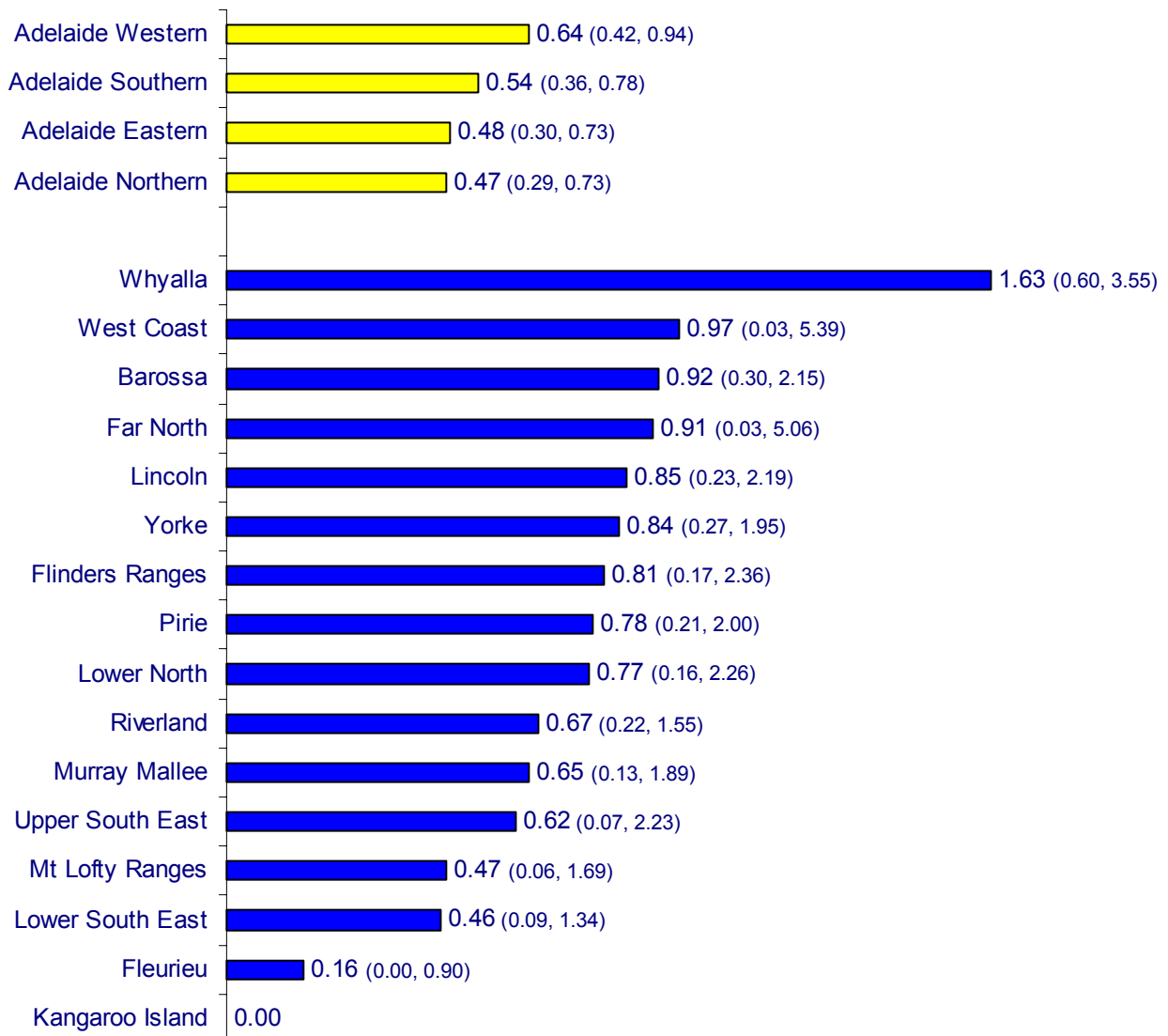


Annual incidence of cancer in South Australia in 1977-2001 by geographic region per 100,000 (age-standardized to World Population)

Cancer site: **Breast**

Males

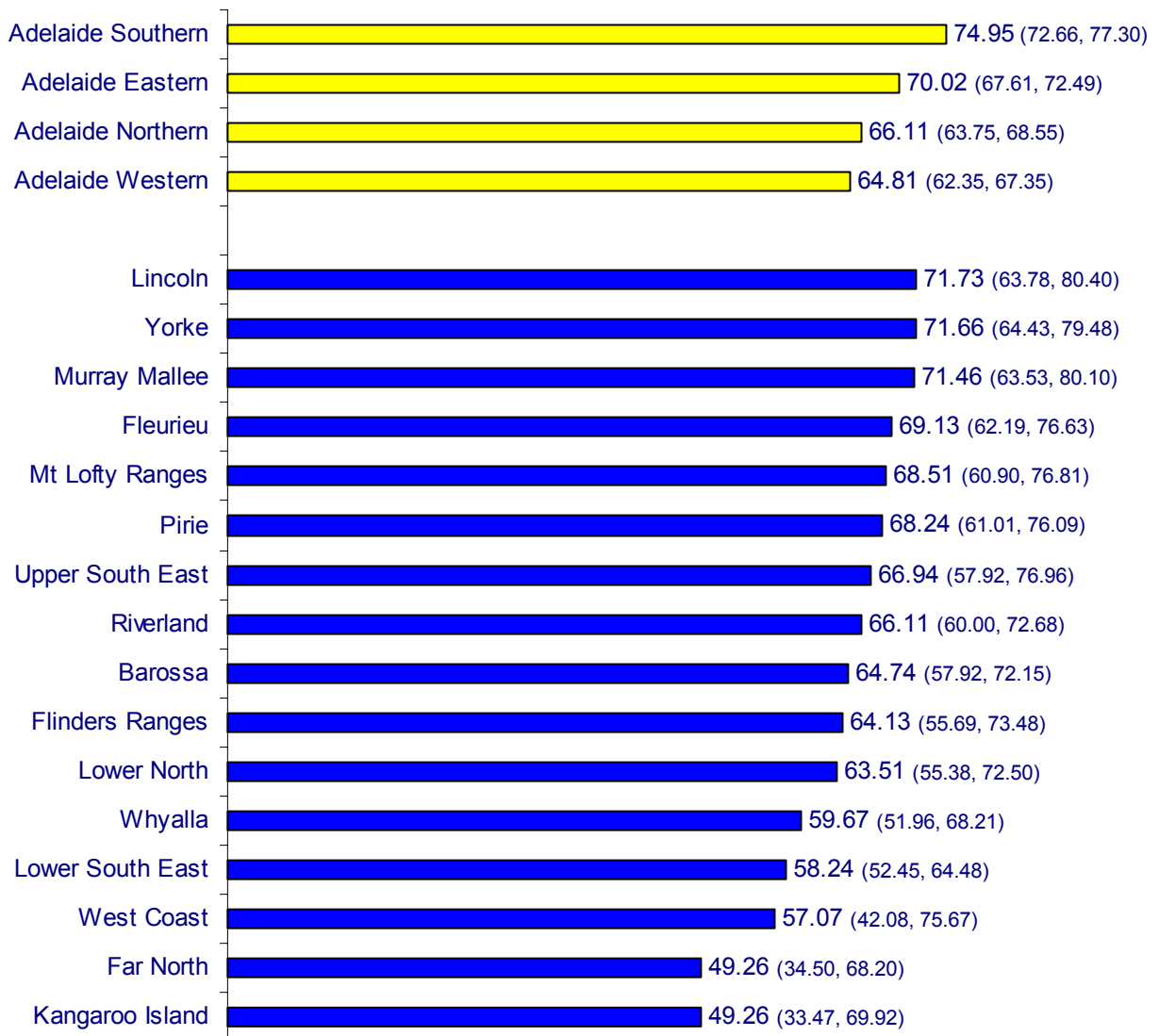
Incidence (95% confidence limits)



Annual incidence of cancer in South Australia in 1977-2001 by geographic region per 100,000 (age-standardized to World Population)

Cancer site: **Breast**

Females Incidence (95% confidence limits)



BREAST

- Australian and North American females had a relatively high incidence of breast cancer in 1993-97. South Australian females had a similar rate to other Australian females. The incidence of this cancer varies approximately four fold among females worldwide. Meanwhile males had a very low and less variable incidence of breast cancer worldwide, with a middle-ranking incidence applying to South Australia.
- Within South Australia, female residents born overseas had an incidence about 8% lower than the Australian born during 1977-2000. This was partly due to low incidence rates for those born in Germany, Eastern Europe and Southern Europe. Overseas born males also had a lower rate than the Australian born, partly due to a low incidence among males born in the United Kingdom/Ireland.
- South Australian women residing in upper socio-economic areas had an elevated incidence in 1977-2001. Similar socio-economic trends have been reported in other populations. Meanwhile, there was not a consistent socio-economic trend for male breast cancer.
- **Women residing in Adelaide had an incidence in 1977-2001 about 5% higher than their country counterparts. Incidence rates were higher in the Southern and Eastern than in the Western and potentially the Northern region of Adelaide. Country differences in female breast cancer, and Adelaide and country regional differences in male breast cancer, both were within the ranges attributable to chance.**
- The incidence of female breast cancer increased by 60% in 1977-2001, with most of the increase occurring after commencement of population screening mammography in the late 1980s. This would reflect the increased detection of small cancers in the age range targeted for screening (50-69 years). While mortality rates were relatively stable during 1977-96, there was a drop of 9% between 1992-96 and 1997-2001, which is attributed to early effects of mammography screening, plus treatment advances.
- Risk factors for female breast cancer include:
 - A family history, a genetic predisposition (responsible for up to 5% of cancers) and early onset menstruation or late menopause.
 - A history of no pregnancies or a late first full-term pregnancy.
 - High body weight after menopause.
- Risk also may be increased when diets are low in vegetables and fruit, and high in total fat and saturated/animal fat, and there is a high alcohol intake. Recent research indicates that prolonged use of hormone replacement therapy with combined oestrogen and progesterin, or with oestrogen alone, can increase the risk of female breast cancer.
- While there is greater uncertainty about risk factors for male breast cancer, excess body weight has been linked to an increased risk in young adults.