The Health of Aboriginal and Torres Strait Islander People in the ACT 2006 to 2011

Health Series

Number 58

Epidemiology Section

Population Health Division

February 2013

ACKNOWLEDGEMENTS

The authors of this report, Louise Freebairn and Lily Jenkins, wish to acknowledge the valuable input of Ana Herceg of Winnunga Nimmityjah Aboriginal Health Service; Josephine Smith and Wendy Armstrong of the Aboriginal and Torres Strait Islander Health Unit; and Louise Edmonds of the Information Management Services, Health Directorate, ACT Government for their contribution to this report.

ISSN 1325-1090

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Produced for Health Services Directorate, ACT Government by the Epidemiology Section and printed by Communications and Marketing Unit on recycled paper. Publications in the Health Series can be accessed from the Health Services Directorate, ACT Government Internet Homepage by using the link to publications and Health Services Directorate, ACT Government publications index.

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Suggested citation: Epidemiology Section, ACT Health (2013) The Health of Aboriginal and Torres Strait Islander People in the ACT, 2006 - 2011, ACT Government, Canberra ACT.

Publication No: 13/0141

ACT Government telephone: Canberra 13ACT1 or 132281. Homepage at http://www.act.gov.au

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1. EXECUTIVE SUMMARY

Demographic overview

The ACT Aboriginal and Torres Strait Islander population has a younger age structure than the total population in the ACT. In 2011, over half (55%) of the Aboriginal and Torres Strait Islander population were aged 24 years or less compared to 33% in the non-Aboriginal and Torres Strait Islander population. Two per cent of Aboriginal and Torres Strait Islander people in the ACT were aged over 55 years in 2011 compared to 11% of the non-Aboriginal and Torres Strait Islander population.

The median age of ACT Aboriginal and Torres Strait Islander people was 22 years compared with 35 years for non-Aboriginal and Torres Strait Islander ACT residents.

ACT Aboriginal and Torres Strait Islander residents had higher incomes, higher education and higher housing costs compared with Aboriginal and Torres Strait Islander people nationally.

Self assessed health status

Almost half of Aboriginal and Torres Strait Islander respondents reported their health to be excellent or very good. A further third reported their health to be good and one in five respondents reported their health to be fair or poor. These results are similar to those reported by Aboriginal and Torres Strait Islander people nationally, however significantly fewer Aboriginal and Torres Strait Islander ACT residents reported their health to be excellent to very good compared with non-Aboriginal and Torres Strait Islander ACT residents.

Health risk behaviours

In 2008, 36% of Aboriginal and Torres Strait Islander ACT adult residents reported being daily smokers. Aboriginal and Torres Strait Islander women who gave birth were significantly more likely to report being smokers than non-Aboriginal and Torres Strait Islander people as were Aboriginal and Torres Strait Islander secondary students.

Aboriginal and Torres Strait Islander secondary students were significantly more likely than non-Aboriginal and Torres Strait Islander students to report ever using cannabis, inhalants or any illicit substance.

Health related actions

Almost 30% of Aboriginal and Torres Strait Islander secondary school students reported consuming at least four serves of vegetables a day (26%) and at least three serves of fruit a day (29%).

Eighty per cent Aboriginal and Torres Strait Islander school students consumed a fast food meal at least once in the last week. Eighty per cent of Aboriginal and Torres Strait Islander secondary school students did not meet guidelines for physical activity. These results are similar to non-Aboriginal and Torres Strait Islander students.

In 2008, 19% of Aboriginal and Torres Strait Islander secondary students reported that they would usually use SPF 30+ sunscreen on a sunny day in summer. Eighty per cent of students reported that they do not wear a hat on a sunny day in summer.

In 2010, nearly all ACT children, both Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander were fully immunised.

Medicare Health Assessments (item no. 715) were claimed for only 5% of the ACT Aboriginal and Torres Strait Islander population in 2010-11.

Emotional wellbeing

In 2008, 28% of ACT Aboriginal and Torres Strait Islander people reported high or very high levels of psychological distress.

Ninety per cent of ACT Aboriginal and Torres Strait Islander people reported that they have never been removed from their natural family, however half responded that relatives had been removed from their natural family.

Significantly fewer ACT Aboriginal and Torres Strait Islander people (21.7%) reported that they could not raise $2,000 within a week in an emergency than Aboriginal and Torres Strait Islander people nationally (47.1%).

Hospital service use

During the four year period from 2006 to 2010, there were 3,348 separations (excluding 2,357 renal dialysis separations) provided at ACT hospitals for people who identified as Aboriginal and Torres Strait Islander. The average age of Aboriginal and Torres Strait Islander people who had a hospital separation was 31 years, significantly younger than the average age for non-Aboriginal and Torres Strait Islander people (48 years).

Excluding renal dialysis, the most frequent reasons for hospitalisation included factors influencing health status (eg. including newborn care and rehabilitation procedures), injury and poisoning, disorders of the digestive system and pregnancy and childbirth.

There were 9,227 presentations to ACT public hospital emergency departments by ACT residents who identified as Aboriginal and Torres Strait Islander. Twenty-two per cent of these presentations were for injuries or poisonings.

Maternal and child health

Between 1997 and 2009 there were 1,037 women who gave birth in the ACT who identified as Aboriginal or Torres Strait Islander. Aboriginal and Torres Strait Islander women gave birth at younger ages with fertility rates for Aboriginal and Torres Strait Islander women aged less than 20 years being approximately four times higher than those for non-Aboriginal and Torres Strait Islander women.

The percentage of babies born to Aboriginal and Torres Strait Islander women who were low-birthweight (less than 2,500 grams) was significantly higher (more than twice the rate) for each three year period between 2000 and 2009 than the percentage of low-birthweight babies born to non-Aboriginal and Torres Strait Islander women.

The percentage of Aboriginal and Torres Strait Islander women who reported smoking during pregnancy has increased from 41% to 49% between 2000 and 2009. The average birthweight of babies born to Aboriginal and Torres Strait Islander women who smoked during pregnancy was significantly lower than the average birthweight of babies born to non-Aboriginal and Torres Strait Islander women who did not smoke during pregnancy.

There were 99 children included in the Australian Early Development Index ACT sample. More Aboriginal and Torres Strait Islander children scored within the 0-10th percentile, classified as 'developmentally vulnerable,' than non-Aboriginal and Torres Strait Islander on all domains.

Key issues and future directions

Aboriginal and Torres Strait Islander people in the ACT continue to experience poorer health outcomes than non-Aboriginal and Torres Strait Islander residents, on a range of health indicators. However, the ability to monitor Aboriginal and Torres Strait Islander health status is hindered by the lack of robust information, low numbers due to small population size and issues concerning the recording of Aboriginal and Torres Strait Islander status in existing health data collections.

However, the findings in this report demonstrate opportunities for service providers and policy makers to improve health outcomes for Aboriginal and Torres Strait Islander people in the ACT. There is clear evidence of high smoking rates, particularly during pregnancy; high teenage fertility rates; low uptake of specifically targeted Medicare items; and higher rates of developmentally vulnerable children in the ACT.

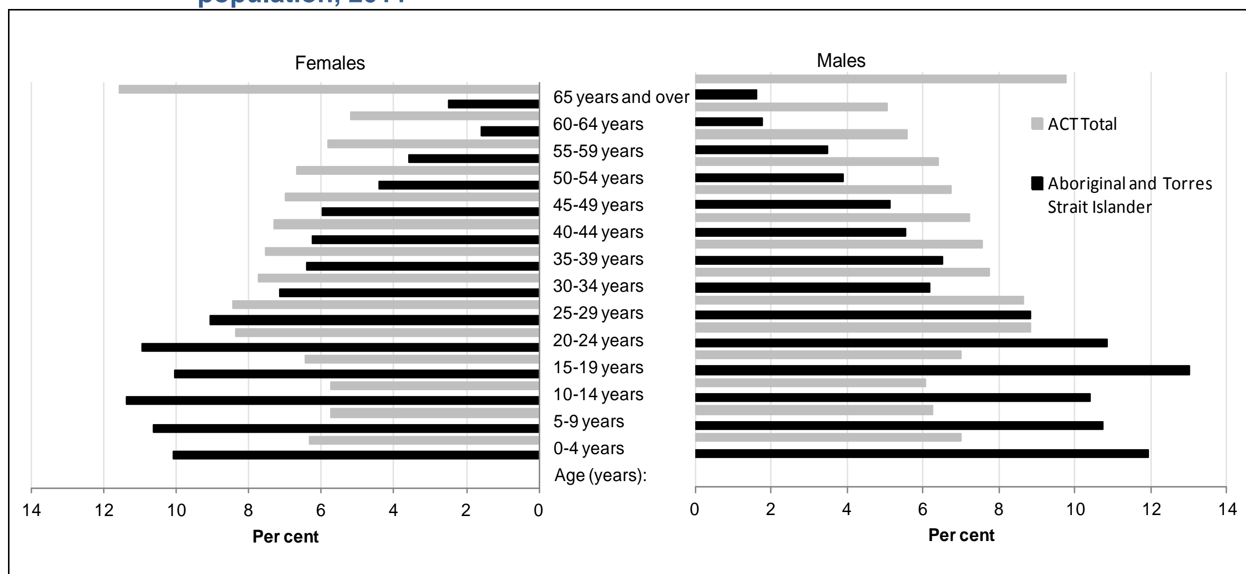
2. Demographic overview

The ACT Aboriginal and Torres Strait Islander population at Census 2011 was 5,185. This represented 1.5 per cent of the ACT population and 1.0 per cent of the total Aboriginal and Torres Strait Islander population of Australia.

The Australian Bureau of Statistics (ABS) estimates this population would increase to between 6,101 and 6,148 persons by 2021, with an average annual growth rate of 2.4 per cent.[1] Population growth is thought to be due to natural increase (the positive balance of births over deaths), net interstate migration and a greater propensity for individuals to identify as 'Aboriginal' and 'Torres Strait Islander' on census forms.

The ACT Aboriginal and Torres Strait Islander population has a much younger age structure than the total population in the ACT, with over half (55%) of the Aboriginal and Torres Strait Islander population aged 24 years and under, compared to 33% of the non-Aboriginal and Torres Strait Islander population (Figure 1). The median age for the Aboriginal and Torres Strait Islander ACT resident population was 22 years, 13 years younger than for non-Aboriginal and Torres Strait Islander ACT residents (35 years).[2]

Figure 1: Age distribution of the ACT Aboriginal and Torres Strait Islander and total population, 2011



Source: ABS 2011, Census Community Profile series: Indigenous profile, Cat. no. 2002.0

Nationally, the total fertility rate (TFR) for Aboriginal and Torres Strait Islander women has remained relatively constant. In 2004, the TFR for Aboriginal and Torres Strait Islander women was 2.1 babies per woman. In 2008 the TFR slightly increased to 2.5 babies per woman, compared with a rate of 2.0 for all women in Australia and 1.6 in ACT, high fertility rates at younger ages contributed to the relatively high overall fertility rate of Aboriginal and Torres Strait Islander women.[3]

Life expectancy rates will not be available for the ACT Aboriginal and Torres Strait Islander population. In 2011, AIHW examined data on mortality of the Australian Aboriginal and Torres Strait Islander population and methods for calculating life expectancy. During this process, it was determined that the number of deaths of Aboriginal and Torres Strait Islander ACT residents was too small to allow reliable calculation of life expectancy rates for the ACT.[4] Nationally, life expectancy at birth for Aboriginal and Torres Strait Islander males is estimated to be 67.2 years and for females it is estimated to be 72.9 years. In the ACT, non-Aboriginal and Torres Strait Islander males have a life expectancy of 80.5 years and life expectancy for females is slightly higher at 84.3 years.[5]

Aboriginal and Torres Strait Islander people in the ACT are highly mobile. Between 2001 and 2006 almost half (49%) of the population had moved address.[6]

2.1. Census statistics for Aboriginal and Torres Strait Islander people in the ACT

Selected statistics from the 2011 Australian Census are presented in Table 1. Median personal and household income for Aboriginal and Torres Strait Islander ACT residents was higher than reported for Aboriginal and Torres Strait Islander people nationally. However, income for Aboriginal and Torres Strait Islander ACT residents was less than for non-Aboriginal and Torres Strait Islander ACT residents.

Median mortgage and rental payments were higher for Aboriginal and Torres Strait Islander people living in the ACT compared with national medians. Mortgage costs were similar for Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander households in the ACT. Rental payments were lower for ACT Aboriginal and Torres Strait Islander households than non-Aboriginal and Torres Strait Islander households, but higher than nationally.

Household size was similar for Aboriginal and Torres Strait Islander people in the ACT and nationally but slightly higher than non-Aboriginal and Torres Strait Islander households. The percentage of dwellings requiring additional bedrooms was lower for ACT Aboriginal and Torres Strait Islander households than nationally.

Table 1: Selected characteristics from Australian Census of Population and Housing, ACT and Australian residents, 2011

	Aboriginal and Torres Strait Islander persons/households ACT(a)	Non-Aboriginal and Torres Strait Islander persons/households ACT(b)	Aboriginal and Torres Strait Islander persons/households Australia(a)
Median age of persons(c)	22	35	21
Median total personal income ($/weekly) (d)	644	921	362
Median total household income ($/weekly) (e)	1,666	1,925	991
Median mortgage repayment ($/monthly) (f)	2,167	2,167	1,647
Median rent ($/weekly) (g)	310	380	195
Average number of persons per bedroom (h)	1.2	1.1	1.2
Average household size (i)	3.1	2.6	3.3
Proportion of dwellings that need one or more extra bedrooms(j) (%)	6.5	2.1	11.8

(a) A household with Aboriginal and Torres Strait Islander person(s) is any household that had at least one person of any age as a resident at the time of the Census who identified as being of Aboriginal and/or Torres Strait Islander origin.
(b) Includes persons who did not state their Aboriginal and Torres Strait Islander status.
(c) Excludes overseas visitors.
(d) Applicable to persons aged 15 years and over.
(e) Applicable to occupied private dwellings. It excludes households where at least one member aged 15 years and over did not state an income and households where at least one member aged 15 years and over was temporarily absent on Census Night. It excludes 'Visitors only' and 'Other non-classifiable' households.
(f) Applicable to occupied private dwellings being purchased and includes dwellings being purchased under a rent/buy scheme. It excludes 'Visitors only' and 'Other non-classifiable' households.
(g) Applicable to occupied private dwellings being rented. It excludes 'Visitors only' and 'Other non-classifiable' households.
(h) Applicable to occupied private dwellings. It excludes 'Visitors only' and 'Other non-classifiable' households.
(i) Applicable to number of persons usually resident in occupied private dwellings. It includes partners, children, and co-tenants (in group households) who were temporarily absent on Census Night. A maximum of three temporary absentees can be counted in each household. It excludes 'Visitors only' and 'Other non-classifiable' households.
(j) Applicable to occupied private dwellings, excluding 'Visitors only' and 'Other non-classifiable' households. It is a comparison of the number of bedrooms in a dwelling with a series of household demographics, such as the number of usual residents, their relationship to each other, age and sex. It is based on the Canadian National Occupancy Standard.

Source: ABS 2011, Census Community Profile series: Indigenous profile, Cat. no. 2002.0

Just under half of ACT Aboriginal and Torres Strait Islander residents (46.0%) reported Year 12 or equivalent as their highest level of school completed compared with one quarter of Aboriginal and Torres Strait Islander people nationally and almost three-quarters (72.1%) of non-Aboriginal and Torres Strait Islander ACT residents.[2]

2.2. Household characteristics

Aboriginal and Torres Strait Islander people in the ACT and nationally were more likely to report living in a household with three or more persons compared with non-Aboriginal and Torres Strait Islander ACT residents (Table 2).

ACT Aboriginal and Torres Strait Islander residents were half as likely to report living in a household with no internet connection as Aboriginal and Torres Strait Islander people nationally, however slightly more likely than non-Aboriginal and Torres Strait Islander residents (Table 2).

ACT Aboriginal and Torres Strait Islander residents were less likely to own their dwelling outright or to own their home with a mortgage than non-Aboriginal and Torres Strait Islander ACT residents, but more likely than Aboriginal and Torres Strait Islander people nationally.

Over half of ACT Aboriginal and Torres Strait Islander residents reported living in a rented dwelling compared with 30.1% of non-Aboriginal and Torres Strait Islander residents. One-quarter (25.3%) of Aboriginal and Torres Strait Islander ACT residents reported that they rented their home from a State or Territory authority compared with 6.9% of non-Aboriginal and Torres Strait Islander ACT residents.[2]

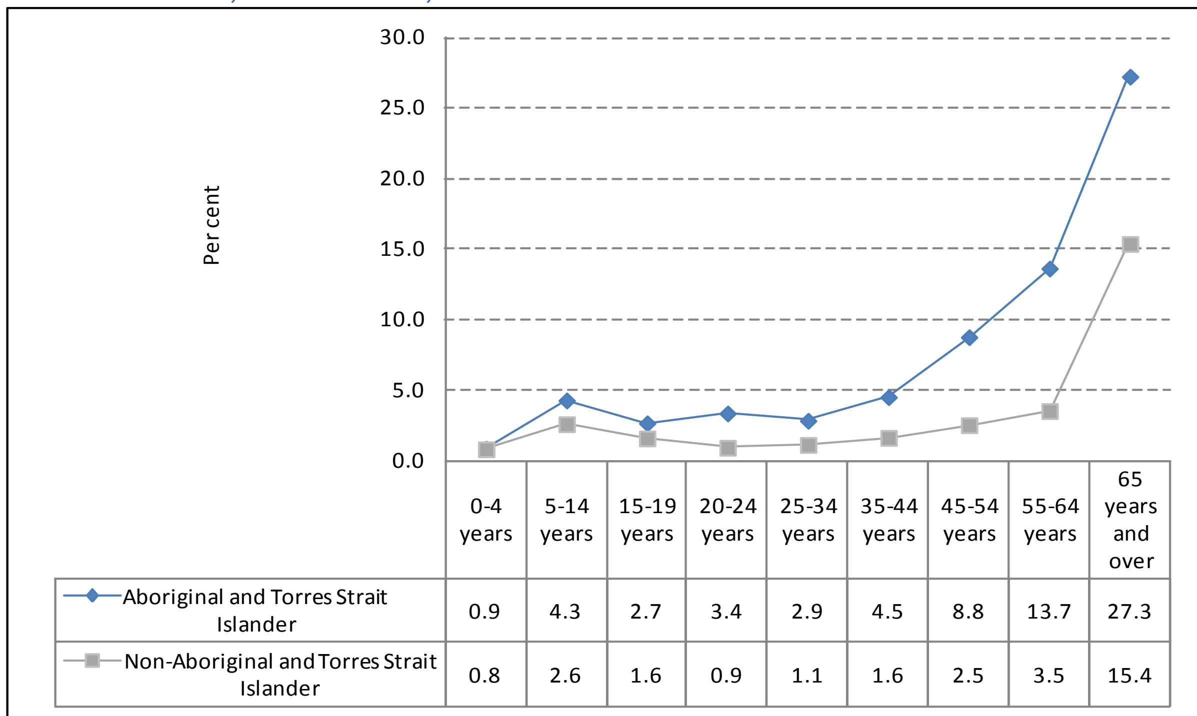
Table 2: Household characteristics, ACT and Australian residents, 2011

	Aboriginal and Torres Strait Islander persons/households ACT (a) %	Non-Aboriginal and Torres Strait Islander persons/households(b) %	Aboriginal and Torres Strait Islander persons/households Australia (a) %
Lone person households	12.6	23.6	14.1
Households with three or more persons	57.4	42.5	59.6
Household with no internet connection	16.5	11.7	31.4
Dwelling owned outright (c)	8.9	28.8	11.2
Dwelling owned with a mortgage	32.9	39.0	24.8
Dwelling rented	55.4	30.1	59.4

(a) A household with Indigenous person(s) is any household that had at least one person of any age as a resident at the time of the Census who identified as being of Aboriginal and/or Torres Strait Islander origin.
(b) Includes persons who did not state their Indigenous status.
(c) Includes dwellings being purchased under a rent/buy scheme.
Source: ABS 2011, Census Community Profile series: Indigenous profile, Cat. no. 2002.0

The 2011 Census included measures of those people needing help or assistance in one or more core activity areas of self-care, mobility and communication, because of a long-term health condition (lasting six months or more), a disability (lasting six months or more), or old age. The percentages of those people requiring assistance were higher for Aboriginal and Torres Strait Islander ACT residents across most age groups and particularly for those people aged 45 years and over (Figure 2). However, the numbers of Aboriginal and Torres Strait Islander ACT residents requiring assistance with core activities were small in each age group.

Figure 2: Core activity need for assistance by age and Aboriginal and Torres Strait Islander status, ACT residents, 2011



	0-4 years	5-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over
Aboriginal and Torres Strait Islander	0.9	4.3	2.7	3.4	2.9	4.5	8.8	13.7	27.3
Non-Aboriginal and Torres Strait Islander	0.8	2.6	1.6	0.9	1.1	1.6	2.5	3.5	15.4

Sources: ABS 2011, Census Community Profile series: Indigenous profile, Cat. no. 2002.0 and ABS, 2011, Basic Community Profile series, ACT, Cat. no. 2001.0

3. Self-assessed health status

Self-rated health status reported by ACT respondents to the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) were similar to those reported by Aboriginal and Torres Strait Islander people nationally (Table 3) with almost half of respondents (46.2%) reporting their health to be excellent or very good. A further third reported their health to be good (33.9%) and one in five respondents (20.0%) reported their health to be fair or poor.

Table 3: Self assessed health status, Aboriginal and Torres Strait Islander people aged 15 years and over, ACT and Australia, 2008

	Aboriginal & Torres Strait Islander	
	ACT %	**Australia %**
Self assessed health status (a)		
Excellent/very good	46.2	43.7
Good	33.9	34.0
Fair/poor	20.0	22.2

Source: ABS 2009, National Aboriginal and Torres Strait Islander Social Survey 2008, Cat. no. 4714.0

A similar proportion of Aboriginal and Torres Strait Islander ACT residents reported their health to be excellent to very good compared with non-Aboriginal and Torres Strait Islander ACT residents who responded to the National Health Survey (Aboriginal and Torres Strait Islander: 46.2%, Non-Aboriginal and Torres Strait Islander: 56.4%).[7] These results are similar to those found in 2004-05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) (excellent/very good Aboriginal and Torres Strait Islander: 43.8%, non-Aboriginal and Torres Strait Islander 58.0%). However, significantly more Aboriginal and Torres Strait Islander ACT residents reported their health to be fair/poor compared to non-Aboriginal and Torres Strait Islander ACT residents (Aboriginal and Torres Strait Islander: 20%, non-Aboriginal and Torres Strait Islander: 12.5%).

4. Health risk behaviours

In summary, 36.2% of ACT Aboriginal and Torres Strait Islander residents reported being current smokers (Table 4), significantly more than non-Aboriginal and Torres Strait Islander ACT residents. Three per cent reported high risk alcohol consumption. These results were similar to those reported by Aboriginal and Torres Strait Islander people nationally.

Table 4: Health risk behaviours, Aboriginal and Torres Strait Islander people aged 15 years and over, ACT and Australia, 2008

	Aboriginal & Torres Strait Islander	
	ACT %	Australia %
Risk behaviours		
Current smoker	36.2	46.8
High risk alcohol consumption	3.0*	6.3

* This estimate has relative standard error between 25 and 50% due to the small sample size and should be interpreted with caution

Source: ABS 2009, National Aboriginal and Torres Strait Islander Social Survey 2008, Cat. no. 4714.0

4.1. Smoker status

In the 2008 NATSISS 38.5% of males, and 33.8% of females, reported being current smokers (Table 5). Thirty-one per cent of males and 44.4% of females reported that they had never smoked. The differences between males and females were not statistically significant.

Table 5: Smoker status for Aboriginal and Torres Strait Islander residents aged 15 years and over, by sex, ACT, 2008

	Males %	Females %	Persons %
Smoker status			
Current smoker	38.5	33.8	36.2
Ex-smoker	30.6	21.8	26.2
Never smoked	30.9	44.4	37.7

Source: ABS 2009, National Aboriginal and Torres Strait Islander Social Survey 2008, Cat. no. 4714.0

Smoking rates have slowly declined over recent years with 36.2 per cent of Aboriginal and Torres Strait Islander ACT residents reporting being current smokers in 2008, compared with 44.7 per cent in 2002.[8]

Age-standardised smoking rates in 2008 for Aboriginal and Torres Strait Islander adults were significantly higher (29.8%) than for non-Aboriginal and Torres Strait Islander adults in the ACT (16.0%).[9]

Significantly more Aboriginal and Torres Strait Islander secondary school students reported that they had ever smoked a cigarette (53.5%), compared with non-Aboriginal and Torres Strait Islander school students (25.7%). Just over one in ten (14.8%) Aboriginal and Torres Strait Islander students reported smoking in the last seven days. Since 2002 there has been a decrease in students reporting that they had ever smoked or smoked in the last seven days, however this decrease is only significant for non-Aboriginal and Torres Strait Islander school students (Table 6).

Table 6: Smoking status, secondary school students by Aboriginal and Torres Strait Islander status, ACT, 2002, 2005 and 2008

	Aboriginal and Torres Strait Islander %	Non-Aboriginal and Torres Strait Islander %
Ever smoked		
2002	56.1	46.1
2005	61.9	30.8*
2008	49.8	25.7*
Smoked in last 7 days		
2002	31.4	14.9*
2005	23.3**	8.0*
2008	14.8**	6.4

*Significant difference between Aboriginal and non-Aboriginal results at p<0.05
** This estimate has relative standard error between 25 and 50% due to the small sample size and should be interpreted with caution
Source: ACT Health 2002, 2005 and 2008, Australian Secondary Students Alcohol and Drug Survey (ASSAD), Confidentialised unit record file

Just over half (53.2%) of Aboriginal and Torres Strait Islander students indicated that they were certain they would not be smoking in 12 months time.

Students were asked questions relating to their knowledge of the risks associated with smoking. One third of Aboriginal and Torres Strait Islander students (32.7%) perceived that smoking less than 10 cigarettes per day was very dangerous to their health. Nearly ninety per cent (87%) of Aboriginal and Torres Strait Islander respondents indicated that smoking more than 20 cigarettes per day was very dangerous to their health. Eighty-four per cent of students (84.2%) agreed with the statement that the health of non-smokers could be affected by breathing other people's cigarette smoke.

4.2. Alcohol use

Approximately seven in ten respondents (72.5%) aged 15 years and over reported low or medium risk of usual daily consumption of alcohol in the 12 months prior to the NATSISS survey (Table 7). One-quarter (24.6%) of respondents reported that they had never, or not in the last 12 months, consumed alcohol.

Table 7: Alcohol use, Aboriginal and Torres Strait Islander residents (aged 15 years and over) by sex, ACT, 2008

	Males %	Females %	Persons %
Alcohol risk			
Low/medium risk	80.3	64.8	72.5
High risk	n.p.	3.6*	3.0*
Never consumed/has not consumed in last 12 months	17.4*	31.6	24.6

*This estimate has relative standard error between 25 and 50% due to the small sample size and should be interpreted with caution
n.p. not publishable due to the small sample size
Source: ABS 2009, National Aboriginal and Torres Strait Islander Social Survey 2008, Cat. no 4714.0

In 2008, 85.9% of Aboriginal and Torres Strait Islander secondary students reported ever consuming alcohol, and 24.5% reported consuming alcohol in the previous seven days before the ASSAD survey. These results are similar to those reported by non-Aboriginal and Torres Strait Islander students (Table 8).

Table 8: Alcohol use, secondary school students by Aboriginal and Torres Strait Islander status, ACT 2002, 2005 and 2008

	Aboriginal and Torres Strait Islander %	Non-Aboriginal and Torres Strait Islander %
Ever consumed alcohol		
2002	85.2	90.4
2005	92.8	89.6
2008	85.9	86.0
Consumed alcohol in last 7 days		
2002	43.6	31.3
2005	39.5	26.0
2008	24.5*	24.2

* This estimate has relative standard error between 25 and 50% due to the small sample size and should be interpreted with caution

Source: ACT Health 2002, 2005 and 2008, Australian Secondary Students Alcohol and Drug Survey (ASSAD), Confidentialised unit record file

In 2008, almost three-quarters (73.8%) of ACT Aboriginal and Torres Strait Islander students surveyed reported that they had received at least part of a lesson on the use of alcohol in the previous school year.

Students were asked questions relating to their attitudes to alcohol use. Over half of ACT Aboriginal and Torres Strait Islander students agreed or strongly agreed with the statements that getting drunk every now and then is not a problem (54.5%); that having a few drinks is one of the best ways of relaxing (51.1%); and that having a few drinks is one of the best ways of getting to know people (53.1%) (Table 9). Almost seven in ten students (68.5%) also agreed or strongly agreed that you can have a good time at a party where there is no alcohol.

Table 9: Students attitudes to alcohol use, agreeing or strongly agreeing, Aboriginal and Torres Strait Islander secondary school students, ACT 2008

	Aboriginal and Torres Strait Islander secondary students %
Getting drunk every now and then is not a problem	54.5
Having a few drinks is one of the best ways of relaxing	51.1
Having a few drinks is one of the best ways of getting to know people	53.1
Having a few drinks makes you part of the group	29.9*
You can have a good time at a party where there is no alcohol	68.5
People who drink alcohol are usually more popular than people who don't	31.5

* This estimate has relative standard error between 25 and 50% due to the small sample size and should be interpreted with caution

Source: ACT Health 2002, 2005 and 2008, Australian Secondary Students Alcohol and Drug Survey (ASSAD), Confidentialised unit record file

Seventy per cent of Aboriginal and Torres Strait Islander students (69.5%) reported that an adult was supervising them when they consumed alcohol. Thirty per cent (30.4%) of students reported that they had tried to buy alcohol themselves.

4.3. Illicit substance use

In 2008, 34.6% of Aboriginal and Torres Strait Islander secondary students reported that they had ever used cannabis in their lifetime (Table 10). Aboriginal and Torres Strait Islander ACT students

were significantly more likely than non-Aboriginal and Torres Strait Islander students to report that they had ever used inhalants, cannabis or any illicit substance.

Table 10: Illicit substance use, ACT secondary school students by Aboriginal and Torres Strait Islander status, 2002, 2005 and 2008

	Aboriginal and Torres Strait Islander %	Non-Aboriginal and Torres Strait Islander %
Ever used cannabis		
2002	43.6	28.0
2005	28.1	16.4
2008	34.6	12.5*
Ever used inhalants(a)		
2002	35.6	18.8*
2005	31.2	17.1
2008	40.1	17.0*
Ever used any illicit substance(b)		
2002	48.5	29.5*
2005	35.6	19.7
2008	36.3	14.2*

*Significant difference between Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander results at $p<0.05$

(a) An inhalant includes aerosol spray cans, glue, paint, petrol or thinners.

(b) Any illicit substance includes opiates (eg. heroin), ecstasy, cocaine, amphetamines, hallucinogens (eg. LSD), and cannabis.

Source: ACT Health 2002, 2005 and 2008, Australian Secondary Students Alcohol and Drug Survey (ASSAD), Confidentialised unit record file

Two-thirds of ACT Aboriginal and Torres Strait Islander students (67.3%) reported receiving at least part of a lesson at school about illicit substance use, however only six in ten students believed that using LSD regularly, using marijuana regularly, and sniffing glue, thinners or petrol regularly was very dangerous (Table 11).

Three-quarters of Aboriginal and Torres Strait Islander students responded that using ecstasy occasionally (74.6%) or regularly (75.4%) and mixing a number of drugs including alcohol (82.2%) was very dangerous (Table 11).

Table 11 : Aboriginal and Torres Strait Islander secondary school students' perception of illicit substance use danger, 2008

	Aboriginal and Torres Strait Islander secondary students %
Perceptions of danger - 'very dangerous'	
Mixing a number of drugs including alcohol	82.2
Using ecstasy regularly	75.4
Using ecstasy occasionally	74.6
using heroin or morphine once or twice	73.9
Using needles & syringes to inject drugs	72.8
Using cocaine	72.2
Trying amphetamines occasionally	65.6
Using marijuana regularly	59.2
Sniffing glue, thinners or petrol regularly	56.6
Using LSD regularly	56.1
Using LSD once or twice	34.4

Source: ACT Health 2008, Australian Secondary Students Alcohol and Drug Survey (ASSAD), Confidentialised unit record file

5. Health related actions

5.1. Nutrition

The *Dietary Guidelines for Children and Adolescents in Australia* recommend that young people aged 12 to 18 years consume at least five serves of cereals, four serves of vegetables/legumes and three serves of fruit each day.[10]

There were no significant differences in the responses of Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander students to questions about nutrition. Approximately one-quarter of Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander students reported consuming at least four serves of vegetables a day (Aboriginal and Torres Strait Islander 26.2%, non-Aboriginal and Torres Strait Islander 22.2%).

Almost three in ten (28.8%) Aboriginal and Torres Strait Islander and four in ten (41.9%) non-Aboriginal and Torres Strait Islander students reported consuming at least three serves of fruit a day. Eighty per cent of Aboriginal and Torres Strait Islander (82.2%) and non-Aboriginal and Torres Strait Islander (81.2%) secondary school students consumed a fast food meal at least once in the last week (Table 12).

Table 12: Nutrition, ACT secondary school students, by Aboriginal and Torres Strait Islander status, 2008

	Aboriginal and Torres Strait Islander %	Non-Aboriginal and Torres Strait Islander %
At least 4 serves of vegetables/day	26.2	22.2
At least 3 serves of fruit/ day	28.8	41.9
Consumed fast food meal at least once in last week	82.2	81.2
Consumed snacks at least once in last week	94.7	97.5
Consumed soft drink at least once in last week	85.9	91.1

Source: ACT Health 2002, 2005 and 2008, Australian Secondary Students Alcohol and Drug Survey (ASSAD), Confidentialised unit record file

Ninety-two per cent of Aboriginal and Torres Strait Islander and 97.1% of non-Aboriginal and Torres Strait Islander students did not meet the dietary guidelines for fruit, vegetables and cereals/grains.

5.2. Physical activity/inactivity for secondary students

Australia's physical activity recommendations for 12-18 year olds advise at least 60 minutes of moderate to vigorous physical activity every day and no more than two hours a day surfing the net, watching television or playing video games.[11]

Eight in ten (79.9%) Aboriginal and Torres Strait Islander secondary school students did not meet guidelines for physical activity. This is similar for non-Aboriginal and Torres Strait Islander students, with 84.5% reporting that they did not meet physical activity guidelines.

Eighty-five per cent (85.4%) of Aboriginal and Torres Strait Islander secondary students and 74.8% of non-Aboriginal and Torres Strait Islander students reported spending more than two hours on the internet/computer or watching television.

5.3. Sun protection for secondary students

In 2008, 79.5% of Aboriginal and Torres Strait Islander ACT secondary students reported that they had received at least part of a lesson on sun protection in the last year. This response has steadily increased, with only half (55.3%) of Aboriginal and Torres Strait Islander students in 2002 reporting that they had at least part of a lesson on sun protection.

Sixty-two per cent (61.8%) of Aboriginal and Torres Strait Islander secondary school students answered the question “you only get skin cancer if you get burnt often” correctly, whereas 94.6% answered “most skin cancer is caused by UVR from the sun” correctly (Table 13).

Table 13: Causes of skin cancer (correct responses to true/false questions), Aboriginal and Torres Strait Islander ACT secondary school students, 2008

	ACT Aboriginal and Torres Strait Islander secondary students %
You only get skin cancer if you get burnt often- false response	61.8
Most skin cancer is caused by UVR from the sun- true response	94.6
Both sun protection knowledge questions correct	58.1

Source: ACT Health 2008, Australian Secondary Students Alcohol and Drug Survey (ASSAD), Confidentialised unit record file

Nineteen per cent (19.1%) of Aboriginal and Torres Strait Islander students reported that they usually or always wear SPF30+ on sunny days, significantly less than non-Aboriginal and Torres Strait Islander students (44.5%). Eighty per cent of Aboriginal and Torres Strait Islander students (80.1%) did not wear a hat on a sunny day in summer; similar to non-Aboriginal and Torres Strait Islander students (70.4%).

5.4. Oral health, ear or hearing and eye or sight problems

In 2008, 42.2% of Aboriginal and Torres Strait Islander children aged four to fourteen years reported teeth or gum problems. This was similar to the national average for Aboriginal and Torres Strait Islander children. Seventy-nine per cent of children aged 4 to 14 years did not have eye or sight problems and 85.4% of children did not have ear or hearing problems (Table 14).

Table 14: Oral health, ear or hearing and eye or sight problems, Aboriginal and Torres Strait Islander children 4-14 years, ACT and Australia, 2008

	ACT %	Australia %
Whether child has eye or sight problems		
Has eye or sight problems	20.1	9.3
Whether child has ear or hearing problems		
Has ear or hearing problems	14.6*	10.1
Whether child has teeth or gum problems		
Has teeth or gum problems	42.2	39.1

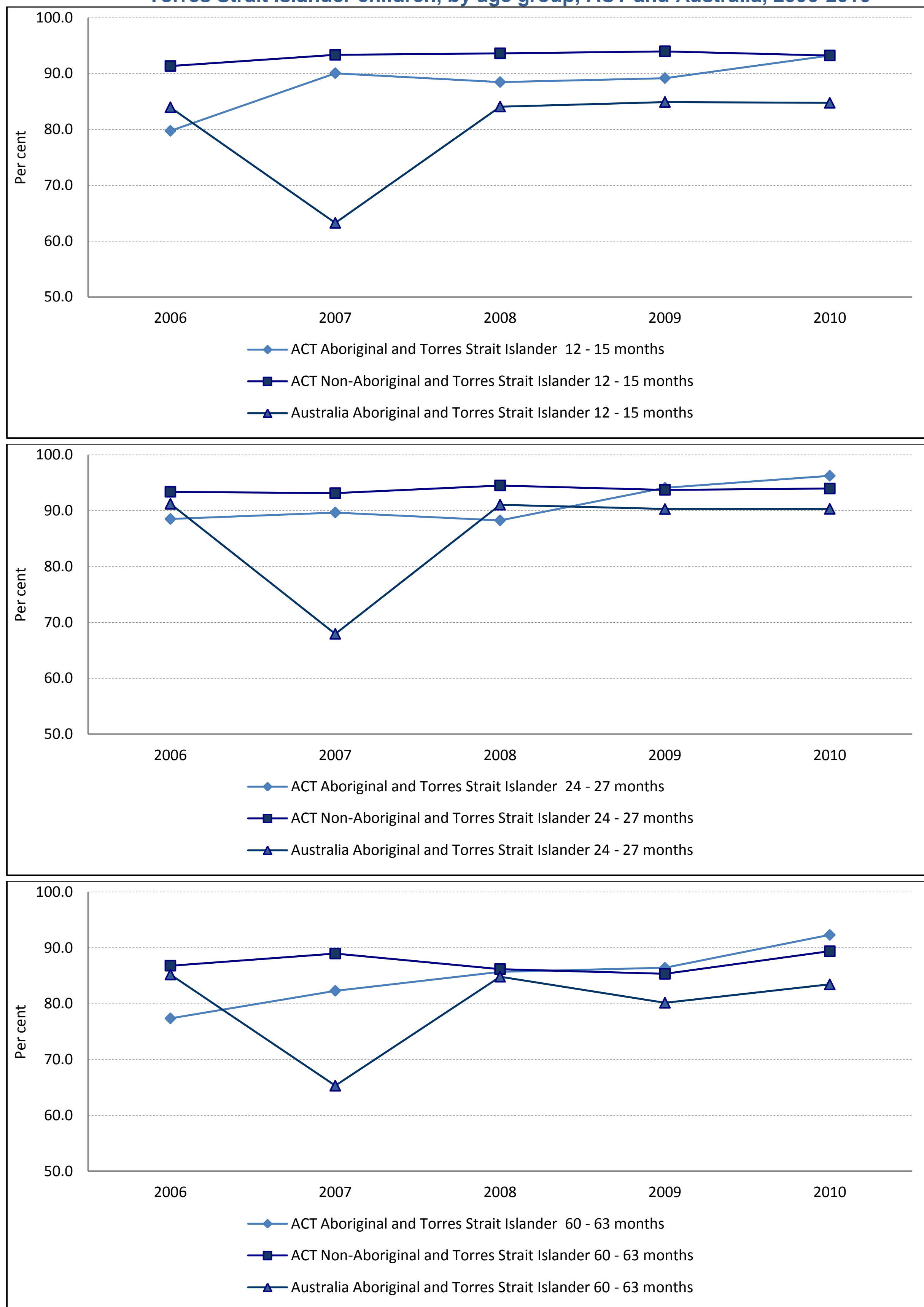
* This estimate has relative standard error between 25 and 50% due to the small sample size and should be interpreted with caution

Source: ABS 2009, National Aboriginal and Torres Strait Islander Social Survey 2008, Cat. no 4714.0

5.5. Childhood immunisation

In 2010, nearly all ACT children, both Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander were fully immunised (Figure 3).

Figure 3: Fully immunised Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander children, by age group, ACT and Australia, 2006-2010



Note: Definitions for the term 'Fully immunised' for each age group are described in Section 11.5 in the Methods Section.

Source: Australian Childhood Immunisation Register 2011

Immunisation rates for Aboriginal and Torres Strait Islander children in the ACT have steadily increased since 2006 from 80% of 12 to 15 month old children being fully immunised to 93% in 2010. This increase has occurred across all age groups. In recent years immunisation rates for ACT Aboriginal and Torres Strait Islander children have been similar to those for non-Aboriginal and Torres Strait Islander children in the ACT (Figure 3).

Immunisation rates for ACT children are based on small numbers of children and may fluctuate from year to year.[12]

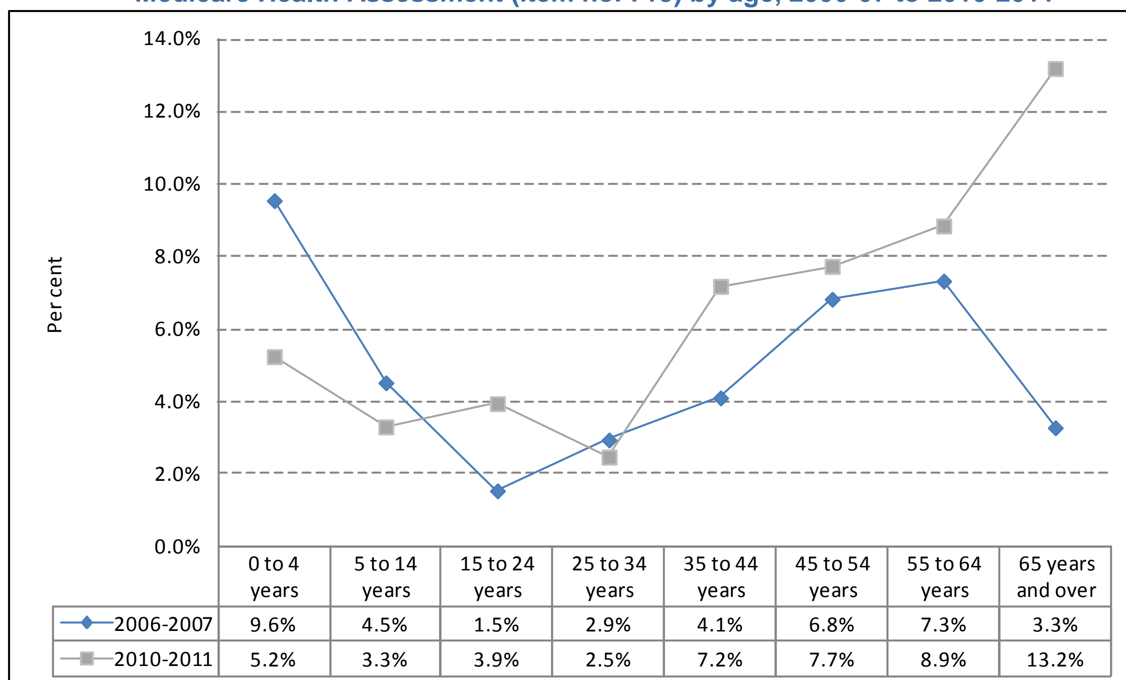
5.6. Health assessment for Aboriginal and Torres Strait Islander people

The Medicare Benefits Scheme health assessment item facilitates Aboriginal and Torres Strait Islander people receiving primary health care matched to their needs, by encouraging early detection, diagnosis and intervention for common and treatable conditions that cause morbidity and early mortality.

The number of health assessments claimed for ACT Aboriginal and Torres Strait Islander residents increased from 177 in 2006-07 to 256 in 2010-2011. The increase has occurred mostly in the older age groups (35 years and over) (Figure 4).

However the overall percentage of Aboriginal and Torres Strait Islander residents receiving a health assessment remained similar over time. In 2006-07, 4.5% of ACT Aboriginal and Torres Strait Islander residents claimed a health assessment compared with 4.9% in 2010-11.

Figure 4: Percentage of ACT Aboriginal and Torres Strait Islander residents who claimed a Medicare Health Assessment (item no. 715) by age, 2006-07 to 2010-2011



	0 to 4 years	5 to 14 years	15 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 years and over
2006-2007	9.6%	4.5%	1.5%	2.9%	4.1%	6.8%	7.3%	3.3%
2010-2011	5.2%	3.3%	3.9%	2.5%	7.2%	7.7%	8.9%	13.2%

Note: The percentage of ACT Aboriginal and Torres Strait Islander residents receiving a health assessment was calculated using the number of health assessments (Medicare item no. 715) claimed for each age group as the numerator and the Census 2006 and 2011 populations as the denominator.

Sources: Medicare Benefits Schedule 2012. ABS 2011, Census Community Profile series: Indigenous profile, Cat. no. 2002.0 and ABS, 2011, Basic Community Profile series, ACT, Cat. no. 2001.0

6. Emotional wellbeing

The concept of social and emotional wellbeing presented below is based on national survey data and attempts to capture an Aboriginal and Torres Strait Islander holistic and whole-of-life view of health.[13]

An interim social and emotional wellbeing module was developed to collect national data on this topic in the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and was subsequently used in the 2008 National Aboriginal and Torres Strait Islander Social Survey (results presented below).

The interim module has eight domains—psychological distress, impact of psychological distress, positive wellbeing, anger, life stressors, discrimination, cultural identification and removal from natural family. However ACT results are not available for all eight domains, likely due to the limitations of the ACT sample size. The available results are presented below.

6.1. Level of psychological distress

Psychological distress was measured in the 2008 NATSISS using items from the Short Form Health Survey (SF36) and Kessler Psychological Distress Scale (K10). Results indicated that ACT Aboriginal and Torres Strait Islander residents recorded similar levels of psychological distress to Aboriginal and Torres Strait Islander people nationally. Almost three in ten (28.3%) ACT respondents reported high or very high levels of psychological distress (Table 15)

Table 15 : Level of psychological distress by Aboriginal and Torres Strait Islander status, ACT and Australia, 2008

	Aboriginal and Torres Strait Islander	
	ACT %	**Australia %**
Level of Psychological distress		
Low/moderate	70.8	67.8
High/very high	28.3	30.7

Source: ABS 2009, National Aboriginal and Torres Strait Islander Social Survey 2008, Cat. no 4714.0

6.2. Financial stress

Twenty-two per cent of Aboriginal and Torres Strait Islander ACT residents (21.7%) reported that they could not raise $2,000 within a week in an emergency; this is significantly less than Aboriginal and Torres Strait Islander respondents nationally (47.1%). Eighty-one per cent of Aboriginal and Torres Strait Islander respondents aged 15 years (81.1%) and over reported that they did not run out of money for basic living expenses.[8]

6.3. Social network and support

Ninety-seven per cent of ACT Aboriginal and Torres Strait Islander respondents (96.8%) aged 15 years and over in the NATSISS reported participating in sporting, social or community activities in the last 12 months.[8]

Almost all (94.1%) respondents to the same survey reported that they were able to get support in a time of crisis from outside their household. Thirty per cent of respondents (29.9%) said they felt they were able to have a say within the community on important issues all or most of the time, compared to 41.7% who responded that they would have a say a little or none of the time.[8]

Ninety-one per cent of ACT Aboriginal and Torres Strait Islander respondents to NATSISS aged 15 years and over (90.8%) reported that they have never been removed from natural family, but half (51.8%) responded that relatives have been removed from natural family.[8]

6.4. Language and culture

Two-thirds of ACT Aboriginal and Torres Strait Islander respondents (66.9%) to NATSISS aged 15 years and over reported that they did not speak an Aboriginal and Torres Strait Islander language, compared to 59.6% nationally.[8]

One-quarter (23.4%) of ACT respondents reported not recognising homelands, with 68.4% not living on homelands compared with 46.4% of respondents nationally.

Seventy-one per cent of ACT respondents (70.6%) identified with clan, tribal or language group (Australia 62.1%) and 72.4% responded that they were involved in events, ceremonies or organisations in the last 12 months (Australia 62.9%) (Table 16).

Table 16: Language and culture summary, Aboriginal and Torres Strait Islander people, 15 years and over, ACT and Australia, 2008

	ACT %	Australia %
Whether speaks an Indigenous language		
Speaks an Indigenous language	11.6	19.1
Speaks only some Indigenous words	21.5	21.2
Does not speak an Indigenous language	66.9	59.6
Whether identifies with clan, tribal or language group		
Identifies with clan, tribal or language group	70.6	62.1
Does not identify with clan, tribal or language group	29.4	37.9
Whether presently lives in homelands or traditional country		
Lives on homelands	8.2*	25.3
Does not live on homelands	68.4	46.4
Does not recognise homelands	23.4	28.3
Whether involved in cultural events, ceremonies or organisations in last 12 months		
Involved in events, ceremonies or organisations	72.4	62.9
Not involved in events, ceremonies or organisations	27.6	37.1

* This estimate has relative standard error between 25 and 50% due to the small sample size and should be interpreted with caution

Source: ABS 2009, National Aboriginal and Torres Strait Islander Social Survey 2008, Cat. no 4714.0

7. Hospital service use

During the four year period from 1 July 2006 to 30 June 2010, there were 5,705 separations from ACT hospitals recorded for ACT residents who identified as Aboriginal and Torres Strait Islander. Of these just under half were for renal dialysis (2,357). Excluding dialysis, there were 3,348 separations for people who identified as Aboriginal and Torres Strait Islander. The number of hospital separations has increased between 2006 and 2010 (Table 17).

As noted in Section 9.2, a recent data quality study showed significant under-identification of Aboriginal people at The Canberra Hospital. Therefore the results presented in the following sections must be interpreted with caution. They are included in this report as they provide the best information currently available regarding reasons for hospitalisation of Aboriginal and Torres Strait Islander people in the ACT.

Table 17: Hospital separations by financial year, Aboriginal and Torres Strait Islander ACT residents, 2006-07 to 2009-10

	No. (a)	%
2006–07	703	21.0
2007–08	797	23.8
2008–09	848	25.3
2009–10	1,000	29.9
Total	**3,348**	**100.0**

(a) Excludes renal dialysis
Source: ACT Admitted Patient Care Collection 2006-07 to 2009-10. Confidentialised unit record file

7.1. Characteristics of people requiring hospital services

Over half (56.1%) of hospital separations for Aboriginal and Torres Strait Islander ACT residents were provided to females. Hospitalisations by age and sex are shown in Table 18.

Table 18: Hospitalisations of Aboriginal and Torres Strait Islander ACT residents by sex and five year age group, 2006-07 to 2009-10 (a)

	Male		Female		Total	
	No.	%	No.	%	No.	%
0–4 years	284	19.3	205	10.9	489	14.6
5–9 years	68	4.6	37	2.0	105	3.1
10–14 years	80	5.4	64	3.4	144	4.3
15–19 years	117	8.0	201	10.7	318	9.5
20–24 years	101	6.9	259	13.8	360	10.8
25–29 years	106	7.2	224	11.9	330	9.9
30–34 years	72	4.9	167	8.9	239	7.1
35–39 years	148	10.1	153	8.1	301	9.0
40–44 years	77	5.2	137	7.3	214	6.4
45–49 years	86	5.9	113	6.0	199	5.9
50–54 years	122	8.3	83	4.4	205	6.1
55–59 years	105	7.1	77	4.1	182	5.4
60–64 years	35	2.4	34	1.8	69	2.1
65 years and over	68	4.6	125	6.7	193	5.8
Total	**1,469**	**100**	**1,879**	**100**	**3,348**	**100**

(a) Excludes renal dialysis
Source: ACT Admitted Patient Care Collection 2006-07 to 2009-10. Confidentialised unit record file

The average age of Aboriginal and Torres Strait Islander people who had a hospital separation was 30 years, significantly younger than the average age for non-Aboriginal and Torres Strait Islander people (48 years). The average length of stay for both Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander ACT residents was four days.

7.2. Reasons for hospitalisations

Excluding renal dialysis, the most frequent reasons for hospitalisation were factors influencing health status and contact with health services (13.2%), followed by injury and poisoning (13.1%), disorders of the digestive system (11.1%) and pregnancy, childbirth and puerperium (11.1%) (Table 19).

Table 19: Hospital separations for Aboriginal and Torres Strait Islander ACT residents by disease group, ACT, 2006-07 to 2009-10 (a)

	Aboriginal and Torres Strait Islander		Non-Aboriginal and Torres Strait Islander
ICD-10-AM Chapter (b)	**No.**	**%**	**%**
Factors influencing health status & contacts	443	13.2	16.1
Injury & poisoning	439	13.1	8.5
Digestive	373	11.1	10.3
Pregnancy & related	370	11.1	7.9
Mental & behavioural	258	7.7	4.0
Symptoms, signs, etc	231	6.9	6.6
Respiratory	189	5.6	5.3
Genitourinary	186	5.6	6.0
Musculoskeletal	144	4.3	7.1
Circulatory	120	3.6	7.0
Perinatal	106	3.2	1.4
Neoplasms	93	2.8	7.2
Skin & subcutaneous	88	2.6	1.7
Endrocrine	78	2.3	2.1
Nervous system	60	1.8	2.3
Infectious	48	1.4	1.5
Ear and mastoid	37	1.1	0.9
Eye and adnexa	32	1.0	2.0
Congenital malformations	31	0.9	0.6
Blood & blood forming	22	0.7	1.5
Total	**3,348**	**100.0**	**100.0**

(a) Excludes renal dialysis
(b) The International Statistical Classification of Diseases and Related Health problems.
Source: ACT Admitted Patient Care Collection 2006-07 to 2009-10. Confidentialised unit record file

7.2.1. Factors influencing health status

This category includes a range of reasons for persons encountering health services, for example, chemotherapy and renal dialysis, or when circumstances are present which influence the person's health status, but are not themselves a current injury or illness.

Excluding renal dialysis, there were 443 separations for ACT Aboriginal and Torres Strait Islander residents (245 males, 198 females). There was a significant difference between the average age of Aboriginal and Torres Strait Islander patients (21 years) and non-Aboriginal and Torres Strait Islander patients (47 years).

Care of newborn babies and rehabilitation procedures accounted for 80% of separations for ACT resident Aboriginal and Torres Strait Islander in this category.

Eight Aboriginal and Torres Strait Islander or Torres Strait Islander ACT residents received 2,375 episodes of renal dialysis between 2004-05 and 2009-10.

7.2.2. Injury and poisoning

There were 439 hospital separations relating to injury and poisoning (240 males, 199 females) for ACT residents who identified as Aboriginal and Torres Strait Islander between July 2006 and June 2010. The average age was 28 years compared with 44 years for non-Aboriginal and Torres Strait Islander ACT residents. Over half of ACT Aboriginal and Torres Strait Islander resident injury and poisoning separations (53.3%) were for people aged between 15 and 34 years.

Injuries to the wrist and hand (n=71), injuries to the head (n=71), poisoning by drugs, medicaments and biological substances (n=60), injuries to the knee and lower leg (n=49) and complications of surgical and medical care (n=40) were the most frequent causes of hospitalisation in this category.

The most frequent causes of injury for Aboriginal and Torres Strait Islander ACT residents were falls (17.5%), transport accidents (14.6%), assault (13.4%) and intentional self harm (12.3%).

7.2.3. Digestive diseases

There were 373 hospital separations for digestive disorders during 2006-07 to 2009-10. The average age for Aboriginal and Torres Strait Islander persons admitted to hospital with a digestive system disease was 36 years, significantly younger than the average age for non-Aboriginal and Torres Strait Islander ACT residents (47 years).

Just over one quarter of hospital separations for digestive disorders were for disorders of the gallbladder, biliary tract and pancreas. A further 22.3% were due to diseases of the oral cavity, salivary glands and jaws (Table 20).

Table 20: Hospital separations for digestive diseases by primary diagnosis, ACT Aboriginal and Torres Strait Islander residents, 2005-06 to 2009-10

Primary diagnosis	No.	%
Disorders of gallbladder, biliary tract and pancreas	103	27.6
Diseases of oral cavity, salivary glands and jaws	83	22.3
Other diseases of intestines	50	13.4
Diseases of oesophagus, stomach and duodenum	47	12.6
Hernia	23	6.2
Diseases of appendix	22	5.9
Other diseases of the digestive system	29	7.8
Noninfective enteritis and colitis	16	4.3
Total	**373**	**100.0**

Note: ICD-10-AM based classification
Source: ACT Admitted Patient Care Collection 2006-07 to 2009-10. Confidentialised unit record file

7.3. Emergency department presentations: 2004-05 to 2009-10

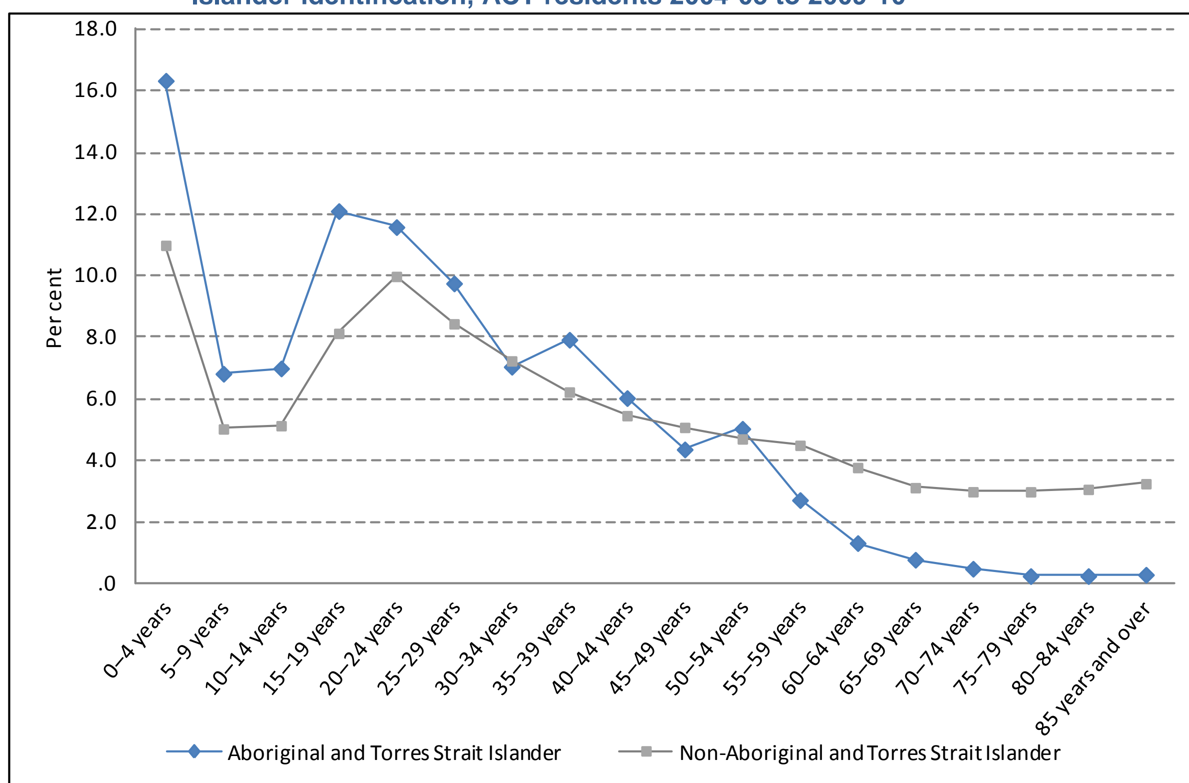
Over the period 2004-05 to 2009-10, there were 9,227 presentations to ACT public hospital emergency departments by ACT residents who identified as Aboriginal and Torres Strait Islander. This represents 1.8% of all ACT resident presentations.

Sixteen per cent of presentations (16.3%) for Aboriginal and Torres Strait Islander persons were for children aged less than five years (non-Aboriginal and Torres Strait Islander 11.0%) and 2.0% of presentations were for persons aged over 65 years (non-Aboriginal and Torres Strait Islander 15.4%) (Figure 5).

One-fifth of ACT emergency department presentations for ACT residents who identified as Aboriginal or Torres Strait Islander were for injuries or poisoning (Table 21). A further 17.7% were for factors influencing health status (e.g. care involving dialysis, donation of an organ or tissue) and 15% for symptoms signs and abnormal findings.

Two-thirds (66%) of ACT Aboriginal and Torres Strait Islander residents who presented to ACT emergency departments completed treatment and were discharged. A further 20.2% required hospitalisation. Almost twelve per cent (11.5%) did not wait to be attended by a health care professional and 1.1% left at their own risk after being seen but before completion of treatment. The remainder died in the Emergency department as a non-admitted patient (0.04%) or had died before arrival (0.01%)

Figure 5: Emergency department presentations by age and Aboriginal and Torres Strait Islander identification, ACT residents 2004-05 to 2009-10



Source: ACT Emergency Department Information System 2004-05 to 2009-10. Confidentialised unit record file

Within the presentations for injury and poisoning there were a range of primary diagnoses. Among the most frequent were open wounds of the head (n=169), open wounds of the wrist and hand (n=123) and fractures at wrist and hand level (n=88). Presentations for injuries and poisoning peaked for people aged between 15 and 19 years (15.3%), with both 0-4 year olds and 20-24 year olds accounting for fourteen per cent of presentations.

Table 21: Emergency department presentations ACT Aboriginal and Torres Strait Islander residents, 2004-05 to 2009-10

ICD-10-AM Chapter (a)	No.	%
Injury & poisoning	2,002	21.7
Factors & contacts(b)	1,630	17.7
Symptoms & signs(c)	1,422	15.4
Respiratory	742	8.0
Musculoskeletal	709	7.7
Digestive	484	5.2
Infectious	484	5.2
Mental & behavioural	351	3.8
Genitourinary	301	3.3
Skin & subcutaneous	277	3.0
Nervous system	147	1.6
Circulatory	136	1.5
Ear and mastoid	126	1.4
Pregnancy & related	128	1.4
External causes	102	1.1
Eye and adnexa	83	0.9
Endrocrine	60	0.7
Blood & blood forming	16	0.2
Neoplasms	13	0.1
Perinatal	12	0.1
Congenital malformations	2	0.0
Total	**9,227**	**100.0**

(a) The International Statistical Classification of Diseases and Related Health problems.
(b) Factors and contacts categories are provided for occasions when circumstances other than a disease, injury or external are recorded as 'diagnoses' or 'problems'.
(c) Symptoms and signs include symptoms, signs, abnormal results of investigative procedures and ill-defined conditions regarding which no diagnosis is classifiable elsewehere.

Source: ACT Emergency Department Information System 2004-05 to 2009-10. Confidentialised unit record file

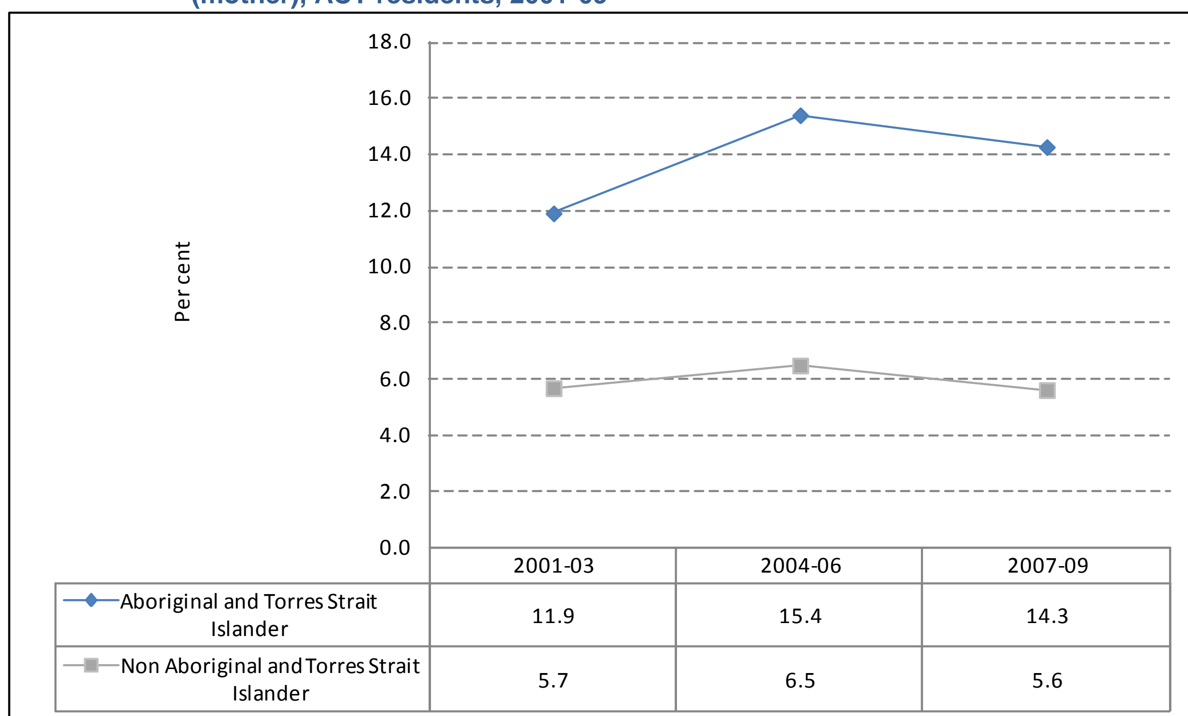
8. Maternal and child health

Between 1997 and 2009 there were 1,037 women who gave birth in the ACT who identified as Aboriginal or Torres Strait Islander, accounting for 1.6% of all births in the ACT. Approximately one-quarter of these mothers were not usual residents of ACT. Over this time period the number of Aboriginal and Torres Strait Islander women who gave birth each year has increased from 58 in 1997 to 107 in 2009. This increase may be due to an increase in the number of Aboriginal and Torres Strait Islander women giving birth or it may be due to an increased propensity to identify as Aboriginal and Torres Strait Islander.

During 1997-2000, fertility rates for Aboriginal and Torres Strait Islander women peaked in the 20-24 year age group. The fertility rate peak shifted to the 25-29 year age group in subsequent years. The fertility rate curve for Aboriginal and Torres Strait Islander women varies from non-Aboriginal and Torres Strait Islander women, with Aboriginal and Torres Strait Islander women having higher fertility in the younger age groups. The teenage fertility rate for Aboriginal and Torres Strait Islander women was consistently around four times higher than the teenage fertility rate for non-Aboriginal and Torres Strait Islander women in the ACT between 1997 and 2008. The fertility rate for Aboriginal and Torres Strait Islander women aged 20 to 24 years was over twice as high as the fertility rate for non-Aboriginal and Torres Strait Islander women in the same age group.[14]

The percentage of babies born to Aboriginal and Torres Strait Islander women who were low-birthweight (less than 2,500 grams) was significantly higher for each three year period between 2001 and 2009 (Figure 6) than the percentage of low-birthweight babies born to non-Aboriginal and Torres Strait Islander women. The percentage has fluctuated between 11.9% and 15.4% over this time period.

Figure 6: Low-birthweight babies by Aboriginal and Torres Strait Islander identification (mother), ACT residents, 2001-09

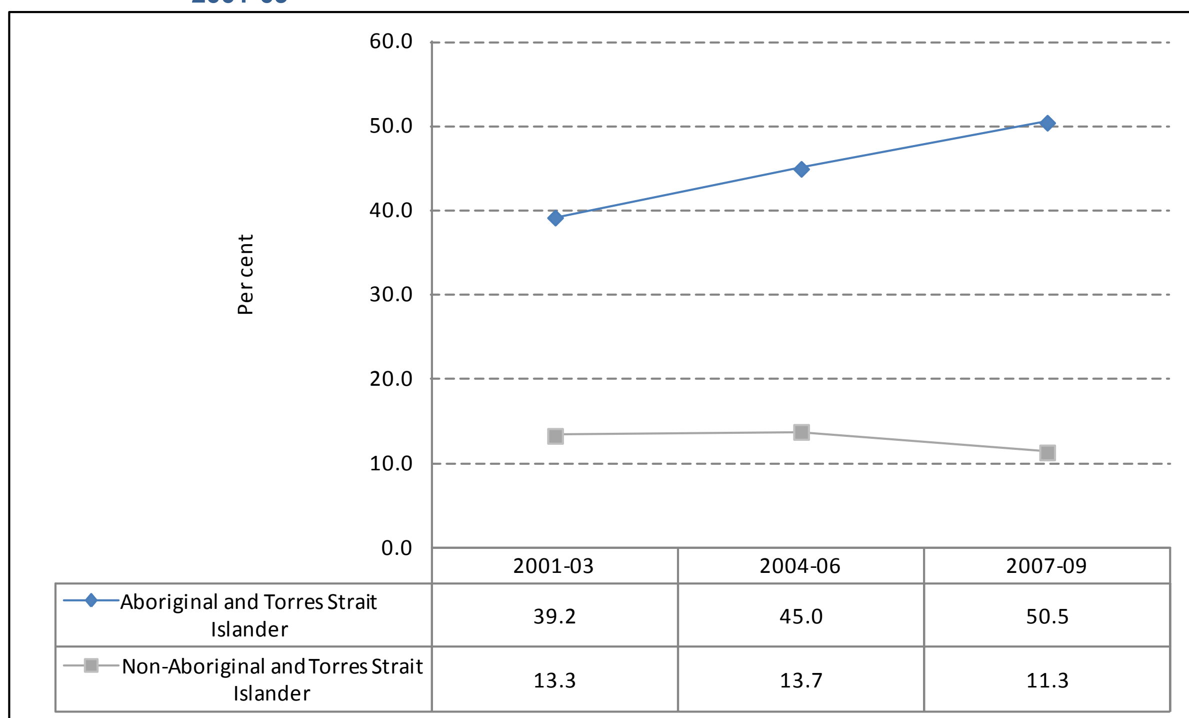


	2001-03	2004-06	2007-09
Aboriginal and Torres Strait Islander	11.9	15.4	14.3
Non Aboriginal and Torres Strait Islander	5.7	6.5	5.6

Source: ACT Maternal and Perinatal Data Collection 2001-09. Confidentialised unit record file

The percentage of Aboriginal and Torres Strait Islander women who reported smoking during pregnancy has increased from 39% to 50% between 2001 and 2009 (Figure 7). While this increase is not statistically significant, rates of smoking during pregnancy were significantly higher for Aboriginal and Torres Strait Islander women compared with non-Aboriginal and Torres Strait Islander women.

Figure 7: Smoking status by Aboriginal and Torres Strait Islander identification, ACT, 2001-09



	2001-03	2004-06	2007-09
Aboriginal and Torres Strait Islander	39.2	45.0	50.5
Non-Aboriginal and Torres Strait Islander	13.3	13.7	11.3

Source: ACT Maternal and Perinatal Data Collection 2001-09. Confidentialised unit record file

The three-year averaged percentage of low-birthweight babies born to Aboriginal and Torres Strait Islander women who smoked during pregnancy fluctuated between 17% and 24% between 2001 and 2009. The percentage of low birth-weight babies born to Aboriginal and Torres Strait Islander women who did not smoke during pregnancy fluctuated slightly between 8% and 12%.[14]

The average birthweight of babies born to Aboriginal and Torres Strait Islander women who smoked during pregnancy (2,979 grams) was significantly lower than the average birthweight of babies born to Aboriginal and Torres Strait Islander women who did not smoke during pregnancy (3,317 grams). The average birthweight for babies born to non-Aboriginal and Torres Strait Islander women who did not smoke during pregnancy was 3,428 grams.[14]

8.1. Australian Early Development Index

The Australian Early Development Index (AEDI) is a measure of young children's development in five domains: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, and communications and general knowledge. Domains are scored according to the following categories:

- 'Developmentally vulnerable' (category 1) – scores in the lowest 10 per cent
- 'Developmentally at risk' (category 2) – scores between the 10th and 25th percentiles
- 'On track'
  - (Category 3) – scores between the 25th and 50th percentiles
  - (Category 4) – scores above the 50th percentile.

Domain scores are represented between 0 and 10. A higher domain score indicates a higher level of development within a particular domain.

There were 99 Aboriginal and Torres Strait Islander children included in the ACT sample. A higher percentage of ACT Aboriginal and Torres Strait Islander children scored within the developmentally vulnerable category than non-Aboriginal and Torres Strait Islander ACT children in all domains (Table 22). This difference was significant for physical health and wellbeing domain, language and cognitive skills domain and communications and general knowledge domain. The average score on each domain was similar for Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander children.

Table 22: Australian Early Development Index (AEDI) average scores and percentiles for domains, by Aboriginal and Torres Strait Islander status, ACT, 2009

	Average score	Developmentally vulnerable(b) %	Developmentally at risk(b) %	On track(b) %
Physical health and wellbeing domain				
Aboriginal and Torres Strait Islander	9.2	23.0*	10.0	67.0
Non-Aboriginal and Torres Strait Islander	9.6	9.0	14.4	76.4
Social competence domain				
Aboriginal and Torres Strait Islander	8.8	15.0	18.0	67.0
Non-Aboriginal and Torres Strait Islander	9.2	8.7	16.2	75.0
Emotional maturity domain				
Aboriginal and Torres Strait Islander	8.1	14.0	17.0	69.0
Non-Aboriginal and Torres Strait Islander	8.7	8.9	15.5	75.7
Language and cognitive skills domain				
Aboriginal and Torres Strait Islander	8.5	15.0*	27.0	58.0*
Non-Aboriginal and Torres Strait Islander	9.6	5.5	10.1	84.4
Communications and general knowledge domain				
Aboriginal and Torres Strait Islander	8.8	19.0*	18.0	63.0
Non-Aboriginal and Torres Strait Islander	9.4	8.7	15.8	75.6

* Significant difference between Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander results
Source: Australian Early Development Index 2009
(b)Overcoming Indigenous Disadvantage 2011. Table 5A.6.1. Available at:
http://www.pc.gov.au/__data/assets/pdf_file/0020/111656/12-key-indicators-2011-chapter5-all.pdf

There were 37 Aboriginal and Torres Strait Islander children (37.4%) who scored below the 10th percentile, described as ‘developmentally vulnerable,’ on one or more domains, and 26 children (26.3%) on two or more domains. Whereas, 21.7% of non-Aboriginal and Torres Strait Islander children were ‘developmentally vulnerable’ on one or more domains and 10.5% on two or more domains.

9. Data quality projects

Due to the limitations of data collections for Aboriginal and Torres Strait Islander people both in the ACT and nationally, there have been several projects initiated aimed at increasing identification of Aboriginal and Torres Strait Islander people.

9.1. Improving identification of Aboriginal and Torres Strait Islander people in ACT Pathology administrative data collections

The Health Directorate, ACT Government has implemented a project to increase the identification of Aboriginal and Torres Strait Islander people by placing an Aboriginal and Torres Strait Islander identifier on pathology request forms.

In 2007 ACT Health commissioned Acumen Alliance (Acumen) to study the feasibility of increasing the identification of Aboriginal and Torres Strait Islander people within the ACT disease and cancer registries. This study found that the key reason for under-recording of Aboriginal and Torres Strait Islander status is the absence of an Aboriginal and Torres Strait Islander identifier on pathology request forms.[15] The lack of identifier on pathology request forms resulted in Aboriginal and Torres Strait Islander status not being included in the pathology results notified to the three ACT government health registers (Cancer, Cervical Cancer and Communicable Disease).

ACT Pathology has subsequently implemented an Aboriginal and Torres Strait Islander identifier on request forms and staff training on asking about a person's Aboriginal and Torres Strait Islander identification.

9.2. Improving identification of Aboriginal and Torres Strait Islander people in hospital administrative data collections

A second project aimed to determine the level of under-identification of Aboriginal and Torres Strait Islander people in ACT hospital administrative data. The study was undertaken under the auspices of AIHW. The hospital data quality study examined the quality of Aboriginal and Torres Strait Islander status data in hospital separations records through an audit process. The audit was conducted by interviewing a sample of admitted patients in The Canberra Hospital about their Aboriginal and Torres Strait Islander status, and comparing the patients' responses with the status information recorded on the hospital admission records.

This study updates a previous study conducted in 2005 when the level of Aboriginal and Torres Strait Islander identification in ACT hospitals was found to insufficient to be included in national analysis.[16]

Preliminary results indicate that 58% of Aboriginal and Torres Strait Islander people were correctly identified in hospital administrative data. Consequently this data must be interpreted with caution and further work will be needed to improve the identification rate.

10. Key issues and future directions

Aboriginal and Torres Strait Islander people in the ACT continue to experience poorer health outcomes than non-Aboriginal and Torres Strait Islander residents, on a range of health indicators.

Key issues identified include:

Data issues

- The ability to identify and monitor Aboriginal and Torres Strait Islander health status is hindered by the lack of robust information. Although the scope of data collections for Aboriginal and Torres Strait Islander people in the ACT has increased in quality and quantity over recent years, there are still gaps in data availability and there are issues associated with the reliance on national survey data and administrative data collections (e.g. sample size, timelines, relevance to the ACT, correct identification of Aboriginal and Torres Strait Islander people).
- There are concerns about whether the methods employed in surveys are the most suitable or appropriate for Aboriginal and Torres Strait Islander respondents, for example regarding mental wellbeing. The ABS and AIHW are working with stakeholders to evaluate current and develop future strategies.

Demographic factors

- ACT Aboriginal and Torres Strait Islander residents had higher incomes, higher education and higher housing costs compared with Aboriginal and Torres Strait Islander people nationally.
- Significantly more Aboriginal and Torres Strait Islander ACT residents reported fair or poor health compared to non-Aboriginal and Torres Strait Islander ACT residents.

Health service improvements

- Specific Medicare health assessments targeting Aboriginal and Torres Strait Islander people (item no. 715) were claimed for only five per cent of the ACT Aboriginal and Torres Strait Islander population.

Maternal and perinatal issues

- Babies born to Aboriginal and Torres Strait Islander women in the ACT were significantly more likely to weigh less than 2,500 grams compared with babies born to non-Aboriginal and Torres Strait Islander women.
- The percentage of Aboriginal and Torres Strait Islander women who reported smoking during pregnancy has increased between 2000 and 2008 and is significantly higher than the percentage of non-Aboriginal and Torres Strait Islander women who report smoking during pregnancy.
- The average birthweight of babies born to Aboriginal and Torres Strait Islander women who smoked during pregnancy was significantly lower than the average birthweight of babies born to Aboriginal and Torres Strait Islander women who did not smoke during pregnancy.
- The teenage fertility rate for Aboriginal and Torres Strait Islander women was consistently four times higher than the teenage fertility rate for non-Aboriginal and Torres Strait Islander women in the ACT between 1997 and 2008. The fertility rate for Aboriginal and Torres Strait Islander women aged 20 to 24 years was over twice as high as the fertility rate for non-Aboriginal and Torres Strait Islander women in the same age group.

Emotional health and wellbeing

- Three in ten ACT Aboriginal and Torres Strait Islander people reported high or very high levels of psychological distress.
- Ninety per cent of ACT Aboriginal and Torres Strait Islander people reported that they have never been removed from their natural family, however half responded that relatives had been removed from their natural family.

- A significantly higher percentage of ACT Aboriginal and Torres Strait Islander children scored in the developmentally vulnerable category on the Australian Early Development Index physical health and wellbeing, language and cognitive skills and communications and general knowledge domains than non-Aboriginal and Torres Strait Islander ACT children.

Risk factors

- Significantly more Aboriginal and Torres Strait Islander school students reported ever smoking, and ever using inhalants, cannabis or any illicit substance.
- Aboriginal and Torres Strait Islander secondary school students are equally likely to consume less than the recommended number of serves of fruit and vegetables each day as non-Aboriginal and Torres Strait Islander residents.
- Aboriginal and Torres Strait Islander secondary school students are equally likely to not meet guidelines for physical activity as non-Aboriginal and Torres Strait Islander students.
- Only three per cent of ACT Aboriginal and Torres Strait Islander residents reported high alcohol risk. ACT Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander students were equally likely to have ever consumed alcohol, or to have consumed alcohol in the last 7 days.

Immunisation

- ACT Aboriginal and Torres Strait Islander children were equally likely to be fully immunised to non-Aboriginal and Torres Strait Islander ACT children. ACT Aboriginal and Torres Strait Islander children were more likely to be fully immunised than Aboriginal and Torres Strait Islander children nationally.

10.1. Future Directions

There is a need to improve the quality of health data relating to Aboriginal and Torres Strait Islander in the ACT. The major benefit expected from more comprehensive health data collection is improvements in health outcomes for Aboriginal or Torres Strait Islander people through:

- using evidence to guide actions and target resources;
- identifying factors that may be associated with disease causation;
- raised awareness of health conditions and health differentials; and
- evaluation of services and interventions.

Comprehensive health data may result from projects which increase identification, such as the identifier on pathology request forms project and the hospital data quality study.

Scoping of existing data sources indicates that emphasis must also be placed on young people within the ACT Aboriginal and Torres Strait Islander community. Almost 40% of the population is aged 15 years or younger and yet information on this group is inadequate for many health indicators.

However, the findings in this report demonstrate opportunities for service providers and policy makers to improve health outcomes for Aboriginal and Torres Strait Islander people in the ACT. As identified in the key issues above there is clear evidence of high smoking rates, particularly during pregnancy; high teenage fertility rates; low uptake of specifically targeted Medicare items; and higher rates of developmentally vulnerable children in the ACT.

11. DATA SOURCES

11.1. National Aboriginal and Torres Strait Islander Social Survey, 2008

The National Aboriginal and Torres Strait Islander Social Survey (NATSISS) was conducted from August 2008 to April 2009 and included people who identified or are identified as being of Aboriginal, Torres Strait Islander or both Aboriginal and Torres Strait Islander origin. Further information relating to this survey is available in the National Aboriginal and Torres Strait Islander Social Survey publication.[8]

Mesh Block level information within Census Collection Districts (CDs) was used to assist in targeting Indigenous people. A sample of CDs were randomly selected, with the likelihood of selection based on the number of Indigenous dwellings recorded in the area for the 2006 Census. All Mesh Blocks containing at least one Indigenous household within the CD were screened. Mesh Blocks containing no Indigenous households were either excluded on coverage or randomly sampled for screening. This approach significantly reduced screening effort in areas of low Indigenous density, such as major capital cities.[8]

As the ACT sample only comprised 435 individuals who responded to the survey, there are limits on the level of detail at which the data can be analysed.

Age-standardised rates are used when comparisons are made between results for Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander ACT resident respondents to adjust for differences in age structure of each population.

11.2. Australian Secondary Students Alcohol and Drug Survey – ACT

During 2008, ACT Health and the Department of Education and Training conducted the Australian Secondary Students Alcohol and Drug Survey of ACT students in years 7 to 12.

The survey included a series of questions about tobacco, alcohol and other substance use, sun protective behaviours, dietary behaviours, weight and height, and physical activity levels. Similar surveys were conducted in the ACT in 1996, 1999, 2002 and 2005.

The results presented here include responses from 56 students who identified as Aboriginal and Torres Strait Islander aged between 12 and 17 years attending government, Catholic and independent secondary schools in the ACT in 2008. Logistic regression models were used to identify changes in the proportion of students reporting specific behaviours between survey years and chi-square statistics were calculated to determine associations between variables. Note that probability levels (p values) below 0.05 are reported as significant.

11.3. 2011 Census and administrative data collections

Demographic data is based on the 2011 Census conducted by the Australian Bureau of Statistics (ABS). Further information is available from www.abs.gov.au.

ACT hospital admission data (ACT Admitted Patient Care Collection, 2005-06 to 2009-10), maternal and perinatal data (ACT Maternal and Perinatal Data Collection, 2005-08) and emergency department presentation data (Emergency Department Information System, 2005-06 to 2009-10) have been used in this report. Pooled data were used where necessary to provide sufficient data to analyse in some detail.

The degree of accuracy of identification of Aboriginal and Torres Strait Islander people varies between datasets. ACT Health in collaboration with Australian Institute of Health and Welfare (AIHW) conducted a data quality study into the identification of Aboriginal and Torres Strait Islander people in hospital data. More information in section 9.2.

Previous validation studies have shown a high degree of accuracy in the ACT Maternal and Perinatal Data Collection (MPDC).

11.4. Medicare statistics

Statistics from the Medicare Benefits Schedule are available online. These statistics are based on the items and groups in the Medicare Benefits Schedule and can be broken down by patient gender and age group.

Medicare statistical reports include only those services that are performed by a registered provider, for services that qualify for Medicare Benefit and for which a claim has been processed by Medicare Australia. They do not include services provided by hospital doctors to public patients in public hospitals or services that qualify for a benefit under the Department of Veterans' Affairs National Treatment Account.[17]

State/Territory is determined according to the address (at the time of claiming) of the patient to whom the service was rendered.[17]

11.5. Australian Childhood Immunisation Register (ACIR)

The Australian Childhood Immunisation Register (ACIR) was established on 1 January 1996, by incorporating demographic data from Medicare on all enrolled children under the age of seven years. Participation in the ACIR is opt-out so it constitutes a nearly complete population register, as approximately 99% of children are registered with Medicare by 12 months of age. Children not enrolled in Medicare can also be added to the ACIR via a supplementary number. Since 2001, immunisations given overseas may be recorded if a provider endorses their validity.

Data are transferred to the ACIR when a recognised immunisation provider supplies details of an eligible immunisation either through the Internet using the Medicare Australia web site or by submitting paper encounter forms, which are scanned at a central location. The existence of medical contraindications and conscientious objection to immunisation is also recorded on the ACIR. All vaccination records for a child remain on the register indefinitely, but no new immunisation encounter records are added after the 7th birthday.[18]

Indigenous status on the ACIR is recorded as 'Indigenous', 'non-Indigenous' or 'unknown', as reported by the child's carer to Medicare, or by the immunisation provider to the ACIR. For this report two categories of children were considered: 'Indigenous' and 'non-Indigenous', children with unknown Indigenous status were presumed to be 'non-Indigenous'.[18]

The proportion of children designated as 'fully immunised' is calculated using the number of Medicare-registered children completely immunised with the vaccines of interest by the designated age as the numerator and the total number of Medicare-registered children in the age cohort as the denominator.

- 'Fully immunised' at 12 months of age is defined as a child having a record on the ACIR of a 3rd dose of a diphtheria (D), tetanus (T) and acellular pertussis-containing (P) vaccine (DTPa), a 3rd dose of polio vaccine, a 2nd or 3rd dose of a PRP-OMP containing Hib vaccine or a 3rd dose of any other Hib vaccine, and a 2nd or 3rd dose of a Comvax hepatitis B vaccine or a 3rd dose of dose of any other hepatitis B vaccine.
- 'Fully immunised' at 24 months of age is defined as a child having a record on the ACIR of a 3rd dose of a diphtheria, tetanus and acellular pertussis-containing vaccine, a 3rd dose of polio vaccine, a 3rd or 4th dose of a PRP-OMP containing Hib vaccine or a 4th dose of any other Hib vaccine, a 3rd or 4th dose of Comvax hepatitis B vaccine or a 4th dose of any other hepatitis B vaccine, and a 1st dose of a measles, mumps and rubella-containing (MMR) vaccine.
- 'Fully immunised' at 5 years of age is defined as a child having a record on the ACIR of a 4th or 5th dose of a diphtheria, tetanus and acellular pertussis-containing vaccine, a 4th dose of polio vaccine, and 2nd dose of an MMR-containing vaccine.[18]

11.6. Other data sources

The total number and leading causes of death for Aboriginal and Torres Strait Islander ACT residents is small. A recent data linkage study conducted by AIHW identified that 94% (n=65) of ACT resident deaths were correctly identified as Aboriginal and Torres Strait Islander in the National Mortality Database between 2001 and 2006.[19] The number of deaths of Aboriginal and Torres Strait Islander people in the ACT is considered too small for the construction of reliable life tables.[4]

Statistics on cancer, papanicolaou smear and notifiable diseases are unavailable, due to the absence of an Aboriginal and Torres Strait Islander indicator on key forms which these registers are compiled.

12. Glossary and statistical methodology

ACT RATES

Rates that are specific to the ACT are calculated by dividing the number of ACT resident cases by the ACT population at risk. In some cases, this results in an over-estimate. This occurs with service delivery statistics, where the denominator shows the ACT population, but a high percentage of services are given to non-ACT residents.

AGE-SPECIFIC RATES

Age-specific rates are calculated by dividing the number of cases occurring in each specified five-year age group (and sex) by the corresponding population in the same age group (and sex) and are expressed as an annual rate per 100,000 population.

AGE-STANDARDISED RATES

The standardised rates presented in this report are based on the direct method of standardisation. This method adjusts for effects of differences in the age composition of different populations. The direct age-standardised rates are based on the weighted sum of age-specific (five-year age group) rates in the population. The weights used in the calculation of these rates (the 'standard' population) are population ratios for five-year age groups derived from the mid-year 2001 Australian population.

CONFIDENCE INTERVALS (CI)

A confidence interval is a computed interval with a given probability (calculated at 95% probability in this report) that a true value of a variable, such as a rate, mean or proportion, is contained within the interval. The confidence interval is the likely range of the true value.

CRUDE RATES

A crude rate is an estimate of a proportion of a population that experiences a specific event over a specified period. It is calculated by dividing the number of events recorded for a given period by the number at risk of the event in the population.

INCIDENCE

Incidence is defined as the number of new cases in a population during a specific period.

LIFE EXPECTANCY AT BIRTH

Life expectancy at birth is an estimate of the average length of time a person can expect to live, assuming that current rates of death for each age group in the population will remain the same for the lifetime of that person.

Life expectancy data provided have been obtained from ABS reports and referenced accordingly.

MEDIAN AGE

Median age at diagnosis is the middle value, i.e. 50 per cent of cases are at an older age and 50 per cent at a younger age compared to the median age.

The interquartile range represents the age at which 25 per cent of the cases are above and 25 per cent below the median age. This range spans 50% of the data set, and in effect, eliminates the highest and lowest of outliers because the highest and lowest quartiles are removed.

MORTALITY

Mortality refers to deaths in a given population occurring in a specified period.

PREVALENCE

Prevalence is a useful measure that provides health care planners and support personnel with the number of people who remain alive following the diagnosis of a chronic disease or who currently have the disease or condition in the case of other diagnoses.

Point prevalence is the proportion of existing cases (old and new) in a population at a single point in time. This is different from incidence which is the number of new cases in a given period of time, usually a calendar year.

RELATIVE STANDARD ERRORS (RSE)

Relative standard errors (RSE) provide an indication of the reliability of an estimate. Estimates with RSEs less than 25% are generally regarded as 'reliable'. All estimates presented in tables in this report have RSEs less than 25%, unless otherwise stated. Estimates presented in tables with an RSE between 25-50% have been marked with an '*' (asterisk) and should be interpreted with caution. For the purposes of this report, estimates for the ACT with RSEs over 50% were not considered reliable and have not been presented.

STATISTICAL SIGNIFICANCE

In statistics, a result is significant if it is considered unlikely to have occurred by chance. For the purpose of this report 'significant' implies that a test of significance has been applied. A result was deemed statistically significant (i.e. there is an effect that is considered unlikely to be due to chance alone) if the p-value obtained was less than 0.05, or if comparing confidence intervals, there was no overlap between intervals.

Statistical significance has been assessed in this report by comparing confidence intervals (95% CI) or calculating p-values, depending on the type of data available for hypothesis testing.

Note that statistical significance is different to clinical significance.

THREE-YEAR MOVING AVERAGE

Three-year moving averages minimise natural variations observed in annual rates produced from relatively small populations. The three-year moving average was calculated by summing the age-standardised incidence or rates for the three-year period centred on the year of interest and dividing the total by three.

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