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Australian Institute of Health and Welfare

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Submission to an

Inquiry into Regional and Remote Indigenous Communities

by the

Australian Senate Select Committee on Regional and Remote Indigenous Communities

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Inquiry into regional and remote Indigenous communities

The Australian Institute of Health and Welfare (AIHW) welcomes the invitation to make a submission to the Inquiry into regional and remote Indigenous communities. This submission will present published data on the health and wellbeing among Indigenous people living in remote and very remote areas, as per the Terms of Reference and will also highlight current data and information gaps.

1. Terms of reference

a) The effectiveness of Australian Government policies following the Northern Territory Emergency Response, specifically on the state of health, welfare, education and law and order in regional and remote Indigenous communities

The AIHW has been funded by the Department of Health and Ageing (DoHA) to manage the data entry, analysis and reporting of the NTER CHCI data – Child Health Checks and follow-up data collections: Chart review, Audiology and Dental. This section of the submission reports on the current state of children's health in regional and remote Indigenous communities using the CHCI.

As of 17 October 2008, CHC forms had been received for an estimated 63% (10,251) of Indigenous children living in the intervention prescribed areas. The largest proportion of children for whom CHC forms had been received was from the Arnhem region (72%), followed by the Barkly and Katherine regions combined (69%), Central Australia (65%) and Darwin Rural region (51%).

The CHCI data identified the key health conditions affecting these children, including oral health problems (43%), history of recurrent chest infection (38%), skin problems (31%), ear disease (30%) and anaemia (15%). Among infants (children aged less than one year), a number of risk factors for SIDS were highly prevalent – 75% of Indigenous children who had CHCs were living in a household with a smoker, 73% of the infants were at risk due to bed sharing, 35% were at risk from soft sleeping surfaces and loose bedding, and 23% were at risk due to prone sleeping (Table 1).

The prevalence of conditions and risks varied across the regions. Compared with the other three regions, children in Arnhem region had the highest rates of oral health problem (50%), ear disease (34%), and children living in a household with a smoker (86%). Darwin rural had the highest rates of children with a history of recurrent chest infections (47%), but the lowest rate of children with ear disease (24%). Central Australia had the lowest proportion of children in households with a smoker (58%) and the lowest proportion of children with oral health problems (36%). Infants in the Barkly/Katherine region were most likely to share a bed (79%), a risk factor for SIDS, but were the least likely to have recurrent chest infections (33%).

The NTER CHCI can be used to assess the extent to which children who were referred for follow up or treatment received their care. During the child health check 69% of children were referred to at least one type of service for follow-up including primary health care (39%), dental (35%) and audiology services (14%). Of the 3,911 children who needed follow-up care, 33% received follow-up care for all health conditions for which they had received a referral and a further 28% had received follow-up care for some of their health conditions (by October 08, Table 2).

Children who were referred to Primary Health Care (PHC) for their follow-up were most likely to receive this care, including 89% of children with a skin condition, 86% of those with ear conditions, and 90% of those with an oral health condition. Children referred for specialist or other services were least likely to receive follow-up: 21% of those with oral health problems, 43% of those with ear problems, and 50% of those with cardiac and respiratory abnormalities. Further research is needed to identify whether these lower follow-ups are due to a lack of services or barriers to service use.

b) The impact of state and territory government policies on the wellbeing of regional and remote Indigenous communities

While the AIHW does not directly assess and report on the impact of state and territory government policies on the wellbeing of regional and remote Indigenous communities, the AIHW does report on the wellbeing of Indigenous Australians, including health, health determinants, welfare, access to housing and/or homelessness services, aged care and other services and where possible the information in these reports are disaggregated by remoteness.

Previous research has shown that place of residence is strongly associated with health status in Australia. People living in regional and remote areas generally have poorer health (higher mortality, lower life expectancy, higher rates of chronic diseases), higher rates of health behaviours associated with poor outcomes (such as smoking), are more disadvantaged socioeconomically, have more driving risks (e.g. poorer road conditions and longer travelling times), and more jobs with higher risks such as primary production and mining (Table 3). People in regional and remote areas have lower access to GPs and specialist services, longer patient transportation times, and are more likely to use hospital emergency departments as a source of primary care.

The health disparities between Indigenous and other Australians are well-documented, and include inequalities on health determinants and outcomes. However, the higher proportion of Indigenous Australians in remote area populations contributes to, but does not completely account for, the generally poorer health of people living in remote areas. In fact, living in regional or remote areas conveys additional risks to Indigenous people as well.

For example, the rates of end-stage renal disease (ESRD) among Indigenous Australians are highest in outer regional, remote, and very remote areas (Table 4), as is the percentage of babies who are born low-birthweight, compared with those living in major cities (Table 5). Diabetes (9% in remote areas compared with 5% in non-remote areas) and heart/circulatory problems are also more prevalent among Indigenous people living in remote areas compared with those in non-remote areas. Indigenous Australians in regional and remote areas have some of the highest rates of acute rheumatic fever and rheumatic heart disease in the world, with the incidence rates for Indigenous Australians 80 times that of other Australians. In 2003–2006, there were over 150 new or recurrent cases of acute rheumatic fever in the Top End of the Northern Territory – 97% of these were Indigenous Australians. For the same period in Central Australia, there were 97 cases of acute rheumatic fever registered, all of which were Indigenous Australians.

The types of life stressors reported by Indigenous people also varied by remoteness (Table 6). Indigenous people living in remote or very remote areas were more likely than those in major cities to say that they, their family and/or friends had been a witness to violence; experienced overcrowding at home; had a member of family sent to jail/currently in jail; and/or had a gambling problem. Indigenous people living in Inner Regional areas reported, on average, 2.2 stressors in the previous 12 months; those in Major Cities reported an average

of 2.6 stressors, whereas those living in Remote or Very Remote areas reported an average of 3.0 stressors. These stressors are likely related to the socioeconomic and environmental disadvantages cited previously. For example, 2% of Indigenous houses are community rental housing in major cities compared with 55% in remote Australia, and more Indigenous clients received support for homelessness in regional and remote areas than in major cities.

In some areas of health, however, there are no differences by remote or regional status within the Indigenous population, and in some indicators those in remote areas report better health or health-related behaviours (although the rates are much higher than for the non-Indigenous population). For example, 19% of Indigenous adults in remote areas report their health as fair or poor, compared with 23% of those in non-remote areas (Table 7). While 36% of Indigenous people aged 15 years and over reported a disability or a long-term health condition in 2002, there was little difference in remote and non-remote areas (35% and 37% respectively). Over one-quarter (27%) of Indigenous adults reported high or very high levels of psychological distress, but these levels varied little by remoteness (Table 8). The proportion of Indigenous people identified as needing assistance with core activities were lowest in outer regional (4%) remote (4%) and very remote (3%) areas (compared with 5% in major cities).

While Indigenous adults in remote areas were more likely than those in non-remote areas to report drinking at short-term risky/high risk-levels (23% and 18% respectively), they were also much more likely to have abstained from alcohol consumption in the previous 12 months than Indigenous adults in non-remote areas (38% compared with 19%).

Tobacco use increases the risk of a number of diseases including chronic lung disease, cardiovascular disease and many cancers, and the rates of smoking are much higher among Indigenous Australians than other Australians. In 2004–05, the proportion of Indigenous adults who reported they were current smokers was similar across all remoteness areas (the rate varied from 46% in Major Cities to 51% in Very Remote areas) (Table 9). Being overweight or obese is a risk factor linked to various chronic diseases including Type 2 diabetes and cardiovascular disease, and the proportions again showed little variation between remote and non-remote areas in 2004–05 (60%).

These findings (and the data presented in the appendix tables) highlight the significant health disadvantages of the Indigenous population, and the areas in which rural and remote Indigenous Australians fare worse. From a policy perspective, it is important to note that there are social, economic, and historical factors which affect the health of the Indigenous population overall (eg. more severe socioeconomic disadvantage and sense of control over one's own life), along with characteristics of living in regional and remote areas which convey higher health risks and thus require particular interventions to address those issues (eg. increases in appropriate health services, better housing conditions, health promotion).

c) The health, welfare, education and security of children in regional and remote Indigenous Communities

The AIHW provides evidence that informs policies and programs aimed at improving children's health and welfare. In general children are defined to include those aged 0–14 years, however, depending on the availability of detailed information on age, the age range can be extended to 17 years.

As with the Aboriginal and Torres Strait Islander population as a whole, Indigenous children suffer poorer health than their non-Indigenous counterparts. Indigenous babies have lower birthweight and higher rates of infection, injury and death than non-Indigenous children.

Mortality rates of Indigenous children are also higher than those of non-Indigenous children. The Indigenous infant mortality rate is nearly three times higher than that of other Australian infants (12.3 and 4.2 deaths per 1,000 live births in 2002-2006) and Indigenous children are 3 times as likely to die as non-Indigenous children (39 per 100,000 children vs. 13 per 100,000 non-Indigenous children in 2002–2006). Although the risk of Sudden Infant Death Syndrome (SIDS) among Indigenous infants has declined significantly since 1991, the rate of deaths from SIDS among Indigenous infants remains 5 times higher than for other Australian infants (1.1 per 1,000 live births and 0.2, respectively).

The evidence demonstrates that, as with adults, the health status of Indigenous children varies by the remoteness of their residence. Babies born to Indigenous mothers are twice as likely as those born to non-Indigenous mothers to be low birthweight (13% and 6% respectively). Over the period 1991–2005, there was a significant increase in the proportion of low birthweight babies born to Indigenous mothers. The proportion of low birthweight babies born to Indigenous mothers was highest in remote and very remote areas (15% and 14% respectively), and lowest in inner regional areas (12%).

Appropriate and timely antenatal care can help identify those mothers at risk of having a premature or low birthweight baby. In 2005 96% of Indigenous mothers attended at least one antenatal care session, and this varied little by remote status. However, over a third of Indigenous mothers in very remote areas had their first antenatal visit in their third trimester, compared with about 25% of those in other areas. In spite of this late start; Indigenous mothers in very remote areas were most likely to attend five or more antenatal sessions (78%), while those in remote areas were least likely to attend five or more antenatal sessions (70%) (Table 10).

Antenatal care can also provide advice and support to help women reduce or stop their smoking during pregnancy and discuss the risks of household tobacco exposure to the health of children. These issues are highly relevant for the Indigenous population, regardless of region. The proportion of Indigenous mothers smoking during pregnancy is similar across all regions, ranging from 51% in major cities to 56% in inner regional areas. Indigenous mothers in major cities are nearly four times as likely as non-Indigenous mothers to smoke during pregnancy. In all other regions, Indigenous mothers are nearly 3 times as likely as non-Indigenous mothers to smoke during pregnancy (Table 11).

Over three quarters (77%) of Indigenous children aged 0–14 years in very remote areas lived in households with a regular smoker and in households with a regular smoker who smokes at home indoors. This proportion was somewhat lower in the other regions where about two thirds of children lived in households with regular smokers and over a quarter of children lived in households where there was someone who smoked regularly inside the house (Table 12).

Differential health status by region carries through infancy to childhood illnesses. Although there has been an overall decline in the proportion of Indigenous children in remote areas who report ear and hearing problems, the rates are highest for Indigenous children in remote areas: in 2004–05, 12% of male and 13% of female children in remote areas reported diseases of the ear and mastoid process compared with 9% and 8% of those in non-remote areas (Table 13).

Combined with the NTER CHCI data presented in section a, these data highlight some of the key opportunities for improving the health of Indigenous children in regional and remote areas. Ensuring that pregnant women in regional and remote areas receive adequate antenatal care and advice/support to reduce smoking, children's levels of environmental tobacco exposure, and risks for SIDS can have protective effects on children's health.

Providing adequate specialist treatments such as dental services, for child health issues which are beyond the scope of Primary Health Care is another area for improvement.

Levels of educational attainment affect future health and well-being through the accumulation of social capital and higher levels of socioeconomic status. Data on the proportion of year 3, 5, and 7 students who achieve the reading, writing, and numeracy benchmarks demonstrate the variations between Indigenous and non-Indigenous students and the regional variations among Indigenous students.

In the three benchmark categories and in all three school years, Indigenous students are significantly less likely than non-Indigenous students to meet the benchmarks. For all children, the likelihoods of meeting these benchmarks decrease with year in school and with distance from metropolitan areas.

Indigenous students in remote and very remote areas demonstrate significant educational disadvantages. Even in year 3, only about half of the Indigenous children in very remote areas meet the benchmarks in reading (54%), writing (46%), and numeracy (50%). By year 7, these disadvantages are quite pronounced, with only 28% of Indigenous children in very remote areas meeting the reading benchmark, 39.3% meeting the writing benchmark, and 20% meeting the literacy benchmark. Addressing the Indigenous/non-Indigenous educational inequity, along with the significant geographic inequities will be critical for the future health and well-being of the Indigenous population (Table 14).

2. Data gaps and data development issues

The data sources used to compile the information presented in this submission include both administrative data and surveys. A major problem in understanding the health and wellbeing of people in regional and remote areas is the availability, representativeness and quality of data. Some surveys are limited by the sample size and therefore the level disaggregation possible. Other surveys, ask different questions of people living in remote areas, reducing comparability. For administrative data sets the issues are more related to differences in the completeness of Indigenous identification by remoteness – with people living in remote areas being more likely to identify as Indigenous than those living in urban areas. Hence it is difficult to dissociate the extent to which observed difference in health and wellbeing by remoteness are a reflection of differences in health status or differences in identification. In addition, it is of policy interest to know how much of the poor health observed in remote areas.

Information on area of residence needed to derive remoteness categories is not available for many administrative data sources. For example, the juvenile justice and child protection data sets described above cannot be disaggregated by geographical area below a very broad scale. The lack of specific locational information in some health and welfare administrative data sets makes it impossible to present information for Indigenous people by remoteness.

A number of strategies exist to improve the availability and quality of data in data collections. These include enhancing the scope of a collection, improving the quality of Indigenous identification and the collection of information that would allow the geographical location of the subjects to be known. For surveys the strategies are focused on enhancing the sample size to allow better disaggregation of data and ensuring the same questions are asked in remote and non-remote areas to allow for better comparability of

information. These limitations and gaps in existing information are examined in more detail below.

2.1 Gaps in existing information

Primary Health Care Data Collection

Currently Indigenous Australians access a range of primary health care services. They include general practitioners, hospital outpatients and emergency clinics, Indigenous specific health services funded by the Commonwealth and state funded community health services. No universally comparable information is collected on the primary health care accessed by Indigenous Australians. It is important that a national primary health care data collection be established to monitor important areas of care similar to those funded through the Healthy for Life Program. These include preventive care, maternal and child health and chronic disease care.

2.2 enhancing the scope of existing collections

National Perinatal Data Collection (NPDC) – in order to improve information on maternal and child health, information on antenatal visits during pregnancy and their timing as well as on risk factors during pregnancy such as smoking, alcohol and Illicit drug use need to be collected.

Housing data – Whilst information on public rental housing and State Owned Managed Indigenous Housing (SOMIH) collections contain unit records (a record for every household in this case) and can provide detail about all Indigenous households living in regional and remote locations, the Indigenous Community Housing (ICH) data collection is only now progressing towards a unit record collection for all states and territories. It can currently provide information about the housing provided by ICH organisations in some states, but the extension to all jurisdictions will result in a comprehensive, flexible data set which can provide data about individual ICH households and dwellings in remote and regional communities

Accurate household and dwelling level information about Indigenous specific housing in the Northern Territory is not available because SOMIH does not operate in NT and ICH data are not provided to the AIHW. It is proposed that Indigenous specific housing will be moved to a Public Housing management framework and when that happened, unit record data will be collected by the AIHW.

2.3 Improving Indigenous identification is some data collections

Supported Accommodation Assistance Program National Data Collection SAAP NDC – A number of data collections are limited by the incomplete recording of Indigenous clients in these data sets. This results in a high proportion of missing or unspecified responses to the question of whether an individual is Indigenous. For example, the SAAP NDC reports on people turned away from SAAP services. The data report that on an average night during the collection period about one in two persons requesting accommodation at the service are turned away. Although the data set includes Indigenous status in about 28% of records in 2006-07 Indigenous status was not stated. This makes it impossible to examine the provision of accommodation by Indigenous status.

Aged care data – A similar situation exists in information on Home and Community Care HACC and in the reporting of demographic data for the National ATSI Flexible Aged Care Program and Multi-purpose Services. So many records are missing the Indigenous status

information that it is not possible to report aged care provision to Indigenous people in rural and remote communities.

Disability data – the quality of Indigenous status in the Commonwealth State/Territory Data Agreement (CSTDA) data has been slowly improving. For example, in 2003-04, 8% of CSTDA clients were reported as having an unknown Indigenous status. By 2007-08, only 5% of the records had no Indigenous status.

2.4 Data not available by remoteness

Young people in juvenile justice system – Data on young people in juvenile justice facilities or under juvenile justice supervision can be disaggregated by state and territories but cannot be disaggregated by geographical location. The same is the case for children in the child protection system where the child protection data set does not allow for the reporting of the data by region or remoteness.

3. Relevant publications:

Australian Institute of Health and Welfare (AIHW) 2009. Aboriginal and Torres Strait Islander Health Performance Framework, 2008 report: Detailed analyses. AIHW cat. no. IHW 22. Canberra: AIHW.

Australian Institute of Health and Welfare (AIHW) 2009 (forthcoming). A picture of Australia's children. Canberra: AIHW.

Australian Institute of Health and Welfare (AIHW) 2009. Homeless Aboriginal and Torres Strait Islander clients in SAAP 2006–07: a report from the SAAP National Data Collection. Cat. no. HOU 190. Canberra: AIHW.

Australian Institute of Health and Welfare and Department of Health and Ageing 2008a. Progress of the Northern Territory Emergency Response Child Health Check Initiative: preliminary results from the Child Health Check and follow-up data collections. Cat. no. IHW 25. Canberra: AIHW.

Australian Institute of Health and Welfare (AIHW) 2008b. AIHW 2008a. Australia's Health 2008: the eleventh biennial health report of the Australian Institute of Health and Welfare. Cat. no. AUS 99. Canberra: AIHW.

Australian Institute of Health and Welfare (AIHW) 2008c. Rural, regional and remote health: indicators of health system performance. Rural Health Series no. 10. Cat. no. PHE 103. Canberra: AIHW.

Australian Institute of Health and Welfare (AIHW) 2008d Rural, regional and remote health: indicators of health status and determinants of health. Cat. no. PHE 97. Canberra: AIHW.

Australian Institute of Health and Welfare & Australian Bureau of Statistics 2008d. The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2008 AIHW cat. no. IHW 21; ABS cat. no. 4704.0.

Australian Institute of Health and Welfare (AIHW) 2008. Disability support services 2006–07: national data on services provided under the Commonwealth State/Territory Disability Agreement. Cat. no. DIS 52. Disability series. Canberra: AIHW.

Australian Institute of Health and Welfare 2007. Aboriginal and Torres Strait Islander Health Performance Framework, 2006 report: detailed analyses. AIHW cat. no. IHW 20. Canberra: AIHW.

Measuring the social and emotional wellbeing of Aboriginal and Torres Strait Islander peoples, AIHW Cat. No. IHW 24. Canberra: AIHW

Progress of the Northern Territory Emergency Response Child Health Check Initiative: Health Conditions and Referrals as at May 2008 (available at: http://www.health.gov.au/internet/main/publishing.nsf/Content/nterchciProgressReport

Roy Morgan Research 2008. State Owned and Managed Indigenous Housing (SOMIH) Survey 2007 National Report. Melbourne: Roy Morgan Research

Other AIWH publications may also be of relevance or interest to the Inquiry and these are available on our website (<u>www.aihw.gov.au</u>).

	Relevant	Yes	No	Unsure	Missing	Total	Total
Health condition	age (years)	(%)	(%)	(%)	(%)	(%)	(no.)
Ears and eyes							
Ear disease ^(a)	All	30.0	67.7	0.0	2.3	100.0	8,997
Trachoma ^(b)	6–15	7.9	91.2	0.0	0.9	100.0	2,523
Visual impairment ^(c)	6–15	0.7	89.0	0.0	10.3	100.0	4,982
Oral health							
Untreated caries	All	40.2	50.0	0.1	9.7	100.0	8,997
Gum disease	All	5.4	84.8	0.1	9.7	100.0	8,997
Other oral health issue	All	3.8	86.4	0.0	9.8	100.0	8,997
Any oral health issue	All	43.2	47.1	0.0	9.8	100.0	8,997
Skin							
Skin sores (4 or more)	All	9.9	84.7	0.0	5.3	100.0	8,997
Scabies	All	7.9	86.7	0.0	5.4	100.0	8,997
Ringworm	All	6.2	88.4	0.0	5.4	100.0	8,997
Any skin problem	All	30.6	64.1	0.0	5.3	100.0	8,997
Cardiac and respiratory							
History of rheumatic heart disease ^(d)	All	1.2	89.0	5.3	4.6	100.0	8,831
History of asthma	All	5.7	84.3	4.6	5.4	100.0	8,997
History of recurrent chest infection	All	37.9	53.1	4.4	4.6	100.0	8,997
Anaemia							
Anaemia ^(e)	All	15.4	74.8	0.0	9.7	100.0	8,997
Physical growth							
Stunting ^(f)	All	4.1	90.5	0.0	5.4	100.0	8,997
Underweight ^(g)	All	9.1	87.3	0.0	3.6	100.0	8,997
Wasting ^(h)	0–4	8.6	84.5	0.0	7.0	100.0	3,274
Overweight ⁽ⁱ⁾	2–15	5.3	89.5	0.0	5.3	100.0	7,699
SIDS risk factors							
Prone sleeping	Less than 1	22.7	62.4	3.3	11.6	100.0	662
Soft sleeping surfaces and loose bedding	Less than 1	34.6	50.5	2.9	12.1	100.0	662
Overheating	Less than 1	15.0	68.6	4.2	12.2	100.0	662
Bed sharing	Less than 1	73.0	14.7	0.8	11.6	100.0	662

 Table 1: Health conditions, Indigenous Australian children who had a NTER Child Health Check

(continued)

Table 1 (continued): Health conditions, Indigenous Australian children who had a NTER Child Health Check

Health condition	Relevant age (years)	Yes (%)	No (%)	Unsure (%)	Missing (%)	Total (%)	Total (no.)
Other		(14)	(14)	(14)	(14)	(14)	(,
Regular smoker ^(j)	12–15	7.4	87.2	1.1	4.4	100.0	1,400
Smoker in household ^(k)	All	75.1	22.3	0.5	2.1	100.0	8,997
Immunisation due	All	15.7	76.8	2.6	4.9	100.0	8,997

(a) Defined as having symptoms (e.g. perforation, bulging) or a diagnosis (e.g. otitis media, otitis externa) of ear disease in at least one ear.

(b) Includes only those children who are known to have been screened for trachoma as part of the CHC (i.e. 51% of children in the age range).

(c) Defined as having a visual acuity score of less then '6/12' in at least one eye.

(d) This question was not included in one of the versions of the Child Health Check form.

(e) Defined as a haemoglobin (Hb) level less than 110g/L.

(f) Defined as below minus two standard deviations from mean height for age of reference population.

(g) Defined as below minus two standard deviations from mean weight for age of reference population.

(h) Defined as below minus two standard deviations from mean weight for height of reference population.

(i) Defined as equal to or greater than the 95th percentile in relation to Body Mass Index (BMI)-for-age relative to the reference population.

(j) In some but not all of the form versions, this was defined as one or more cigarettes per day.

(k) In most but not all of the form versions, the question referred to a 'regular' smoker in the household.

Note: Excludes non-standard CHC forms.

Source: AIHW analysis of NTER CHCI Child Health Check data entered as at 17 October 2008.

Table 2: Health conditions with referrals to PHC and specialist or other services, by whether the child has been seen at least once at chart review (initial or initial and exit), Indigenous Australian children who had a NTER CHC

	Pri	mary Healt	h Care (PH	IC)		Speci	alists and	other serv	ices	Total
-	Child	d seen ^(a)		not yet seen ^(b)	Total number with	Child	l seen ^(a)	Child	not yet seen ^(b)	number with specialist/
Health condition	no.	%	no.	%	PHC referral	no.	%	no.	%	other referral
Ears	421	86.1	68	13.9	489	285	42.5	386	57.5	671
Eyes	43	81.1	10	18.9	53	13	24.5	40	75.5	53
Oral health	239	90.5	25	9.5	264	278	21.1	1,041	78.9	1,319
Skin	450	88.6	58	11.4	508	9	50.0	9	50.0	18
Cardiac and respiratory abnormalities	158	77.5	46	22.5	204	76	50.3	75	49.7	151
Abdominal abnormality	4	100.0	0	0.0	4	3	60.0	2	40.0	5
Anaemia	404	85.4	69	14.6	473	7	38.9	11	61.1	18
High BSL	27	25.0	81	75.0	108	3	33.3	6	66.7	9
Nutrition	16	100.0	0	0.0	16	1	20.0	4	80.0	5
Underweight	35	79.5	9	20.5	44	12	38.7	19	61.3	31
Overweight	14	70.0	6	30.0	20	3	30.0	7	70.0	10
Growth problems	88	68.2	41	31.8	129	23	32.9	47	67.1	70
Substance use	3	75.0	1	25.0	4	0	0.0	0	0.0	0
Immunisation due	197	77.6	57	22.4	254	4	57.1	3	42.9	7
Investigative tests	1	50.0	1	50.0	2	2	40.0	3	60.0	5
Other conditions	204	82.9	42	17.1	246	48	46.6	55	53.4	103

(a) Some children had more than one related condition (i.e. ear condition can include bulging and otitis media). If the child had been seen for any of the conditions, then it was considered that the child had been seen for that condition.

(b) This group also includes unsure, not stated and missing.

Source: AIHW analysis of the NTER CHCI data and Chart review data as at 17 October 2008.

Selected characteristics	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote	Australia
Total population living in each area	68	20	9	2	1	100
Indigenous population living in each area	32	22	22	9	15	100
Population in each area who are Indigenous	1	3	5	13	45	2
Adults employed in primary production and mining ^(a)	<1	3	7	13	10	2
Adults employed in other industry sectors	58	50	46	45	44	55
Proportion of employed Indigenous Australians in $CDEP^{^{(b)}}$	<1	2	8	14	76	100
Adults not in workforce or unemployed	38	43	39	33	36	39
Adults participating in unpaid work in each area						
Unpaid childcare	30	31	31	30	36	30
Volunteer	17	24	26	29	24	20
Unpaid assistance to a person with a disability	11	12	11	9	10	11
Highest level of education obtained						
Bachelor degree	44	29	27	27	27	40
Certificate or Diploma	56	71	73	73	1	60
Year 12 Schooling	52	35	34	35	29	47
Year 10 schooling	22	32	32	31	28	25
Areas classified as being in the top quarter of socioeconomic areas ('best-off') $^{(c)}$	34	14	8	10	2	26
Areas classified as being in the bottom quarter of socioeconomic areas ('worst-off') $^{\rm (c)}$	20	28	33	26	53	24
Reticulated water supplies adequately fluoridated ^(d)	81	39	34	30	29	49
Median household income (weekly)	1,084	854	841	1,004	977	1027
Housing loan repayments (monthly)	1,400	1,083	979	1,000	693	1,300
Rent (weekly)	220	160	140	119	60	200

Table 3: Selected characteristics of Indigenous and total population, by remoteness, 2006

(a) Primary production includes agriculture, forestry and fishing.

(b) CDEP is Community Development Employment Project.

(c) These figures are based on the Index of Relative Socio-Economic Disadvantage (IRSD), one of four SEIFAs (Socioeconomic Indexes for Areas) developed by the ABS (See Box 5.2). In this table, the figures refer to those Census Collection Districts classified as being the 25% least disadvantaged ('best-off'), and the 25% most disadvantaged ('worst-off').

(d) Fluoridation data are derived from a rolling survey, and do not relate specifically to 2007.

Source: ABS Census 2006, AIHW 2005.

	Nur	nber	Per o	cent ^(b)	Indigenous	Non- Indigenous	
	Indigenous	Non- Indigenous	Indigenous	Non- Indigenous	No. per 1,000 ^(c)	No. per 1,000 ^(c)	Rate ratio ^(d)
Major Cities	71	4,229	11.8	70.6	0.4	0.1	3.5*
Inner Regional	62	1,219	10.3	20.4	0.5	0.1	5.5*
Outer Regional	169	465	28.1	7.8	1.1	0.1	14.4*
Remote	116	56	19.3	0.9	1.6	0.1	19.7*
Very Remote	184	19	30.6	0.3	1.4	0.1	18.3*
Australia ^(f)	615	6,001	100.0	100.0	0.8	0.1	8.4*

Table 4: Incidence of end-stage renal disease, by Indigenous status and remoteness, 2004–2006^(a)

* Represents results with statistically significant differences in the Indigenous/other comparisons.

(a) Calendar year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Proportion of Indigenous and other patients in each age group.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio Indigenous: non-Indigenous.

(e) Australia total includes cases where remoteness category was not known.

Source: AIHW analysis of ANZDATA data.

Table 5: Live-born low birthweight babies by maternal characteristics and Indigenous status, 2003–2005

	Indigenou	s	Non-Indigen	ious		
	Number	%	number	%	Ratio	
Remoteness						
Major Cities	857	12.8	31,431	6.1	2.1	
Inner Regional	573	12.1	8,463	6.2	1.9	
Outer Regional	988	13.0	4,075	6.1	2.1	
Remote	452	14.7	659	5.7	2.6	
Very Remote	723	13.6	233	5.7	2.4	
Total	3,601	13.1	44,882	6.1		

Source: AIHW analysis of NPSU National Perinatal Data Collection.

	Major Cities	Inner Regional	Outer Regional	Remote or Very Remote	Australia
Type of stressor					
Serious illness or disability	30.0	28.4	25.8	28.7	28.4
Serious accident	9.9	7.5	6.8	12.1	9.4
Death of a family member or close friend	41.8	39.2	40.5	45.6	42.1
Divorce or separation	12.4	14.2	11.2	7.3	11.1
Not able to get a job	20.2	15.8	16.4	14.6	16.9
Involuntary loss of job	12.4	7.6	5.0	3.7	7.4
Alcohol-related problems	20.9	15.3	18.1	24.1	20.1
Drug-related problems	19.2	14.5	15.9	15.2	16.4
Witness to violence	11.2	10.8	9.5	23.5	14.2
Abuse or violent crime	11.3	10.1	10.1	13.2	11.4
Trouble with the police	15.6	12.9	17.1	19.0	16.3
Gambling problem	12.6	8.8	11.4	19.4	13.5
Member of family sent to jail/currently in jail	17.2	13.6	17.7	24.7	18.7
Overcrowding at home	11.3	8.9	16.1	29.2	16.9
Discrimination/racism	11.7	11.0	10.4	13.1	11.6
Total who experienced at least one of these stressors	77.2	76.7	75.1	78.0	76.9
None of the above	22.5	22.6	23.8	20.9	22.4
Total ^{(a)(b)}	100.0	100.0	100.0	100.0	100.0
Total no. of Indigenous people ^(b)	78,700	51,400	55,400	72,800	258,300

Table 6: Type of life stressor experienced, by remoteness, Indigenous persons aged 18 years and over, 2004–05 (per cent)

(a) Multiple response item—total exceeds 100.0%.

(b) Includes missing responses.

Source: AIHW analysis of the 2004–05 NATSIHS.

Table 7: Self-assessed health status, Indigenous persons aged 15 years and over, by remoteness, 2004–05^{(a)(b)}

		Self-asse	ssed health sta	itus			
	Excellent	Very good	Good	Fair	Poor	Total(c)	Total number
			Per cen	t			
Major Cities	12	31	32	16	8	100	89,350
Inner Regional	14	29	34	16	7	100	58,372
Outer Regional	15	30	33	16	5	100	65,700
Total non-remote	14	30	33	16	7	100	213,422
Remote	14	24	38	17	7	100	24,456
Very Remote	13	30	41	13	3	100	55,763
Total remote	13	28	40	14	5	100	80,219
Total	14	30	35	16	6	100	293,641

(a) Self-reported data from the National Aboriginal and Torres Strait Islander Health Survey 2004–05.

(b) Information for some persons aged 15–17 years was provided by a parent or guardian.

(c) Includes self-assessed health status 'not stated'.

Source: ABS and AIHW analysis of 2004–05 National Aboriginal and Torres Strait Islander Health Survey.

Table 8: Level of psychological distress by selected characteristics, Indigenous persons aged 18 years and over, 2004–05 (per cent)

	Low/moderate	High/very high	Total ^(a)
Sex			
Male	77.1	21.4	100.0
Female	66.2	32.2	100.0
Age			
18–24 years	72.8	26.0	100.0
25–34 years	71.4	27.1	100.0
35–44 years	69.6	29.2	100.0
45–54 years	69.3	29.4	100.0
55 years and over	73.8	23.0	100.0
Remoteness			
Major Cities	74.2	25.2	100.0
Inner Regional	70.8	29.1	100.0
Outer Regional	68.7	29.6	100.0
Remote or Very Remote	70.4	26.0	100.0
Total ^(a)	71.3	27.2	100.0
Total no. of Indigenous people ^(a)	184,100	70,200	258,300

(a) Includes missing responses.

Note: The category 'low/moderate' includes those who responded 'none of the time' to all five questions on psychological distress.

Source: AIHW analysis of the 2004-05 NATSIHS.

	Ma	ajor Citie	s	Inn	er Regior	nal	Out	ter Region	al	I	Remote		Ver	y Remot	e ^(a)		Australia	i
Smoker status	Indig.	Non- Indig.	Rate ratio	Indig.	Non- Indig.	Rate ratio	Indig.	Non- Indig.	Rate ratio	Indig.	Non- Indig.	Rate ratio	Indig.	Non- Indig.	Rate ratio	Indig.	Non- Indig.	Rate ratio
	%	%		%	%		%	%		%	%		%	%		%	%	
Current smoker	46	22	2.1*	47	26	1.8*	50	27	1.9*	47	34	1.4*	51	n.a.	_	48	23	2.1*
Daily	45	20	2.3*	46	24	1.9*	48	25	1.9*	45	32	1.4*	48	n.a.	—	46	21	2.2*
Other	2 ^(d)	2	0.9	1 ^(c)	2	0.6	2 ^(c)	2	1.0	2 ^(c)	2 ^(c)	1.4	3 ^(c)	n.a.	_	2	2	1.0
Ex- smoker	27	30	0.9	25	31	0.8*	22	31	0.7*	25	27	0.9	18	n.a.	_	24	30	0.8*
Never smoked	26	49	0.5*	28	44	0.6*	29	42	0.7*	28	40	0.7*	31	n.a.	_	28	47	0.6*
Total ^(b)	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0		100.0	n.a.		100.0	100.0	

Table 9: Smoker status, by remoteness area and Indigenous status, persons aged 18 years and over, 2004-05

* Represents statistically significant differences in the Indigenous/ non-Indigenous comparisons.

(a) The National Health Survey did not collect data in Very Remote Australia.

(b) Includes smoker status not known.

(c) Estimate is subject to sampling variability too high for most practical purposes.

(d) Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Note: Data are directly age-standardised.

Source: ABS and AIHW analysis of 2004-05 NATSIHS and 2004-05 NHS.

	Major	Cities	Inner R	egional	Outer F	Regional	Ren	note	Very R	emote	Т	otal
	Indig.	Non- Indig.	Indig.	Non- Indig.	Indig.	Non- Indig.	Indig.	Non- Indig.	Indig.	Non- Indig.	Indig.	Non- Indig.
						Per	cent					
Total attended at least one antenatal session	96	98.6	97.5	98.9	97.2	99.2	94.5	88	94.1	87.9	96.2*	98.5*
Number of sess	sions atte	ended ^(d)										
0	3.9*	0.3*	1.5*	0.2*	2.0*	0.1*	4.2	_	2.4	3	2.6*	0.2*
1	4.4*	0.5*	5.2*	0.7*	4.7*	0.7*	7.0*	0.2*	2.4	0.8	4.5*	0.6*
2–4	18.2*	4.4*	20.5*	5.4*	20.4*	5.6*	16.4*	2.8*	13.9*	4.5*	18.2*	4.8*
5+	71.8*	92.4*	71.2*	91.8*	72.4*	92.9*	69.6*	80.9*	77.8	79.7	72.7*	92.1*
No sessions not stated Duration of pres	1.7 gnancy a	2.4 t first ante	1.6 enatal vis	1.9 sit ^(e)	0.6	0.7	2.9*	16.0*	3.5*	12.0*	1.9*	2.4*
First trimester												
(<13 weeks) Second trimester (13 to <20 weeks)	38.2* 33.7	57.2* 30.1	58.4* 18.3	71.1* 19.3	51.1* 19.2	71.4*	49.1* 18.5	71.5* 18.6	34.7* 20.8	59.2* 23.5	46.3* 21.7*	62.2* 26.0*
Third trimester (20 or more weeks)	26.1*	12.2*	21.3*	9.2*	25.1*	9.5*	27.2*	8.5*	36.6*	15.0*	27.5*	11.2*
Gestation not stated	—	—	_	_	1.3*	0.6*	2.8*	1.3*	2.8	1	1.3*	0.1*
Total women who gave birth(a)	1,481	98,855	1,498	36,131	2,381	18,742	850	2,120	1,093	531	7,390	157,159

Table 10: Use of antenatal services by mothers, by Indigenous status, NSW, Qld, SA and NT, 2005(a)(b)(c)

*Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the p < 0.05 level.

(a) Indigenous and non-Indigenous data exclude births where the mother's Indigenous status is not stated.

(b) Jurisdiction-level data are based on place where birth occurred, not place of usual residence. Cross-border issues need to be considered here, e.g. a high proportion of births in ACT hospitals are for NSW mothers.

(c) Data not available from Victoria, Western Australia and Tasmania.

(d) Data for Qld, SA and NT only. Data not collected in NSW.

(e) Data for NSW and NT only. Data not collected in Qld or SA.

Source: AIHW analysis of state/territory perinatal collections.

	Indiger	nous propo	ortion	Non-Indig	jenous propo	ortion	Rate ratio ^(a)	
	Smoked	Did not smoke	Not stated	Smoked	Did not smoke	Not stated	Smoked	
Remoteness ^(b)								
Major Cities	50.8	48.6	0.6	12.6	87.1	0.3	3.6	
Inner Regional	56.2	43.3	0.5	21.8	77.6	0.6	2.6	
Outer Regional	54.9	42.7	2.4	24.4	74.8	0.7	2.4	
Remote	53.5	42.5	4.0	21.2	77.8	0.9	2.6	
Very Remote	51.0	40.7	8.3	19.3	79.8	0.9	2.9	
Total ^(b)	53.1	43.8	3.0	15.7	83.9	0.4	3.3	

Table 11: Smoking during pregnancy by Indigenous status and remoteness, NSW, Qld, WA, SA, Tas, ACT and NT, 2005

(a) Rate ratio: proportion for Indigenous divided by proportion for non-Indigenous.

(b) Rate ratios for remoteness categories and the total are derived from the directly age-standardised proportions for Indigenous and non-Indigenous using the Australian female population aged 15–44 years in all states excluding Victoria and the first 6 months of 2005 for Queensland who gave birth in 2005 as the standard.

Source: AIHW analysis of NPSU National Perinatal Data Collection.

Table 12: Households with Indigenous children aged 0–17 years: smoking status by remoteness, 2004–05

	Major	Inner	Outer	Very		
	Cities	Regional	Regional	Remote	Remote	Australia
	%	%	%	%	%	%
Households with regular smoker in household	65	62	63	63	77	65
Households with regular smoker who smokes at home indoors in household	27	32	26	26	40	29
Total households ^(a)	32,421	21,903	23,465	7,174	10,865	95,829

(a) Includes not applicable, not asked (single-person household), not stated, not known, and households with no regular smokers/households with no regular smokers who smoke indoors.

Source: ABS and AIHW analysis of 2004-05 NATSIHS.

Table 13: Indigenous children aged 0–14 years reporting conditions of the ear and mastoid process, by remoteness, 1995, 2001 and 2004–05

	1995 ^(a)		2001		2004–05		
-	Males	Females	Males	Females	Males	Females	Persons
	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Remote	n.a.	n.a.	18	18	12	13	13
Non-remote	7	4	6	11	9	8	8
Total	n.a.	n.a.	10	13	10	9	10
Total number	54,392	52,401	90,615	85,878	92,767	87,902	180,699

(a) Data for the National Aboriginal and Torres Strait Islander Health Survey 1995 are available for non-remote regions only. Total numbers are therefore for non-remote areas only.

Source: ABS and AIHW analysis of 2004–05 National Aboriginal and Torres Strait Islander Health Survey.

	Metropolitan		Provincial		Remote		Very Remote	
	Indigenous	All students	Indigenous	All students	Indigenous	All students	Indigenous	All students
	Per cent							
Reading								
Year 3	86.1 (<u>+</u> 4.3)*	93.8 (<u>+</u> 1.5)*	83.3 (<u>+</u> 4.7)*	92.0 (<u>+</u> 2.0)*	68.0 (<u>+</u> 7.9)*	87.9 (<u>+</u> 3.7)*	53.8 (<u>+</u> 7.1)*	71.4 (<u>+</u> 5.3)*
Year 5	72.6 (<u>+</u> 5.3)*	89.5 (<u>+</u> 1.6)*	67.8 (<u>+</u> 5.6)*	86.8 (<u>+</u> 2.0)*	58.9 (<u>+</u> 8.3)*	80.0 (<u>+</u> 4.2)*	34.7 (<u>+</u> 7.2)*	57.5 (<u>+</u> 5.8)*
Year 7	70.1 (<u>+</u> 3.5)*	90.3 (<u>+</u> 0.8)*	67.1 (<u>+</u> 4.2)*	87.8 (<u>+</u> 1.1)*	45.2 (<u>+</u> 7.9)*	78.3 (<u>+</u> 3.3)*	27.7 (<u>+</u> 5.4)*	54.3 (<u>+</u> 4.8)*
Writing								
Year 3	84.9 (<u>+</u> 4.1)*	94.8 (<u>+</u> 1.2)*	82.6 (<u>+</u> 5.0)*	93.2 (<u>+</u> 1.6)*	64.4 (<u>+</u> 7.2)*	86.1 (<u>+</u> 3.2)*	46.0 (<u>+</u> 6.2)*	65.8 (<u>+</u> 4.9)*
Year 5	85.1 (<u>+</u> 6.8)*	94.7 (<u>+</u> 1.2)*	78.5 (<u>+</u> 6.9)*	93.0 (<u>+</u> 1.6)*	62.4 (<u>+</u> 6.0)*	83.5 (<u>+</u> 3.8)*	41.9 (<u>+</u> 5.7)*	63.0 (<u>+</u> 4.7)*
Year 7	82.1 (<u>+</u> 4.3)*	93.7 (<u>+</u> 1.4)*	76.3 (<u>+</u> 5.0)*	90.8 (<u>+</u> 1.9)*	53.1 (<u>+</u> 7.7)*	80.8 (<u>+</u> 4.1)*	39.3 (<u>+</u> 4.9)*	62.4 (<u>+</u> 4.8)*
Numeracy								
Year 3	79.8 (<u>+</u> 4.7)*	93.6 (<u>+</u> 1.2)*	82.7 (<u>+</u> 4.5)*	92.7 (<u>+</u> 1.6)*	64.6 (<u>+</u> 8.6)*	85.6 (<u>+</u> 3.8)*	50.2 (<u>+</u> 7.5)*	67.2 (<u>+</u> 5.5)*
Year 5	73.7 (<u>+</u> 4.4)*	91.3 (<u>+</u> 1.2)*	70.2 (<u>+</u> 4.7)*	89.5 (<u>+</u> 1.6)*	48.6 (<u>+</u> 8.2)*	78.6 (<u>+</u> 4.0)*	28.6 (<u>+</u> 5.7)*	53.4 (<u>+</u> 5.3)*
Year 7	53.9 (<u>+</u> 3.7)*	81.1 (<u>+</u> 1.1)*	49.4 (<u>+</u> 4.3)*	77.4 (<u>+</u> 1.4)*	35.4 (<u>+</u> 7.5)*	71.7 (<u>+</u> 3.6)*	20.2 (<u>+</u> 4.9)*	47.1 (<u>+</u> 5.3)*

Table 14: Proportion of Year 3, 5 and 7 students achieving the reading, writing and numeracy benchmarks, by remoteness area and Indigenous status, 2006

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons.

Notes

1. The achievement proportions reported in the table include 95% confidence intervals; for example, 80% (± 2.7) means that there is a 95% chance that the true percentage lies between 77.3% and 82.7%.

 Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varies considerably across jurisdictions. Hence readers are urged to be cautious when comparing results.

 Revised definitions and standards for the collection and reporting of student socioeconomic background information (sex, Indigenous status, socioeconomic background and language background) were introduced in 2005 through the school enrolment processes for all schools to ensure greater national consistency in reporting against characteristics from 2006.

Source: MCEETYA 2006.