

Monograph Series Number 1

The Health Status
of
Males in the ACT



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Health Status of Males in the ACT

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Health Status of Males in the ACT

1. Demographic features

There are slightly more males than females in the ACT. Table 1 shows the small constant estimated growth in population in the ACT over the past 9 years. 1996 figures are derived from the 1996 Census, so are actual rather than estimated. The projected growth in the male population over the past three years or so has not eventuated. There has been a 6.8 per cent growth in overall population since the 1991 Census.

Table 1 : Estimated ACT population, 1988-96, ACT

Year	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Males	138220	141550	145427	144636	147132	150096	151269	153168	152804	153661
Females	136935	139533	142627	144684	146586	148804	149598	150957	155221	156133
Persons	275155	281083	288054	289320	293718	298900	300867	304125	308025	309794

Source: *Population of the ACT*. ABS. Unpublished data
Estimated resident Population by Age and Sex in Statistical Local Areas. ABS Catalogue No. .
Australian Capital Territory. ABS Catalogue No. 3207.8
Demography Australian Capital Territory 1996. ABS Catalogue No. 3311.8

Table 2 shows that most of the ACT population is under 75 years old. However, it should be noted that, while other states will roughly double their proportion of people aged 65 or more, the ACT proportion is expected to nearly triple between now and 2051.¹

Table 2: Estimated population aged less than 75 years, ACT, 1988-96

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Males	135593	138361	141508	142421	145033	147603	148661	150332	143874	150290
Females	133091	135165	137421	140862	142682	144488	145061	146123	145280	150620
Persons	268684	273526	278929	283283	287715	292091	293722	296455	289154	300910

Source: Population of the ACT. ABS unpublished data
Estimated resident population by sex and age, preliminary, States and Territories, June 1992 and June 1993. ABS Catalogue No. 3201.0
Census of population and housing.: selected social and housing characteristics for statistical local areas ACT 1996. ABS Catalogue No. 2015.8

The ACT male median age was 30.7 years in 1996 and 30.9 years in 1997. For all persons the median age was 31 years.

2. Health risk factors

Risk factors have varying impacts on individuals, their health and life quality. Major impacts are outlined below.

Table 3: Major possible impacts of risk factors on individuals

Risk factors	Causes of ill-health, disability & mortality
<i>Behavioural:</i>	
Smoking	Coronary heart disease, cancers (eg lung, mouth, cervix), stroke, chronic lung disease
Excessive alcohol consumption	Coronary heart disease, liver & pancreatic disease, stroke, high blood pressure, cancers of the digestive system, accidents, mental illness, violence
Other drug abuse	AIDS, hepatitis, renal failure, mental illness, suicide, violence, accidents
Poor diet & nutrition	Coronary heart disease, stroke, breast & digestive system cancers, non-insulin dependent diabetes mellitus, gallstones, osteoporosis, malnutrition, dental conditions
Inadequate physical activity	Coronary heart disease, stroke, non-insulin dependent diabetes mellitus, colon cancer, osteoporosis, bone fractures, falls, mental illness, obesity
Unprotected sexual activity	AIDS, hepatitis, cervical cancer, infertility, pelvic infection, venereal disease
Excessive sun exposure	melanoma & other skin cancers, premature ageing of the skin
<i>Physiological</i>	
Overweight & obesity	Coronary heart disease, non-insulin dependent diabetes mellitus, breast cancer, gallstones, degenerative joint disease, obstructive sleep apnoea
High blood pressure	Coronary heart disease, stroke
Raised blood cholesterol level	Coronary heart disease, stroke

Source: Australian Institute of Health & Welfare, 1998, *Australia's health 1998: sixth biennial health report of AIHW*, Canberra

2.1 Risk taking behaviour

Unsafe behaviour may be adopted because the contingencies of the behaviour are unknown. In this case the individual does not see the behaviour as risky. Alternatively, unsafe behaviour may be adopted because the consequence of the behaviour is either *extrinsically* rewarding, for example “speeding saves time”, “unprotected sex is more pleasurable”, or because the behaviour is *intrinsically* rewarding, that is, the risk-taking itself provides a thrill (Hewitt et al 1995)². There is a strong consensus that risk-taking is predominantly done by males.

Many injuries result from inexperience rather than from the very small number of ‘problem’ young people who exhibit a range of risky behaviours. A study commissioned by the National Health and Medical Research Council on unintentional injury in young males confirmed many of Hewitt et al’s findings, including that low socio-economic status is linked to risk-taking behaviour. Factors which influence this correlation are increased stress (since risk-taking can be an escape from stress), riskier occupations, quality of recreational equipment (eg less crash-worthy cars) and access and attitudes to health care (Unintentional Injury in Young Males NHMRC AGPS 1996)³.

Human behaviour is a contributing factor in 90 per cent of vehicle accidents. The age and gender of drivers, their physical health (eg eyesight, reflexes), and the influence of alcohol are important elements (Gilbert and Gordon 1996)⁴. Lack of seatbelt use is linked to carrying more passengers and to using alcohol and other drugs. It is also linked

to being male, less-educated and younger. As such, this forms part of a pattern of attitudes rather than an isolated behaviour that can be targeted directly (Unintentional Injury) ⁵. Details of injury data are in Section 8.

3. Births

There were 2,155 female and 2,241 male births registered to mothers usually resident in the ACT, in 1996.

4. Mortality

The death rates of the ACT and Australian populations have declined considerably during this century, particularly in the past 20 years. Taking changes of an ageing population into account, the age-standardised death rates for Australia between 1921 and 1991, fell by 49 per cent for males (62 per cent for females).⁶ This represented an annual decline of 0.98 per cent. Over a 20 year period (1971-91) in the ACT, the age-standardised death rate for males declined from 1405 to 762 per 100,000 population, (persons 1038 to 598 per 100,000 population). In 1985 the median age at death was 65.2 years for ACT males. By 1996 it was 71.4 years (74.0 for Australian males).⁷ The younger median age is likely to be caused by the younger age distribution in the ACT.

The following table gives detail of the ACT male mortality profile since 1988:

Table 4: Indicators of mortality, ACT males, 1988-96

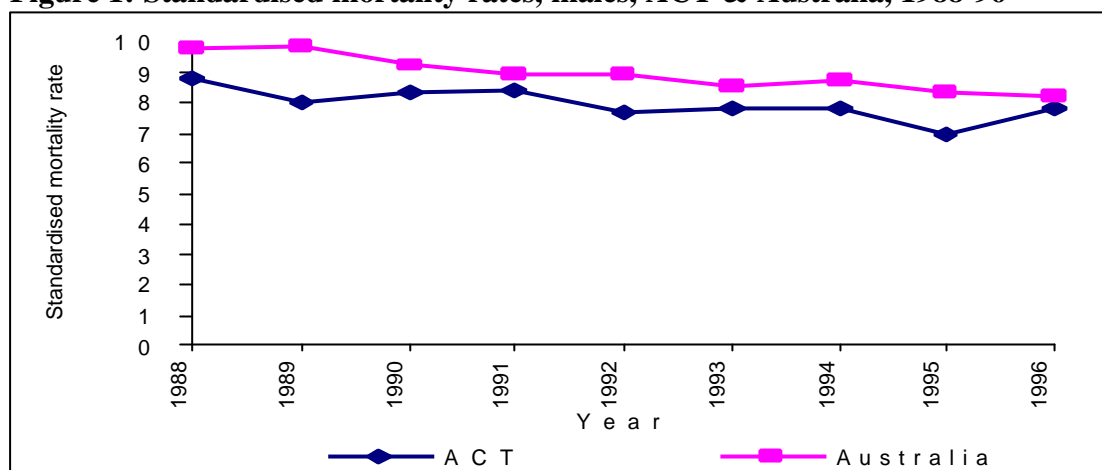
	1988	1989	1990	1991	1992	1993	1994	1995	1996
Number of deaths	566	537	594	605	578	632	644	593	698
Mortality rate per 100,000	409.5	379.4	408.5	418.3	392.8	421.1	425.7	387.2	472.2
Standardised mortality rate per 100,000	880	800	830	840	770	780	780	700	780
Infant mortality rate per 1,000 live births	n/a	7.3	11.6	9.9	7.1	6.7	6.3	2.6	5.4
Premature deaths (< 75 years)	397	370	424	412	367	397	425	374	421
Premature mortality rate per 100,000	292.8	267.4	301.0	292.1	253.7	269.0	285.9	248.8	276.8

Source: *Deaths Australia, 1993-95*. ABS Cat. No. 3302.0 ; *Causes of Death ACT*. ABS unpublished data; *Demography ACT, 1990-95*. ABS Cat No. 3311.8

There was a total of 9 male Indigenous deaths in 1993 and 1994.

The standardised mortality rates, which are a good indicator of change and can be used to compare between ACT and Australian rates, can be converted to graphical form to show the reduction in deaths over time (refer Figure 1). Standardisation of rates removes the majority of anomalies caused by differing age structures in populations. ACT standardised death rates, are consistently below those for Australia, although 1996 data suggests a narrowing margin.

Figure 1: Standardised mortality rates, males, ACT & Australia, 1988-96



Note: rate per 1,000 population

Source: *Deaths Australia, 1993-96, ABS Catalogue No. 3302.0*

Age-specific death rates have declined or remained constant for males since 1985.

Table 5: Age-specific death rates^(a), males, ACT, 1985-96

	1985	1990	1991	1992	1993	1994	1995	1996
Males								
under 1	9.8	11.6	9.9	7.1	6.7	6.3	2.6	under 1 5.4
1-9	0.3	0.2	0.2	0.4	0.3	0.3	0.3	1-4 0.3
10-19	0.6	0.6	0.7	0.2	0.2	0.5	0.2	5-14 0.2
20-29	1.5	1.0	1.0	1.1	0.9	0.7	0.8	15-24 1.0
30-39	1.0	0.9	1.0	1.2	1.5	1.1	1.3	25-34 1.0
40-49	1.3	2.2	2.2	2.0	1.7	2.5	1.6	35-44 1.4
50-59	7.3	6.0	4.7	4.2	4.8	5.7	5.2	45-54 2.6
60-69	17.7	20.3	19.1	15.3	16.9	15.5	13.3	55-64 8.4
70-79	51.1	44.8	43.9	39.9	42.1	41.4	33.3	65-74 25.7
80+	119.0	117.2	124.6	129.6	137.5	115.9	122.5	75-84 67.5

(a) Rates are per 1,000 population.

Note: There was one male Aboriginal or Torres Strait Islander death included in 1994 infant (under 1 yr) deaths. (Total of 21 deaths). This was the first year of recording Indigenous deaths. None were identified in 1995.

Note: Change in recording age groups for 1996. 1996 cannot therefore be compared with previous years. The ABS reports that there is little difference in rates from previous years if same age groups are used.

Source: *Demography ACT 1995.*, ABS Catalogue No. 3311.8 *Deaths Australia 1996*, Catalogue No. 3302.0

Estimates of years of potential life lost are made on the assumption that deaths occurring for people aged 1 to 75 years are considered untimely. Since healthy people would be expected to live until at least 75 years, it would be expected that a good proportion of deaths would occur after that age. This is certainly true for the ACT as is reflected in the following table.

Table 6: Deaths at age less than & more than 75 years, males, ACT, 1993-96

Year	1993	1994	1995	1996
More than 75 years	235	219	219	277
Less than 75 years	397	425	374	421

Source: *Deaths Australia*. ABS, Cat. No. 3302.0

4.1 Major causes of death

As shown in Table 7, it can be seen that the major causes of death in the ACT and Australia for males are circulatory disease (mainly ischaemic heart disease and cerebrovascular disease (stroke) and malignant neoplasms (cancer). Approximately 31 percent of male deaths were due to cancer and 23 percent were due to ischaemic heart disease, in the ACT in 1996.

Table 7: Principal causes of death, males, ACT & Australia, 1996

Cause of death	ACT		Australia	
	No.	Rate	No.	Rate
Malignant neoplasms	212	228	19584	230
Circulatory disease	266	330	26550	326
Accidents and suicides	64	47	5431	61
Respiratory system	41	52	5733	71
Digestive system	18	20	2022	24
Other diseases	97	95	8881	108

Note: standardised death rate per 100,000 persons, standardised for age using the 1991 Aust. Population (persons) as the standard population.
Source: *Causes of Death, Australia 1996*. ABS Catalogue No.3303.0,

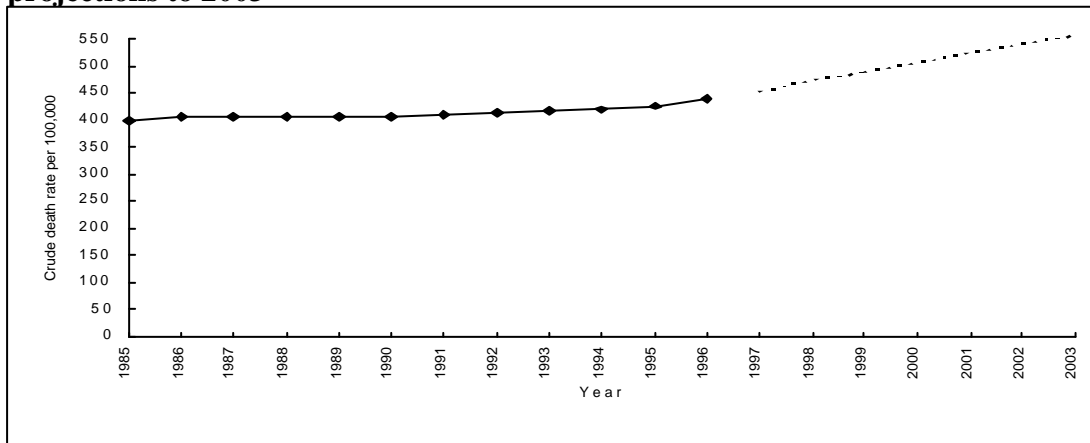
4.2 Projections of mortality to the year 2001

Projections of indicators can be used to assess future needs by policy makers, planners and service providers.

Male crude death rates for all causes have increased slightly over the years 1985 to 1996. The effect of the ageing population will be to increase ACT male crude death rates substantially over the years 1997 to 2003.

In 1996 there were 698 male deaths from all causes for ACT residents. Projecting the current death rates into the future suggests that there will be 901 deaths from all causes in the year 2003.

Figure 2: Crude death rates(smoothed) for all causes, ACT males, 1985-96 with projections to 2003



Sources: *Causes of death, Australia, ABS Cat No 3303.0*

ACT Population forecasts 1998-2013, ACT Dept of Urban Services, 1998

Note: Projections were calculated as follows; age- and sex-specific ACT death rates (in five year age groups up to "80 & over") for the three years of most recent available data (1994-96) were averaged, and then multiplied by the ACT forecast populations for the same age and sex groups to give the expected deaths in each age and sex group. These were summed to give the total expected deaths for males and females. This process was repeated using population forecasts prepared by the ACT Dept of Urban Services for each year 1998 to 2003. For 1997, ABS population estimates were used.

4.3 Expectation of life at birth

People born in the ACT in 1996 recorded the highest expectation of life from birth of all states and territories: 76.6 years for males (compared to 75.2 years nationally).⁸

5. Morbidity

5.1 National Health Survey

The ABS conducts National Health Surveys every 5 years. It utilises a self-reporting format, so results represent respondents' perceptions. In the 1995 Survey, 2,156 dwellings were surveyed in the ACT. Results for ACT males are summarised below. It can be seen that most men thought their health to be excellent or good with 91% for recent conditions, 93% for long-term conditions and 86.7% overall.

Table 8: Males 15 years & over, self-assessed health status (%), by whether reported recent or long-term condition(s), ACT, 1995

Self-assessed health status	Recent condition	Long-term condition	Total
Excellent	26.9	23.6	21.0
Very good	43.5	46.3	39.5
Good	20.5	22.7	26.2
Fair	*9.1	6.7	10.4
Poor	-	**0.7	2.9

* denotes subject to sampling variability between 25%-50%
50%

** denotes subject to sampling variability over

Source: ABS National Health Survey 1995, Cat. No. 4392 (unpublished data)

With regard health actions taken in the 2 weeks prior to interview, ACT male responses are outlined below. It can be deduced that three quarters of males took some action, mainly just taking medications including vitamins.

Table 9: Males, whether took health action during 2 weeks prior to interview, by type of action, ACT, 1995

Type of action	% of males
Hospitalisation	**0.6
Casualty/emergency/outpatient visit	*2.2
Day clinic visit	**1.1
Doctor consultation	17.0
Dental consultation (males over 2 years)	6.5
Consultation with OHP	9.1
Medication use (include vitamins, minerals, natural & herbal)	66.4
Days off work or school	8.7
Days of reduced activity	5.7
Other health-related contact	6.0
Total males taking action	72.4
Total males taking no action	27.6

* denotes subject to sampling variability between 25%-50%
50%

** denotes subject to sampling variability over

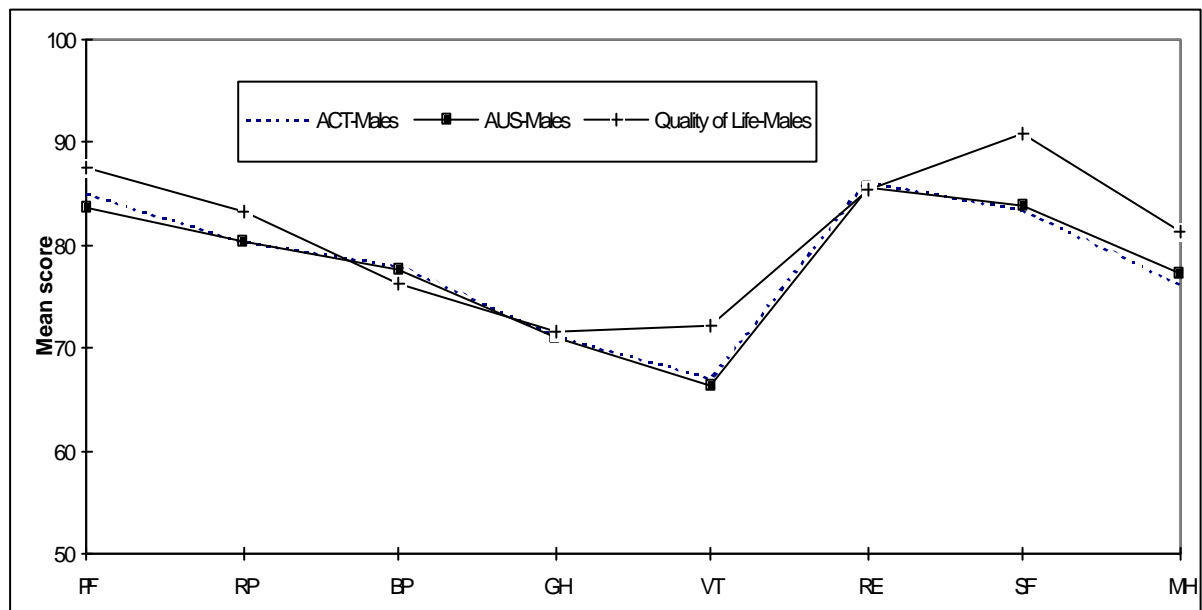
Source: ABS National Health Survey 1995, Cat. No. 4392 (unpublished data)

5.2 ACT Quality of Life Survey

The Quality of Life Project was developed to examine the quality of life of people residing in the ACT Region. The Australian Capital Territory (ACT) Department of Health and Community Care in collaboration with the Cultural Heritage Management program at the University of Canberra have conducted a series of annual surveys (1994-1997), using the Medical Outcomes Study's Short Form 36 (SF-36) to examine health-related quality of life.

A comparison of ACT's and Australia's normative data of the SF-36 are presented in Figure 3. In general, the results from the 1995 National Health Survey (NHS) indicate that younger people and those in higher socio-economic groups experienced better health and health related well-being than those in other groups (ABS, 1997). The SF-36 profiles for males aged 18 years or more were similar for the ACT and Australia within the NHS (there were no significant differences). However the results from the 1995 Quality of Life project indicated that ACT males reported similar or slightly higher than their national counterparts for all of the SF-36 scales except for bodily pain.

Figure 3: SF-36 profiles for males, Quality of Life Project (1994-1997) and National Health Survey, 1995



NHS-ACT sample age standardised to 1995 national sample

Source: ABS, NHS, *Cat No 4399.0* and *Quality of Life project 1995* weighted data

5.3 Hospital utilisation

The majority of hospital services are provided by the two major public hospitals; The Canberra Hospital including the Detox Unit and the Renal Satellite, and Calvary Hospital including Calvary Nursing Home beds. Other hospital services are provided by two private hospitals; Calvary Private and John James Memorial. There are also 5 recognised day-only private hospitals. The breakdown of hospital activity is outlined in Table 10.

Table 10: Hospital separations, all hospitals, males, ACT, 1993-97

Indicator	1993-94		1994-95		1995-96		1996-97	
	Number	Rate(a)	Number	Rate(a)	Number	Rate(a)	Number	Rate(a)
Public hospitals	17253	11494.6	20706	13688.2	20592	13444.1	20295	13076.0
All hospitals	21300	14190.9	25575	16907.0	24583	16049.0	25037	16132.3
Indigenous	111	n/a	186	n/a	205	n/a	(b) 433	n/a

(a) Crude rate per 100,000 population, using mid-year ACT population and ACT resident separations only (no interstate separations)

(b) Since the Indigenous population in the ACT increased by 82% from the 1991 census to the 1996 Census, the increase in hospitalisations is understandable. The increase in numbers probably is mainly due to an increased willingness to self-identify rather than anything else.

Source: ACT Hospital Morbidity Data Collection, 1993-97

Length of stay in hospital is a reasonable measure of acuity of the diagnosed condition. The following table shows length of stay for the various conditions.

Table 11: Estimated no. of hospital separations for selected principal diagnosis, by length of stay, males, ACT, 1996-97

Principal diagnosis	Length of stay (days)							ALOS	Median
	<1	1	2	3	4-7	8-14	15+		
Infectious and parasitic diseases	45	121	142	94	99	38	24	4.4	2
Neoplasms	1226	244	165	121	327	358	224	4.6	1
Malignant neoplasms	833	185	133	105	291	330	210	5.4	2
Endocrine, nutritional and diseases and immunity disorders metabolic	171	21	34	13	44	41	18	3.6	0.5
Diabetes mellitus	5	7	15	8	29	24	12	6.9	5.5
Mental disorders	44	75	48	64	135	138	203	13.1	7
Psychoses	18	31	22	35	92	106	174	16.2	9
Neuroses	-	4	-	3	6	7	4	8.7	5
Diseases of the respiratory system	174	628	391	187	346	170	87	4.1	2
Pneumonia	-	11	48	50	116	58	27	7.0	5
Bronchitis	5	-	7	4	7	6	3	7.7	3
Emphysema	-	-	-	0	12	8	6	13.5	8.5
Asthma	19	93	100	36	41	10	-	2.4	2
Diseases of the genitourinary system	350	244	155	119	373	115	52	3.6	2
Hyperplasia of the prostate	98	25	12	32	179	45	23	4.9	4
Supplementary classification of factors	7894	371	299	348	579	96	91	1.1	0
Sterilisation	89	-	-	-	-	-	-	0.0	0
Normal neonate	55	228	237	306	470	13	-	3.1	3
Extracorporeal dialysis	5251	-	-	-	-	-	-	0.0	0
Maintenance chemotherapy	1783	9	4	-	5	-	-	0.0	0

Source: ACT Hospital Morbidity Data Collection, 1996-97

-: Less than 3 cases.

With regard overall length of stay, the following table shows details of activity in ACT hospitals for 1996-97.

Table 12: Average length of stay (days), ACT male residents, 1996-97

Excludes nursing home type patients *	2.566
Excludes day patients	5.930
All patients	3.178

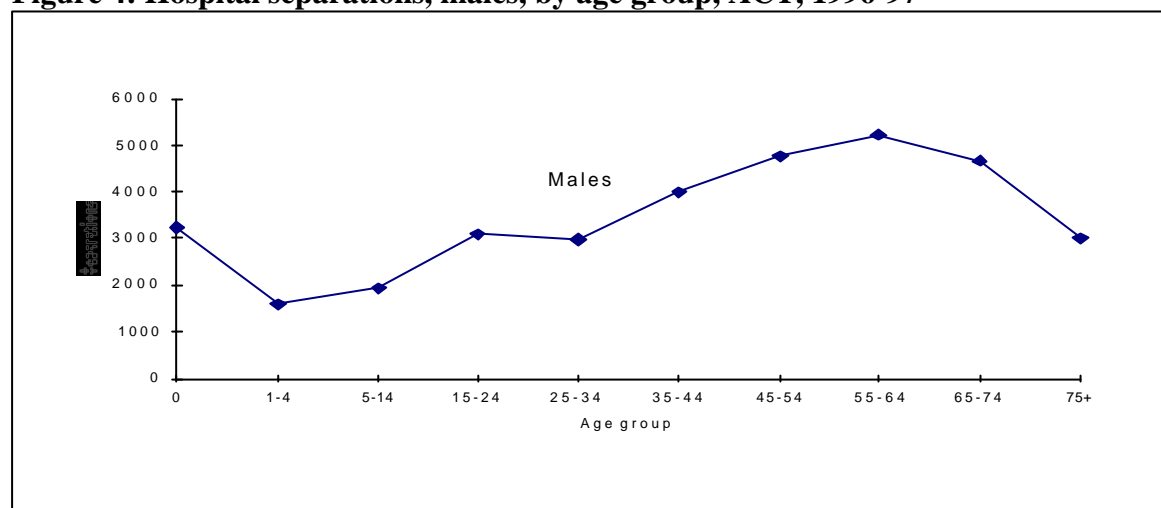
* Nursing home type patients are those who stay longer than 35 days.

Source: ACT Hospital Morbidity data 1996-97

Age-specific hospital separations

From the figure below, it can be seen that males increase their hospital activity as their age progresses, but this falls off progressively from age 65 years. This is probably due to the fact that there are less males in the older groups than in the younger groups (mainly due to death).

Figure 4: Hospital separations, males, by age group, ACT, 1996-97



Source: ACT Hospital Morbidity Data Collection

Table 13 gives an overall profile of how hospital services were utilised in 1996-97 in relation to age categories for males. It can be seen from Figure 4 that separations are greatest for males in the 45-74 age range. Reasons for hospitalisation for this age group include diseases of the digestive system (12%), diseases of the circulatory system (8.6%), neoplasms (7.7%), and injury and poisoning (7.7%).

Table 13: Hospital separations, by age, males, ACT, 1996-97

Age (years)	Most frequent major diagnostic groups ^(a)
1- 4	Respiratory disorders (26%), in particular, Asthma (8%), Nervous system disorders (18%), Infectious/parasitic diseases (13%) Injury & poisoning (8%)
5-14	Injury & poisoning (20%), Respiratory disorders (15%), Nervous system disorders (13%), Digestive system disorders (11%)
15-24	Digestive system disorders (17%), Injury & poisoning (19%), Musculoskeletal disorders (10%), Respiratory disorders (5%)
25-34	Digestive system disorders (19%), Genitourinary disorders (3%), Musculoskeletal & connective tissue disorders(13%), Injury & poisoning (15%), Mental disorders (6%)
35-44	Genitourinary disorders (4%), Digestive system disorders (15%), Musculoskeletal disorders (10%), Neoplasms (5%), Injury & poisoning (8%), Circulatory system disorders (5%)
45-54	Digestive system disorders (15%), Genitourinary disorders (5%), Neoplasms (9%), Circulatory system disorders(11%), Musculoskeletal disorders (6%)
55-64	Circulatory system disorders (12%), Digestive system disorders (10%), Neoplasms (11%), Genitourinary disorders (5%), Musculoskeletal disorders (6%)
65-74	Circulatory system disorders (18%), Neoplasms (16%), Digestive system disorders (11%), Musculoskeletal disorders (7%), Genitourinary disorders (6%),
75+	Circulatory system disorders (21%), Neoplasms (15%), Digestive system disorders (10%), Injury & poisoning (7%), Nervous system disorders (6%),Genitourinary disorders (6%)

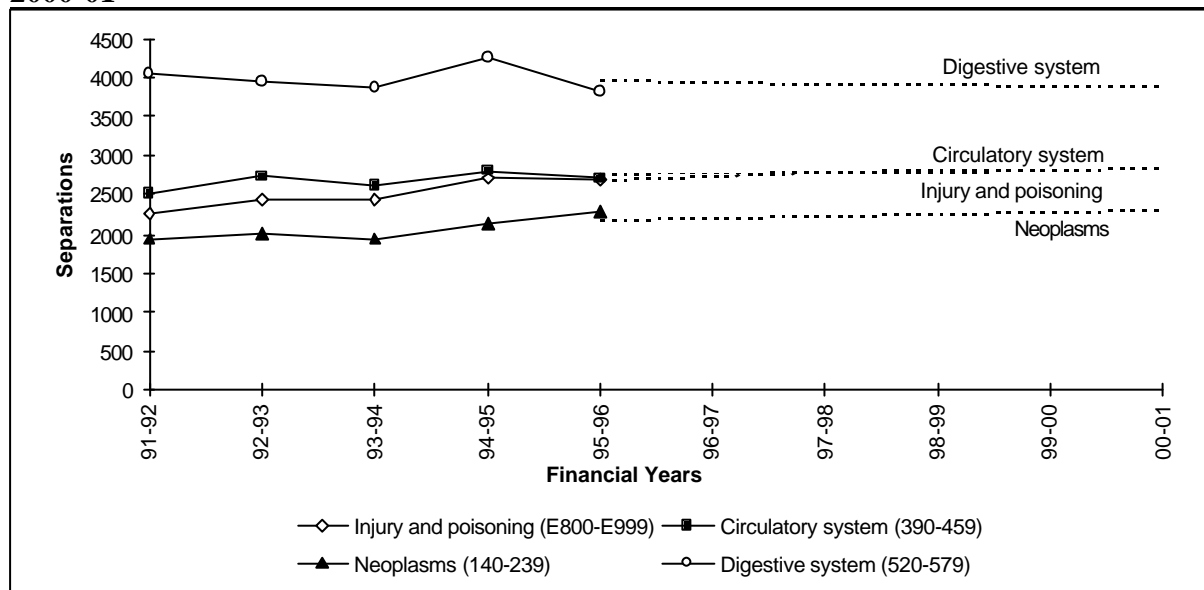
(a) Percentages refer to the percentage of all separations for that particular age group , male percentages shown.

Source: ACT Hospital Morbidity Data Collection, 1996-97

5.3 Projections of morbidity for selected causes to the year 2001

Figure 5 shows projections for separations due to selected diagnoses for males. The line of best fit predicted a decline in the number of separations due to diseases of the digestive system, with projections of 4,019 in 1991-92, 3954 in 1996-97 and 3,901 in 2000-01. Male separations for disorders of the circulatory system were predicted to rise, with 2,553 separations predicted for 1991-92, 2,789 for 1996-97 and 2,857 for 2000-01. Slight but constant increases in separations for injury and poisoning and for neoplasms were projected. Separations for injury and poisoning were predicted to exceed separations for circulatory diseases by the year 2000 (2,869 male separations). Separations due to neoplasms were also predicted to rise for males with projections of 1,892 for 1991-92, 2,211 for 1996-97 and 2,302 for 2000-01.

Figure 5: ACT hospital separations, selected causes, males, 1991-96, projected to 2000-01



Note: Loglinear trendlines fitted for projections
 Source: ACT Hospital Morbidity Data Collection, 1991-96

6. Cardiovascular disease

6.1 Mortality

The Australian study conducted by the WHO MONICA Project found that, over a ten year period (1984-93), mortality rates for cardiovascular diseases declined significantly. This was due to mortality rates from coronary heart disease (also known as ischaemic heart disease), and cerebrovascular disease (also known as stroke) declining by over 50 per cent in males and females. There were no significant changes in other heart disease mortality rates. A 1996 report released by the National Heart Foundation in Australia supports these findings.⁹

The following table shows ACT mortality over a four year period, 1993-96.

Table 14: Mortality caused by cardiovascular disease, males, ACT, 1993-96

Indicator	1993		1994		1995		1996	
	No.	Rate(a)	No.	Rate(a)	No.	Rate(a)	No.	Rate(a)
All deaths from ischaemic heart disease	134	89.3	144	95.2	127	82.9	160	103.6
Premature deaths from ischaemic heart								
< 75 years	84	56.9	90	60.5	74	49.2	88	58.2
All deaths from cerebrovascular disease	35	23.3	39	25.8	36	23.5	53	34.3
Premature deaths from cerebrovascular								
< 75 years	15	10.2	17	11.4	12	8.0	17	11.2

(a) Crude rate per 100,000

Source: *Causes of Death ACT 1993-96*. ABS unpublished data *Demography, ACT*, ABS Catalogue No. 3201.0
ACT population 1993-96. ABS unpublished data, population at 30 June 1993-96

Age standardisation, using the 30 June 1991 Australian population (persons) as the standard population, brings the 1996 ACT standardised rates close to those of Australia for cardiovascular disease, with 330 per 100,000 males (ACT) compared to 326 (Australia). For ischaemic heart disease, ACT standardised rate was 186 per 100,000 population (compared to Australian male rate of 195) and for cerebrovascular disease it was 72 per 100,000 population (Australian rate of 66).

6.2 Hospital separations

There were 2062 male separations with the principal diagnosis of cardiovascular disease in the ACT in 1996-97.

7. Cancer

Approximately one in four people will develop a cancer (not including non-melanocytic cancer) during their life time.¹⁰ Although not all cancers are fatal, cancer is the major cause of premature mortality in Australia.

Table 15: Most common cancers, by age, males, ACT, 1988-97

a) 1988-92

0-14 years	15-44 years	45-64 years	65+ years
n = 31	n = 254	n = 510	n = 814
leukaemias (30%)	melanoma (28%)	colon (16%)	prostate (24%)
brain (23%)	lymphomas (11%)	lung (16%)	lung (16%)
bone (13%)	testis (10%)	melanoma (15%)	colon (9%)

Note: Per cent of all cancers in an age group in brackets

Source: Briscoe N, *Cancer in the Australian Capital Territory 1983-92, 1996*

b) 1993-97

0-14 years	15-44 years	45-64 years	65+ years
n = 30	n = 282	n = 837	n = 1263
leukaemias (17%)	melanoma (25%)	prostate (24%)	prostate (37%)
brain (10%)	testis (14%)	colon (12%)	lung (9%)
Hodgkins disease (10%)	Colon(6%)	melanoma (11%)	colon (9%)

Note: Per cent of all cancers in an age group in brackets. Time period to November 1997.

Source: Briscoe N, *Cancer in the Australian Capital Territory 1983-92, 1996*

7.1 Mortality

Table 16 outlines mortality caused by specific cancers. Major cancers causing death are lung, colorectal and prostate cancers in males.

Table 16: Mortality caused by cancer, males, ACT, 1993-96

Indicator	1993		1994		1995		1996	
	No.	Rate(a)	No.	Rate(a)	No.	Rate(a)	No.	Rate
Deaths from all cancers	204	135.9	208	137.5	186	121.4	212	136.6
Lung, trachea and bronchus cancer	43	28.6	34	22.5	33	21.5	34	21.9
Colorectal cancer	29	19.3	35	23.1	28	18.3	32	20.6
Prostate cancer	26	17.3	27	17.8	25	16.3	30	19.3
Malignant melanoma	4	2.7	6	4.0	5	3.3	4	2.6

(a) Crude rate per 100,000 population

Source: *Causes of Death ACT 1993-5*. ABS unpublished data
ACT population 1993-6.

ACT males had slightly lower death rates from cancers than Australia as a whole. In 1996, the ACT male standardised death rate from cancer was 228 per 100,000 population (Australian rate of 230).

7.2 Hospital separations

There were 1714 male separations with the principal diagnosis of cancer in the ACT in 1996-97.

8. Injury

8.1 Mortality

The number of deaths caused by injury in the ACT is relatively small, although injury is the fourth most common cause of death in the Territory. The small numbers result in a fluctuating pattern over the years. There were 64 male injury deaths in the ACT in 1996.

A valid comparison between the ACT and Australian rates necessitates the standardisation of rates. Table 17 shows that the Territory rates compare favourably with Australian rates.

Table 17: Age-standardised mortality rates^(a) for injury, males, ACT & Australia, 1996

	ACT	Australia
Males	47	61

(a) Standardised to 1991 Census population, rate is per 100,000

Source: *Causes of Death Australia, 1995*. ABS Catalogue No. 3303.0

It can be seen from Table 18 that a large majority of deaths caused by injury occur in the young ages of 15 to 44 (76.6% of male injury deaths).

The majority of deaths in males were caused by suicide and self-inflicted injury, and motor vehicle accidents. These proportions follow the national trend.

Table 18: Deaths of males caused by injury, by age, ACT, 1996

Age group	0-	5-	15-	25-	35-	45-	55-	65-	75+
Number of deaths	-	-	20	9	14	6	6	-	7

Source: *Causes of Death Australia 1995*. ABS unpublished data

-: Less than 3 deaths

8.2 Hospital separations

There were 4359 male hospital separations with the principal diagnosis of external cause of injury from hospitals in the ACT in 1996-97.

Details of causes are shown in Table 19.

Table 19: Estimated no. of ACT hospital separations from external causes of injury or poisoning, males, by age, 1996-97

Selected external causes	Age groups										Total
	0	1-	5-	15-	25-	35-	45-	55-	65-	75+	
Motor vehicle traffic accidents	-	-	18	73	47	39	27	12	8	10	236
Motor vehicle non-traffic accidents	-	-	5	9	11	-	7	-	-	-	37
Other road vehicle accidents	-	3	42	11	13	7	13	4	0	3	96
Water transport accidents	-	-	-	-	-	-	-	-	-	-	4
Air and space transport accidents	-	-	-	-	-	-	-	-	-	-	5
Vehicle accidents not elsewhere classifiable	-	-	10	29	14	10	7	-	-	-	71
Accidental poisoning by drugs, medicaments & biologicals	-	12	-	4	7	4	4	-	5	-	40
Accidental poisoning by other solid, liquid substances, gases and vapours	-	4	-	4	3	-	-	-	-	-	14
Misadventure to patients during surgical and medical care	-	-	-	3	-	-	4	3	-	4	20
Surgical & medical procedures causing abnormal reaction or later complication without misadventure	18	27	39	70	104	109	140	249	349	243	1348
Accidental falls	3	52	155	123	79	49	53	42	52	125	733
Accidents caused by fire and flames	-	-	-	4	3	-	-	-	-	-	11
Accidents due to natural & environmental factors	-	5	7	-	8	6	6	-	3	-	40
Accidents caused by submersion, suffocation & foreign bodies	6	11	9	3	-	5	11	4	6	-	57
Struck accidentally by falling object	-	-	3	5	6	6	4	5	-	-	31
Caught accidentally in or between objects	-	13	4	-	5	5	3	3	-	-	36
Striking against or struck accidentally by object or person	-	-	12	16	7	8	-	4	-	-	50
Accidents caused by machines	-	-	-	6	9	16	17	13	7	-	72
Accident caused by cutting & piercing instrument or object	-	7	22	55	45	26	17	7	6	3	189
Accidents cause by hot substance or object, caustic or corrosive material, steam	-	7	4	-	5	-	-	-	-	-	23
Overexertion or strenuous movements	-	-	4	6	14	12	9	9	-	-	58
Late effects of accidental injury	-	-	17	64	90	61	41	17	10	3	305
Drugs, medicinal & biological substances causing adverse effects in therapeutic use	6	21	10	14	9	25	28	23	57	60	253
Suicide and self-inflicted injury	-	-	-	35	43	39	10	4	-	-	134
Homicide & injury purposely inflicted by other person	-	-	4	57	29	21	5	3	-	-	121
Other accidents	-	-	71	140	86	35	23	4	6	8	375
Total	41	176	441	739	641	489	434	412	515	471	4359

Source: ACT Hospital Morbidity Data Collection, 1996-97

-: Less than 3 separations

¹ ABS, *Australian Demographic Trends 1997*, Catalogue No. 3102.0

² Hewitt, N., Elliott, B. and Shanahan, P. *Working as a Nation to Prevent Injury: a review of risk behaviours among 15-24 year olds* Australian Government Publishing Service 1995:131

³ National Health and Medical Research Council *Unintentional Injury in Young Males 15-29 years* Australian Government Publishing service 1996:29

⁴ Gilbert, Carol and Gordon, Chris *The Epidemiology of Injury in the ACT*, ACT Department of Health and Community Care 1996:27

⁵ NH&MRC *Unintentional Injury in Young Males 15-29 years* AGPS 1996:41

⁶ ABS, *Trends in Mortality*, Catalogue No. 3313.0

⁷ ABS, *Demography ACT 1995*, Catalogue No. 3311.8

⁸ ABS, *Deaths Australia 1996*, Catalogue No. 3302.0

⁹ National Heart Foundation, *Heart and Stroke Facts 1996 Report*, Canberra, August 1996

¹⁰ Briscoe N, *Cancer in the ACT 1983-92*, Health Series No. 3, Epidemiology Unit, ACT Dept of Health & Community Care, Canberra, April 1996