupational exposures to oil refining, rubber manufacturing, and the production of medical drugs. There is some evidence that health professionals and agricultural workers may be at increased risk.

## Data sources:

- Cancer Registry reports, South Australian Department of Health
- Globocan 2008, IARC.

September 2010  
next review due September 2011