

Outreach

GOLDFIELDS – POPULATION AND HEALTH SNAPSHOT



The Goldfields region is located in the south east corner of Western Australia and incorporates eight Local Government Areas (LGAs). It is the largest health region in Western Australia at three times the size of Victoria. Kalgoorlie-Boulder in the centre and Esperance on the coast are the two major towns. Smaller towns include Coolgardie, Kambalda, Laverton, Leonora, Menzies and Norseman.

The Ngaanyatjarra Lands are home to 12 remote Aboriginal communities and are in the northern-most area of the Goldfields, extending across the border into South Australia and the Northern Territory. Travel to the Ngaanyatjarra Lands is via gravel roads, including sections of the Gunbarrel Highway and the Canning Stock Route, which become impassable after rain. There is no train or regular bus service, and charter flights are limited.

Tjuntjuntjara is a remote Aboriginal community located in the Great Victoria Desert, 690 kilometres north east of Kalgoorlie. Paupiyala Tjarutja Aboriginal Corporation manages the Tjuntjuntjara community on behalf of the Spinifex people, providing a range of local services and programs.

Goldfields health services

The Goldfields region incorporates a network of public hospital facilities supported by a range of community-based services. These include public health, aged care and mental health services as well as a number of public and private health partners and providers.

The majority of health services are based in the main town centres of Kalgoorlie-Boulder and Esperance.

The region is also home to a number of Aboriginal Community Controlled Health Services (ACCHSs) that are based in Kalgoorlie, Wiluna, the Ngaanyatjarra Lands and Spinifex country to the east of Kalgoorlie.

These services provide culturally appropriate services and outreach to the smaller communities in the Goldfields.



Population

The estimated residential population of the Goldfields in 2015 was 54,821, which is 2.1% of the State's population. For a geographically large region, the Goldfields has a low population density, with 0.08 people per square kilometre.

Aboriginal and Torres Strait Islander peoples represent 12% of the population of the Goldfields, which is greater than the State proportion of 3.6%. The Aboriginal population has a younger age structure than the non-Aboriginal population with 41% being under the age of 20.

OUTREACH SERVICE CONSIDERATIONS

- The large proportion of Aboriginal people in the Goldfields highlights the need for culturally safe health service provision.
- Consider undertaking or updating your cultural awareness and safety training as part of your preparations.



Government of Western Australia
WA Country Health Service

With thanks to WA Country Health Service for permission to use data from various sources including the Goldfields Regional Health Profile 2015 which can be accessed at www.wacountry.health.wa.gov.au/index.php?id=445 listed under Regional Health Profiles

Measure of disadvantage

Socio-Economic Indexes for Areas (SEIFA) measures a broad range of determinants of disadvantage. A score of 1000 is considered a baseline, and scores over or below are considered to represent advantage or disadvantage respectively. Research has shown that a lower SEIFA score is correlated with increased factors contributing to poor health.

The 2016 SEIFA scores for Goldfields LGAs are ¹:

Ngaanyatjarra Lands	689
Laverton	770
Menzies	804
Dundas	873
Coolgardie	905
Leonora	932
Esperance	975
Kalgoorlie-Boulder	991

Hospitalisations

The overall hospitalisation rate in the Goldfields was greater (1.1 times) than the State. The main causes of hospitalisation were dialysis, digestive diseases, and injury and poisoning. Aboriginal people were hospitalised at a rate 1.2 times greater than the State rate.

After pregnancy and childbirth, the next most common conditions causing hospitalisation were digestive diseases, injury and poisoning, ill-defined conditions and musculoskeletal diseases.

Potentially preventable hospitalisations

In the Goldfields, rates of potentially preventable hospitalisations (PPH) were significantly greater when compared to the State (1.5 times greater).

Table 1 represents a list of leading causes of PPH in the period 2011-2015.

Rates of PPH were significantly greater in the Aboriginal population in the Goldfields from 2011-2015 when compared to the State Aboriginal PPH rate, as well as the Goldfields and State rates for non-Aboriginal people.

Table 1 – 2011-2015 top five leading causes of PPH in ages 15-64 years

Condition	Number	% of total PPH	Rate vs State
Diabetes complications	560	12	2.0
Cellulitis	550	12	1.5
Dental conditions	397	8	0.7
Angina	366	8	1.8
UTIs incl. pyelonephritis	365	8	1.0

Source: DOH, Health Tracks

Mortality

Mortality is an important population health indicator. Knowing the reasons for and causes of death can assist in the planning of health services to prevent and avoid mortality where possible.

There is a demonstrable gap in life expectancy between rural Western Australia and metropolitan Perth. This gap increases the more remotely a person lives.

There is also a discrepancy between the life expectancy of Aboriginal and non-Aboriginal people in Australia. This gap is estimated by the Australian Bureau of Statistics to be 8.6 years for males (71.6 years life expectancy) and 7.8 years for females (75.6 years life expectancy) ².

In the Goldfields during the period 2011-2015, the top five leading causes of death were all experienced at a rate greater than that of the State (see Table 2).

Table 2 – 2011-2015 Goldfields leading causes of mortality

Condition	% of all deaths	Rate ratio
Ischaemic heart disease	15	1.6
Lung cancer	6	1.3
Cerebrovascular diseases	5	1.3
COPD	5	1.7
Intentional self-harm	4	1.3

Source: DOH, Health Tracks

Fifty-six per cent of deaths in the Goldfields during the period 2011-2015 under the age of 75 were classed as avoidable. Avoidable mortality in the Goldfields occurred at a rate 1.5 times greater than the State.

¹ ABS, 2033.0.55.001 – Socio-economic Indexes for Australia (SEIFA), 2016

Table 3 shows the causes and rate ratios of the top five causes of avoidable mortality in the Goldfields.

Table 3 – 2011-2015 Goldfields leading causes of avoidable mortality

Condition	% of all deaths	Rate ratio
Ischaemic heart disease	25	2.0
Suicide and other self-inflicted injuries	12	1.3
Transport accidents	9	2.0
Diabetes	6	2.1
COPD	5	1.6

Source: DOH, Health Tracks

OUTREACH SERVICE CONSIDERATIONS

- Screening and prevention activities can help to reduce the rate of avoidable mortality.
- Interventions should target modifiable risk factors for leading causes of avoidable mortality.

Child and adolescent health

Low birth weight

Low birth weight is defined by the World Health Organisation as less than 2,500 grams. From 2007-2008 to 2015-2016, the proportion of low birth weight full-term babies born to Goldfields mothers was slightly greater than the State average at 2.4% versus 2.1% for the State. The proportion of babies born at low birth weight to Aboriginal mothers in the Goldfields was 5.4% compared to the State proportion of 5.1%.

Australian Early Development Census

The Australian Early Development Census (AEDC) is a measure of how children are developing across five domains upon commencing full-time school. These domains are physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, communication skills and general knowledge. For more information on the AEDC, visit <https://www.aedc.gov.au/about-the-aedc>.

One-in-five Australian children were considered developmentally vulnerable in 2015 in one or more domain. Data in the Goldfields on the AEDC is limited to four communities (see Table 4) due to low response rate in other locations. Of those communities, Coolgardie and Leonora had a high proportion of developmentally vulnerable children in one or more domains than the Australian population.

Table 4 – 2015 Goldfields AEDC scores

Community	Vulnerable children				Total surveyed
	One or more domains		Two or more domains		
	#	%	#	%	
Coolgardie	21	26.9	9	11.5	78
Esperance	29	14.1	11	5.3	206
Kalgoorlie	110	21.8	51	10.1	504
Leonora	11	47.8	6	26.1	23
Australia		22.0		11.1	

Source: DOH, Health Tracks

Immunisation

The Australian target for immunisation is a rate of greater than 90% of children with a complete vaccination schedule at two years of age, with the recommendation that 100% of children are vaccinated at the age of school entry.

In the Goldfields in 2017, the proportion of all children vaccinated exceeded the target of 90% except for Aboriginal children aged 24-27 months, of which 72% are recorded as vaccinated.

Table 5 shows rates of vaccination by age and Aboriginality.

Table 5 – 2017 Goldfields immunisation rates by age and Aboriginality

Age group	Aboriginal	Non-Aboriginal	All persons
12 to < 15 months	92%	97%	96%
24 to < 27 months	72%	94%	91%
60 to < 63 months	96%	93%	96%

Source: DOH, Health Tracks

OUTREACH SERVICE CONSIDERATIONS

- There is a high need for child development services including access to multidisciplinary teams made up of medical services, child health nurses, speech pathologists, physiotherapists and occupational therapists in the Goldfields.
- Bega Garnbirringu Health Service chairs the Maternal and Child Health Community Outreach Steering Committee. Consider connecting with this group before applying for outreach services.

Adult health

Chronic disease

Chronic diseases are long lasting conditions with persistent effects³. The self-reported, doctor-diagnosed prevalence of chronic disease in regional Western Australia is collected via the Western Australian Health and Wellbeing Surveillance System (HWSS) survey. In 2013-2016, the HWSS found:

- 22% of adults reported requiring medical treatment for an injury in the previous year;
- 19.8% reported having arthritis; and
- 11.8% reported a current mental health problem.

Chronic diseases in Aboriginal people

In 2018-2019, 46% of Aboriginal people reported having at least one chronic disease that posed a significant health problem. This represents an increase of 6% since 2012-2013⁴.

National evidence reports a greater burden and prevalence of chronic disease among Aboriginal people when compared to non-Aboriginal people. The demographic factors of remoteness (isolation) and socio-economic disadvantage of the Aboriginal population contribute to this burden of disease.

When compared to non-Aboriginal people, Aboriginal people in Western Australia are:

- 9.4 times more likely to have chronic kidney and/or urinary disease;
- 8.7 times more likely to have diseases of the endocrine system including diabetes;
- 4.1 times to have gastrointestinal disease; and
- 4 times more likely to have a long-term injury.

OUTREACH SERVICE CONSIDERATIONS

- Culturally appropriate services delivered through ACCHSs are crucial in addressing the disparity in health between Aboriginal and non-Aboriginal people.
- Consider connecting with the Goldfields Regional Aboriginal Health Planning Forum to see how your service can best serve the Aboriginal people of the Goldfields.
- Telehealth is a viable way of increasing the frequency of services while keeping costs low.

Ear health

Hearing problems and ear diseases such as otitis media occur at greater rates in Aboriginal children than non-Aboriginal children (7% and 3.6% respectively). Chronic otitis media is a key concern in the Goldfields because of the consequences of the condition in relation to language, social development and education.

The following trends have been observed in the Goldfields in regarding ear health:

- In 2011-2015, ear, nose and throat infections were the greatest cause of PPH in children aged 0-14 accounting for 27% of all PPH for that age group and occurring at a rate 1.2 times greater than the State.
- Between 2006 and 2015, the rate of disease of the ear and mastoid process hospitalisations were 2.5 times greater for Aboriginal children than for non-Aboriginal children.

The establishment of a Goldfields Aboriginal Ear Health Plan and the formation of the Goldfields Ear Health Stakeholder Group represent significant leaps forward in the coordination of ear health efforts in the region as well as the collaboration and communication between the various ear health service providers in the Goldfields.

OUTREACH SERVICE CONSIDERATIONS

- Connect with the Goldfields Ear Health Stakeholder Group prior to planning ear health services to the Goldfields.
- Familiarise yourself with the WA Child Ear Health Strategy and ensure that your proposed service aligns with the objectives.

Eye health

Eye health conditions are common in Australia and contribute to disadvantage due to childhood learning delays, lower participation in education and employment, and social isolation.

Based on national data, 13 million Australians (or 55%) have one or more long-term eye conditions⁵.

Aboriginal people experience greater rates of visual impairment and blindness than non-Aboriginal people. Nationally, an estimated 18,300 Aboriginal people aged 40 and over experience vision impairment and blindness.

³ AIHW 2020. <https://www.aihw.gov.au/reports-data/health-conditions-disability-deaths/chronic-disease/overview>

⁴ ABS 2019. National Aboriginal and Torres Strait Islander Health Survey, 2018-2019

⁵ AIHW 2019. Web report – eye health

Trachoma

Trachoma is an eye infection that is caused largely by environmental factors such as sub-standard living conditions and overcrowded housing. Trachoma has been largely eliminated from the developed world; however, it is still prevalent in some remote Aboriginal communities in Australia.

Recent improvements in trachoma control in Aboriginal communities across Western Australia show that the number of at-risk communities has halved from 2010 to 2017; however, there are still some remote communities that only experienced a marginal decrease in trachoma incidence⁶.

Maternal health

Overview of rural maternity services

Community based pregnancy and maternity care services are provided by WA Country Health Service (WACHS), regional hospitals, private general practitioners, ACCHSs and a range of community-based and non-government organisations.

Birth rates

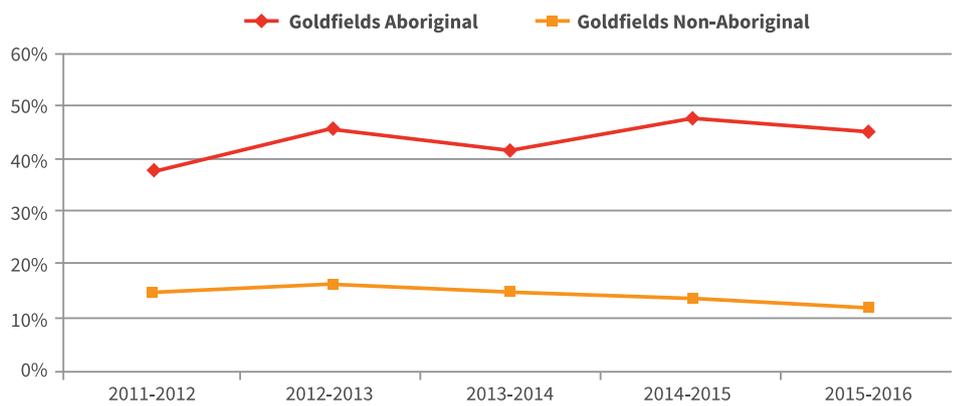
The following trends were observed in the Goldfields region between 2012 and 2016:

- The number of births in the Goldfields decreased by 3% between 2012 and 2016.
- The number of births to Aboriginal women increased by 11% annually in the same time period.
- In 2015, the age-specific birth rate was greater in the Goldfields when compared to metropolitan Perth at 75 and 62 per 1,000 women respectively.

Smoking in pregnancy

The risks associated with smoking in pregnancy include low birth weight, premature birth, placental complications and stillbirths.

Figure 1 Proportion of women who smoked during pregnancy 2011-2012 to 2015-2016



Source: DOH, Health Tracks

Figure 1 shows the proportion of women who smoked during pregnancy from 2011-2012 to 2015-2016. Rates of smoking during pregnancy are similar in the Goldfields when compared to other WACHS catchments. Rates of smoking during pregnancy have decreased slightly in non-Aboriginal mothers since 2012-2013.

Alcohol in pregnancy

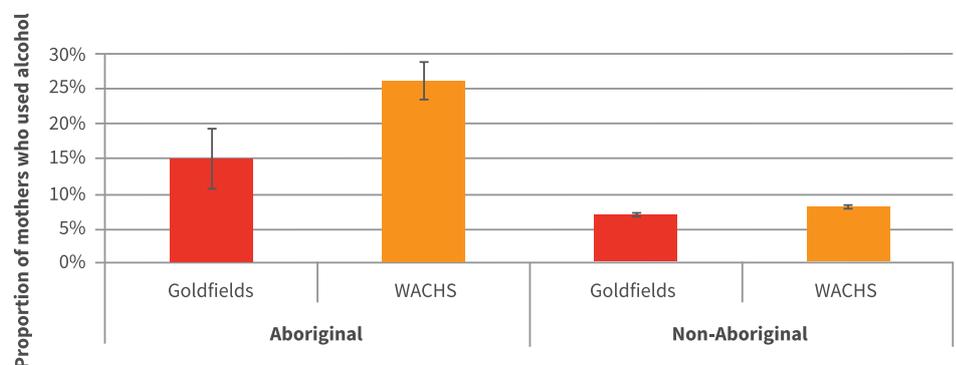
The effects of alcohol consumption during pregnancy are well documented. The prevalence of Fetal Alcohol Spectrum Disorder (FASD) in Western Australia has been estimated at 0.26 per 1,000 births with a disproportionate amount being observed in Aboriginal children (89%).

It has been estimated that the prevalence rate has doubled over the last 30 years.

In some remote Aboriginal communities where high rates of prenatal alcohol have been recorded, FASD and partial FASD rates of 120.4 per 1,000 children have been observed.

Figure 2 shows an indication of alcohol use in pregnancy in the Goldfields. Ninety-two per cent of mothers in the Goldfields reported not consuming alcohol while pregnant, while 85% (n=181) of Aboriginal mothers reported not consuming alcohol while pregnant.

Figure 2 2014-2015 proportion of mothers* who used alcohol during pregnancy



Source: DOH, Health Tracks

* Proportion of mothers who responded to the question. Response rate in the Goldfields was 81%.

I Indicates 95% confidence interval.

Teenage mothers

The Goldfields experiences a high proportion of births to teenage mothers. The proportion of births to mothers aged less than 20 years was 2.1 times greater in the Goldfields than in the State. In 2015-2016, the proportion of births to Aboriginal teenagers was significantly greater (18%) than non-Aboriginal women (3%).

Gestational Diabetes Mellitus

In the period 2011-2012 to 2015-2016, it was reported that 9.7% of Goldfields Aboriginal women who gave birth had a diagnosis of Gestational Diabetes Mellitus (GDM).

This is compared to 6.4% in non-Aboriginal women. Percentages of both Aboriginal and non-Aboriginal women with GDM was greater in the Goldfields than the WACHS catchment average which was 7.1% and 5.9% respectively.

OUTREACH SERVICE CONSIDERATIONS

- High rates of smoking and alcohol use during pregnancy amongst Aboriginal women highlight the need for culturally appropriate antenatal and health promotion services in the Goldfields.
- Consider tailoring and distributing health promotion resources targeting smoking during pregnancy whilst providing outreach health services.

Mental health

In 2013-2016, one in eight (12%) Goldfields adults aged 16 and over reported having a current diagnosis of a mental health problem.

Females experienced a disproportionately high prevalence when compared to males (16% and 9% respectively). While these rates are lower than the State (17% for females and 10% for males), less than 6% of those surveyed in the Goldfields reported using a mental health care service in the past 12 months.

In the age group 15-64 years, intentional self-harm was the second highest cause of mortality after ischaemic heart disease in the Goldfields, at a rate 1.3 times greater than the State. Sixty-seven per cent of adults who died from self-inflicted injuries were in the 25-44 year age group.

Rates of youth suicides were significantly greater in the Goldfields when compared to the State and metropolitan Perth (see Table 6).

Table 6 – 2006-2015 youth suicides per 100,000 persons by gender

Gender	Goldfields	Metropolitan	State
Males (15-24 years)	22.9	15.1	19.6
Females (15-24 years)	10.3	6.4	7.7

Source: DOH, Health Tracks

OUTREACH SERVICE CONSIDERATIONS

- Increase access to mental health services targeting youth and the Aboriginal population in the Goldfields.
- Collaborate with other service providers delivering social and emotional wellbeing programs in the Goldfields.