Rural Health West

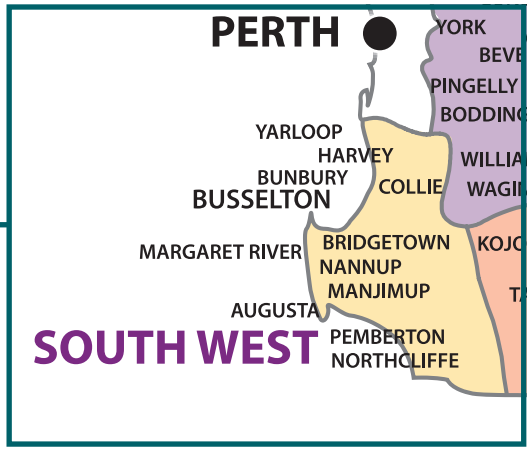
Outreach in the Outback
Rural Health West

South West – population and health snapshot

The South West region is the smallest of the seven rural regions in Western Australia, covering almost 24,000 square kilometres and encompassing 12 local government areas. The major population centres are Bunbury, Collie, Busselton, Manjimup and Margaret River. The region has seven health districts at the local government area level – Blackwood, Bunbury, Busselton, Leeuwin, Leschenault, Warren and Wellington.

Based on the Accessibility/Remoteness Index of Australia (ARIA), the South West region is classified as:

- 50% outer regional
- 40% inner regional
- 10% remote



Population

The estimated resident population in 2013 was 169,682, a 19% increase since 2006. Overall, the South West has a younger population than other regions, with an even number of males and females. The age-structure of the South West differs from the State with a:

- larger proportion of children aged 5-14 years;
- smaller proportion of adults aged 20-39 years; and
- larger proportion of adults aged 45 years and over.

The South West population is expected to grow an average of 3% per year until 2026, with this growth predominantly occurring in older age groups.

The Aboriginal population represented 2.6% of the South West population in 2012. The Aboriginal population has a much younger age structure when compared to the non-Aboriginal population.

Planning outreach teams

- ⇨ Increase services targeting the ageing population.
- ⇨ Target low SEIFA score areas, such as Collie, Manjimup and remote communities.

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 (<1,000) correlates with a lower health status with increased risk factors to ill health.

The South West region is one of the least disadvantaged regions in the State, with many statistical local areas scoring close to 1,000.

The 2011 SEIFA scores for towns in the South West region are :

Waroona	941
Manjimup	946
Collie	947
Bunbury	963
Harvey	999
Busselton	1,002
Boddington	1,025

[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 South West 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	Aboriginal Medical Services
• Bunbury South West Health Campus • Busselton Health Campus • Collie Health Service (upgrades 2016-2017) • Harvey Health Service (upgrades 2016-2017) • Warren Hospital (new Manjimup Hospital 2016-2018) • St John of God Bunbury Hospital	• Community Health Service – Bunbury/ Harvey, Naturaliste • South West Population Health Unit • Warren and Blackwood Community Health Service	• WACHS South West Regional Aged Care • Bunbury Mental Health Service • Bunbury Older Adult Mental Health Service • Bridgetown/Manjimup Mental Health Service • Busselton Community Mental Health Clinic • South West Mental Health Service –Margaret River	• South West Aboriginal Medical Service

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 the major regional hospitals. In the South West, planned birthing services are available at Bunbury South West Health Campus, Busselton Health Campus, Collie Hospital, Bridgetown Hospital, Margaret River Hospital, Warren Hospital and St John of God Bunbury Hospital[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 South West region during 2009-2013:

- There was a 9.2% increase in total number of births within the region. On average, births by Aboriginal women increased by 6% per year and by 2.1% per year in non-Aboriginal women.
- The age-specific birth rate for non-Aboriginal women was 68 per 1,000 women which was 1.1 times higher than the birth rate for Aboriginal women (62 per 1,000 women).

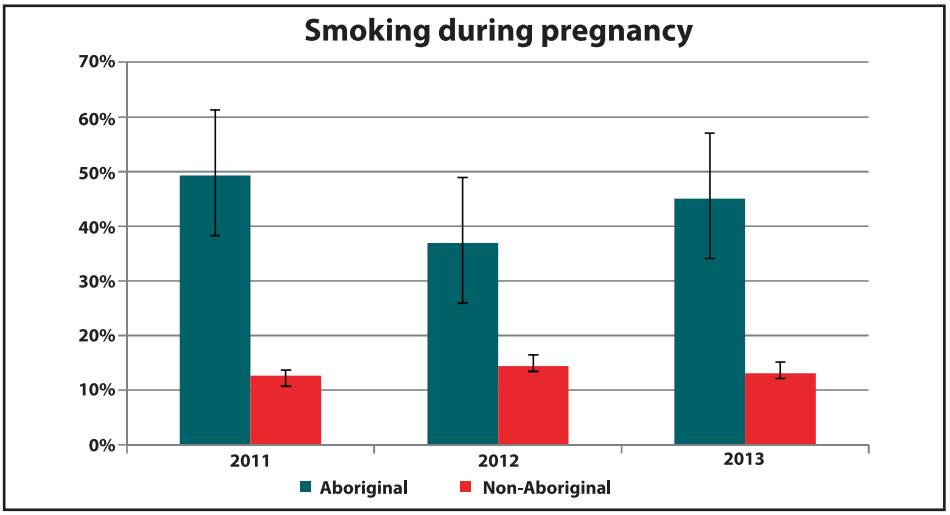
Teenage pregnancy

In 2012, 4.2% of South West women who gave birth were aged less than 20 years, a proportion similar to the State. In 2012, the percentage of Aboriginal teenage women giving birth was 23% 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 South West women who reported smoking during pregnancy. In 2013, 45% of Aboriginal mothers and 13% of non-Aboriginal mothers smoked during pregnancy.

Figure 1: 2011-2013 proportion of women smoking during pregnancy, South West 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 stillbirth are among the consequences of drinking during pregnancy. FASD is a common cause of medical, cognitive and behavioural problems for children including prematurity, brain damage, birth defects, growth restriction and developmental delay.

The FASD prevalence in WA has been reported to be 0.26 per 1,000 births. Of these, 89% were Aboriginal. The Aboriginal rate of 4.08 per 1,000 was significantly higher than non-Aboriginal children (0.03 per 1,000). Table 1 below 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.

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

	Gestational diabetes mellitus		Births
	Percent	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

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 (GDM) at higher rates.

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

Planning outreach teams

- ⇨ Culturally appropriate and targeted health promotion interventions on drinking and smoking during pregnancy.
- ⇨ Increase access to maternity services particularly support for teenage mothers.
- ⇨ Strengthen partnerships with primary care providers such as local GPs and Aboriginal Medical Services.

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 a low birth weight are more likely to develop significant disabilities and have a greater risk of poor health and mortality outcomes. From 2008-2012, the proportion of low birth weight babies born to women in the South West was 11.4% and 5.3% for Aboriginal and non-Aboriginal people respectively.

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 the South West, the proportion of children rated as developmentally vulnerable on one or more domains ranged from 14% - 30%. Table 3 shows the South West towns with AEDC results higher than the national rates.

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, South West children vulnerable on at least one domain.

Community	Children vulnerable: 1+ domains		Children vulnerable: 2+ domains	
	Number	% of total surveyed	Number	% of total surveyed
Bridgetown-Greenbushes	12	21	6	10
Bunbury	109	29	56	15
Dardanup	58	30	30	16
Harvey	94	24	49	12
Manjimup	33	26	20	16
Collie	35	27	10	7.8

Adult health

Chronic disease prevalence

Chronic disease refers to long-term conditions that last for six months or more. The South West region received funding to progress Chronic Disease Self-Management (CDSM) projects. These projects have worked to establish and integrate clinical pathways into practice.
Prevalence data collected for the South West population during 2009-2012 found that:

- One quarter of adults (23%) reported an injury requiring medical treatment.
- One in five adults (22%) reported arthritis, a significantly higher rate than the State.
- One in seven (14%) adults reported a currently diagnosed mental health problem.
- 8% of adults had asthma.

The highest cancer incidence rates in the South West from 2008-2012 were for cancers of the skin (melanoma), breast, prostate gland, colorectal and lung, bronchus and trachea. Melanoma rates were significantly higher (1.5 times) than the State rate.

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 non-Aboriginal people.

Research collected from 2011-2013 indicates that compared to non-Aboriginal people, Aboriginal people were found to be[3,4]:

- 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 times more likely to report having asthma.
- 2 times more likely to report kidney disease.

Diabetes: Majority have 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 being 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 as major priorities for Aboriginal health planning in the South West region are chronic diseases particularly diabetes and cardiovascular disease. Other priorities include ear, child and dental health[5].

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 existing major health care providers and discuss how your team could collaboratively work together in service delivery and coordination.**

Eye health

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 2011-2012, over half (53.7%) of Australians reported having a chronic eye condition. In 2013-2014, 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)[6].

Diseases of the eye was the second leading cause of hospitalisations for South West residents 65 years and over, from 2008-2012.

[3] AIHW 2015. Cardiovascular disease, diabetes and chronic kidney disease – Australian facts: Aboriginal and Torres Strait Islander people.
[4] ABS 2013. Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-2013.
[5] South West Regional Aboriginal Health Planning Forum data.
[6] www.aihw.gov.au/eye-health/cataract-surgery/#t2

Mental health

Health trends

For 2009-2012, one in seven (14%) South West adults 16 years and over suffered from a diagnosed mental health problem, with prevalence twice as high among females than males. Yet only 6% reported accessing a mental health care service in the last year.

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

Access: For 2003-2012, South West Aboriginal adults accessed community mental health services 1.7 times the rate of non-Aboriginal residents.

Community mental health services accessed by residents aged 15 to 64 in the South West between 2006 and 2010 were at a significantly lower rate than the State, primarily for serious psychiatric disorders. Rates for alcohol and drug disorders in the South West was 1.4 times the State rate, presenting mostly in males.

Table 4: 2002-2011 youth suicide rates, South West residents, 15-24 years.

Youth suicides (per 100,000 persons)*	South West Health Region	Metro	State
Males (15-24 years)	21.6	15.6	19.9
Females (15-24 years)	3.6	5.4	6.0

* These rates have been age-standardised to the Australian 2001 population.
Source: DoH, Health Tracks

Youth Suicide: For 2007-2011, the youth suicide rate in the South West for males and females was similar to the State youth suicide rate. Table 4 shows the South West youth suicide rates by gender during 2002-2011 to preserve confidentiality.

Planning outreach teams

- ⇨ **Health promotion interventions on alcohol and drug consumption as linked with injury and chronic disease.**
- ⇨ **Targeted initiatives to increase access and utilisation of mental health services.**
- ⇨ **Programs and services for Aboriginal people need to be targeted and culturally appropriate.**

Ear health

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

Otitis media begins within weeks of birth and can persist into adolescence with reoccuring 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[8].

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

- Ear, nose and throat infections accounted for 19% of all potentially preventable hospitalisations in South West children.
- The majority of these hospitalisations were for very young children aged 0-4 years.
- Rate of hospitalisations for disease of the ear and mastoid process was 825 per 100,000 children.

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 and community services.**

[7] ABS 2013. Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-2013.
[8] Closing the Gap Clearinghouse (AIHW & AIFS) 2014. Ear disease in Aboriginal and Torres Strait Islander children. Resource sheet no.35.

Regional hospitalisations

Overall, the hospitalisation rate for South West residents was significantly lower than the State in 2008-2012, with a standardised rate ratio of 0.97 and 1.0 respectively. The hospitalisation rate for Aboriginal residents in the South West was 1.6 times higher than the rate for non-Aboriginals.

Renal dialysis was the leading cause of hospitalisations for both Aboriginal and non-Aboriginal residents (24% and 8% respectively). Hospitalisations due to alcohol and tobacco consumption were significantly higher in Aboriginal residents than non-Aboriginal residents (alcohol 1.4 times and tobacco 2.6 times).

Table 5 shows the leading causes of hospitalisation other than renal dialysis, by major category.

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 South West residents:

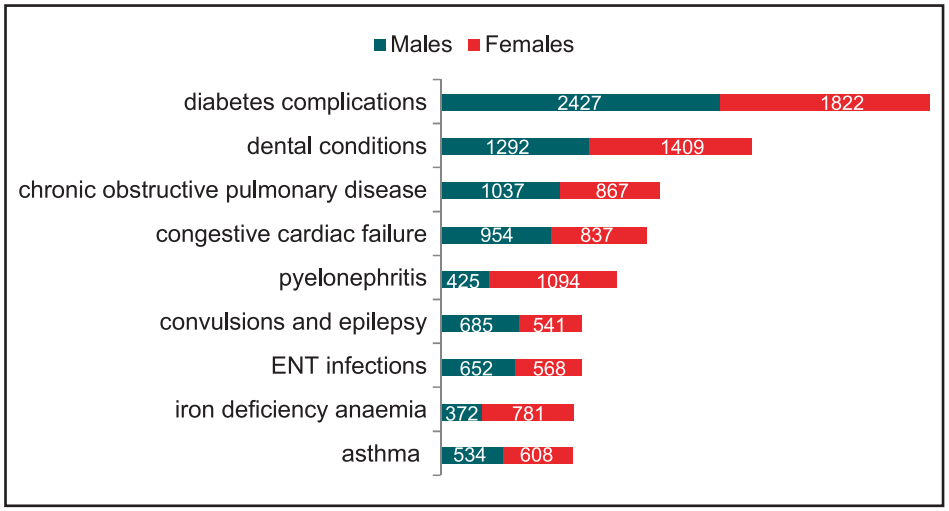
- PPH accounted for 20,161 (7%) of hospitalisations. This figure was similar to the State.
- Diabetes with its complications was the leading cause of PPH for South West residents (21% of total). Other PPH conditions are shown in Figure 2.

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

Rank	Cause of hospitalisation	Number	% of total (15-64 yrs)	State rank
1	Digestive diseases	36,170	12	1
2	Musculo-skeletal diseases	23,497	8	5
3	Ill-defined conditions	22,051	7	3
4	Neoplasms	21,184	7	2
5	Injury and poisoning	20,529	7	4
All hospitalisations		300,302	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

Figure 2: 2008-2012 leading conditions for potentially preventable hospitalisations, South West residents .



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 primary and community care services to prevent avoidable mortality. There is still a discrepancy between the life expectancy of Aboriginal people when compared to non-Aboriginal people.

Planning outreach teams

- ⇨ **Interventions should consider modifiable risk factors for leading causes of avoidable mortality.**
- ⇨ **Explore partnerships with existing services providing primary and secondary interventions.**

Leading causes of death

The South West mortality rate was similar to the State rate in 2007-2011. However the Aboriginal South West mortality rate was 1.5 times higher than the State.

During this period, the leading causes of death in the South West region were found to be[9]:

- Ischaemic heart diseases, cerebrovascular diseases, dementia (including Alzheimer's disease), lung cancer and chronic obstructive pulmonary disease.

Avoidable mortality

During 2007-2011, 55% of South West resident deaths under 75 years could have been avoided through the better use of primary prevention and treatment interventions.
The avoidable mortality rate for Aboriginal people was 4 times higher than for non-Aboriginal people in the region.

The leading cause of avoidable deaths for South West residents was ischemic heart disease (10%) followed by lung cancer (9%). Avoidable mortality rates from treatable melanoma of the skin was 1.6 times higher than the State rate.

[9] 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).