

Australian Indigenous
HealthInfoNet

Summary of Australian Indigenous health, 2010



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Australian Indigenous Health/InfoNet

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Summary of Australian Indigenous health, 2010

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Introduction

This summary includes facts about common health problems and risk factors among Australian Indigenous peoples. More detailed information about the health of Indigenous peoples, associated social and economic circumstances, and risk factors, is available from the HealthInfoNet's website (www.healthinfonet.ecu.edu.au).

What is known about the Indigenous population?

There were around 562,681 Indigenous people living in Australia in 2010 [1]. Detailed population information is not available for 2010, but in 2006 there were around 463,900 Aboriginal people, 33,100 Torres Strait Islanders, and 20,200 people of both Aboriginal and Torres Strait Islander descent [2]. Indigenous people comprise 2.6% of the total Australian population. NSW has the largest number of Indigenous people. The NT has the highest percentage of Indigenous people among its population. For more details on the Indigenous population in each state and territory see the table below.

Table 1. Estimated Indigenous population, Australia, by state and territory, 30 June 2010

State or territory	Indigenous population	Proportion of Australian Indigenous population (%)	Proportion of state or territory population (%)
NSW	165,190	29.4	2.3
Vic	36,734	6.5	0.7
Qld	160,514	28.5	3.6
WA	76,218	13.5	3.4
SA	30,382	5.4	1.9
Tas	20,086	3.6	4.0
ACT	4,709	0.8	1.3
NT	68,599	12.2	30.5
Australia	562,681	100.0	2.6

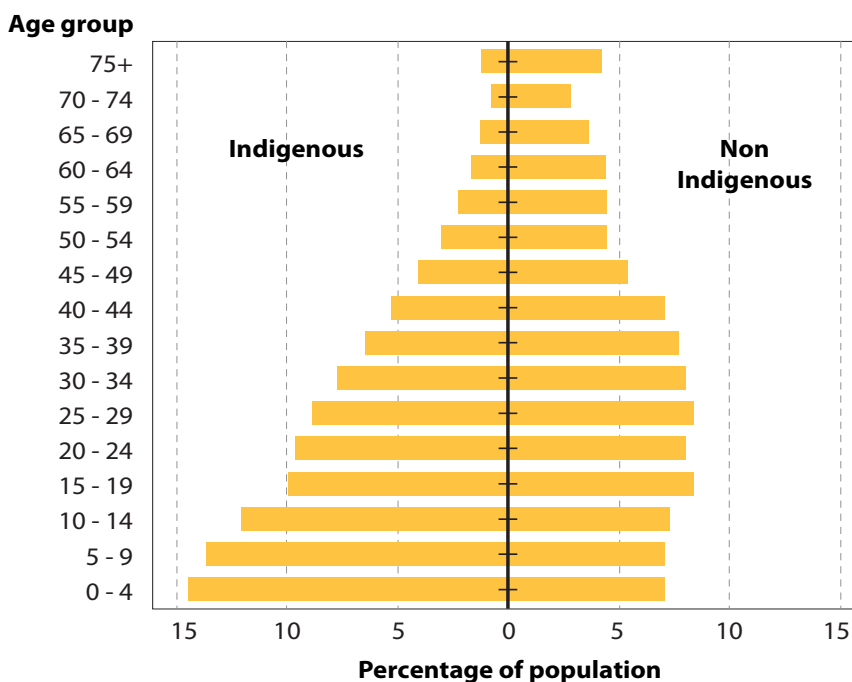
Source: Derived from ABS, 2009 [1], ABS, 2010 [3]

Notes: Indigenous population figures based on June 2009 projections, total population figures based on demographic information from December 2010

Almost 32 out of 100 Indigenous people live in major cities, 21 out of 100 in inner regional areas, 22 out of 100 in outer regional areas, 10 out of 100 in remote areas, and 16 out of 100 in very remote areas [2].

The Indigenous population is much younger overall than the non-Indigenous population [2]. According to the 2006 Australian census, about 37 out of 100 Indigenous people were aged less than 15 years, compared with 19 out of 100 non-Indigenous people. About 3 out of 100 Indigenous people were aged 65 years or over, compared with 13 out of 100 non-Indigenous people. A comparison of the age profiles of the Indigenous and non-Indigenous populations is provided in the following figure.

Figure 1. Population pyramid of Indigenous and non-Indigenous populations, 2010



Source: Derived from ABS, 2009 [1]

What is known about Indigenous births?

In 2008, there were 15,011 births registered in Australia where one or both parents were Indigenous (five out of every 100 births) [4]. Overall, Indigenous women had more children and had them at younger ages than did non-Indigenous women.

Based on the pattern of births in recent years, Indigenous women would have, on average, around 2.5 births in their lifetime, compared with 2.0 births for non-Indigenous women [4]. Approximately 70 out of 100 Indigenous mothers were 30 years or younger when they had their babies, compared with 46 out of 100 non-Indigenous mothers. About 20 in 100 Indigenous mothers were teenagers, compared with four in 100 of all Australian mothers.

In 2007, babies born to Indigenous women on average weighed 200 grams less than those born to non-Indigenous women [5]. 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 health problems.)

What is known about Indigenous deaths?

Indigenous people are much more likely to die before they are old than people in the rest of the Australian population [6, 7]. The most recent estimates from the Australian Bureau of Statistics (ABS) indicate that an Indigenous male born in the period 2005-2007 could be expected to live to 67.2 years, about 11.5 years less than a non-Indigenous male at that time (who could expect to live to 78.7 years). In the same period, an Indigenous female could be expected to live to 72.9 years, which is almost 10 years less than a non-Indigenous woman (82.6 years) [8]. (These ABS estimates, which are considerably higher than previous ones, reflect its revised procedures for estimating Indigenous life expectancy and are not comparable with previous estimates.)

In 2008, there were 2,472 deaths registered to people identified as Indigenous [6]. Many Indigenous deaths are incorrectly identified as non-Indigenous — the actual number of Indigenous deaths is likely to be around 4,000.

After taking account of the fact that the Indigenous population is much younger overall than the non-Indigenous population, the death rates for Indigenous males and females are around three times higher than those of their non-Indigenous counterparts [9]. (Death rates relate the numbers of deaths to the total number of people.)

Babies born to Indigenous women are more likely to die in their first year than those born to non-Indigenous women [6]. In 2006-2008, the infant mortality rate for babies born to Indigenous women was highest in the NT (almost 14 babies died out of 1,000 births) and lowest in SA (less than seven babies died out of 1,000 births). (The rate for the total Australian population was 4.1 deaths per 1,000 births in 2008.)

The leading causes of death in 2008 for Indigenous people living in Australia were: cardiovascular disease (including heart disease and strokes); external causes (including transport accidents, and self-harm); and cancer [10]. More information about these causes of death is provided below.

Specific health conditions

What is known about cardiovascular disease in the Indigenous population?

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 [11]. Heart and related conditions are around 1.3 times more common for Indigenous than for non-Indigenous people, with high blood pressure, the most commonly reported condition, being 1.5 times more common.

Cardiovascular disease (CVD) was the leading cause of death for Indigenous people living in Qld, WA, SA and the NT in 2002-2005, with deaths from CVD being three times more common for Indigenous people than for non-Indigenous people [12]. These are the only states and territories with adequate reporting of Indigenous status on death registrations. Indigenous people are much more likely to die from CVD than other Australians at any age, but particularly in younger age groups.

Heart attacks and closely related conditions caused almost two-thirds of the deaths from CVD of Indigenous males and around one-half of those of Indigenous females [9]. Strokes caused almost one-in-seven of the 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?

As is the case with information about other health conditions, the extent and impact of cancer among Indigenous people is under-estimated, but the available information suggests that the rate of new cases (incidence rate) of cancer is slightly less for Indigenous people than for non-Indigenous people living in NSW, Vic, Qld, WA, SA and the NT in 2000-2004 [9, 13]. Incidence rates were higher for Indigenous people than for non-Indigenous people for lung and other smoking-related cancers, cancer of unknown primary site and cervical cancer. Rates were lower for Indigenous people than for non-Indigenous people for colorectal cancer, breast cancer, prostate cancer and lymphomas.

In contrast to the lower overall incidence rates of cancer among Indigenous people, cancer death rates were around 1.5 times higher for Indigenous males and females than for their non-Indigenous counterparts.

The leading causes of Indigenous cancer deaths include cancers of the digestive organs and lung cancer [9]. Smoking-related cancers are more common among Indigenous people than among non-Indigenous people. Cervical cancer is more common among Indigenous women than among non-Indigenous women, but breast cancer is less common. Although the incidence of breast cancer in Indigenous women is lower than for non-Indigenous women, they have higher age-standardised death rates from this cancer [9].

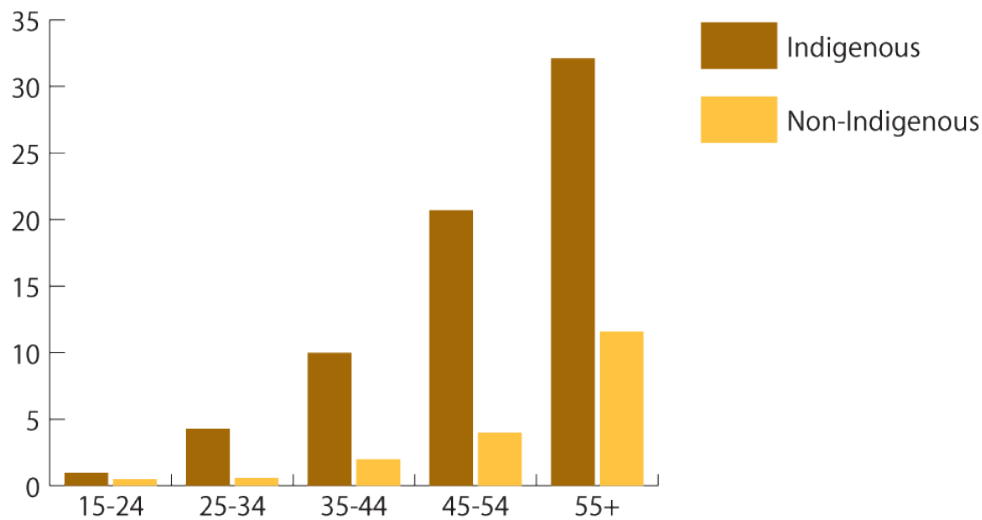
The fact that Indigenous people are more likely than non-Indigenous people to die from cancer could be because the cancers they develop (such as cancers of the lung and liver) are more likely to be fatal, the stage of cancer may be more advanced by the time it is recognised and they are less likely to receive adequate treatment [13]. The patterns of Indigenous cancer incidence and cancer-related deaths are largely explained by the higher prevalence of risk factors, most notably tobacco use.

What is known about diabetes in the Indigenous population?

Diabetes is a major health problem among Indigenous people, but it is difficult to know just how many Indigenous people have the disease. Diabetes was reported by 6% of Indigenous people in the 2004-2005 NATSIHS, with the condition being more common among people living in remote areas (9%) than among those living in non-remote areas (5%) [11]. Overall, diabetes is around three-and-a-half times more common among Indigenous people than among other Australians.

Only around one-half of people with diabetes know they have the condition, so the levels reported in the 2004-2005 NATSIHS are consistent with the estimate made in a major review of evidence from a variety of studies that concluded the overall prevalence among Indigenous people was between 10% and 30% [14].

Figure 2. Diabetes: proportions of people reporting diabetes as a long-term health condition by Indigenous status, 2004-2005



Source: ABS, 2006 [11]

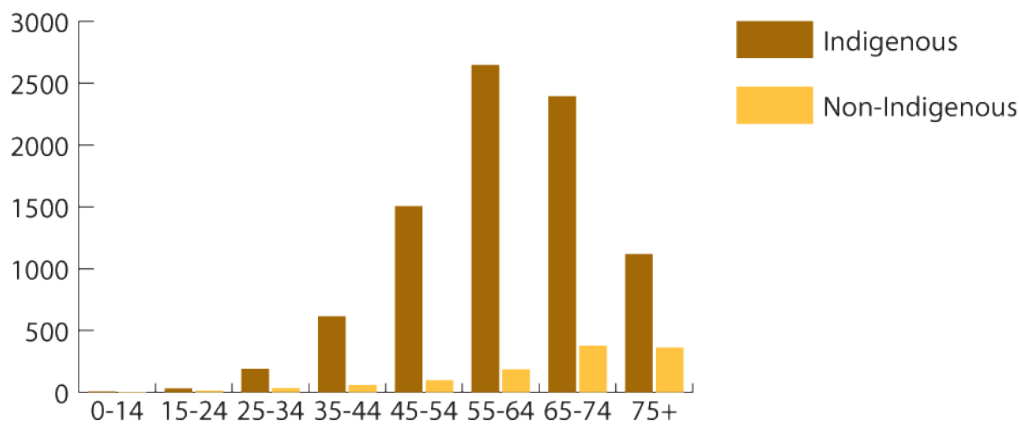
Deaths from diabetes were 9 times more common for Indigenous people than for non-Indigenous people living in Qld, WA, SA and the NT in 2002-2006 [15]. For people aged 35-54 years, deaths from diabetes were 23 times more common for Indigenous males than for non-Indigenous males, and 37 times more common for Indigenous females than for non-Indigenous females.

What is known about kidney disease in the Indigenous population?

Kidney disease is a very serious health problem for many Indigenous people. End-stage renal disease (ESRD), which occurs when the kidneys are no longer able to function, is much more common for Indigenous people than for non-Indigenous people across most of the country [16].

ESRD occurs at younger ages among Indigenous people than among non-Indigenous people - almost three-fifths of the Indigenous people diagnosed with the disease in 2004-2007 were aged less than 55 years compared with less than the one-third of non-Indigenous people diagnosed in that period (Figure 3) [Derived from 16]. After taking account of the fact that the Indigenous population is younger overall than the non-Indigenous population (see 'What is known about the Indigenous population?'), notifications of ESRD were almost nine times more common for Indigenous people than for non-Indigenous people in 2004-2007. The highest rates were for Indigenous people living in the NT (2,366 per 1,000,000), WA (1,076 per 1,000,000), Qld (886 per 1,000,000) and SA (845 per 1,000,000).

Figure 3 End-stage renal disease: age-specific notification rates (per million), by Indigenous status, Australia, 2004-2007



Source: Derived from McDonald, Excell & Livingston, 2008 [16]

Dialysis (a treatment for ESRD, in which the work of the kidneys is done artificially) accounted for more than two-fifths of all hospital admissions among Indigenous people in 2008-09 (many of these involved repeat admissions for the same people, some on an almost daily basis) [17]. Indigenous people were more than 12 times more likely to be hospitalised for dialysis than non-Indigenous people.

ESRD is especially prevalent in remote communities [9]. For people living in remote and very remote areas, Indigenous people were 26 and 12 times more likely, respectively, than non-Indigenous people to register for ESRD treatment in 2006. Communities in remote Australia have limited access to treatment options for ESRD, such as dialysis and transplant facilities, requiring many Indigenous patients to travel in order to receive treatment [18].

For the period 2002-2006, deaths from chronic kidney disease were seven times more common for Indigenous males and 11 times more common for Indigenous females than for their non-Indigenous counterparts living in Qld, WA, SA and the NT [19]. The greatest differences between Indigenous and non-Indigenous people occurred in the 45-54 age group: deaths from chronic kidney disease were 31 times more common for Indigenous males than for non-Indigenous males and 51 times more common for Indigenous females than for non-Indigenous females [20].

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

The 2004-2005 NATSIHS found that Indigenous people aged 18 years or older were twice as likely as their non-Indigenous counterparts to feel high or very high levels of psychological distress (after adjustments were made for the differences in the structures of the Indigenous and total Australian populations) [11].

The higher overall levels of psychological distress reported by Indigenous people are consistent with the relative frequencies with which the two populations experienced specific stressors in the previous 12 months. According to the 2004-2005 NATSIHS, 77% of Indigenous people experienced one or more significant stressors in the previous 12 months [11]. In comparison, 59% of the total population reported in the 2006 General Social Survey that they experienced one or more significant stressors in the previous 12 months [21]. The proportions reporting specific stressors were generally higher for Indigenous people than for the total population, particularly for the 'death of a family member or friend', 'alcohol or drug related problem', 'trouble

with police, and 'witness to violence'. Almost one in five Indigenous people reported that a member of the family had been sent to jail in the previous 12 months, but that stressor was not reported for the total population.

The Western Australian Aboriginal Child Health Survey (WAACHS) reported that 24% of Indigenous children and young people aged 4-17 years were rated by their parents as being at high risk of clinically significant emotional or behavioural difficulties (compared with 15% in the general Australian population) [22]. Children of Indigenous carers who had been forcibly separated from their families were more than twice as likely to be at high risk of incurring clinically significant emotional and behavioural difficulties, and had twice the rates of alcohol and other drug use. Seven out of 10 Indigenous children were living in families that had experienced three or more major life stress events (such as death in the family, serious illness, family breakdown, financial problems or arrest) in the 12 months prior to the survey, and 22% had experienced seven or more of such events.

Indigenous people were almost twice as likely to be hospitalised for mental and behavioural disorders than were other Australians in 2008-09 [17]. Indigenous males were 5.8 times more likely and Indigenous females 3.1 times more likely to die from these disorders in 2001-2005 than were their non-Indigenous counterparts [9]. In terms of specific disorders, the death rate for 'mental and behavioural disorders due to psychoactive substance use' was 14 times higher for Indigenous males aged 35-44 years than for non-Indigenous males in that age group. The rate for Indigenous females in this age group was 12 times higher than their non-Indigenous counterparts. In 2003-2007 death rates from intentional self-harm were generally between 1.5 and 3.5 times higher for Indigenous males and females living in NSW Qld, WA, SA and the NT than for their non-Indigenous counterparts [23]. Indigenous people died from suicide at much younger ages than non-Indigenous people.

What is known about injury in the Indigenous population?

Indigenous people are more likely to die from transport accidents, intentional self-harm and assault than other Australians [9]. For Indigenous people living in Qld, WA, SA and the NT in 2001-2005, the leading causes of death from injuries for males were intentional self-harm (35%), transport accidents (27%), and assault (8%), and for females they were transport accidents (30%), intentional self-harm (18%) and assault (16%). Injury was the second most common cause of death for Indigenous males and the fourth most common cause of death for Indigenous females – rates were around three times those of the total Australian population.

Over 13% of all admissions to hospital of Indigenous people living in NSW, Vic, Qld, WA, SA and the NT in 2008-09 were as a result of an injury of some sort (excluding those for renal dialysis) [17]. Admissions to hospital for injury were twice as common for Indigenous people than for non-Indigenous people.

What is known about respiratory disease in the Indigenous population?

Disease of the respiratory system was reported by 27% of Indigenous people who participated in the 2004-2005 NATSIHS [11]. These problems were reported more frequently by Indigenous people living in non-remote areas (30%) than by those living in remote areas (17%). The proportions represent a slight decrease from those reported to the 2001 National Health Survey.

The overall levels of respiratory disease were similar for Indigenous and non-Indigenous people, but asthma, the condition most often reported by Indigenous people, was 1.6 times more common for Indigenous people than for non-Indigenous people [11].

Almost 11% of all admissions to hospital of Indigenous people living in NSW, Vic, Qld, WA, SA and the NT in

2008-09 were as a result of a respiratory condition (excluding those for renal dialysis) [17]. Admissions to hospital for a respiratory condition were almost three times more common for Indigenous people than for non-Indigenous people.

Respiratory disease was responsible for almost 9% of all deaths of Indigenous people living in Qld, WA, SA and the NT in 2001-2005, with death from a respiratory cause being around four times more common for Indigenous people than for non-Indigenous people [20].

What is known about communicable diseases in the Indigenous population?

It is compulsory for some communicable diseases to be notified. The States and Territories collect the information, which is then collated and published by the National Notifiable Disease Surveillance System. Indigenous status is often not reported in notifications, and only the information from WA, SA and the NT is believed to be complete enough for publication by Indigenous status [9]. Information for Australian HIV/AIDS cases relates to all states and territories and is collated and published by the National Centre in HIV Epidemiology and Clinical Research [24].

Recent information about communicable diseases includes:

- tuberculosis – the rate of newly diagnosed cases for Indigenous people in 2003-2007 was more than ten times the rate for non-Indigenous people [Derived from 25, 26-29];
- hepatitis – the notification rates for hepatitis B and C were higher for Indigenous people living in WA, SA and the NT in 2006-2008 than for their non-Indigenous counterparts, with rates four and three times higher respectively. Notification rates for Indigenous people for hepatitis A in 2005-2007 were almost 9 times higher than that for non-Indigenous people [Derived from 30, 31-33];
- *Haemophilus influenzae* type B – the notification rate in 2003-2006 for Indigenous children aged less than five years was almost 11 times that for the total Australian population in that age group [34];
- invasive pneumococcal disease – in 2003-2006 the incidence of IPD was 4.6 times higher among Indigenous people than among non-Indigenous people in NSW, WA, SA and the NT [34];
- meningococcal infection – the notification rate for Indigenous people living in NSW, WA, SA, Vic and the NT in 2003-2006 was more than twice that of the total population of those states [34];
- chlamydia and gonorrhoea – notification rates for Indigenous people living in WA, SA, Vic, Qld and the NT in 2008 were four and 37 times higher, respectively, than those for non-Indigenous people [24]; and
- HIV/AIDS – the rate for HIV infection was similar for Indigenous and non-Indigenous people from 2004-2008 [24] as was the rate of AIDS diagnoses in 2007 [32].

What is known about eye health in the Indigenous population?

Eye health has improved for Indigenous people but they are still more likely than non-Indigenous people to suffer from preventable conditions. Trachoma, for example, is an eye infection that is found mainly in the Indigenous population [35, 36]. Many Indigenous people also experience difficulty in accessing optometrist or specialist services [36]. In the 2004-2005 NATSIHS, eye and/or sight problems were reported by 30% of

Indigenous people [11]. Of increasing concern due to high rates of diabetes in the Indigenous population, is diabetic retinopathy, a complication that can cause eye damage [36, 37].

The 2008 National Indigenous Eye Health Survey (NIEHS) found blindness rates in Indigenous adults were six times the rate found in surveys of mainstream adults [36]. Low vision rates in Indigenous adults were nearly three times the rate for mainstream adults. Major causes of blindness in Indigenous adults were cataract, optic atrophy, refractive error, diabetic eye disease and trachoma. Overall, 3% of Indigenous adults were found to suffer vision loss from cataract; only 65% of Indigenous people needing cataract surgeries received them. Refractive error was responsible for half of vision loss in both adults and children, almost 40% of adults could not see normal print. For Indigenous adults nearly 40% reported having diabetes, and of those only 20% had had an eye examination within the last year, 12% of those with diabetes had visual impairment. The rate of active trachoma in children was 4%, the infection was found to be less common in urban areas, however, in 50% of very remote communities it was endemic.

For Indigenous children, the 2008 NIEHS reported that they had better vision than their mainstream peers especially in remote areas [36]. There were similar findings in the WAACHS [38]. The 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) collected information on Indigenous children's sight issues including: long sightedness; short sightedness; partial or total blindness; glaucoma; or lazy eye. Almost one in ten (9%) Indigenous children aged 4-14 years were reported to have experienced an eye or sight problem [39].

What is known about ear conditions in the Indigenous population?

The level of ear disease and hearing loss among Indigenous people remains higher than that of the general Australian population, particularly among children and young adults [40, 41]. Otitis media (OM), particularly suppurative forms, is associated with some impairment of hearing, with major implications for language development and learning difficulties [41]. The risk of permanent hearing loss increases if OM is not adequately treated and followed up.

The 2008 NATSISS collected information on the ear and hearing problems of Indigenous children with one in ten (10%) aged 4-14 years reported as having experienced an ear or hearing problem [39].

Ear/hearing problems were reported by 12% of Indigenous people who participated in the 2004-2005 NATSIHS [11]. Complete or partial deafness was reported by 9% of Indigenous people, but the level of otitis media was higher for Indigenous people living in remote areas (4%) than for those living in non-remote areas (2%). After adjusting for differences in the age structures of the two populations, otitis media was nearly three times more common for Indigenous people than for non-Indigenous people. The levels of complete or partial deafness among Indigenous people were around two times or more those among non-Indigenous people for age groups up to 34 years.

The WAACHS reported that nearly 20% of Indigenous children aged 0-17 years had recurring ear infections [38]. Children 0-11 years were more likely (20%) to have recurring ear infections than children aged 12-17 years (14%). Abnormal hearing was reported by carers for 7% of the children aged 4-17 years. Of children with recurring ear infections with discharge, nearly 8% had abnormal hearing compared with 1% of those without ear infections.

What is known about oral health in the Indigenous population?

The oral health of Indigenous people is not as good as that of other Australians. In contrast to the situation for young non-Indigenous children, whose oral health has improved in recent years, that of young Indigenous children has generally declined [42]. Indigenous children have more caries in their deciduous (baby) and permanent (adult) teeth than non-Indigenous children, and their caries are often more severe. Indigenous children have more decayed, missing and filled teeth than non-Indigenous children, with the largest difference observed in younger children. Indigenous children also have more gingivitis, a mild periodontal disease, than non-Indigenous children.

Indigenous adults have more than twice as many caries than non-Indigenous adults and have three times the number of decayed surfaces, which often indicates a lack of access to timely dental care [43]. Indigenous adults also suffer from more periodontal disease and much higher levels of edentulism (complete tooth loss), especially at younger ages.

What is known about skin infections and infestations in the Indigenous population?

Skin infections, which are more common for Indigenous people than for non-Indigenous people, are often the result of poor living conditions. The most common skin infections affecting Indigenous people are scabies (caused by a mite) and streptococcal pyoderma (a bacterial infection) [44, 45]. Scabies, in particular, is a problem in many remote Indigenous communities where up to half of the children may be infected.

Skin diseases cause very few deaths directly, but they can be linked with serious complications. They did, however, account for about 1 out of every 25 hospital separations in 2008-09 for patients identified as Indigenous (excluding those for renal dialysis), at a rate more than twice that of non-Indigenous people [17].

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

Indigenous people generally experience more risk factors for ill-health than do other Australians. Contributing generally to the poor health status of many Indigenous people are: social factors (such as dispossession, dislocation and discrimination); educational factors (such as poor levels of schooling); economic factors (such as income and employment); and physical environmental factors (such as housing). These social, educational, economic and environmental disadvantages underlie specific health risk factors (such as alcohol and other drug misuse, smoking, nutrition, obesity and physical inactivity), and often contribute to lack of access to good quality health care. Alcohol misuse and smoking tobacco are major causes of health problems for Indigenous people.

Alcohol

Excessive alcohol use can contribute to liver disease, diabetes, some cancers, brain damage and cardiovascular disease [46]. Alcohol use can also be a contributor to injury and violence. Consumption in pregnancy can affect the unborn child leading to foetal alcohol spectrum disorder, a range of physical, behavioural and cognitive abnormalities caused by alcohol damage to the brain and other parts of the body of the unborn baby [47].

The 2007 National Drug Strategy Household Survey (NDSHS) found that Indigenous people were more likely than other Australians to abstain from alcohol consumption, (23% compared with 17%), but were also more

likely to consume alcohol at risky or high-risk levels for harm in the short term (27% compared with 20%) [48]. Over the five-year period from 2000-2004, 1,145 Indigenous Australians died from injury and disease caused by alcohol [49]. The average age of those who died was 35 years.

Tobacco

Smoking tobacco is a major cause of heart disease, stroke, some cancers, lung diseases, and a variety of other health conditions [20]. Passive smoking also contributes to poor health, with children particularly susceptible.

Surveys consistently reveal that the prevalence of smoking is higher among Indigenous people than among non-Indigenous people. The 2001 National Drug Strategy Household Survey (NDSHS), for example, found that 45% of Indigenous people aged 14 years or older smoked daily - more than twice the proportion of their non-Indigenous counterparts (19%) [50]. However, the gap is starting to narrow. The 2007 NDSHS reported that 34% of Indigenous people were smokers, compared with 19% of the non-Indigenous population [48], which suggested the gap started to narrow. However, the most recent survey of smoking by Indigenous people, conducted as part of the 2008 National Aboriginal and Torres Strait Islander Social Survey, found that 45% of those aged 15 years and over were current smokers [39]. This indicates little has changed since 2001.

Aboriginal and Torres Strait Islander peoples, on average, smoked more cigarettes per week than other Australians (115 compared with 97) [48]. Two out of three Indigenous children live in a household with at least one regular smoker and one in four children live in a household in which at least one resident regularly smokes indoors [51].

Smoking is responsible for one in five of all Indigenous deaths and is the most preventable cause of poor health and early death among Indigenous people [52, 53].

Summary

Indigenous people remain the least healthy sub-population in Australia, even though there have been improvements in a number of areas in recent years and there appears to have been some slight reductions in mortality [9].

The reasons why the health status of Indigenous people remains much worse than that of non-Indigenous people are complex, but represent a combination of general factors – such as education, employment, income and socioeconomic status – and factors more specific to the health sector. As the Australian health ministers noted in their introduction to the 2003 *National Strategic Framework for Aboriginal and Torres Strait Islander Health*, achievement of substantial improvements in Indigenous health will depend on long-term collaborative approaches involving Indigenous leaders and communities, the health and non-health sectors, and all levels of government [54].

Within the health sector, there is a need for further improvement in: health advancement programs; identification of health conditions before they become serious; and substantial expansion of primary health care services. To achieve long-term health benefits, funding needs to be directed to a wide range of preventive and clinical services. Funding should take account of the fact that mainstream services may not be accessible for many Indigenous people, who may also have difficulty in accessing Medicare and pharmaceutical benefits. However, without substantial reductions in the overall disadvantages experienced by many Indigenous people, even fully committed approaches within the health sector will have a limited impact on achieving major improvements in Indigenous health status.

The recent 'closing the gap' commitments by Australian governments, through the Council of Australian Governments (COAG), represent, for the first time, a coordinated, multi-sector approach to addressing the substantial health and other disadvantages experienced by Indigenous people. The commitments offer hope that real progress will be achieved in reducing these disadvantages, but the extent to which the gaps are closed will depend on the allocation of adequate resources over the medium to long term.

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