

BRAIN CANCER

South Australia 2005 Figures	Males	Females	Total
Number of cases	77	70	147
Number of deaths	51	36	87
Incidence/100,000 (ASR* Aust 2001 Population)	9.4	7.9	8.6
Mortality/100,000 (ASR* Aust 2001 Population)	6.2	4.0	5.0
Risk of developing brain cancer (by age 75 yrs.)	1 in 145	1 in 156	1 in 151

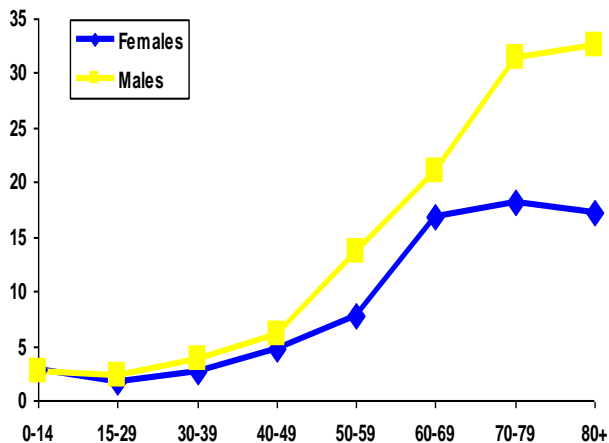
* ASR – Age Standardised Rate

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 1995-2005)



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.

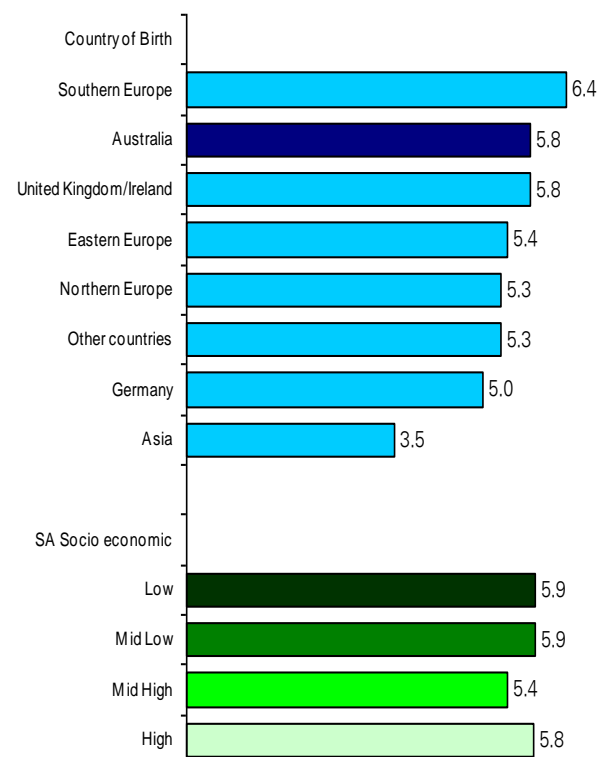
Country of birth

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. Brain cancer, the incidence 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

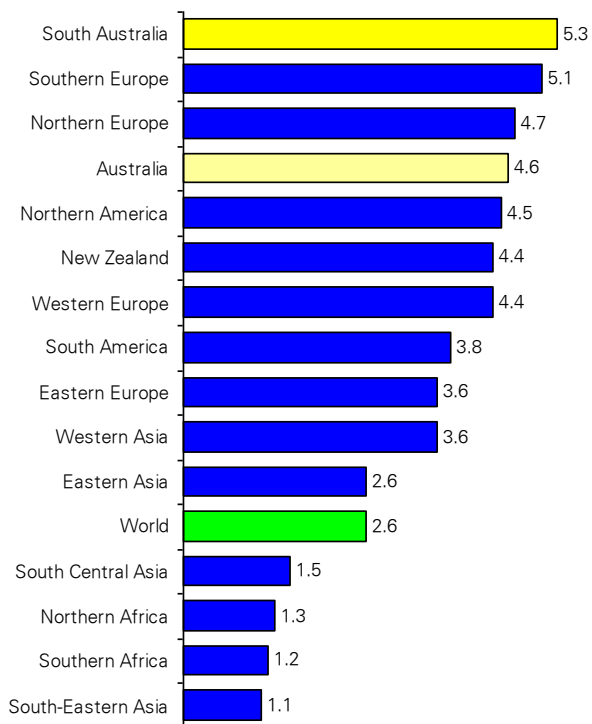


(Annual rate/100,000 – SA 1977-2001 – ASR World Pop.)

GLOBAL COMPARISONS

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

Brain cancer incidence rate by regions of the world

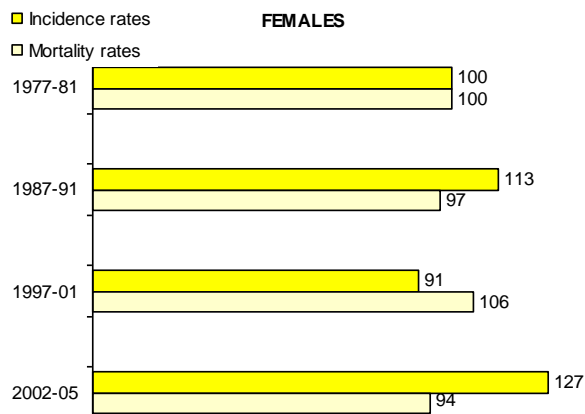
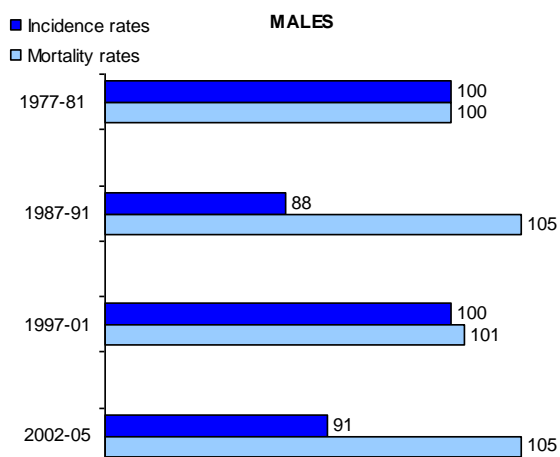


(Rate/100,000 ASR World Pop. Globocan 2002)

TRENDS

Little change in incidence or mortality was evident between 1977-81 and 2002-2005.

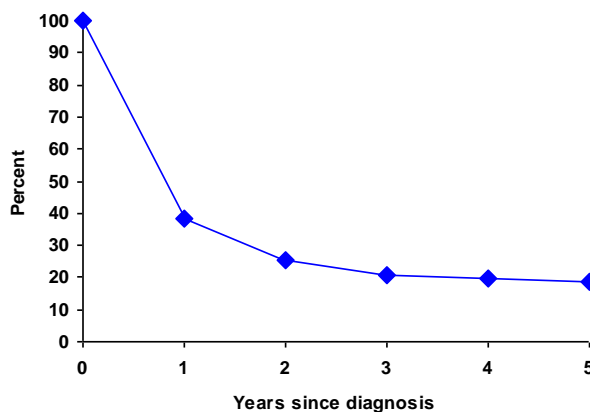
Trends in brain cancer incidence and mortality in SA (Rates for 1977-81 set at '100')



SURVIVAL

Survival outcomes from brain cancer are relatively poor. Only 19% survive their disease for 5 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.