



**SUMMARY BOOKLET**

**The Health of Aboriginal  
Children and Young People**

### **How to obtain a copy of the main report**

A copy of the report *The Health of Aboriginal Children and Young People* can be purchased through:

Telethon Institute for Child Health Research  
PO Box 855  
WEST PERTH WA 6872  
Telephone: (08) 9489 7777  
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A PDF version of the main publication, as well as a PDF version of this summary booklet can be downloaded from our website:

[www.ichr.uwa.edu.au](http://www.ichr.uwa.edu.au)

### **Further information**

If you would like more information about the Western Australian Aboriginal Child Health Survey, please email us at:

[waachs@ichr.uwa.edu.au](mailto:waachs@ichr.uwa.edu.au)

## About the survey

This booklet summarises the first volume from the Western Australian Aboriginal Child Health Survey: *The Health of Aboriginal Children and Young People*.

This large-scale investigation into the health of 5,289 Western Australian Aboriginal and Torres Strait Islander children was undertaken by the Telethon Institute for Child Health Research (the Institute) in conjunction with the Kulunga Research Network. The survey was designed to build the knowledge to develop preventative strategies that promote and maintain the healthy development and the social, emotional, academic, and vocational well-being of Aboriginal and Torres Strait Islander children.

The Institute has previously surveyed the health of all Western Australian children in 1993. Recognising that this survey did not have a focus on Aboriginal and Torres Strait Islander children, the Institute met with several key Aboriginal leaders and representatives from across the state to seek support and endorsement to conduct a survey of Aboriginal and Torres Strait Islander children aged 0 to 17 years. The survey was subsequently endorsed and has been the first to gather comprehensive health, developmental and educational information on a population-based sample of Aboriginal and Torres Strait Islander children in their families and communities.

All phases of the survey, including its development, design and implementation, were under the direction of the Western Australian Aboriginal Child Health Survey Steering Committee. The Steering Committee comprises senior Aboriginal people from a cross section of agencies and settings.



## About the information in this booklet

### Terms used

**Aboriginal:** refers to Aboriginal and Torres Strait Islander peoples.

**Children:** refers to persons under the age of 18 years at the time of the survey.

**Age groups:** Children are generally grouped in the analysis as follows:

- ▶ 0 to 3 years
- ▶ 4 to 11 years
- ▶ 12 to 17 years.

**Level of Relative Isolation (LORI):** a new classification of remoteness indicating the relative distance of localities from population centres of various sizes. See the next page for a more detailed description and map.

**Primary carer:** the person spending most time with the child and considered to know most about the child. The child's primary carer was usually its mother.

**Secondary carer:** Often the child's father, but may also have been a grandparent or other relative, or other person involved in the upbringing of the child.

### Carer reported data

The Survey data are composed of responses to questionnaires, which were accepted without further validation. It was possible to compare carer reported events of hospitalisation for certain conditions with the statutory database for hospital admissions. This process found that, where carers were asked whether an event had ever occurred, they were more likely to report events that had occurred within 5 years of the survey than those occurring more than 5 years prior to the survey.

### Accuracy of the estimates

All data presented in this booklet have been subject to rigorous statistical analysis. Estimates from the survey have been calculated at a 95% level of confidence. The confidence intervals are displayed on graphs by means of vertical confidence interval bars (  $\bar{\pm}$  ). There is a 95% chance that the true value for a data item lies between the upper and lower limits indicated by the confidence bars for that item. A full explanation of the survey methodology and the confidence intervals used can be obtained from the main report.

## Level of Relative Isolation

### Measuring access to services

For this survey, a new classification of remoteness – the Level of Relative Isolation (LORI) – has been designed. The LORI is based on a product from the National Key Centre for Social Application of Geographic Information Systems at Adelaide University (GISCA) called ARIA++. The ARIA++ is an extension of ARIA (the Accessibility/Remoteness Index of Australia), which has been widely adopted as the standard classification of remoteness in Australia. Because ARIA is based on describing the entire population of Australia, it has not been specifically designed to describe the circumstances of Aboriginal people living in remote areas. The ARIA++ gives a more detailed description of more remote areas by including more service centres, of smaller sizes, in calculating its remoteness scores.

### ARIA++ : better definition of remote areas

Under the original ARIA, over two-thirds of the land mass of WA, and over one quarter of Aboriginal people in WA live in areas classified as “very remote”. However, WA Aboriginal Child Health Survey data showed that, within this group, there were marked differences in access to basic services, cultures, lifestyles and health outcomes. The greater detail of ARIA++ enables these differences to be more adequately described in the Aboriginal population.

### Illustrating the difference between ARIA and ARIA++

The town of Halls Creek in the East Kimberley – population about 1,300 people – is classified as Very Remote under ARIA. However, it has a 4-bed hospital facility which provides health services to the town and communities throughout the surrounding region. One of those communities, Yiyili, about 120 kilometres east of Halls Creek, has a population of around 250 people. The Halls Creek Health Service provides a weekly community nursing clinic in the Yiyili community. Under ARIA’s 12 point remoteness scale, both Halls Creek and Yiyili receive the maximum score of 12 (“very remote”).

## Level of Relative Isolation (continued)

Under ARIA++, which has an extended 18 point remoteness scale, Halls Creek receives a score of 12 and Yiyili receives a score of 18. Compared to major capital cities, both Halls Creek and Yiyili would be regarded as small places with limited access to services. However, analysis of survey data has shown that the difference in isolation between Halls Creek and Yiyili is reflected not only in different access to basic services, but also in a different level of adherence to traditional cultures and languages, and different health outcomes.

### LORI categories

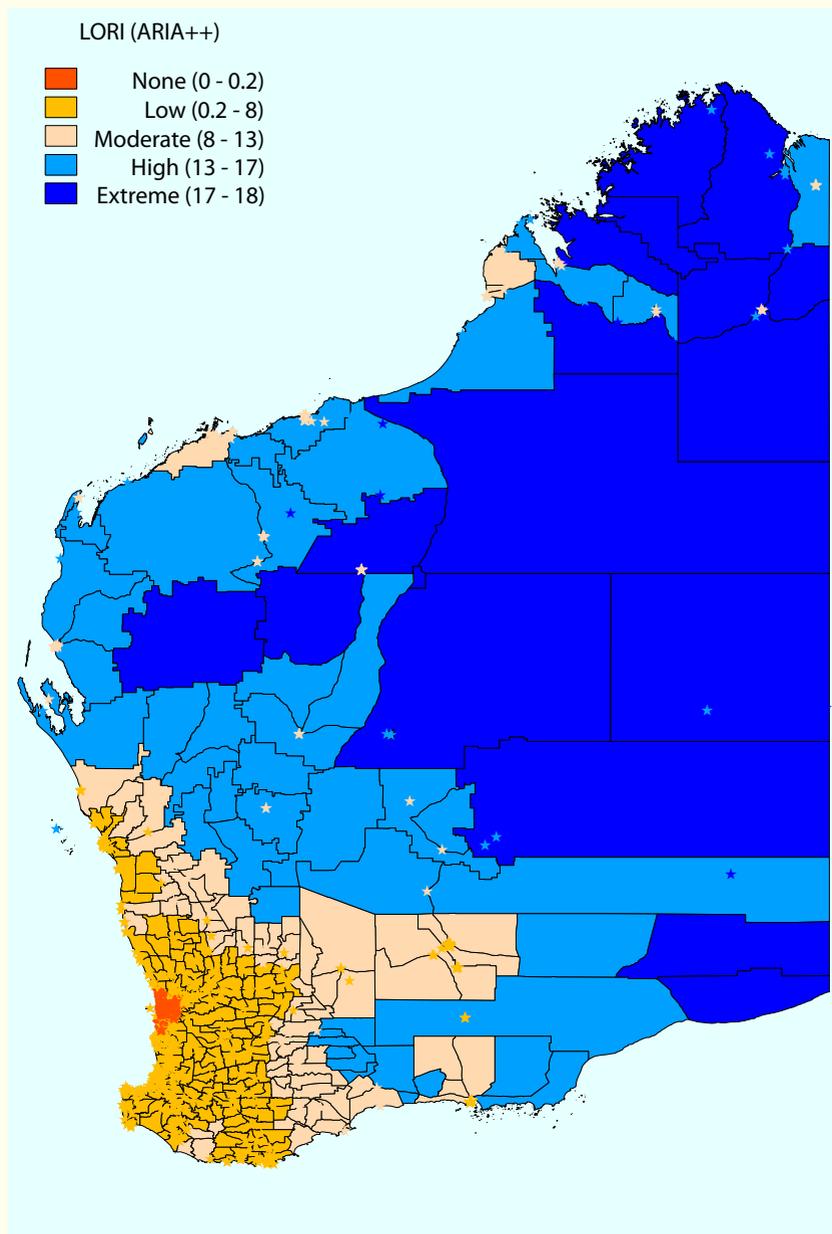
Based on the ARIA++ scores, five categories of isolation have been defined to more appropriately reflect differences in cultures, access to services and health outcomes for Aboriginal children. To avoid confusion with the original ARIA, the five categories are referred to as Levels of Relative Isolation (LORI) and range from None (the Perth Metropolitan area) to Low (e.g. Albany), Moderate (e.g. Broome), High (e.g. Kalumburu) and Extreme (e.g. Yiyili).

#### LEVEL OF RELATIVE ISOLATION CATEGORIES: ARIA++ RANGES AND DISTRIBUTION OF ABORIGINAL CHILDREN

Level of Relative Isolation	ARIA++ range	Proportion of survey children
		%
None	0 – 0.2	34
Low	0.2 – 8	24
Moderate	8 – 13	21
High	13 – 17	11
Extreme	17 – 18	10

## Level of Relative Isolation (continued)

LEVEL OF RELATIVE ISOLATION (LORI) CATEGORIES BASED ON ARIA++ RANGES

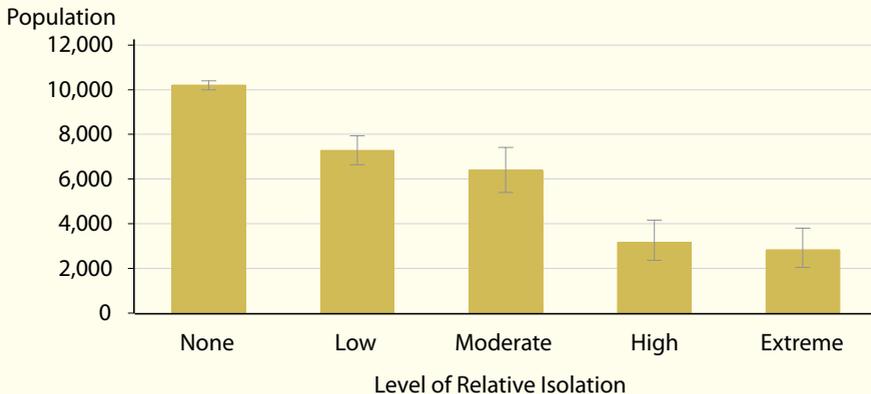


## The Aboriginal population

- ▶ The Aboriginal population of Western Australia at 30 June 2001 was estimated at 66,069 or 3.5% of the State population.
- ▶ In 1999–2001, life expectancy of Aboriginal males and females was estimated to be 55 years and 63 years respectively compared with 77 years and 83 years for the state population as a whole (Australian Bureau of Statistics, *Deaths 2001, Catalogue no. 3302.0*).
- ▶ Of the Aboriginal population, 29,817 people were under the age of 18 comprising 6% of the state's general population for this age group and 45% of the total Aboriginal population.

Over one third (34%) of all Aboriginal children live in the Perth region (no isolation) whereas just under 10% of children live in areas of extreme isolation.

### NUMBER OF CHILDREN, BY LEVEL OF RELATIVE ISOLATION



## Carers and their children

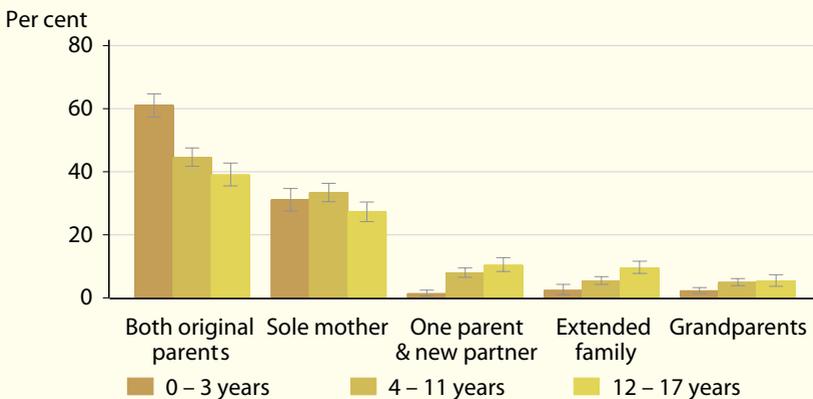
Women who identified as being of Aboriginal origin were the natural mothers and primary carers of 24,000 or 68% of Aboriginal children. Non-Aboriginal women were the natural mothers and primary carers of 3,400 or 11% of Aboriginal children. Another 5,150 or 17% of children had, as their primary carer, an Aboriginal woman who was not their natural mother.

### CHILDREN – WHETHER PRIMARY CARER IS ABORIGINAL AND NATURAL MOTHER



An estimated 13,900 or 47% of Aboriginal children were cared for by both of their original parents. Sole mothers cared for another 9,220 or 31% of children.

### CARE ARRANGEMENTS, BY AGE OF CHILD

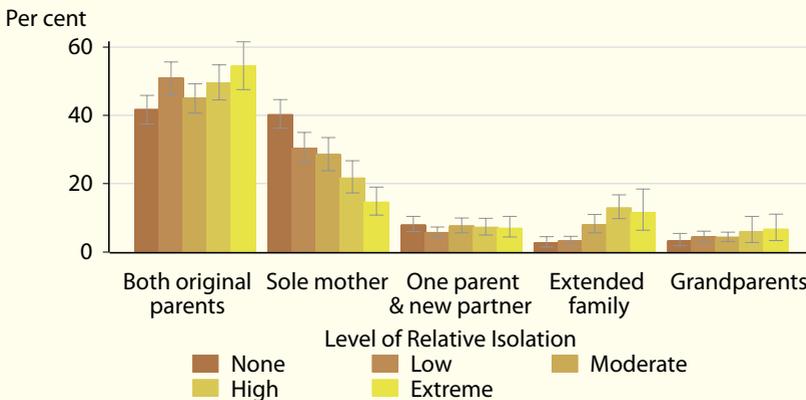


## Carers and their children (continued)

The impact of death, separation and divorce on the lives of Aboriginal children is striking. Around 6% of Aboriginal children aged 0 to 3 years were being cared for by someone other than their original parent(s), the proportion increasing to 20% for children aged 12 to 17 years.

As isolation increased, the proportion of children cared for by both of their original parents increased – from 42% in the Perth metropolitan area to 54% in areas of extreme isolation. The proportion cared for by sole mothers decreased – from 40% in the Perth metropolitan area to 15% in areas of extreme isolation.

### CARE ARRANGEMENTS, BY LEVEL OF RELATIVE ISOLATION



## Forced separation and forced relocation

### Forced separation

An estimated 1,280 or 12% of primary carers and 670 or 12% of secondary carers reported being forcibly separated from their natural family by ‘a mission, the government or welfare’. One in every five (20%) primary carers reported that their mother had been forcibly separated whereas 13% of the fathers of primary carers had been forcibly separated. Some 16% of secondary carers reported that their mothers had been separated and 11% reported that their fathers had been separated. Just over one third (10,500 or 35%) of Aboriginal children were living in households where a carer or a carer’s parent (e.g. grandparent) was reported to have been forcibly separated from their natural family.

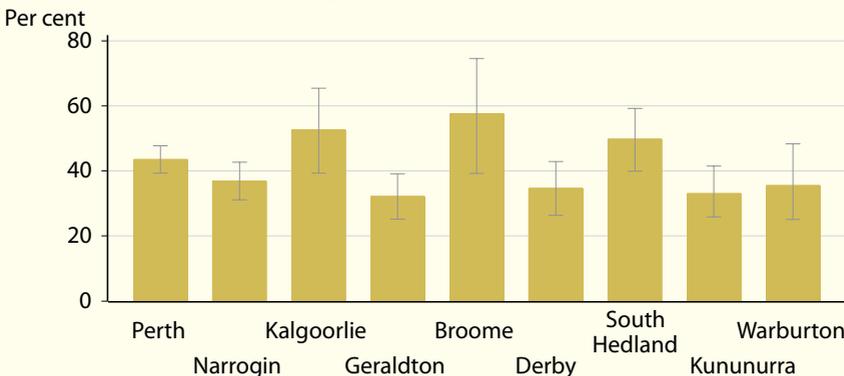
### Forced relocation

Almost one in every four children (7,090 or 24%) were living in households where carers or grandparents were forcibly relocated from an area that was their traditional country or homeland.

### Forced separation and/or forced relocation

Just over two in every five children (12,200 or 41%) were living in households that had been affected by the forced separation or forced relocation of at least one primary or secondary carer or grandparent. The Broome ATSIIC region had the highest proportion of children in such households (58%).

### CHILDREN – PROPORTION LIVING IN HOUSEHOLDS WITH EXPERIENCE OF FORCED SEPARATION OR RELOCATION, BY ATSIIC REGION

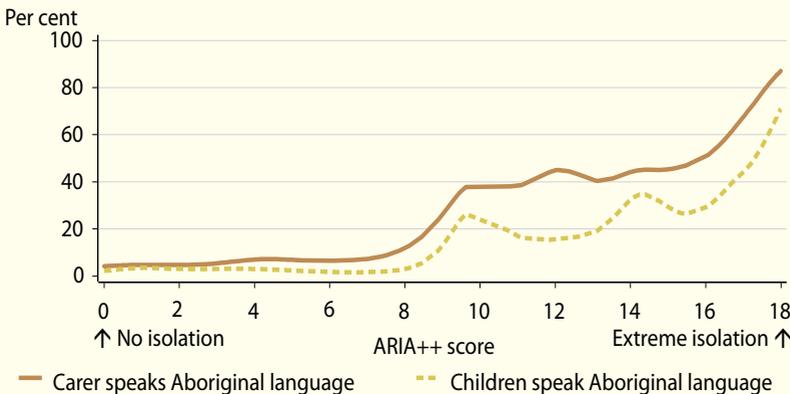


## Language and culture

The use of traditional Aboriginal languages is one marker of cultural preservation. The rates of inter-generational language loss appear to be in the order of about 20% in areas of moderate to extreme isolation. Rates of language loss appeared particularly high in areas of moderate isolation. This suggests that, unless continued efforts are made to preserve, document, teach and encourage the use of Aboriginal languages, in a relatively short period this heritage will be lost to Aboriginal people and the world.

An estimated 1,620 or 13% of primary carers indicated that at least one child in their care could speak an Aboriginal language. A further 4,750 or 38% indicated that their children knew a few words of an Aboriginal language. There were strong associations between relative isolation and the proportion of children who could speak an Aboriginal language – 2 per cent of children in the Perth metropolitan area compared with over 60% in areas of extreme isolation.

### ABORIGINAL CHILDREN AND CARERS CONVERSANT IN ABORIGINAL LANGUAGES, BY REMOTENESS



### Cultural activities

Almost seven in every ten carers (69%) had attended an Aboriginal funeral, while almost half (49%) had attended an Aboriginal festival or carnival in the 12 months prior to the survey. Participation increased as the level of isolation increased.

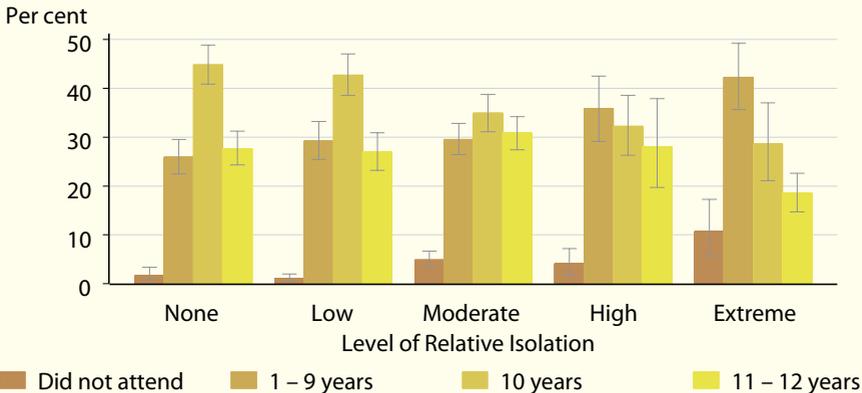
## Education

Education has a significant role in enabling access to employment and income. Higher education is associated with better parenting skills (particularly mothers) and better academic and mental health outcomes. Gaining knowledge and better use of income can have significant benefits for improving the material circumstances relevant to a child’s development, particularly their language, cognitive and intellectual capacities.

While almost 97% of all carers reported having attended school, 30% of carers had left school before completing year 10, a level necessary to achieve a secondary school certificate. Nearly two in five carers (39%) completed their education in year 10, with just over one quarter (27%) going on to complete either years 11 or 12.

Carer participation in school education varied with the level of relative isolation. Carers in areas of extreme isolation were much more likely to have had no schooling or completed up to year 7 or less (28%) compared with carers from the Perth metropolitan area (8%).

### CARER SCHOOL EDUCATION – HIGHEST SCHOOL YEAR COMPLETED, BY LEVEL OF RELATIVE ISOLATION



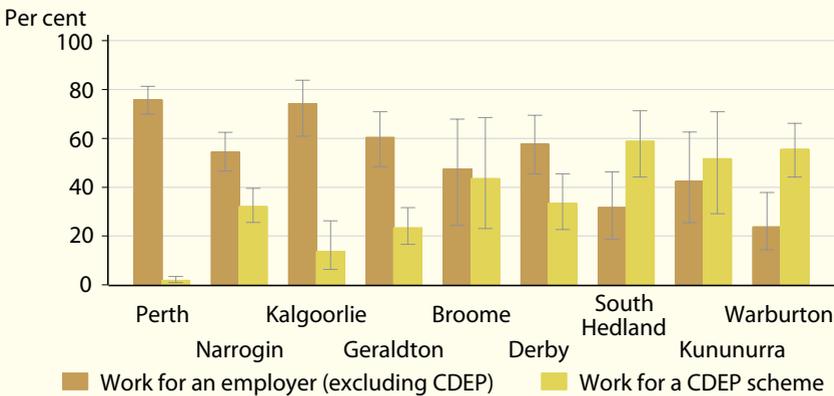
Over one third (37%) of all carers have achieved some level of post-school qualification with just over half (54%) of these having a college certificate.

## Employment and Financial Strain

### Employment

Of 19,500 carers, 63% (or 12,320) were in the labour force (i.e. either in a job or looking for work) and, of these, just over three quarters (9,310 or 76%) were currently employed. Of the employed carers, the majority (5,260 or 56%) worked for an employer. Another 28% worked in the Community Development Employment Projects (CDEP) scheme, which principally operates in rural and particularly remote regions where over 50% of carers worked in CDEP.

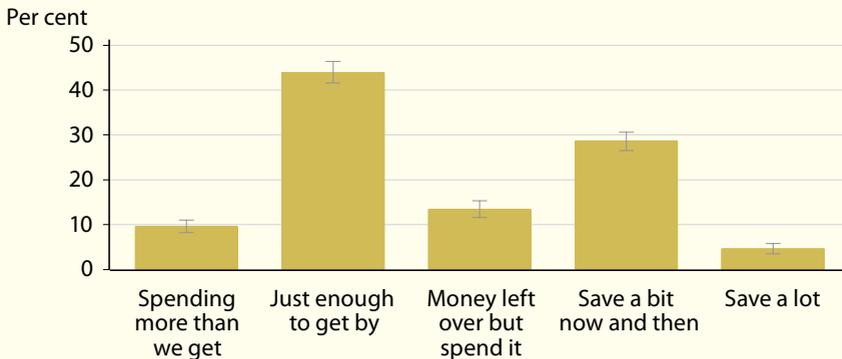
#### EMPLOYED CARERS – SELECTED EMPLOYER TYPES, BY ATSI REGION



### Financial Strain

Primary carers were asked to assess their family’s monetary situation. The majority (5,520 or 44%) reported that their family had just enough money to get through to the next payday. Only 5% indicated they could save a lot.

#### PRIMARY CARERS – FAMILY FINANCIAL STRAIN



## Characteristics of children at birth

### Premature births

Of 26,000 Aboriginal children under the age of 18 years, 13% were born prematurely (less than 37 weeks gestation). This is significantly higher than the prevalence of premature births in the general population (8%).

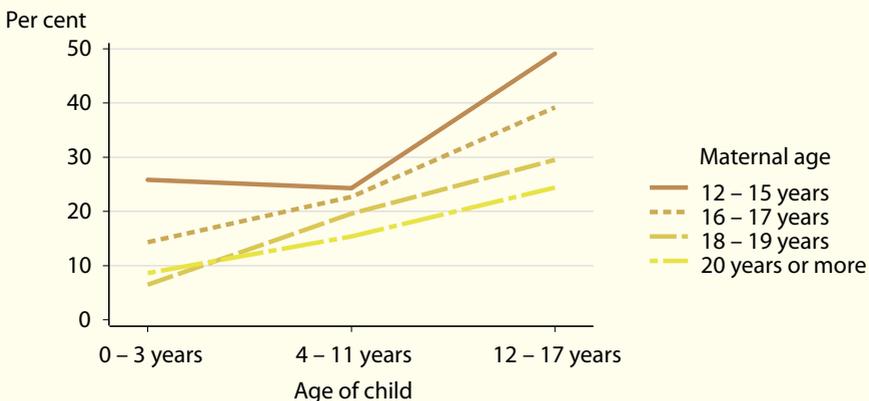
### Low birth weight babies

The average birth weight of Western Australian Aboriginal babies was estimated to be 3,170 grams, with 11% being of low birth weight (less than 2,500 grams) compared with 7% for the general population. Premature birth and poor intrauterine growth are two causes of low birth weight. Around 21% of infants were considered to have poor intrauterine growth compared with 13% of births in the total population.

### Infants of teenage mothers

An estimated 11% of Aboriginal infants were born to mothers aged 17 years or less compared with 2% of infants in the total population. This is a significant cause for concern since early pregnancy imposes substantial risks to the infant and in very young mothers impairs her own growth and interrupts her schooling. Also, mothers delivering before they turned 18 were less likely to be caring for their children, particularly mothers under 16 years of age of whom 26% were not caring for their 0 to 3 year-olds at the time of the survey.

### PROPORTION OF CARERS WHO ARE NOT THE NATURAL MOTHERS, BY AGE OF CHILD AND AGE OF THEIR NATURAL MOTHER

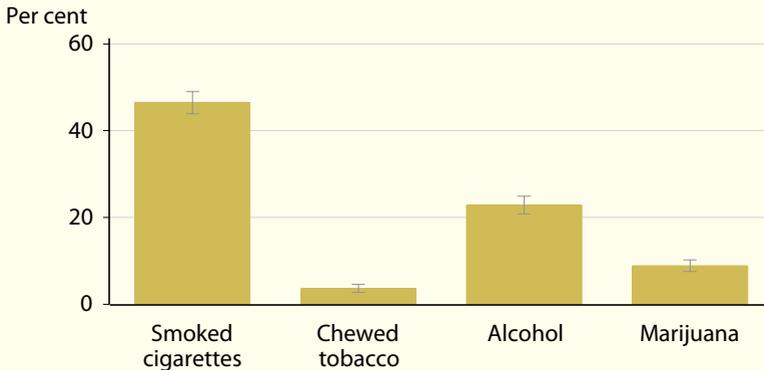


## Substance use during pregnancy

Aboriginal mothers often have multiple risk factors which contribute to low birth weight and impaired growth of their babies. Among these factors are tobacco use, alcohol consumption and drug use during pregnancy.

The mothers of 46% of Aboriginal children reported smoking tobacco during pregnancy. In comparison, 22% of infants were born to mothers in the general population who had smoked during pregnancy. The mothers of almost half (49%) of the children had used tobacco (smoked or chewed) whilst pregnant. Despite a decade or more of intensive health promotion campaigns in the general population, the persistence of tobacco use by such a high proportion of women giving birth to Aboriginal children is in urgent need of attention. These rates are uniform across all ATSIC regions and all levels of relative isolation.

### SUBSTANCE USE BY MOTHER DURING PREGNANCY



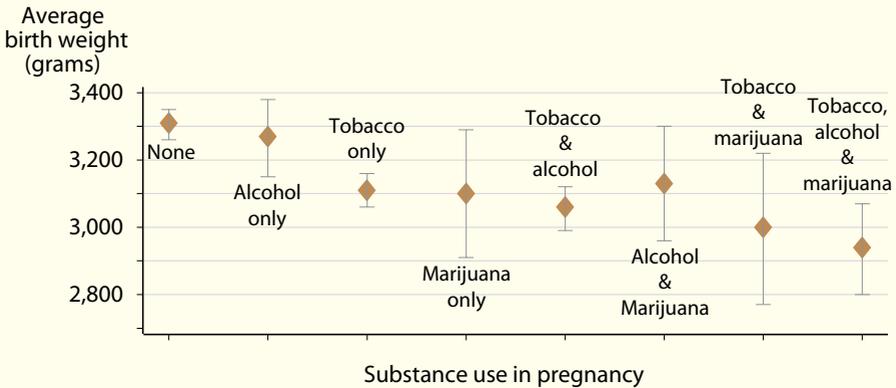
Mothers of 23% of infants had drunk alcohol during their pregnancy. These rates are consistent across all ATSIC regions and all levels of relative isolation. An increased incidence of low birth weight was seen among births to women who drank alcohol, suggesting that a proportion drank excess alcohol. There needs to be a concerted effort to reduce the incidence of heavy drinking during pregnancy.

Mothers of 9% of children reported having used marijuana during pregnancy, its use declining with increased level of isolation: from 11% in the Perth metropolitan area to 2% in areas of extreme isolation.

## Substance use during pregnancy (continued)

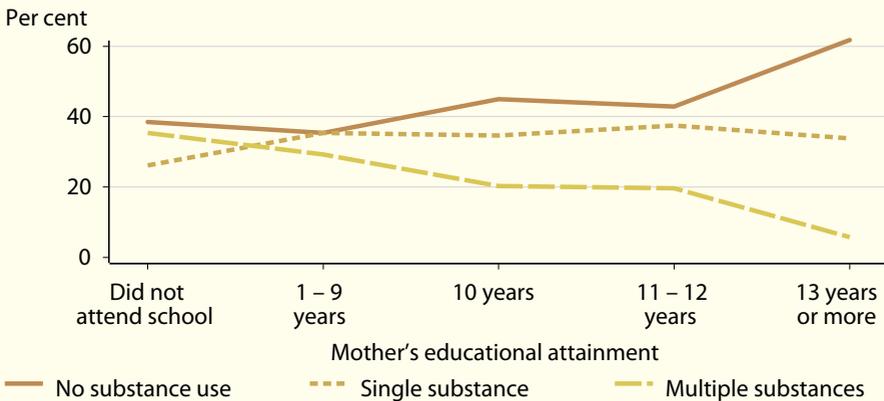
Infants born to mothers who reported using tobacco during their pregnancy had a significantly lower average birth weight (3,110 grams) than infants born to mothers not using tobacco during pregnancy (3,310 grams). Average birth weights were lowest for infants of those mothers who used marijuana either with tobacco (3,000 grams) or with both tobacco and alcohol (2,940 grams).

### AVERAGE BIRTH WEIGHT – SUBSTANCE USE BY MOTHER DURING PREGNANCY



The incidence of use of multiple substances by a child’s mother decreased significantly the longer she continued with her education. The level of the mother’s educational attainment had little effect on use of a single substance.

### CHILDREN – SUBSTANCE USE BY THEIR MOTHER, BY MOTHER’S EDUCATIONAL ATTAINMENT

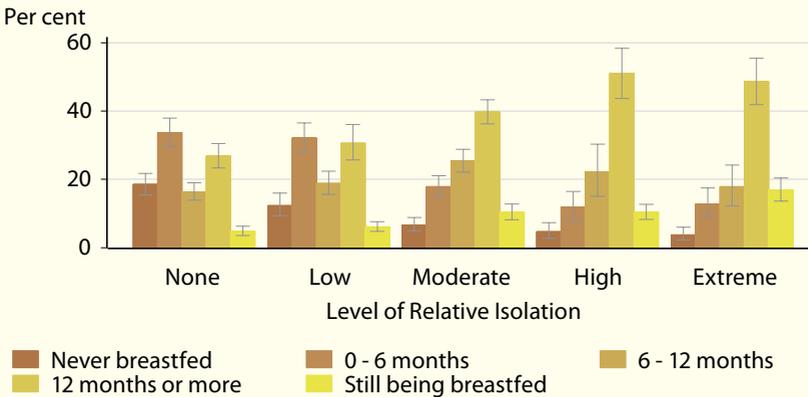


## Breastfeeding

Over a third (34%) of all Aboriginal children were breastfed for more than 12 months, a proportion significantly higher than the comparable figure of 20% for children aged 4 to 16 years as recorded in the 1993 WA Child Health Survey.

The prevalence of breastfeeding for 12 months or more increased with the level of relative isolation – ranging from 27% in the Perth metropolitan area to 49% in areas of extreme isolation. The finding that mothers of Aboriginal children are more likely to breastfeed longer than mothers in the general population offers a positive basis from which to build health promotion programs in the post-natal period.

### CHILDREN AGED 0 TO 17 YEARS – DURATION OF BREASTFEEDING, BY LEVEL OF RELATIVE ISOLATION



## Nutrition

### Indicators of dietary quality

Four indicators of dietary quality were devised for Aboriginal children aged 4 to 17 years to reflect whether the principles of a healthy diet were being observed.

**Indicator 1:** *met if water was usually drunk when thirsty.*

When thirsty, the majority (15,600 or 68%) of Aboriginal children drank water rather than alternatives such as soft drink, fruit juice or cordial. Children in high or extreme isolation were significantly more likely to drink water when thirsty than children in no or low isolation.

**Indicator 2:** *met if some form of unsweetened and unflavoured cow or soy milk was regularly consumed.*

Cow's milk is a child's usual dietary source of calcium, a mineral important to a healthy diet. A very high number of children, 21,200 or 93%, regularly drank unflavoured and unsweetened cow's or soy milk.

**Indicator 3:** *met if at least half a cup of a variety of at least 3 fresh vegetables, other than potato, were usually consumed on 6 or 7 days of the week.*

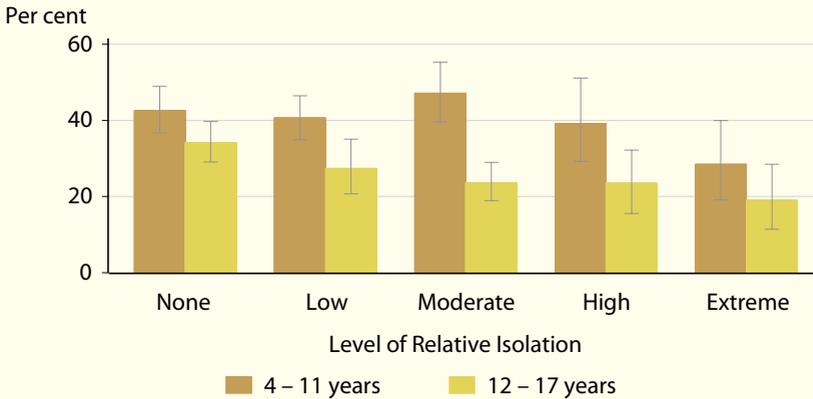
Nearly two thirds (65%) of Aboriginal children usually ate vegetables (other than potato) every day; nine in every ten reportedly ate at least half a cup a day; and 59% regularly consumed more than three varieties of vegetables.

However, only 8,230 or 36% of children met this third indicator which meets only half the medically recommended quantity of vegetable intake. Children aged 4 to 11 years were much more likely to meet the indicator (41%) than those aged 12 to 17 years (28%) while significantly more children in the Perth metropolitan area (39%) met this criterion than children in extremely isolated areas (24%).

The consumption of fresh vegetables was inadequate at all levels of relative isolation and particularly for older children.

## Nutrition (continued)

### CHILDREN AGED 4 TO 17 YEARS – PROPORTION MEETING THE VEGETABLE INDICATOR OF DIETARY QUALITY, BY LEVEL OF RELATIVE ISOLATION AND AGE



**Indicator 4:** met if fresh fruit was usually consumed on 6 or 7 days of the week.

Seven in ten children ate fresh fruit every day, with those aged 12 to 17 years more likely to do so – 76% compared with 67% of children aged 4 to 11 years.

### Combined indicator of dietary quality

One in five (4,290 or 19%) children met all four indicators and were more likely to be children aged 4 to 11 years living in areas of moderate or high isolation. Another 40% of children met three indicators and 32% met two.

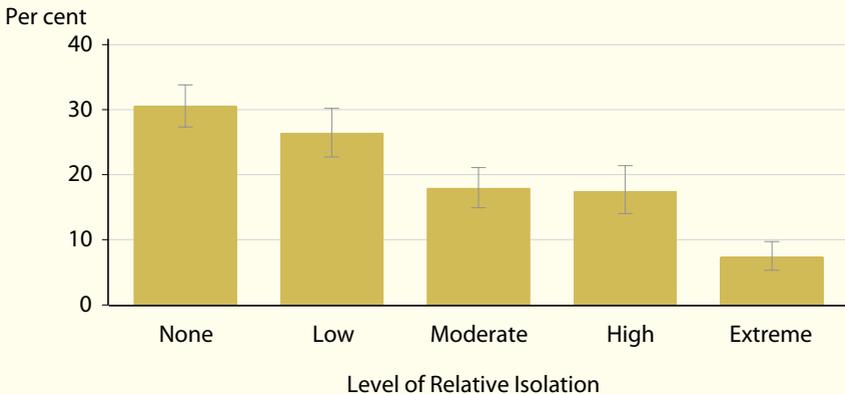
Within individual families, meeting the indicators was inconsistent, suggesting that food choices are seldom directed by a knowledge and desire for a healthy diet.

## Asthma

Asthma was estimated to have occurred at some time during the lives of 6,910 or 23% of Aboriginal children aged 0 to 17 years. This lifetime occurrence is somewhat higher than the 20% reported for all children aged 4 to 16 years in the 1993 Western Australian Child Health Survey, although it should be noted that the 1993 survey asked whether the child currently had asthma.

Asthma prevalence among Aboriginal children declines substantially from the Perth metropolitan area (30%) through to extremely isolated areas of the state (7%). The basis of this reduction, if better understood, could offer potential prevention benefits for this burdensome condition.

### CHILDREN – LIFETIME OCCURRENCE OF ASTHMA, BY LEVEL OF RELATIVE ISOLATION



Children with recurring chest infections were much more likely to have had asthma than children with no recurring chest infection (52% compared with 19%) while children who suffered allergies were also more likely to have had asthma than children who do not have allergies (45% and 21% respectively).

## Recurring infections

Recurring infections are the dominant illnesses faced by Aboriginal children.

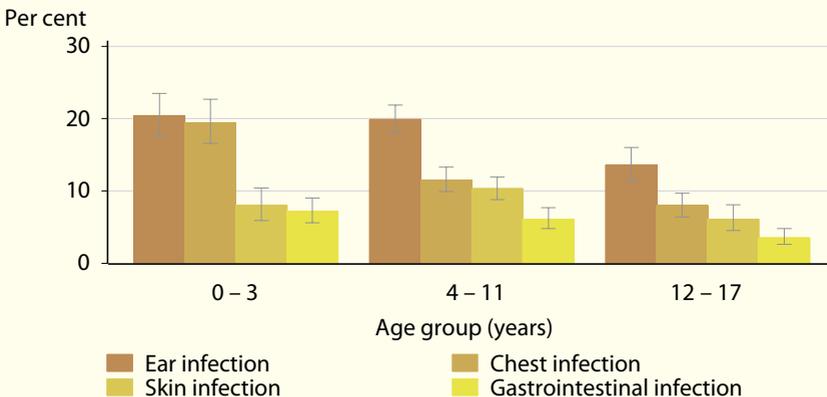
**Recurring chest infections:** Recurring chest infections affected an estimated 3,660 or 12% of Aboriginal children aged 0 to 17 years. For children aged 0 to 3 years, the prevalence was estimated at 19%, more than twice the rate for children aged 12 to 17 years (8%).

**Recurring skin infections:** Carers were asked if their children had 'Recurring skin infections such as school sores or scabies'. An estimated 2,530 or 8% of Aboriginal children aged 0 to 17 years had recurring skin infections.

**Recurring gastrointestinal infections:** From carer's reports, it was estimated that 1,670 or 6% of Aboriginal children suffered from recurring gastrointestinal infections.

**Recurring ear infections:** From carer's reports, it was estimated that 5,400 or 18% of Aboriginal children aged 0 to 17 years had recurring ear infections at the time of the interview. Children aged 12 to 17 years were significantly less likely to have recurring ear infections (14%) than children aged 0 to 11 years (20%).

### CHILDREN – RECURRING INFECTIONS, BY AGE



The prevalence of recurring ear, skin and gastrointestinal infections showed little variation across the levels of relative isolation with the exception of extremely isolated areas where prevalence was notably higher.

## Recurring infections (continued)

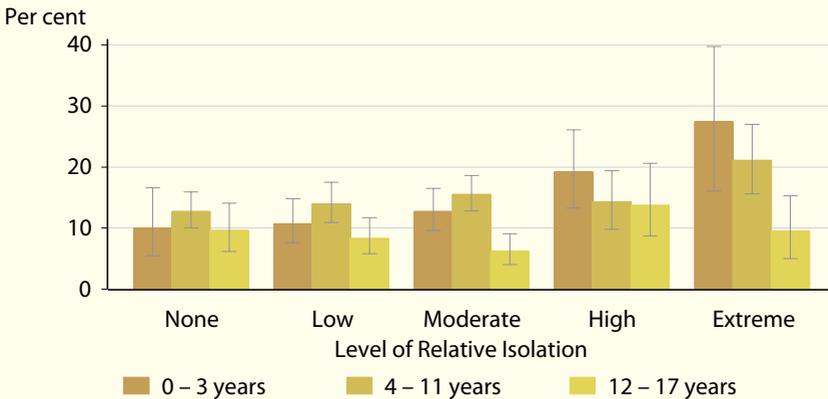
### Ear infections with discharge

Of children with recurring ear infections, nearly seven in ten (3,740 or 69%) had at least one instance where the infection was sufficiently severe to rupture the eardrum causing a discharge ('runny ears'). In terms of the total Aboriginal child population, one in eight Aboriginal children (3,740 or 13%) were reported by their carers to have had recurring ear infections with at least one instance of runny ears.

The likelihood of runny ears in children with recurring ear infections increases significantly in the most isolated areas, from 65% in areas of no, low or moderate isolation to 83% in areas of high and extreme isolation.

The risk of recurring ear infections with runny ears is highest in 0 to 3 year-olds in the more isolated areas, but is highest in 4 to 11 year-olds in less isolated areas. Thus, children in more isolated areas are not only at greater risk of impaired hearing, but that risk occurs at an earlier age.

### CHILDREN – RECURRENT AND DISCHARGING EAR INFECTIONS, BY LEVEL OF RELATIVE ISOLATION AND AGE

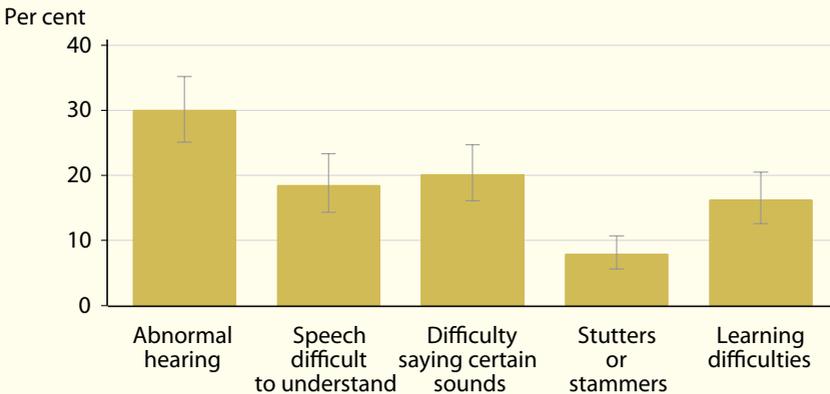


## Recurring infections (continued)

### Functional impact of ear infections

Carers reported that 1,560 or 7% of Aboriginal children aged 4 to 17 years had abnormal hearing. Of children with runny ears, 30% had abnormal hearing. By comparison only 2% of children who did not have ear infections had abnormal hearing, and 10% of children with recurrent ear infections but no discharge had abnormal hearing. Hearing problems have adverse repercussions for language development and learning, and recurrent and discharging ear infections, which affected one in eight Aboriginal children, had a very significant impact on rates of hearing loss and of speech, language and learning problems.

### CHILDREN WITH RECURRING EAR INFECTIONS WITH DISCHARGE – FUNCTIONAL IMPACT OF THE EAR INFECTION



### Co-existence of recurring infections

Children were much more likely to experience any of the types of recurring infection if they had also had any other type of recurring infection.

This co-existence of multiple types of infection was found to be associated with financial strain – the greater the financial strain, the higher the rate of multiple infections.

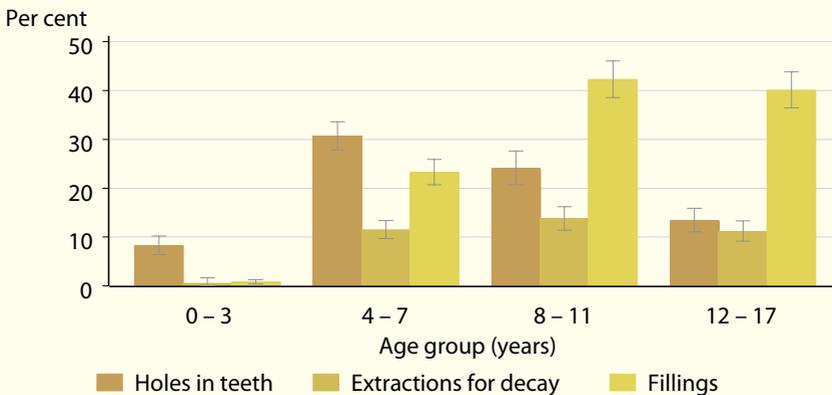
## Oral health

Carers reported the following estimated prevalence of oral health conditions in Aboriginal children:

- ▶ 19% had holes in their teeth
- ▶ 9% had ever had a decayed tooth removed
- ▶ 28% had ever had a tooth filled
- ▶ 6% had a problem with sore or bleeding gums.

As expected, there was a strong association with these conditions and the age of the child. For example, children aged 12 to 17 years were nearly twice as likely to have had fillings than children aged 4 to 7 years (40% and 23% respectively). Children in the Perth metropolitan area were almost four times more likely to have had a filling than children in areas of extreme isolation (34% and 9% respectively).

### CHILDREN – ORAL HEALTH CONDITIONS, BY AGE



## Disability

### Limitations of independent function

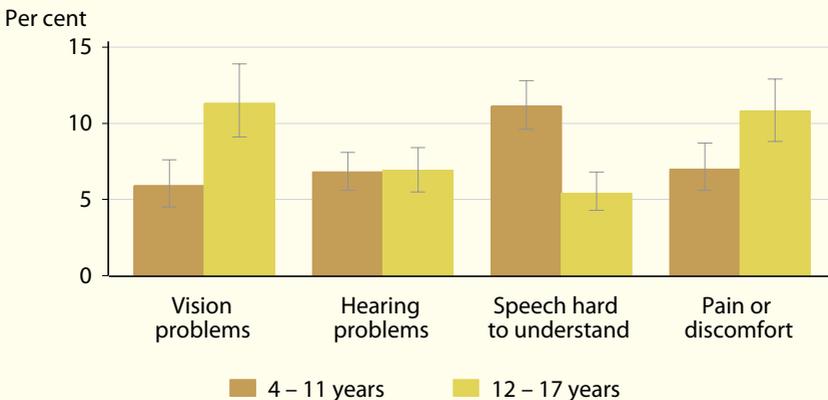
Carers were asked if their children needed physical help with activities of daily living such as eating, dressing, bathing and going to the toilet. An estimated 380 or 2% of children aged 4 to 17 years required help with these basic activities.

Other reported limitations in the independent functioning of 4 to 17 year-old children due to illness or disability were:

- ▶ 4% could not participate in games or sports involving strong exercise
- ▶ 4% needed special help at school.

Just over one quarter (27%) were limited in one or more sensory functions (vision, hearing or speech) or experienced pain.

### CHILDREN AGED 4 TO 17 YEARS – SENSORY FUNCTION PROBLEMS AND PAIN, BY AGE



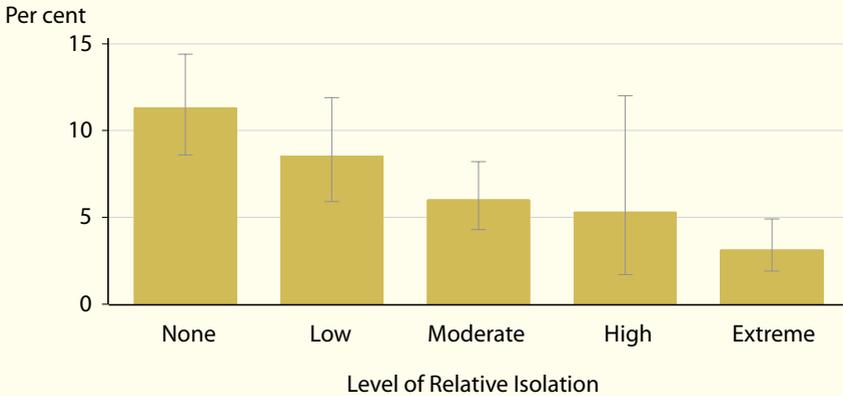
### Vision impairment

There were an estimated 1,850 or 8% of 4 to 17 year-old Aboriginal children who did not have normal vision in both eyes. This is significantly lower than the 14% of all 4 to 16 year-old children in the 1993 WA Child Health Survey found not to have normal vision in both eyes. Impaired vision was more common in older children – 11% of 12 to 17 year-olds compared with 6% of children aged 4 to 11 years.

## Disability (continued)

The reported prevalence of vision problems decreased as the level of relative isolation increased – from 11% in the Perth metropolitan area (no relative isolation) to 3% in areas of extreme isolation.

### CHILDREN AGED 4 TO 17 – VISION PROBLEMS, BY LEVEL OF RELATIVE ISOLATION



Around six in ten (58%) children who did not have normal vision in both eyes used prescribed glasses or contact lenses, the proportion declining particularly in areas of high and extreme isolation.

### Hearing problems

An estimated 1,560 or 7% of Aboriginal children aged 4 to 17 years did not have normal hearing in both ears. Of these children, the majority (an estimated 760 or 49%) were deaf or partially deaf in one ear only while almost one quarter (24%) were deaf or partially deaf in both ears. The type of hearing problem was not stated in a quarter of cases.

### Speech difficulties

An estimated 2,240 or 10% of children were reported to have trouble saying certain sounds, this problem decreasing with increasing age.

Amongst children aged 4 to 11 years, males were more likely to have difficulty saying certain sounds (17% compared with 10% for females) and more likely to stutter (8% compared with 3% for females).

## Contacts with health professionals

The survey asked carers if their children had any contact with selected health professionals in the six months prior to the survey.

### Contacts with a doctor, nurse or Aboriginal Health Worker (AHW)

The data indicate that:

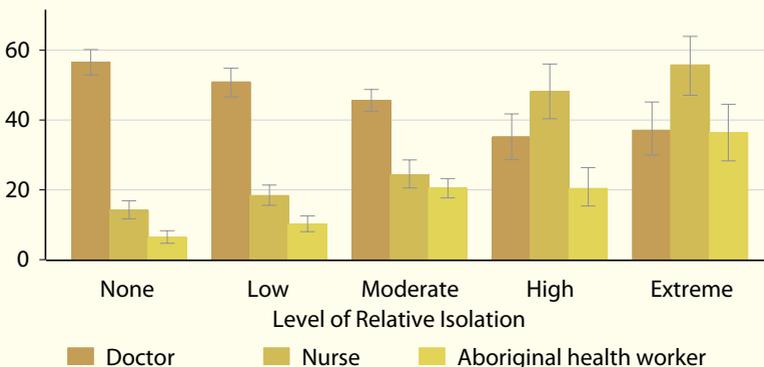
- ▶ just under half (49%) of all children had at least one contact with a doctor, a rate significantly below that reported for all children aged 4 to 16 years in the 1993 WA Child Health Survey (59%);
- ▶ 25% of children had at least one contact with a nurse, the highest proportion (42%) being children aged 0 to 3 years; and
- ▶ 15% of children had at least one contact with an AHW.

The number of children having at least one contact with a doctor, nurse or AHW decreased as the age of the child increased. For example, 69% of 0 to 3 year-olds had seen a doctor compared with 39% of 12 to 17 year-olds while 22% of 0 to 3 year-olds had seen an AHW compared with 9% for 12 to 17 year-olds.

As isolation increased and the availability and access to doctors decreased, the number of contacts a child had with a doctor decreased whereas contacts with nurses and AHWs increased substantially.

### CHILDREN HAVING ONE OR MORE CONTACTS WITH A DOCTOR, NURSE OR AHW IN THE LAST SIX MONTHS, BY LEVEL OF RELATIVE ISOLATION

Per cent



## Contacts with health professionals (continued)

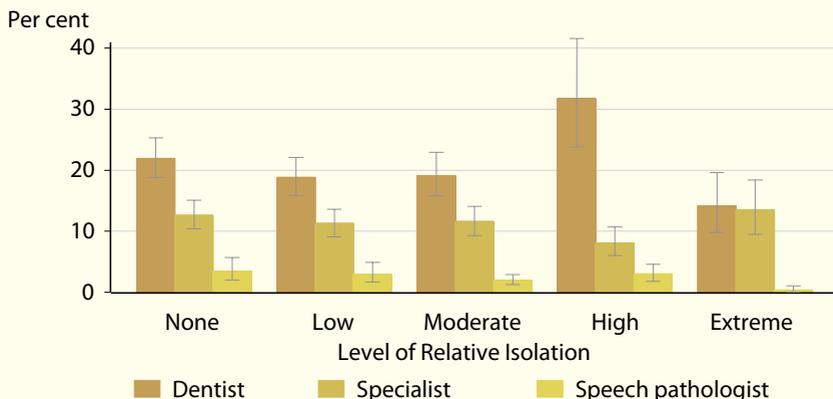
While isolation had a detrimental effect on the number of contacts with doctors, the survey found that Aboriginal children were more likely to have seen a doctor if their carers had higher levels of education or if they were children of non-Aboriginal carers (85% of whom were the natural mothers). The survey also found that children were more likely to be seen by nurses where their primary carer was Aboriginal, where there was no reported access to the use of a vehicle, and where they were living in areas of increased socio-economic disadvantage. Contacts with AHWs followed this pattern and were also associated with higher levels of family financial strain.

### Contacts with a dentist, specialist or speech pathologist

The proportion of children who had contact with a dentist, specialist or speech pathologist in the six months prior to the survey was 21%, 12% and 3% respectively.

As with contacts with doctors, children were more likely to have seen a dentist if their carers had higher levels of education or were non-Aboriginal. Dental contacts were also more likely where the carer reported access to the use of a vehicle. Contacts with dentists were most common in areas of high (but not extreme) relative isolation (32%).

#### CHILDREN HAVING ONE OR MORE CONTACTS WITH A DENTIST, SPECIALIST OR SPEECH PATHOLOGIST IN THE LAST SIX MONTHS, BY LEVEL OF RELATIVE ISOLATION



## Discussion

### Why was the survey needed?

- ▶ To improve the health of Aboriginal children by providing relevant and accurate information to guide service planning and ensure equitable distribution of funding according to need.

This first volume of findings describes the prevalence and risk factors for the main health problems that affect Aboriginal children, young people and their carers. These vary considerably with geographic isolation, social disadvantage and access to adequate health services.

### How can the survey findings be used?

- ▶ ***To develop policy to address the health needs of Aboriginal children.*** At present there is no national policy framework specific to Aboriginal child and adolescent health. The Office for Aboriginal and Torres Strait Islander Health is developing policy to address maternal and child health issues and information from this survey will assist this development.
- ▶ ***To ensure that communities have better access to services where they are needed.*** Funding allocations from the Commonwealth and State Governments to both mainstream and community controlled health services have not been adequately based on population and geographic cost factors. This poses a major impediment to progress in Aboriginal health.

### What else do the survey findings show?

Population data from this survey confirm that many of the key determinants of Aboriginal child health are outside the immediate influence of the health care system. This highlights the need for concerted action across and beyond the health sector to address the complex and inter-related factors that contribute to the increased risk of health problems amongst Aboriginal children.

Aboriginal child health is inextricably tied to processes of human development and growth. Relevant and achievable Aboriginal child health policies demand understanding and commitment to this. As a result, any policy framework for Aboriginal child health (indeed, the health of all children) will need to influence the principal resource domains for healthy child development. These include:

- ▶ the physical environment (i.e. housing, clean water, sanitation and nutrition) to meet the basic necessities of living;

## Discussion (continued)

- ▶ the levels of family income available to support the development of children;
- ▶ the creation of human and psychological capital (e.g. good health, education and parenting skills) available within the family to support child development; and
- ▶ the social capital (e.g. cultural heritage and traditions; safe communities) available to individuals living in the community and wider society.

### What should happen now?

Policy makers wishing to improve Aboriginal child health must ask “How should we take action and with whom?” In the absence of an integrated Aboriginal child health policy based on sound theories of human development and measured against the population burden of disease, policy development and implementation will remain piecemeal and reactive.

Breaking the cycle of Aboriginal poor health and disadvantage requires a strategic national focus on the importance of early child health and development. This is now recognised internationally as the single most effective strategy currently available to governments and communities for reducing the worst effects of poverty and breaking the cycle of inter-generational disadvantage.

Important health goals to achieve better Aboriginal child health include: lowering the rate of early teenage pregnancy; improving maternal health and wellbeing; lowering the rate of premature and low birthweight infants; lowering rates of alcohol abuse and tobacco use – particularly in pregnant women; reducing infection rates; improving nutritional knowledge and access to affordable nutritious food – particularly fresh vegetables; and improving rates of contact of Aboriginal families and children with appropriate health care services.

The population perspective provided by these data illustrates why health systems and health services alone cannot provide what is needed to bring about progress. Aboriginal child health is fundamentally linked to social, economic and political factors underpinning human development. This is why progress in Aboriginal health needs the engagement of Aboriginal communities along with concerted, coordinated actions across governments and sectors to develop and implement policies that reflect this fundamental reality.

# The Health of Aboriginal Children and Young People



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