South West health services

The South West Health Campus located in Bunbury is the largest health facility in the South West. Bunbury is also the location of the region’s only private hospital.

There are four District Health Services located in Busselton, Collie, Manjimup and Margaret River. In total, there are 14 hospital facilities or health services located across the South West. The Busselton Health Campus, which opened in 2015, is the newest health facility in the South West.

There is one Aboriginal Community Controlled Health Service (ACCHS) located in the South West. The South West Aboriginal Medical Service is located in Bunbury and provides culturally appropriate outreach services throughout the region.

Population

The estimated regional population of the South West was 175,904 in 2016, which is 33% of the population of rural Western Australia and 7% of the population of the State.

The South West is a relatively small geographical area with a large population density. In 2015, there were seven people per square kilometre, which is much greater than the State average (1 per square kilometre).

The age structure of the South West differs from the State, with a greater proportion of children aged 5-14 and adults aged 50-74 (see Figure 1 – page 2).

Aboriginal and Torres Strait Islander peoples represent 2.6% of the region’s population, a proportion which is lower than the State (3.6%). The Aboriginal population has a younger age structure when compared to the non-Aboriginal population. This is a trend that is consistent across Western Australia.

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1 South West Aboriginal Medical Service, 2020
Measure of disadvantage

Socio-Economic Indexes for Areas (SEIFA) measures a broad range of determinants of disadvantage. A score of 1,000 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.

Based on the 2016 census, in the South West the lowest SEIFA score for an LGA was Collie with 899, while the greatest was for Capel with 1,009. Overall, Bunbury, Collie and Manjimup are the only LGAs with a score in the lowest 30% of the State, suggesting that the South West is among the least disadvantaged regions in Western Australia.

Hospitalisations

Between 2011 and 2015, the rate of hospitalisation was the same as the State rate (1.0 times). In Aboriginal adults, the rate of hospitalisation in the South West was significantly lower than the State rate. However, Aboriginal people in the South West were 2.2 times more likely to be hospitalised than non-Aboriginal people.

The leading causes of hospitalisation in the South West between 2006-2015 were:

- Digestive diseases: 13%
- Pregnancy and childbirth: 9%
- Musculo-skeletal diseases: 9%
- Ill-defined conditions: 7%
- Injury and poisoning: 7%

Potentially preventable hospitalisations

For the period 2011-2015, 4% of all hospitalisations were preventable. The rate of potentially preventable hospitalisations (PPH) in the South West is significantly lower than the State rate.

For vaccine preventable illnesses, the rate of PPH was the same as the State. For Aboriginal people, the rate of PPH was significantly less when compared to Aboriginal people throughout the State; however, the rate was still greater than non-Aboriginal residents in the South West. Table 1 shows the top five leading causes of PPH in the South West.

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

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number</th>
<th>% of total PPH</th>
<th>Rate vs State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes complications</td>
<td>1,222</td>
<td>15</td>
<td>0.8</td>
</tr>
<tr>
<td>Cellulitis</td>
<td>924</td>
<td>11</td>
<td>1.0</td>
</tr>
<tr>
<td>Angina</td>
<td>820</td>
<td>10</td>
<td>1.3</td>
</tr>
<tr>
<td>UTIs incl. pyelonephritis</td>
<td>783</td>
<td>9</td>
<td>0.8</td>
</tr>
<tr>
<td>Iron deficiency anaemia</td>
<td>717</td>
<td>9</td>
<td>1.02</td>
</tr>
</tbody>
</table>

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 South West 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>
<thead>
<tr>
<th>Condition</th>
<th>% of all deaths</th>
<th>Rate ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischaemic heart disease</td>
<td>12</td>
<td>1.0</td>
</tr>
<tr>
<td>Cerebrovascular diseases</td>
<td>7</td>
<td>1.3</td>
</tr>
<tr>
<td>Dementia (incl Alzheimers)</td>
<td>6</td>
<td>0.9</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>Intentional self-harm</td>
<td>4</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Source: DOH, Health Tracks

During the period 2011-2015, 52% of deaths in the South West under the age of 75 were classed as avoidable. Table 3 shows the causes and rate ratios of the top five causes of avoidable mortality in the South West.

<table>
<thead>
<tr>
<th>Condition</th>
<th>% of all deaths</th>
<th>Rate ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischaemic heart disease</td>
<td>19</td>
<td>1.0</td>
</tr>
<tr>
<td>Suicide and other self-inflicted injuries</td>
<td>13</td>
<td>1.2</td>
</tr>
<tr>
<td>Transport accidents</td>
<td>8</td>
<td>1.6</td>
</tr>
<tr>
<td>Cerebrovascular diseases</td>
<td>7</td>
<td>1.3</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>6</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: DOH, Health Tracks

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 mothers in the South West was slightly lower than the State average at 1.8% versus 2.1% for the State. The proportion of babies born at low birth weight to Aboriginal mothers in the South West was 4.8% 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 South West is available for 11 communities. The total number of South West children vulnerable in at least one domain was 578, with 284 being vulnerable in two or more domains. Table 4 shows the AEDC scores of the five communities with the greatest percentage of vulnerable children of those surveyed.

<table>
<thead>
<tr>
<th>Community</th>
<th>Vulnerable children</th>
<th>Total surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One or more domains</td>
<td>Two or more domains</td>
</tr>
<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Bunbury</td>
<td>126</td>
<td>31.9</td>
</tr>
<tr>
<td>Manjimup</td>
<td>37</td>
<td>28.9</td>
</tr>
<tr>
<td>Dardanup</td>
<td>54</td>
<td>28.6</td>
</tr>
<tr>
<td>Capel</td>
<td>11</td>
<td>47.8</td>
</tr>
<tr>
<td>Donnybrook-Balingup</td>
<td>18</td>
<td>24.0</td>
</tr>
<tr>
<td>Australia</td>
<td>22</td>
<td>22.0</td>
</tr>
</tbody>
</table>

Source: DOH, Health Tracks

\(^2\) ABS, Life Tales for Aboriginal and Torres Strait Islander Australians, 2015-2017
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 South West in 2017, the proportion of all children vaccinated exceeded the target of 90% except for children aged 24-27 months, of which 89% are recorded as vaccinated. Table 5 shows rates of vaccination by age and Aboriginality.

Table 5 – 2017 South West immunisation rates by age and Aboriginality

<table>
<thead>
<tr>
<th>Age group</th>
<th>Aboriginal</th>
<th>Non-Aboriginal</th>
<th>All persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 to &lt; 15 months</td>
<td>91%</td>
<td>93%</td>
<td>93%</td>
</tr>
<tr>
<td>24 to &lt; 27 months</td>
<td>96%</td>
<td>88%</td>
<td>89%</td>
</tr>
<tr>
<td>60 to &lt; 63 months</td>
<td>96%</td>
<td>93%</td>
<td>93%</td>
</tr>
</tbody>
</table>

Source: DOH, Health Tracks

Adult health

Chronic disease

Chronic diseases are long lasting conditions with persistent effects. 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 2012-2013.

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.

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 South West because of the consequences of the condition in relation to language, social development and education.

For children aged 0-14 in the South West, ear, nose and throat infections occurred at a lower rate than the rest of the State (standardised rate ratio of 0.7) between 2011 and 2015. Despite this, ear, nose and throat infections were still the second greatest cause of PPH in that age group, accounting for 19% of all PPH with the majority occurring in children aged 0-4 years.

OUTREACH SERVICE CONSIDERATIONS

- Culturally appropriate services delivered through Aboriginal Community Controlled Health Services (ACCHSs) are crucial in addressing the disparity in health between Aboriginal and non-Aboriginal people.
- Consider connecting with the Regional Aboriginal Health Planning Forum to see how your service can best serve the Aboriginal people of the South West.

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OUTREACH SERVICE CONSIDERATIONS

- Familiarise yourself with the WA Child Ear Health Strategy and ensure that your proposed service aligns with the objectives.

4 ABS 2019. National Aboriginal and Torres Strait Islander Health Survey, 2018-2019
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 (55%) have one or more long-term eye conditions 5. 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.

In the South West, diseases of the eye were amongst the leading causes of hospitalisation for the period 2011-2015 representing 4% of all hospitalisations. In all South West residents aged 65 or over for the same period, eye diseases caused the second most hospitalisations after renal dialysis.

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 South West between 2012 and 2016:

- The age-specific birth rate was greater in the South West compared to the State (68.7 and 63.6 per 1,000 women respectively)
- Between 2012 and 2016 there was a 12% increase in deliveries taking place in hospitals in the South West.
- The number of births to Aboriginal women increased by 9.1% annually in the same time period.

Teenage mothers

Births to teenage mothers in the South West occur at a rate similar to the State. In 2015-2016, the proportion of Aboriginal mothers who were teenaged was greater than non-Aboriginal mothers (19% and 3% respectively).

Smoking in pregnancy

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

Figure 2 shows the proportion of women who smoked during pregnancy from 2011-2012 to 2015-2016. Rates of smoking during pregnancy in the South West have fluctuated in recent years.

An increase in rates of women reporting smoking during pregnancy from 35% to 43% was observed between 2013-2014 and 2015-2016. Rates of reported smoking in pregnancy are lower in non-Aboriginal mothers compared to Aboriginal mothers (13% and 42% respectively).

5 AIHW 2019. Web report – eye health
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 past 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 3 shows an indication of alcohol use in pregnancy in the South West. Ninety-one per cent of mothers in the South West reported not consuming alcohol while pregnant, while 83% (n=94) of Aboriginal mothers reported not consuming alcohol while pregnant.

Gestational Diabetes Mellitus
In the period 2011-2012 to 2015-2016, it was reported that 6.8% of South West Aboriginal women who gave birth had a diagnosis of Gestational Diabetes Mellitus (GDM). This is compared to 6.3% in non-Aboriginal women.

The percentage of Aboriginal women experiencing GDM was lower in the South West than the rural Western Australian average which was 7.1%. In non-Aboriginal mothers, the rate of GDM was greater than the rural Western Australian average of 5.9%.

OUTREACH SERVICE CONSIDERATIONS

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

Mental health
In 2013-2016, one-in-seven (14%) of South West 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 (17% and 11% respectively). Only 8% of those surveyed in the South West reported using a mental health care service in the past 12 months.

In the period 2011-2015, intentional self-harm was the leading cause of mortality in the South West in the age group 15-64 years. Deaths due to intentional self-harm occurred at a rate 1.2 times greater than the State. Two thirds of deaths occurred in the 25-54 year age group.

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

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

<table>
<thead>
<tr>
<th>Gender</th>
<th>South West</th>
<th>Metropolitan</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(15-24 years)</td>
<td>22.3</td>
<td>15.1</td>
<td>19.6</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(15-24 years)</td>
<td>6.6</td>
<td>6.4</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Source: DOH, Health Tracks

OUTREACH SERVICE CONSIDERATIONS

- Increase access to mental health services targeting youth in the South West.
- Increase activities raising awareness of mental health conditions and encourage people to access services.
- Collaborate with other service providers delivering social and emotional wellbeing programs in the South West.