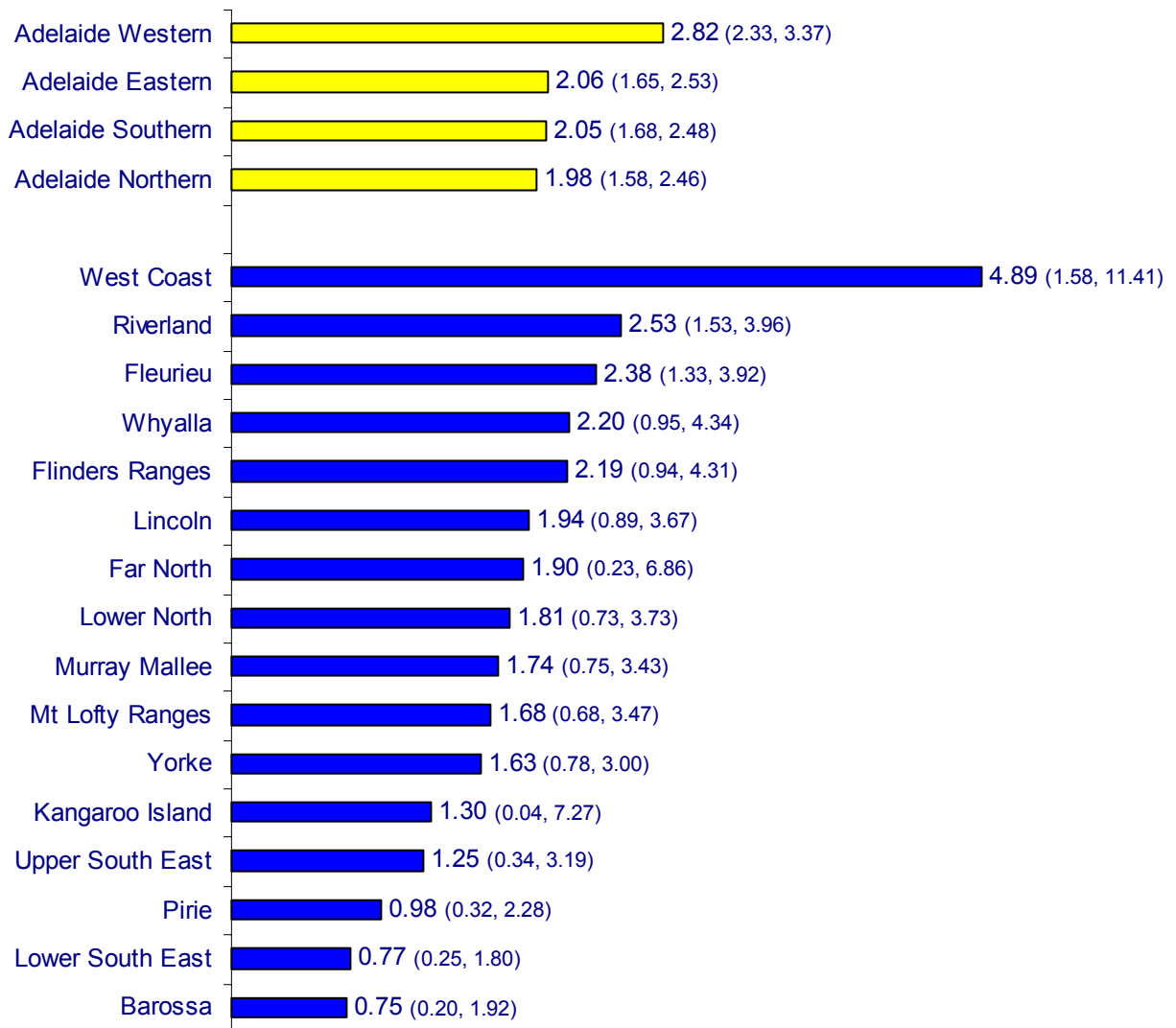


## Annual incidence of cancer in South Australia in 1977-2001 by geographic region per 100,000 (age-standardized to World Population)

Cancer site: **Liver**

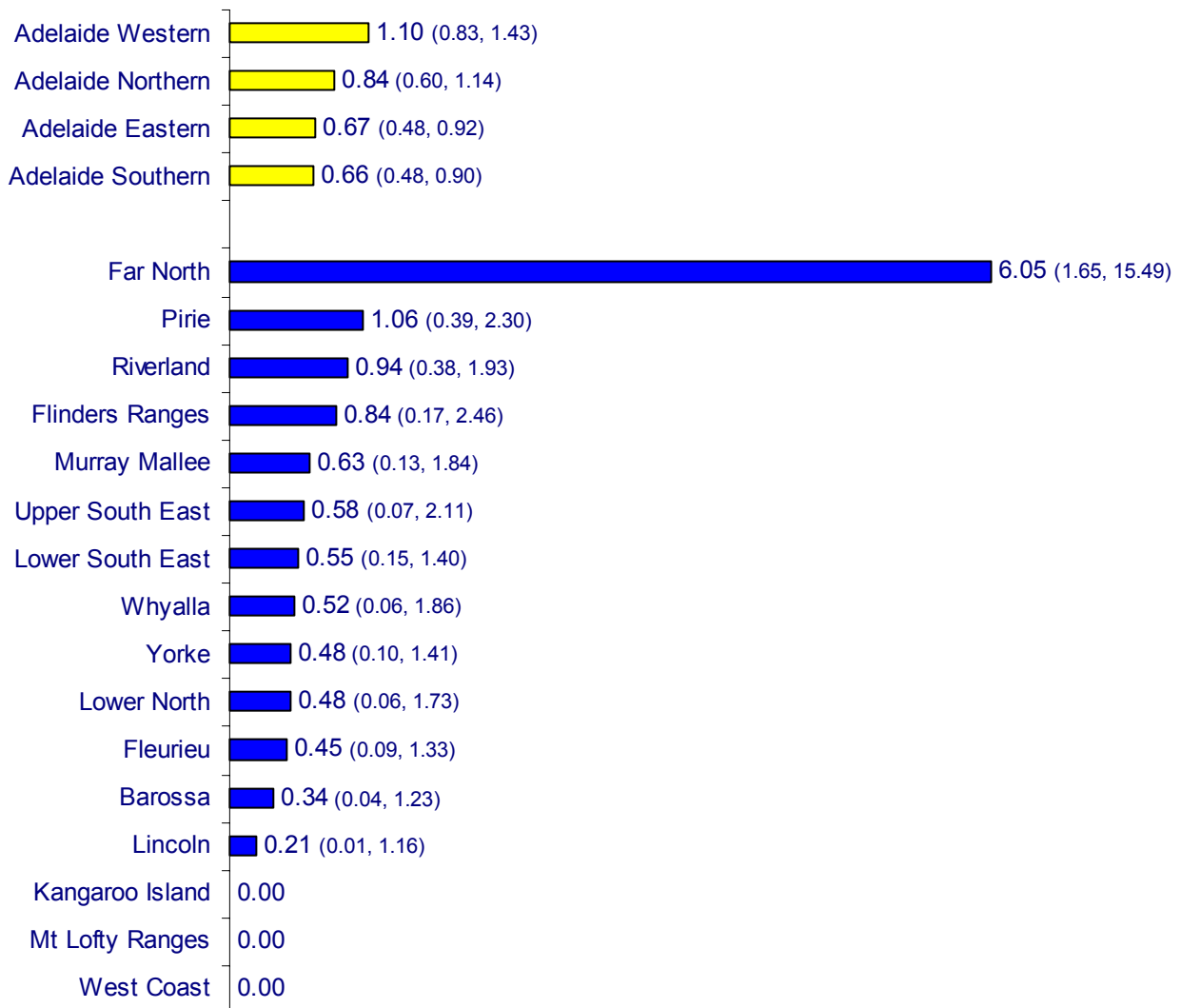
Males Incidence (95% confidence limits)



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

Cancer site: **Liver**

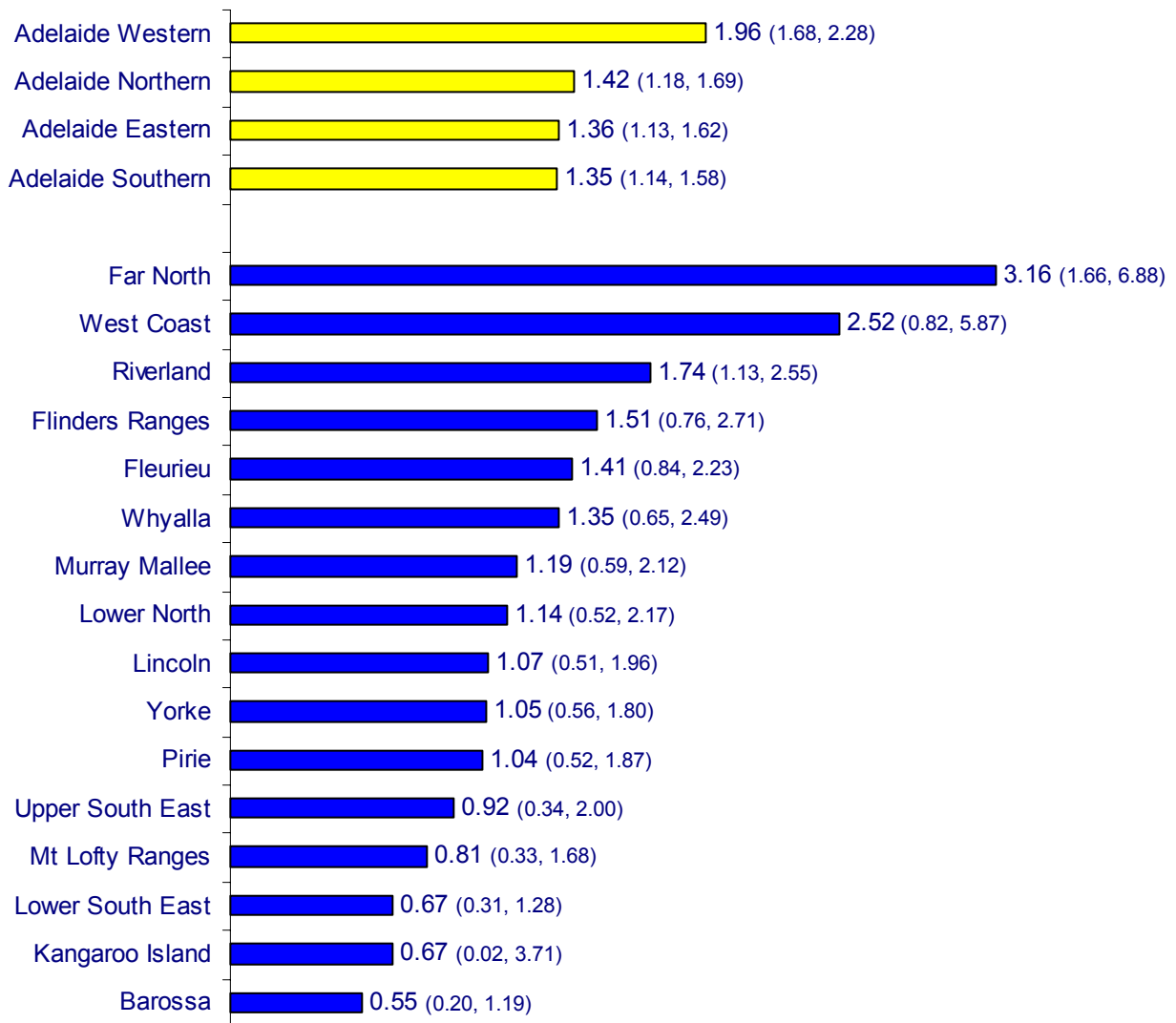
Females Incidence (95% confidence limits)



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

Cancer site: **Liver**

Both Incidence (95% confidence limits)



## LIVER

- Cancers of the liver vary in incidence about 10 fold around the world about. During 1993-97, South Australia had a lower incidence than Australia overall and most comparison populations.
- Within South Australia, residents born overseas had an incidence about 50% higher than the Australian born during 1977-2000. Among the Asian born, the incidence was about six times higher. Elevated rates of a smaller magnitude presented in residents born in Eastern and Southern Europe.
- During 1977-2001, the incidence of liver cancer was higher in South Australia in low than upper socio-economic areas. This was partly due to the concentration in low socio-economic areas of residents born in high-risk countries.
- **Also during 1977-2001, the incidence was approximately 30% higher in Adelaide than generally applying in country regions. High risks experienced by Aboriginal and Asian residents, and possibly other overseas-born residents, would have contributed to the relatively high incidence in the Western region of Adelaide. Also, the high incidence in the Far North, and potentially the West Coast, could reflect the distribution of Aboriginal residents at elevated risk.**
- The incidence of liver cancer increased by almost 60% between 1977-81 and 1997-2001, with a resulting increase in mortality. While increased immigration from Asian and other high-risk countries would have contributed, this would not explain the total increase in incidence.
- Risk factors include:
  - Hepatitis B and C infection.
  - Excess alcohol intake and associated cirrhosis.
  - Contamination of grain harvests with aflatoxins, as frequently reported in countries with humid storage conditions.
  - Possibly a low vegetable intake.