POLICY

Enhanced Aboriginal Child Health Schedule (EACHS) rationale

Scope (Staff): Child Health, School Health
Scope (Area): CACH, WACHS

This document should be read in conjunction with this DISCLAIMER

Aim

This policy guides the practice of community health staff, particularly child health nurses, employed by the Department of Health when delivering the Enhanced Aboriginal Child Health Schedule.

Please Note:

It is acknowledged that Aboriginal and Torres Strait Islander people have many similar characteristics although distinct cultural practices that make up an important part of their culture and heritage. For the purpose of this document the word Aboriginal includes both Aboriginal and/or Torres Strait Islander identities.

Geographically and demographically, Western Australia is a very diverse state. This diversity makes each population or community unique from one another.
Executive Summary

The poor health status of Aboriginal people has been well documented. Substantial inequalities exist between Aboriginal populations and non-Aboriginal populations, particularly in relation to chronic diseases, communicable diseases, mental health and life expectation. The origins of many of these morbidities can be traced back to childhood and are closely related to the social determinants of health. There are a number of disturbing trends among Aboriginal people that reveal an entrenched health crisis. In particular, there remain:

- high rates of chronic diseases such as renal failure, cardio-vascular disease, respiratory disease, eye and ear problems and diabetes
- continued higher rates of poor health among Aboriginal infants and children, as well as far too common occurrence of otitis media (middle ear infection), prematurity, growth failure, overweight and obesity, increasing levels of behavioural, developmental, mental health and social issues, oral health issues and injuries
- a continuing tendency towards poor access to primary health care, as evidenced by high rates of sexually transmitted infections
- high rates of Sudden Unexpected Death in Infancy (SUDI), including Sudden Infant Death Syndrome (SIDS) and fatal sleeping accidents
- high rates of unhealthy and risky behaviour, including an increased prevalence of alcohol and other drug use. Increasing potential risks of Fetal Alcohol Syndrome Disorder
- significant health implications with teenage pregnancies.

In the recent past, governments of all persuasions have made commitments to address this situation over a prolonged period of time, accompanied by incremental funding increases. Despite this, existing data suggests that there have been slow improvements in some areas of health status and no progress on others. The gains made are generally not of the same magnitude of the gains experienced by the non-Aboriginal population, with the result that they have had a minimal impact on reducing the inequality gap between Aboriginal people and other Australians. Most noticeable is the significant gap in health outcomes between Aboriginal and non-Aboriginal children.

The 2011 Ombudsman’s Report: Investigation into the ways that Western Australian Government Departments can prevent or reduce sleep-related infant deaths has informed updates to the Enhanced Aboriginal Child Health Schedule Policy documents. These now highlight potentially modifiable risk factors and provide relevant and appropriate advice for parents in relation to the prevention of Sudden Unexpected Death in Infancy (SUDI) which includes Sudden Infant Death Syndrome (SIDS) and other fatal sleeping accidents.1

Aboriginal infants, children and their families are over represented in all negative demographic social indicators including health indicators and improving their health status is a priority for WA Health and the Commonwealth and Western Australian Governments. WA Health recognises the Council of Australian Governments’ (COAG) landmark ‘Closing the Gap’ initiative as an opportunity to strengthen its approach to addressing Aboriginal health issues, particularly child health issues. This initiative aims to improve the level of

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1 Ombudsman Western Australia. 2012. Investigation into the ways that Western Australian Government Departments can prevent or reduce sleep-related infant deaths.
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engagement with Aboriginal families with infants and young children, particularly families with additional health needs.

Western Australia’s approach, like most other States and Territories in Australia, is to provide a foundation universal child health service which includes child health checks supplemented by more targeted and specialist services. An Enhanced Aboriginal Child Health Schedule has been developed; this new approach builds on and strengthens the existing universal child health schedule by offering additional assessments to Aboriginal families with identified health needs. The enhanced schedule delivers a comprehensive approach to families to ensure that health issues are identified and addressed early in order to maximise positive outcomes for the infant/child. The Universal and Enhanced schedules complement each other as families move between the two streams as their needs and circumstances dictate. Health professionals working with families provide referral in and out of the two streams and support families to navigate their way through the health system.

It is recognised that the first year of life is critical to ensure healthy growth and development of children. Therefore, there are additional health checks offered from the antenatal period onwards. This is to enable health issues such as growth failure, infections, hearing loss, developmental delay, the impact of mental health, drug and alcohol issues, or risk factors associated with Sudden Unexpected Death in Infancy (SUDI) to be identified early. Staff are then able to either commence early intervention or refer to appropriate agencies if available.

The Enhanced Aboriginal Child Health Schedule is well articulated with research and is evidence informed and responsive to national frameworks and reports. In 2009, a review of the evidence of Aboriginal child health screening and surveillance was completed by Telethon Institute for Child Health Research (TICHR). The schedule is grounded in the knowledge base regarding the importance of the early childhood years in laying the foundations for future health and wellbeing. Information that supports a better understanding of the key issues affecting Aboriginal children and their families is critical in the development of this new policy.

The universal child health service in Western Australia is delivered by child health nurses, who are registered nurses with post graduate qualifications in child and family health. The Enhanced Aboriginal Child Health Schedule can be delivered by a multidisciplinary team including Child Health Nurses, Remote Area Nurses, Aboriginal Health Workers, Registered Nurses, Enrolled Nurses, Midwives and Medical Officers who provide services in different settings; at home, in child health centres and other community venues that are accessible and culturally appropriate.

All of these health professionals have a vital role in supporting parents/carers with infants and young children; for many families they are the only link into health and social services. As the family has the greatest influence on a child’s health and development, it is essential that health professionals engage with and work in partnership with Aboriginal families and communities (parents, carers, grandparents, aunties, elders) using a strengths-based approach to effect change in behaviour and health outcomes. The flexibility in service delivery will allow staff to deliver care tailored to individual and community needs.

The Enhanced Aboriginal Child Health Schedule aims to improve health outcomes for children by providing effective early support at critical periods in a child’s life to minimise the harmful effects of disadvantage and increase the likelihood of children achieving their social, educational and personal aspirations. The schedule recognises that the health status and health service needs of Aboriginal children and their families, and that Aboriginal concepts of health and illness, differ from those of the general population in
many ways. It is acknowledged that social, cultural and linguistic differences among groups can also contribute to differences in health status, health service requirements and health outcomes. The schedule has been developed in consultation with Aboriginal health staff, internal and external health experts, and modified from the ‘Healthy under 5 Kids Program’ from the Northern Territory State Health Department (with consent).

The Enhanced Aboriginal Child Health Schedule and delivery of child health services will continue to evolve in response to new evidence, societal changes, and the needs of Aboriginal children and families in Western Australia. Ongoing research in child health care provision is essential and will continue to inform the future directions of service deliveries complementing societal and cultural needs. This rationale document has been developed with a view to depict a clear direction for contemporary Aboriginal child health services in Western Australia.

Introduction

Since the 1920’s child health services in Western Australia (WA) have had a key role in monitoring the healthy development and wellbeing of infants and children 0-5 years of age. Community health staff supports parents/carers by empowering them with the skills and knowledge to enhance their child’s health and development.

During the 1980’s and 1990’s, child health services in Western Australia provided a structured 0-5 health program for Aboriginal children, which involved recalling children at key developmental ages to monitor their growth and wellbeing. Subsequent departmental restructuring resulted in the loss of formal arrangements to initiate and maintain relationships with Aboriginal families, particularly those with children at risk of poorer health and developmental outcomes. With the current re-engagement by all governments in improving Aboriginal health, and in particular children’s health and development, children’s health services require policy and planning frameworks to address the inadequate health outcomes of Aboriginal children. Current evidence supports frameworks that include key factors for effective primary prevention strategies in addition to acknowledging the additional needs of vulnerable and at risk children.

Through the policy paper, New Directions: an equal start in life for Indigenous children, the Commonwealth Government has committed to ‘Closing the Gap’ for Aboriginal infants, children and their families. A specific directive under this proposal is for Aboriginal children to have their weight gain, immunisation status, infections and early developmental milestones monitored by a primary health care service that sees itself responsible for that child’s health and development. This would also involve children being referred to specialist medical care, allied health or child protection services as appropriate.

Western Australia, like most other States and Territories in Australia, provides a foundation universal child health service supplemented by more targeted and specialist services for children and their families with identified health and developmental needs. These services are delivered by child health staff employed by WA Health. In regards to Aboriginal infants, children and their families, there are a number of service providers including WA Health’s child health services, Aboriginal Medical Services, Aboriginal Community Controlled Organisations and General Practitioners.

Across Western Australia, child health staff identified a need to improve the level of engagement with Aboriginal families with young children, particularly who are at risk of health conditions and developmental issues. This was in recognition that universal mainstream child health services are underutilised by many within the Aboriginal population. In most cases it appears that retention within the service rather than initial access may be a key issue which may result in children with health conditions such as
growth failure not receiving adequate follow up and support. Amid the wide range of contributing factors hypothesised for this poor engagement are a general mistrust of mainstream services, a reduced healthcare awareness resultant from low levels of parental education, a belief that the services misunderstand Aboriginal cultural beliefs and inadequate culturally appropriate service provision.

A comprehensive Enhanced Aboriginal Child Health Schedule has been developed which builds on and strengthens the existing universal child health schedule by offering additional health assessments to Aboriginal families with identified health needs. The schedule will be delivered predominantly as a home visiting/outreach community development model in recognition of evidence which suggests that home visiting positively impacts on effective Aboriginal parenting.

**Best practice**

In the last decade there has been overwhelming research evidence on the importance of the early years and its impact on human development, which has seen a major shift in the way child health services are delivered. There is increasing focus on supporting parents/carers to enhance their children’s cognitive, social and emotional development, as well as their physical health. In addition, there is increasing recognition of the need to respond to the social factors that are important determinants of health outcomes, and which underlie health inequalities.

The Enhanced Aboriginal Child Health Schedule reflects current evidence and research and will be subject to monitoring and evaluation processes to ensure the delivery of a useful, responsive and effective service. The enhanced schedule is more comprehensive than the Universal Contact Schedule in the number of contacts being delivered. This is in recognition of the need to support and strengthen children and their families with identified needs. Entry and exit criteria and referral pathways have been developed. The criteria include individual risk factors and factors within the family environment that may impact on the child’s developmental outcomes.

Key issues addressed include parental physical and emotional wellbeing, alcohol, smoking and other drug misuse, parenting, child health, behaviour, child development, breastfeeding, infant nutrition, oral health, injury prevention, safe sleeping strategies, safety and immunisation. Similarly to the universal schedule, once an assessment is made during a health check, the parent/caregiver and health professional will develop a plan outlining the frequency of visits, venue, and any referral needs. For those families considered to have high needs, referral to specialist services may be offered.

The contact times of the Enhanced Aboriginal Child Health schedule are based on a series of principles including:

- Aligning child health assessments against critical periods of a child’s development.
- Offering more frequent contacts in the first 12 months to facilitate the development of a relationship between family and child health service and identify early health conditions that, if left untreated, are likely to result in significant impact to the child and wider community. Examples of such conditions are congenital eye conditions, dental decay, inadequate nutrition, hearing loss, developmental dysplasia of the hip and un-descended testes, growth failure, infections, and delays in physical language, social and emotional development.
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- Provision of age-specific health information and targeted anticipatory guidance, particularly around issues such as breastfeeding, safe sleeping, parenting and parent-infant interaction.

- Promotion and/or provision of immunisation, which is the most cost effective public health intervention in preventing childhood morbidity and mortality.

The Vision

All Western Australian Aboriginal children and their families with identified needs will benefit from quality child health services that support optimal health, cultural respect, development and wellbeing.

Objectives

The vision is achieved through the following objectives:

- Provide carers with support to navigate through the health systems
- Improve the uptake of, and the level of family engagement with community health services by Aboriginal families with young children, particularly those with identified health needs
- Identify the protective and risk factors within the family environment
- Provide early identification and early intervention services to children with identified needs in order to tailor the appropriate service responses
- Provide a culturally sensitive approach to service delivery
- Strengthen the parenting skills and confidence within Aboriginal families
- Support young and first time parent/carers. Encourage parents to plan appropriate spacing between pregnancies.
- Concentrate on building partnerships between the community health staff and the family
- Facilitate family access to relevant community resources and agencies where appropriate.

The enhanced schedule contains elements of screening and surveillance, delivered within a holistic approach to the Aboriginal child and family. Individual and family needs are identified through assessments and appropriate strategies are implemented in partnership with caregivers and families. Aboriginal children and families who have specific issues are provided with additional resources based on their identified needs and/or referred to specialist services if available.

Demographic information about Aboriginal Children (0-5 years) In Western Australia (WA)

Number of Aboriginal children (0-5 years)

In 2009, there were 9931 Aboriginal children aged 0-5 residing in WA with over 60% living in rural and remote areas. A high proportion of Aboriginal children reside in the Kimberley region (22%) and the metropolitan inland zone (18%) (Rates calculator 2009). Table one
below shows the distribution of Aboriginal children aged zero to five years throughout Western Australia (WA).

### Table 1: Aboriginal 0 to 5 years population by WA health service region/zone (2009)

<table>
<thead>
<tr>
<th>Health region/zone</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Southern</td>
<td>305</td>
<td>3</td>
</tr>
<tr>
<td>South West</td>
<td>376</td>
<td>4</td>
</tr>
<tr>
<td>Wheatbelt</td>
<td>498</td>
<td>5</td>
</tr>
<tr>
<td>Goldfields</td>
<td>784</td>
<td>8</td>
</tr>
<tr>
<td>North Coastal</td>
<td>851</td>
<td>9</td>
</tr>
<tr>
<td>Pilbara</td>
<td>915</td>
<td>9</td>
</tr>
<tr>
<td>Midwest</td>
<td>1033</td>
<td>10</td>
</tr>
<tr>
<td>South Coastal</td>
<td>1179</td>
<td>12</td>
</tr>
<tr>
<td>Inland</td>
<td>1804</td>
<td>18</td>
</tr>
<tr>
<td>Kimberley</td>
<td>2186</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9931</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Rates calculator database 2009, Epidemiology branch, WA Department of Health, Dr Jim Codde.

**Birth number and rates**

Aboriginal mothers represented 5.7 percent of women who gave birth in WA in 2008 and have a high birth rate (101.7 per 1000 women) than non-Aboriginal women (66.3 per 1000 women). Overall 6.1% (8,672) of babies were born to Aboriginal women in WA from 2004 to 2008. The birth rate for Aboriginal teenage mothers (104.2 per 1000 women) was more than six times the rate for non-Aboriginal teenage mothers (16.6 per 1000 women).

**Child mortality**

**Perinatal mortality**

There were 315 neonatal deaths in Western Australia leading to a neonatal mortality rate of 2.2 per 1000 live births. For babies of Aboriginal women the neonatal mortality rate was 6.1 per 1000, which was more than three times the rate recorded for babies of non-Aboriginal women.1 The rates indicated further improvements needed toward the health of neonates in Western Australia with continual focus and emphasis on antenatal care as well as early detection to reduce the current rates of mortality.

**Infant mortality**

From 2004 to 2008, there were 498 infant deaths identified during this period, providing an infant mortality rate of 3.5 per 1000 live births. For babies of Aboriginal women the rate reduced from 21.0 per 1000 in 1994 to 11.7 per 1000 in 2008.

Among babies of Aboriginal mothers, the infant mortality rate of 11.3 per 1000 was almost four times that of the rate for babies of non-Aboriginal women (3.0 per 1000) during the 5 year period 2004 - 2008. Impacting this figure is the high proportion of deaths among babies of Aboriginal mothers in the post-neonatal period (5.3 per 1000 live births), which was more than five times the rate recorded for babies of non-Aboriginal women (1.0 per 1000). Causes of infant death are principally Sudden Unexpected Death in Infancy (SUDI) which includes Sudden Infant Death Syndrome (SIDS) and other fatal sleeping accidents, lethal congenital anomaly, low birth weight and infection. Among babies of Aboriginal
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women, SUDI and SIDS (22.2%) and lethal congenital anomaly (22.2%) were the principal known causes of death during the post-neonatal period. ¹,²

**Factors that influence Health and Wellbeing**

**Low birth weight**

A baby’s birth weight affects health status. Low birth weight babies (< 2500 grams) have a high risk of poor health and significant disabilities. ⁵ Risk factors that contribute to low birth weight and impaired growth of Aboriginal babies include cigarette smoking, alcohol consumption and other drug use during pregnancy. The percentage of low birth weight babies born to Aboriginal mothers (16.0 per cent) in 2008 was more than two and a half times the percentage of babies born to non- Aboriginal mothers (6.1 per cent). The rate of Aboriginal mothers having babies with low birth weight has not improved in the last 15 years (Table 2). ⁵

<table>
<thead>
<tr>
<th>Birth weight (grams)</th>
<th>Aboriginal n</th>
<th>Aboriginal %</th>
<th>Non-Aboriginal n</th>
<th>Non-Aboriginal %</th>
<th>Total n</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2500</td>
<td>278</td>
<td>16.0</td>
<td>1774</td>
<td>6.1</td>
<td>2052</td>
<td>6.7</td>
</tr>
<tr>
<td>≥ 2500</td>
<td>1462</td>
<td>84.0</td>
<td>27156</td>
<td>93.9</td>
<td>28618</td>
<td>93.3</td>
</tr>
<tr>
<td>Total</td>
<td>1740</td>
<td>100.0</td>
<td>28930</td>
<td>100.0</td>
<td>30670</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Le, M, Tran, BN, 2010, perinatal statistics in Western Australia 2008: Twenty-sixth annual report of the Western Australian midwives notification system. Department of Health, Perth.*

**Premature births**

Preterm birth (less than 37 weeks gestation) is associated with neonatal problems that cause significant morbidity and mortality in newborn babies, 13.3 per cent of all Aboriginal infants were of preterm births. The proportion of premature births in the total population is 8.2 per cent. ²,⁵ Due to the gestational age this also influences the length of stay within the hospital setting. ⁵

**Immunisation**

Immunisation coverage rates can inform whether immunisation programs are effective and where targeted programs are required. Of WA children aged <63 months on 31 March 2010 the average percentage of Aboriginal children fully immunised for 12-<15 months, 24-<27 months and 60-<63 months was 78.01%, 79.53% and 80.56%, respectively (Australian Childhood Immunisation Register 2010). This was lower, in all three age groups, than the immunisation coverage rate of non-Aboriginal children (90.95%, 91.21% and 87.09% respectively) (Australian Childhood Immunisation Register 2010). In comparison to other Australian states and territories, in the September 2009 quarter, WA had the second lowest proportion of Aboriginal children aged 24 to less than 27 months who were fully immunised (table 3).
Maternal Factors which may impact on child health outcomes

**Teenage pregnancies**

Teenage motherhood poses significant long-term risks, including poorer health, educational and economic outcomes, for both mother and child. Aboriginal women have children at younger ages than all women. In WA the median age of Aboriginal women who registered a birth in 2009 was 24.2 years. From 2004 to 2008 almost a quarter (23.7%) of Aboriginal women who gave birth were teenage women (less than 20 years of age) in contrast with non-Aboriginal women of whom 4.1 per cent were teenagers. In 2009 the teenage fertility rate of Aboriginal women living in WA was 103 babies per 1000 women, more than six times the rate of all teenage women in Australia (17 babies per 1000 women). Fathers of Aboriginal births in 2009 were younger than all fathers. Of all the Australian states, WA recorded the lowest median age of fathers of Aboriginal births (27.1 years).

**Tobacco use during pregnancy**

15.4% of all mothers smoked in 2008. Among teenage mothers, 34.1 per cent smoked and among Aboriginal mothers, 51.2 per cent smoked. Smoking during pregnancy is associated with prematurity, low birth weight and increased risk of SUDI.

**Alcohol use during pregnancy and breastfeeding**

Consuming alcohol at hazardous levels during pregnancy is associated with adverse perinatal outcomes including foetal alcohol syndrome, alcohol withdrawal in the newborn and increased risk of perinatal mortality. One study found that 22.8 per cent of birth mothers of Aboriginal children drank alcohol during their pregnancy. It should be noted that although Aboriginal women are less likely to consume any alcohol than other Australian women, those that do are more likely to consume alcohol at hazardous levels, particularly women of child bearing age. Drinking alcohol in excessive quantities causes diabetes, liver damage, raised blood pressure, overweight, and can replace healthy food in the diet. Alcohol is high in kilojoules and low in nutrients.

During pregnancy, any alcohol consumed passes through the placenta and enter the blood circulation of the foetus in nearly equal concentrations. Alcohol exposure may result in Foetal Alcohol Spectrum Disorder (FASD). FASD, is an umbrella term used to describe a range of alcohol-related birth defects and disorders. Foetal Alcohol Syndrome (FAS) is caused by exposure to high levels of alcohol during pregnancy, resulting in neurological development problems. Children with FASD may have facial abnormalities,

<table>
<thead>
<tr>
<th>Table 3: Immunisation coverage (%) children on the Australian Childhood Immunisation Register who were aged 24-&lt;27 months between 1 July 2009 and 30 Sept 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indigenous</td>
</tr>
<tr>
<td>WA</td>
</tr>
<tr>
<td>Indigenous</td>
</tr>
<tr>
<td>WA</td>
</tr>
<tr>
<td>Total (%)</td>
</tr>
<tr>
<td>Person (n)</td>
</tr>
<tr>
<td>90.8</td>
</tr>
<tr>
<td>91.9</td>
</tr>
<tr>
<td>91.8</td>
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<tr>
<td>6,936</td>
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</tbody>
</table>
impaired growth, abnormal functioning of the nervous system and significant developmental, behavioural and cognitive problems. As FASD is linked directly to the consumption of alcohol during pregnancy, health professionals are in a prime position to assist in its prevention. Even at low levels of drinking, results show that pregnant women who drink more than between one to two standard drinks each time and more than six standard drinks a week increase their risk of a premature birth, even if drinking has ceased before the second trimester. Children with FASD experience lifelong problems including disrupted and difficulty with learning, mental health issues and antisocial behaviour.

Alcohol use during lactation has effects on mother and child.

The concentration of alcohol in the breast milk is equivalent to the blood alcohol concentration of the mother, breast milk supply may be reduced and infants can become irritable, feed poorly and suffer from disturbed sleep. High frequency of alcohol consumption has also been associated with premature cessation of breastfeeding.

Breastfeeding women are strongly advised not to become intoxicated as judgment is impaired and thus increases the risk of injury to themselves and their infants.

WA Health staff are required to promote the recommendations from the Australian Government guidelines on alcohol, pregnancy and breastfeeding that:

- No alcohol is the safest choice therefore pregnant and breastfeeding women are encouraged to not drink at all.
- Women who are breastfeeding and choose to drink alcohol are given the following advice;
  - Try to avoid alcohol in the first month after your baby is born until breastfeeding is well-established.
  - After that, alcohol intake should be limited to no more than two standard drinks a day.
  - You should not drink alcohol immediately before you breastfeed.
  - You should consider expressing milk in advance if you want to drink alcohol.
  - Avoid co-sleeping to prevent fatal sleeping accidents.

Nutrition during pregnancy

It is estimated that up to 19 per cent of the national Aboriginal health gap is attributable to diet related causes, including low fruit and vegetable intake, especially in remote locations where fresh fruit and vegetables are expensive and limited. Poor diet and nutrition in pregnancy and beyond, impacts on birth outcomes, early child development and can have life-long consequences for the health of mothers, with flow-on effects to current and future generations, including increased morbidity and mortality.

Specific Health Issues which may impact on child health outcomes

Nutrition

Nationally Aboriginal children aged less than four years suffer from malnutrition at 29.6 times the rate for non-Aboriginal children. However, despite many Aboriginal infants being of lower birth weight, by the age of four years, 27.9 per cent of them are overweight or
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Obese, compared to 18 per cent of non-Aboriginal children. Varied nutrition intake, parasitic infestation and recurrent infections are causative factors. Illnesses linked to inadequate nutrition such as iron deficiency anaemia impact on developmental milestones, placing health, education, development and wellbeing at risk, and increase the likelihood of chronic disease in adulthood. Local protocols for screening and treatment of anaemia should be implemented in regions where anaemia is a significant population issue. Otherwise, targeted assessment of symptomatic children is indicated.

**Oral health**

Aboriginal children experience approximately 70 per cent more dental caries, have advanced decay in their deciduous teeth and overall rate for dental extraction was slightly higher than for other Australian children.

Well established dental decay in childhood carries through to adulthood and further increases the number of adult dental procedures. The rate of decay is increasing in remote areas, and is a major cause for hospital admissions, impacting on overall general health and wellbeing.

**Ear health**

Aboriginal children account for the highest prevalence of Chronic Suppurative Otitis Media (CSOM) in the world, up to 40 per cent in some remote communities. A prevalence of over four per cent in a defined population of children is considered by the World Health Organisation as a 'massive public health problem requiring urgent attention'. It is common for Aboriginal infants to develop otitis media (OM) in the first few weeks of life and 73 per cent have OM before 12 months of age.

Middle ear disease is a significant problem for Aboriginal children in WA and is associated with mild to moderate hearing loss. Strong evidence shows, that childhood ear infections contribute to education disruption and adult imprisonment. One study found that almost half the female Aboriginal inmates at a Western Australian prison had significant hearing loss, almost ten times higher than non-Aboriginal inmates.

Aggressive early treatment of ear infections is required to prevent progression to CSOM. OM and its complications can lead to intermittent or persistent deafness with subsequent impact on language development, learning and cognitive functioning throughout adulthood. Despite this, Aboriginal children are under-represented in terms of preventative surgical approaches (insertion of grommets and/or removal of tonsils and adenoids). On the other hand, rates of tympanoplasty, a surgical procedure to repair a perforated ear drum, are higher in Aboriginal groups, suggesting that preventative opportunities to preserve middle ear health are being missed. Promising early results from a small study in Western Australia indicated the benefits of using salt water in swimming pools to reduce rates of ear infections.

In recognition that environmental conditions impact on ear health, staff are encouraged to use protocols that reflect community needs. Appropriate protocols are available as listed below.

Kimberley protocols can be sourced at

The CARPA manual guidelines are available at:
Alternatively staff can use the Aboriginal Ear Health Manual as referenced below.


**Eye health**

This is a priority for the Australian Government as trachoma still occurs in people across Australia. Having inflammatory trachoma as a child this causes the eyelashes to turn inwards, scarring the eye, resulting in blindness in adulthood. Therates of trachoma have decreased nationally, but a concerted effort within very remote communities is still required, with 60 percent having endemic trachoma.\(^{16,17}\) Aboriginal children have very good eye health, but require early detection of trachoma to eliminate the condition.

**Asthma**

The WA Aboriginal Child Health Survey (2004) found that the occurrence of asthmawas lowest among younger children, with 16.8 per cent of children aged 0 to 3 years reported to have had asthma compared with 25.6 per cent of children four to 11 years and 24.4 per cent of children aged 12 to 17 years.\(^2\) The survey also reported asthma to be four times more common among Aboriginal and Torres Strait Islander people living in the Perth metropolitan area than in extremely isolated areas in the state.\(^2\)

**Skin infections**

Skin infections are not easily contained when living in overcrowded dwellings. Transmission involves sharing of bedding, clothes, towels as well as skin to skin contact. In these environments scabies are most common; however this does not indicate poor hygiene. Skin infections including eczema, school sores and ringworms require a rigorous treatment approach from the whole community. Skin health is addressed through community knowledge around good environment health and prevention strategies.

**Respiratory conditions**

Overcrowded living conditions within the Aboriginal community contribute to increased level of risk for respiratory diseases. The low uptake of childhood immunisation also contributes to the spread of infections. Respiratory diseases including pneumonia, asthma, and bronchitis are currently managed and treated by health staff. Respiratory illnesses are often a cause of hospitalisation for this age group.

**Gastrointestinal bacterial infection and parasitic infestation**

There are a number of bacteria and parasites that cause diarrhoea in Aboriginal children. Giardiasis is a very prevalent intestinal parasite particularly in children between two and five years of age. Gastrointestinal infections can lead to secondary episodes of lactose intolerance resulting in diarrhoea. Hookworm infection is of special importance because it causes internal blood loss leading to iron deficiency anaemia. Other effects can include loss of appetite, reduced absorption and intestinal digestion.\(^{18}\) Breastfed babies are less likely to suffer from conditions such as gastroenteritis and respiratory illness due to the protective properties in the breastmilk.\(^{19}\)
**Child development**

The Australian Early Developmental Index (AEDI) is a population measure of children’s development over five key domains. Overall WA Aboriginal children are more vulnerable than non-Aboriginal children in each of the five AEDI domains.

<table>
<thead>
<tr>
<th></th>
<th>Physical health &amp; wellbeing</th>
<th>Social competence</th>
<th>Emotional maturity</th>
<th>Language &amp; cognitive skills</th>
<th>Communication skills &amp; general knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aboriginal</td>
<td>24.7%</td>
<td>18.6%</td>
<td>18.3%</td>
<td>37.7%</td>
<td>22.1%</td>
</tr>
<tr>
<td>Non Aboriginal</td>
<td>9.2%</td>
<td>7.0%</td>
<td>8.2%</td>
<td>10.3%</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

**Injuries and preventable deaths**

Transport accidents, intentional self-harm and assault accounted for 23.9 per cent of Australian Aboriginal deaths in 2005. Assault accounts for the highest proportion of hospitalisations (33 per cent), with more Aboriginal females than males being affected. Transport accidents account for over a quarter (28 per cent) of Aboriginal deaths nationally, and the age-standardised rate of fatal injury due to transport accidents is 2.9 times higher than for non-Aboriginal people. Aboriginal children aged 0 to 14 years are four times more likely to die from an injury (22.3 per 100 000 population) than non-Aboriginal children (5.9 per 100 000 population).

The number of Sudden Infant Death Syndrome (SIDS) deaths in Australia has decreased by over 80% from 526 in 1984 to 87 in 2005. However, Aboriginal infants were found to be nearly eight times more likely to die from SIDS than non-Aboriginal infants. With the overall decline in numbers of SIDS deaths, attention has now turned to the broader Sudden Unexpected Death in Infancy (SUDI) which includes SIDS and fatal sleep accidents due to unsafe sleep environments. There is evidence that co-sleeping is associated with a greater incidence of SUDI where certain factors are also present. Smoking during pregnancy significantly increases the risk of SUDI, particularly if the mother smokes during the second or third trimester of her pregnancy. It is important that babies be kept in a smoke-free environment during pregnancy and after birth.

**Child abuse and neglect**

Child abuse and neglect can be defined as the harm or likely harm experienced by a child as a result of the action, or inactions, of an adult who has care responsibility of the child. Abuse can be physical, emotional, psychological or sexual. Being subject to abuse or neglect can have detrimental effects on a child’s development and wellbeing, including higher rates of alcohol and drug issues, criminal behaviour and poor academic achievements in adolescence. Adults who were abused in childhood often face difficulty parenting their own children.

Children under three years old are at higher risk of neglect and sustained physical abuse, particularly in the first year of life. Older children are at higher risk of sustained sexual abuse. Children with disabilities have a higher risk of abuse, particularly those with
hearing impairment and severe physical and intellectual disabilities. Aboriginal children are at higher risk than non-Aboriginal children. Family factors that may contribute to abuse or neglect are low socioeconomic status, crowded dwellings, poverty, residential instability, alcohol and drug misuse, domestic violence, intellectual or psychiatric disability.

Aboriginal children are over represented in notifications of child abuse or neglect, children under care and protection orders, and children in out of home care. The reasons for this over-representation are complex and include the legacy of past policies of the forced removal of some Aboriginal children from their families, the intergenerational effects of previous separations from family and culture, and poor socioeconomic status. Neglect accounted for almost half (49.3%) of all Aboriginal children who were the subject of a substantiation of a notification received during 2008 to 2009 in WA.

Children in out-of-home care

Children in the care of the Chief Executive Officer of the WA Department for Child Protection and Family Support (referred to as ‘children in care’) are a highly vulnerable group with often complex and undefined health needs. They therefore often require additional support from community health providers.

In 2009 in WA, there were 3,195 children in care of the Department for Child Protection and Family Support, a 16% increase in the last two years. The majority of these children in care (52%) were under four years of age, with 22% less than one year old, 30% aged one to four years, 25% aged five to nine years, 21% aged 10 to 14 years and 2% aged 15 or older. Forty-four percent were Aboriginal. Living arrangements vary although home-based out of home care is the most common type of living arrangement across all ages.

National reports indicate that Australian children living in state care experience poorer levels of physical, developmental, behavioural and emotional health than those of the general child population.

Parental Carer Factors that may impact on child health outcomes

Family and domestic violence

Aboriginal people are 11 times more likely than non-Aboriginal people to be hospitalised with assault-related injuries and are five to ten times more likely to die as a result of assault-related incidents. In 2006-07, the rate of hospitalisation for Aboriginal people as a result of spouse or partner violence was almost 34 times that of non-Aboriginal people. The presence of family violence is a strong predictor of child abuse and reduces the capacity of people who have experienced violence to enjoy the everyday freedoms of our society.

- Family violence continues to devastate Aboriginal families and communities at a much higher rate than the broader community. Its effects are brutal and long-lasting, especially for children.
- Family violence is a crime and the impact can be far reaching. For a family who lives with violence, it is very hard to study, work, or to give children the nurturing they need.
Aboriginal child health rationale

Providing high quality and timely care to people who have experienced violence is crucial to preventing the cycle of violence from continuing. Research has shown that the first point of contact for a person who has experienced family violence is critical to their recovery process. Service delivery models that recognise the complexity of a person’s needs while providing consistently high levels of assistance and followthrough with care plans are most successful. The Time for Action report referred to this as the “first door, right door” model. Information sharing between service providers (such as children, parenting and women’s services, night patrols, mental health, schools and health clinics) and police and governments is critical to responding before violence happens. It is also critical that children who are exposed to family violence and child abuse are given support, time and space to recover. Their recovery from this trauma is also vital in preventing the cycle from continuing.

Strategies that may assist families in this situation include:

- Working intensively with parents on core parenting skills such as setting boundaries for children.
- Providing childcare, playgroup and other services that can provide parents with respite, friendship networks, and information and skills.
- Ensuring that additional supports are available for families in times of need or heightened vulnerability.

**Drug misuse**

Substance use is a contributing factor to ill health, accidents, violence, crime, family and social disruption. In Australia the use of illicit drugs and the harms attributed to their use is higher among Aboriginal people than the general population. The National Drug Strategy Household Survey (2008) reported a prevalence rate of 28 per cent of illicit substance use among the Aboriginal population in urban areas aged 15 years and over. This compares with a usage rate of 13 per cent for the general population aged over 14 years.23

**Mental Health**

Parental mental health clearly impacts on a child’s health and development. Parents who are capable of nurturing and parenting their children provide the optimum emotional climate for secure attachment and long term benefits.

When parents suffer from poor mental health related to anxiety and depression in the perinatal period, the impacts on a child’s health and emotional, cognitive and social development can be significant. Many Aboriginal people have experienced traumatic life experiences through forcible removal, racism and continual grieving for loss of family members and culture.

Trauma can be unwittingly handed down to the next generation through fear, shame, violence or abusive behaviour. Due to these situations, individuals can react to stressors in a number of different ways, and use a variety of coping mechanisms. When families are under significant stress, additional support may be required to assist families to use healthy coping mechanisms.

Although all children experience a wide range of developmental, social, parenting, family and other factors which can influence the likelihood that a mental health disorder will
Aboriginal child health rationale

develop, the compounding impact of trauma places Aboriginal children and young people at higher risk of poor health, social, employment and other outcomes. The WA Aboriginal Child Health Survey noted that approximately 25% of Aboriginal children between 4-17 years were at high risk of clinically significant emotional and behavioural difficulties, compared to approximately 15% of non-Aboriginal children.²

Aboriginal Family Structures in Australia

Most Aboriginal children show a strong sense of acceptance, concern and commitment to siblings and family. Aboriginal families respect for children’s early autonomy has enabled many children to develop good adaptation and survival skills, to take on personal responsibilities and to act independently. One of the key strengths of Aboriginal families is their acceptance of children within an extended family system.²⁴

The complexity of Aboriginal family relations is that an Aboriginal child’s father and all paternal uncles are considered to be fathers. A child’s mother and all maternal aunties are considered to be mothers. As such, parental responsibilities such as legal consent, discipline and personal care can be shared between several relations. In addition to this, cousins may be recognised as sisters and brothers, and close unrelated paternal/maternal figures may be identified as uncles/aunties.

Structure of an Aboriginal family unit

![Diagram of Aboriginal family structure]

Source: (The structure shown above is taken from the Office of Aboriginal Health’s “Aboriginal Employment A Guide to better retention strategies across WA Health” document).

Aboriginal Household and Family Structure

Data from the 2006 Census show that the majority of both Aboriginal and other Australian households are single family households (76% and 70% respectively), however a larger proportion of Aboriginal households are multi-family households (5% compared with 1%) and a smaller proportion are lone person households (14% compared with 25%). Aboriginal households are more likely to be larger, with an average of 3.4 people compared with 2.6 for other Australian households.²³
In 2006, Aboriginal single family households were three times more likely than other single family households to be one-parent families with dependent children or students (30% compared with 10%), but less likely to be families without dependents (33% compared with 54%). Aboriginal and non-Aboriginal single family households were equally likely to be, couples with dependent children (around 37%).

The characteristics of Aboriginal households differ from the majority of Australian households - they tend to be larger, non-nuclear and more fluid in composition. Aboriginal families have overlapping and extensive kinship networks, with both adults and children commonly moving between different households. These extensive and fluid family structures are more common in remote communities, but are also found in more settled areas of Australia.

**Socioeconomic Status**

The relatively poor socioeconomic status of Aboriginal people and families has been well documented as well as the lower employment rates, income levels and education attainment of Aboriginal people when compared with non-Aboriginal people. Aboriginal people in remote areas have limited access to services and mainstream labour markets. This has important implications for Aboriginal children born and raised in these environments, and impacts on their health and other life outcomes. A key set of statistical variables has been identified as indicators of risk of exclusion from mainstream social and economic opportunities. An analysis of the 2001 Census and other data on the indicators of risk for Aboriginal and non-Aboriginal children led to the conclusion that Aboriginal children were among the most socially disadvantaged in Australia. Compared with other children, children living in Aboriginal households were:

- less likely to be living with a parent (88% of Aboriginal children compared with 98% of non-Aboriginal children)
- had lower weekly household incomes (median weekly incomes of households with Aboriginal children were 67% of the median weekly incomes of households with other children (i.e. non-Aboriginal children)
- more reliant on income support (33% of Aboriginal families with dependents were receiving parenting payment compared with 16% of non-Aboriginal families)
- more likely to have parents who left school early (57% of children in Aboriginal households were living with parents who had not completed Year10 compared with 25% of children in other households); and less likely to have a parent in paid employment (47% of Aboriginal families had no parent working compared with 20% of other families).

**Enhanced Aboriginal Child Health Schedule**

Evidence suggests that universal mainstream child health services are underutilised by many within the Aboriginal population. In most cases it appears that retention and engagement with the service rather than initial access may be the key issue. Some suggested reasons for disengagement with the health service are a general mistrust of mainstream services, a belief that the services misunderstand Aboriginal cultural beliefs and inadequate culturally appropriate service provision. There are structural barriers including: limited availability, hours of operation, inaccessible locations, lack of public transport and absence of outreach capacity.
Aboriginal child health rationale

In Western Australia, all families with a newborn are offered a schedule of child health and developmental assessments, commencing with a universal home visit within the first 10 days following birth. Where there are no identified vulnerabilities or health/developmental risks, child health staff will continue to track the child's health and development using the universal child health contact schedule.

Where an infant is assessed as at risk or vulnerable a structured process including the offer of additional contacts, early intervention services, referral and/or support through targeted and intensive/specialist services is offered. Examples include the Enhanced Home Visiting Service and the Enhanced Aboriginal Child Health Schedule.

The Enhanced Aboriginal Child Health Schedule comprises a greater number of health assessments and structured pathways to address the often complex health and developmental needs of Aboriginal children. It utilises a documented process of engagement with child health services, ideally commencing in pregnancy.

There is clear evidence that families with infants and young children identified with high needs require effective outreach services which are;

- intensive in the first few months
- linked to a comprehensive system
- have strategies clearly linked to identified risk factors and expected outcomes,
- have well trained and mentored staff and
- sustained interventions over a longer period of time

The evidence also indicates that families with lower levels of need benefit more from short term responsive interventions, but as the need lessens, they should return to the universal schedule.

Referral to any targeted and intensive/specialist services should be voluntary and based on the presence of criteria or risk factors. It is also important that these specialist services have clear criteria for entry and exit of the service, but it is imperative that the criteria is not so rigid that it excludes shared decision making between the parent/caregiver and the health professional.

Both the Universal Child Health Contact Schedule and the Enhanced Aboriginal Child Health Schedule use the Indicators of Need Guide as a basis to identify risk and protective factors within the family environment. In addition the following risk factors should be considered for Aboriginal children and their families who may benefit from the Enhanced Aboriginal Child Schedule of visits.

Infant factors

- Infants at increased medical risk due to prematurity, low birth weight and failure to thrive
- Weight loss of >10% of birth weight
- Transfer to Neonatal Intensive Care Unit/ Special Care Nursery
- Difficulty in feeding
- Constant crying
Aboriginal child health rationale

- Infant with a severe physical deformity
- Infant with neurological impairment
- Infant with indeterminate sex
- Any other concerns

Parental factors

- Alcohol and drug abuse
- Anxiety, depression or other mental illness
- Family instability, conflict or violence
- Attachment issues
- Unsupported, low income, teenage parent
- Homelessness or overcrowding
- Poverty, unemployment, housing problems
- Parent with an intellectual disability
- Department of Child Protection involvement
- Socially isolated parents
- Parents where there are precursors of insecure attachment
- Indication of adoption
- Any other concerns.

Families should be offered services according to their needs. Families with more risk factors or significant issues may require higher priority access to the service. Children and their families who only have one or two of the issues might only require short term interventions before returning to the universal child health service. Therefore, the enhanced schedule which currently includes a minimum of 14 contacts over five years should only be for children and their families with multiple risk factors. The same schedule can be modified for families with some needs, who only require more frequent visits for a short period of time to address the health needs.

As with the universal schedule, once an assessment is made during a contact, the community health staff and the parent/carer will develop a plan outlining the frequency of visits, venue, and any referral needs. For those families considered to have high needs, additional home visiting contacts may be offered. Where the family's issues have been resolved, or they require less intensive support, they may return to the universal schedule, with the understanding that they can return to the enhanced schedule whenever necessary.

The aims of the Enhanced Aboriginal Child Health Schedule are to promote the health and wellbeing of Aboriginal infants, young children and their families with identified health needs through the following strategies:
Aboriginal child health rationale

- Supporting Aboriginal families in caring for their children by enhancing the confidence and capabilities of parents and carers and promoting the relationship between parent/carer and child
- Providing a culturally sensitive approach to service delivery
- Providing a respectful, flexible and family centred approach
- Providing a responsive service that meets the health needs of children and their parents/carers
- Offering screening and surveillance of children’s physical, developmental, social and emotional needs and enabling access to timely and appropriate interventions and/or referral to specialist services
- Delivering public health strategies including: immunisation, safe sleeping strategies, ear health programs and trachoma screening
- Providing early support and brief interventions to families with identified needs
- Facilitating family access to relevant community resources and agencies when appropriate
- Providing community capacity building through parenting and community groups.

**Practice principles underpinning the service delivery model**

**Best practice**

The service delivery will reflect current evidence and research; will implement ongoing quality improvement; and comply with relevant legislative requirements. It will also be subject to monitoring and evaluation processes to ensure the delivery of a useful, responsive and effective program.

**Family centred practice**

The service recognises families have the biggest influence on the ways in which their children grow and develop and also have the principle responsibility for the care of their children. It also recognises that the capacity of families to support their children in reaching their potential is affected by their immediate physical and social environment as well as by broader factors in society. Best outcomes for children will be achieved when the service works respectfully and in partnership with the families to support and strengthen their role.

**Family Partnership approach**

This approach recognises that parents and family members have knowledge and information about their child’s development and involves health providers working collaboratively with families and carers in the provision of services to their children.

**Culturally secure**

Culturally secure services consider Aboriginal cultural rights, views and values. A culturally secure service embraces cultural awareness, workforce reform, workforce development, workplace practices and the accountability of services in engaging with Aboriginal communities.
Continuum of care
Core components of the service delivery include developmental screening and monitoring, early identification of problems, early intervention, provision of referral pathways, health promotion and prevention and self-management.

Flexible service delivery
The service will be responsive to the needs of the family and community; it will be accessible, delivered in suitable locations or via outreach.

Community-focused
The service will work in collaboration and partnership with other relevant stakeholders in the communities which they are located to develop, implement and sustain actions which foster positive changes according to priority issues and community preferences.

Workforce
The service will utilise a multidisciplinary model with a culturally competent workforce who have experience in supporting families with complex needs. Staff will be highly competent in their ability to assess a child’s physical, social and emotional development and have a sound knowledge of attachment and other developmental theories.

Specifics of the Enhanced Aboriginal Child Health Schedule

Timing
The enhanced schedule has been developed to address the health needs of vulnerable Aboriginal children and their families. It is an evidence based program of additional contacts aimed at maintaining engagement with families, in order to provide support, promote health and wellbeing and deliver prevention and early intervention strategies which are well timed and appropriate to the needs of the families.

<table>
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<td>Antenatal (whenever possible)</td>
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**Content**

Checklists and guidelines outlining the various assessments/screening at each of the child health checks have been developed. The assessments focus on the specific health issues which may impact on Aboriginal children’s health outcomes e.g. growth failure, infections, ear health, vision, developmental delay and anaemia. There are also a number of assessments on family risk factors which may impact on child health outcomes e.g. family and domestic violence, child abuse and neglect, drug and alcohol misuse, anxiety and depression.

The child health checks provide opportunities to deliver public health screening programs and services e.g. immunisation, trachoma, dental, and ear health.

In addition, every child health check offers an opportunity to promote family/community health and wellbeing messages e.g. safe sleeping, smoking cessation, healthy eating and lifestyle.

Clinical pathways for identified health conditions are available and staff are encouraged to check regional protocols for managing health conditions.

**Conclusion**

Societal changes and issues of health care access have impacted on the health of the Aboriginal children. Community health services have worked to address the impact of the issues, and deliver a service responsive to the need of Aboriginal families. The Enhanced Aboriginal Child Health Schedule focuses on early detection and management of developmental conditions, health promotion and monitoring activities to better the health of Aboriginal children as well as supporting parent/carers as required.

The emphasis is working collaboratively with children and families under a community development model, acknowledging and delivering a culturally supported service and empowering with parents/carers with the skills and knowledge to improve child health, development and wellbeing.
## References


Aboriginal child health rationale


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### Additional resources

#### Developmental/Physical Activity

- O'Dea J. Gender, ethnicity, culture and social class influences on childhood obesity among Australian schoolchildren: implications for treatment, prevention and


**Nutrition**

- Growing Strong resources  
- National Health and Medical Research Council, Nutrition in Aboriginal Torres Strait Islander peoples: an information paper, Canberra: Commonwealth of Australia; 2000
- The Aboriginal and Torres Strait Islander Guide to Health Eating  
- Winters, P. (2010). Neuroscience and Early Childhood Development: Summary of Selected Literature and Key Messages for Parents  

**Breastfeeding**

- Infant Feeding Story:  

**Health Promotion**


**Dental**

- Ridker P, Silverton J. Inflammation, C - reactive protein and atherothrombosis.
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<td>Dental Health Education Unit. Flashcard script. Western Australian Health Department Perth 2009.</td>
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### Safety


### Depression


### Alcohol and Drug Misuse

- Department of Families, Housing, Community Services and Indigenous Affairs. Introduction to working with men and family relationships guide. Commonwealth of Australia. Canberra: ACT
- Aboriginal Health and Medical Research Council of New South Wales www.ahmrc.org.au/index.htm

### Domestic Violence

### Eye Health


### Hearing


### Support Services

- Office for Aboriginal Health - www.aboriginal.health.wa.gov.au Department of Health Western Australia
- CACH Aboriginal health Team Belmont Community Health Centre

### Professional Resources

- An electronic source for Indigenous health information is the Australian Indigenous Health InfoNet: www.healthinfonet.ecu.edu.au
- The WA Health Aboriginal Cultural Respect – Implementation Framework. This framework can be accessed via the Office for Aboriginal Health internet site: www.aboriginal.health.wa.gov.au/htm/programs/default.htm
- For WA specific health data access the Western Australian Aboriginal Child Health Survey, Volumes 1 to 4 from the Telethon Institute for Child Health Research available free online or to order www.ichr.uwa.edu.au Telephone: (08) 9489 7978 Email: waachs@ichr.uwa.edu.au

#### Other States


#### National

- Aboriginal and Islander Health Workers Journal www.aihwj.com.au

### General Aboriginal Health

- Aboriginal Health www.medicineau.net.au/AbHealth
- Australian Indigenous Health InfoNet www.healthinfonet.ecu.edu.au
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- Centre for Disease Control and Prevention [http://cdc.gov](http://cdc.gov)
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- Rates calculator database 2009, Epidemiology branch of the WA Department of Health, Dr Jim Codde.
- West Australian Early Developmental Index (AEDI) confidential unit record file (CURF) version 3 2009, AEDI, The Royal Children’s Hospital, Melbourne.

Resources for Families

- Osborne GP network www.ogpn.com.au
- The lunch right Menu planner Available from Cancer Council WA via education@cancerwa.asn.au Or (08) 9388 4363

Other States
- South Australia: Early Childhood Services, Department of Education and Children’s Services

National
- Aboriginal and Torres Strait Islander Corporation of Languages www.fatsil.org
- Aboriginal and Torres Strait Islander Social Justice Commissioner www.humanrights.gov.au
- Aboriginal Hostels Limited (AHL) wwwahl.gov.au
- Australian Indigenous Doctors Association www.aida.org.au
- Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) www.aiatsis.gov.au
- Cooperative Research Centre for Aboriginal Health www.crcah.org.au
- Cooperative Centre for Aboriginal Health Promotion www.ccahp.org.au
- Department of Immigration and Multicultural and Indigenous Affairs immi.gov.au
- Diabetes Australia www.diabetesaustralia.com.au
- Diabetes Outreach www.diabetesoutreach.org
- National Aboriginal Community Controlled Health Organisation (NACCHO)
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- Aboriginal Health Council of South Australia Inc [www.ahcsa.org.au](http://www.ahcsa.org.au)
Aboriginal child health rationale

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