

M E T H O D S

I INCIDENCE

Cancer incidence is defined as the number of cases first notified for a given population during a specified period. The incidence data in Tables A1 and A2 of this report relate to cancer cases first diagnosed in 1998. Table A5 shows the number of new cases diagnosed during 1977-1998. These tables include only invasive cancers and generally would exclude non-melanocytic skin cancers.

II MORTALITY

Cancer deaths occurring in hospital are notified directly to the Registry. Information on deaths is also obtained from the Registrar of Births, Deaths and Marriages where these are attributed to cancer. The mortality data in Tables A3 and A4 refer to deaths occurring in 1998. Table A6 lists the number of deaths occurring in 1977-1998. These tables generally would exclude any deaths from non-melanocytic skin cancers.

NB: Incidence and mortality rates were calculated per 100,000 population per annum using the estimated South Australian population by age for 1998 (Table A8). The standardized rates for South Australia as a whole were based on the World Standard Population (Cancer Incidence in Five Continents, Volume IV, 1982 - IARC). Upper and lower 95% confidence limits are shown in the tables.

Cumulative rates have also been provided for different cancers. The cumulative rate (which is expressed as a percentage) is a good approximation of the cumulative risk, which is the risk an individual would have of developing the disease in question if that person were not to die beforehand from another cause. A cumulative rate of, say, five per cent for lung cancer in males would mean that one out of every 20 males would be expected to get lung cancer by age 75 years if he were not to die before that age from another disease. Based on 1998 cumulative cancer rates for the total population, approximately one in three persons would be expected to get a cancer by age 75 years.

Incidence ratios for the period 1977-1998 for different CURB Sub-regions, which correspond to the ABS Statistical Subdivisions, have been standardized using 1977-1998 average annual incidence rates for South Australia as a whole as the standard (Table A7).

III SURVIVAL

Cancer registry files have been linked to South Australian death registrations, with supplementary information on interstate deaths coming from the National Death Index, the National Cancer Clearing House, and interstate registries. Life-table, proportional hazards regression and allied methods are used to show trends in case outcomes. It has been customary to use survival rates as an index of survival, with higher rates being interpreted favourably, although it is realized that upward trends in rates would not always reflect reductions in deaths. Survival rates can be affected by variations in lead time, length time, patient selection, disease classification, and sometimes overdiagnosis, and therefore need to be interpreted with care, but they are nonetheless an important index of case outcomes.

IV MODIFICATIONS TO THE I.C.D.-9 TOPOGRAPHY CODING SYSTEM

158	PERITONEUM & RETROPERITONEUM	<i>on the advice of an authority on soft-tissue tumours, primaries are being coded to 171.</i>
171	SOFT TISSUE	<i>included are all Merkel cell tumours and dermatofibrosarcomas protuberans. Soft tissue tumours of the intra-thoracic, breast or abdominal organs are coded to the organ concerned.</i>
172	MELANOMA OF SKIN	<i>included are all invasive cases whether treated as outpatients or inpatients. Pre-invasive melanomas are collected but do not appear in the statistical outputs.</i>
173	SKIN	<i>excludes melanoma of skin - the only codes used are 173.0 (lip) and 173.5 (anus).</i>
180	CERVIX UTERI	<i>includes only micro-invasive and invasive carcinomas.</i>
188	BLADDER	<i>carcinoma "in situ" and papillary non-invasive tumours have been coded to 188, but were recorded separately in the data as from 1/1/82 and do not appear in the statistical outputs.</i>
188-189	URINARY TRACT	<i>tumours of these sites are counted as one primary when they are multifocal transitional cell carcinomas.</i>
196-198	SECONDARY SITES	<i>are not coded as such but are included under code number 199 when the primary site is unspecified.</i>
200	LYMPHOSARCOMA & RETICULOSARCOMA	<i>only diffuse non-Hodgkin's lymphomas are included under this code number.</i>
208	PRE-LEUKAEMIA	<i>only recorded when leukaemic change. (myelodysplastic syndrome)</i>
204-208	LEUKAEMIAS	<i>certain changes have been made to 206.0, 207.0 and 207.2 to incorporate them in the Acute Myeloid (AML) 205.0 FAB Classification (M1-M7).</i>
230-234	CARCINOMA	<i>these codes are not used. Level I melanomas are coded to 172, in-situ breast tumours to 174, and in-situ/papillary non-invasive bladder tumours to 188. All are given appropriate histology codes. No information is collected on other "in situ" cancers because a substantial number of pathologists in this state are of the opinion that the criteria for differentiating between malignant dysplasias and carcinoma "in situ" for sites such as stomach are not well established. It should be noted that in-situ cases are not included in the statistical tables in this report, nor are they included in any of the chapters unless otherwise specified.</i>
235-238	NEOPLASMS OF UNCERTAIN BEHAVIOUR	<i>these tumours are not recorded.</i>

Please note that none of the 3-digit malignant topography ICD-9 codes have been changed (140-208). However, some of the 4-digit codes of ICD-9 have been expanded or condensed to concur with changes in pathology classifications and where numbers warrant this practice. As the International Agency for Research on Cancer's scientific publication, Cancer Incidence in Five Continents, mostly is based on 3-digit codes, this does not affect international comparisons.