

Monograph Series Number 2

The Health Status
of
Females in the ACT



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Health Status of Females in the ACT

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Health Status of Females in the ACT

1. Demographic features

There are slightly more females than males 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. There has been a 6.8 per cent growth in overall population since the 1991 Census.

Table 1 : Estimated ACT population, 1988-97, 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 ABS Unpublished data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, 1988-97

	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 ABS unpublished data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 & age, preliminary, States & Territories, June 1992 & June 1993. ABS Cat No. 3201.0
Census of population & housing: selected social & housing characteristics for statistical local areas ACT 1996. ABS Cat. No. 2015.8

For both the ACT and Australia, there are more females than males aged 65 years or more.

Table 3: Projected female population, aged 65 yrs or more, ACT, 1997-2005

	1997	1998	1999	2000	2001	2002	2003	2004	2005
No.	130000	136000	141000	146000	150000	152000	158000	160000	166000
% of 65+ population	56.0	56.2	56.2	56.8	56.0	55.9	55.6	55.0	55.1

Source: Medium series, *ACT Population Forecasts 1998-2013*, Demographics ACT, DUS, June 1998

The preponderance of women becomes more marked as age increases.

Table 4: Estimated female population, aged 65 yrs or more, by age groups, ACT, 1998

	65-69 yrs	70-74yrs	75-79 yrs	80+ yrs
No.	4000	3700	2800	3100
% of age group population	51.3	55.2	56.0	66.0

Source: Medium series, *ACT Population Forecasts 1998-2013*, Demographics ACT, DUS, June 1998

The ACT female median age was 31.9 years in 1996 and 32.2 years in 1997. For all persons the median age was 31.6 years in 1997².

2. Health risk factors

Risk factors have varying impacts on individuals, their health and life quality. Age and sex are important indicators of health risk. Major general impacts are outlined below.

Table 5: 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

Since being single or part of a single parent family is associated with higher standardised death rates, more self-reported poor health and greater prevalence of risk factors, it is important to determine household structure in an examination of socioeconomic status³.

Of the 231,521 ACT people over the age of 15 years counted at the Census in August 1996, the following partnership status was recorded:

Table 6: Registered partnership status, ACT, 1996

Married		Separated		Divorced		Widowed		Never married	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
58619	59076	3412	4421	6008	9368	1680	7539	43485	37913
52%	50%	3%	4%	5%	8%	1%	6%	38%	32%

Percents refer to proportion of total for the sex. As figures are rounded, they do not necessarily total 100%

Source: ABS, *Social & Housing Characteristics for SLAs, ACT*, Catalogue No. 2015.8

As with the national trend, females outnumber males in the categories of not presently married. They are therefore more likely to be living alone or in a single parent household. The marriage rate in the

ACT (5.8 per 1,000 population) was the second lowest of all states and territories in 1995. ACT residents also tended to marry later than in previous years (26.7 years for females, 29.2 years for males). ACT divorce rate is increasing slightly and is higher than for Australia⁴.

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)⁵. There is a strong consensus however, that risk-taking is predominantly done by males. A summary of information from Health Series No. 19 follows:

Sexual behaviour

The reduction in the incidence of diseases transmitted by sexual contact (and by injecting drugs) is of key importance to the ACT government. Rosenthal and Reichler state that “to practise safe sex, a young person may need to behave in a way that is seen as inappropriate for their gender”. For example, for a young woman to bring up the subject of condoms may feel embarrassingly forward.⁶

The Secondary Students, HIV/AIDS and Sexual Health Survey (1997) revealed a shift towards safer sex practices from 1992 to 1997, with the use of condoms slowly becoming the norm. The study included 175 students from the ACT. A total of 37 % of the sexually active students surveyed were using condoms sometimes and 9 % never at all⁷. Table 7 shows that females use condoms less than males, but their improvement rate over time has increased more rapidly than that of males.

Table 7: Students reporting condom use when last had sex, Australia 1992-1997

	1992	1997
Females	41.9%	66.2%
Males	72.8%	77.1%

Source: Secondary students HIV/AIDS and sexual health 1997: 37

Alcohol consumption

Participation in binge drinking is a key factor in students engaging in sexual risk behaviour. More than 30 % of students interviewed had been binge drinking in the previous fortnight. Females tend to binge drink slightly less than males, but indications suggest that the problem may be increasing..

Table 8: % of students binge drinking in previous fortnight, by sex, by no. of binge drinking episodes, Australia, 1997

Number of binges	males	females
none	53.2	48.5
one	19	23
two	13	16
three	13	11.5

Source: Secondary students HIV/AIDS and sexual health 1997

Women in general have a lower tolerance for alcohol than men. However, it is thought that strong social sanctions against women drinking heavily mean that women are at less risk of developing dependence. Conversely, women’s increased levels of education and participation in the workforce have contributed to an increase in alcohol use⁸. This is related particularly to occupations in medicine, law and other professions requiring long hours and a strong commitment to the problems of others⁹. The table below shows that the vast majority of ACT females were drinking within safe limits in the week prior to the National Health Survey.

Table 9: Drinking levels, females, by age, ACT 1995

age group	low risk	hazardous	harmful
0-14	100.0	0	0
15-24	96.5	0.9	2.6
25-64	97.2	0.6	2.2
65 and over	95.3	1.2	3.5

Source: *National Health Survey 1995*, Confidentialised Unit Record File ABS 1997, Cat. No. 4364.0

At hazardous drinking levels, far fewer females than males are represented in all age groups. However, at harmful drinking levels, females are on a par with or exceeding males.

Tobacco smoking

The overall pattern of current female smokers in 1993 and 1995 was similar to that of male smokers. The exceptions were a decline in the proportion of current female smokers in the 14-19 years age group and an increase in the 25-34 years age group from 1993 to 1995. Recent research suggests that women smokers may be at greater risk of early death from smoking than males¹⁰. As women start to smoke younger their pattern of lifetime smoking is beginning to conform to that of men. As a result women smokers' survival prospects are becoming even less favourable than men's. Comparison of the different age groups shows that across the ACT and Australia, more younger women are smoking than older women, and they are not giving up at the same rate as men.

Results from the ACT Secondary Schools Survey 1996 show a clear relationship between age and the prevalence of cigarette smoking. Prevalence is lower in the younger years and increases substantially to a peak in students in years 11 and 12. The survey also found that of all male and female respondents in 1996, more males are non-smokers (73%) than females (64%). There are more female occasional, light smokers and heavy smokers than male. The higher prevalence of smoking among girls is similar throughout Australia, and may be due to factors such as a greater tendency for girls to be concerned about being slim as a response to the imagery of advertising, compared with boys' greater concern with fitness¹¹.

Other drugs

Generally speaking, females use illicit drugs less than males. The exception is with self-inflicted poisoning and tranquilisers where females outnumber males.

Hospital separation data shows that by far the largest group was that of females between the ages of 15 and 24 years. One of the major reasons why people were admitted to hospital for drug poisoning was because of suicide attempt. The larger proportion of female than male hospitalisations may reflect in part, the fact that males tend to use more violent methods for suicide attempts and therefore complete it more often than females.

Exercise

ACT females (and males) participate in more organised and unorganised physical activity than their Australian counterparts. Details may be found in Health Series No. 19.

Nutrition

The ABS National Nutrition Survey 1995 surveyed community eating patterns and levels of food intake. Results showed that ACT women ate more cereal products, less vegetables, about the same amount of milk products, more meat and meat products compared to the national average. ACT women drink more alcohol and eat more confectionary than the national average.

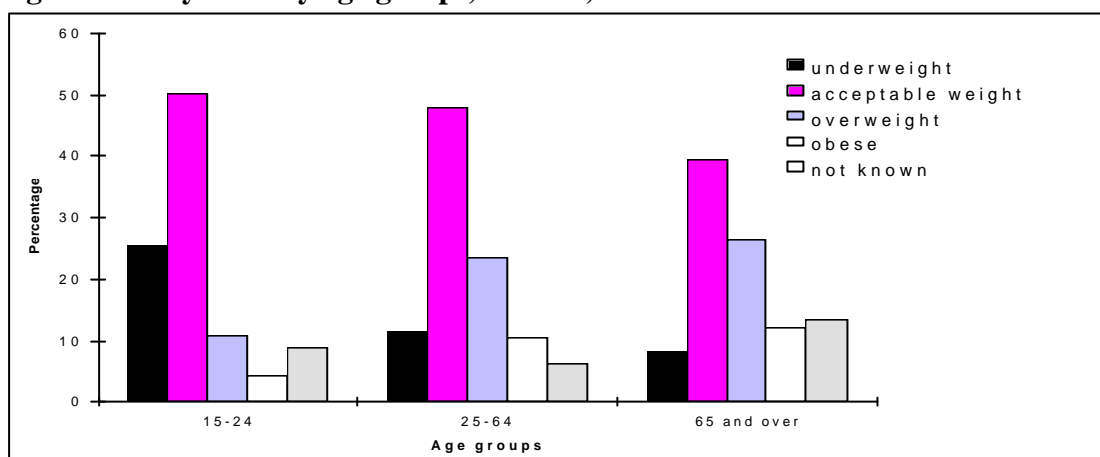
One of the dietary guidelines put forward by the National Health and Medical Research Council (NHMRC) is the promotion of breastfeeding. It contends that breastfeeding is 'recognised by health authorities as the most appropriate method for feeding infants and [is thought] to be closely related to

infant health¹². The National Health Survey 1995 indicated that the ACT had the highest proportion of children under 3 years who had been breastfed. The percentage of those breastfed for 6 months or longer was 52 %. This compares with 47 % for Australia.

Body mass

Overweight and obesity are indicators of preventable morbidity and mortality, due to diseases such as cardiovascular disease, hypertension and non-insulin-dependent diabetes mellitus. ACT females tend to maintain acceptable weight levels into middle age. The proportion of overweight women remains below 30 % across all age groups. There is an increase in proportions of obesity, from 14 to 24 years to other age groups however.

Figure 1: Body mass by age groups, females, ACT 1995



Note: large no. of 'unknown' may affect results

Source: National Health Survey 1995 Confidentialised Unit Record ABS 1997

Screening

In the ACT from 1988 to 1997, breast cancer was the most common cancer in women over the age of 14 years¹³. In 1994-96, the age-standardised incidence rate was 96 per 100,000 population. The ACT had a similar breast cancer death rate (26.3 per 100,000 women in 1996) to Australia as a whole. There were 40 deaths from this cause in 1996 in the ACT.

The known risk factors for breast cancer are not easily modifiable, so the main scope for reducing mortality is through early detection. This is accomplished through breast examination and screening.

ACT women in the target group of 45-64 years had screening rates for mammography higher than those of Australia generally. The ACT Department of Health and Community Care administers a Women's Health Program which offers free mammography to women, especially those between 50-69 years, every 2 years. Table 10 shows activity over a four year period.

Table 10: Breast cancer screening, ACT Women's Health Program, 1993-97

	1993-94	1994-95	1995-96	1996-97
ACT	7,998	8,887	10,073	10,177
NSW	1,059	2,050	5,011	6,116
Total	9,057	10,937	15,084	16,293

Source: ACT Breast Screening Program

Cancer of the cervix is the eighth most common cancer in Australian females. It generally affects women over the age of 30 years. In the ACT, the incidence rate (1991-94) was 10.3 per 100,000 women (compared to 12.0 for Australia) and the death rate (1991-96) was 3.2 per 100,000 women (compared to 2.9 for Australia)¹⁴. There were 5 deaths from cervical cancer in the ACT in 1996. Both incidence and deaths caused by cervical cancer are decreasing over time. The decrease is

mainly, if not completely, due to the introduction of wide-spread Papanicolaou (Pap) smear screening tests and subsequent diagnosis and treatment of precancerous abnormalities. ACT women tend to have more Pap smear tests than their Australian counterparts (National Health Survey 1995). The ACT Department of Health and Community Care administers a Women's Health Program which offers free cervical screening. Table 11 shows activity over a two year period.

Table 11: Cervical cancer screening, ACT Women's Health Program, 1995-97

	1995-96	1996-97
Cervical cancer screening	33,038	35,663

Source: ACT Women's Health Program

3. Births

There were 2,155 female (2,241 male) births registered to mothers usually resident in the ACT, in 1996. The female infant mortality rate was 6.03 per 1,00 live births (male rate of 5.36) in that year.

Table 12: Indicators of perinatal & infant health, ACT, 1993-96

Indicator	1993		1994		1995		1996	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Babies weighing > 2,500 g at birth	-		4513		4554		4381	
Babies weighing < 1,500g at birth	-		271		279		311	
Perinatal mortality (deaths under 4 weeks of age)	32	7.2	27	6.0	36	8.1	35	7.9
All deaths under one yr of age								
Infant mortality rate	19	4.3	21	4.7	21	4.8	25	5.7
Deaths from SIDS								
Males	3	1.3	2	0.9	1	0.4	1	0.4
Females	2	0.9	0	0.0	2	0.9	2	0.9

Sources: ABS Births 1993-95

ACT Hospital morbidity data collection 1992-1996

ABS Causes of death, unpublished data

Midwives data collection 1994-96

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 62% for females (50% for males).¹⁵ This represented an annual decline of 1.4% (0.98% for males). Over a 20 year period (1971-91) in the ACT, the age-standardised death rate for females declined from 787 to 482 per 100,000 population.

In 1986 the median age at death was 73.5 years for ACT females. By 1996 it was 77.5 years (80.7 for Australian females).¹⁶ The younger median age is likely to be caused by the younger age distribution in the ACT.

There was a total of 10 female Indigenous deaths in 1993 and 1994¹⁷.

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

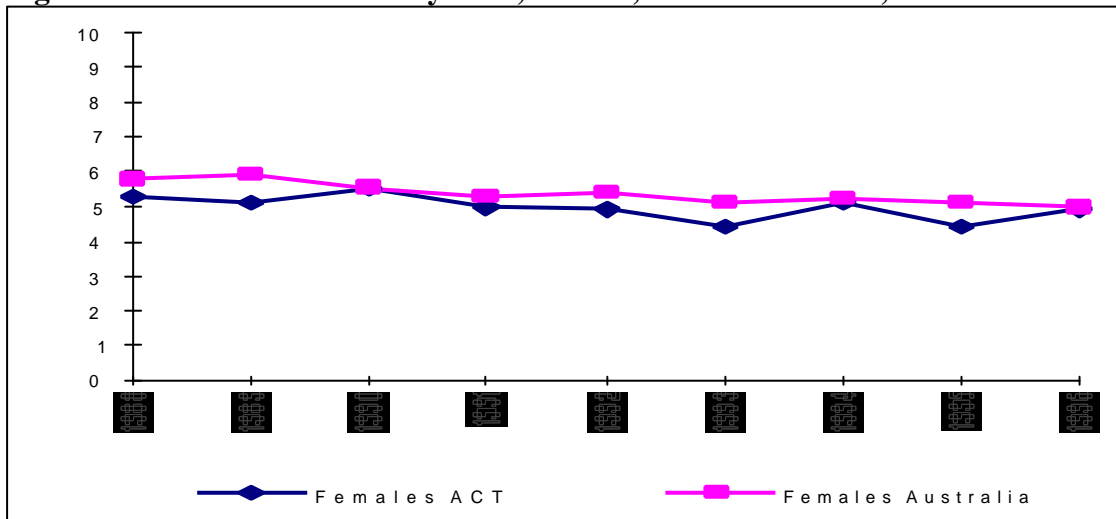
Table 13: Indicators of mortality, ACT females, 1988-96

	1988	1989	1990	1991	1992	1993	1994	1995	1996
Number of deaths	450	443	508	491	496	478	578	521	602
Mortality rate per 100,000	328.6	317.5	356.2	339.4	338.4	321.2	386.4	345.1	397.6
Standardised mortality rate per 100,000	530	510	550	500	490	440	510	440	490
Infant mortality rate per 1,000 live births	n/a	6.2	7.1	5.2	5.5	1.8	3.1	7.1	6.0
Premature deaths (< 75 years)	233	204	242	244	241	217	241	243	259
Premature mortality rate per 100,000	175.1	150.9	178.3	176.1	172.4	150.2	166.1	166.3	176.1

Source: *Deaths Australia, 1993-96*. ABS Cat. No. 3302.0 ; *Causes of Death ACT*. ABS unpublished data;
Demography ACT, 1990-96. ABS Cat No. 3311.8

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 may suggest a narrowing margin (or just be a fluctuation).

Figure 2: Standardised mortality rates, females, 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 fairly constant for females since 1985.

Table 14: Age-specific death rates^(a), females, ACT, 1985-96

	1985	1990	1991	1992	1993	1994	1995	1996 (b)	
under 1	5.6	7.1	5.2	5.5	1.8	3.1	7.1	under 1	6.0
1-9	0.3	0.3	0.3	0.3	0.2	0.0	0.3	1-4	0.2
10-19	0.3	0.2	0.4	0.1	0.1	0.3	0.1	5-14	0.2
20-29	0.3	0.5	0.4	0.4	0.4	0.3	0.2	15-24	0.1
30-39	0.6	0.5	0.4	0.3	0.6	0.7	0.5	25-34	0.5
40-49	1.5	1.6	1.1	1.0	1.0	1.0	1.1	35-44	0.9
50-59	4.1	3.3	4.0	2.9	3.0	3.4	3.5	45-54	1.6
60-69	11.0	11.3	10.0	10.8	8.0	9.5	8.7	55-64	4.7
70-79	30.9	29.9	25.8	25.6	25.6	24.8	21.9	65-74	16.8
80+	90.0	98.9	92.5	93.1	84.7	110.3	84.7	75-84	45.8
								85+	137.0

(a) Rates are per 1,000 population.**(b) 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
3302.0*Deaths Australia 1996*, Catalogue No.

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. It would be expected that a good proportion of deaths would occur after 75 years. This is certainly true for the ACT as is reflected in the following table.

Table 15: Deaths at age less than & more than 75 years, females, ACT, 1993-96

Year	1993	1994	1995	1996
More than 75 years	261	337	278	343
Less than 75 years	217	241	243	259

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

4.1 Major causes of death

As shown in Table 16, the major causes of death in the ACT and Australia for females are circulatory disease - mainly ischaemic heart disease and cerebrovascular disease (stroke), and malignant neoplasms (cancer). Approximately 28 % of female deaths were due to cancer and 19 % were due to ischaemic heart disease, in the ACT in 1996.

Table 16: Principal causes of death, females, ACT & Australia, 1996

Cause of death	ACT		Australia	
	No.	Rate	No.	Rate
Malignant neoplasms	164	133	15084	139
Circulatory disease	256	213	27439	215
Accidents and suicides	28	18	2123	21
Respiratory system	40	34	4560	38
Digestive system	21	17	1871	15
Other diseases	93	74	9433	79

Note: standardised death rate per 100,000 persons, standardised for age using 1991 Aust. population (persons) as standard population.

Source: *Causes of Death, Australia 1996*. ABS Catalogue No.3303.0,

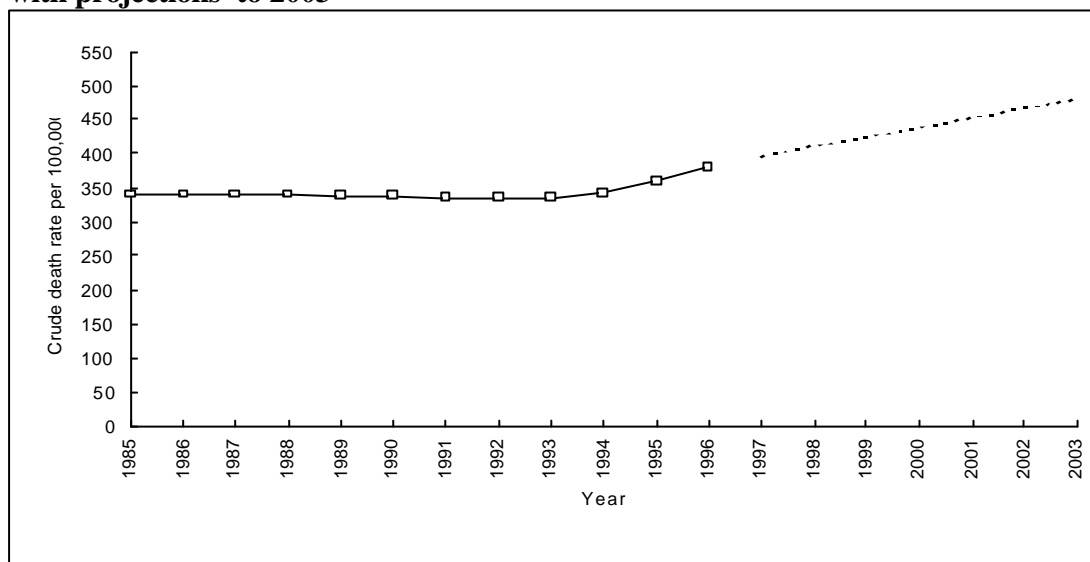
4.2 Projections of mortality to the year 2001

Projections can be used to assess future needs by policy makers, planners and service providers. If projection assumptions are met, there will be little change in crude death rates in the next 3 or 4 years.

Female crude death rates for all causes have increased slightly over the years 1985 to 1996 (Refer Figure 3). The effect of the ageing population will be to increase ACT female crude deaths rates substantially over the years 1997 to 2003.

In 1996 there were 602 female deaths from all causes for ACT residents. Projecting the current death rates into the future gives the following figure: 788 female deaths from all causes in the year 2003.

Figure 3 : ACT females, crude deaths rates (smoothed) for all causes, 1985 to 1996, with projections to 2003



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.

Sources: *Causes of death, Australia*, ABS Cat No 3303.0
ACT Population forecasts 1998-2013, ACT Dept of Urban Services, 1998

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: 81.6 years for females (compared to 81.1 years nationally).¹⁸

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 females show that most women thought their health to be excellent or good with 94.7% for recent conditions, 94.5% for long-term conditions and 85.3% overall.

Table 17: Females 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 (a)
Excellent	35.0	29.1	19.9
Very good	37.6	36.9	37.7
Good	22.1	28.5	27.7
Fair	**4.5	4.9	11.5
Poor	**0.8	**0.6	3.1

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

** denotes subject to sampling

(a) total refers to all women, whether they reported a condition or not.

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

Regarding health actions taken in the 2 weeks prior to interview, ACT female responses showed that 82% of females took some action, mainly taking medications (including vitamins):

Table 18: Females, whether took health action during 2 weeks prior to interview, by type of action, ACT, 1995

Type of action	rate *
Hospitalisation	10.3
Casualty/emergency/outpatient visit	23.2
Day clinic visit	16.2
Doctor consultation	254.3
Dental consultation (females over 2 years)	83.6
Consultation with Other Health Professional	129.2
Medication use (include vitamins, minerals, natural & herbal)	765.9
Days off work or school	98.5
Days of reduced activity	97.2
Total males taking action	821.0
Total males taking no action	179.0

* rate per 1,000 population of same age & sex

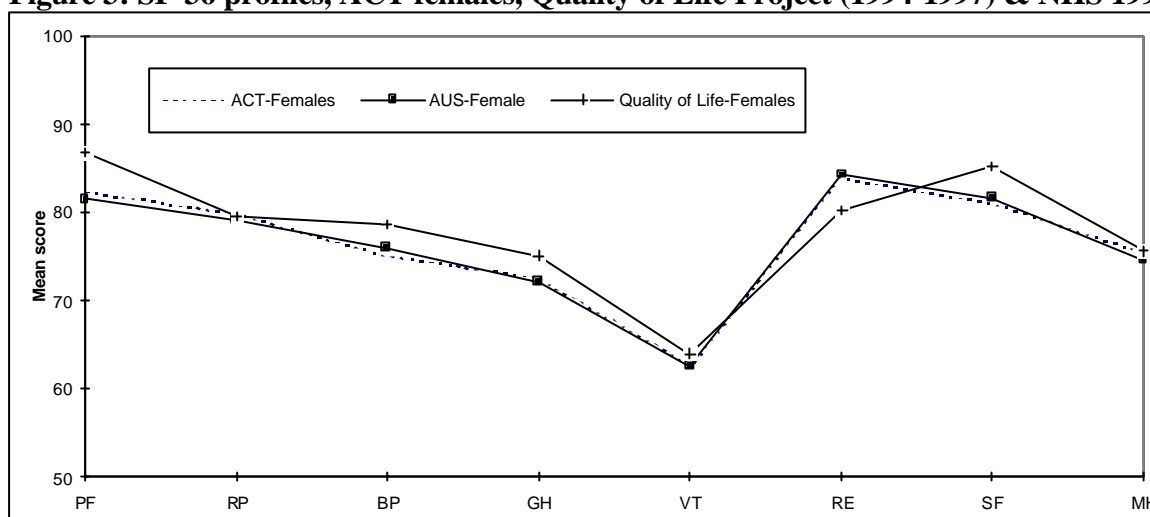
Source: ABS *National Health Survey 1995*, Cat. No. 4392 (unpublished data)

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 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 4. 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 females 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 females reported similar or slightly higher than their national counterparts for all of the SF-36 scales except for role disability due to emotional health problems (RE).

Figure 3: SF-36 profiles, ACT females, Quality of Life Project (1994-1997) & NHS 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 19.

Table 19: Hospital separations, all hospitals, females, 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	23502	15793.9	25901	17313.7	25858	17129.4	24914	16357.1
-obstetric (b)	6122	7855.3	5226	16743.8	4575	5906.8	4405	5696.1
All hospitals	28426	19103.0	32530	21744.9	31599	20929.1	31577	20731.7
-obstetric (b)	6261	8033.6	6118	7894.9	5601	7231.5	5569	7201.2
Indigenous (c)	149	n/a	127	n/a	134	n/a	255	n/a

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

(b) ACT females aged 15-44 years are used as the population for obstetric rates.

(c) 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 20: Estimated no. of hospital separations for selected principal diagnosis, by length of stay, females, ACT, 1996-97

Principal diagnosis	Length of stay (days)							ALOS	Median
	<1	1	2	3	4-7	8-14	15+		
Infectious and parasitic diseases	89	104	149	77	94	35	23	3.8	2
AIDS/HIV	0	0	0	0	0	0	0	0	0
Neoplasms	1212	233	146	109	529	276	184	4.4	1
Malignant neoplasms	610	157	103	66	259	202	165	5.4	2
benign - uterus	52	5	4	10	182	42	3	5.2	6
Endocrine, nutritional and metabolic									
Diabetes mellitus	3	14	15	16	32	26	13	7.8	5
Mental disorders	56	78	41	53	161	194	235	13.8	8
Psychoses	30	24	12	22	86	110	188	17.7	11
Neuroses	7	7	7	8	14	25	15	8.9	7
Diseases of the respiratory system	117	487	303	165	313	190	99	4.7	2
Pneumonia	4	8	29	37	106	74	31	7.9	6
Bronchitis	0	3	3	3	9	13	2	7.1	6
Emphysema	0	1	1	0	4	3	7	20.3	11.5
Asthma	15	53	51	36	65	26	6	3.8	3
Diseases of the genitourinary system	2090	305	189	142	646	260	61	2.3	0
Supplementary classificn. of factors	7505	312	336	399	705	99	107	1.3	0
Sterilisation	215	23	2	0	3	0	0	0.2	0
Normal neonate	53	181	254	349	552	22	0	3.3	3
Extracorporeal dialysis	4395	0	0	0	0	0	0	0.0	0
Maintenance chemotherapy	2234	11	3	0	2	0	0	0.0	0

Source: ACT Hospital Morbidity Data Collection, 1996-97

The following table shows average length of stay activity in ACT hospitals for 1996-97.

Table 21: Average length of stay (days), ACT female residents, 1996-97

Excludes nursing home type patients *	2.92
Excludes day patients	6.13
All female patients	3.578

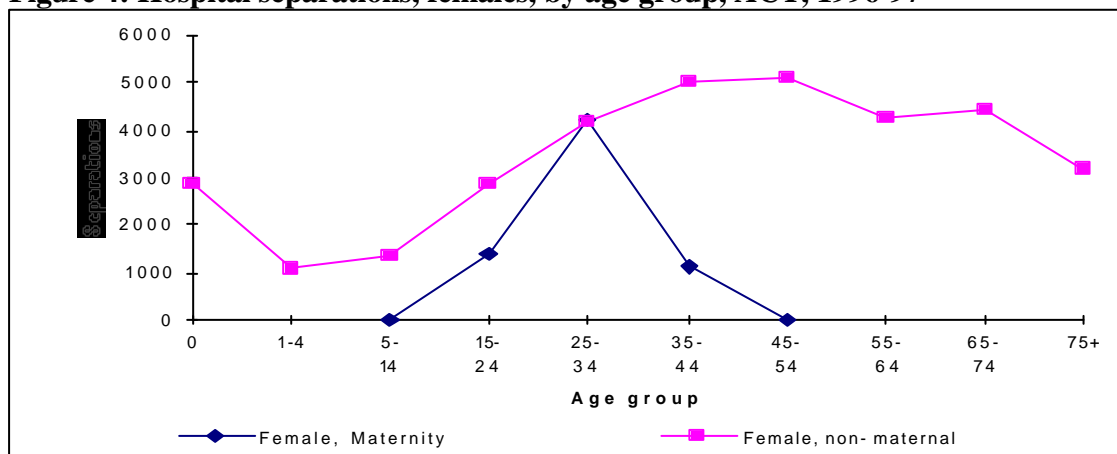
* Nursing home type patients are those who stay longer than 35 days.

Source: ACT Hospital Morbidity data 1996-97

Age-specific hospital separations

Females increase their hospital activity as they age, but it decreases progressively from age 65 years, probably due to the fact that there are less females in the older groups (due to death).

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



Source: ACT Hospital Morbidity Data Collection

It can be seen from Figure 5 that separations are greatest for females in the 25-74 age range. Reasons for hospitalisation for this age group include pregnancy, childbirth and the puerperium (20.5%), diseases

of the genitourinary system (11%), diseases of the digestive system (9.9%), and neoplasms (7.6%). Table 22 shows hospital separations in 1996-97 in relation to age categories for females

Table 22: Hospital separations, by age, females, ACT, 1996-97

Age (yrs)	Most frequent major diagnostic groups (a)
1-4	Respiratory disorders (21%), in particular, Asthma (8%), Nervous system disorders (17%), Infections/parasitic diseases (15%) Injury & poisoning (9%)
5-14	Injury & poisoning (16%), Respiratory disorders (19%), Nervous system disorders (13%), Digestive system disorders (13%)
15-24	Complications of pregnancy (33%), Digestive system disorders (19%), Injury & poisoning (6%), Musculoskeletal disorders (4%), Respiratory disorders (6%)
25-34	Digestive system disorders (7%), Genitourinary disorders (10%), Musculoskeletal & connective tissue disorders(2%), Injury & poisoning (3%), Mental disorders (2%)
35-44	Complications of pregnancy (18%), Genitourinary disorders (17%), Digestive system disorders (9%), Musculoskeletal disorders (5%), Neoplasms (7%), Injury & poisoning (4%), Circul. system disorders (2%)
45-54	Digestive system disorders (13%), Genitourinary disorders (15%), Neoplasms (14%), Circulatory system disorders(5%), Musculoskeletal disorders (6%)
55-64	Circulatory system disorders (8%), Digestive system disorders (11%), Neoplasms (9%), Genitourinary disorders (7%), Musculoskeletal disorders (8%)
65-74	Circulatory system disorders (10%), Neoplasms (10%), Digestive system disorders (10%), Musculoskeletal disorders (7%), Genitourinary disorders (4%),
75+	Circulatory system disorders (21%), Neoplasms (11%), Digestive system disorders (11%), Injury & poisoning (11%), Nervous system disorders (10%),Genitourinary disorders (4%)

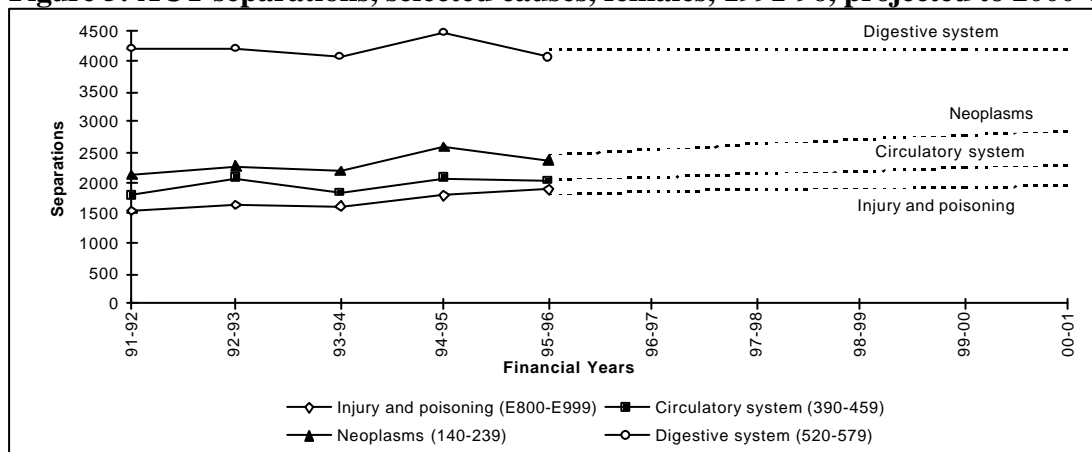
(a) Percentages refer to the percentage of all separations for that particular age group , female percentages shown.

Source: ACT Hospital Morbidity Data Collection, 1996-97

5.3 Projections of morbidity for selected causes to the year 2001

Figure 6 shows projections for separations due to selected diagnoses for females. The line of best fit predicted no change in the number of separations due to diseases of the digestive system, with projections of 4,206 in 1991-92, 4,210 in 1996-97 and 4,210 in 2000-01. Female separations for disorders of the circulatory system were predicted to rise, with 1,867 separations predicted for 1991-92, 2,105 for 1996-97 and 2,295 for 2000-01. Slight but constant increases in separations for injury and poisoning were projected, with 1,510 separations in 1991-92, 1,850 in 1996-97 and 1,947 in 2000-01. Separations due to neoplasms were also predicted to rise for females with projections of 2,155 for 1991-92, 2,551 for 1996-97 and 2,868 for 2000-01.

Figure 5: ACT separations, selected causes, females, 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 10 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 (known as stroke) declining by over 50% in both sexes. 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.¹⁹

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

Table 23: Mortality caused by cardiovascular disease, females, 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	90	60.5	119	79.5	92	60.9	113	74.1
Premature deaths from ischaemic heart								
< 75 years	24	16.6	30	20.7	13	8.9	34	23.1
All deaths from cerebrovascular disease	44	29.6	72	48.1	52	34.4	81	53.1
Premature deaths from cerebrovascular								
< 75 years	12	8.3	20	13.8	10	6.8	16	10.9

(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, brings the 1996 ACT standardised rates close to those of Australia for cardiovascular disease, with 213 per 100,000 females (ACT) compared to 215 (Australia). For ischaemic heart disease, ACT standardised rate was 95 per 100,000 population (compared to Australian female rate of 108) and for cerebrovascular disease it was 68 per 100,000 population (Australian rate of 59).

6.2 Hospital separations

There were 1936 female 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.²⁰ Although not all are fatal, cancer is the major cause of premature mortality in Australia.

Table 24: Most common cancers, by age, females, 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 (19%)	breast (36%)	breast (37%)	breast (20%)
	brain (19%)	melanoma (26%)	melanoma (10)	colon (14%)
	kidney (19%)	cervix (9%)	colon (7%)	lung (9%)

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

b) 1993-97

0-14 years	15-44 years	45-64 years	65+ years
n = 30 leukaemias (32%) brain (14%) Hodgkins disease (14%)	n = 287 breast (29%) cervix (21%) melanoma (17%)	n = 227 breast (43%) melanoma (10%) colon (7%)	n = 1762 breast (21%) colon (11%) trachea (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

Major cancers causing death are breast, colorectal and lung cancers in females. ACT females had slightly lower cancer death rates than Australian females. In 1996, the ACT female standardised death rate from cancer was 133 per 100,000 population (Australian female rate of 139).

Table 25: Mortality caused by cancer, females, ACT, 1993-96

Indicator	1993		1994		1995		1996	
	No.	Rate(a)	No.	Rate(a)	No.	Rate(a)	No.	Rate
Deaths from all cancers	141	94.8	146	97.6	179	118.6	164	107.7
Breast - all ages	35	23.5	27	18.0	39	25.8	40	26.3
- aged 50-69	12	60.1	15	73.0	19	89.5	19	86.4
Cervical	1	0.7	3	2.0	7	4.6	5	3.3
Lung, trachea & bronchus	19	12.8	22	14.7	17	11.3	18	11.8
Colorectal	29	19.5	16	10.7	27	17.9	17	11.2
Malignant melanoma	2	1.3	2	1.3	6	4.0	5	3.3

(a) Crude rate per 100,000 population

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

ACT population 1993-6. ABS

7.2 Hospital separations

There were 2,015 female 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.

Table 26: Deaths caused by injury, females, by age, ACT, 1996

Selected external causes	Age groups									Total
	0-	5-	15-	25-	35-	45-	55-	65-	75+	
Motor vehicle traffic accidents	0	3	1	2	1	0	0	0	1	8
Accidental falls	0	0	0	0	0	0	0	1	2	3
Accidents from fire & flames	0	0	0	0	0	1	0	0	0	1
Accidents due to natural or environmental factors	0	0	0	0	0	0	0	0	1	1
Accidents due to submersion suffocation, or foreign bodies	1	0	0	0	1	0	0	0	0	2
Late effects of accidental injury	0	0	0	0	1	0	0	0	0	1
Suicide & self inflicted injury	0	0	2	2	2	4	0	1	0	11
Other causes of injury	0	0	0	0	0	1	0	0	0	1
Total	1	3	3	4	5	6	0	2	4	28

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

There were 28 female injury deaths in the ACT in 1996. The ACT standardised rate was 18 compared to the Australian rate of 21 per 100,000 population (standardised for age using the 1991 Aust. population (persons) as the standard population). It can be seen from Table 26 that the age spread for females is fairly even (for males, 76.6% deaths caused by injury occur in the young ages of 15 to 44) with a small peak at the 35-54 years group. The majority of deaths in females was caused by suicide and self-inflicted injury, and motor vehicle accidents. These proportions follow the national trend.

8.2 Hospital separations

There were 3,574 female 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 27.

Table 27: 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	0	2	18	73	47	39	27	12	8	10	236
Motor vehicle non-traffic accidents	0	1	5	9	11	1	7	0	1	2	37
Other road vehicle accidents	0	3	42	11	13	7	13	4	0	3	96
Water transport accidents	0	0	1	1	0	0	1	1	0	0	4
Air and space transport accidents	0	0	0	1	1	0	1	2	0	0	5
Vehicle accidents not elsewhere classifiable	0	0	10	29	14	10	7	1	0	0	71
Accidental poisoning by drugs, medicaments & biologicals	1	12	1	4	7	4	4	0	5	2	40
Accidental poisoning by other solid, liquid substances, gases and vapours	1	4	1	4	3	0	1	0	0	0	14
Misadventure to patients during surgical and medical care	2	0	0	3	1	2	4	3	1	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	0	0	1	4	3	2	1	0	0	0	11
Accidents due to natural & environmental factors	0	5	7	2	8	6	6	1	3	2	40
Accidents caused by submersion, suffocation & foreign bodies	6	11	9	3	2	5	11	4	6	0	57
Struck accidentally by falling object	0	1	3	5	6	6	4	5	0	1	31
Caught accidentally in or between objects	0	13	4	2	5	5	3	3	1	0	36
Striking against or struck accidentally by object or person	0	2	12	16	7	8	0	4	0	1	50
Accidents caused by machines	0	2	1	6	9	16	17	13	7	1	72
Accident caused by cutting & piercing instrument or object	1	7	22	55	45	26	17	7	6	3	189
Accidents cause by hot substance or object caustic or corrosive material, steam	1	7	4	2	5	1	1	1	0	1	23
Overexertion or strenuous movements	0	2	4	6	14	12	9	9	1	1	58
Late effects of accidental injury	0	2	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	0	0	0	35	43	39	10	4	2	1	134
Homicide & injury purposely inflicted by other person	1	1	4	57	29	21	5	3	0	0	121
Injury inflicted by legal intervention	0	0	0	0	0	0	0	0	0	0	0
Injury undetermined whether accident or purposely inflicted	0	0	0	0	0	0	0	0	0	0	0
Other accidents	1	1	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

Although detailed data for injury caused by falls are unavailable from general practitioners, physiotherapists etc, available hospital morbidity data give an indication of *acute* morbidity for this cause. There were 1,113 separations due to falls in the ACT in 1996-97 (Refer Table 28).

Table 28: Separations for falls, by place of occurrence, by age, by sex, ACT residents, 1996-97

Age group	Sex	Home	Farm	Mine	Industrial	Sport/ Rec	Street/ Highway	Public Building	Institutional Residence	Other place specified	Other place unspecified	Missing	Total
<1 yr	M	2											2
	F	6											6
1-14 yrs	M	62			1	25	1	16		1	62	2	170
	F	35				18		14			33		100
15-24 yrs	M	23			1	3	2	4	1	3	24	21	82
	F	11									10	6	27
25-44 yrs	M	27			5	3	1	4		5	42	9	96
	F	12								1	23	4	40
45-54 yrs	M	11			4			1	1		15	4	36
	F	21								4	10	1	36
55-64 yrs	M	7			4			1	2		15	4	33
	F	18		1					3		16	4	42
65-74 yrs	M	12				2	1	1	6		11	2	35
	F	35					1	5	12	1	15	10	79
75-84 yrs	M	36				1			12	1	11	6	67
	F	62		1			3	2	26	1	15	15	125
85+ years	M	11				1		2	5		3	2	24
	F	53	1	1		3		1	25	1	10	18	113
Total	M	191	0	0	15	35	5	29	27	10	183	50	545
	F	253	1	3	0	21	4	22	66	8	132	58	568

Source: ACT hospitals morbidity dataset, 1996-97

From the table above, it can be seen that nearly a third of falls resulting in hospitalisation occurred for people over 75 years (29.6%) and nearly a quarter for children aged 1-14 years (24.3%). Females had more falls in all later age groups. Most falls occurred in the home (64.3% of separations where place was nominated). It must be noted, that these data refer to people hospitalised only, and may not be applicable to people who fall but do not require such treatment.

Given these data, and taking into consideration an ageing population in the ACT, the incidence of falls can be expected to increase. A report by the National Health and Medical Research Council in November 1993²¹ notes that:

- * at least one third of people over 65 years of age fall one or more times a year;
- * the causes of falls are usually multifactorial involving combinations of age-related physiological decline, chronic disease, medication and environmental factors;
- * the risk factors for women are muscle weakness, standing systolic blood pressure of less than 110, psychotropic drugs and medication liable to cause postural hypotension;
- * psychological sequelae, such as fear, occur frequently and may lead to increased dependence;

Since falls are a common problem for older people (especially women) and since the causes are multifactorial, preventative measures also need to be multidisciplinary in approach. Medications and environmental dangers are potentially remediable, and impaired balance may respond to rehabilitation. Education programs such as the one recently undertaken by the ACT Division of GPs²², will be important in any preventative strategy.

There is considerable evidence regarding the relationship between falls resulting in bone breaks or fractures, and osteoporosis. Continued education programs to ensure people, especially children and young adults, follow a balanced diet with appropriate levels of calcium intake, is indicated.

9. Mental disorders

9.1 Mortality

Fortunately, in the majority of cases, mental disorders do not result in premature death. Death rates for mental disorders in Australia are slowly increasing. This may reflect the ageing of Australia's population, since many deaths in this category are the result of dementia, including Alzheimer's disease, which tend to occur during old age. In addition, medical practitioners are increasingly inclined to nominate mental disorders as the cause of death, increasing the death rates attributed to these disorders.²³

In 1996, of 32 deaths due to mental disorders in the ACT, 15 were female. The mean age was 64 years. Most of these deaths were due to uncomplicated senile dementia. The mean age at death due to all dementias was 85 years. While males outnumber females in younger age groups, the majority of residents aged 75 years or more are female (63%). It is therefore not surprising that the majority of those who died due to dementias were female (71%). Twelve deaths were recorded as the result of mental disorders related to drug abuse (4 female).

Female deaths due to mental disorders in the ACT increased from 2 in 1985 to 15 in 1996. When one considers that in 1996 the majority of cases were related to dementia and that our population is ageing, one can see the importance of monitoring these figures.

The lines of best fit for mental disorders estimates numbers of female deaths in 1985 to be 3, but 18 in 2001. Projections of crude deaths rates show an increase for females.

Suicide

In 1996, 11 females committed suicide (8 in 1985). Four of these were aged 25-44 years.

The line of best fit estimates the numbers of suicides for females will decrease from 10 in 1985, to 5 in 1995 and 1996 and 4 in 2001. These estimates take into consideration fluctuations resulting from the small numbers of deaths in the ACT (eg females deaths were 10 in 1994 and 1 in 1995). If the trend in crude rates continues there will be a decline in suicides.

9.2 Morbidity

The National Survey of Mental Health 1997 estimated that the ACT had approximately 19,800 females with a mental disorder of some type. This equates to 17.5 % of the ACT female population, or nearly 1 in 5 females. This estimation is in line with national trends (18%).

A large proportion of females (53% of those with mental disorders) were 18-34 years old.

With regard to type of disorder, females accounted for the minority of substance use disorders (20%), but there were slightly more females than males with anxiety disorders (58%) and affective disorders (56%). The older female (and male) age groups experienced less mental disorder than younger groups.

Table 29: Prevalence (%) of mental disorders, females, by age, ACT, 1997

	Age group (years)						Total
	18-24	25-34	35-44	45-54	55-64	65+	
Females							
Mental disorders							
Anxiety disorders	*10.5	20.3	12.0	*12.6	*8.2	*12.1	13.4
Affective disorders	17.0	*9.5	*5.7	*8.2	–	**3.6	8.6
Substance use disorders	–	*6.8	*7.5	–	–	–	4.3
<i>Total mental disorders</i>	25.8	21.8	14.5	15.1	*8.2	*14.1	17.5
No mental of physical disorders	49.5	61.3	58.0	45.3	47.9	*24.7	50.5
Total females ('000)	18.7	25.6	25.2	21.3	10.5	11.9	113.3

Note: Subject to sampling variability between 25% & 50%. (a) During the 12 months prior to interview. (b) A person may have more than

one mental disorder with or without a physical condition. The components when added may therefore be greater than the total.

Source: ABS. *Survey of mental health and well being, 1997* (unpublished data).

9.2.1 Eating disorders

Poor dietary habits and a lack of a sense of well-being can lead to serious eating disorders. These disorders mainly affect women, from all sections of the community. Reasons for developing such disorders can include feelings of inadequacy (even if they are high achievers), anxiety, society's presentation of the ideal body (pressure to conform), lack of self-esteem, poor body image, child and adolescent development problems, emotional, sexual and physical abuse, other life crises, family relationships, psychological and biological factors. Whereas men are more likely to use violence as their outlet for lack of well-being, women are possibly more likely to use their own bodies to either punish themselves, make themselves less attractive (so that abuse might stop), to take their minds off other problems or to attempt to fulfil a societal ideal body in order that they may be attractive to others. All these reasons involve lack of feeling safe, lack of feeling accepted and acceptable - in short, negative feelings of well-being.

The two major eating disorders are anorexia nervosa and bulimia:

Anorexia nervosa presents as an intense preoccupation with body size and image resulting in a deliberate restriction of calorie intake and often a tendency to exercise obsessively, which leads to substantial loss of body weight.²⁴ About 40 % of anorexics develop bulimia later. The disorder affects about 1% of young women, who generally present for assistance around 13 or 14 years of age²⁵. People with acute anorexia may be hospitalised for treatment. Table 31 shows separations over a 4 year period in the ACT. There is no apparent rise in these acute cases over time.

Bulimia also presents as an intense concern with body image and attractiveness, but it results in eating cycles (food restriction to binge eating to vomiting and use of laxatives), often several times a day. Since body weight does not alter dramatically, people with bulimia can hide their disorder. Bulimia affects about 7 % of young women. Young women generally present with problems in their late teens or early twenties. Hospitalisation is very rare (refer Table 31).

Table 30: Hospital separations for eating disorders, females, ACT 1993-97

	1993-94	1994-95	1995-96	1996-97
<i>Principal diagnosis</i>				
Anorexia nervosa	9	14	15	12
Bulimia	2	1	2	1
<i>Secondary diagnosis</i>				
Anorexia nervosa	4	5	4	6
Bulimia	1	5	16	2

Note: in 1996-97 1 female with a principal diagnosis of anorexia nervosa had a secondary diagnosis of bulimia

Source: *ACT hospitals morbidity dataset, 1993-97*

Since eating disorders affect people both physically and mentally, a range of health practitioners may be involved in treatment. Treatment may include psychotherapy; family, drug and/or reality therapy; hypnosis and education. There are support groups for sufferers and their families.

10 Health Series Publications

The Epidemiology Unit of the Department of Health and Community Care has developed an on-going health series of publications to inform health professionals, policy developers and the community on health status in the Territory. Information contained therein will assist in the development of appropriate policy and service delivery models, the evaluation of programs, and an understanding of how the ACT compares with Australia as a whole with regard health status.

- Number 1: *ACT's Health: A report on the health status of ACT residents*
Carol Gilbert, Ursula White, October 1995
- Number 2: *The Epidemiology of Injury in the ACT*
Carol Gilbert, Chris Gordon, February 1996
- Number 3: *Cancer in the Australian Capital Territory 1983-1992*
Norma Briscoe, April 1996
- Number 4: *The Epidemiology of Asthma in the ACT*
Carol Gilbert, April 1996
- Number 5: *The Epidemiology of Diabetes Mellitus in the ACT*
Carol Gilbert, Chris Gordon, July 1996
- Number 6: *Developing a Strategic Plan for Cancer Services in the ACT*
Kate Burns, June 1996 (Out of print)
- Number 7: *The First Year of The Care Continuum and Health Outcomes Project*
Bruce Shadbolt, June 1996
- Number 8: *The Epidemiology of Cardiovascular Disease in the ACT*
Carol Gilbert, Ursula White, January 1997
- Number 9: *Health Related Quality of Life in the ACT: 1994-95*
Darren Gannon, Chris Gordon, Brian Egloff, Bruce Shadbolt, February 1997
- Number 10: *Disability and Ageing in the ACT: An Epidemiological Review*
Carol Gilbert, April 1997
- Number 11: *Mental Health in the ACT*
Ursula White, Carol Gilbert, May 1997
- Number 12: *Aboriginal and Torres Strait Islander Health in the ACT*
Norma Briscoe, Josie McConnell, Michelle Petersen, July 1997
- Number 13: *Health Indicators in the ACT: Measures of health status and health services in the ACT*
Carol Kee (Gilbert), George Johansen, Ursula White, Josie McConnell, January 1998
- Number 14: *Health status of the ACT by statistical sub-divisions*
April 1998
- Number 15: *Results from the 1996 ACT Secondary School Students' Survey*
Hai Phung, George Bodilsen, Allison Webb, Norma Briscoe, June 1998
- Number 16: *Childhood Immunisation & Preventable Diseases in the ACT 1993-97*
Hai Phung, Michelle Petersen, June 1998
- Number 17: *Health Related Quality of Life in the ACT 1994-97*
Hai Phung, Ursula White, Brian Egloff, June 1998
- Number 18: *Maternal and Perinatal Status in the ACT*
Maureen Bourne, Carol Kee, September 1998
- Number 19: *Health risk factors in the ACT*
Carol Kee, Michelle Petersen, Kate Rockpool, October 1998
- Number 20: *Communicable Diseases in the ACT*
Linda Halliday, Michelle Petersen, November 1998
- Number 21: *Illicit drug samples seized in the ACT, 1980-97*
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- Number 22: *Young people in the ACT*
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