Government of **Western Australia**
Department of **Health**

Health and Wellbeing Profile

Shire of Goomalling

2011-2020

October 2024

Epidemiology Directorate, Public and Aboriginal Health Division, Department of Health WA

Acknowledgement of Country and People

WA Health acknowledges the Aboriginal people of the many traditional lands and language groups of Western Australia. It acknowledges the wisdom of Aboriginal Elders both past and present and pays respect to Aboriginal communities of today.

Abbreviations

AF	Aetiological fraction
ASR	Age-standardised rate
BMI	Body mass index
COD URF	Cause of Death Unit Record File
DOH WA	Department of Health, Western Australia
ERP	Estimated resident population
HMDC	Hospital Morbidity Data Collection
HWSS	Health and Wellbeing Surveillance System
ICD-10	International Classification of Diseases, 10th revision
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification
IRSD	Index of Relative Socio-economic Disadvantage
K10	Kessler Psychological Distress Scale
LGA	Local Government Area
PAHD	Public and Aboriginal Health Division
RSE	Relative standard error
WA	Western Australia
WANIDD	WA Notifiable Infectious Diseases Database

Contents

Introduction

The Shire of Goomalling Health Profile 2011-2020 has been prepared by the Epidemiology Directorate, Department of Health, Western Australia (DOH WA), in collaboration with the Public Health Advisory Group, to inform the development of a local public health plan as required under the WA Public Health Act 2016 (PAHD 2019).

This health profile aims to provide an overview of the health status and health determinants of people in the Shire of Goomalling using the latest available data from multiple sources and covers the following key areas:

- Population
- Lifestyle-related risk factors (including nutrition, physical activity, overweight and obesity, tobacco use, alcohol use and injury)
- Alcohol, tobacco and illicit drug-attributable hospitalisations and deaths
- Injury-related hospitalisations and deaths
- Mental health conditions
- Notifiable infectious diseases.

We'd like to emphasise that the data in this report are modelled. They do not represent raw values but are smoothed estimates. Due to rounding and the modelling approaches we used, the sum of male and female values may not add up to the total. Details of the modelling methodology can be found in Epidemiology Directorate (2024a).

Methods

Data sources

WA Health and Wellbeing Surveillance System
The WA Health and Wellbeing Surveillance System (HWSS) is managed by the Epidemiology Directorate, DOH WA. The main objectives of the HWSS are to monitor the health status of the WA population, inform and support planning, implementation and evaluation of health services and policies in WA.

The HWSS is designed to provide information at a population level using computer-assisted telephone interviewing . Information on a range of health indicators is collected from a random sample of the WA population and is weighted to represent the age and sex distribution of the WA population using the Estimated Resident Population. The data are also adjusted to compensate for oversampling in remote and rural areas of WA. Data can be considered representative of the general population but will not be representative of smaller groups such as Aboriginal people or those from non-English speaking backgrounds. Further details on the design and methods used in the HWSS can be obtained from Epidemiology Directorate (2024b).

WA Hospital Morbidity Data Collection
The WA Hospital Morbidity Data Collection (HMDC) is managed by the Information and System Performance Directorate, Purchasing and System Performance Division, DOH WA. The HMDC provides the WA health system with information for planning, allocating and evaluating health services. The HMDC records all inpatient episodes of care from all public and private acute hospitals, public and private psychiatric hospitals and private day surgeries in WA.

WA Cause of Death Unit Record File
The Cause of Death Unit Record File (COD URF) data is sourced from the Australian Co-ordinating Registry, the Registries of Births, Deaths and Marriages, the Coroners, the National Coronial Information System and the Victorian Department of Justice and Community Safety and managed by the Information and System Performance Directorate, Purchasing and System Performance Division, DOH WA. In order to complete a death registration, the death must be certified by either a doctor or by a coroner. Causes of death data are a vital measure of a population’s health and provides information on patterns of diseases that cause death by population groups and over time. Examining death patterns can help explain differences and changes in health status, evaluate health strategies, and guide planning and policy-making (ABS 2021a).

WA Notifiable Infectious Diseases Database
The WA Notifiable Infectious Diseases Database (WANIDD) is managed by the Communicable Disease Control Directorate, Public and Aboriginal Health Division, DOH WA. This database contains information on all notifiable infectious diseases diagnosed in WA that have been reported to the Department of Health, as mandated by the Public Health Act 2016 and subsequent amendments. Further details on the dataset can be obtained from Communicable Disease Control Directorate (2023).

ABS Estimated Resident Population
The WA estimated resident population (ERP) is obtained from the Australian Bureau of Statistics. These population estimates are as at 30 June and broken down by local government area, year, age and sex (ABS 2021b).

ABS 2021 Census of Population and Housing
The Census of Population and Housing is the primary source of population statistics in Australia and is undertaken by the Australian Bureau of Statistics once every five years. The aim of the Census is to collect data on the key characteristics of people in Australia on Census night and the dwellings in which they live.

Summary measures and their uses

Health and Wellbeing Surveillance System

Prevalence estimates
Prevalence refers to the proportion or percentage of the population with the lifestyle risk factor or disease in a specified period. Prevalence estimates for the HWSS indicators are calculated by dividing the number of people with the lifestyle risk factor or disease in a specified period by the total number of people in the population in the same period.

HWSS, like most surveys, only collects information from a sample of the target population. The raw data are then weighted to represent the population from which it was drawn, with each person given a weight that can be thought of as the number of people they represent. In this report, the HWSS data have been weighted to adjust the proportions of certain demographic characteristics of the respondents so that they match the corresponding proportions in the total WA population (raked weighting).

Estimated numbers
Estimated numbers for the HWSS indicators refer to the estimated number of people in the local government area (LGA) who have the lifestyle-related risk factor or mental health condition. This is calculated by multiplying the prevalence estimate (or percentage) by the estimated resident population of the LGA.

Suppression of prevalence estimates
The stability of prevalence estimates can be guided by the Relative Standard Error (RSE). The RSE is a measure of the extent to which the survey estimate is likely to be different from the actual population result. In this report, prevalence estimates with RSEs between 25%–50% should be used with caution. Estimates with RSEs above 50% are considered too unreliable for general use and have been suppressed.

Comparisons with WA State prevalence estimates
In this report, comparisons of local prevalence estimates with WA State prevalence estimates are made by using exceedance probabilities (EPs) of the posterior draws (i.e., samples), to identify whether the lifestyle risk factor or disease prevalence is higher, lower, or similar between the LGA compared to the State prevalence. Further details can be found in Epidemiology Directorate (2024a).

All other data sources

Age-standardised rates
Age-standardised rates (ASR) are calculated by adjusting the crude rate to eliminate the effect of differences in population age structures when comparing crude rates for different time periods, different geographic areas and/or different population sub-groups. In other words, age-standardised rates are hypothetical or artificial rates that would have been observed if the populations being studied had the same age distribution as the standard population, while all other factors remained unchanged. When making comparisons between population groups, age-standardised rates should be used as they take into account any differences in the age structure of the populations (AIHW 2011). In this report, the direct method of age-standardisation has been applied using all age groups of the 2001 Australian standard population. The rates are expressed per 100,000 population.

Suppression of numbers
In this report, numbers are not presented when they are less than or equal to 5. This is to protect the confidentiality of people/patients whose data are included in the report by reducing or eliminating the risk of disclosing their identity.

Comparisons with WA State rates
Comparison to State is based on the exceedance probabilities (EPs) of the posterior draws (i.e., samples), to identify whether the disease/condition ASR is higher, lower, or similar between the LGA compared to the State ASR.

Indicators

Nutrition
Data for the prevalence of dietary behaviours were sourced from the WA Health and Wellbeing Surveillance System. We asked respondents how many serves of fruit or vegetables they usually eat each day. A serve of fruit is equal to one medium piece, two small pieces of fruit or a cup of diced fruit. A serve of vegetables is equal to half a cup of cooked vegetables or one cup of salad. The number of serves eaten were rounded down to the nearest whole number. We then compared the usual number of serves eaten with the 2013 NMHRC Australian Dietary Guidelines to obtain and estimate of the prevalence of those who eat the recommended serves of fruit daily and those who eat the recommended serves of vegetables daily (NHMRC, 2013). The prevalence estimates for those who meet the guidelines for fruit consumption and vegetable consumption includes persons aged 2 years and over.

We also asked respondents how many times a week on average they ate fast food meals or snacks such as burgers, kebabs, meat pies, pizza, chicken or chicken nuggets from fast food outlets. We then categorised respondents on whether they ate fast food at least weekly. The prevalence estimates for those who ate fast food at least weekly includes persons aged 1 year and over.

Physical activity
Data for the prevalence of sufficient physical activity were sourced from the WA Health and Wellbeing Surveillance System. We asked respondents a range of questions on the types and length of physical activity taken in the past week. We then categorised respondents on whether they met the physical activity guideline for their age.

Different physical activity guidelines apply to different age groups. The 2019 Australian 24-Hour Movement Guidelines for Children and Young People recommends children aged between 5 and 17 years complete at least 60 minutes of moderate to vigorous physical activity each day (DHAC, 2019). We classified children as meeting the physical activity guidelines if they were physically active for seven or more sessions a week where each session lasted 60 minutes or more.

The 2014 Australian Department of Health Physical Activity and Sedentary Behaviour Guidelines state that adults aged 18 to 64 years should complete at least 75 to 150 minutes of vigorous physical activity or 150 to 300 minutes of moderate physical activity per week, and adults aged 65 years and over should complete 30 minutes of moderate physical activity on most and preferably all days of the week (DHAC, 2014). The prevalence estimates for those who completed the recommended amount of physical activity includes persons aged 5 year and over.

The results for children/young people and adults are combined and presented together in this report.

Data for the prevalence of sedentary behaviour were sourced from the WA Health and Wellbeing Surveillance System. We asked respondents how many hours per week they spend in screen-based sedentary recreational leisure time activities such as watching TV or DVDs, using a computer, smartphone or tablet device for the internet or to play games, excluding work time.

We then categorised respondents on whether they spent more than recommended time in screen-based leisure activities for their age based on the 2019 Australian 24-Hour Movement Guidelines for Children and Young People and 2014 Australian Department of Health Physical Activity and Sedentary Behaviour Guidelines. The recommendations for children by age are: 0-2 years: no screen time, 3-5 years: no more than 1 hr per day, 5-17 years: no more than 2 hrs per day. For adults18 years and over, no upper time limit is specified in the guidelines. As such, we have categorised adults who spend more than 21 hours per week in screen-based sedentary leisure time as not meeting the guideline. The prevalence estimates for those who spent more than recommended time in screen-based leisure activities includes all persons.

Overweight and obesity
Data for the prevalence of overweight and obesity were sourced from the WA Health and Wellbeing Surveillance System. We asked respondents how tall they were and how much they weighed. For each respondent, a Body Mass Index (BMI) was derived from these figures by dividing weight in kilograms by height in metres squared after adjustment for errors in the self-reported height and weight (Hayes et al 2008) and the exclusion of biologically implausible values (CDC, 2023). We then categorised each respondent's adjusted BMI into weight classes. For adults these were overweight or obese (BMI less than 25), overweight (BMI from 25.0 to 29.9), or obese (BMI of 30.0 and above). For children these classifications were derived using age and sex percentile curves as developed by Coles et al (2000).

The prevalence estimates for those who are overweight and those who are obese includes persons 5 years and over.

Tobacco smoking
Data for the prevalence of tobacco smoking were sourced from the WA Health and Wellbeing Surveillance System. We asked respondents about their smoking status (including cigarettes, cigars, and pipes). We categorised smoking status into current smokers or not. We did not include the use of e-cigarettes or vaping when determining the prevalence of current tobacco smoking. The prevalence estimates were for those who smoked daily or occasionally and were 18 years old and over.

Tobacco-attributable hospitalisations and deaths
Data for tobacco-attributable hospitalisations and deaths were sourced from the WA Hospital Morbidity Data Collection and the Cause of Death Unit Record File respectively. Population estimates were obtained from the Australian Bureau of Statistics. Hospitalisations and deaths attributable to tobacco use were estimated using the tobacco-attributable aetiological fractions for WA developed by the Epidemiology Directorate, WA Department of Health and based on the method used by the National Drug Research Institute, Curtin University (Whetton et al. 2009). An aetiological fraction (AF) is the proportion of hospitalisations or deaths for a particular condition that can be attributed to tobacco use. The AFs vary by age and sex. Hospitalisations for tobacco-attributable conditions were identified using ICD-10-AM codes for principal diagnosis and/or external causes. Deaths for tobacco-attributable conditions were identified using ICD-10 codes for underlying cause of death and/or multiple cause of death. A list of tobacco-attributable conditions included in the estimation of tobacco-attributable hospitalisations and deaths can be requested from the Epidemiology Directorate (Coles and Sun 2021).

Alcohol consumption
Data for the prevalence of alcohol consumption were sourced from the WA Health and Wellbeing Surveillance System. We asked respondents about their alcohol drinking habits, including how many days a week they usually drink and how many drinks they usually have. We categorised the alcohol consumption information into risk levels based on the National Health and Medical Research Council (NHMRC) 2009 guidelines. We have reported the high risk categories of those who consume alcohol at levels that put them at risk for long term harm, and of those who consume alcohol at levels that put them at risk of short-term harm.

We do not currently report alcohol consumption using the revised NHMRC 2020 guidelines on alcohol consumption in this resource, as no data had been collected reflecting the new guidelines prior to 2022.

The prevalence estimates for adults that drink at levels that increase the risk of long-term harm or short term harm includes persons 16 years and over.

Alcohol-attributable hospitalisations and deaths
Data for alcohol-attributable hospitalisations and deaths were sourced from the WA Hospital Morbidity Data Collection and the Cause of Death Unit Record File, respectively. Population estimates were obtained from the Australian Bureau of Statistics. Hospitalisations and deaths attributable to alcohol use were estimated using alcohol aetiological fractions for WA developed by the Epidemiology Branch, DOH WA (Van Diemen et al. 2017).

An aetiological fraction (AF) is the proportion of hospitalisations or deaths for a particular condition that can be attributed to alcohol use. The AFs vary by age, sex, remoteness and Aboriginal status. Hospitalisations for alcohol-attributable conditions were identified using ICD-10-AM codes for principal diagnosis and/or external causes. Deaths due to alcohol-attributable conditions were identified using ICD-10 codes for underlying cause of death.

Illicit drug-attributable hospitalisations and deaths
Data for illicit drug-attributable hospitalisations and deaths were sourced from the WA Hospital Morbidity Data Collection and the Cause of Death Unit Record File, respectively. Population estimates were obtained from the Australian Bureau of Statistics. Hospitalisations and deaths attributable to illicit drug use were estimated using illicit drug aetiological fractions for Australia developed by the Australian Institute of Health and Welfare (Ridolfo and Stevenson 2001).

An aetiological fraction (AF) is the proportion of hospitalisations or deaths for a particular condition that can be attributed to illicit drug use. The AFs vary by age and sex. Hospitalisations for illicit drug-attributable conditions were identified using ICD-10-AM codes for principal diagnosis and/or external causes. Deaths due to illicit drug-attributable conditions were identified using ICD-10 codes for underlying cause of death and/or multiple cause of death. Ten drug groups contribute to the illicit drugs-attributable conditions and include opioids, sedatives (sedatives and barbiturates and benzodiazepines), anti-depressants, psychostimulants and cocaine, hallucinogens, cannabis, volatile substances, analgesics/antipyretics/antirheumatics, combination/unspecified drugs and other adverse effects of drugs.

Mental health
Data for the prevalence of mental health conditions were sourced from the WA Health and Wellbeing Surveillance System. We asked respondents if a doctor had told them they have a mental health condition in the past 12 months, including anxiety, depression, stress related condition, or other mental health condition. For each condition, we then categorised respondents into two groups, those who had been told by a doctor they had a mental health condition and those who had not. We also categorised respondents into those who had any mental health condition diagnosed in the past 12 months.

The prevalence of psychological distress were determined using the Kessler Psychological Distress Scale-10 (K10), a 10-item questionnaire that measures psychological distress by asking respondents about levels of anxiety and depressive symptoms experienced in the past four weeks. Each item on the K10 is scored and then summed, resulting in a range of possible scores from 10 to 50, which are then categorised into low, moderate, high and very high levels of psychological distress (Andrews and Slade, 2001). We then categorised respondents into two groups, those with high and very high psychological distress and those with low and moderate psychological distress.

The prevalence estimates for adults who had a doctor tell them they had a mental health condition or high/very high psychological distress includes persons 16 years and over.

Injury-related hospitalisations and deaths
Data for injury-related hospitalisations and deaths were sourced from the WA Hospital Morbidity Data Collection and Cause of Death Unit Record File as well as population estimates from the Australian Bureau of Statistics. Injury-related hospitalisations and deaths are identified using ICD-10-AM codes for external causes of injury and ICD-10 codes for underlying cause of death, respectively (see Table 1). These external causes are the circumstances of injury, or the activity being undertaken when the injury occurred. There are a total of 15 major injury causes, however, only the 6 causes considered to be amenable to prevention by local governments are presented in this report.

Table 1. ICD-10-AM/ICD-10 codes for selected external causes of injury and external causes of death

Selected external cause of injury/external cause of death	ICD-10-AM codes for cause of injury	ICD-10 codes for cause of death
Assault and neglect	X85-X99; Y00-Y09	X85-Y09, Y35-Y36, Y87.1
Intentional self-harm	X60-X84	X60-X84, Y87.0
Accidental poisoning	X20-X29; X40-X49	X40-X49
Accidental drowning, submersion, threats to breathing	W65-W84	W65-W84
Falls	W00-W19	W00-W19
Transport accidents	V00-V99	V00-V99, Y85

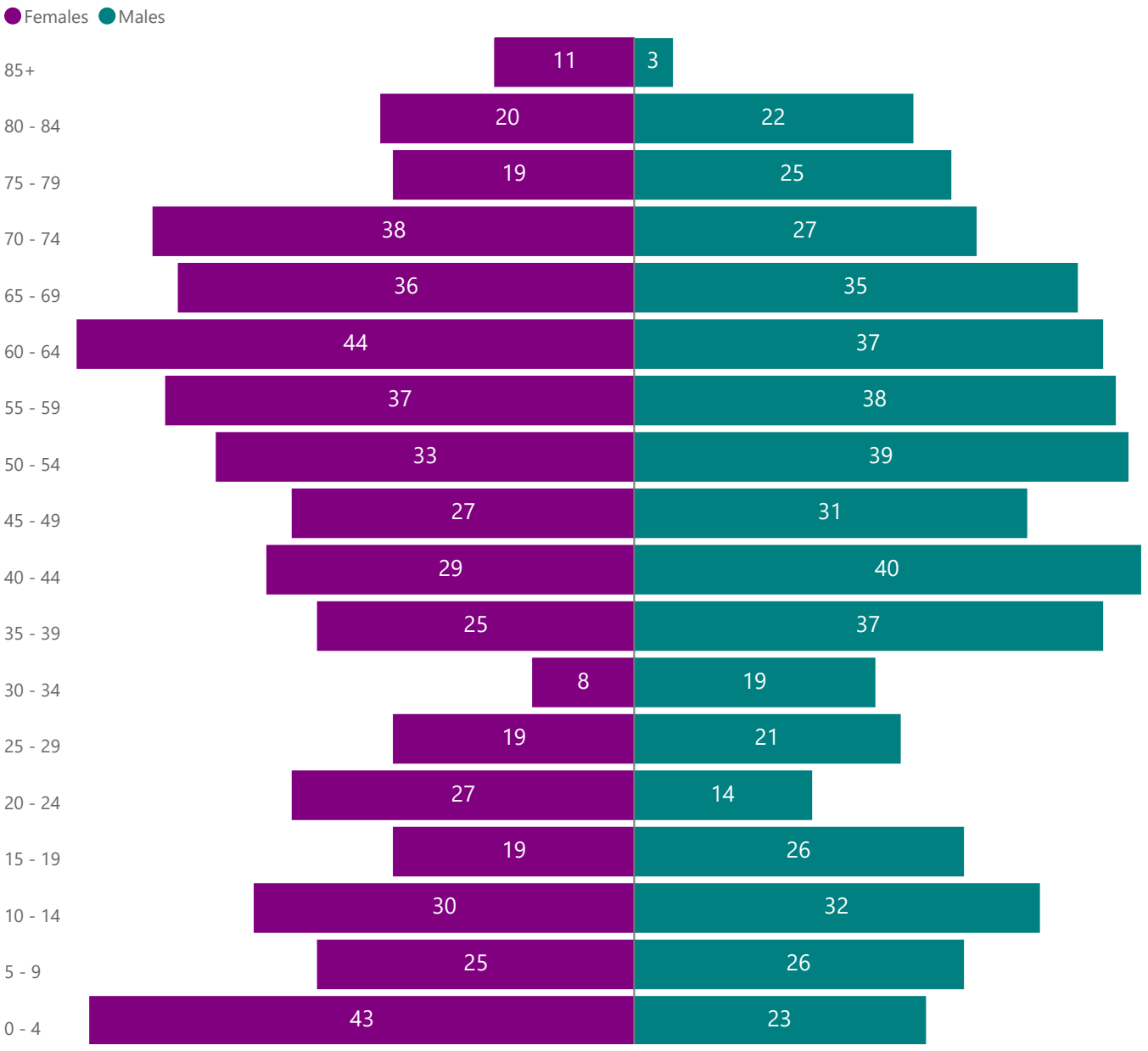
Notifiable infectious diseases
Data for infectious disease notifications was sourced from the WA Notifiable Infectious Diseases Database and population estimates from the Australian Bureau of Statistics. In this report, notifiable infectious diseases were aggregated into five major disease categories. However, the major disease categories of zoonotic diseases and other notifiable diseases were not reported due to small number of cases in WA.

A list of the specific infectious diseases that fall under the major disease categories can be requested from the Epidemiology Directorate. Specific infectious diseases were identified using case definitions available from Communicable Disease Control Directorate (2021).

Population

As at 30 June 2021, an estimated 985 people lived in the Shire of Goomalling. Around 50.3% were male and 49.7% were female. Other selected population measures based on 2021 Census of Population and Housing data are provided in Table 2.

Figure 1.Population by age group (years) and sex, Shire of Goomalling, 2021



Source: 2021 Estimated Resident Population, Australian Bureau of Statistics

Table 2. Selected population measures, Shire of Goomalling, 2021

Population measure	Count	Percentage (%)
Aboriginal persons	48	4.9
Families with annual income < $64,999	59	23.0
Persons born overseas	246	25.0
Persons who are unemployed	18	3.2
Persons who do not speak English at home	152	15.9

Source: 2021 Census of Population and Housing, Australian Bureau of Statistics

Nutrition

Diet has an important effect on health and can influence the risk of diseases such as coronary heart disease, type 2 diabetes, stroke and some cancers. The Australian Dietary Guidelines outlines the recommended daily serves of fruit and vegetables for adults and children (NHMRC 2013).

In 2020, Shire of Goomalling residents had 50.6% of population eating the recommended two serves of fruit daily, 10.4% eating the recommended five serves of vegetable daily and 19.2% eating fast food at least weekly.

Among males, 47.0% ate two serves of fruit daily, 7.79% ate five serves of vegetable daily and 23.05% fast food at least weekly. In comparison, among females 54.1% ate two serves of fruit daily, 12.9% ate five serves of vegetable daily and 15.5% ate fast food at least once a week.

Figure 2. Prevalence (%) of those who eat recommended serves of fruit and vegetables daily (2 years and above) and those eat meals from fast food outlets at least weekly (1 year and above), by sex, Shire of Goomalling, 2020

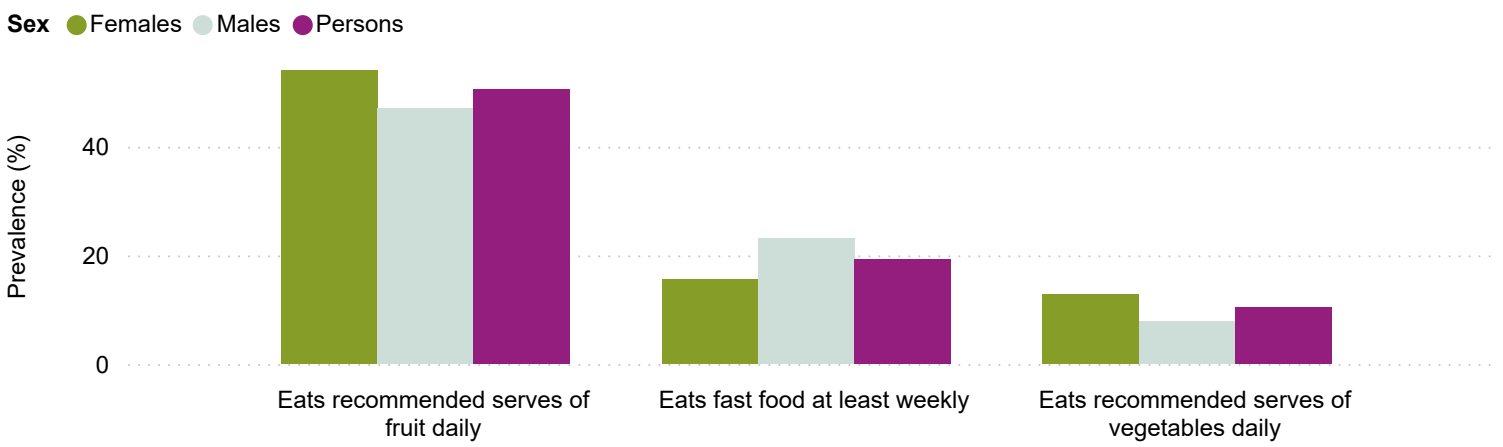
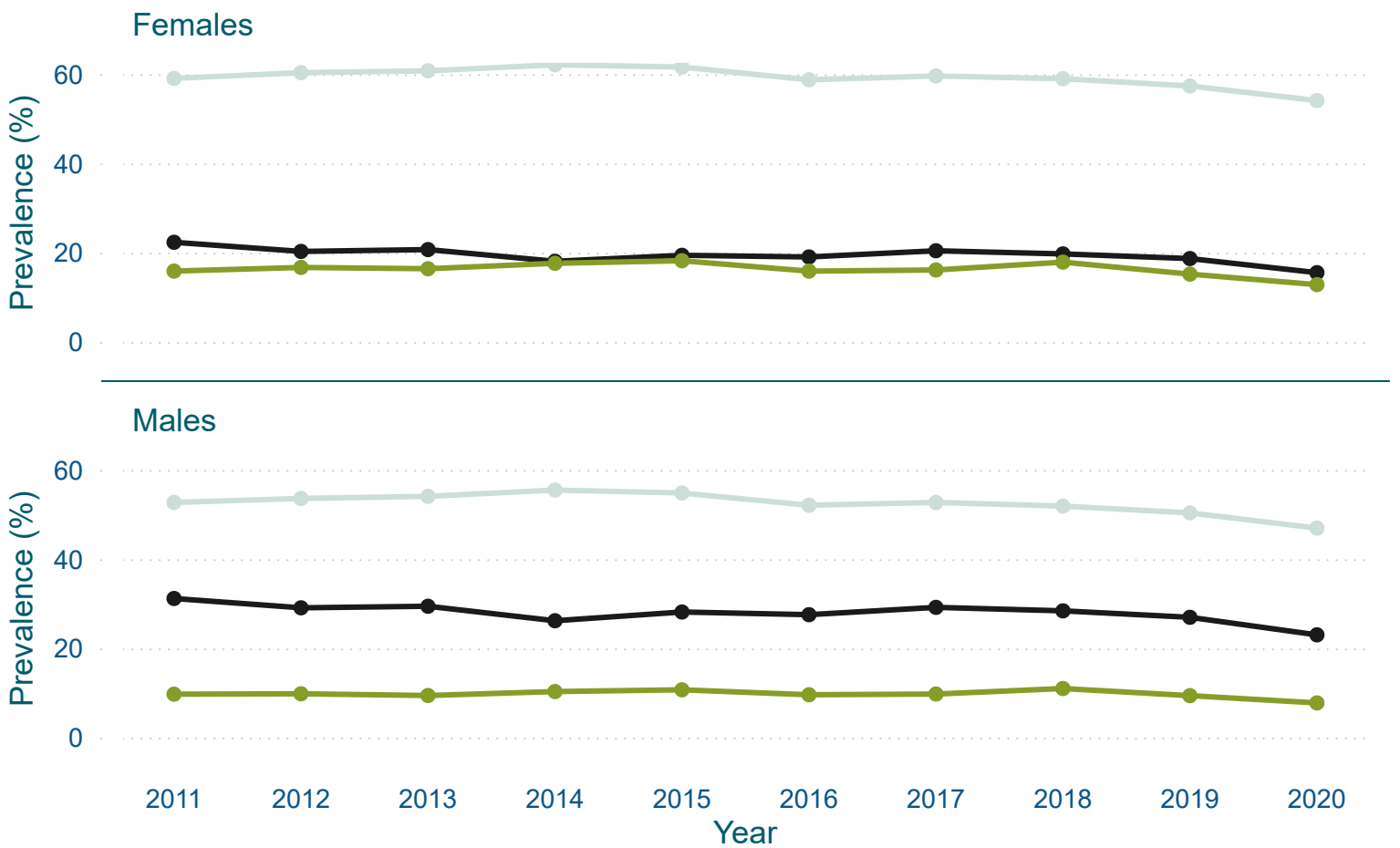


Table 3. Prevalence (%) of those who eat recommended serves of fruit and vegetables daily (2 years and above) and those eat meals from fast food outlets at least weekly (1 year and above), by sex, Shire of Goomalling, 2020

Category	Prevalence (%)	Estimated number	RSE (%)	WA prevalence (%)	Comparison to WA
Eats fast food at least weekly					
Females	15.5	77.0	21.4	22.6	lower
Males	23.1	112.0	18.8	25.4	similar
Persons	19.2	189.0	19.8	23.9	lower
Eats recommended serves of fruit daily					
Females	54.1	268.0	4.7	52.0	similar
Males	47.0	226.0	5.3	47.6	similar
Persons	50.6	494.0	5.0	49.9	similar
Eats recommended serves of vegetables daily					
Females	12.9	64.0	14.5	10.6	higher
Males	7.8	37.0	15.4	6.0	higher
Persons	10.4	101.0	14.8	8.4	higher

Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA

Figure 3. Prevalence (%) of those who eat recommended serves of fruit and vegetables daily (2 years and above) and those eat meals from fast food outlets at least weekly (1 year and above) by sex, Shire of Goomalling , 2011-2020



Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA

Physical activity

Physical activity reduces the risk of cardiovascular disease, some cancers and type 2 diabetes, and also helps improve musculoskeletal health, maintain body weight and reduce symptoms of depression (WHO 2009). The 2009 Australian Physical Activity and Sedentary Behaviour Guidelines for adults recommends accumulating 2.5 to 5 hours of moderate intensity physical activity or 1.25 to 2.5 hours of vigorous intensity physical activity each week.

In 2020, Shire of Goomalling residents had a similar prevalence of sufficient physical activity and a lower prevalence of spending more than recommended time in screen-based sedentary leisure time activities when compared to the WA State average.

It is estimated that 47.7% of males aged 5 years and over had recommended amount of physical activity each week and 42.5% of males (all ages) spent more than recommended screen-based sedentary leisure time activities. In comparison, 53.8% of females aged 5 years and over had sufficient levels of physical activity each week and 42.0% of females (all ages) spent more recommended screen-based sedentary leisure time activities.

Figure 4. Prevalence (%) of sufficient physical activity (5 years and above) and sedentary behaviour (all ages) by sex, Shire of Goomalling, 2020

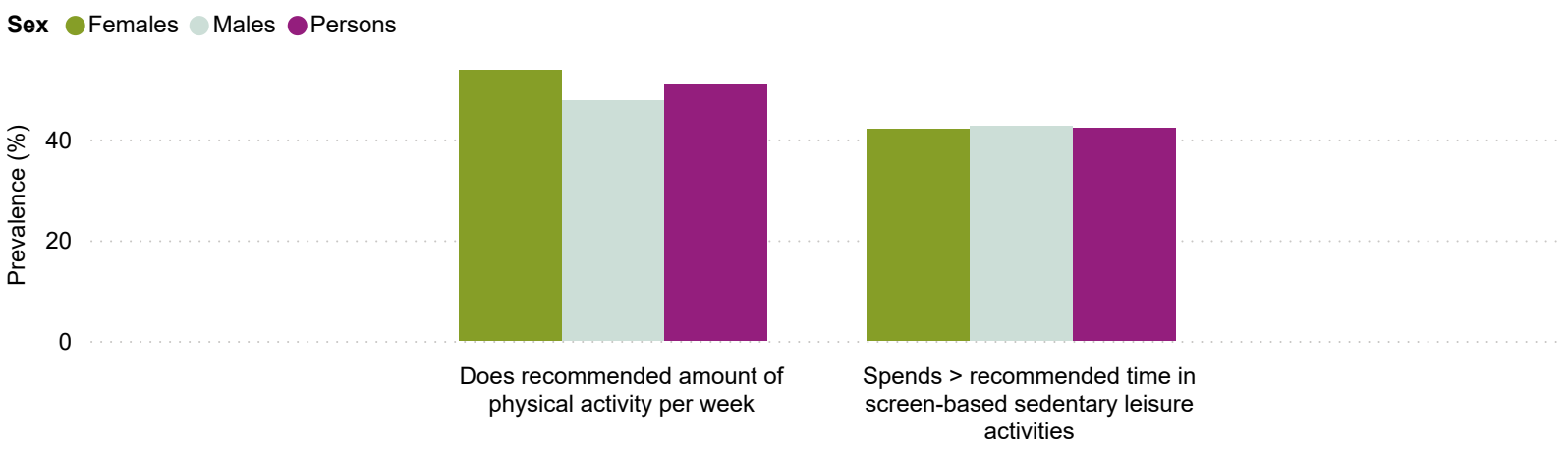
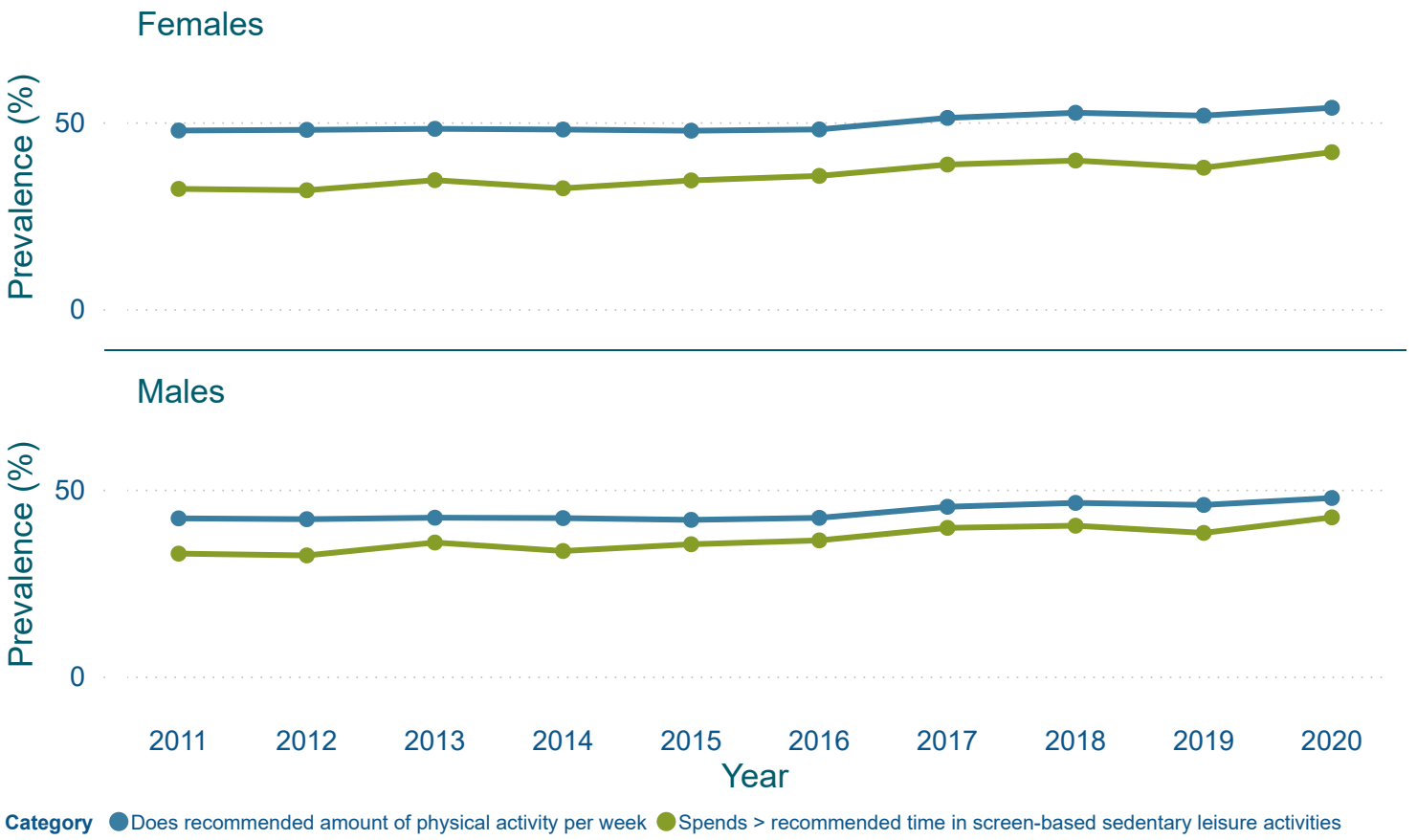


Table 4. Prevalence (%) of sufficient physical activity (5 years and above) and sedentary behaviour (all ages) by sex, Shire of Goomalling, 2020

Category	Prevalence (%)	Estimated number	RSE (%)	WA prevalence (%)	Compared to WA
Does recommended amount of physical activity per week					
Females	53.8	257.0	7.0	49.18	higher
Males	47.7	221.0	8.1	46.88	similar
Persons	50.9	478.0	7.5	48.07	similar
Spends > recommended time in screen-based sedentary leisure activities					
Females	42.0	210.0	6.7	46.04	lower
Males	42.5	209.0	6.6	43.99	similar
Persons	42.3	419.0	6.6	45.06	lower

Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA

Figure 5. Prevalence (%) of sufficient physical activity (5 years and above) and sedentary behaviour (all ages) by sex, Shire of Goomalling, 2011-2020



Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA.

Overweight and obesity

Overweight and obesity in adults is associated with cardiovascular disease, type 2 diabetes, some cancers, musculoskeletal disorders (in particular osteoarthritis), dementia and a range of other conditions (AIHW 2017).

Shire of Goomalling residents had a lower prevalence of overweight and a similar obesity prevalence compared to the State. In 2020, it is estimated that 36.8% of males aged 5 years and over were overweight and 32.7% were obese. In comparison, 27.1% of females aged 5 years and over were overweight and 33.8% were obese.

Figure 6. Prevalence (%) of overweight and obesity by sex, persons aged 5 years and over, Shire of Goomalling, 2020

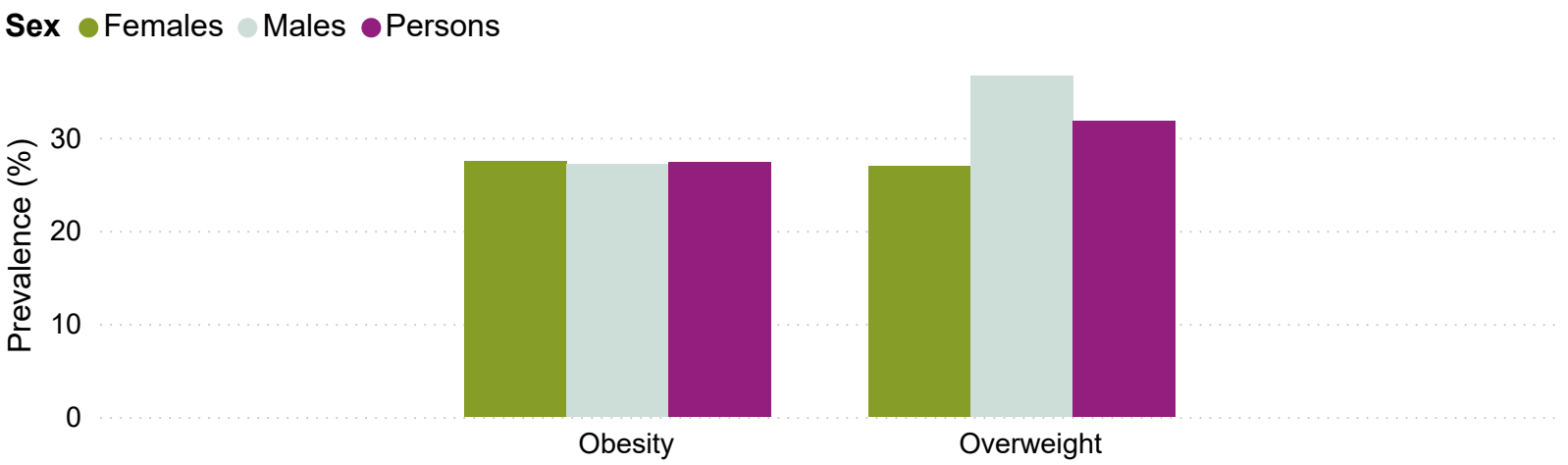
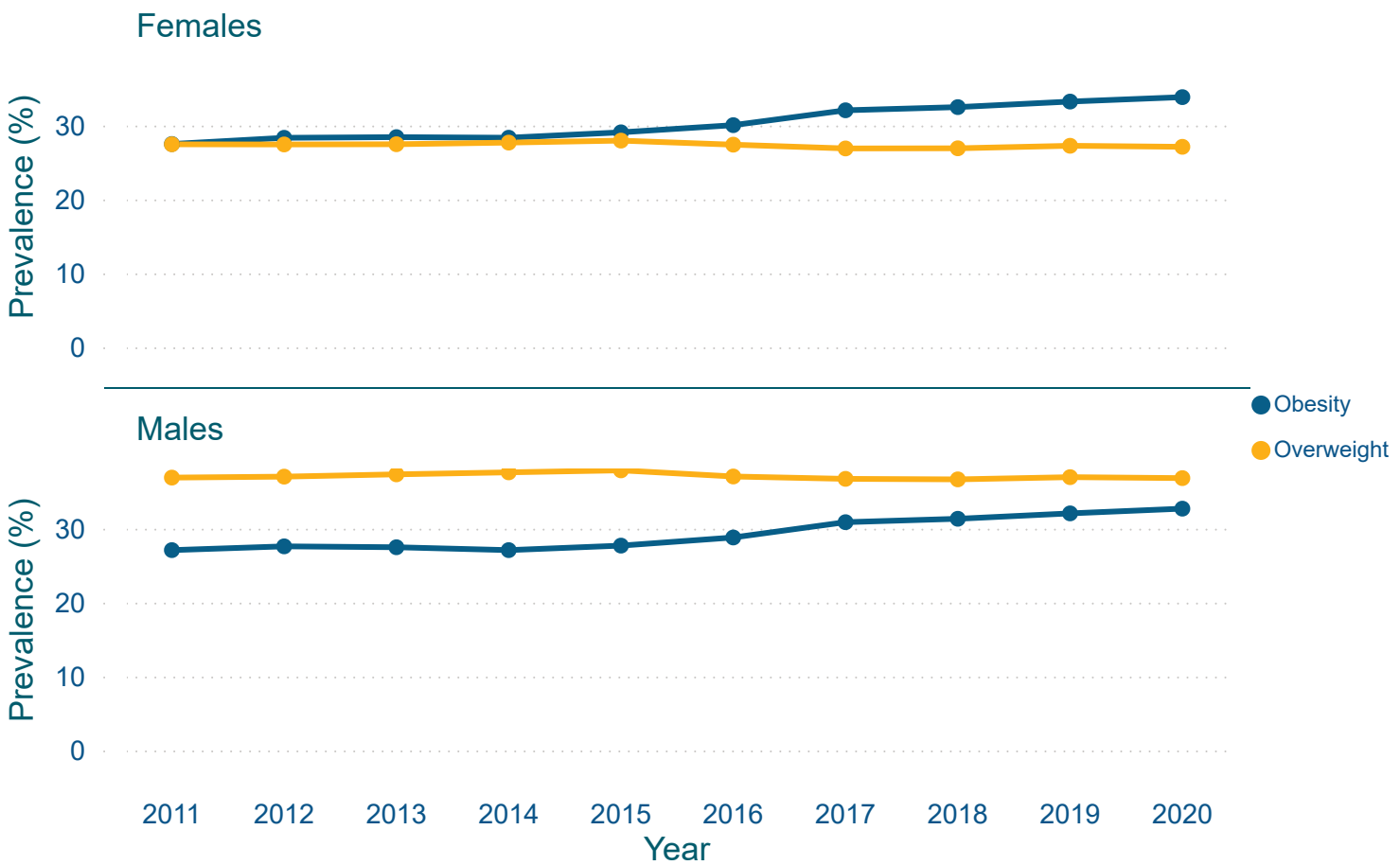


Table 5. Prevalence (%) of overweight and obesity by sex, persons aged 5 years and over, Shire of Goomalling, 2020

Category	Prevalence (%)	Estimated number	RSE (%)	WA prevalence (%)	Comparison to WA
Obesity					
Females	33.8	161.0	7.0	32.24	similar
Males	32.7	151.0	7.3	31.61	similar
Persons	33.3	313.0	7.1	31.93	similar
Overweight					
Females	27.1	129.0	5.5	31.35	lower
Males	36.8	171.0	4.7	38.74	lower
Persons	31.9	300.0	5.0	34.95	lower

Figure 7. Prevalence (%) of overweight and obesity by sex, persons aged 5 years and over over time by sex, Shire of Goomalling, 2011-2020



Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA.

Tobacco smoking

Tobacco use

Tobacco smoking is the leading cause of preventable death and disease in Australia. Tobacco use, including past and current use and exposure to second-hand smoke, increases the risk of a number of health conditions, including cancer, respiratory diseases and cardiovascular disease (AIHW 2018).

Residents of Shire of Goomalling had a similar prevalence of current smoking compared to the WA State. In 2020, 13.9% of males aged 18 years and over reported currently smoking compared with 10.7% of females aged 18 years and over.

Figure 8. Prevalence (%) of current smoking by sex, Shire of Goomalling, 2020

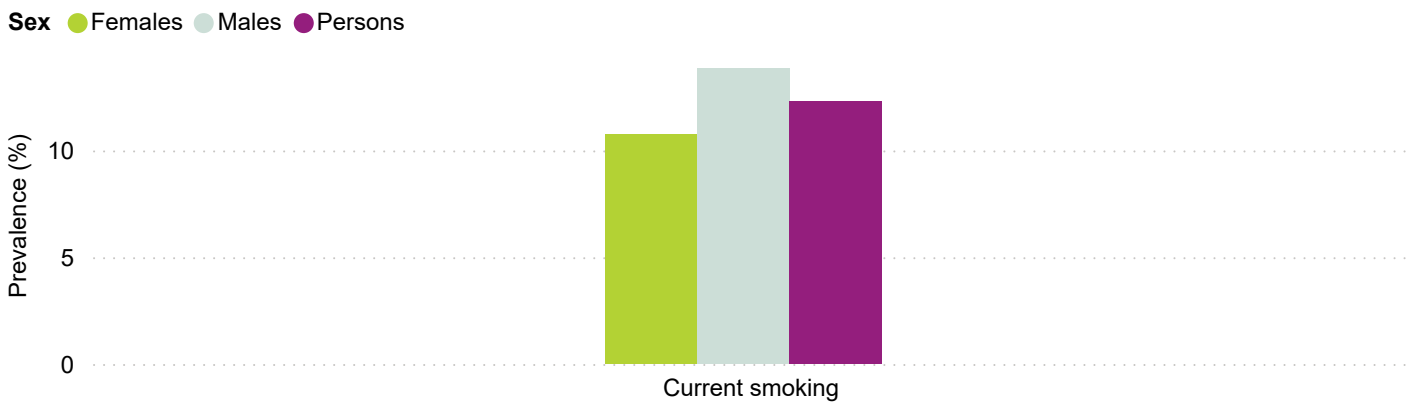
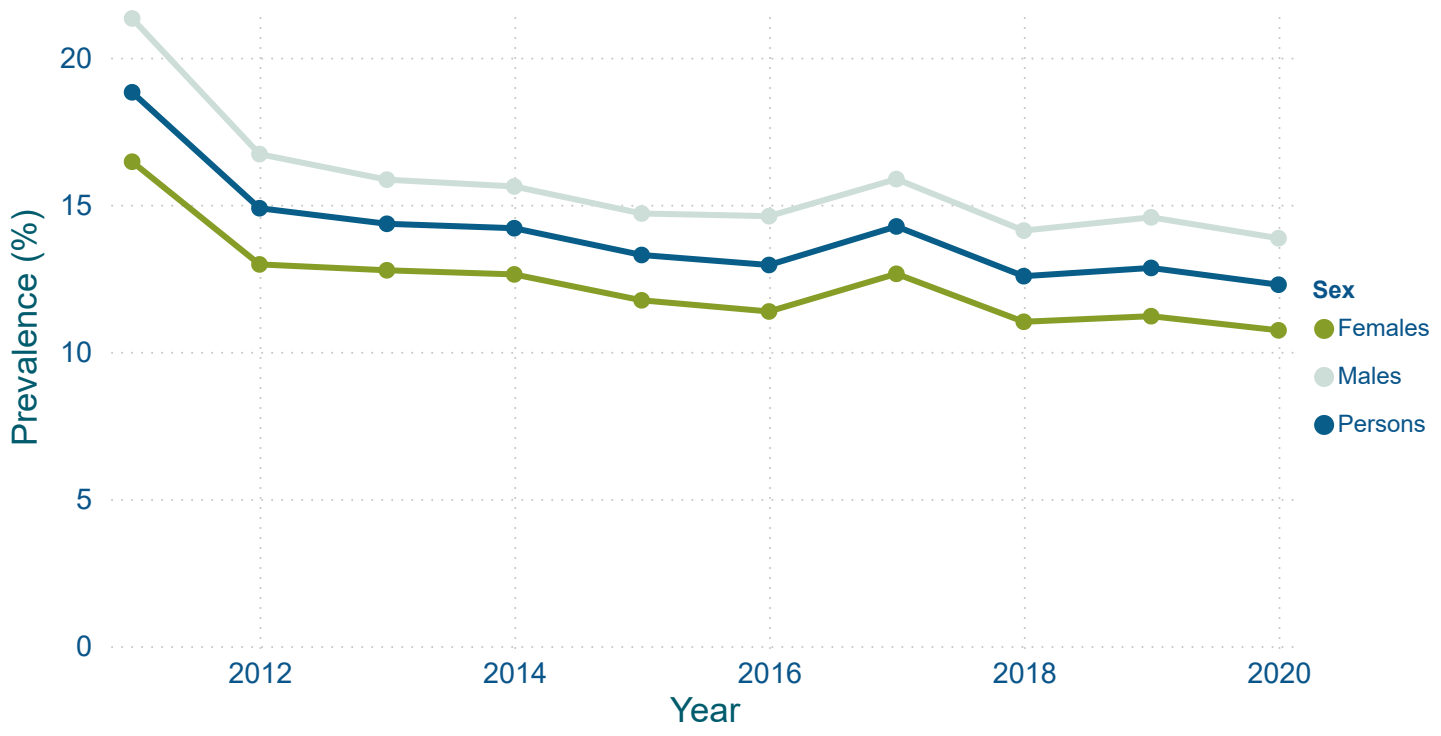


Table 6. Prevalence (%) of current smoking by sex, Shire of Goomalling, 2020

Category	Prevalence (%)	Estimated number	RSE (%)	WA prevalence (%)	Comparison to WA
Current smoking					
Males	13.9	53.0	17.2	11.9	higher
Females	10.7	42.0	18.1	9.7	similar
Persons	12.3	95.0	17.5	10.7	similar

Figure 9. Prevalence (%) of current smoking, Shire of Goomalling, 2011-2020



Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA.

Tobacco-attributable hospitalisations

In 2020, the rate of tobacco-attributable hospitalisations was higher among Shire of Goomalling residents (1088.1 per 100,000) compared to the WA State rate (455.6 per 100,000). Among male residents, the rate of tobacco-attributable hospitalisations was 1239.7 per 100,000. This is higher compared to the WA State rate. Among female residents, the rate of tobacco-attributable hospitalisations was 908.6 per 100,000. This is higher compared to the WA State rate. Note that the data is for all ages. Note that the data is only for people aged 15 years and over.

Figure 10. Age standardised rate(/100,000) of tobacco related hospitalisations by sex, Shire of Goomalling, 2020

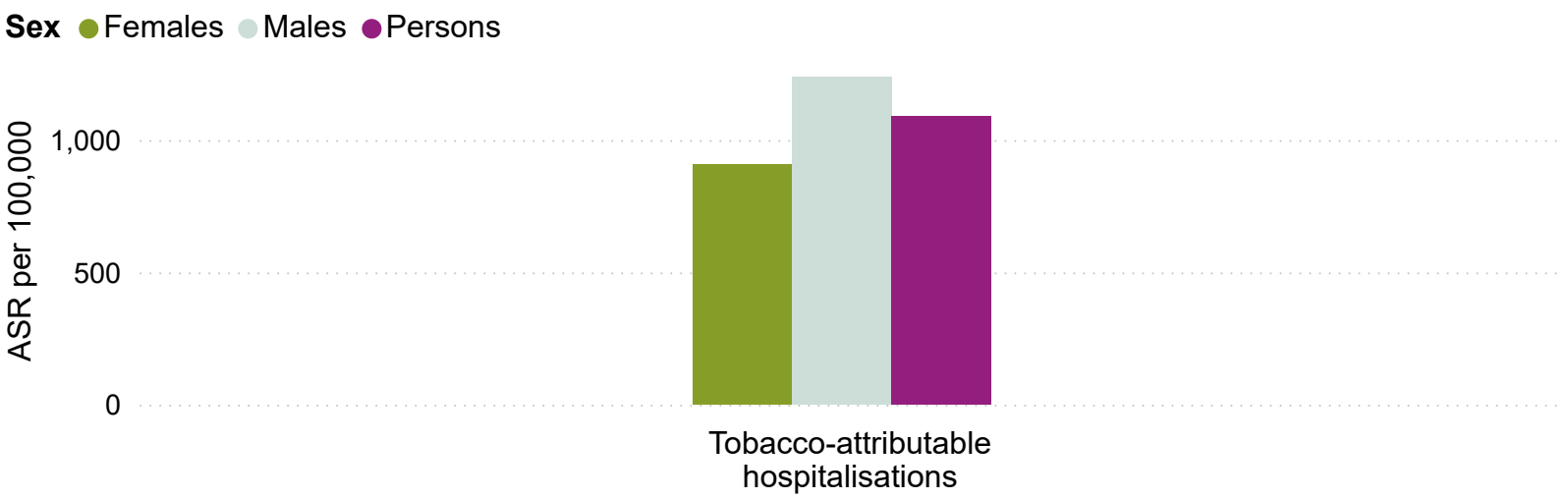
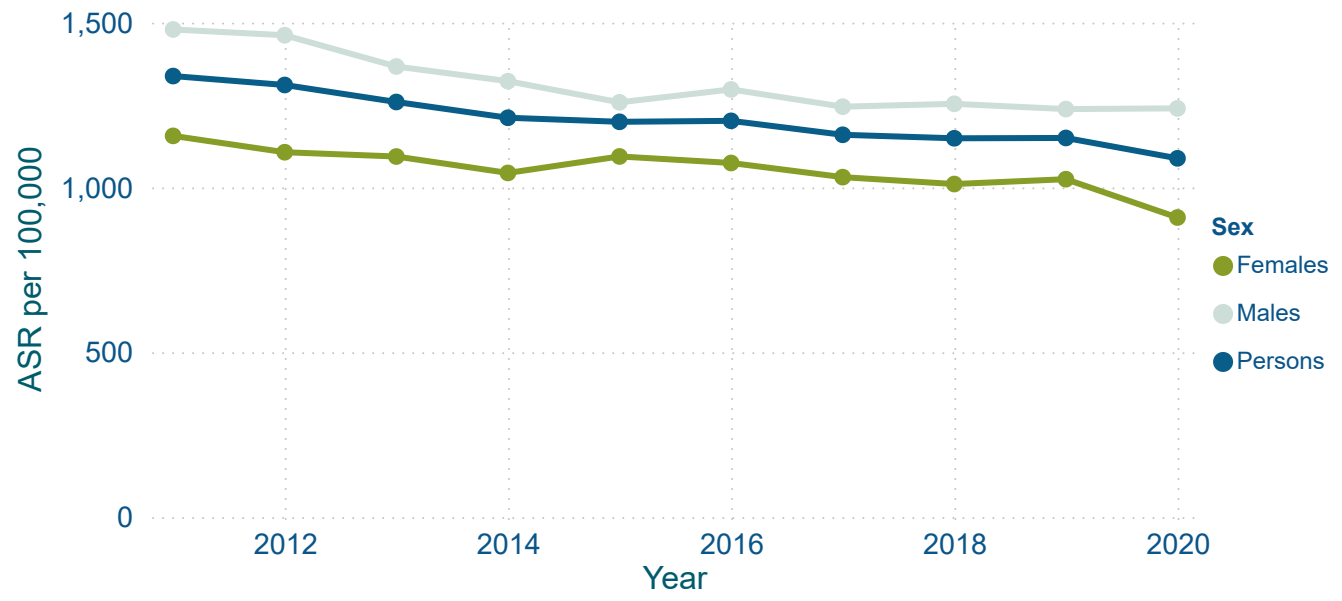


Table 7. Estimated number and age standardised rate (/100,000) of tobacco related hospitalisations by sex, Shire of Goomalling, 2020

Sex	Estimated number	ASR per 100,000	WA ASR per 100,000	Comparison to WA
Females	5.0	908.6	399.6	higher
Males	8.0	1,239.7	516.8	higher
Persons	13.0	1,088.1	455.6	higher

Figure 11. Age standardised rates (/100,000) of tobacco related hospitalisations over time, Shire of Goomalling, 2011-2020



Source: WA Hospital Morbidity Data Collection, Information and System Performance Directorate, DOH WA

Tobacco-attributable deaths

In 2020, the rate of tobacco-attributable deaths was higher among residents of Shire of Goomalling compared to the WA State rate. Among male residents, the rate of tobacco-attributable deaths was 113.6 per 100,000. This is higher compared to the WA State rate. Among female residents, the rate of tobacco-attributable deaths was 82.8 per 100,000. This is higher compared to the WA State rate. Note that the data is only for people aged 15 years and over.

Figure 12. Age standardised rate of tobacco-attributable deaths by sex, Shire of Goomalling, 2020

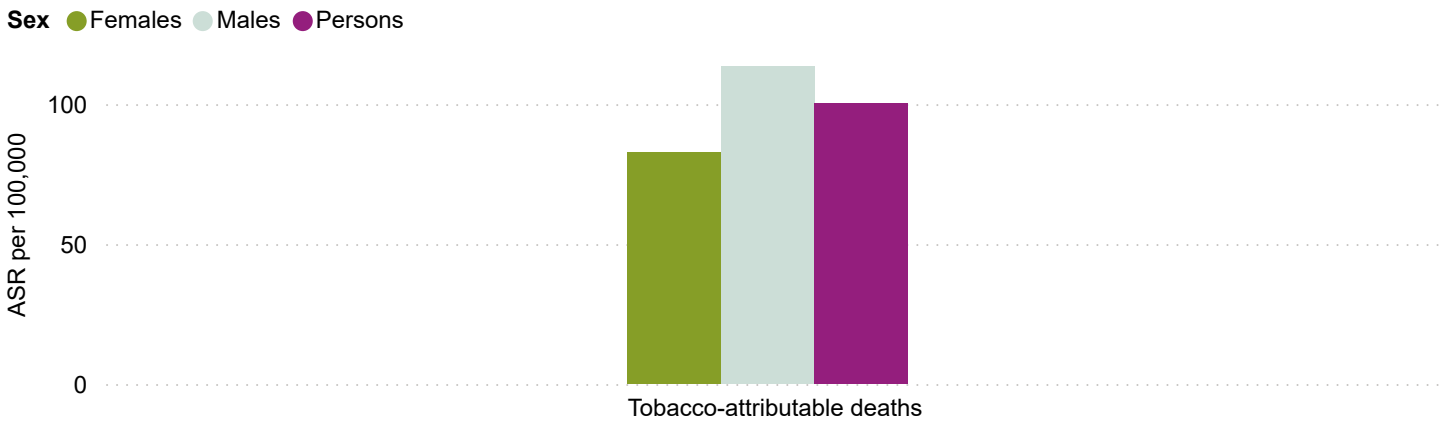
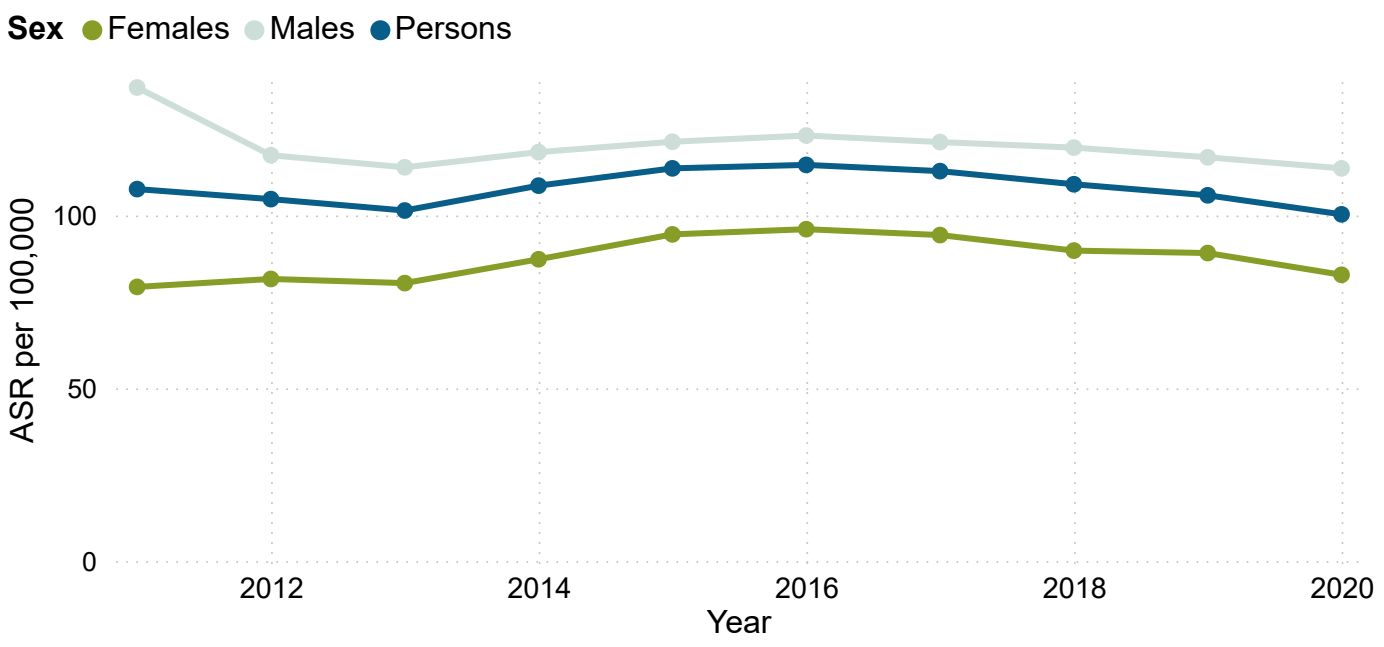


Table 8. Number and age standardised rate (/100,000) by sex, Shire of Goomalling, 2020

Sex	Estimated number	ASR per 100,000	WA ASR per 100,000	Comparison to WA
Females	1.0	82.8	49.4	higher
Males	1.0	113.6	74.9	higher
Persons	1.0	100.3	61.6	higher

Figure 13. Age standardised rate (/100,000) of tobacco-attributable deaths over time by sex, Shire of Goomalling, 2011-2020



Source: Cause of Death Unit Record File, Australian Co-ordinating Registry, the Registries of Births, Deaths and Marriages, the Coroners, the National Coronial Information System and the Victorian Department of Justice and Community Safety

Alcohol-related harm

Alcohol use prevalence

Alcohol use increases the risk of some health conditions, including coronary heart disease, stroke, high blood pressure, and liver and pancreatic disease. It also increases the risk of violence and anti-social behaviour, accidents and mental illness (AIHW 2017). The alcohol use levels reported below were based on the 2009 Australian guidelines to reduce health risks from drinking alcohol, that recommends that healthy adults aged 18 years and over should drink no more than 2 standard drinks per day to reduce the risk of long-term harm and no more than 4 standard drinks on any one day to reduce the risk of short-term harm from alcohol-related disease or injury (NHMRC 2009).

In 2020, the prevalence of alcohol use at levels considered to be high risk for short-term harm (4 standard drinks on any one day) in the Shire of Goomalling was higher compared to the WA State average. The prevalence of alcohol use at levels considered to be high risk for long-term harm (2 standard drinks on any one day) was similar compared to the WA State average. It is estimated that 32.2% of males aged 16 years and over used alcohol at levels considered to be high risk for long-term harm and 16.5% used alcohol at levels considered to be high risk for short-term harm. In comparison, 11.6% of females aged 16 years and over used alcohol at levels considered to be high risk for long-term harm and 3.6% used alcohol at levels considered to be high risk for short-term harm.

Note that data may not be available for certain category/sex due to RSE >50%.

Figure 14. Prevalence (%) of high risk alcohol use by sex, persons aged 16 years and over, Shire of Goomalling, 2020

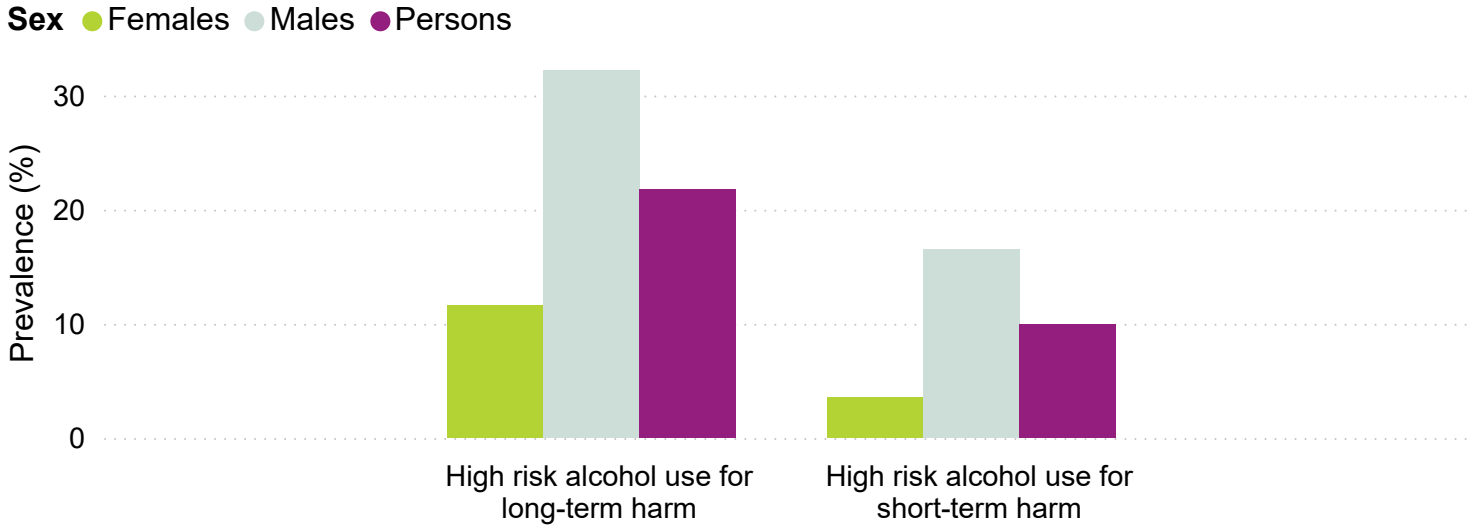
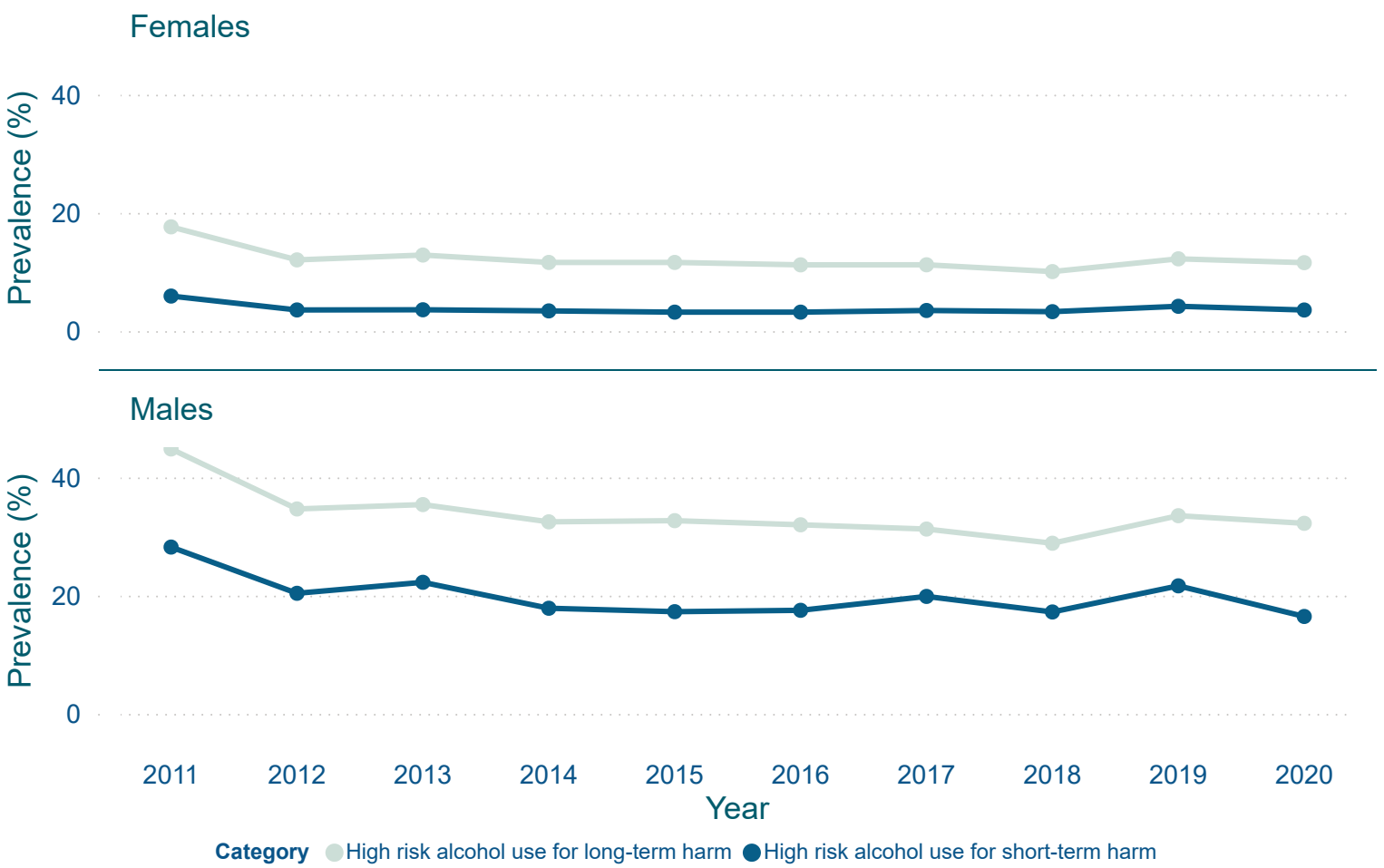


Table 9. Prevalence (%) of high risk alcohol use by sex, persons aged 16 years and over, Shire of Goomalling, 2020

Category	Prevalence (%)	Estimated number	RSE (%)	WA prevalence (%)	Comparison to WA
High risk alcohol use for short-term harm					
Males	16.5	63.0	23.5	12.22	higher
Persons	9.9	77.0	24.2	7.92	higher
Females	3.6	14.0	29.9	4.15	similar
High risk alcohol use for long-term harm					
Females	11.6	45.0	17.3	16.41	lower
Males	32.2	123.0	12.3	32.67	similar
Persons	21.8	169.0	13.6	24	similar

Figure 15. Prevalence (%) of high risk alcohol use for short- or long-term harm over time by sex, Shire of Goomalling, 2011-2020



Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA

Alcohol-attributable hospitalisations

In 2020, the rate of alcohol-attributable hospitalisations was higher among Shire of Goomalling residents (1274.1 per 100,000) compared to the WA State rate (944.2 per 100,000). Among male residents, the rate of alcohol-attributable hospitalisations was 1578.4 per 100,000. This is higher compared to the WA State male rate. Among female residents, the rate of alcohol-attributable hospitalisations was 969.1 per 100,000. This is higher compared to the WA State female rate. Note that the data is only for those aged 15 years and over.

Figure 16. Age standardised rate (/100,000) of alcohol-attributable hospitalisations by sex, Shire of Goomalling, 2020

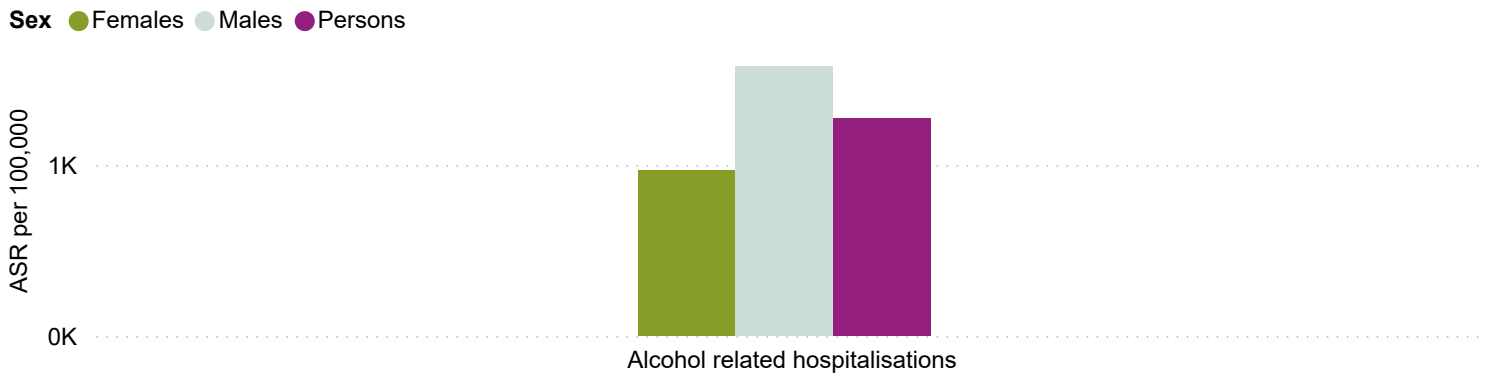
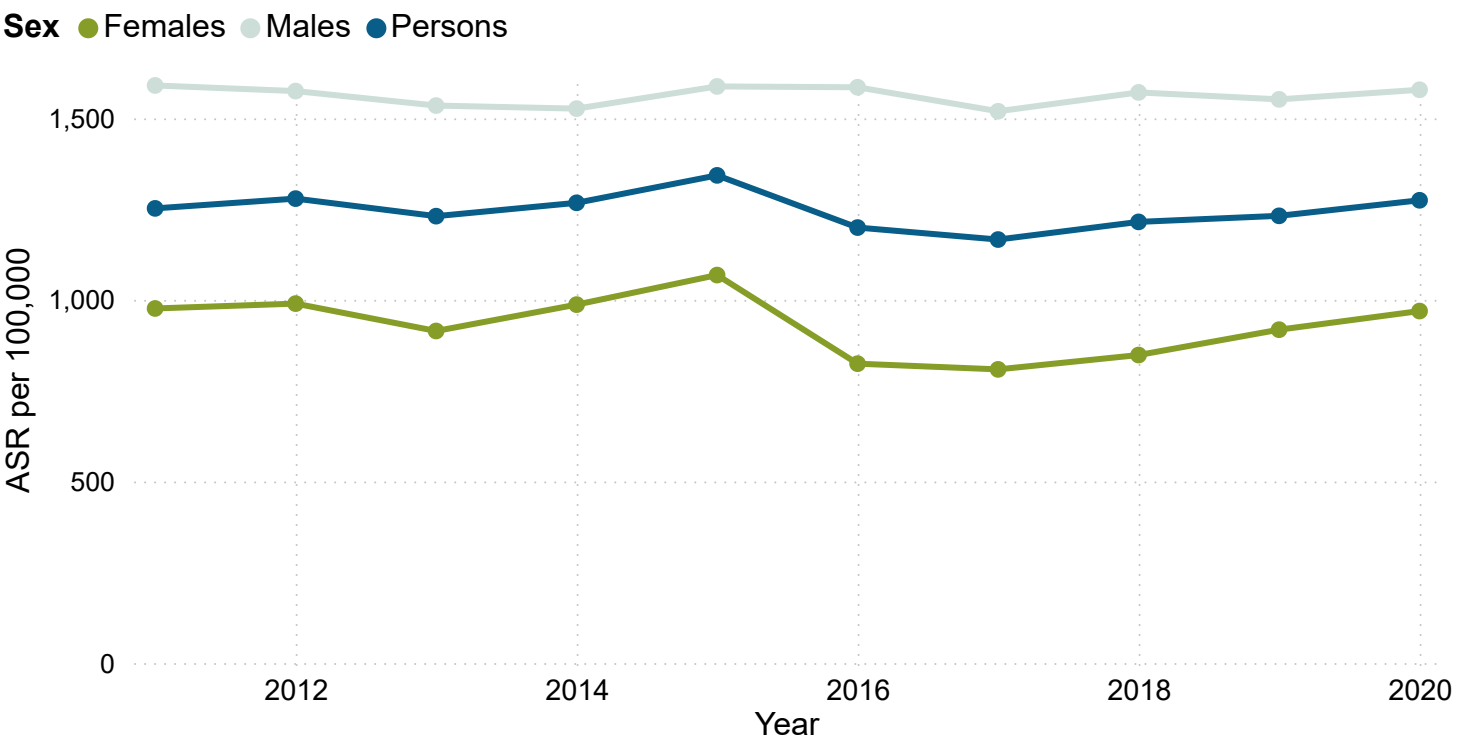


Table 10. Estimated number and age standardised rate (/100,000) of alcohol-attributable hospitalisations by sex, Shire of Goomalling, 2020

Sex ▲	Estimated number	ASR per 100,000	WA ASR per 100,000	Comparison to WA
Females	4.0	969.1	747.4	higher
Males	7.0	1,578.4	1,144.9	higher
Persons	11.0	1,274.1	944.2	higher

Figure 17. Age standardised rate (/100,000) of alcohol attributable hospitalisations over time by sex, Shire of Goomalling, 2011-2020



Source: WA Hospital Morbidity Data Collection, Information and System Performance Directorate, DOH WA

Alcohol-attributable deaths

In 2020, the rate of alcohol-attributable deaths was higher among Shire of Goomalling residents (83.9 per 100,000) compared to the WA State rate (33.7 per 100,000). Among male residents, the rate of alcohol-attributable deaths was 122.3 per 100,000. This is higher compared to the WA State male rate. Among female residents, the rate of alcohol-attributable deaths was 41.5 per 100,000. This is higher compared to the WA State female rate. Note that the data is only for those aged 15 years and over.

Figure 18. Age standardised rate (/100,000) of alcohol-attributable deaths by sex, Shire of Goomalling, 2020

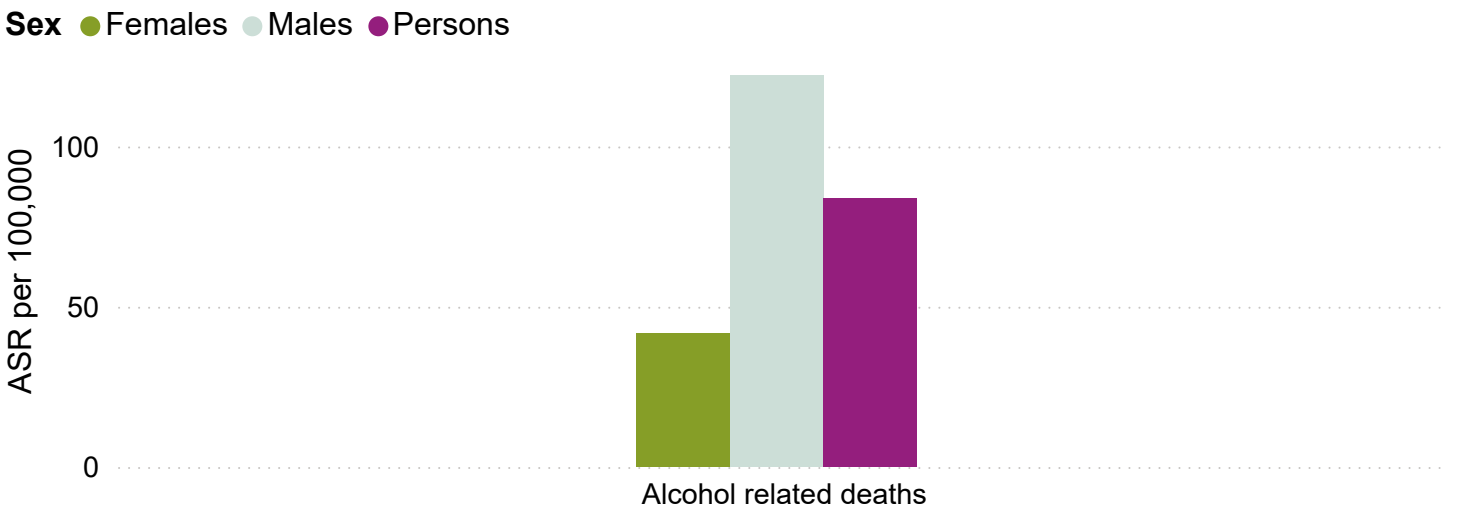
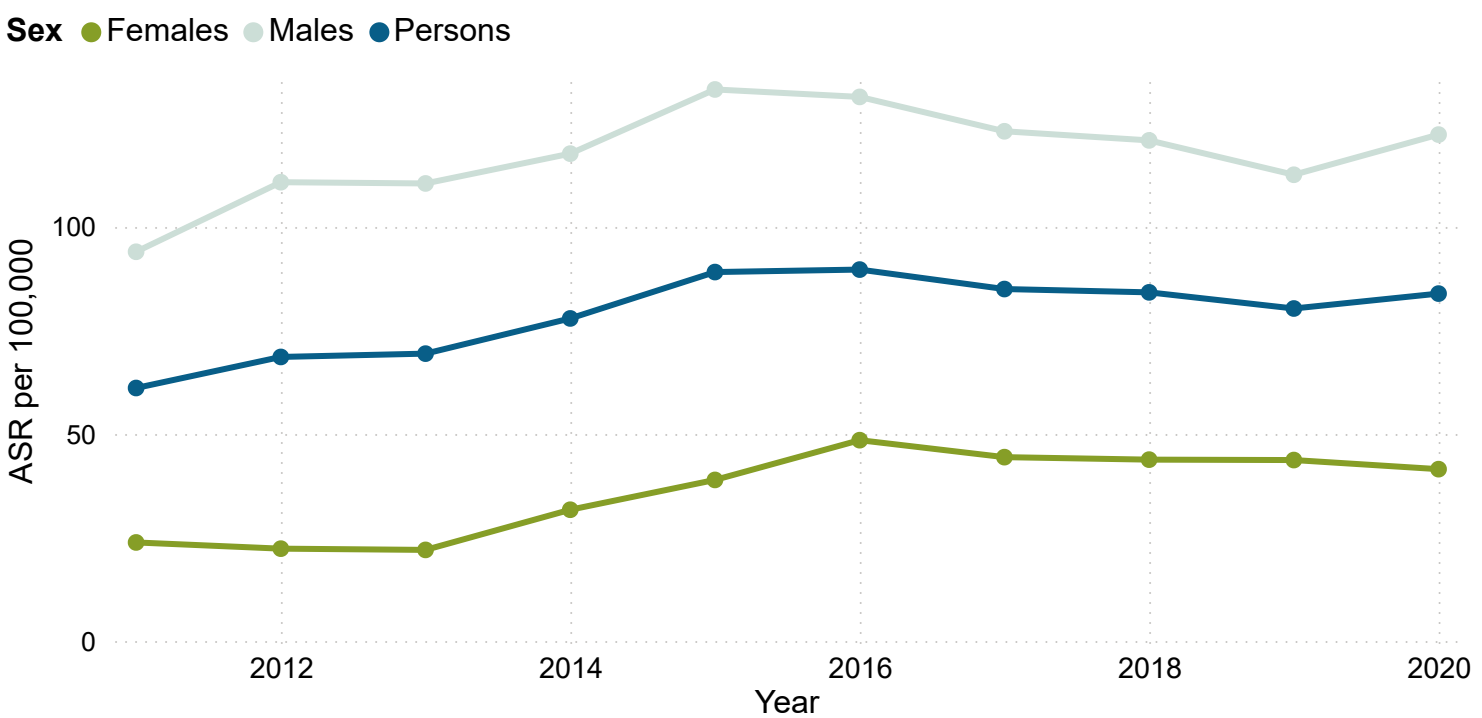


Table 11. Age standardised rate (/100,000) of alcohol-attributable deaths by sex, Shire of Goomalling ,2020

Sex	Estimated number	ASR per 100,000	WA ASR per 100,000	Comparison to WA
Females	0.0	41.5	18.0	higher
Males	1.0	122.3	50.3	higher
Persons	1.0	83.9	33.7	higher

Figure 19. Age standardised rate (/100,000) of alcohol-attributable deaths over time by sex, Shire of Goomalling, 2011-2020



Source: Cause of Death Unit Record File, Australian Co-ordinating Registry, the Registries of Births, Deaths and Marriages, the Coroners, the National Coronial Information System and the Victorian Department of Justice and Community Safety

Illicit drug-related harm

Illicit drug-attributable hospitalisations

In 2020, Shire of Goomalling residents had similar drug-attributable hospitalisation rate compared to the WA State average. It is estimated that among male residents, the rate of illicit drug-attributable hospitalisations was 140.2 per 100,000. This is lower compared to the WA State rate. Among female residents, the rate of tobacco-attributable hospitalisations was 386.2 per 100,000. This is similar compared to the WA State rate. Note that the data is only for people aged 15 years and over.

Figure 20. Age standardised rate (/100,000) of illicit drug-attributable hospitalisations by sex, Shire of Goomalling, 2020

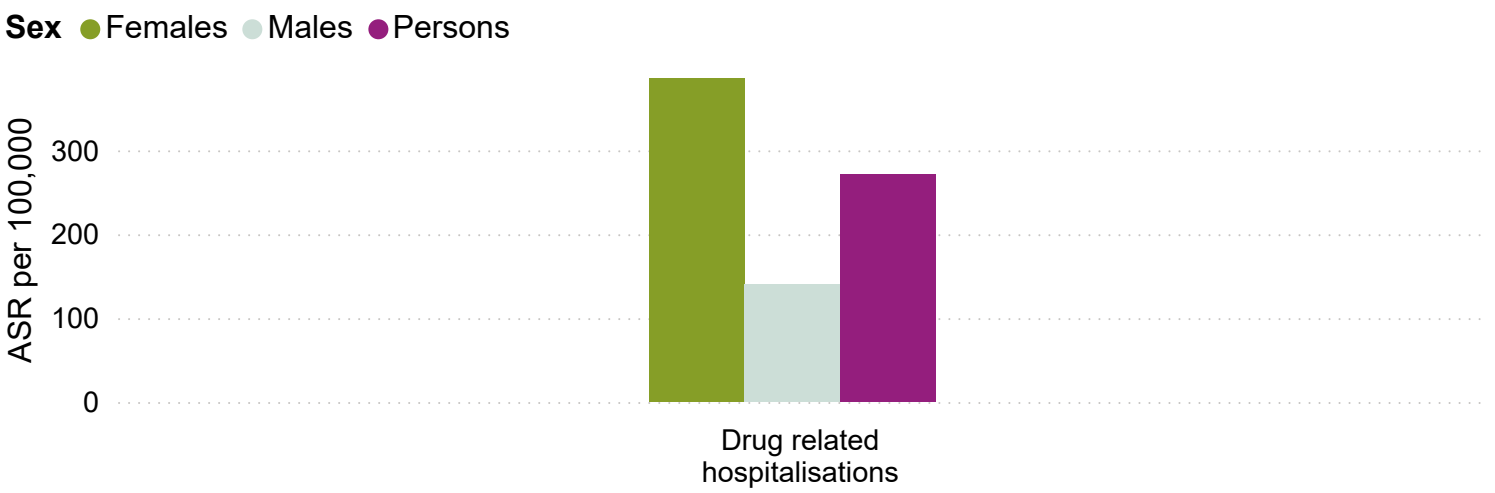
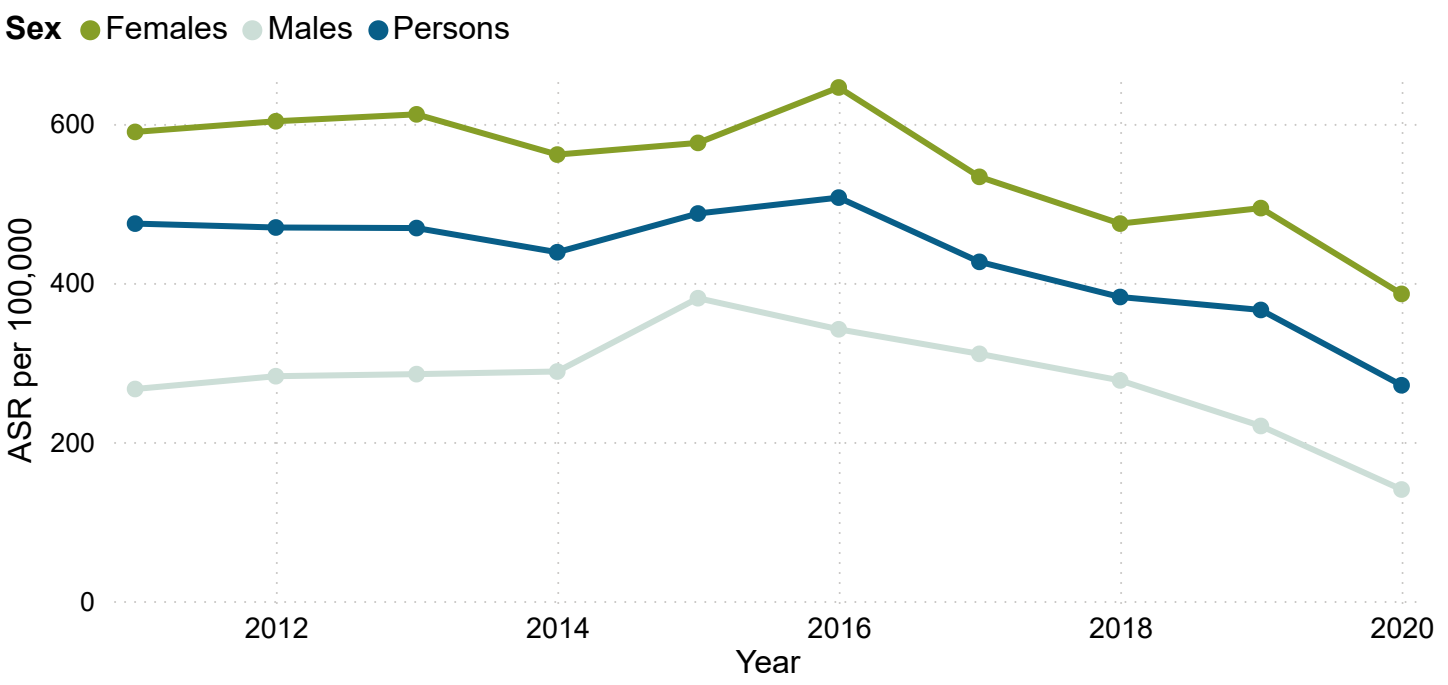


Table 12. Estimated number and age standardised rate (/100,000) of illicit drug-attributable hospitalisations by sex, Shire of Goomalling, 2020

Sex	Estimated number	ASR per 100,000	WA ASR per 100,000	Comparison to WA
Females	1.0	386.2	282.0	similar
Males	0.0	140.2	252.2	lower
Persons	2.0	271.3	266.7	similar

Figure 21. Age standardised rate (/100,000) of illicit drug attributable hospitalisations over time by sex, Shire of Goomalling, 2011-2020



Source: WA Hospital Morbidity Data Collection, Information and System Performance Directorate, DOH WA

Illicit drug-attributable deaths

In 2020, Shire of Goomalling residents had higher drug-attributable hospitalisation rate compared to the WA State average. It is estimated that among male residents, the rate of illicit drug-attributable hospitalisations was 39.5 per 100,000. This is higher compared to the WA State rate. Among female residents, the rate of illicit drug-attributable hospitalisations was 22.1 per 100,000. This is higher compared to the WA State rate. Note that the data is only for those aged 15 years and over.

Figure 22. Age standardised rate (/100,000) of illicit drug-attributable deaths by sex, Shire of Goomalling, 2020

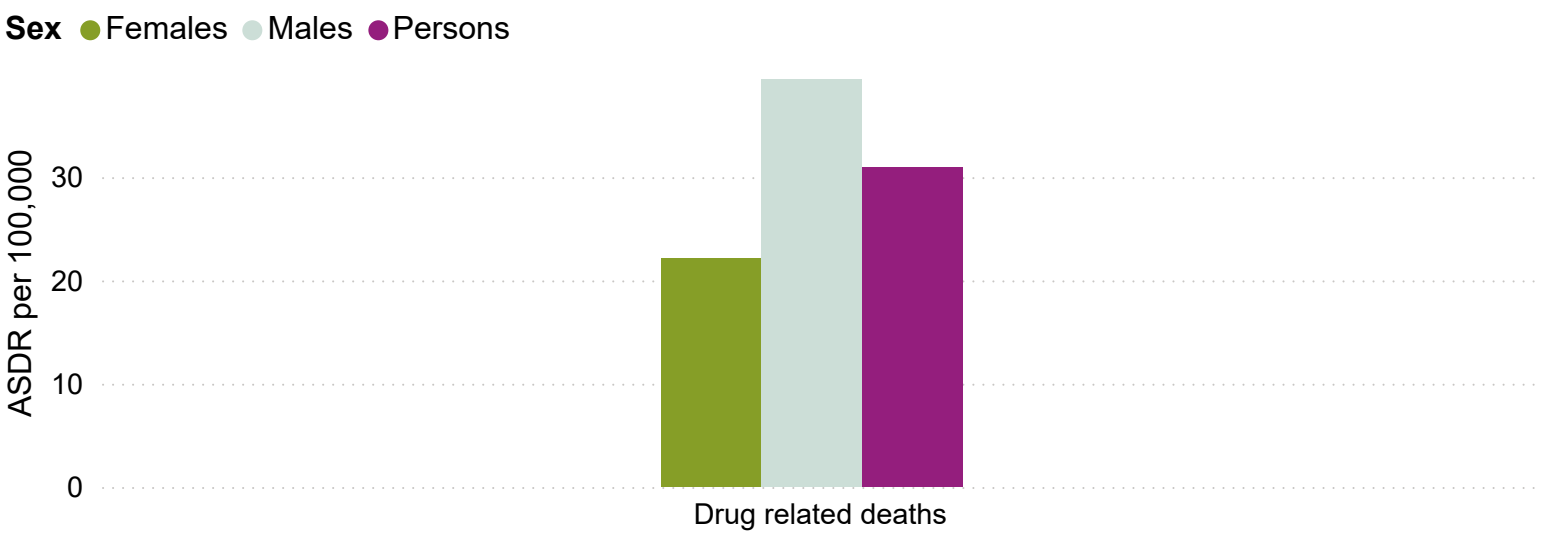
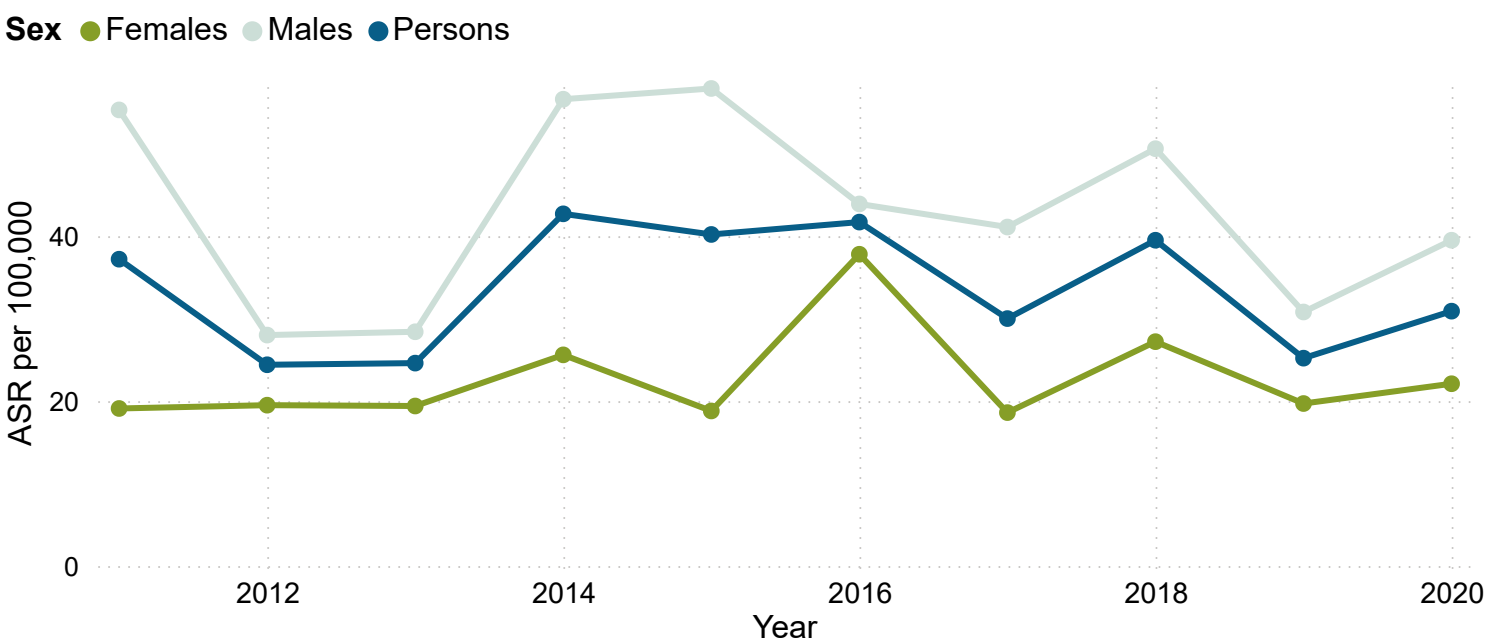


Table 13. Estimated number and age standardised rate (/100,000) of illicit drug-attributable deaths by sex, Shire of Goomalling, 2020

Sex ▲	Estimated number	ASR per 100,000	WA ASR per 100,000	Comparison to WA
Females	0.0	22.1	7.3	higher
Males	0.0	39.5	15.9	higher
Persons	0.0	30.9	11.6	higher

Figure 23. Age standardised rate (/100,000) of illicit drug attributable deaths over time by sex, Shire of Goomalling, 2011-2020



Source: Cause of Death Unit Record File, Australian Co-ordinating Registry, the Registries of Births, Deaths and Marriages, the Coroners, the National Coronial Information System and the Victorian Department of Justice and Community Safety

Mental Health Conditions

People with a mental health condition are at an increased risk of experiencing other disorders including physical disorders and diabetes (AIHW 2017).

In 2020, Shire of Goomalling residents had a similar prevalence of anxiety, a similar prevalence of depression, a similar prevalence of stress, and a lower prevalence of any mental health condition when compared to the WA State prevalence.

A detailed breakdown by sex for each mental health condition can be found in the table below.

Figure 24. Prevalence (%) of mental health conditions by sex, persons aged 16 years and over, Shire of Goomalling, 2020

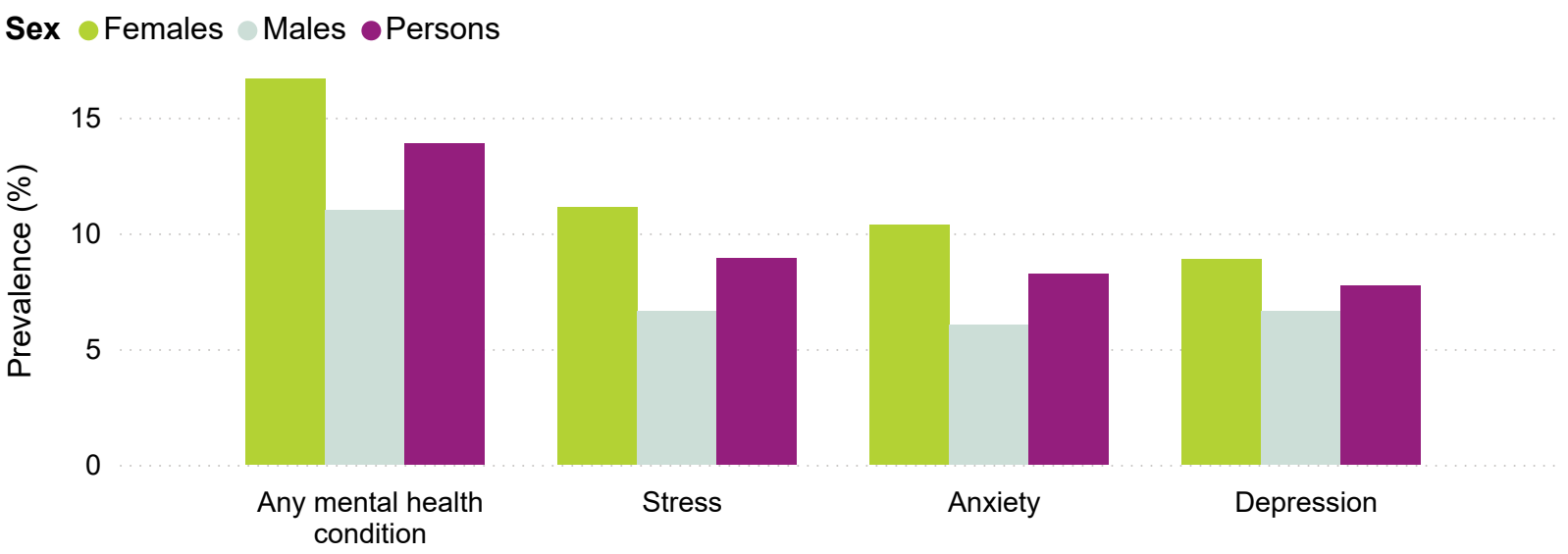
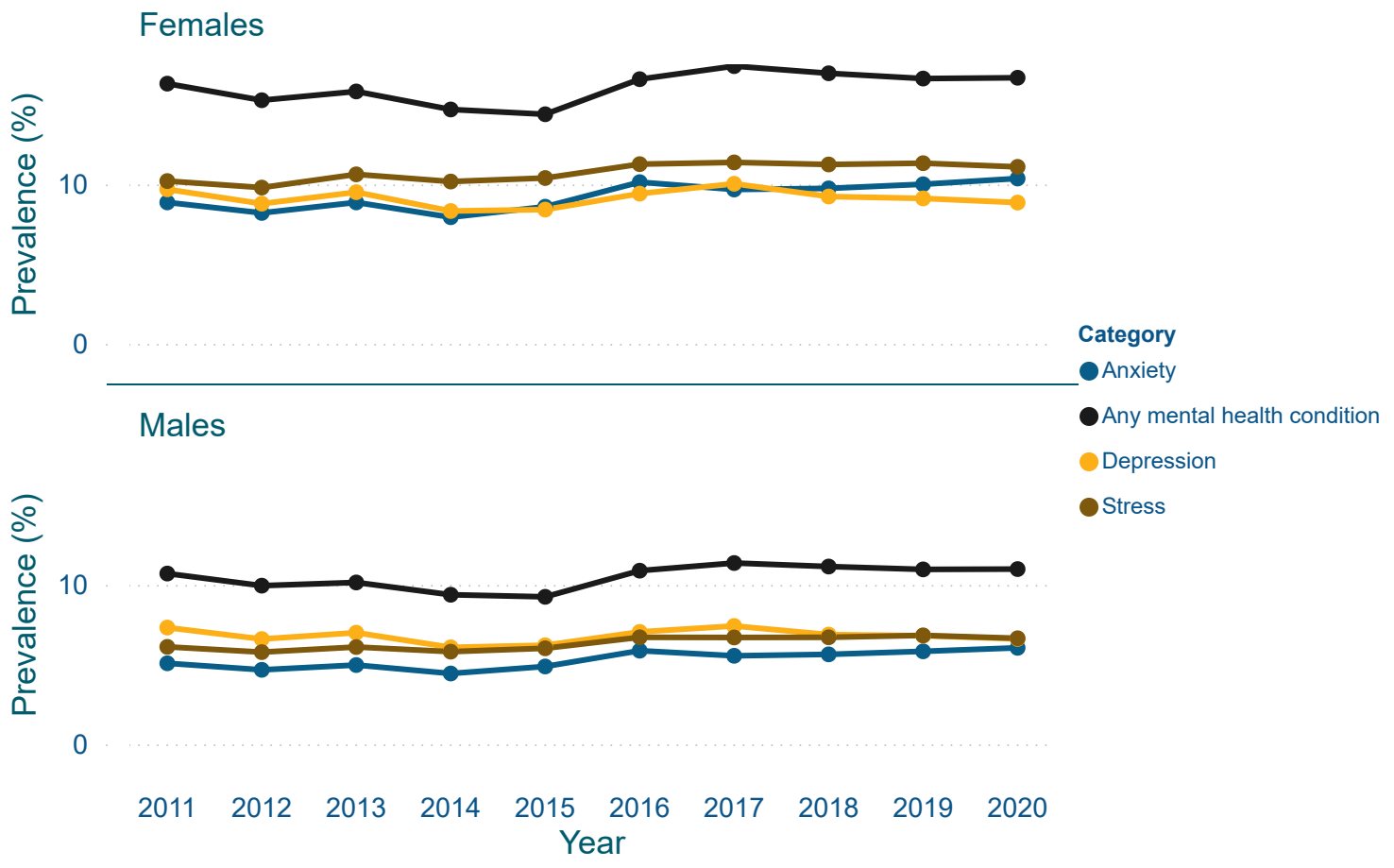


Table 14. Prevalence (%) of mental health conditions by sex, persons aged 16 years and over, Shire of Goomalling, 2020

Category	Prevalence (%)	Estimated number	RSE (%)	WA prevalence (%)	Compared to WA
Anxiety					
Females	10.4	41.0	16.1	11.19	similar
Males	6.1	23.0	17.0	7.21	lower
Persons	8.2	64.0	16.3	9.33	similar
Any mental health condition					
Females	16.7	66.0	13.9	18.72	lower
Males	11.0	42.0	14.9	11.88	similar
Persons	13.9	108.0	14.2	15.53	lower
Depression					
Females	8.9	35.0	16.3	9.17	similar
Males	6.6	25.0	16.8	7.14	similar
Persons	7.8	60.0	16.4	8.22	similar
Stress					
Females	11.1	44.0	15.7	11.31	similar
Males	6.7	25.0	16.6	7.39	similar
Persons	8.9	69.0	15.9	9.47	similar

Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA

Figure 25. Prevalence (%) of mental health conditions over time by sex, persons aged 16 years and over, Shire of Goomalling, 2011-2020



Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA

Injuries

Injury-related hospitalisations

In 2020, accidental falls was the leading cause of injury-related hospitalisations in Shire of Goomalling (1078.5 per 100,000). This rate was similar compared to the WA State rate (1115.1 per 100,000). Among males, accidental falls was the leading cause of injury-related hospitalisations (1189.0 per 100,000). This is higher compared to the WA State rate. Among females, accidental falls was the leading cause of injury-related hospitalisations (965.1 per 100,000). This is lower compared to the WA State rate.

Figure 29. Age standardised rate (/100,000) of injury related hospitalisations by selected injury cause and sex, Shire of Goomalling, 2020

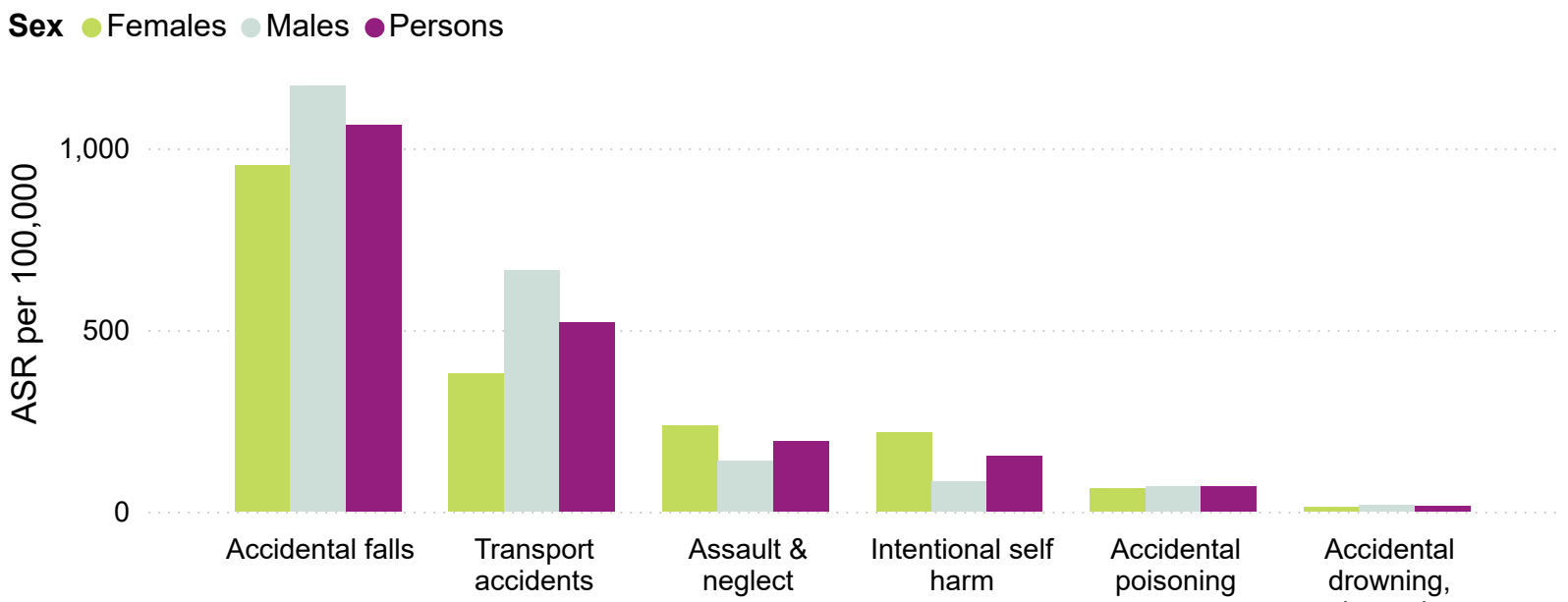
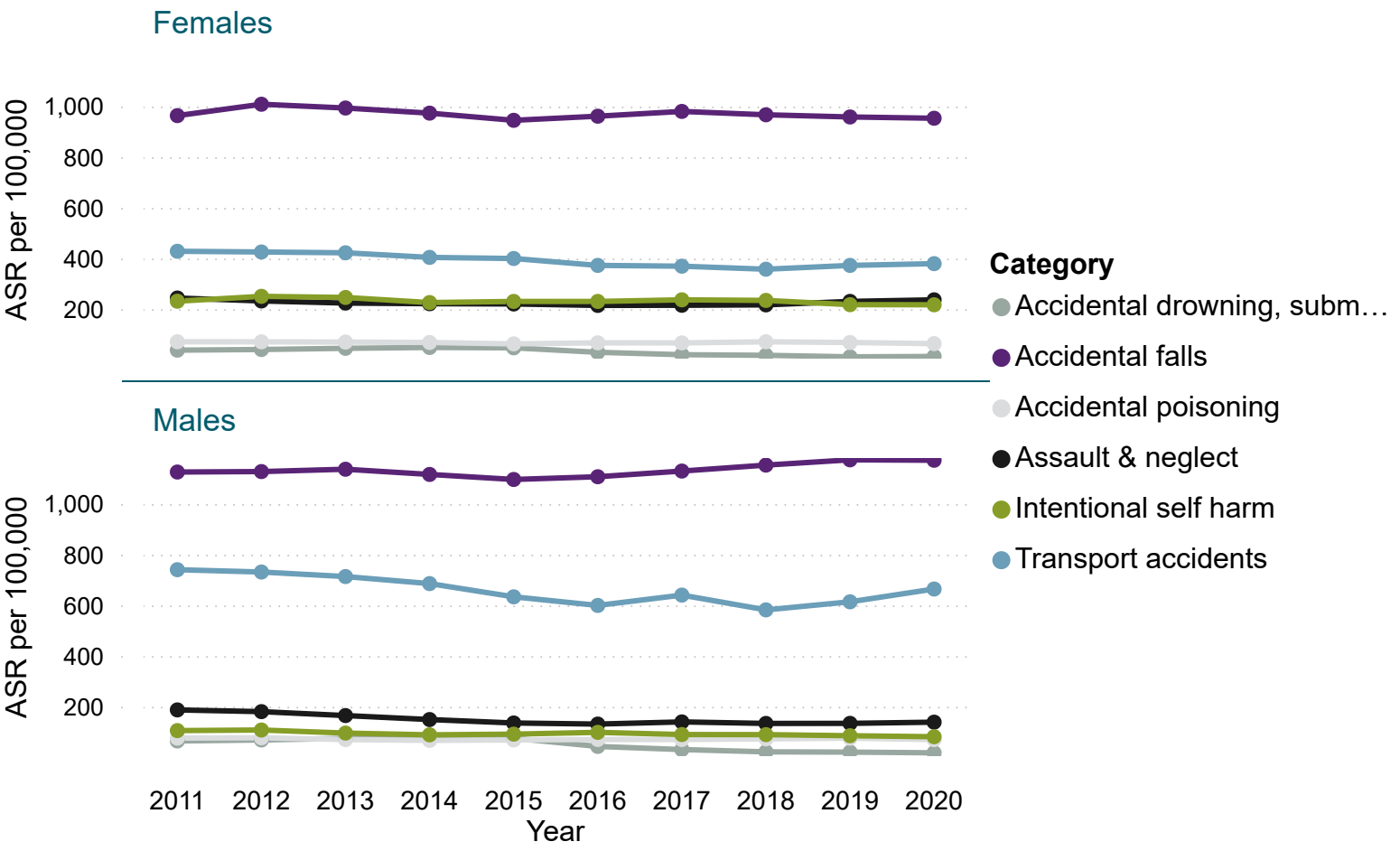


Figure 30. Age standardised rate (/100,000) of injury related hospitalisations over time by sex, Shire of Goomalling, 2011-2020



Source: WA Hospital Morbidity Data Collection, Information and System Performance Directorate, DOH WA

Injury-related hospitalisations

Table 16. Estimated number and age standardised rate (/100,000) of injury-related hospitalisations by selected injury cause and sex, Shire of Goomalling, 2020

Category	Estimated number	ASR per 100,000	WA ASR per 100,000	Comparison to WA
Accidental drowning, submersion, threats to breathing				
Females	0.0	13.5	19.0	lower
Males	0.0	17.9	27.1	lower
Persons	0.0	16.0	23.0	lower
Accidental falls				
Females	7.0	953.7	1,164.3	lower
Males	8.0	1,172.8	1,021.6	higher
Persons	15.0	1,064.5	1,099.2	similar
Accidental poisoning				
Females	0.0	64.0	55.3	similar
Males	0.0	70.2	69.8	similar
Persons	1.0	67.7	62.5	similar
Assault & neglect				
Females	1.0	236.9	135.3	higher
Males	1.0	138.9	164.9	similar
Persons	2.0	193.8	150.1	higher
Intentional self harm				
Females	1.0	217.4	221.6	similar
Males	0.0	81.4	105.6	similar
Persons	1.0	151.6	162.6	similar
Transport accidents				
Females	2.0	379.8	174.0	higher
Males	3.0	664.5	386.1	higher
Persons	5.0	520.5	280.4	higher

Source: WA Hospital Morbidity Data Collection, Information and System Performance Directorate, DOH WA

Injury-related deaths

In 2020, intentional self harm, accidental falls and accidental poisoning/transport accidents were the leading causes of death in the Shire of Goomalling.

Detailed estimated numbers and rates can be found in the figures and table below. For example, in 2020, the death rate due to intentional self harm among males was 34.0 per 100,000. This is higher compared to the WA State male rate. Among females, the rate was 7.0 per 100,000. This is similar compared to the WA State female rate.

Figure 31. Age standardised rate (/100,000) of injury-related deaths by selected injury cause and sex, Shire of Goomalling, 2020

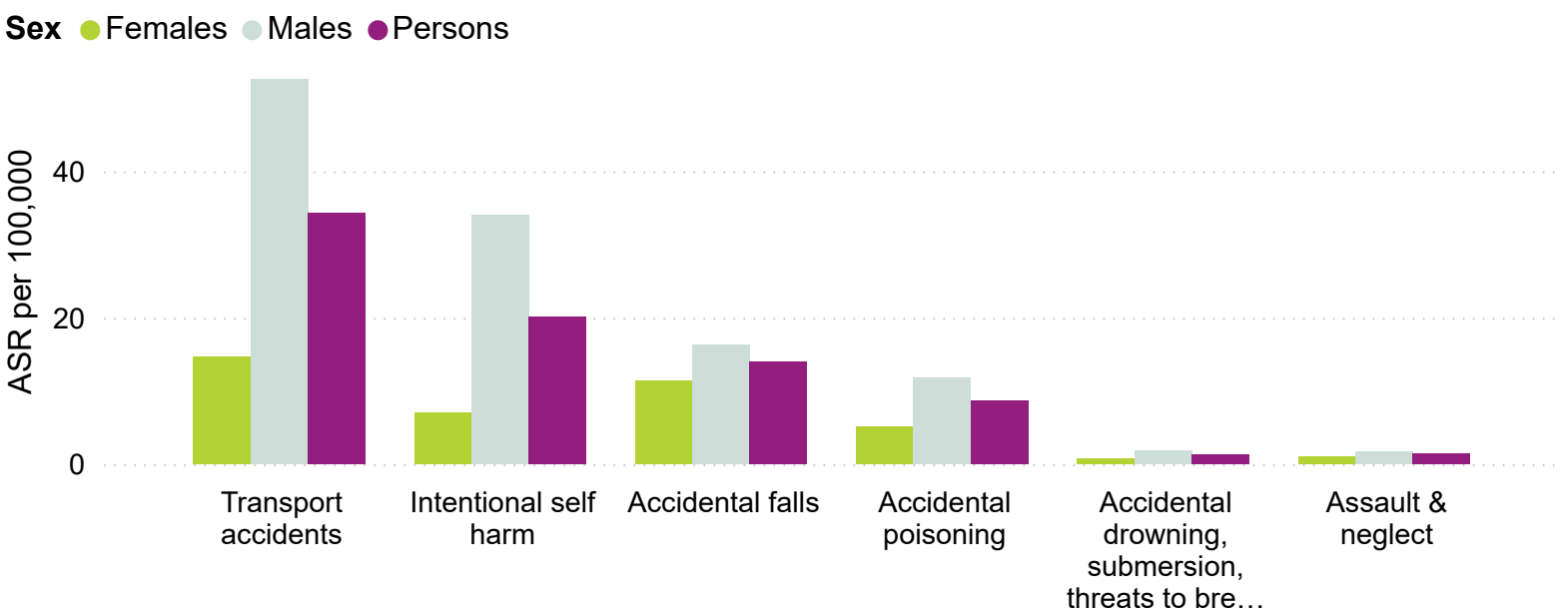
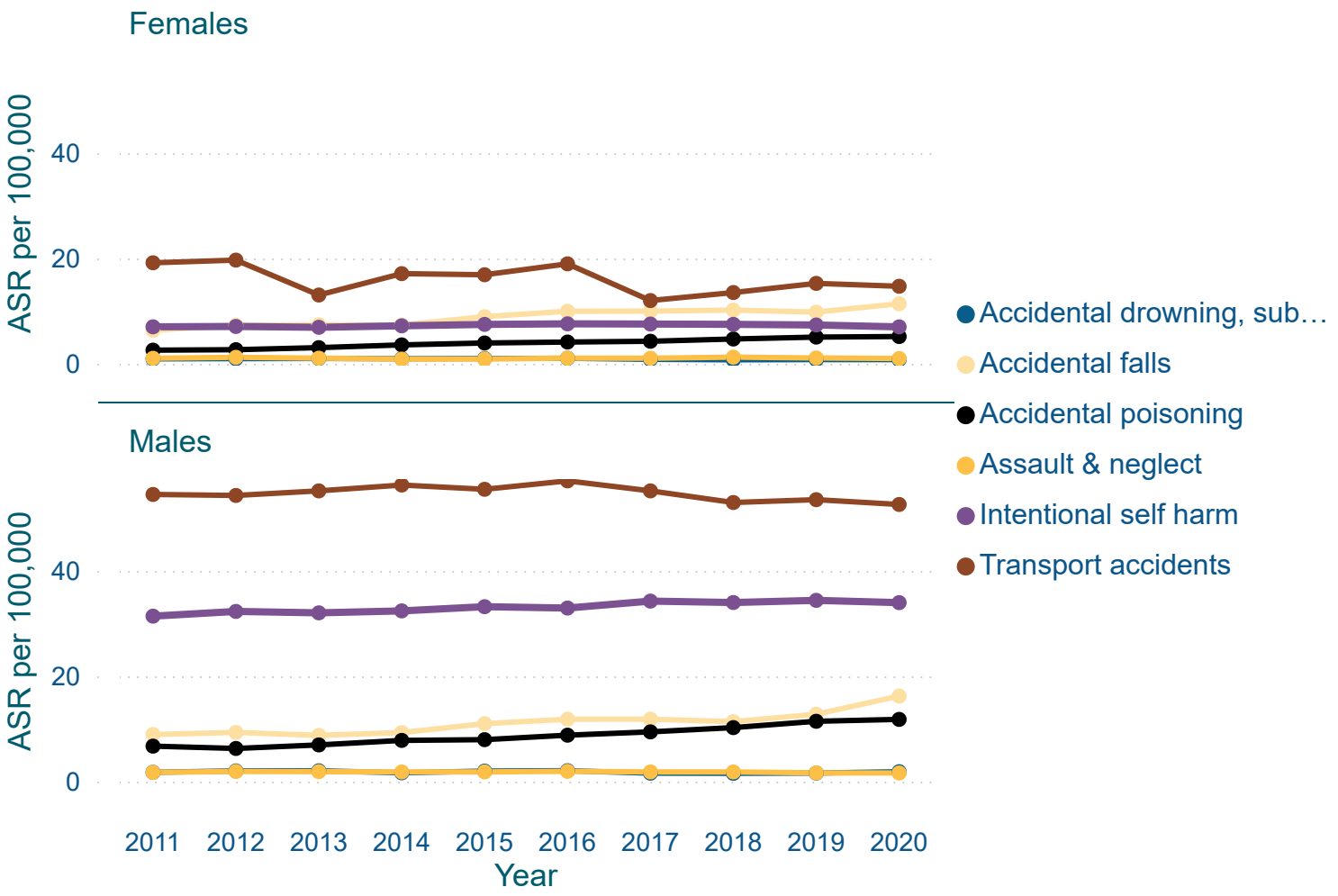


Figure 32. Age standardised rate (/100,000) of injury-related deaths over time by sex, Shire of Goomalling, 2011-2020



Source: Cause of Death Unit Record File, Australian Co-ordinating Registry, the Registries of Births, Deaths and Marriages, the Coroners, the National Coronial Information System and the Victorian Department of Justice and Community Safety

Injury-related deaths

Table 17. Estimated number and age standardised rate (/100,000) of injury-related deaths by selected injury cause and sex, Shire of Goomalling, 2020

Category	Estimated number	ASR per 100,000	WA ASR per 100,000	Comparison to WA
Accidental drowning, submersion, threats to breathing				
Females	0.0	0.8	0.9	similar
Males	0.0	1.9	2.4	similar
Persons	0.0	1.4	1.7	similar
Accidental falls				
Females	0.0	11.4	12.7	similar
Males	0.0	16.3	20.0	similar
Persons	0.0	14.0	15.9	similar
Accidental poisoning				
Females	0.0	5.2	5.7	similar
Males	0.0	11.8	13.6	similar
Persons	0.0	8.6	9.6	similar
Assault & neglect				
Females	0.0	1.0	0.8	similar
Males	0.0	1.7	1.6	similar
Persons	0.0	1.4	1.2	similar
Intentional self harm				
Females	0.0	7.0	6.9	similar
Males	0.0	34.0	22.2	higher
Persons	0.0	20.1	14.5	higher
Transport accidents				
Females	0.0	14.7	3.3	higher
Males	0.0	52.6	10.5	higher
Persons	0.0	34.3	6.9	higher

Source: Cause of Death Unit Record File, Australian Co-ordinating Registry, the Registries of Births, Deaths and Marriages, the Coroners, the National Coronial Information System and the Victorian Department of Justice and Community Safety.

Notifiable infectious diseases

In 2020, sexually transmitted infections and enteric diseases were the two leading causes of notifiable infectious diseases in the Shire of Goomalling.

Detailed estimated numbers and rates can be found in the figures and table below. For example, in 2020, the notifiable rate of sexually transmitted infections among males was 422.2 per 100,000. This is lower compared to the WA State male rate. Among females, the rate was 796.2 per 100,000. This is higher compared to the WA State female rate.

Figure 33. Age standardised rate (/100,000) of notifiable diseases by major disease category and sex, Shire of Goomalling, 2020

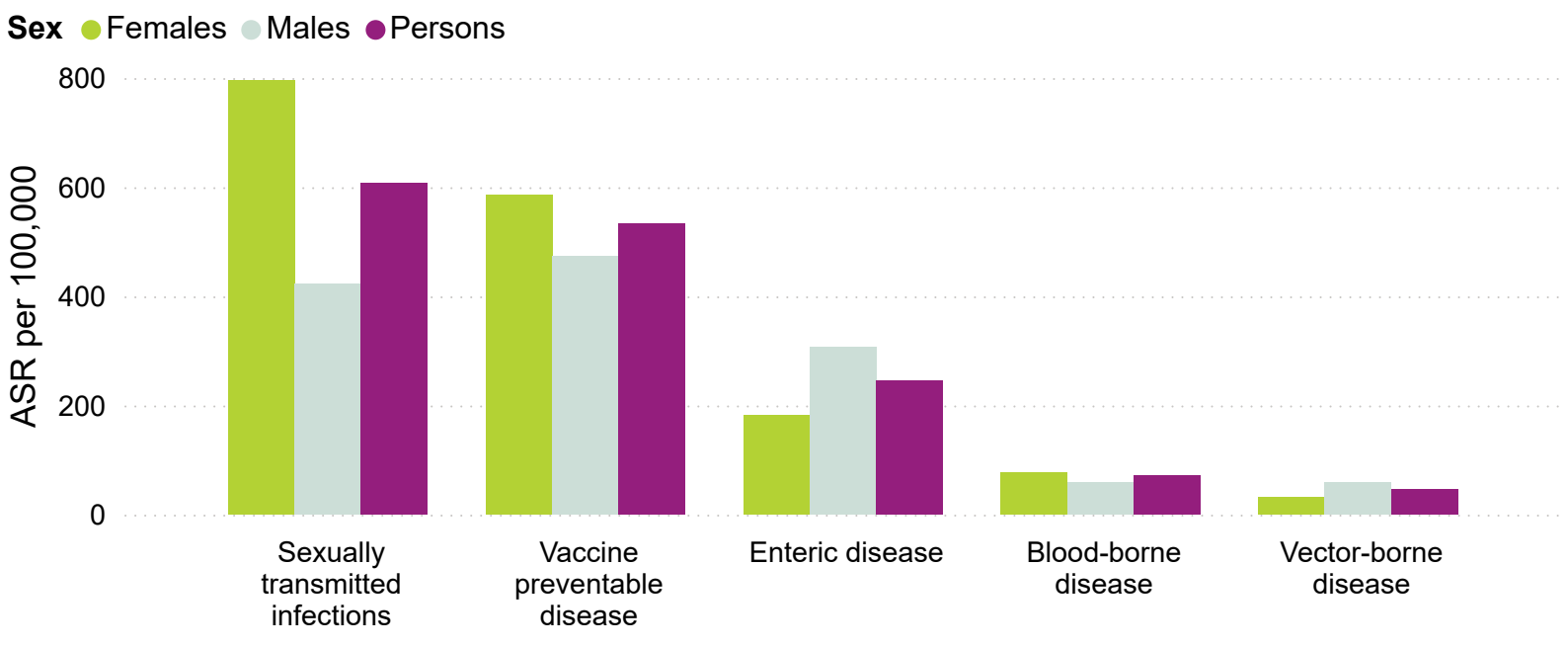
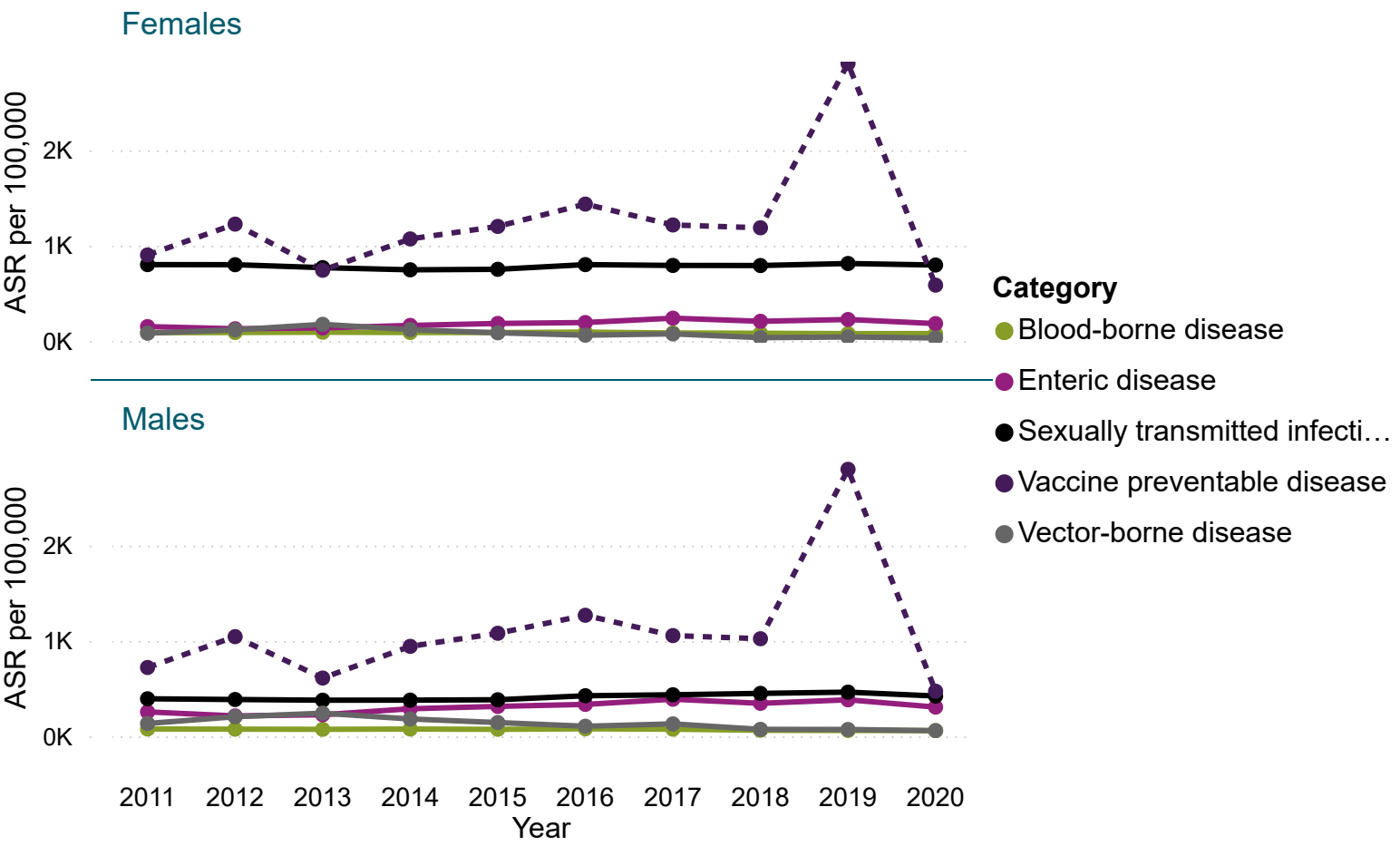


Figure 34. Age standardised rate (/100,000) of notifiable infectious diseases over time by sex, Shire of Goomalling, 2011-2020



Source: WA Notifiable Infectious Disease Database, Communicable Disease Control Directorate, DOH WA

Notifiable infectious diseases

Table 18. Estimated number and age standardised rate (/100,000) of notifiable infectious diseases by major disease category and sex, Shire of Goomalling, 2020

Category	Estimated number	ASR per 100,000	WA ASR per 100,000	Comparison to WA
Blood-borne disease				
Females	0.0	77.1	44.0	higher
Males	0.0	58.9	64.9	similar
Persons	1.0	71.7	54.5	higher
Enteric disease				
Females	1.0	182.0	206.9	similar
Males	1.0	306.3	220.2	higher
Persons	2.0	246.0	213.6	higher
Sexually transmitted infections				
Females	2.0	796.2	648.7	higher
Males	1.0	422.2	578.8	lower
Persons	4.0	607.7	611.6	similar
Vaccine preventable disease				
Females	3.0	585.1	240.7	higher
Males	3.0	472.7	223.3	higher
Persons	6.0	532.7	232.1	higher
Vector-borne disease				
Females	0.0	31.0	23.3	higher
Males	0.0	59.1	24.6	higher
Persons	0.0	45.7	24.0	higher

Source: WA Notifiable Infectious Disease Database, Communicable Disease Control Directorate, DOH WA

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