Rural Health West

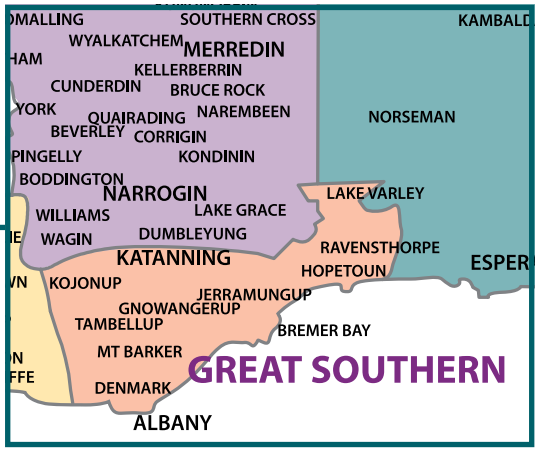
Outreach in the Outback
Rural Health West

Great Southern – population and health snapshot

The Great Southern region is the second smallest region in Western Australia and comprises about 1.5% of Western Australia's total land area. Albany is the regional centre with other population hubs centred around Katanning, Denmark, Mt Barker, Kojonup, Gnowangerup and Ravensthorpe. The region incorporates two health districts – Central and Lower Great Southern.

Based on the Accessibility/Remoteness Index of Australia (ARIA), the Great Southern Health Region is classified as:

- 44% outer regional (Gnowangerup, Jerramungup, Kent and just over half of Albany);
- 39% remote; and
- 17% very remote (Ravensthorpe Shire).



Population

The estimated resident population in 2013 was 61,522, a growth of 6% since 2006. The age-structure of Great Southern differs from the State with a significantly lower proportion of people aged 20-44 years and a higher proportion of children aged 5-14 years and adults aged 50 years and over. The proportion of adults over 65 years is projected to increase by 54% between 2014 and 2026.

Aboriginal people represented 3.8% of the region's population in 2011. The Aboriginal population has a younger age structure than the non-Aboriginal population, with nearly half the population aged under 20 years.

Planning outreach teams

- ⇨ Consider differing age structure when planning Aboriginal programs and services.
- ⇨ Consider aged care and chronic disease management services in light of growing 65+ population.
- ⇨ Target disadvantaged areas within the region.

Measure of disadvantage

Socio-Economic Indexes for Areas (SEIFA) measures a broad range of socio-economic indices from a baseline of 1,000. Research shows that a lower SEIFA (<1000) correlates with a lower health status with increased risk factors to ill health.

The Great Southern region has relatively high SEIFA scores for most statistical local areas in the region. However, lower SEIFA scores show some areas within Great Southern with high levels of disadvantage such as[1]:

Tambellup	838
Cranbrook	866
Broomehill Village	886
Katanning	909
Gnowangerup	925
Ravensthorpe	1,008

[1] ABS, 2033.0.55.001 – Socio-economic Indexes for Areas (SEIFA), Data Cube only, 2011.

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

Government of Western Australia
WA Country Health Service

Major health services

Hospital services	Community and public health services	Mental health and aged care services
• Albany Health Campus • Katanning Hospital (upgrades in 2016) • Denmark Hospital and Health Service • Gnowangerup Health Service • Kojonup Health Service • Plantangenet (Mt Barker) Hospital • Ravensthorpe Health Service	• Great Southern Population Health Unit • Tambellup Health Clinic • Jerramungup Health Centre • Ravensthorpe Community Health • Bremer Bay Health Centre	• Great Southern Mental Health – Albany, Katanning and Narrogin • Juniper Bethshan - Katanning • Great Southern Aged and Subacute Care Services • Springhaven Frail Aged Hostel • Clarence Estate Residential • Plantagenet Village Homes

Further health service information can be found at **www.myhospitals.gov.au** and **www.ruralhealthaustralia.gov.au**.

Maternal health

Overview of rural maternity services

Community based pregnancy and maternity care services are provided by WA Country Health Service, private general practitioners, Aboriginal Community Controlled Health Services and a range of community based and non-government organisations. Specialist obstetric services are mainly provided at regional hospitals. In the Great Southern, planned birthing services are available at Albany Health Campus[2].

Aboriginal maternity issues

There is a large body of evidence to demonstrate that Aboriginal women experience poorer maternal health outcomes, higher rates of perinatal and infant mortality and deliver babies with lower average birth weights when compared to non-Aboriginal women.

Birth rates

The following trends were seen within the Great Southern region between 2008 and 2012:

- There was a 2% decrease in total number of births within the Great Southern region. On average, births by Aboriginal women decreased by 5.4% and by 0.1% by non-Aboriginal women.
- The age-specific birth rate for Aboriginal women was 86 per 1,000 women which is 1.2 times higher than the non-Aboriginal rate (69 per 1,000 women).

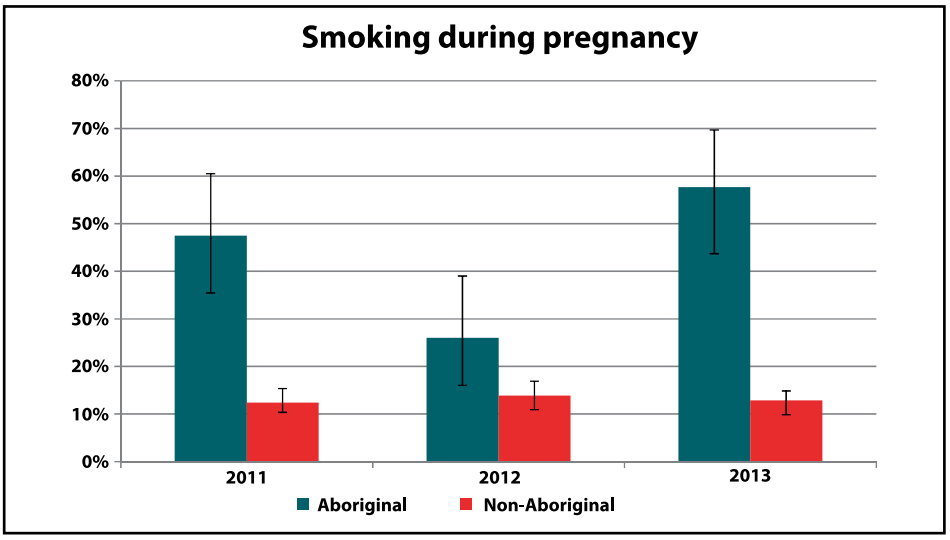
Teenage pregnancy

In 2012, 5% of Great Southern women who gave birth were aged less than 20 years. In 2012, the percentage of Aboriginal teenage women giving birth was 16% and 4% in non-Aboriginal teenage women.

Smoking during pregnancy

Risks associated with smoking during pregnancy include low birth weight, premature birth, placental complications and stillbirths. Figure 1 shows the proportion of births to Great Southern women who reported smoking during pregnancy. In 2013, 58% of Aboriginal mothers and 13% of non-Aboriginal mothers smoked during pregnancy.

Figure 1: 2011-2013 proportion of women smoking during pregnancy, Great Southern residents.



Notes: The error bars represent the 95% confidence interval of the proportion: 2013 is preliminary data.
Source: Midwives Notification System

[2] www.healthywa.wa.gov.au/Articles/F_I/Having-a-baby-in-a-public-country-hospital-in-WA

Alcohol during pregnancy

Fetal Alcohol Spectrum Disorder (FASD), miscarriage and still birth are among the consequences of drinking during pregnancy. The FASD birth prevalence has been reported to be 0.26 per 1,000 births within all of the WA population. Of these, 89% were Aboriginal. The FASD birth prevalence was 4.08 per 1,000 within the WA Aboriginal population, significantly higher than non-Aboriginal children (0.03 per 1,000).

FASD is a common cause of medical, cognitive and behavioural problems for children including prematurity, brain damage, birth defects, growth restriction and developmental delay.

Table 1 shows the proportion of Australian women drinking during pregnancy.

Table 1: 2012-2013 levels of drinking during pregnancy, Australian women aged 18-44 years.

	Low risk levels of drinking	High risk levels of drinking
Aboriginal	28.4%	11.6%
Non-Aboriginal	42%	9.5%

Sources: WA Register for Developmental Anomalies and the Midwives Notification System

Gestational diabetes mellitus

Diabetes in pregnancy increases the risk of complications of pregnancy, labour and delivery for mothers and their babies. It is also an indicator of increased risk of developing type 2 diabetes later in life. The risk is increased for those with pre-existing diabetes prior to pregnancy. Aboriginal mothers and their babies generally experienced the adverse effects of gestational diabetes mellitus at higher rates.

7% of Western Australian women who gave birth in 2012 were diagnosed with gestational diabetes mellitus. Table 2 provides an overview of gestational diabetes mellitus status in Australia during 2005-2007.

Table 2: 2005-2007 women who gave birth in Australia and gestational diabetes mellitus status.

	Gestational diabetes mellitus		Births
	Per cent	Number	Total
Aboriginal	5.1%	1,562	30,518
Non-Aboriginal	4.7%	37,539	802,175

Source: Australian Institute of Health and Welfare, 2010

Planning outreach teams

- ⇨ Culturally appropriate and targeted health promotion interventions on drinking and smoking during pregnancy.
- ⇨ Access to dietitians and nutritional professionals for expectant Aboriginal mothers.
- ⇨ Strengthen partnerships with primary care providers eg local GPs.

Child and adolescent health

Low birth weight

A baby's birth weight is a key indicator of health status. The World Health Organisation defines low birth weight as less than 2,500 grams. Babies born with low birth weight have a greater risk of poor health and dying, and are more likely to develop significant disabilities and have a greater risk of poor health and mortality outcomes.

From 2008 to 2012 in the Great Southern region, 14% of Aboriginal babies were born with a low birth weight, compared to 6% of babies born to non-Aboriginal mothers.

Australian Early Development Census

The Australian Early Development Census (AEDC) is a measure of how children are developing upon commencing full-time school for the first time.

In 2012, Australian Bureau of Statistics data classed 22% of Australian children as developmentally vulnerable on one or more domains of the AEDC. In addition, 11% were developmentally vulnerable on two or more domains. Within Great Southern communities, the proportion of children rated as developmentally vulnerable on one or more domains ranged from 10% - 52%. The five towns with the highest percentages of children that were developmentally vulnerable in 2012 are shown in Table 3.

To learn more about the AEDC, visit **www.aedc.gov.au/about-the-aedc**.

Planning outreach teams

- ⇨ Increase allied health professionals to assist early childhood development. Teams could include speech pathologists, occupational therapists, physiotherapists and child health nurses.

Table 3: 2012 AEDC, Great Southern children vulnerable on at least one domain.

Community	Children vulnerable: 1+ domains		Children vulnerable: 2+ domains	
	Number	% of total surveyed	Number	% of total surveyed
Broomehill/Tambellup/Lake Toolbrunup	6	32	4	21
Katanning township and surrounds	27	39	12	17
Kendenup	9	39	5	22
Mount Barker and surrounds	12	31	6	15
Spencer Park	22	52	13	31

Ear health

Ear diseases, in particular otitis media, and associated hearing loss are highly prevalent among Aboriginal children. In 2012-2013, prevalence of chronic otitis media causing hearing problems in Aboriginal children aged 0-14 years was double that of non-Aboriginal children (7% compared to 3.6%)[3].

Otitis media begins within weeks of birth and can persist into adolescence, with reoccurring episodes. Preventing ear disease is a high priority as it can significantly reduce delays in child learning and development.

Risk factors include poor environmental-household conditions, passive smoking, premature birth and malnutrition[4].

In the Great Southern, the following ear health trends were observed during 2008-2012 for children aged 0-14 years:

- Ear, nose and throat (ENT) infections were the second leading cause of potentially preventable hospitalisations (PPH) and was 1.2 times the State rate.
- The majority (74%) of these hospitalisations were for very young children aged 0-4 years.
- Rate of PPH due to ENT infections was significantly higher for Aboriginal children than the non-Aboriginal rate (1,338 vs 580 per 100,000).

Planning outreach teams

- ⇨ **Focus on ENT infections and respiratory disease in children especially Aboriginal children.**
- ⇨ **Increase programs aimed at prevention and management of risk factors.**
- ⇨ **Identify links with other primary health care services.**

Adult health

Chronic disease prevalence

Chronic disease refers to long-term conditions that last for six months or more. Prevalence data within the Great Southern population collected by WA population based surveys found:

- One in four adults (25%) reported being diagnosed with arthritis, a proportion significantly higher than the State.
- One in four adults (25%) reported an injury requiring medical treatment.
- More than one in ten adults (13%) reported being diagnosed with a current mental health problem.
- More than one in ten adults reported being diagnosed with current asthma (11%).

The five most prevalent cancers in Great Southern from 2008-2012, were cancers of the breast, prostate, skin (melanoma), colorectal and lung.

Chronic disease amongst Aboriginal people

Available national evidence reports a greater burden and prevalence of chronic disease among Aboriginal people. The demographic factors of remoteness (isolation) and socio-economic disadvantage of the Aboriginal population contribute to the significantly greater burden of disease compared to the non-Aboriginal population. Research collected from 2011-2013 indicates that compared to non-Aboriginal people, Aboriginal people were found to be[5,6]:

- Half as likely to report excellent or very good health.
- 3.5 times more likely to report having diabetes.
- 1.2 times more likely to report having cardiovascular diseases.
- 2.0 times more likely to report having asthma.
- 2.0 times more likely to report kidney disease.

Diabetes: Majority is type 2 diabetes. Risk factors include being overweight/obese, leading a sedentary lifestyle and poor nutritional intake.
Cardiovascular disease: The leading types are ischaemic heart disease and stroke.
Respiratory disease: The two major types are asthma and chronic obstructive pulmonary disease.
Kidney disease: Often develops as a complication of other medical conditions including diabetes, high blood pressure, urinary tract infections and drug use.

Strategic focus areas that have been identified for Aboriginal health planning in the Great Southern region are mental health, chronic disease, alcohol and other drugs and family and domestic violence[7].

Planning outreach teams

- ⇨ **Health promotion interventions targeting the prevention and management of modifiable risk factors for chronic disease.**
- ⇨ **Consider how services can align with the strategic focus areas of the region.**
- ⇨ **Contact major health care providers and discuss how your team could collaboratively work together in service delivery and coordination.**

[3] ABS 2013. Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13.
[4] Closing the Gap Clearinghouse (AIHW and AIFS) 2014. Ear disease in Aboriginal and Torres Strait Islander children. Resource sheet no.35.
[5] AIHW 2015. Cardiovascular disease, diabetes and chronic kidney disease – Australian facts: Aboriginal and Torres Strait Islander people.
[6] ABS 2013. Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13.
[7] Great Southern Regional Aboriginal Health Planning Forum data.

Mental health

Health trends

For 2009-2012, one in eight (13%) Great Southern adults 16 years and over suffered from a diagnosed mental health problem.

Prevalence was higher among females (16%) than males (10%).

Aboriginal residents have reported levels of psychological stress 2.7 times higher than non-Aboriginals on a national level.

Access: Great Southern adults accessed community mental health services at a significantly lower rate than the State, primarily for serious psychiatric disorders and anxiety disorders. Female residents accessed community mental health services 1.3 to 2.5 times more often than male residents.

Youth Suicide: For 2007-2011, the suicide rate for male youth in the Great Southern region was 2.7 times the State youth suicide rate. Table 4 shows the Great Southern youth suicide rates by gender over a longer time period (2002-2011) to preserve confidentiality.

Table 4: 2002-2011 youth suicide rates, Great Southern residents, 15-24 years.

Youth suicides (per 100,000 persons)* 2002-2011	Great Southern Health Region	Metro	State
Males (15-24 years)	29.4	15.6	19.9
Females (15-24 years)	6.6	5.4	6.0

* These rates have been age-standardised to the Australian 2001 population.
Source: DoH, Health Tracks [Note: DoH, Health Tracks Reporting Great Southern excludes Ravensthorpe SLA]

Eye health

Planning outreach teams

- ⇨ Increase access to mental health services targeting Great Southern male and Aboriginal residents.
- ⇨ Eye health is a significant issue for older adults in Great Southern.

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

In 2011-12, 53.7% of Australians reported having a chronic eye condition.

In 2013–14, Aboriginal people had a lower rate of hospitalisations for cataract extraction as compared to non-Aboriginals (7.3 compared with 8.9 per 1,000 population)[8].

Diseases of the eye was the third leading cause of hospitalisation for Great Southern residents 65 years and over, from 2008-2012.

Hospitalisations

Regional hospitalisations

Overall, the hospitalisation rate for Great Southern residents was significantly lower than the State from 2008-2012.

The hospitalisation rate for Aboriginal residents in the Great Southern was 1.7 times higher than the rate for non-Aboriginal residents.

Table 5 shows the top five causes of hospitalisation by major category.

Table 5: 2008-2012 leading causes of hospitalisation by major category, Great Southern residents.

Rank	Cause of hospitalisation	Number	% of total (15-64 yrs)	State rank
1	Digestive diseases	13,240	12	1
2	Neoplasms	7,930	7	2
3	Musculoskeletal diseases	7,319	7	5
4	Ill-defined conditions	7,184	7	3
5	Injury and poisoning	7,144	7	4
All hospitalisations		106,660	100	

Note: leading causes exclude 'factors influencing health status and contact with health services' and 'attending health services for examination and investigation', reproduction, specific procedures, and other circumstances, and potential health hazards related to communicable diseases, socioeconomic and psychosocial circumstances, family and personal history. This also includes renal dialysis.
Source: DoH, Health Tracks

[8] www.aihw.gov.au/eye-health/cataract-surgery/#t2

Hospitalisations

Other than dialysis, there was a distinct difference in the other leading conditions for hospitalisation between Aboriginal and non-Aboriginal adults in the Great Southern (table 6).

Potentially preventable hospitalisations

Potential preventable hospitalisations (PPH) are hospitalisations which could have been avoided with disease intervention plans and various methods of preventative care. Three categories are identified: acute, chronic and vaccine preventable.

During 2008-2012, the following trends were observed for PPH in Great Southern residents:

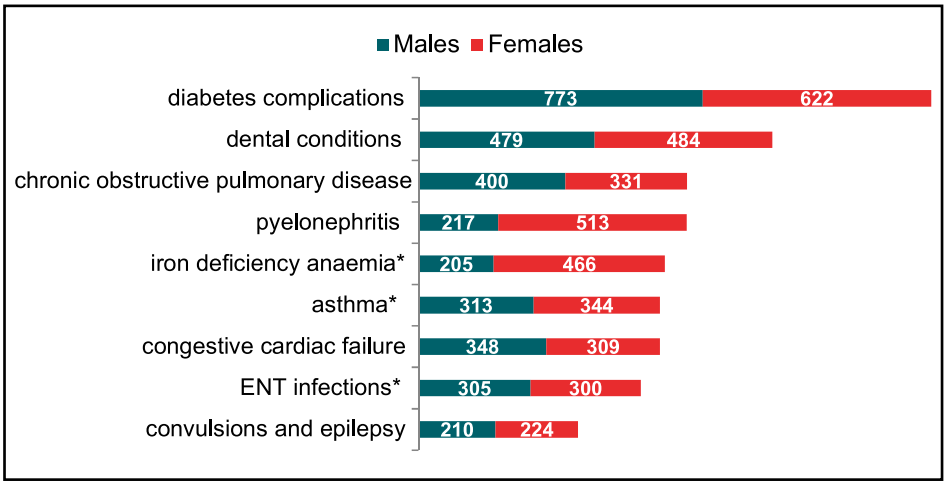
- PPH accounted for 8,079 (8%) of all hospitalisations in the region.
- The leading PPH condition for non-Aboriginals was diabetes complications (18%). Other conditions are shown in Figure 2.
- The leading PPH condition for Aboriginals was asthma (17%), which was significantly higher than the State Aboriginal rate.

Table 6: 2008-2012 leading conditions for hospitalisation, by Aboriginality.

Aboriginal	Non-Aboriginal
• Dialysis (13%) • Alcohol and drug disorders • Mood and anxiety disorders • Injuries to head and neck • Acute respiratory infections	• Dialysis (8%) • Chemotherapies • Mood and anxiety disorders • Arthropathies • Digestive system and abdominal symptoms

* Source: DoH, Health Tracks

Figure 2: 2008-2012 leading conditions for potentially preventable hospitalisations, Great Southern residents .



* Indicates rate significantly higher than the State.
Source: DoH, Health Tracks [Note: DoH, Health Tracks Reporting Great Southern excluces Ravensthorpe SLA]

Mortality

Mortality is an important population health indicator. Knowing the reasons for and causes of death can assist in the planning of primary and community care services to prevent avoidable mortality.

Planning outreach teams

- ⇨ Interventions should consider modifiable risk factors for leading causes of avoidable mortality.
- ⇨ Explore partnerships with existing primary and therapeutic services.
- ⇨ Programs and services for Aboriginal people need to be targeted and culturally appropriate.

There is still a discrepancy between the life expectancy of Aboriginal people when compared to non-Aboriginal people.

Leading causes of death

During the period 2008-2012, the leading causes of death in the Great Southern region were found to be[9]:

- ischaemic heart diseases, cerebrovascular diseases, lung cancer, dementia and chronic obstructive pulmonary disease.

For Aboriginal residents, the leading causes of death were[10]:

- ischaemic heart diseases, liver diseases, intentional self-harm, diabetes including impaired glucose regulation, lung cancer and motor vehicle accidents.

Avoidable mortality

During 2007-2011, 57% of deaths of Great Southern residents under 75 years of age could have been avoided through the better use of primary prevention and treatment interventions.

The avoidable mortality rate for Aboriginal people was 3.7 times higher than for non-Aboriginal people in the region. The leading cause of Aboriginal avoidable deaths was alcohol-related (13%). Lung cancer and ischemic heart disease (10%) were equal leading causes of non-Aboriginal avoidable deaths in the Great Southern.

[9,10] All mortality and avoidable mortality statistics were sourced from the Department of Health, Health Tracks – Epidemiology Branch (PHI) in collaboration with the Cooperative Research Centre for Spatial Information (CRC-SI).

04.16