

Australian Indigenous  
HealthInfoNet

# *Summary of Australian Indigenous health, 2011*



CORE FUNDING



Australian Government  
Department of Health and Ageing



# Australian Indigenous Health/InfoNet

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The Health/InfoNet addresses this mission by undertaking research into various aspects of Indigenous health and disseminating the results (and other relevant knowledge and information) mainly via its Internet site ([www.healthinfonet.ecu.edu.au](http://www.healthinfonet.ecu.edu.au)). The Health/InfoNet's research mainly involves analysis and synthesis of data and other information obtained from academic, professional, government and other sources.

The Health/InfoNet's work in translational research aims at transferring the results of pure and applied research into policy and practice. In this research, the Health/InfoNet addresses the knowledge needs of a wide range of potential users. These include policy makers, health service providers, program managers, clinicians and other health professionals (including Indigenous health workers), and researchers. The Health/InfoNet also provides easy-to-read and summarised material for students and the general community.

**Director:** Professor Neil Thomson

**Address:** Australian Indigenous Health/InfoNet  
Kurungkurl Katitjin, Centre for Indigenous Australian Education and Research  
Edith Cowan University  
2 Bradford Street  
Mount Lawley, WA 6050

**Telephone:** (08) 9370 6336

**Facsimile:** (08) 9370 6022

**Email:** [healthinfonet@ecu.edu.au](mailto:healthinfonet@ecu.edu.au)

**Web address:** <http://www.healthinfonet.ecu.edu.au>

This summary – or an updated version – can be viewed at: <http://www.healthinfonet.ecu.edu.au/summary>

For a more comprehensive review of Indigenous health, please see the HealthInfoNet's 'Overview of Indigenous health status' at:

<http://www.healthinfonet.ecu.edu.au/overview>

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# Contents

Introduction .....	1
What is known about the Indigenous population? .....	2
What is known about Indigenous births? .....	3
What is known about Indigenous deaths? .....	3
Specific health conditions .....	4
<i>What is known about heart and circulatory health in the Indigenous population?</i> .....	4
<i>What is known about cancer in the Indigenous population?</i> .....	4
<i>What is known about diabetes in the Indigenous population?</i> .....	5
<i>What is known about the social and emotional wellbeing of Indigenous people?</i> .....	5
<i>What is known about kidney health in the Indigenous population?</i> .....	7
<i>What is known about injury in the Indigenous population?</i> .....	7
<i>What is known about respiratory health in the Indigenous population?</i> .....	8
<i>What is known about eye health in the Indigenous population?</i> .....	8
<i>What is known about ear health in the Indigenous population?</i> .....	9
<i>What is known about oral health in the Indigenous population?</i> .....	9
<i>What is known about disability in the Indigenous population?</i> .....	10
<i>What is known about communicable diseases in the Indigenous population?</i> .....	10
<i>What is known about factors contributing to ill-health in the Indigenous population?</i> .....	11
Nutrition .....	11
Physical activity .....	11
Tobacco use .....	12
Alcohol use .....	12
Conclusion .....	13
References .....	14

# Introduction

This summary includes the following information about Aboriginal and Torres Strait Islander peoples:

- population
- births
- deaths
- common health problems
- health risk and protective factors.

This summary uses information from the most up-to-date sources to help create a picture of the health of Australia's Indigenous people. This report uses four main sources of information:

- reports in the *Health and welfare of Australia's Aboriginal and Torres Strait Islander peoples* series produced by the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW)
- the Indigenous compendium to the *Report on government services* produced by the Steering Committee for the Review of Government Service Provision (SCRGSP)
- reports on key indicators of Indigenous disadvantage also produced by SCRGSP
- reports in the *Aboriginal and Torres Strait Islander health performance framework* series produced by AIHW for the Department of Health and Ageing.

Data for these reports are derived from a variety of sources, including health surveys and a number of health-related collections (such as those on births, deaths, hospitalisation, and cancer).

An important issue when collecting health information or data is to make sure the information is accurate and reliable. If some details are missing the information may not be accurate. For example, to understand the hospitalisation Indigenous people, states and territories need to collect information about people admitted to hospital, including whether a person is Indigenous. Some states and territories (like SA, WA and the NT) collect reliable information, but others do not. This means that most information about the health of Indigenous people is only accurate for certain states and territories, but not for Australia as a whole. The information about the Indigenous populations is getting better, but there are still limitations. To get a more detailed picture of Indigenous health (which includes details of the coverage of each health topic by states/territories), please refer to our *Overview of Australian Indigenous health status* (<http://www.healthinonet.ecu.edu.au/overviews>).

A person's health reflects not only the health services available to them and their health behaviours (such as smoking), but also a variety of other factors that affect their lives. These 'social determinants of health' include if a person:

- has a good education
- is working
- has enough money
- feels connected to friends and family
- feels safe in their community (no discrimination).

Social determinants that are particularly important to many Indigenous people are:

- their connection to land
- a historical past that took people from their traditional lands and away from their families.

If a person feels safe, has a job that earns enough money, and feels connected to their family and friends, they will generally be healthier. Indigenous people are generally worse off than non-Indigenous people when it comes to the social determinants of health.

A lot of health services are not as user-friendly for Indigenous people as for non-Indigenous people, adding to higher levels of disadvantage. This can occur if a health service is not culturally appropriate (does not consider Indigenous culture and specific needs). These aspects can affect how Indigenous people access health services. Other important aspects affecting access to health services are:

- where people live - compared with non-Indigenous people, more Indigenous people live in remote and very remote parts of Australia, where the number and types of health services are much more limited
- a person's ability to pay for health services - Australia has a mix of public and private health services. Many private health services are too expensive for many Indigenous people.

Health services can be more accessible for Indigenous people by:

- having Indigenous Health Workers on staff
- increasing the number of Indigenous people working in the health sector (doctors, dentists, nurses, etc)
- designing health promotion campaigns especially for Indigenous people
- increasing the cultural competence of the service and staff
- making important health services available in remote locations (so Indigenous people do not have to travel to cities, away from their support networks)
- funding health services so they are affordable for Indigenous people who might otherwise not be able to afford them.

More detailed information about the health of Indigenous peoples, associated social and economic circumstances, and risk and protective factors, is available from the HealthInfoNet's website ([www.healthinonet.ecu.edu.au](http://www.healthinonet.ecu.edu.au)).

## What is known about the Indigenous population?

There were 575,552 Indigenous people living in Australia in 2011 [1]. Detailed population information is not available for 2011, but in 2006 there were around 463,900 Aboriginal people, 33,100 Torres Strait Islanders, and 20,200 people who were both Aboriginal and Torres Strait Islander [2]. In 2011, Indigenous people made up 2.6% of the total Australian population. NSW had the largest number of Indigenous people. The NT had the highest percentage of Indigenous people. For more details on the Indigenous population in each state and territory see the table below.

*Table 1. Estimated Indigenous population, by state/territory, Australia, 30 June 2011*

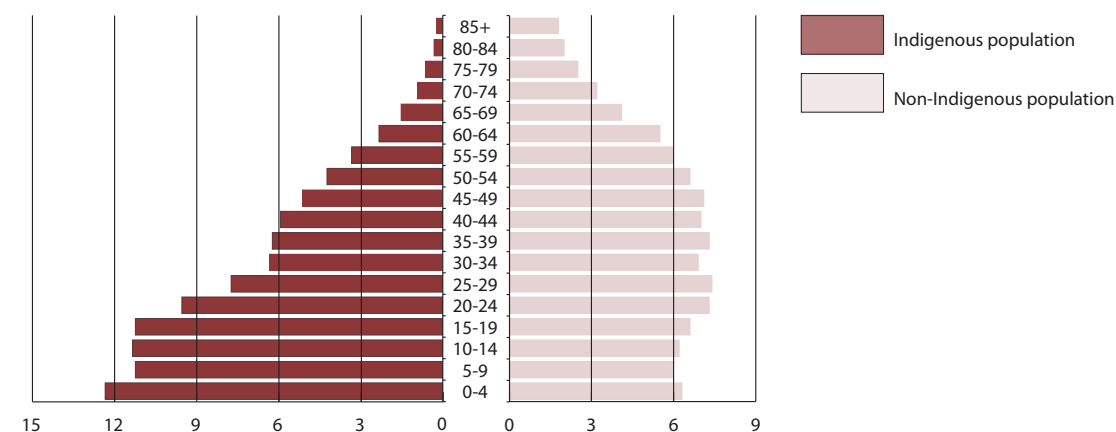
State/territory	Indigenous population, number	Indigenous population, proportion (%)	Proportion (%) of Indigenous people by state/territory
NSW	168,773	29.3	2.3
Vic	37,647	6.5	0.7
Qld	164,883	28.6	3.6
WA	77,694	13.5	3.4
SA	31,040	5.4	1.9
Tas	20,580	3.6	4.0
ACT	4,825	0.8	1.3
NT	69,855	12.1	30.3
Australia	575,552	100.0	2.6

Source: ABS, 2009 [1], ABS, 2008 [3]

In 2006, around one-third of Indigenous people lived in major cities, one-quarter in remote areas and the others in regional areas [4].

The Indigenous population is much younger overall than the non-Indigenous population [1]. According to the 2006 Australian census, about one-third of Indigenous people were aged less than 15 years, compared with one-fifth of non-Indigenous people [1, 4]. Almost 4% of Indigenous people were aged 65 years or over, compared with 14% of non-Indigenous people. The following figure shows a comparison of the age profiles of the Indigenous and non-Indigenous populations.

*Figure 1. Population pyramid of Indigenous and non-Indigenous populations, 2011*



Source: Derived from ABS, 2009 [1], ABS, 2011 [5]

## What is known about Indigenous births?

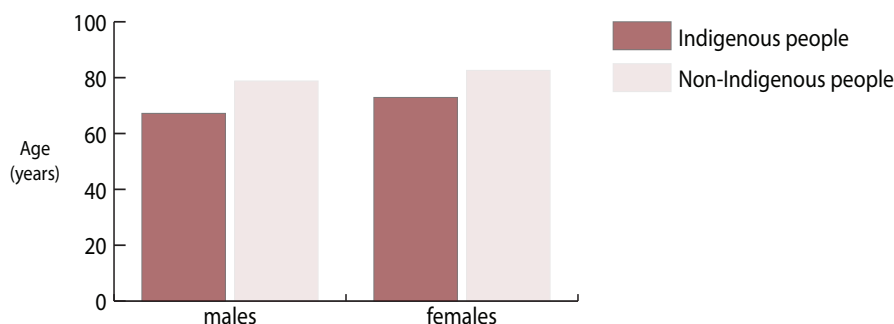
In 2010, there were 16,129 births registered in Australia where one or both parents were Indigenous (four out of every 100 births) [6]. Overall, Indigenous women had more children and had them at younger ages than did non-Indigenous women. Indigenous women had, on average, 2.6 births in their lifetime (compared with 1.9 births for all Australian women) [6]. Around three-quarters of Indigenous mothers were 30 years or younger when they had their babies, compared with less than one-half of all mothers. About 20 in 100 Indigenous mothers were teenagers, compared with 4 in 100 of all Australian mothers.

In 2008, babies born to Indigenous women on average weighed almost 200 grams less than those born to non-Indigenous women [7]. Babies born to Indigenous women were twice as likely to be of low birthweight (less than 2,500 grams) than were those born to non-Indigenous women. Low birthweight can increase the risk of a child developing health problems.

## What is known about Indigenous deaths?

Indigenous people are much more likely than non-Indigenous people to die before they are old [8, 9]. The most recent estimates from the ABS show that an Indigenous male born in 2005-2007 was likely to live to 67.2 years, about 11.5 years less than a non-Indigenous male (who could expect to live to 78.7 years) [8]. An Indigenous female born in 2005-2007 was likely to live to 72.9 years, which is almost 10 years less than a non-Indigenous female (82.6 years). (In 2010 the ABS changed the way it calculates Indigenous life expectancy, so recent estimates cannot be compared with older estimates.)

Figure 2. Expectation of life at birth for Indigenous and non-Indigenous males and females 2005-2007



Source: ABS, 2009 [8]

In 2010, there were 2,767 deaths registered to people identified as Indigenous [9]. Many Indigenous deaths are incorrectly counted as non-Indigenous because the person or family are not identified as Indigenous — the actual number of Indigenous deaths is thought to be around 4,000.

The leading causes of death for Indigenous people are:

- cardiovascular disease (including heart disease and strokes)
- cancer
- external causes (including transport accidents and self-harm) [10].

Babies born to Indigenous women are more likely to die in their first year than those born to non-Indigenous women [9]. In 2008-2010, the infant mortality rate (see boxed information for details) for babies born to Indigenous women was highest in the NT (for 1,000 births, around 11 babies died) and lowest in SA (for 1,000 births, less than five babies died). (The rate for the total Australian population was around four deaths per 1,000 births in 2010.)

### What is a 'rate'?

One way of looking at how common a disease is in a population is by calculating a 'rate'. A rate is the number of cases of a disease in a specific time period divided by the population. By calculating a rate you can compare how common a disease is in different populations (such as Indigenous and non-Indigenous people) or between sexes (men and women).

Rates are used to compare things like the numbers of new cases of a disease (such as cancer or tuberculosis - these are known as incidence rates or notification rates) and admissions to hospital.

You can also calculate rates for deaths (which lets you compare the number of deaths in two different populations), and births.

There is a special calculation for 'infant mortality rates'. To calculate this rate, the number of infants (children under one year of age) who died in one calendar year is divided by the number of live births in the same year.

## Specific health conditions

### What is known about cardiovascular disease in the Indigenous population?

Cardiovascular disease (CVD) is a group of diseases affecting the heart and circulatory system [11]. The most common types of CVD are heart disease, stroke, and high blood pressure. Risk factors (a behaviour or characteristic that makes it more likely for a person to get a disease) for CVD include: smoking tobacco, not eating well, not exercising, having diabetes, and having chronic kidney disease.

In the 2004-2005 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), almost one-in-eight Indigenous people reported having a long-term heart or related condition [12]. Heart and related conditions were around 1.3 times more common for Indigenous people than for non-Indigenous people; high blood pressure (the most commonly reported condition) was reported 1.5 times more often by Indigenous people than by non-Indigenous people.

CVD was the most common cause of death for Indigenous people in 2004-2008 [13]. More than one-quarter of Indigenous deaths were from CVD. Deaths from CVD happened almost twice as often for Indigenous people as for non-Indigenous people. Indigenous people were much more likely to die from CVD than other Australians at any age, but particularly in younger age-groups.

Heart attacks caused almost two-thirds of the CVD-related deaths of Indigenous males and around one-half of those of Indigenous females [13]. Strokes caused around one-in-eight deaths from CVD of Indigenous males and around one-in-five of those of Indigenous females.

### What is known about cancer in the Indigenous population?

Cancer is a disease of the body's cells (the basic building blocks of the body) [14]. Normally cells multiply and grow in an ordered way, but sometimes the cells are damaged and they grow into a lump called a tumour. Tumours can be benign (non-cancerous) or malignant (cancerous). Cancers can occur in many different parts of the body, including the bones, breast, prostate (for men), or lungs. Malignant tumours can spread through the body causing illness and potentially causing death.

How cancer affects the Indigenous population, and how common it is among Indigenous people, is not fully understood [15]. The most current information suggests that the overall rate of new cases (incidence rate) of cancer was slightly lower for Indigenous people than for non-Indigenous people in 2003-2007 [14]. Even though the incidence rate was lower for Indigenous people than for non-Indigenous people, Indigenous people were more likely to die from cancer [15]. Indigenous men and women died from cancers 1.3 times more often than did non-Indigenous men and women in 2004-2008 [13].

Incidence rates vary depending on the type of cancer. Indigenous people have higher incidence rates than do non-Indigenous people for [14]:

- lung and other smoking-related cancers
- cervical cancer
- cancers of 'unknown primary site'.

Indigenous people have lower incidence rates than do non-Indigenous people for [14]:

- bowel cancer
- breast cancer
- prostate cancer (for men)
- skin cancer
- lymphoid cancer (the lymphoid system is part of the body's immune system, the system that helps the body fight off diseases).

The types of cancer that caused the most deaths among Indigenous people in 2004-2008 were 'cancer of digestive organs' and 'cancer of respiratory organs' (mostly lung cancer) [13]. The likelihood of getting lung cancer increases when people smoke tobacco [14].

For Indigenous women, being diagnosed with cervical cancer and dying from it was much more common than it was among non-Indigenous women [14]. Being diagnosed with breast cancer was less common for Indigenous women than for non-Indigenous women, but Indigenous women were more likely than non-Indigenous women to die from this cancer [16].

The fact that Indigenous people are more likely than non-Indigenous people to die from cancer could be because [15]:

- the types of cancer they develop are more likely to be fatal

- their cancer may be more advanced by the time it is recognised
- they are less likely to receive adequate treatment.

## What is known about diabetes in the Indigenous population?

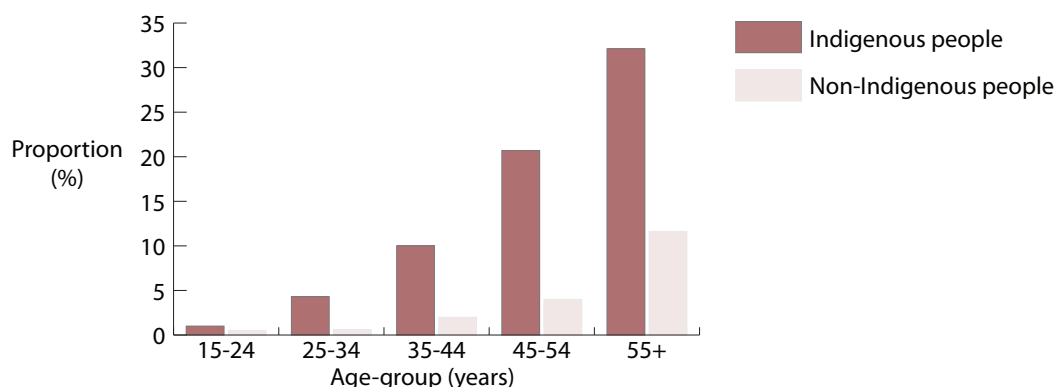
Diabetes is a condition where the body cannot properly process sugars [17]. Normally the body can convert sugars into energy with the help of a hormone called insulin. If someone has diabetes their body stops producing enough insulin. Without enough insulin the body cannot turn the sugars from food into energy, and the sugars stay in the blood. Treating diabetes depends on the type of diabetes that a person has – if someone has type 1 diabetes they will need to inject insulin; if someone has type 2 diabetes they may be able to manage it by living a healthy lifestyle or taking some medication. It is possible for a person to have type 2 diabetes without knowing it.

Diabetes is a major health problem for many Indigenous people, but it is hard to know just how many have the disease. Diabetes was reported by 6% of Indigenous people in the 2004-2005 NATSIHS [12]. However, it is estimated that only around one-half of Indigenous people with diabetes actually know they have it. So the actual percentage of Indigenous people who have the condition may be between 10% and 30% [18, 19].

According to the 2004-2005 NATSIHS, diabetes was more common for Indigenous people living in remote areas (9%) than for those living in non-remote areas (5%) [12]. Diabetes affects Indigenous people at a younger age than it does non-Indigenous people – it affects high numbers of Indigenous people over the age of 35 years, which is about ten years earlier than for non-Indigenous people (Figure 3). Overall, diabetes is around 3.5 times more common among Indigenous people than among other Australians.

Deaths from diabetes were seven times more common for Indigenous people than for non-Indigenous people in 2004-2008 [13].

*Figure 3. Proportions (%) of Indigenous and non-Indigenous people reporting diabetes as a long-term health condition, by age-group (years) 2004-2005*



Source: ABS, 2006 [12]

## What is known about the social and emotional wellbeing of Indigenous people?

Social and emotional wellbeing is a term used to talk about a person's social, emotional, spiritual, and cultural wellbeing. It is similar to 'mental health' (how people think and feel, how they cope with events, and how they take part in everyday life) but social and emotional wellbeing also includes [20]:

- connection to land
- culture
- family
- community
- tradition.

Many things can influence a person's social and emotional wellbeing, including [13, 20]:

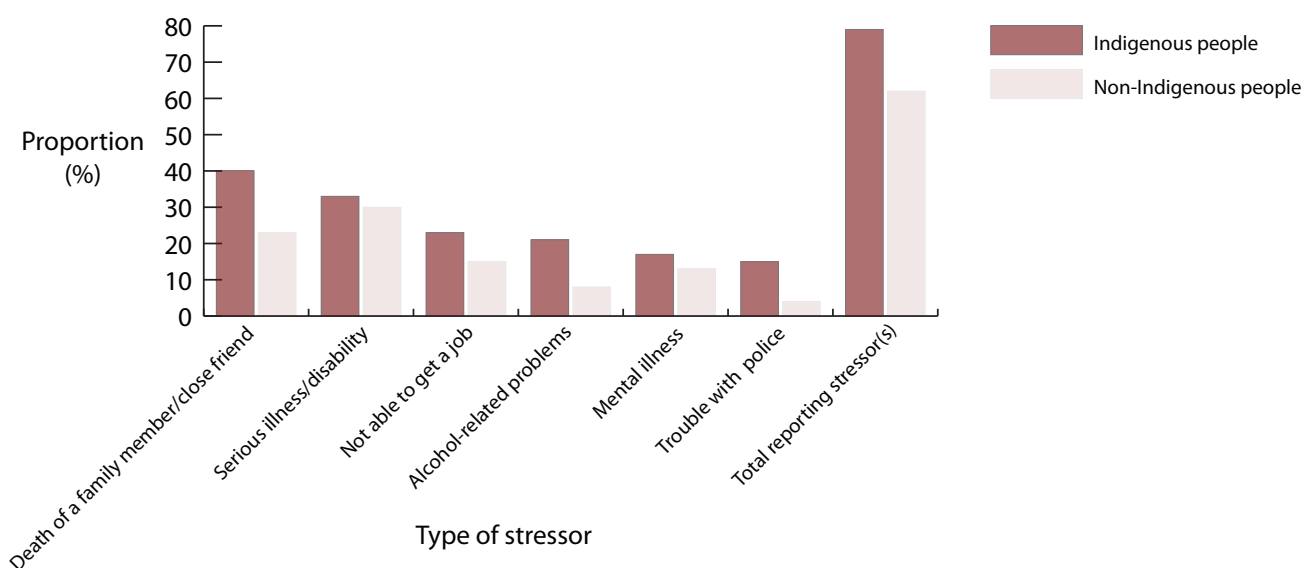
- historical/past events
- discrimination
- illness
- death of friends or family members
- substance and alcohol use
- trouble with the police.

Measuring social and emotional wellbeing is difficult, but it usually relies on 'stressors' (stressful events in a person's life) or self-reported feelings (like stress, happiness, or calmness).

The 2004-2005 NATSIHS found that Indigenous adults were twice as likely as non-Indigenous adults to feel high or very high levels of psychological distress [12].

Indigenous people may have higher levels of psychological distress because they experience more stressors than non-Indigenous people. The 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) found that almost eight-out-of-ten Indigenous people experienced one or more significant stressors in the 12 months before interview [13] (compared with six-out-of-ten for the total population) [21]. Many more Indigenous people than non-Indigenous people reported stressors like: the death of a family member or friend; alcohol or drug related problem; trouble with police; and witness to violence (Figure 4) [13]. Almost one-in-five Indigenous people reported that a member of the family had been sent to jail in the previous 12 months.

Figure 4. Proportion (%) of Indigenous and non-Indigenous people who experienced stressor(s), by type of stressor, 2008 and 2010



Source: AIHW, 2011 [13], ABS, 2011 [21]

The 2008 NATSISS asked questions about how people were feeling (self-reported feelings). It found that most (nine-out-of-ten) Indigenous people felt happy some, most, or all of the time [22]. Around four-out-of-five Indigenous people reported feeling calm and peaceful, full of life, and that they had a lot of energy some, most, or all of the time. This also means that around one-in-five Indigenous people felt calm and peaceful, full of life, or like they had a lot of energy only a little, or none of the time. There is no information to compare the self-reported feelings of Indigenous and non-Indigenous people, but Indigenous people are likely to have lower levels of social and emotional wellbeing because they experience more stressors.

The Western Australian Aboriginal Child Health Survey (WAACHS) found that one-in-four Indigenous children and young people were rated by their parents as being at high risk of 'clinically significant emotional or behavioural difficulties' (serious emotional or behavioural problems that affect a person's day-to-day life) (compared with one-in-seven for the general WA population) [23]. Children whose Indigenous carers (parents or guardians) had been forcibly taken away from their families were at high risk of having clinically significant emotional and behavioural difficulties, more than twice the risk than that of the general WA population. These children also had twice the rates of alcohol and other drug use. Seven-out-of-ten Indigenous children were living in families that had experienced three or more major life stress events (like a death in the family, serious illness, family breakdown, financial problems, or arrest) in the 12 months before the survey, and one-in-five had experienced seven or more major stress events.

In 2008-09, Indigenous people were almost twice as likely to be hospitalised for 'mental and behavioural disorders' than were other Australians [22] ('mental and behavioural disorders' is when a person becomes unwell in the mind and experiences changes in their thinking, feelings, and/or behaviour that affects their day-to-day life).

In 2005-2009, there were 268 Indigenous deaths from 'mental and behavioural disorders' [22]. Indigenous people were twice as likely as non-Indigenous people to die from these disorders.

Deaths for 'mental and behavioural disorders' do not include deaths from 'intentional self-harm' (suicide). Indigenous people are more likely to die from intentional self-harm than non-Indigenous people, especially males [22]. Deaths from intentional self-harm are especially high for young Indigenous people.

## What is known about kidney health in the Indigenous population?

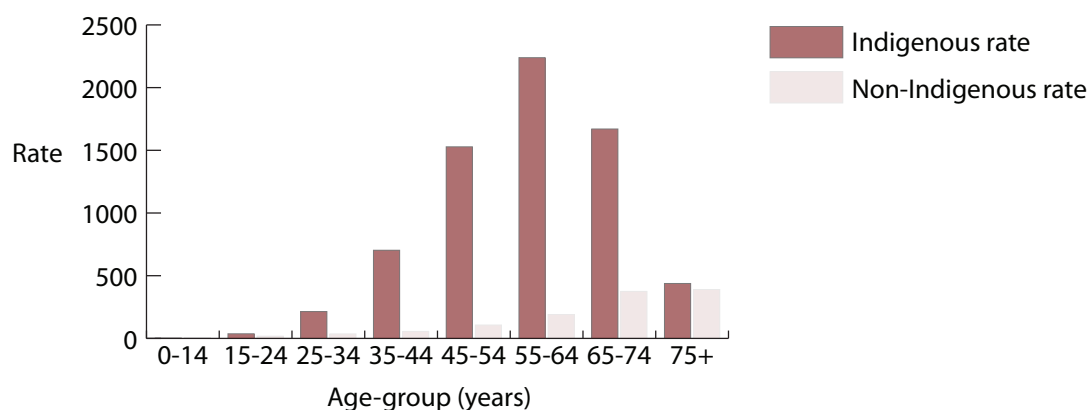
Healthy kidneys help the body by removing waste and extra water, and keeping the blood clean and chemically balanced [24]. When the kidneys stop working properly – as is the case when someone has kidney disease – waste can build up in the blood and damage the body. Chronic kidney disease (CKD) is when the kidneys gradually stop working. End stage renal disease (ESRD) is when the kidneys have totally or almost totally stopped working. People with ESRD must have either regular dialysis (be hooked up to a machine that filters the blood) or a kidney transplant to stay alive.

Kidney disease is a serious health problem for many Indigenous people. In 2007-2009, ESRD was almost ten times more common for Indigenous people than for non-Indigenous people [Derived from 25, 26-28].

ESRD affects Indigenous people when they are much younger than non-Indigenous people – almost two-thirds of the Indigenous people diagnosed with the disease in 2007-2009 were younger than 54 years old (less than one-third of non-Indigenous people were younger than 54 years) (Figure 5) [Derived from 25, 26-28].

The rates of ESRD were highest for Indigenous people living in the NT (18 times higher for Indigenous people than for non-Indigenous people) and WA (more than 12 times higher) [Derived from 25, 26-28].

Figure 5. Rates (per million) of end-stage renal disease for Indigenous and non-Indigenous people, by age-group (years) 2007-2009



Source: Derived from ANZDATA, 2010 [25], ABS, 2008 [26], ABS, 2001 [27], ABS, 2009 [28]

Note: These rates show how many Indigenous and non-Indigenous people had ESRD per million. This means, for example, that for every 1 million Indigenous people aged 45-54 years, just over 1,500 had ESRD in 2007-2009.

Dialysis was the most common reason for Indigenous people to be admitted into the hospital in 2009-10 [29]. Almost one-half of all Indigenous hospital admissions were for dialysis. Indigenous people were admitted to hospital for dialysis around 11 times more often than other Australians.

Some people need to have dialysis every day. Dialysis can be undertaken at hospitals, special out-of-hospital satellite units, or in the home (which requires special equipment and training for the patient, and is very costly) [30]. Accessing dialysis can sometimes be very difficult for Indigenous people, particularly those who live in rural or remote locations and may have to travel to receive treatment.

In 2004-2008, Indigenous people were more than five times more likely to die from kidney disease than were non-Indigenous people [31].

## What is known about injury in the Indigenous population?

Injury generally refers to physical harm to a person's body, most commonly caused by:

- assault
- self-harm
- environmental injuries (e.g. falling over)
- transport accidents [32].

Everyday life situations for Indigenous people can affect the types of injuries and the frequency of injuries experienced. Some factors that can increase the risk of injury include:

- disruption to culture
- socioeconomic disadvantage
- living in rural and remote locations (including increased use of roads in poor condition)
- risky behaviour
- limited access to health services and support services.

Indigenous people were almost twice as likely as non-Indigenous people to be admitted to hospital for injuries in 2009-10 [29]. Injury was the second most common reason for Indigenous hospital admissions (after dialysis). The main causes of Indigenous injury-related hospital admissions in 2009-10 were medical complications, assault, and falls.

In 2004-2008, injury was the third most common cause of death for Indigenous people [33]. The most common causes of injury-related death for Indigenous people were suicide, transport accidents, accidental poisoning, and assault. Indigenous people were twice as likely as non-Indigenous people to die from suicide and three times as likely to die from traffic accidents. Around two-thirds of these deaths happened to young Indigenous people between the ages of 15 and 39 years.

## What is known about respiratory health in the Indigenous population?

The respiratory system includes all the parts of the body involved with breathing, including the nose, throat, larynx (voice box), trachea (windpipe), and lungs [34]. If any of these parts of the body are damaged or diseased, it is called respiratory disease. Common types of respiratory disease include asthma and pneumonia.

Risk factors for respiratory disease include: smoking (including passive smoking), poor environmental conditions (especially areas that are dusty or have a lot of pollen or pollution), poor living conditions, and other diseases (like diabetes and kidney disease). Passive smoking is particularly bad for children.

Disease of the respiratory system was reported by around one-quarter of Indigenous people in the 2004-2005 NATSIHS [12]. Respiratory problems were reported more often by Indigenous people living in non-remote areas (nearly one-third) than by those living in remote areas (nearly one-fifth).

Indigenous and non-Indigenous people had similar levels of most kinds of respiratory disease, but asthma (the condition most often reported by Indigenous people) was 1.5 times more common for Indigenous people [12].

In 2009-10, one-sixth of all hospital admissions for Indigenous people (excluding those for dialysis) were because of a respiratory condition [29].

In 2004-2008, respiratory disease was the cause of death for almost one-tenth (8%) of Indigenous people [13]. Indigenous people were more than twice as likely as other Australians to die from a respiratory disease.

## What is known about eye health in the Indigenous population?

Having healthy eyes is important for everyday life; they are needed to read and study, play sports, drive, and work [35]. There are a number of problems that can affect the health of the eye [36]. The most common conditions are:

- refractive error (problems focusing the eyes)
- diabetic retinopathy (a complication of diabetes that can lead to blindness)
- cataract (clouding of the eyes' lenses)
- infectious diseases (particularly trachoma).

Eye problems are associated with: getting older, smoking, injuries, exposure to ultra-violet (UV) light from the sun, and not eating enough healthy food [36]. Eye health problems can result in low vision (not being able to see properly). This can be corrected with glasses, contact lenses or eye surgery. Eye health problems can also result in blindness.

Many Indigenous people do not have access to specialised eye health services like optometrists [37]. Therefore, even though eye health has improved for Indigenous people, they are still more likely than non-Indigenous people to suffer from poor eye health that is preventable. In the 2004-2005 NATSIHS, eye and/or sight problems were reported by one-third of Indigenous people [12].

The 2008 National Indigenous Eye Health Survey (NIEHS) found that low vision was nearly three times more common for Indigenous adults than for total population adults [38]. Overall, 3% of Indigenous adults suffered vision loss caused by cataracts, but only 65% of Indigenous people who needed cataract surgery received it. Refractive error caused one-half of vision loss in both adults and children.

Diabetes, a major problem for Indigenous people, can cause eye diseases and loss of vision. The 2008 NIEHS found that of the four-out-of-five Indigenous people who had diabetes, only one-fifth had had an eye examination within the last year, and just over one-tenth had sight problems [38].

According to the 2008 NIEHS, blindness was six times more common for Indigenous adults than for total population adults. The main causes of blindness for Indigenous adults were:

- cataracts
- damage to the eye's nerves (optic atrophy)
- refractive error
- diabetic eye disease
- trachoma.

For Indigenous children, the 2008 NIEHS reported that they had better vision than other children in Australia, especially those living in remote areas [38]. There were similar findings in the WAACHS [39]. The 2008 NATSISS found that almost one-in-ten Indigenous children had an eye or sight problem [40].

## What is known about ear health in the Indigenous population?

Ear health is very important for hearing, learning, and for balance [41]. If ears get damaged, people might:

- not be able to hear properly, either for a short time or for the rest of their lives
- have problems learning (because they cannot hear the lessons well)
- have problems learning to speak properly.

There are a number of ear diseases, but the most common among children is called otitis media (OM) [41]. OM is an ear disease where the middle ear is affected by an infection from bacteria or a virus. OM can be very painful and sometimes fluid leaks from the ear (known as 'runny ears'). In other cases, the fluid build-up in the middle ear ('glue ear') can reduce hearing. Ear diseases are associated with people being in crowded homes or day care centres, living in poor conditions, or having poor hygiene. Hearing naturally gets worse for most people as they age.

Indigenous people, especially children and young adults, have more ear disease and hearing loss than other Australians [41, 42]. The 2008 NATSISS reported that one-in-ten Indigenous children had ear and hearing problems [40]. Ear/hearing problems were reported by one-in-eight Indigenous people in the 2004-2005 NATSIHS (which was the same as for non-Indigenous people) [12].

The 2004-2005 NATSIHS reported that OM was much more common for children than adults, and it was more common for Indigenous children than for non-Indigenous children [12]. OM was more common for Indigenous people living in remote areas (4%) than for Indigenous people living in non-remote areas (2%). Indigenous people were three times more likely than non-Indigenous people to get OM.

Almost one-tenth of Indigenous people were partially or completely deaf [12]. Partial or complete deafness was more likely to affect Indigenous people than non-Indigenous people, especially when they were young, but the rate of partial or completely deafness was the same for Indigenous and non-Indigenous people aged 55 years and older.

The WAACHS reported that almost one-fifth of Indigenous children had recurring ear infections (ear infections that keep coming back) [39]. Young children (0-11 years) were more likely to have recurring ear infections than older children (12-17 years). Hearing that wasn't normal was reported by 7% of Indigenous children by their carers. There is a strong link between recurring ear infections and abnormal hearing: almost 28% of children who had recurring ear infections with discharge (runny or glue ears) also had abnormal hearing, compared with 1% of those without ear infections.

## What is known about oral health in the Indigenous population?

Oral health is a term used to describe the health of a person's teeth and gums [43]. If people have unhealthy teeth and gums they will probably have some pain; they may not be able to eat a variety of healthy foods or talk to other people comfortably. Two common oral health problems are caries and gum diseases. Caries is caused by bacteria that decay (break down) the enamel (hard outer part of

the tooth); if caries is not treated the tooth will continue to decay and will have to be removed. Caries is caused by eating a lot of sticky and sweet foods that enable bacteria to grow and multiply. Gum disease (also known as periodontal disease) is caused by bacteria that attack the gums, causing the gums to swell and bleed. If gum disease is not treated, the gums may start to break down and the teeth will become loose because the gums won't be strong enough to hold them in place. Gum disease is caused by poor oral hygiene (poor care of the teeth and gums).

The oral health of Indigenous people is not as good as that of other Australians. The oral health of young non-Indigenous children has improved in recent years, but the oral health of young Indigenous children has generally worsened [44]. Indigenous children have more caries in their deciduous (baby) and permanent (adult) teeth than do non-Indigenous children, and their caries is often more severe. Indigenous children have more decayed, missing and filled teeth than do non-Indigenous children. Indigenous children also had more gingivitis, a mild form of periodontal disease, than did non-Indigenous children.

According to the 2004-2006 National Survey of Adult Oral Health (NSAOH), Indigenous adults had more than twice as much caries as non-Indigenous adults, and had three times the number of decayed surfaces, which often suggests little or no access to timely dental care [45]. Indigenous adults also suffer from more periodontal disease than do non-Indigenous adults. More Indigenous adults than non-Indigenous adults suffer from edentulism (losing all of their teeth), especially at younger ages.

## What is known about disability in the Indigenous population?

Disabilities may affect how a person can move around, how they can learn, or how they can communicate [46, 47]. There are a lot of different kinds of disabilities:

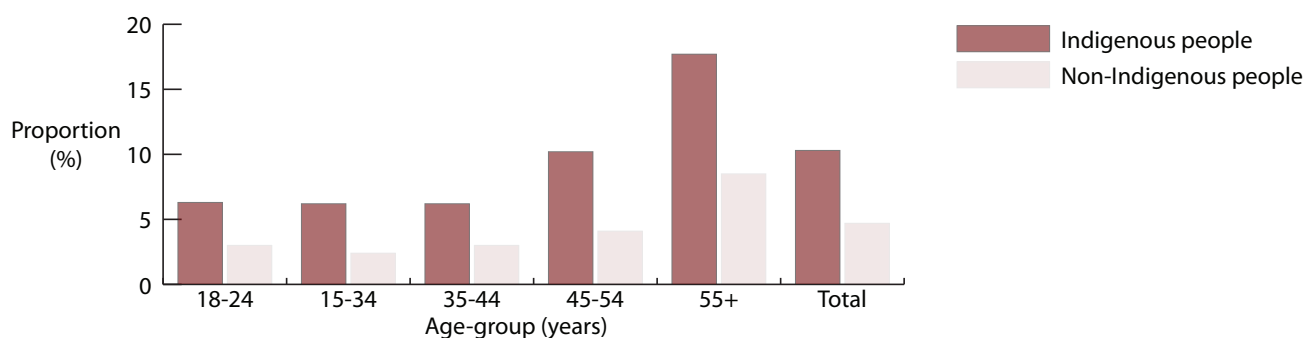
- some disabilities affect the body, others affect the brain
- some disabilities are temporary, others last for a person's whole life
- some people are born with a disability
- some people become disabled as the result of an event (such as a car crash).

Disabilities that are severe and affect how people are able to live their lives are classified as 'profound/severe core activity restriction'.

In 2008, one-half of Indigenous adults had some form of disability [48]. Around one-in-twelve Indigenous adults had a profound/severe core activity restriction.

Disabilities become more common as people get older [22]. In 2008, disabilities, including profound/severe core restrictions, were more common for Indigenous people than for non-Indigenous people at every age (Figure 6). Overall, Indigenous people were more than twice as likely as non-Indigenous people to have a profound/severe core restriction [48].

**Figure 6. Proportions (%) of Indigenous and non-Indigenous people with a profound/severe core restriction, by age-group (years), Australia (non-remote areas), 2008**



Source: Steering Committee for the Review of Government Service Provision, 2011 [22]

## What is known about communicable diseases in the Indigenous population?

Communicable diseases are diseases that a person can catch from another person. These diseases can be caused by: bacteria, viruses, fungus, or parasites. Improvements to personal and environmental cleanliness, and the introduction of new vaccines, have greatly reduced the number of people who catch some of the communicable diseases in Australia.

If a person contracts certain communicable diseases (like tuberculosis) the disease must be notified (which means that the information is collected by health authorities and put together in one place, such as a database). Unfortunately, Indigenous status is often not

reported in notifications. Only WA, SA and the NT reliably identify Indigenous status in disease notifications, and, even then, not for all diseases [49].

Recent information about communicable diseases includes:

- tuberculosis – in 2003-2007, the notifications for Indigenous people were more than ten times higher than for non-Indigenous people [Derived from 50, 51-54]
- hepatitis – in 2008-2010, notifications for hepatitis B were two times higher for Indigenous people than for non-Indigenous people. Notifications for hepatitis C were five times higher for Indigenous people than for non-Indigenous people. Notification of hepatitis A were lower for Indigenous people than for non-Indigenous people [Derived from 28, 55, 56-58]
- *Haemophilus influenzae* type B – in 2003-2006, notifications were almost nine times higher for Indigenous children than for non-Indigenous children 0-4 years [59]
- invasive pneumococcal disease – in 2006-2008, notifications were more than seven times higher for Indigenous people than for non-Indigenous people [13]
- meningococcal disease – in 2003-2006, notifications for Indigenous children were more than two times higher than for other Australian children 0-4 years [59]
- chlamydia and gonorrhoea – in 2008-2010, notifications for chlamydia were almost nine times higher, and notifications for gonorrhoea were around 50 times higher for Indigenous people than for non-Indigenous people [Derived from 28, 55, 58]
- HIV – in 2010, the rate of HIV infection was similar for Indigenous and non-Indigenous people [55].

## What is known about factors contributing to ill-health in the Indigenous population?

Some behaviours and characteristics can affect a person's health. These are called risk and protective factors. Some health risk factors – poor nutrition, not being physically active, smoking, and heavy alcohol drinking – play an important part in causing ill health. By eating a more nutritious diet, getting regular exercise, not smoking, and drinking in moderation, people reduce the risk of developing diseases such as heart disease, diabetes and kidney disease.

Sometimes people cannot totally control the risk factors that may affect their health. For example:

- if fresh fruit and vegetables have been transported a long distance and are very expensive to buy people may not choose them
- if someone works very long days at work, and spends time with their family, they may not be able to find time to exercise regularly
- if someone has a lot of stress in their lives, they may be more likely to drink too much alcohol or smoke tobacco.

### Nutrition

If a person eats healthy food they are more likely to be healthy [60]. A healthy diet includes: a lot of fresh vegetables and fruits; plenty of whole grains; low-fat dairy products; and foods low in fat and salt. Having access to healthy foods can be a challenge for some Indigenous people. This is particularly so for people living in remote locations because food may have to be shipped over long distances or because fresh foods may be expensive.

The 2004-2005 NATSISH found that most Indigenous people ate fruit (86%) and vegetables (95%) every day [12]. Around one-in-eight Indigenous people did not eat fruit everyday (compared with one-in-fourteen for non-Indigenous people) and around one-in-twenty did not eat vegetables every day (compared with one-in-one-hundred for non-Indigenous people). More Indigenous people living in non-remote areas ate fruits and vegetables daily than did those living in remote areas. This is probably because fruit and vegetables are more available and less expensive in non-remote areas than in remote areas.

The 2004-2005 NATSISH found that most Indigenous people drank whole milk, and only around one-in-six Indigenous people drank reduced fat or skim milk [12]. About one-half of Indigenous people usually added salt to their food after it was cooked.

### Physical activity

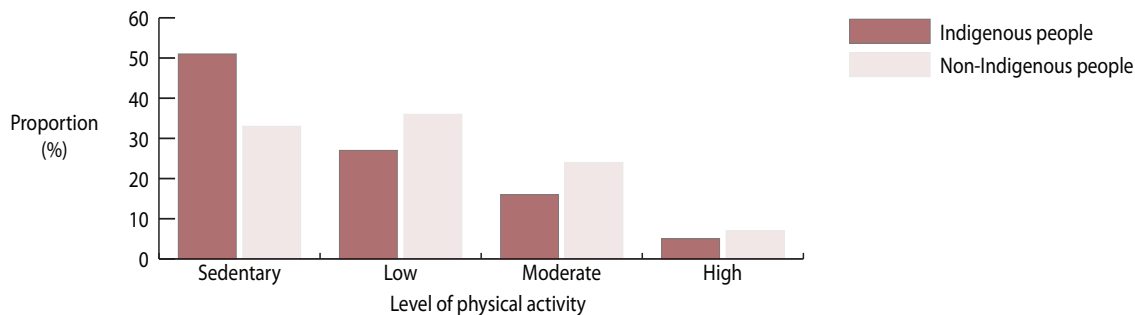
Keeping physically active is important for staying healthy. Physical exercise is good for people's social and emotional wellbeing and reduces the risks of heart problems, stroke, diabetes, and of some cancers [61].

The 2008 NATSISS found that three-quarters of Indigenous children had been active for 60 minutes on every day in the week before the survey [40]. Very few children (3%) did not participate in any physical exercise the week before the survey.

For Indigenous adults, the 2008 NATSISS found that around one-third had taken part in physical activity or sport in the 12 months before the survey [Derived from 62].

The most recent data that can compare the physical activity of Indigenous and non-Indigenous people are from the 2004-2005 NATSIHS. This survey found that more Indigenous people than non-Indigenous people were sedentary (had very little or no exercise) [13]. One-half of the Indigenous people from the survey reported that they were sedentary compared with one-third of non-Indigenous people (Figure 7). Around one-fifth of Indigenous people and one-third of non-Indigenous people had moderate or high levels of physical activity.

Figure 7. Proportions (%) of Indigenous and non-Indigenous people by levels of physical activity, Australia, 2004-2005



Source: AIHW, 2011 [13]

## Tobacco use

Smoking tobacco is a major cause of:

- heart disease
- stroke
- some cancers
- lung diseases
- a variety of other health conditions [33].

Passive smoking also contributes to poor health, particularly for children.

Surveys consistently show that smoking is more common among Indigenous people than among non-Indigenous people. The 2008 NATSISS found that almost one-half of Indigenous adults were current smokers [40]. Between 2002 and 2008, the proportion of Indigenous people who smoked daily fell from 51% to 47%. A survey in 2010 found that around two-fifths of Indigenous people smoked, compared with less than one-fifth of non-Indigenous people [63]. (Being based on a more representative 'sample' of Indigenous people, the estimate for 2008 is likely to be closer to the actual level of smoking among Indigenous people than the 2010 figure.)

In 2008, around one-in-six Indigenous children 0-3 years and one-quarter of Indigenous children 4-14 years lived with someone who usually smoked inside the house [64, 65]. Around one-quarter of Indigenous adults were living with someone who usually smoked inside the house [48].

## Alcohol use

Drinking too much alcohol is associated with [66]:

- liver disease
- diabetes
- some cancers
- brain damage
- cardiovascular disease
- injury
- violence
- self harm.

Also, if a woman drinks alcohol when she is pregnant, the unborn child may be affected by foetal alcohol spectrum disorder (FASD). This term is used to describe the physical, behavioural, and learning problems caused by alcohol damage to the brain and other parts of the body of the unborn baby [67]. The 2008 NATSISS found that 80% of mothers of Indigenous children 0-3 years did not drink

during pregnancy, and 16% drank less alcohol [13]. Only 3.3% drank the same amount or more alcohol during pregnancy.

Indigenous people are much more likely to not drink alcohol (abstain) than non-Indigenous people. The 2008 NATSISS found that more than one-third of Indigenous adults did not drink alcohol (compared with around one-in-eight non-Indigenous adults) [68, 69]. The 2004-2005 NATSIHS found that one-quarter of Indigenous adults did not drink alcohol (compared with around one-in-seven non-Indigenous adults) [13].

However, Indigenous people who drink alcohol are more likely to drink it at high-risk levels than non-Indigenous people. The 2008 NATSISS found that one-in-six Indigenous adults were drinking at high risk levels for a long time ('chronic' risky/high risk drinking) [48]. The 2008 NATSISS found that one-third of Indigenous adults had reported drinking at high risk levels over a short time (binge drinking) in the two weeks before they were interviewed.

In 2004-2008, alcohol was responsible for almost 400 deaths of Indigenous people (about 4% of Indigenous deaths) [13]. Indigenous people were more than six times more likely to die from an alcohol-related reason than non-Indigenous people.

## Concluding comments

Indigenous people in Australia are not as healthy as non-Indigenous people but there have been a number of improvements, including:

- reductions in death rates [13]
- a decrease in deaths from some diseases, like respiratory conditions, stroke, and kidney problems [70]
- a decrease in infant mortality rates [13]
- reductions in some communicable diseases (because more Indigenous people are getting vaccinated) [59, 71]
- a decrease in smoking [40].

The reasons why the health of Indigenous people is worse than that of non-Indigenous people are complex, but represent a combination of general factors (like education, employment, income, and socioeconomic status) and factors having to do with the health sector (like not having access to culturally competent services or support).

Within the health sector, there is a need for:

- programs to improve health, paying attention to the social determinants
- better identification of health conditions before they become serious
- more primary health care services that are accessible to Indigenous people
- greater cultural competence of service providers.

To achieve health improvements for the Indigenous population that will continue over years and decades, more funding needs to be directed to preventive and medical services. It is also important to remember that mainstream services may not be appropriate or suitable for many Indigenous people, who may also have difficulty accessing Medicare and pharmaceutical benefits. However, without reductions in the overall disadvantages experienced by many Indigenous people (the social determinants), even the best health services and programs will have little success in improving the health of Indigenous people.

The Council of Australian Governments (COAG), has committed to 'closing the gap' in Indigenous disadvantage, including health, by dealing with health and factors that have an impact on health, such as housing and education. This is seen as a positive step in reducing Indigenous disadvantage. The rate of improvement in Indigenous health, however, will depend on how much money, time and other resources are given in the medium to long term.

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### Bibdjool

Donna Lei Rioli - a Western Australian Indigenous artist - was commissioned by the HealthInfoNet in 2008 to create a new logo incorporating a gecko for the redevelopment of its website. The gecko was chosen because it is one of a few animals that are found across the great diversity of Australia.

Donna is a young Tiwi/Nyoongar woman who is dedicated to the heritage and culture of the Tiwi people on her father's side, Maurice Rioli, and the Nyoongar people on her mother's side, Robyn Collard. Donna enjoys painting because it enables her to express her Tiwi and Nyoongar heritage and she combines the two in a unique way.

Donna interpreted the brief with great awareness and conveyed an integrated work that focuses symbolically on the pathway through life. This is very relevant to the work and focus of Australian Indigenous HealthInfoNet in contributing to improving the health and wellbeing of Indigenous Australians.