



## FACT SHEET: LIFE EXPECTANCY ESTIMATES FOR ABORIGINAL AND TORRES STRAIT ISLANDER AUSTRALIANS

On 15 November, 2013 the ABS released the latest official estimates of life expectancy for Aboriginal and Torres Strait Islander peoples. These are the fifth set of life expectancy estimates released by the ABS since the first set was released in 1997.

The latest estimates show that in 2010-2012, life expectancy at birth for Aboriginal and Torres Strait Islander men was 69.1 years and 73.7 years for women. This suggests that Aboriginal and Torres Strait Islander men, on average, live 10.6 years less than non-Indigenous men, while Aboriginal and Torres Strait Islander women, on average, live 9.5 years less than non-Indigenous women. This gap has reduced over the last five years by 0.8 years for men and 0.1 years for women.

This means, 69.1 is the average number of years that a group of newborn, male, Aboriginal and Torres Strait Islander babies would be expected to live if current death rates remain unchanged. For newborn, female, Aboriginal and Torres Strait Islander babies, the average number is 73.7 years.

### ***What is life expectancy?***

Life expectancy summarises the mortality experience of a population by measuring how long, on average, a group of people born in the same year would be expected to live, if current death rates at each age remained the same.

Life expectancy can be calculated for any age using life tables (a table which shows the probability of dying at each age), though life expectancy at birth is what most people focus on. **Life expectancy at birth is the average number of years that a group of newborn babies would be expected to live if current death rates remain unchanged.** Since death rates in the population will change during a person's lifetime and a person may die at an earlier or older age, life expectancy is only a summary indicator for a population, rather than an exact measure of how long individuals will actually live.

By the time a child reaches their first birthday, their chances of living longer increase (since they have survived their first year). By the time they reach late adulthood, their chances of surviving to a very old age are quite good. For example, although the average life expectancy for Aboriginal and Torres Strait Islander men is around 69 years, a five year old is expected to live another 65 years, making their life expectancy 70 years. If an Aboriginal and Torres Strait Islander man reaches age 65, they will have an expected average of 14 additional years left to live, making their life expectancy 79 years, 10 years longer than the average life expectancy at birth.

### ***Does that mean that most people will only live to 69 years and 74?***

The latest estimates show that Aboriginal and Torres Strait Islander men born in 2010-2012 would live to an average of 69 years, while women would live to an average of 74 years if current mortality rates continued. However, this does not mean that all or most Aboriginal and Torres Strait Islander people born during 2010-2012 will die at or around these ages. These are average values, so some people die before reaching the average life expectancy at birth (including in their first year), while others will live well beyond that age.

### ***What is life expectancy used for?***

Life expectancy is widely used as a key measure of the health of a population. Since life expectancy is expressed in years of life, it is often seen as an intuitive indicator that is more easily interpreted than other measures of mortality (e.g. standardised death rates, preventable death rates, etc). Life expectancy is also not affected by different population age structures, so can be compared across subpopulations, jurisdictions and over time.

However, since it's a summary measure, changes in life expectancy are often much smaller than the changes in other measures. For instance, life expectancy at birth for the population of Australia changed by around 0.25 years of life per year, from 1901 to 2001, despite major changes in infant and child mortality and other mortality trends.

### ***Quantity of life versus quality of life***

While life expectancy at birth measures how long, on average, a group of people born in the same year can expect to live, it does not take account of how healthy they are expected to be throughout their life. Health adjusted life expectancy estimates are not regularly published, with the most recent data published by the University of Queensland in '[The burden of disease and injury in Aboriginal and Torres Strait Islander peoples 2003](#)'.

## **How does the ABS calculate life expectancy?**

Life expectancy is calculated using life tables, which bring together deaths data and population estimates. By temporarily linking death registration records and Census records, the ABS is able to confirm that there are a number of Aboriginal and Torres Strait Islander people who are not identified as such on their death registration. From this the ABS is able to estimate how many deaths there would have been in the Aboriginal and Torres Strait Islander population, had all of the people who died been identified as they were in the Census.

This method, known as the 'direct method', was first used by the ABS for the previous estimates of Aboriginal and Torres Strait Islander life expectancy (for 2005-07). The estimates produced by this method are considered to be more accurate than those from the previous method (the 'indirect method', which required the ABS to make a range of assumptions in the calculation).

For the 2010-12 estimates the ABS again used the 'direct method', though it also made a small refinement to the methodology, which the ABS estimates would have made a difference of over one year to the previous estimates. As a result, revised estimates (incorporating this small refinement) for 2005-07 were also produced and can be seen in the table below.

**Table 1. Life expectancy at birth estimates, 2005-07 and 2010-12**

	2005-07 (revised <sup>1</sup> )	2010-2012	Change: 2005-07 to 2010-12
Aboriginal and Torres Strait Islander men	67.5	69.1	1.6
Aboriginal and Torres Strait Islander women	73.1	73.7	0.6
Non-Indigenous men	78.9	79.7	0.8
Non-Indigenous women	82.6	83.1	0.5
The gap – men	11.4	10.6	-0.8
The gap – women	9.6	9.5	-0.1

<sup>1</sup> 2005-07 estimates revised using the 2010-12 method, to enable effective comparisons over time.

## **For further information**

See *Life Tables for Aboriginal and Torres Strait Islander Australians, 2010—2012* (cat. no. 3302.0.55.003).

## **Acknowledgement**

The ABS would like to thank Dr. Darren Benham, from the Department of the Prime Minister and Cabinet, for his valuable contribution to the explanations contained in this fact sheet.