

A B S T R A C T

**Trends in cancer incidence by social class in South Australia,
as inferred from occupational status**

Previous analyses of South Australian data by socioeconomic status of residential postcode have pointed to an elevated incidence of colon, female-breast, prostate and skin (melanoma) cancers in upper socioeconomic postcodes, but a reverse social gradient for cancers of the stomach, larynx, lung and cervix. These results accord with findings for other populations.

In this chapter, social-class gradients are re-examined for the 1977-98 diagnostic period, and are explored further, using a different methodology based on occupational status. Data on social gradients of cancer have facilitated responses to questions about cancer risk from local community groups, and have helped meet requests from health planners. Further analyses therefore seem appropriate.

Notwithstanding the limited occupational information available for analysis, the results confirm earlier findings of an elevated frequency of colon, prostate, and skin (melanoma) cancers among the upper social classes. More active screening and allied early-detection initiatives probably contributed to these trends, although other possible contributors have been cited. The data also confirm earlier findings of a lower frequency of stomach, laryngeal, lung and (possibly) cervical cancers among the upper social classes. Depending on the cancer, these trends likely would have been affected by differences in diet, tobacco smoking, alcohol consumption, sexual behaviour, and exposure to infections, and variations in screening coverage.

The present data also show an excess of oesophageal cancers among cases from the lower social classes, which accords with earlier findings for South Australian males and other populations, and probably reflects variations in tobacco smoking and alcohol consumption. Other findings consistent with observations for other populations include an elevated frequency of lip cancers among the lower social classes, probably due at least partly to outdoor sun exposures, and an elevated frequency among the upper classes of testicular cancers, cancers of cranial nerves and related structures, and multiple myelomas and immunoproliferative neoplasms. Possible reasons for these elevations have been suggested.

