

Collation of Data, Health Status and
Determinants of the Shire of Augusta
Margaret River, Western Australia

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1.0 Introduction

Stoneham and Associates were contracted by the Shire of Margaret River Augusta and the City of Busselton to assist with the development of a Public Health Plan. Stoneham and Associates identified and conducted simplistic analysis of existing public health and wellbeing activities and trends, and identified gaps in programs to meet community and stakeholder perceptions. The next phase will recommend evidence-based strategies that unite or join up approaches across the organisation, as well as providing options for innovation and identifying roles for agencies external to the Council.

The purpose of accessing these data contained within this report was to inform the Public Health Plans for the Shire of Augusta Margaret River.

2.0 Findings for the Shire of Margaret River Augusta

2.1 Who Lives There?

The South West is the most populated region outside Perth and has experienced a long standing pattern of population growth.

The resident population of the Busselton, Margaret River and Augusta health districts is projected to increase by 28.1%, from 45,879 in 2011 to over 58,783 by 2021. This level of growth is markedly higher than the expected 20.3% growth of the State for the same time period.

Augusta-Margaret River population is expected to grow to 18,362 or 29.9% by 2021 or 2.7% annually. The Shire of Augusta Margaret River population is less than 0.6 % of the total WA population, however, it has the same male to female ratio (50%).

The following tables provide demographic information on people living in the Shire of Augusta Margaret River.

Population	Augusta Margaret River	Western Australia
Total	14,258	2,474,410
Male	7,131 (50%)	1,238,419 (50%)
Female	7,133 (50%)	1,235,994 (50%)

Table One - Total population and by sex (ABS 2016)

The Shire of Augusta Margaret River has half the percentage of Aboriginal population compared to the State average.

Augusta Margaret River	Western Australia
195 (1.4%)	75,978 (3.1%)

Table Two - Aboriginal people and Torres Strait Islanders population

Table Three demonstrates that the Shire of Augusta Margaret River has higher than the State average for the all age groups from 0-79 years and lower than the WA average for 80 years and over. There are 1250 residents aged between 0-5 years.

Age	Augusta Margaret River	%	Western Australia	%
Median age	39	-	36	-
0-4 years	1,109	7.3	161,727	6.5
5-9 years	1,183	7.8	164,153	6.6
10-14 years	1,038	6.8	150,806	6.1
65-69 years	786	5.2	116,755	4.7
70-74 years	545	3.6	82,911	3.4
75-79 years	380	2.8	61,509	2.5
80-84 years	230	1.5	42,590	1.7
85 years and over	243	1.6	42,420	1.7

Table Three - Age structure by 5 year age bands (0-14, 65 and over)

It is projected that by 2026, the Shire of Augusta Margaret River will have 7582 people aged 50 years and over. Given that at age 60 years, a Western Australian man can expect to live another 21.9 years and a Western Australian woman another 25.6 years¹, this is a priority for the Shire in relation to future planning for an age friendly environment.

Ancestry	Augusta Margaret River		Western Australia	
	Count	%	Count	%
English	6,274	31.5%	931,150	27.9%
Australian	5,653	28.4%	760,032	22.8%
Scottish	1,533	7.7%	214,154	6.4%
Irish	1,550	7.8%	224,372	6.7%
German	566	2.8%	73,062	2.2%

¹ Office of Seniors & Volunteering (2006) Western Australia's Seniors Active Ageing Benchmark Indicators 2006. Government of Western Australia. http://www.community.wa.gov.au/DFC/Communities/Seniors/Publications/Active_Ageing_Benchmark_Indicators.htm

English Only	12,146	85.5%	1,861,041	75.2%
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Table Four - Ethnic origin of major populations groups and language spoken at home

According to the ABS data, the Shire of Augusta-Margaret River has a higher than State average for people with an English, Australian, Scottish and Irish heritage.

2.2 Births and Deaths

Table Five indicates that the Shire of Augusta Margaret River have a slightly higher fertility rate than the State.

Augusta Margaret River	Western Australia
588 / 2.19	105,054 / 1.89

Table Five - Total births / fertility rates (PHIDU 2019, SHA)

Table Six demonstrates that there is little difference in the death rate when compared with the State average.

Augusta Margaret River	Western Australia
311 81 years	65,978 80 years

Table Six - Death rates: median number and age at death (PHIDU 2019, SHA)

Data is limited by Region for these categories. In 2015, the standardised death rate in Western Australia was 5.3 deaths per 1000 standard population. The Western Australian infant mortality rate was 2.5 infant deaths per 1 000 live births in 2015.

The standardised death rate in Western Australia in 2015 for males (6.4) was higher than for females (4.3). The standardised death rate for males has been higher than for females over the ten years since 2005.

In Australia, the maternal mortality rate (MMR) is low compared to other countries at 6.8 per 100 000 women giving birth in 2008–2012. The comparable figure for New Zealand is 14.7 per 100 000 women giving birth in 2010–2012 (PMMRC 2016). In the United Kingdom slightly different terminology is used and the comparable figure is 8.5 per 100,000 maternities in 2012–2014 (NPEU 2016).²

Augusta Margaret River	Western Australia
Standardised mortality ratios deaths per 1000 ABS 2017	
5.1	5.3 ³
Perinatal mortality rate AIHW 2018	

² Source: <https://www.aihw.gov.au/reports/mothers-babies/maternal-deaths-in-australia-2012-2014/contents/introduction>

³ Supreme Court WA data

10.5	8.6
Maternal mortality rate	
NA	6.8 in Australia

Table Seven – Mortality rates

Augusta Margaret River	Australia
Years of life lost p/1000 ABS 2016	
48.2	39
Avoidable deaths	
1.82 Transport	105.2

Table Eight – Years of life lost and avoidable deaths

2.3 Education Levels

The South West Region has very good access to educational services. The area is well-serviced by government and non-government pre-primary, primary and secondary schools.

For tertiary options, the Region has access to the Bunbury Campus of Edith Cowan University, the South West Institute of Technology, the Rural Clinical School of WA and the Margaret River Education Campus incorporating the Centre for Wine Excellence.

As Table Nine indicates, the Country WA Primary Health Network (CWAPHN) population has a significantly higher rate of the population who have left school prior to Year 10 or who did not go at to school at all (ASR 40.2 per 100 compared to both the WA and Australian rates of 32.8 and 34.3 per 100 respectively). Augusta Margaret River (ASR 30.7 per 100) has very lowest rates within the CWAPHN.

	Augusta Margaret River		Western Australia	
Completed year 12 or equivalent	1,652	14.8%	818,674	16%
Completed year 10 or equivalent	1,201	10.8%	235,001	11.8%

Table Nine – Completed Years (ABS 2016)

Schools in the Margaret River area fall in the Capes network of schools including:

Primary

- Augusta
- Cowaramup
- Karridale

- Rapids Landing
- Margaret River

Secondary Schools

- Margaret River

A number of private and independent schools are also located within the Shire. A map of the local schools appears below.⁴

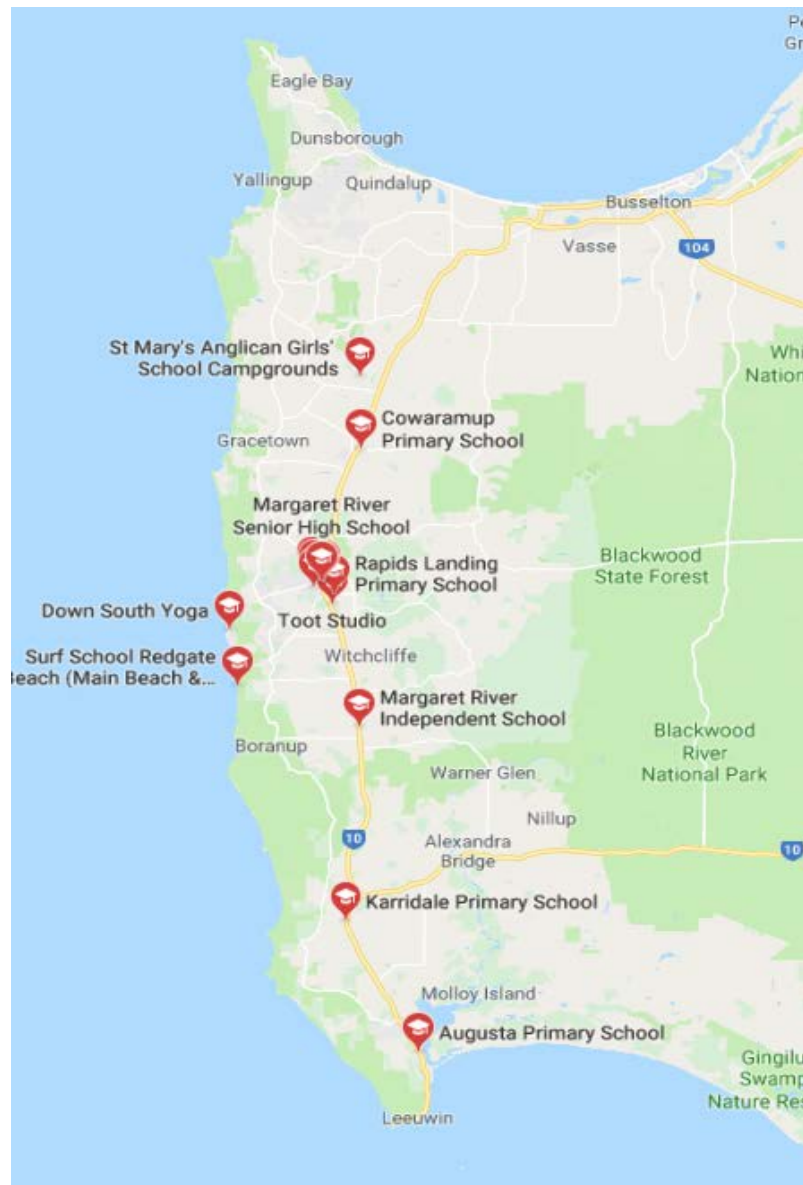


Figure One – Map of schools in the Region

⁴

<https://www.arcgis.com/home/webmap/viewer.html?webmap=f5eb4e7da2554546a32a7a15336fd677&extent=93.3072%2C-36.234%2C168.19%2C-9.1763>

The different domains of early childhood development—physical, social/emotional and language/cognitive—strongly influence learning, school success, economic participation, social citizenry and health. Healthy physical development and emotional support during the first years of life provide building blocks for future social, emotional, cognitive and physical wellbeing. Children from disadvantaged backgrounds are more likely to do poorly at school, affecting adult opportunities for employment, income, health literacy and care, and contributing to intergenerational transmission of disadvantage. Investment in early childhood development has great potential to reduce health inequalities, with the benefits especially pronounced among the most vulnerable children.

The Australian Early Development Census (AEDC) is a nationwide data collection of early childhood development at the time children commence their first year of full-time school. The AEDC highlights what is working well and what needs to be improved or developed to support children and their families by providing evidence to support health, education and community policy and planning. It collects data relating to five key areas of early childhood development referred to as ‘domains’, including:

- Physical health and well being
- Social competence
- Emotional maturity
- Language and cognitive skills
- Communication skills and general knowledge

For the Margaret River region, 222 children from 12 schools were assessed. The areas covered all regions included the Augusta Margaret River region. The average age was 5 years and 4 months. In total across the five domains, the number and percentage of children who are vulnerable on one or more developmental domain(s) or two or more developmental domains is shown below.

Vulnerable on one or more domains	32 (15.2%)
Vulnerable on two or more domains	12 (5.6%)

These figures represent a significant decrease in children vulnerable on one or more domain and no significant change for children vulnerable on two or more domains, when compared to previous AEDC scores from 2015.

Figure Two provides additional data for these children under each domain, from 2009 until 2018. Please note that significant change has been colour coded: green text represents a positive change, red text represents a negative change. At risk has not been colour coded as any changes should be interpreted in context with changes in the percentage of children who are vulnerable and on track.






		2009		2012		2015		2018		Significant change	
		n	%	n	%	n	%	n	%	2009 vs 2018	2016 vs 2018
 Physical health and wellbeing	On track	144	86.7	130	77.4	192	80.7	190	88.8	No significant change	Significant increase
	At risk	13	7.8	29	17.3	28	11.8	15	7.0	No significant change	No significant change
	Vulnerable	9	5.4	9	5.4	18	7.6	9	4.2	No significant change	No significant change
 Social competence	On track	142	85.5	128	76.2	184	77.3	182	85.0	No significant change	Significant increase
	At risk	22	13.3	26	15.5	41	17.2	18	8.4	No significant change	Significant decrease
	Vulnerable	2	1.2	14	8.3	13	5.5	14	6.5	Significant increase	No significant change
 Emotional maturity	On track	134	80.7	131	78.0	185	78.1	160	76.2	Significant decrease	No significant change
	At risk	25	15.1	30	17.9	35	14.8	36	17.1	No significant change	No significant change
	Vulnerable	7	4.2	7	4.2	17	7.2	14	6.7	No significant change	No significant change
 Language and cognitive skills (school-based)	On track	106	63.9	111	66.9	160	68.4	180	84.5	Significant increase	Significant increase
	At risk	45	27.1	40	24.1	56	23.9	25	11.7	Significant decrease	Significant decrease
	Vulnerable	15	9.0	15	9.0	18	7.7	8	3.8	Significant decrease	Significant decrease
 Communication skills and general knowledge	On track	144	86.7	130	77.4	195	81.9	188	87.9	No significant change	Significant increase
	At risk	16	9.6	29	17.3	33	13.9	15	7.0	No significant change	Significant decrease
	Vulnerable	6	3.6	9	5.4	10	4.2	11	5.1	No significant change	No significant change

Figure Two - AEDC domain results over time for Margaret River

2.4 Social Determinants of Health

The effects of social conditions on individual health have long been acknowledged. Many factors combine together to affect the health of individuals and communities.

Whether people are healthy or not, is determined by their circumstances and environment. To a large extent, factors such as where we live, the state of our environment, genetics, our income and education level, and our relationships with friends and family all have considerable impacts on health, whereas the more commonly considered factors such as access and use of health care services often have less of an impact.

Research has conclusively shown how both social relationships and socio-economic status (SES) have positive effects on a large variety of health outcomes. Individuals who are better socially integrated benefit from better health than those who are less socially integrated. Individuals with a higher SES exhibit better health than their low-SES counterparts.

The socio-economic index for Augusta Margaret River is 1026, compared with Western Australia as a whole at 1016. This means that people living in the local government are less disadvantaged than the State average.

A comparison of other local governments in the South West region appears in Table Ten.

Local government	SEIFA
Waroona	941
Manjimup	946
Collie	947
Bunbury	963
Harvey	999
Busselton	1002
Boddington	1025

Table Ten – Comparison of SEIFA index across the SW Region

The number of people who describe themselves as in fair or poor health in the Shire of Augusta Margaret River compared with 13.7 for the State.

Bond University run a Happiness Project that collates statistics from public police, ABS and health data to present a snapshot of quality of life in every local government area in Australia. It revealed jurisdictions in the South West generally compared favourably to the rest of regional WA, though most areas were still ranked below local government areas in Perth. Margaret River and Busselton were also among the top performers in WA for health and employment, though both lost marks on housing and safety.⁵

Figure Three demonstrates that various social determinants of health for the South West region from 2011. There have been some changes in the most recent census that are indicated in Tables Eleven, Twelve and Thirteen.

⁵ <https://bond.edu.au/happiness-project/rationale>

LGA	Single parent families (%) [†]	Needing Assistance (%) [†]	Early school leavers (ASR per 100)	Un employment (%) [‡]	Income <\$400 / wk (%) [†]	IRSD score [§]
Augusta-Margaret River	19.9	2.9 [§]	30.7 [§]	3.5 [§]	34.6 [§]	9 (1025) [§]
Boyup Brook	15.2 [§]	4.6 [§]	38.5 [§]	4.6 [§]	42.8 [§]	6 (989) [§]
Bridgetown-Greenbushes	24.0 [§]	4.7 [§]	38.5 [§]	4.5 [§]	44.8 [§]	6 (979) [§]
Bunbury	29.6 [§]	5.4 [§]	41.7 [§]	6.4 [§]	37.4 [§]	5 (973) [§]
Busselton	21.3 [§]	4.1 [§]	37.2 [§]	4.1 [§]	38.0 [§]	8 (1011) [§]
Capel	17.8 [§]	2.5 [§]	39.0 [§]	3.3 [§]	35.6 [§]	9 (1045) [§]
Collie	23.4 [§]	5.0 [§]	46.3 [§]	6.9 [§]	41.8 [§]	4 (958) [§]
Dardanup	19.6 [§]	3.9 [§]	43.8 [§]	2.9 [§]	35.1 [§]	9 (1028) [§]
Donnybrook-Balingup	18.0 [§]	4.2 [§]	42.1 [§]	4.2 [§]	43.2 [§]	7 (996) [§]
Harvey	18.9 [§]	3.2 [§]	43.1 [§]	3.7 [§]	37.9 [§]	8 (1014) [§]
Manjimup	22.7 [§]	4.9 [§]	41.0 [§]	4.8 [§]	42.9 [§]	4 (958) [§]
Nannup	20.6 [§]	5.3 [§]	37.7 [§]	4.2 [§]	45.6 [§]	6 (978) [§]
Country WA	21.8	3.8	40.2	5.6	35.4	983
WA	19.9	4.5	32.8	5.6	35.5	1022
Australia	21.3	4.9	34.3	5.9	38.9	1000

Sourced from: [†] 2011(PHIDU, 2016); [‡] ABS, 2011b; [§] June quarter 2016 (CDE, 2016); [§] IRSD 2011 (ABS, 2011c)

Figure Three – Determinant of health indicators for the SW Region

Key points from Figure Three indicate:

- Fewer families need assistance when compared to the WA and Country WA averages
- Much lower percentage of early school leavers
- Unemployment is lower than the WA and Country WA averages

Occupation has a strong link to health and wellbeing, and is often associated with higher education and income levels—a higher educational attainment increases the likelihood of higher-status occupations and these occupations often come with higher incomes.

Income and wealth also play important roles in socioeconomic position, and therefore in health. Besides improving socioeconomic position, a higher income allows for greater access to goods and services that provide health benefits, such as better food and housing, additional health care options, and greater choice in healthy pursuits.

Unemployed people have a higher risk of death and have more illness and disability than those of similar age who are employed. The psychosocial stress caused by unemployment has a strong impact on physical and mental health and wellbeing. For some, unemployment is caused by illness, but for many it is unemployment itself that causes health problems through its psychological consequences and the financial problems it brings. One example identified by the AIHW in 2014, was that unemployed people were 1.6 times as likely to use

cannabis, 2.4 times as likely to use meth/amphetamines and 1.8 times as likely to use ecstasy as employed people⁶. There are many other examples.

Data on occupation, unemployment and income for the Shire of Augusta Margaret River is demonstrated below.

	Augusta Margaret River	Western Australia
Total labour force	87.7% (n=6336)	87%
Employed full time	48.4% (n=3495)	57%
Unemployed	4.6% (n=335)	7.8%
FIFO	1.2% ⁷	63%

Table Eleven – Employment

Income (\$ weekly)	Augusta Margaret River	Western Australia
Medium individual	671	724
Medium household	1285	1595

Table Twelve – Income (ABS 2016)

Family has an influence on health and wellbeing. Family dynamics significantly impact health in both positive and negative ways. Having a close-knit and supportive family provides emotional support, economic well-being, and increases overall health. Some studies have found that older adults who had closer, more intense relationships with their families had a 6% likelihood of death within the next four years, while those who weren't close had more than double the rate of mortality at 14%⁸. Other studies indicate that family attitude towards health and diet affects everyone in the family. Where families prepare for their time together to have proper meals and physical activity, it becomes part of the family's values.⁹

Data for family structure for the Shire of Augusta Margaret River is illustrated in Table Thirteen.

⁶ AIHW 2014e. National Drug Strategy Household Survey detailed report: 2013. Drug statistics series no. 28. Cat. no. PHE 183. Canberra: AIHW.

⁷ <http://www.fifofacts.com.au/images/files/2015-2025-WA-Resources-Sector-Outlook-Full-Report.pdf>

⁸ <https://www.sciencedaily.com/releases/2016/08/160821093058.htm>

⁹ https://www.acc.org/latest-in-cardiology/articles/2016/04/04/12/12/review-shows-family-plays-important-role-in-heart-health-throughout-life?w_nav=LC

Family characteristics	Augusta Margaret River	Western Australia
Couple families with children	1604 (43.2%)	292,133 (45.3%)
Couple families without children	1569 (42.2%)	247,841 (38.5%)
One parent families	521 (14%)	93,344 (14.5%)
Total households	7740	866 767
Lone person household	1179 (23.4%)	204 202 (23.6%)
Median weekly rent	300	347
Median housing loan repayment (\$/monthly) (occupied private)	1733	1993
Occupied private dwellings – fully owned	1,566 (31%)	247,050 (28.5%)
Occupied private dwellings – rented including rent-free	1,425 (30.5%)	245,705 (28.3%)
Number of social housing dwellings rented*	107 (2.1%)	31,032 (3.6%)
Number of homeless people	NA	36.4 people per 10000
Overcrowding	NA	23.4 per 10000

Table Thirteen – Family characteristics and household composition

The Margaret River Soup kitchen provides a service to those needing food and is open every Monday and Wednesday evening from 5-7pm. The Margaret River Community Centre provides a range of emergency relief services including vouchers, food relief packages and bus tickets¹⁰.

¹⁰ <https://www.mrcc.com.au/emergency-relief/>

2.5 Health Conditions

The following data was accessed from Health Tracks 2018.

Chronic conditions are Australia’s leading cause of ill health and have serious implications for the health system. Many of these chronic conditions are linked to lifestyle factors such as overweight and obesity, insufficient physical activity, tobacco smoking and alcohol use but there are signs of positive behaviour changes, particularly among young Australians.

The leading causes of death for both males and females living in the Shire of Augusta Margaret River is reflective of that found at the national level. This is illustrated below as Figure Five.

Leading causes of death

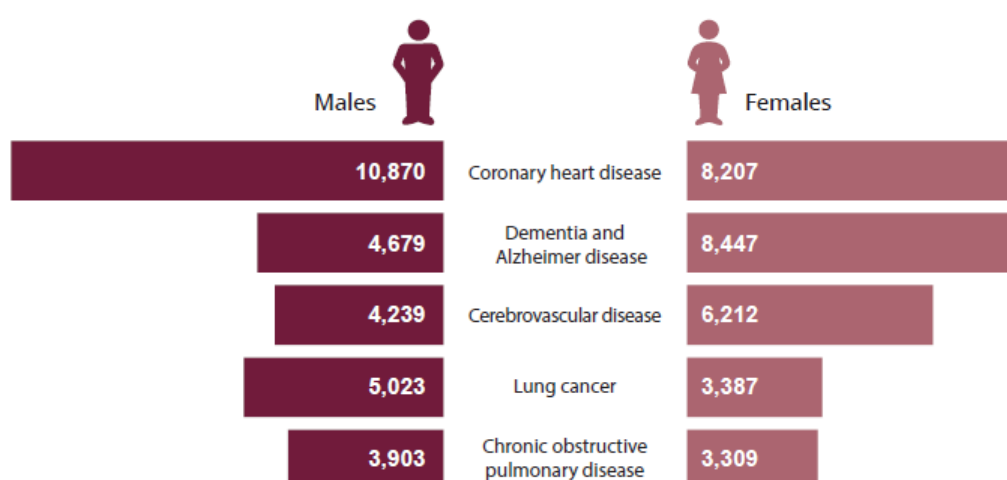


Figure Four – Leading causes of death in Australia

The prevalence of disease, disorder, injury or trauma is shown below.

Notifiable diseases (per 100,000 persons)	Augusta Margaret River	Western Australia
Enteric Disease	280.7	179.6
STIs	596.3	541.6
Vaccine preventable diseases	661.2	397.2
Vector-borne disease		87.8

Table Fourteen - The prevalence of disease, disorder, injury or trauma

In 2014, about three in ten people with disability had difficulty accessing service providers compared with about two in ten people without disability. People with disability were far more likely than those without to experience a barrier to accessing healthcare (11% compared with 2.8%) (ABS 2016).

For the Shire of Augusta Margaret River, the rates of male hospitalisations due to:

- Accidental falls;
- Accidental exposure to other & unspecified factors;
- Motor vehicle/motorcycle occupant/rider injured in transport accidents;
- Accidents caused by objects that cut or pierce;
- Pedal cyclist injured in transport accidents;
- Accidents caused by venomous animals and plants; and
- Accidents caused by smoke, fire, flames, hot substances were significantly greater than the state.

The rates of male hospitalisations were due to:

- Arthropathies;
- Symptoms involving the digestive system & abdomen;
- Injuries to upper limbs;
- Skin cancer (excluding melanoma);
- Soft tissue disorders; and
- Injuries to lower limbs were significantly greater (2018, Health Tracks).

The rates of female hospitalisations due to:

- Accidental falls;
- Intentional self- poisoning by poisoning, including by motor vehicle exhaust; and
- Accidents caused by overexertion were significantly greater than the state

The rates of female hospitalisations due to:

- Delivery;
- Persons encountering health services for examination & investigation;
- Related to reproduction; and
- Pregnancy with abortive outcome were significantly greater (2018, Health Tracks).

2.6 Health behaviours and risk factors

Our health is influenced by the choices that we make—whether we smoke, drink alcohol, are immunised, have a healthy diet or undertake regular physical activity. Table Fifteen outlines health behaviour data for both LGAs.

Health behaviour	Augusta Margaret River (ASR /100)	Western Australia (ASR /100)
Currently smokes (AIHW Health Tracker) (18 yrs +)	17.7	16.0
Does not eat two or more serves of fruit daily ASR 100 (18 yrs +)	56.1	54.4
Does not eat 5 serves of vegetables daily	87.1	88.4
Drinks alcohol at risk/high levels for long-term harm (PHIDU 2019, SHA) (15 yrs +)	28.1	19.5
Drinks alcohol at risk/high levels for short-term harm	11.1	10.3
Insufficient physical activity (AIHW Health Tracker)	63.8	62.8
Participates in unsafe sex	NA	29
Age standardised suicide rate	19.3 per 100 000	12.1 per 100 000 (national)
Psychological distress (ASR per 100000)	9.0	10.5
Above current high blood pressure (AIHW Health Tracker) (18yrs +)	22.0	21.2
Above current high cholesterol	37.5	(34.8)
Overweight or obese (2-17 yrs)	37.9	(60.4)
Overweight or obese (18 yrs +)	25.9	(24.6)
Cervical screening rate (%)	78	58

Table Fifteen – Health related risk factors

In relation to alcohol consumption, there could be a perception that due to the wine making culture of the area, that consumption may be elevated. NDRI has developed a report listing national alcohol sales. The data is presented by SA3 codes. The Consumption rate for the Augusta-Margaret River – Busselton SA3 (50101) is 14.24 litres of alcohol sold per person.

The WA average is 11.94 litres per person. These data indicate that this perception is in fact a reality.

The table below indicates the alcohol consumption per capita for the region as compared to a number of geographically close regions.

Region	All beer	All wine	All spirits	All alcohol	Pce/ESP
MR/Aug/Buss	4930670	1423359	659740	7013768	14.24
Bunbury	8667493	2020061	976396	11663950	9.75
Manjimup	1889961	291994	175278	2367233	8.17
WA	233368748	64915921	37926286	336210956	11.94

Table Sixteen (litres) of alcohol sold by beverage and pure alcohol, and per capita consumption by ESP in selected SA3s, Western Australia, 2005/06 to 2011/12¹¹

In general, people living in regional areas are:

- More likely to be obese (34.6% regional; 27.8% WA)
- More likely to drink and smoke at high-risk levels compared with people living in the city
- Three times more likely to die from a motor vehicle accident.¹²

Given the wine making culture of the two local governments, strategies to address consumptions rates, responsible driving and drowning while drunk may be worthwhile.

2.7 Crime, Community Safety and Injury

Crime is a major social issues in terms of its negative consequences for individuals, communities and society. The fear of crime also affects health and wellbeing causing some individuals to seek exclusion from society or from activities that may benefit their health such as walking instead of driving to a destination. Overall, the SW Region of WA is a safe environment to love, work and play.

The following provide crime statistics for the key locations within the Shire of Augusta Margaret River. It is important to note that the crime statistics are reported based on the location the offence occurred and they may be influenced by a wide range of factors; including, but not limited to, population size, infrastructure (such as shopping centres and entertainment precincts), seasonal trends, and the extent to which crime is reported to or detected by police. As the 2019 data is incomplete, we have provided total statistics for 2018.

¹¹ NDRI(2016) NASDP Report. Available at <http://ndri.curtin.edu.au/NDRI/media/documents/nasdp/nasdp005.pdf>

¹² WACHS (2018) Annual report.

Margaret River

The crime rates for the Margaret River township have remained steady since 2016, totalling just under 500 reports annually. Stealing is by far the most common offence.

Type of offence	Number of reports
Homicide	1
Sexual offences	23
Assault (family)	47
Assault (non family)	26
Threatening behaviour (family)	3
Threatening behaviour (non family)	4
Deprivation of liberty	1
Robbery	0
Dwelling burglary	26
Non dwelling burglary	18
Stealing of car	9
Stealing	180
Property damage	63
Arson	3
Drug offences	52
Graffiti	8
Fraud & related offences	4
Breach of VRO	17
Total	485

Table Seventeen – Reported crime rates for Margaret River

Cowaramup

The reported crimes for Cowaramup have decreased significantly since 2015-16 (n=64) and now sit at a total of 37 for 2018. Stealing is the most common offence.

Type of offence	Number of reports
Homicide	0
Sexual offences	0
Assault (family)	6
Assault (non family)	2
Threatening behaviour (family)	0
Threatening behaviour (non family)	0
Deprivation of liberty	0
Robbery	0
Dwelling burglary	1
Non dwelling burglary	5
Stealing of car	1
Stealing	14
Property damage	5
Arson	0
Drug offences	0
Graffiti	0
Fraud & related offences	1
Breach of VRO	2
Total	37

Table Eighteen – reported crimes in Cowaramup

Gnarabup

The reported crimes for Gnarabup have significantly increased since 2016-17 (n=21) and sit at 53 for the 2018 year. In this community fraud and dwelling burglary are the most commonly recorded offences.

Type of offence	Number of reports
Homicide	0
Sexual offences	0
Assault (family)	0
Assault (non family)	0
Threatening behaviour (family)	0
Threatening behaviour (non family)	0
Deprivation of liberty	0
Robbery	0
Dwelling burglary	11
Non dwelling burglary	1
Stealing of car	1
Stealing	1
Property damage	13
Arson	7
Drug offences	0
Graffiti	0
Fraud & related offences	20
Breach of VRO	0
Total	53

Table Nineteen – Reported crimes for Gnarabup

Gracetown

The reported crimes for Gracetown have reduced since 2016-17 (n=12) to only 6 in 2018. The six crimes were assault one report each for assault (non family); dwelling burglary; property damage and drug offences, and two reports for stealing.

Karridale

The reported crimes for Karridale have significantly increased since 2016-17 (n=12) and sit at 35 for the 2018 year. Fraud and stealing are the most commonly recorded offences.

Type of offence	Number of reports
Homicide	0
Sexual offences	0
Assault (family)	3
Assault (non family)	0
Threatening behaviour (family)	0
Threatening behaviour (non family)	0
Deprivation of liberty	0
Robbery	0
Dwelling burglary	0
Non dwelling burglary	0
Stealing of car	1
Stealing	6
Property damage	0
Arson	0
Drug offences	0
Graffiti	0
Fraud & related offences	25
Breach of VRO	0
Total	35

Table Twenty – Reported crimes in Karridale

Augusta

The reported crimes for Augusta have reduced from 2016-17 (n=72) and sit at 51 for the 2018 year. Stealing is the most common offence.

Type of offence	Number of reports
Homicide	0
Sexual offences	1
Assault (family)	3
Assault (non family)	2
Threatening behaviour (family)	0
Threatening behaviour (non family)	0
Deprivation of liberty	0
Robbery	0
Dwelling burglary	4
Non dwelling burglary	1
Stealing of car	1
Stealing	21
Property damage	13
Arson	0
Drug offences	2
Graffiti	0
Fraud & related offences	2
Breach of VRO	1
Total	51

Table Twenty-one – Reported crimes for Augusta

It is difficult to compare across Regions, however the following year to date totals are provided for similar population based towns in the South of WA.

Bunbury	1194 (most common is stealing)
Fremantle	2976 (most common is stealing)
Albany	387 (most common is stealing)
Esperance	293 (most common is stealing)

There do appear to be some spikes in crime reporting that generally occur over the school holiday periods.

The most common offenders were non-Indigenous males aged between 20-39 years of age.

Injury and Community Safety

Given the coastal location of the two local governments, drowning and surfing injury statistics were sought.

In Australia, between July 2017 and June 2018, there were 46 beach drownings and 70% occurred as a result of swimming and recreating.

In WA, there were 27 fatal drownings during this time period. Seventeen (67%) of those who drowned in were male. Three were under 4 years of age. Swimming pools were the leading location for drowning in Western Australia last year, accounting for 19% of all deaths. Falls into water were the leading activity immediately prior to drowning. 41% of drowning deaths in WA last year took place in Summer.

The location of drownings in WA are illustrated in Figure Five.

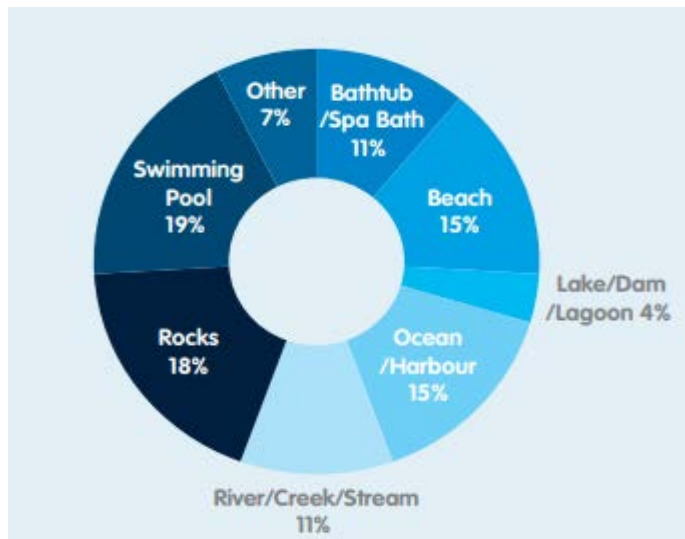


Figure Five – Location of fatal drownings in WA 2017-2018¹³

¹³ SLSA (2019) Drowning Report. Available at file:///C:/Users/226631B/Downloads/RLS_NDR2018_ReportLR.pdf

Local government data is difficult to access. Limited regional data is offered from the period 2016-17¹⁴.

- West Australians are 1.9 times more likely to drown in a regional or remote area (8.7 incidents per 100,000 population) than in the Perth metropolitan area (4.5 incidents per 100,000 population)
- The highest rates of fatal drowning were recorded in the Kimberley, Midwest and Great Southern regions in 2016-17
- Despite only 28.6% (n=30) of hospital admissions occurring in regional WA, people were 1.5 times more likely to be hospitalised in these areas (5.3 admissions per 100,000 population) than in the Perth metropolitan area (3.5 admissions per 100,000 population)
- In WA, , drowning deaths were most likely to occur at coastal locations with 61.5% (n=24) of deaths recorded along the WA coastline

Data relating to the activity being undertaken at the time of the incident was only available for fatal drowning and hospital admissions following a non-fatal drowning incident. What is available is shown below and it is clear that diving, kayaking and surfing are risky activities.

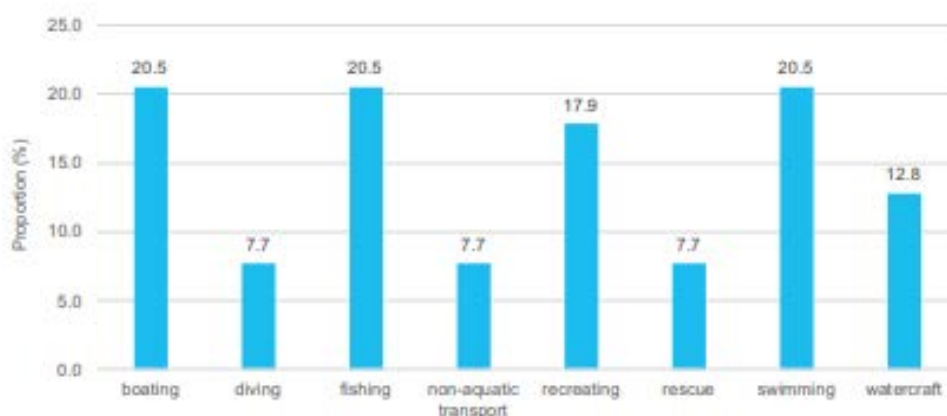


Figure Six – Fatal drowning activity WA 2016-17

¹⁴ SLSA (WA) Drowning Report WA. Available at file:///C:/Users/226631B/Downloads/2016-17%20WA%20Drowning%20Report_LR.pdf

The RSLA produce a National Coastline Safety Report¹⁵ and points of interest relevant to the SW Region are as follows:

- In 2017–18, coastal and ocean drowning deaths in WA dropped to below the 14-year average of 15 after a record high in 2016-17. From 2004 to 2018, the average rate per 100,000 population is 0.62
- 26% of these drownings were swimmers or waders
- 85% of these drownings were males aged between 25-34 years of age
- 31% of the drownings were on a beach and 38% resulted from a rock or cliff fall
- 62% of the drownings were greater than 5km from a surf lifesaving service.

Shark attacks are more common in the SW Regional WA. From April 2017 until April 2018, there 12 reports of shark attacks in WA, with one fatality (SW), six injuries (5 in SW) and the remainder uninjured (3 in SW).

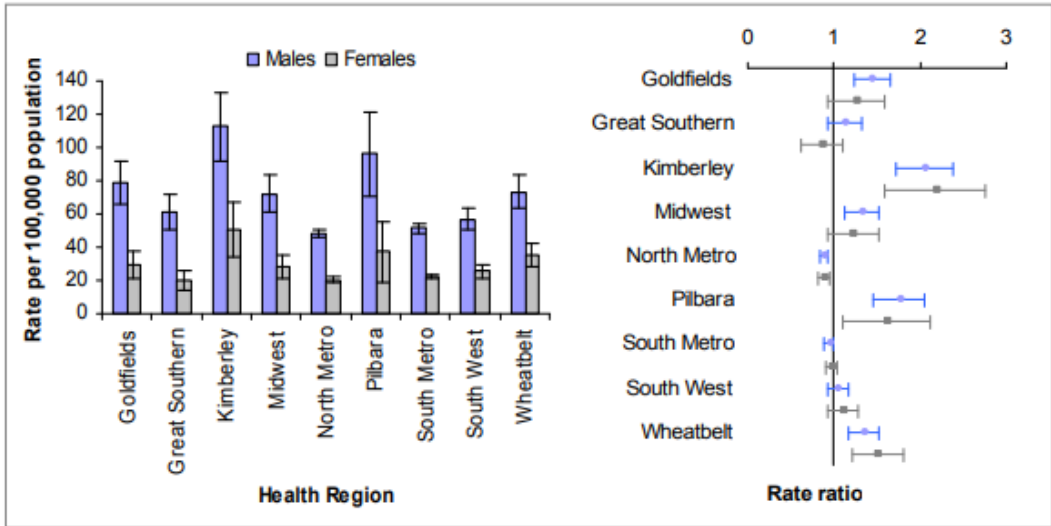
Given the skateboarding culture in the Margaret River region¹⁶, there may be a need to focus on injuries associated with skate parks including skateboard, scooter and BMX injuries. Unintentional injuries among children over one are the leading cause of death and hospitalisations of Australian children. Although difficult to access, it has been estimated that about 23% of Australian children aged 12 to 17 years have been injured playing sport, requiring medical attention. Common children's sport injuries result from participation in cricket, soccer, horse riding, cycling, baseball, skateboarding, hockey and snowboarding, as well as quad-bikes, another off-the- road vehicles.¹⁷

Injury rates when compared to the rest of WA are low for the SW Region. Local government specific data is limited. Regional data from the Epidemiological Unit of WA Health is provided below.

¹⁵ file:///C:/Users/226631B/Downloads/NCSR-2018_Inside_V14LR.pdf

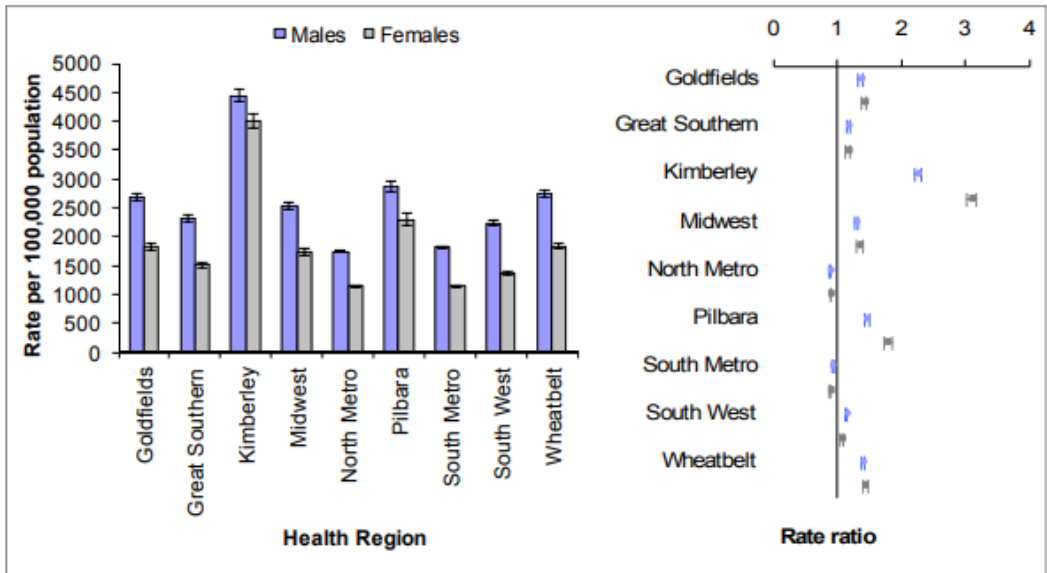
¹⁶ <https://www.margaretriver.com/stories-skate-culture-margaret-river/>

¹⁷ Sydney Children's Hospital data



Note: Reference category = WA state (WA rate = 1).

Figure Seven - Age-standardised rates of injury death and rate ratios by health region and sex, WA, 2000-2007



Note: Reference category = WA state (WA rate = 1).

Figure Eight - Age-standardised injury hospitalisation rates and rate ratios by health region and sex, WA, 2000-2008

From Figures Seven and Eight it is clear that for males and females, the age-standardised hospitalisation rates for injuries were significantly higher than the state for all rural and remote areas; and significantly lower than the state in the metropolitan health regions.

2.8 Immunisation

Immunisation rates for country WA are recorded to be 93.3% fully immunised at 1 year of age; 90.9% fully immunised at 2 years of age and 93.8% fully immunised at 5 years of age.¹⁸

According to WACHS, in 2017, vaccination rates in the Augusta Margaret River region were lower than the South West average of close to 90 per cent. The percentage of children fully immunised aged 1, 2 and 5 years in Augusta Margaret River area was around 84%, 78% and 88% respectively as per the last March quarter report (2017).¹⁹

Child Immunisation	Country Western Australia (%)	Augusta Margaret River (%)
12-15 months	92.8	84
24-27 months	88.3	78
60-63 months	91.5	88

Table Twenty-two: Vaccination rates in Country WA and Augusta Margaret River

Additional data is presented below.

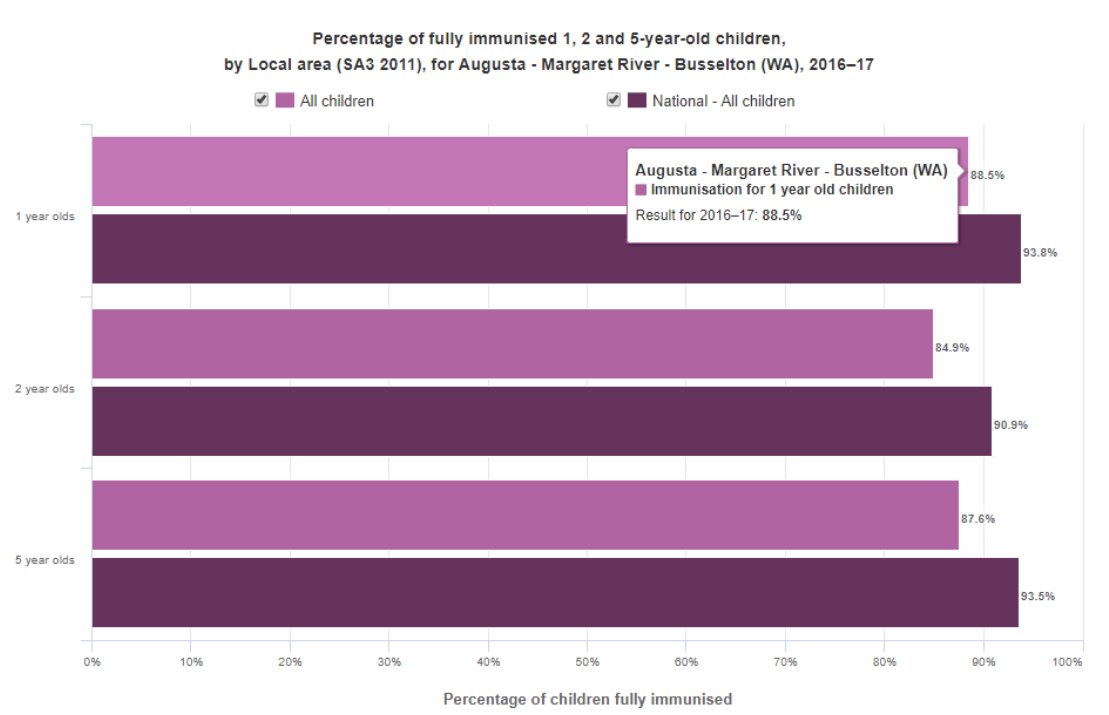


Figure Nine – Vaccination rates by age for the Region as opposed to the Shire

¹⁸ <https://www.myhealthycommunities.gov.au/interactive/immunisation>

¹⁹ <https://www.margaretrivermail.com.au/story/4650858/margaret-river-vaccinations-well-behind-wa-rates/>

2.9 Access to Services

Almost everyone you speak with will tell you they do not have good enough access to health services. WACHS provide many of the public health services in the SW Region.

Around 84% of South West resident hospitalisations occur in hospitals in the Southwest, with 13% occurring in Busselton, compared with 49% in Bunbury and approximately 3% in Augusta Margaret River (2018, Health Tracks).

There is a range of health services available in the Region. A list is provided below²⁰.

Hospital services	Community and public health services	Mental health and aged care services	Aboriginal Medical Services
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Community Health Service – Bunbury/Harvey, Naturaliste South West Population Health Unit Warren and Blackwood Community Health Service 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> South West Aboriginal Medical Service

ⁱFigure Ten – Summary of health services in Region

In 2019, a new mental health service for young people was announced for the Margaret River. Margaret River was identified by the Country WA Primary Health Network – which is responsible for mental health services in the region – as an area with a high need for a youth mental health service²¹.

The GP Down South service provides free Mental Health Services and access to Allied Psychological Services (ATAPS) is available in Harvey, Collie, Busselton, Margaret River and Augusta and surrounding towns.

The Margaret River and Augusta hospitals have fewer than 50 beds and provides domiciliary care units and obstetric services.

There is no dedicated alcohol and drug service in the area. The closest is in Bunbury.

²⁰ <https://www.wapha.org.au/wp-content/uploads/2015/12/Regional-Profile-2016-South-West-population-and-health-snapshot-FINAL.pdf>

²¹ <https://www.margaretrivermail.com.au/story/5876449/15-million-announced-for-mental-health-facility/>

Indicator	Augusta Margaret River
Number of GPs in the South West required to meet the demand for GP services by people aged 50+	18 (2007 data) Estimated to be 36 by 2026
Average number of hospital beds demanded per night for those aged 50+ (SW)	309 in 2007 Estimated to be 633 by 2026
Access to services for older people	6 aged care private sector beds 10 acute overnight beds and 8 high care residential places 14 low care beds via Leeuwin Frail Aged Lodge Aged care and nurse led emergency care
Access to emergency centres	Margaret River public hospital

Table Twenty-three: Access to services

2.10 Transport and Traffic Injuries

The Shire of Augusta-Margaret River does not appear in the top 13 LGAs with the highest fatality count.²² However the South West as a region has the second highest fatality rate (15) count in WA, following the Wheatbelt (46.2). The South West had the highest fatality count (27) in WA during 2018 (Wheatbelt was 25). Additional data is illustrated in Table Twenty-five.

Indicator	South West	Western Australia
Road deaths 2018	27	161
Road toll (ASR per 100000)	15.8 (MR) 8.6 Busselton 16 (B)	6.7 ²³
Gender killed*	57.8% male	75% male
Highest age bracket of those killed* 2018	23.7% aged 20-29	25% aged 20-29
Number of people seriously injured in 2017*	285	1340
Number of alcohol related fatalities 2018	15.9%	18% (n=29)
Access to public transport (e.g. within 400m to bus; 800m to train station)	2%	9.2%

*Road Safety Commission (<https://www.rsc.wa.gov.au/Statistics/Regional-Statistics/South-West>)

Table Twenty four – Transport data

²² RSC (2018) Preliminary summary of Fatalities on WA roads.

<https://www.rsc.wa.gov.au/RSC/media/Documents/Road%20Data/Statistics/Annual%20crash%20statistics/2018-Preliminary-Summary-of-Fatalities-on-WA-Roads.pdf>

²³ Integrated MH Atlas

The map below indicates where serious crashes where illegal behaviour was a factor in the South West Region between 2013-2017.

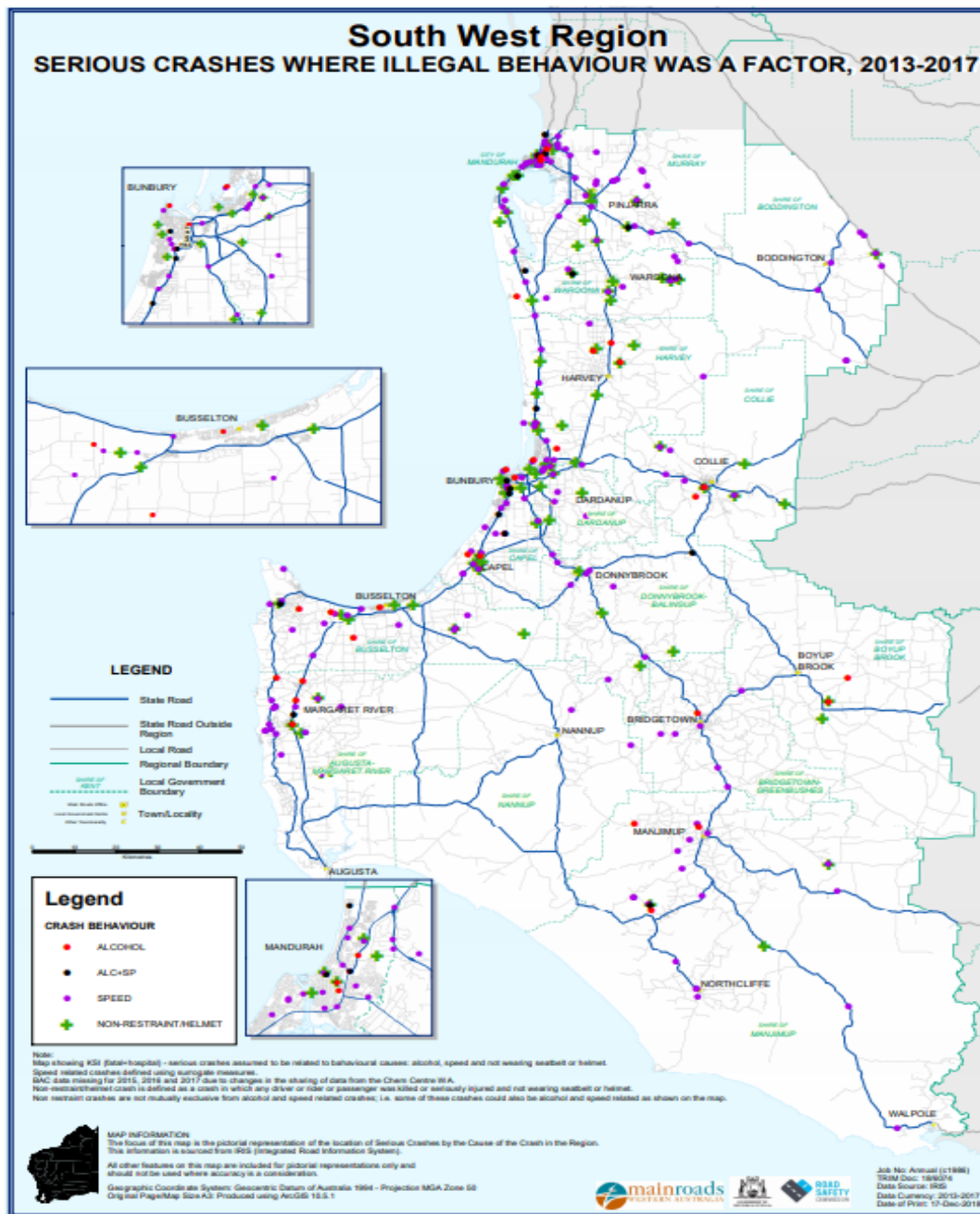


Figure Eleven – Map of serious crashes where illegal behaviour was involved

Travel to work

	Augusta-Margaret River %	Western Australia %
Walk	4.6	2.8
Car	59.3	63.3
Public transport	2.0	9.2

Table Twenty-five – Mode of travel to work

2.11 Environmental Health Data

Maintaining a healthy environment is central to increasing quality of life and years of healthy life. Maintaining data is an important component of ensuring a risk base approach to managing environmental health issues in a local community. The data that was available is listed below.

	Augusta Margaret River	Western Australia
Ambient air quality PM 2.5	8.2 11 complaints	8.35 (Max = 38) 38 Complaints
Drinking water quality	5,500 connections Quarterly samples all met guidelines 2017-18	
Recreational water quality	3 – very good 4 – good 1 – fair 0 – poor	
Food safety (Enteric Disease Rate) and quality	EDR-280.7 400-500 Food Business Inspected/yr	EDR – 179.6 267 food notifications / 100,000 (i.e. 0-4 y.o. - 732 cases)
Land and soil quality (e.g. free from contamination)	24 sites classified 19 awaiting classification	3,550* sites reported to register
Cases - Pesticides, asbestos, chemicals and heavy metals in the land, water or air	9 Asbestos 11 Air 31 Water	374 Asbestos
Vector borne disease incidence	169	87.8
Waste management	1 landfill site	
Noise (cases)	64	46*
Water cases (D,R,Rec)	31	175**
Tobacco and alcohol cases	8	

Table Twenty-six - DER*/WC** Annual Reports 2017*

Inspection regimes for the Environmental Health team at the Shire were offered and appear below.

Strategy KPI	Augusta Margaret River
Food Samples	
Food Inspections (545)	401 YTD
Water Samples 2018-19	353 YTD
Public Buildings Inspections	22
Caravan Parks Inspections	6
Lodging Houses Inspections	6
Events Approved	44
Onsite Waste Water Approvals	
Public Health Assessments 2017-18	430

Table Twenty-seven – EH inspection data SAMR

2.12 Climate change

The South West of WA is recognised as one of the world’s most significant biodiversity hotspots and is experiencing one of the highest rates of climate change in the country.

Climate modelling has shown that rising temperature and falling rainfall trends are expected in the 21st century for the south west of Western Australia. On average, the dry scenario indicated that the region would experience a 14 per cent reduction in average annual rainfall by 2030 and a 0.7°C rise in temperature, relative to the baseline period.

The WA Government has predicted the following for the SW of West Australia:

- a 5% reduction in rainfall
- some groundwater from the South West Yarragadee aquifer will need to be used to supply growth of local towns and is no longer being considered as a water source option to meet demand in other regions
- As streamflow, dam inflows and regional groundwater levels are declining, seawater desalination will be needed into the future to secure drinking water supplies
- Sea level rise, causing low-lying coastal freshwater floodplain and wetland ecosystems to be at risk as the incidence of inundation events increases and vegetation has less time to recover after more and more regular flooding by seawater. This will increase vector breeding sites.
- Increase in temperatures
- More intense storms

It has been recommended that local governments invest in water-efficient technology, investigating managed aquifer recharge and applying water-sensitive urban design. Specific changes are demonstrated in Table Twenty-eight.

Climate Change Impact ²⁴	Western Australia
Air / Sea Surface Temperature	Increasing - 0.50 C to 20C
Sea Levels	Increasing - less than 3 to 17 cm by 2030 to 75 cm by 2100
Fire Danger Index	Increasing -
Rainfall	Decreasing – 2 to 20 % since 1970
Ocean Acidification	Increasing – pH 8.06
Stream flow	Decreasing – 5 to 40%
Heat events	Increasing – plus 1 to plus 20 days over 35 C
Rain/storm/flood/cyclone intensity	Increasing and more severe

Table Twenty-eight – Climate changes in WA

The WA Health Department has identifies a range of health and social impacts associated with climate change and these are identified below.

Health Impact Categories Western Australia ²⁵
Direct physical impacts of extreme events – flood, fire, storms.
Water-borne diseases – contamination of drinking water.
Vector-borne diseases – increase in vector borne diseases, breeding sites
Air quality – respiratory, asthma, UV exposure, VOCs, pesticides
Food-borne disease – food poisoning, seafood, mycotoxins
Food production – increase costs, importation.
Infrastructure – access to services, energy utilities.
Social Impacts – dislocation, mental health.
Lifestyle/behavioural – crime, accidents, recreation, sleep, exercise, open space.
Community – population, economy, chemical exposure, biodiversity.

Table Twenty-nine – WA Health Dept’s recognised climate change risks

²⁴ <https://www.csiro.au/en/Research/OandA/Areas/Assessing-our-climate/State-of-the-Climate-2018/Australias-changing-climate>

²⁵ https://ww2.health.wa.gov.au/~/_media/Files/Corporate/general%20documents/Environmental%20health/Climate%20change/Health-impacts-of-climate-change.pdf

3.0 PRIORITY PUBLIC HEALTH RISKS

Based on the data collected in this report the following public health issues have been identified as a priority to be included within the Shire's Public Health Plan. They are in no order of priority.

- Aging population
- Alcohol consumption
- Vaccination
- Road safety
- Fruit and vegetable consumption
- Suicide and mental health
- Overweight and obesity
- Physical activity rates
- Injury prevention
- Environmental health protection (specifically vector borne disease & noise)
- Climate change mitigation
- Advocating for increased access to health services
- Smoking

4.0 CONCLUSION

Under the Public Health Act 2016, local governments are required to develop evidence informed Public Health Plans. One aspect of this evidence is the collection of local data. This report has attempted to collect and collate as much relevant public health and wellbeing data as is available for the region of Augusta Margaret River.
