Great Southern – population and health status

Population

Estimated resident population in 2010 was 59,412, a 8% growth over five years. Most of this population resides in the main centre: City of Albany as well as Denmark and Katanning.

The age structure differs from the State with lower numbers of 15 to 24 and 25 to 44 year olds. The region also has a large proportion of older people with 15% of the population aged 65+ in 2010.

The Aboriginal population represented 2,148 (4%) people in 2010. The Great Southern Aboriginal population has a younger age structure when compared to the non-Aboriginal population.

It is estimated that the resident population in the Great Southern region will increase to 73,575 by 2016 and 78,750 by 2021.

Measure of disadvantage

Socio-Economic Indexes for Areas (SEIFA) measures a broad range of socio-economic indices. The baseline for the SEIFA is 1,000.

A score above 1,000 indicates an area of socio-economic advantage and a score below 1,000 indicates an area of disadvantage. Research shows that a lower SEIFA 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. The region is not as disadvantaged as other Western Australian regions.

The 2006* SEIFA scores for towns in the Great Southern region are as follows:

<table>
<thead>
<tr>
<th>Town</th>
<th>Rank</th>
<th>SEIFA Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany</td>
<td>1</td>
<td>1,032</td>
</tr>
<tr>
<td>Katanning</td>
<td>2</td>
<td>947</td>
</tr>
<tr>
<td>Jerramungup</td>
<td>3</td>
<td>1,031</td>
</tr>
<tr>
<td>Gnowangerup</td>
<td>4</td>
<td>1,002</td>
</tr>
<tr>
<td>Denmark</td>
<td>5</td>
<td>966</td>
</tr>
<tr>
<td>Broomehill</td>
<td>6</td>
<td>1,001</td>
</tr>
</tbody>
</table>

*2006 SEIFA is the most up-to-date data available from ABS, 2011 statistics will be available in 2013

Health status

Based on ABS 2007 data, the Great Southern population is relatively healthy on a population-wide basis. However, the prevalence of chronic disease is on the increase and:

- one in three adults were classified as obese in terms of height to weight ratios;
- there are more females with high blood pressure; and
- there are more people with high cholesterol.

Leading causes of death

During the period 2003 to 2007, the leading causes of death were diseases of the circulatory system, neoplasms and respiratory disease. The number of deaths in the Great Southern was not significantly different when compared to the rest of the State.

With thanks to WA Country Health Service for permission to use data from various sources including the Great Southern Regional Health Profile 2012 which can be accessed at http://www.wacountry.health.wa.gov.au/fileadmin/sections/publications/Great_Southern_Health_Care_Profile_FINAL_10_April_2012.pdf

When planning new outreach health services focus on current gaps and using an effective team approach model.
Great Southern – population and health status

Table 2: 2003-2007 Great Southern residents - Leading causes of mortality

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause of mortality</th>
<th>Count</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diseases of the circulatory system</td>
<td>681</td>
<td>36.4%</td>
</tr>
<tr>
<td>2</td>
<td>Neoplasms</td>
<td>553</td>
<td>29.6%</td>
</tr>
<tr>
<td>3</td>
<td>Diseases of the respiratory system</td>
<td>119</td>
<td>6.4%</td>
</tr>
<tr>
<td>4</td>
<td>Injury and poisoning</td>
<td>107</td>
<td>5.7%</td>
</tr>
<tr>
<td>5</td>
<td>Endocrine, nutritional and metabolic diseases</td>
<td>95</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

(ABS Mortality Data)

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

Avoidable mortality

During 1997 to 2007, two thirds of Great Southern resident deaths under the age of 75 could have been avoided. More than half (52.7%) of these deaths could have potentially been avoided through the use of primary care interventions.

Figures 1 and 2 below show a count of the top five causes of avoidable mortality by gender during 1997 to 2007. Ischaemic heart disease was the leading cause of avoidable mortality for both males and females with lung cancer rating high in both genders. For Aboriginal residents the leading cause of avoidable mortality was ischaemic heart disease (23.4%).

According to the 2006 ABS Census the following trends for Great Southern residents are:

- 6.7% lived in a remote area
- 93.3% lived in an outer regional area.

Major health service providers

<table>
<thead>
<tr>
<th>Hospital services</th>
<th>Community and public health services</th>
<th>Mental health and aged care services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany Hospital</td>
<td>Great Southern Population Health Unit</td>
<td>Great Southern Mental Health - Katanning</td>
</tr>
<tr>
<td>Ravensthorpe District Health Centre</td>
<td>Ravensthorpe Community Health</td>
<td>Great Southern Mental Health - Narrogin</td>
</tr>
<tr>
<td>Denmark Hospital and Health Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gnowangerup Hospital</td>
<td></td>
<td>Great Southern Mental Health – Albany</td>
</tr>
<tr>
<td>Katanning Hospital</td>
<td></td>
<td>Great Southern Aboriginal Health Service</td>
</tr>
<tr>
<td>Kojonup Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plantagenet Hospital</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Planning outreach teams

- Focus on chronic conditions: cardiovascular disease, cancers and preventable mental health
- Contact major health care providers and discuss how your team could collaboratively work together in service delivery and coordination


With thanks to WA Country Health Service for permission to use data from various sources including the Great Southern Regional Health Profile 2012 which can be accessed at http://www.wacountry.health.wa.gov.au/fileadmin/sections/publications/Great_Southern_Health_Care_Profile_FINAL_10_April_2012.pdf

When planning new outreach health services focus on current gaps and using an effective team approach model.
Great Southern – population and health status

The burden of disease

Aboriginal health

Chronic, non-communicable diseases contribute to over 70% of the total burden of illness and injury in Australia\(^1\). In Western Australia, chronic disease is largely detected and managed by general practitioners and Aboriginal Medical Services, with specialist care available at WA Country Health Service Regional Resource Centres and from resident and visiting specialists.

The following information about the five chronic health conditions targeted by the Medical Specialist Outreach Assistance Program – Indigenous Chronic Disease (MSOAP-IDC) and their impact has primarily been sourced from the Aboriginal Health Planning Forum Data reports prepared by the WA Health Epidemiology Branch and WA Country Health Service, November 2009.

Chronic disease amongst Aboriginal people

65% of Aboriginal people report at least one long-term health condition and approximately 27% of Aboriginal children have one or more long-term health conditions.

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.

The high burden of disease is also reflected in a comparison of admission rates compared to the general population\(^2\):

- 12 x greater for renal dialysis
- 8 x greater for diabetes
- 5.62 x greater due to cellulitis
- 6.64 x greater due to respiratory infections/inflammations
- 8.2 x greater due to disorders of the pancreas.

Diabetes: Majority is type 2 diabetes. Risk factors for type 2 diabetes include being overweight, leading a sedentary lifestyle and consuming a high calorie diet.

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.

In 2006, the most common causes of cancers in Western Australia for men were prostate, melanoma, colorectal and lung. For women the most common cancers were breast, colorectal, melanoma and lung.

Mortality – chronic conditions

Between 1997 and 2006, the leading causes of mortality among Aboriginal people from the combined Great Southern, South West and Wheatbelt regions were ischaemic heart disease and cancer, followed by cerebrovascular disease\(^6\).

\(^{1}\) Improving Chronic Disease Services in Country WA: Priority Chronic Disease Models of Care. WA Country Health Service. Oct 2009

\(^{2}\) Ibid. Page 20. Data from 2006/07

\(^{3}\) Great Southern Aboriginal Health Planning Forum Data. Page 9

Figure 3 compares the age standardised mortality rate ratios for the combined Great Southern, South West and Wheatbelt Aboriginal populations with the State Aboriginal population, the combined State population and the combined Great Southern, South West and Wheatbelt non-Aboriginal population for the period 1998 to 2007\(^5\).

Table 3 below shows the leading cause of mortality that could have been avoided with effective medical interventions. One in four avoidable deaths for Aboriginal Great Southern residents was ischaemic heart disease.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Condition</th>
<th>Deaths</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ischaemic heart disease</td>
<td>15</td>
<td>23.4%</td>
</tr>
<tr>
<td>2</td>
<td>Cerebrovascular diseases</td>
<td>6</td>
<td>9.4%</td>
</tr>
<tr>
<td>3</td>
<td>Lung cancer</td>
<td>5</td>
<td>7.8%</td>
</tr>
<tr>
<td>4</td>
<td>Diabetes</td>
<td>5</td>
<td>7.8%</td>
</tr>
<tr>
<td>5</td>
<td>Chronic obstructive pulmonary disease</td>
<td>5</td>
<td>7.8%</td>
</tr>
</tbody>
</table>

(ABS Mortality Data)

The Western Australian Hospital Morbidity Data System records all (Statewide) hospitalisations.

The following chart compares the age standardised hospital separation rate ratios for the Great Southern Aboriginal population with the State Aboriginal population, the combined State population and the Great Southern non-Aboriginal population for the period 2004 to 2008\(^6\).
Great Southern – population and health status

Maternity

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. GP obstetricians play an important role in maternity care in hospitals where specialist services are often not available. All birthing services are supported by midwives and anaesthetists. Severe workforce shortages impact across all these professions. In Western Australia, planned birthing services are available in 19 public hospitals and at St John of God Geraldton and Bunbury Hospitals.

Great Southern birthing services

Planned birthing services are available at Albany Regional Hospital and Katanning District Hospital.

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.

Low birth weight

A baby’s 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. Statewide from 2000 to 2006, 14.1% of babies born to Aboriginal mothers were of low birth weight, compared to 5.9% of babies born to non-Aboriginal mothers.

Low birth weight Aboriginal babies

For rural Western Australia in 2008, 6.2% of all babies were born with a low birth weight. For Aboriginal babies, the percentage with low birth weight was significantly higher at 14.6%.

The percentage of low birth weight Aboriginal babies born in the Great Southern ranged from 6.7% in 2005 to 4.5% in 2008.

Birth trends

In 2005, women residing in country areas of Western Australia represented 25% of the total number of women who gave birth in Western Australia while 63.9% of births by Aboriginal women were from country regions. More country women are also delivering in the metropolitan area in public and private hospitals. From 2004 to 2008 there were 34,808 births recorded in rural Western Australia, with Aboriginal births being an average of 18.96% of these births.

During the 2004 to 2008 period, there was a 1.2% average annual decrease in births each year.

Figure 6 identifies the number of births in the Great Southern region and figures have remained relatively stable.
Great Southern – population and health status

Mothers aged less than 20 years
The following trends were seen between 2004 and 2008:

- In Western Australia the proportion of births to women aged less than 20 years was 5.1%. For non-Aboriginal teenage mothers the proportion was 4% compared to 23.1% for young Aboriginal women.
- The number of Aboriginal teenagers in the Great Southern giving birth decreased from 36% in 2004 to 13.3% in 2008.
- In 2008, 4.5% of Aboriginal mothers in the region were teenagers compared to 23.1% being the State Aboriginal women teenage population.

Figure 7: Comparison of babies born to teenage mothers by Aboriginal status of mother and region

Drinking and pregnancy
Miscarriage and stillbirth are among the consequences of drinking during pregnancy. Fetal alcohol syndrome is a common cause of medical, cognitive and behavioural problems for children including prematurity, brain damage, birth defects, growth restriction and developmental delay.

National reported rates per 100,000 children per annum indicate that the Aboriginal rate is significantly higher than the non-Aboriginal rate:

- Children <5 years at diagnosis (total population) 1.14
- Non-Aboriginal population 0.37
- Aboriginal population 14.60

The Western Australian Birth Defects Registry reported rates for 2002 also indicated a significantly higher Aboriginal rate:

- 0.02/1,000 for non-Aboriginal children
- 2.76/1,000 for Aboriginal children.

Infant mortality rate
The Statewide infant mortality rate for 1998 to 2007 was 3.8 per 1,000 live births. This comprised a non-Aboriginal rate of 3.2 deaths per 1,000 live births compared with a rate of 12.9 per 1,000 for Aboriginal women.

Mental health
In 2009 14.9% of adults 16 years and over had suffered from a mental health problem. Only a slight proportion (6.9%) had accessed mental health care services within the year.

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

Community mental health services accessed between 2006 and 2010 was not significantly different to that of the State.

Child and adolescent health

Smoking and pregnancy
Risks associated with smoking during pregnancy include premature births, lower birth weights, organ malfunctions and stillbirths. Figure 8 shows an increase in the proportion of Aboriginal women smoking during pregnancy compared to a decrease for non-Aboriginal women. Aboriginal women were three times more likely to smoke during pregnancy.

Figure 8: Great Southern women who smoked during pregnancy 2008-2010

Smoking and pregnancy

Planning outreach teams

- Health promotion interventions on drinking and smoking during pregnancy
- Access to dieticians and nutritional professionals for expectant Aboriginal mothers

Child and adolescent health

Vaccinations
The recommended Australian vaccination coverage goals aim for greater than 90% coverage of children at two years of age and almost 100% coverage at school entry age.

More than 90% coverage is needed to create community immunity against ongoing transmission of communicable diseases.

In the Great Southern region, childhood vaccination coverage is above 90% for the 24 month age group. Coverage is lower for Aboriginal children in this age bracket.
Great Southern – population and health status

Table 4 below represents the current immunity for Year 7s in the Great Southern. There is relatively low community immunity against chickenpox.

Table 4: 2009 Year 7 Great Southern vaccinations

<table>
<thead>
<tr>
<th>B1</th>
<th>B2</th>
<th>HPV1*</th>
<th>HPV2*</th>
<th>HPV3*</th>
<th>VZV**</th>
<th>DPT#</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>402</td>
<td>374</td>
<td>206</td>
<td>194</td>
<td>177</td>
<td>148</td>
</tr>
<tr>
<td>%</td>
<td>75.3</td>
<td>70.0</td>
<td>84.4</td>
<td>79.5</td>
<td>72.5</td>
<td>27.7</td>
</tr>
</tbody>
</table>

*Cervical cancer **chickenpox #diphtheria, pertussis and tetanus

Australian Early Development Index

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

2009 ABS data classed 23.5% of Australian children as developmentally vulnerable on one or more domains. A child ranked in the bottom 10% is classed as “developmentally vulnerable” whereas a child ranked 75% and above is classed as “on track”.

In 2009, a small number of Great Southern areas had children who were developmentally vulnerable on one or more domains. High vulnerability was seen in Katanning (52.3%); however data may be skewed with only 16 children surveyed. Plantagenet (41.5%) and Gnowangerup (41.4%) areas had nearly half of the children ranked in the bottom 10%. Areas such as Albany (20.3%) and Denmark (21.8%) have a lower proportion of children who are developmentally vulnerable.

Planning outreach teams

- Increase access to mental health services targeting the Aboriginal population
- Increase allied health professionals to assist early childhood development. Teams could include speech pathologists, occupational therapists, physiotherapists and child health nurses

Figure 9: Childhood vaccinations for Great Southern residents 24 months 2006-2009

Non-Aboriginal

Aboriginal