

# Health and wellbeing of adults in Western Australia 2023

**Epidemiology Directorate** 



#### Copyright

Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism, or review, as permitted under the provisions of the Copyright Act 1968, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.

#### Acknowledgements

Thanks are extended to the people of Western Australia who participate in the Health and Wellbeing Survey. Appreciation is extended to our colleagues and specialists in the field who contribute to the content and integrity of the system.

Sonia El-Zaemey, Candice Patterson and Nang Phoo of the Epidemiology Directorate of the Department of Health, Western Australia authored this report. Tim Landrigan from the Epidemiology Directorate, and staff from the Chronic Disease Prevention Directorate reviewed the report and provided valuable input and advice.

#### Suggested citation

Epidemiology Directorate, 2025. Health and Wellbeing of Adults in Western Australia 2023. Department of Health, Western Australia

### **Table of Contents**

E:	kecutive summary	Х
1.	Introduction and methodology	2
	1.1 Introduction	2
	1.2 Changes to the availability of trend data from 2002 onwards	3
	1.3 Methodology	3
	1.3.1 Sampling and mode of administration	3
	1.3.2 Weighting and analysis of data	4
	1.3.3 Mode differences	5
	1.3.4 Content review	5
	1.3.5 Survey response	5
	1.4 How estimates are reported	7
	1.4.1 Percentage and prevalence	7
	1.4.2 Confidence intervals and Statistical significance	7
	1.5 Using this report	8
2.	Demographics	10
3.	General health	15
	3.1 Self-reported health status	16
	3.2 Disability	18
4.	Chronic health conditions	23

4.1 Arthritis and osteoporosis	25
4.2 Heart disease and stroke	27
4.3 Skin cancer and other cancer	29
4.4 Diabetes	31
4.5 Injury	33
4.6 Asthma	35
4.7 Respiratory conditions other than asthma	38
4.8 Mental health	40
5. Lifestyle behaviours	45
5.1 Tobacco and e-cigarette use	48
5.1.1 Tobacco smoking	48
5.1.2 E-cigarette use	54
5.2 Alcohol	59
5.2.1 Alcohol consumption based on the NHMRC 2009 guidelines	60
5.2.2 Alcohol consumption based on the NHMRC 2020 guidelines	63
5.3 Nutrition	65
5.3.1 Fruit and Vegetables	65
5.3.2 Milk	70
5.3.3 Food security	71
5.3.4 Impact of teeth/dentures on dietary intake	72
5.4 Discretionary foods	73
5.4.1 Fast food	73
5.4.2 Fried hot potato products	75

5.4.3 Sweet baked snacks	77
5.4.4 Salty snacks	79
5.4.5 Sugar-sweetened soft drinks and energy drinks	81
5.4.6 Processed meats	83
5.5 Physical activity and sedentary behaviour	85
5.5.1 Physical activity	85
5.5.2 Sedentary recreational screen time	90
5.6 Sleep	92
5.7 Illicit drug use	94
6. Biomedical risk factors	96
6.1 Cholesterol	97
6.2 Blood pressure	100
6.3 Body weight	103
7. Mental Health	108
7.1 Psychological distress	108
7.2 Major life events	111
7.3 Lack of control	113
7.4 Suicide ideation	117
7.5 Social support	119
8. Health service utilisation	122
8.1 Health services	123
9. Social chracteristics	129

### List of tables

Table 1: Demographic characteristics used in the raked weighting	4
Table 2: Demographic characteristics, 16 years & over, HWSS 2023	11
Table 3: Socioeconomic characteristics, 16 years & over, HWSS 2023	12
Table 4: Self-reported health status, 16 years & over, HWSS 2023	16
Table 5: Rating of the impact of disability on the respondents themselves and their family, 16 years & over, HWSS 2023	20
Table 6: Prevalence of arthritis and osteoporosis, 16 years & over, HWSS 2023	25
Table 7: Prevalence of heart disease and stroke, 16 years & over, HWSS 2023	27
Table 8: Prevalence of skin cancer and other cancer, 16 years & over, HWSS 2023	29
Table 9: Prevalence of diabetes and type 2 diabetes, 16 years & over, HWSS 2023	31
Table 10: Prevalence of injuries and falls in the past 12 months, 16 years & over, HWSS 2023	33
Table 11: Prevalence of asthma and asthma action plan, 16 years & over, HWSS 2023	35
Table 12: Prevalence of asthma interfering with daily activities in the last 4 weeks, 16 years & over, HWSS 2023	37
Table 13: Prevalence of respiratory conditions other than asthma, 16 years & over, HWSS 2023	38
Table 14: Prevalence of mental health conditions, 16 years & over, HWSS 2023	40
Table 15: Current mental health status, 16 years & over, HWSS 2023	42
Table 16: Current smoking status, 18 years & over, HWSS 2023	48
Table 17: Lifetime smoking status, 18 years & over, HWSS 2023	50
Table 18: Smoking in the home, 18 years & over, HWSS 2023	53
Table 19: Prevalence of adults who have (ever) tried an e-cigarette, 18 years & over, HWSS, 2023	54
Table 20: Prevalence of adults who tried an e-cigarette in the last 12 months of those who had ever tried an e-cigarette, 18 years	
& over, HWSS, 2023	56
Table 21: Prevalence of adults who are current e-cigarette users,18 years and over, HWSS, 2023	57
Table 22: Prevalence of current e-cigarette use among current smokers, 18 years & over, HWSS 2023	58
Table 23: Risk of long-term alcohol related harm, NHMRC 2009 guidelines, 16 years & over, HWSS 2023	60
Table 24: Risk of short-term alcohol related harm, NHMRC 2009 guidelines, 16 years & over, HWSS 2023	61
Table 25: Drinking at levels that put people at risk of harm from alcohol-related disease or injury, NHMRC 2020 guidelines,	
16 years & over, HWSS 2023	63

Table 26: NHMRC Australian Dietary Guidelines for fruit and vegetable daily consumption guidelines and HWSS reporting	
definitions, 16 years & over	65
Table 27: Serves of fruit consumed daily, 16 years & over, HWSS 2023	66
Table 28: Serves of vegetables consumed daily, 16 years & over, HWSS 2023	67
Table 29: Prevalence of meeting fruit and vegetable consumption guidelines, 16 years & over, HWSS 2023	68
Table 30: Type of milk consumed, 16 years & over, HWSS 2023	70
Table 31: Ran out of food and could not afford to buy more, 16 years & over, HWSS 2023	71
Table 32: Impact of teeth/dentures on dietary intake, 65 years & over, HWSS 2023	72
Table 33: Meals from fast food outlets per week, 16 years & over, HWSS 2023	73
Table 34: Hot chips, french-fries, wedges, hash browns or fried potatoes eaten per week, 16 years & over, HWSS 2023	75
Table 35: Sweet biscuits, cakes, doughnuts, muffins, pastries or muesli bars eaten per week, 16 years & over, HWSS 2023	77
Table 36: Salty snacks eaten per week, 16 years & over, HWSS 2023	79
Table 37: Drinking sugar-sweetened soft drinks or energy drinks per week, 16 years & over, HWSS 2023	81
Table 38: Processed meats eaten per week, 16 years & over, HWSS 2023	83
Table 39: Self-reported level of physical activity, 16 years & over, HWSS 2023	85
Table 40: How usually spend day, 16 years & over, HWSS 2023	86
Table 41: Physical activity level, based on the 2014 Australian Physical Activity and Sedentary Behaviour guidelines (150 minutes	
or more per week), 18 years & over, HWSS 2023	88
Table 42: Time spent watching TV/DVDs or using a computer/smartphone/tablet device per week, 16 years & over, HWSS 2023	90
Table 43: Prevalence of adults sleeping the recommended number of hours on a usual night, 16 years & over, HWSS 2023	92
Table 44: Use of illicit drugs in the last 12 months for non-medical purposes, 16 years & over, HWSS 2023	94
Table 45: Prevalence of adults with high cholesterol levels, 16 years & over, HWSS 2023	97
Table 46: Prevalence of population by when cholesterol level was last tested, 16 years & over, HWSS 2023	99
Table 47: Prevalence of adults with high blood pressure, 16 years & over, HWSS 2023	100
Table 48: Prevalence of population by when blood pressure was last tested, 16 years & over, HWSS 2023	102
Table 49: Prevalence by Body Mass Index categories, 16 years & over, HWSS 2023	103
Table 50: Prevalence of self-perception of body weight, by BMI classification, 16 years & over, HWSS 2023	105
Table 51: Prevalence of intentions to change weight, by BMI classification, 16 years & over, HWSS 2023	106
Table 52: Psychological distress as measured by Kessler Psychological Distress Scale-10, 16 years & over, HWSS 2023	109
Table 53: Prevalence by major life events experienced, 16 years & over, HWSS 2023	112
Table 54: Lack of control over life in general during past four weeks, 16 years & over, HWSS 2023	113
Table 55: Lack of control over personal life during past four weeks, 16 years & over, HWSS 2023	114
Table 56: Lack of control over health during past four weeks, 16 years & over, HWSS 2023	115
Table 57: Often or always perceive a lack of control, 16 years & over, HWSS 2023	116

Table 58: Suicide thoughts over past 12 months, 16 years & over, HWSS 2023	117
Table 59: Friends/family suicide attempts over past 12 months, 16 years & over, HWSS 2023	118
Table 60: Number of groups/associations belonging to, 16 years & over, HWSS 2023	119
Table 61: Health service utilisation in the past 12 months, 16 years & over, HWSS 2023	124
Table 62: Mean visits to health services in the past 12 months, 16 years & over, HWSS 2023	126
Table 63: Mean visits to health services in the past 12 months of those who attended the service, 16 years & over, HWSS 2023	127
Table 64: Private health insurance status, 16 years & over, HWSS 2023	130

## List of figures

Figure 1: Flowchart of response rates to the HWSS survey, 2023	6
Figure 2: Prevalence of self-reported health status by health regions in WA, 16 years & over, HWSS 2023	17
Figure 3: Prevalence of disability, long-term illness or pain within the family that impacts on them personally or on their family, 16 years & over, HWSS 2023	18
Figure 4: Prevalence of disability, long-term illness or pain within the family that puts pressure on them personally or on their family by health regions in WA, 16 years & over, HWSS 2023	19
Figure 5: Rating of the impact of disability on the respondents themselves and their family by health regions in WA, 16 years & over, HWSS 2023	21
Figure 6: Prevalence of arthritis and osteoporosis by health regions in WA, 16 years & over, HWSS 2023	26
Figure 7: Prevalence of heart disease and stroke by health regions in WA, 16 years & over, HWSS 2023	28
Figure 8: Prevalence of skin cancer and other cancer by health regions in WA, 16 years & over, HWSS 2023	30
Figure 9: Prevalence of all diabetes and type 2 diabetes by health regions in WA, 16 years & over, HWSS 2023	32
Figure 10: Prevalence of injuries and falls in the past 12 months by health regions in WA, 16 years & over, HWSS 2023	34
Figure 11: Prevalence of lifetime asthma and current asthma by health regions in WA, 16 years & over, HWSS 2023	36
Figure 12: Prevalence of respiratory conditions other than asthma by health regions in WA, 16 years & over, HWSS 2023	39
Figure 13: Prevalence of anxiety, depression, and stress-related conditions by health regions in WA, 16 years & over,	
HWSS 2023	41
Figure 14: Prevalence of current mental health status by health regions in WA, 16 years & over, HWSS 2023	43
Figure 15: Prevalence of lifetime smoking status by health regions in WA, 18 years & over, HWSS 2023	52
Figure 16: Prevalence of adults who ever tried an e-cigarette by health regions in WA, 18 years & over, HWSS 2023	55
Figure 17: Prevalence of high-risk alcohol consumption for long-term and short-term harm by health regions in WA, NHMRC 2009 guidelines, 16 years & over, HWSS 2023	62
Figure 18: Prevalence of consuming alcohol at levels that put them at risk of harm from alcohol related disease or injury by health regions in WA, NHMRC 2020 guidelines, 16 years & over, HWSS 2023	64
Figure 19: Prevalence of meeting fruit and vegetable consumption guidelines by health regions in WA, 16 years & over, HWSS 2023	69
Figure 20: Prevalence of eating meals from fast food outlets at least once a week by health regions in WA, 16 years & over,	
HWSS 2023	74

Figure 21: Prevalence of eating fried hot potato products at least once a week by health regions in WA, 16 years & over, HWSS	
2023	76
Figure 22: Prevalence of eating sweet baked snacks at least once a week by health regions in WA, 16 years & over, HWSS 2023	78
Figure 23: Prevalence of eating salty snacks at least once a week by health regions in WA, 16 years & over, HWSS 2023	80
Figure 24: Prevalence of drinking sugar-sweetened soft drinks or energy drinks at least once a week by health regions in WA, 16	00
years & over, HWSS 2023	82
Figure 25: Prevalence of eating processed meats at least once a week by health regions in WA, 16 years & over, HWSS 2023 Figure 26: Physical activity levels based on the 2014 Australian Physical Activity and Sedentary Behaviour guidelines (150	84
minutes or more per week) by health regions in WA, 18 years & over, HWSS 2023	89
Figure 27: Prevalence of adults who spend 21 hours or more per week in screen-based sedentary leisure time activities by health	
regions in WA, 16 years & over, HWSS 2023	91
Figure 28: Prevalence of adults sleeping the recommended number of hours on a usual night by health regions in WA, 16 years &	4
over, HWSS 2023	93
Figure 29: Prevalence of adults with high cholesterol levels by health regions in WA, 16 years & over, HWSS 2023	98
Figure 30: Prevalence of adults with high blood pressure by health regions in WA, 16 years & over, HWSS 2023	101
Figure 31: Prevalence of adults by BMI categories by health regions in WA, 16 years & over, HWSS 2023	104
Figure 32: Prevalence of adults with high or very high psychological distress by health regions in WA, 16 years & over, HWSS	
2023	110
Figure 33: Prevalence of adults who reported belonging to at least one group/association by health regions in WA, 16 years &	
over, HWSS 2023	120
Figure 34: Prevalence of adults attending a primary health care service in the past 12 months by health regions in WA, 16 years &	x.
over, HWSS 2023	125
Figure 35: Prevalence of having at least one type of private health insurance by health regions in WA, 16 years & over,	
HWSS 2023	131

#### **Executive summary**

The Health and Wellbeing Surveillance System is a continuous data collection initiated in 2002 to monitor the health status of the population of Western Australia. In 2023, 11,307 adults aged 16 years and over completed either a computer assisted telephone interview or an online survey between February and December, with an average participation rate of approximately 45.3 per cent. The sample was randomly selected and then weighted to reflect the Western Australian adult population.

This report describes the findings from the 2023 Health and Wellbeing Surveillance System and provides the health sector and the public with important information about various aspects of the health and wellbeing of Western Australian adults at the population level.

Key estimates from the report include:

#### General health:

Approximately half (50.2%) of adults self-reported their health status as excellent or very good.

#### Chronic health conditions:

- One in ten (10.3%) adults reported currently having asthma.
- More than one in four (26.4%) adults have suffered an injury in the past 12 months that required treatment from a health professional.
- More than one in five (22.5%) adults have been told by a doctor that they have a mental health condition in the past 12 months.

#### Lifestyle and biomedical risk factors:

- One in eight (12.5%) adults aged 18 years and over were current smokers.
- One in four (24.3%) adults aged 18 years and over had ever tried an e-cigarette.
- More than one in three (35.5%) adults reported drinking at levels that put them at risk of harm from alcohol related disease or injury.
   Males were almost twice as likely as females to report drinking at levels that put them at risk of harm from alcohol related disease or injury (46.4% compared with 25.5%).
- More than one in three (36.3%) adults met the guidelines for recommended daily intake of fruit, while only one in eighteen (5.1%) adults met the guidelines for recommended daily intake of vegetables.
- One in fifteen (6.6%) adults reported running out of food and not being able to afford to buy more in the past 12 months.

- More than one in three (37.2%) of adults reported eating fast food meals at least once a week.
- Two thirds (66.2%) adults engaged in at least 150 minutes of moderate physical activity per week.
- One in two (50.6%) adults usually spend most of their day sitting.
- More than one in three (35.1%) adults reported sleeping less than the recommended number of hours on a usual night.
- One in eight (11.8%) adults reported using illicit drugs.
- More than one in three (37.7%) adults have a body mass index (BMI) that is categorised as overweight, with more than one in three (38.2%) adults categorised as obese.
- One in four (25.0%) adults reported having current high cholesterol and more than one in five (21.4%) adults reported having current high blood pressure.

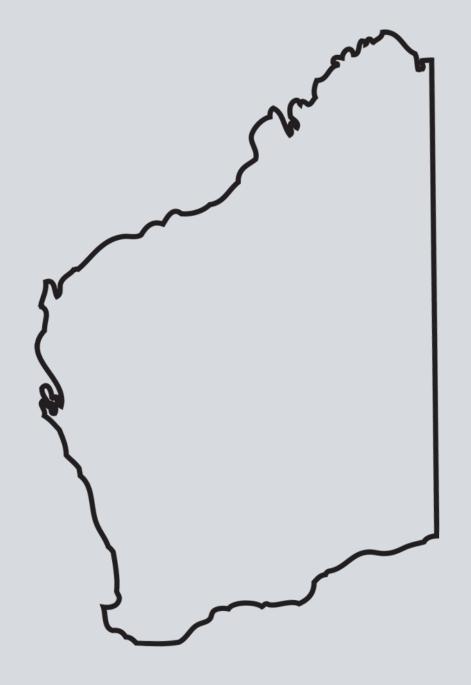
#### Mental health:

- More than one in six (18.2%) adults experienced high or very high levels of psychological distress.
- One in twelve (8.2%) adults had seriously thought about ending their own life in the past 12 months.
- More than half (57.0%) of adults reported belonging to at least one social group or association.

#### Health service utilisation:

Nine in ten (89.5%) adults used primary health services within the past 12 months. Only one in six (17.0%) reported using mental health services.

## INTRODUCTION AND METHODOLOGY



#### 1. Introduction and methodology

#### 1.1 Introduction

The WA Health and Wellbeing Surveillance System (HWSS) is a continuous data collection system developed to monitor the health and wellbeing of Western Australians. The HWSS began in March 2002 and is run on a continual basis, where thousands of people throughout Western Australia (WA) are interviewed each year. This report presents the information on the health and wellbeing of 11,307 adults aged 16 years and over during 2023.

Information from the survey is used to monitor the health status of Western Australian adults, to inform health education programs, to evaluate interventions and programs, to inform health research, to support health policy development, to identify and monitor emerging trends and to support health service planning and development. Respondents are asked questions on a range of health and wellbeing topics, including chronic health conditions, lifestyle and biomedical risk factors, health service utilisation, mental health, and sociodemographics.

The questions included in the HWSS are selected either to provide information about state or national indicators of health and wellbeing, or to provide information about areas of health, lifestyle and demography that are not available elsewhere and are necessary to understand the dynamics of healthy behaviours and outcomes. A copy of the questionnaire is available on the WA Department of Health website:

https://ww2.health.wa.gov.au/Reports-and-publications/Population-surveys

An important feature of this surveillance system is that it is population based, meaning that it is designed to examine health status at the population level. Although major socio-demographic group estimates are possible, it is not the purpose of the system to investigate smaller subgroups. Therefore, the information provided in this report is representative of Western Australian adults by age and sex but is unlikely to be reliably representative of small or specific groups within the population, such as Aboriginal people, culturally and linguistically diverse (CALD) populations, people who are experiencing homelessness or those without telephones/internet access.

The HWSS has been approved by the WA Department of Health's Human Research Ethics Committee (EC00422).

#### 1.2 Changes to the availability of trend data from 2002 onwards

Starting in 2021, trend data are no longer included in HWSS annual reports, due to the large amount of information that would need to be added. Trend data remain an important feature of the HWSS and will be made publicly available as an online resource on the HWSS webpage.

https://www.health.wa.gov.au/Improving-WA-Health/Health-and-Wellbeing-Surveillance-System

#### 1.3 Methodology

#### 1.3.1 Sampling and mode of administration

Four sample frames and two modes were used for contacting respondents in 2023. An extract from Sensis Consumer Database was linked with the WA Electoral Roll by the WA Health Data Linkage System to append phone numbers. A second extract from Thryv¹ was used to top up the numbers required by WA health region for representative sampling. Linkage with the WA Electoral Roll for this second extract was not performed. A third sample extract was obtained from the WA Electoral Roll, but only used for two months due to a low response rate. A fourth sample frame was used from August to December from SamplePages. All lists were used to contact a sample of potential respondents by letter each month. Respondents were invited to respond to the survey online with a link and unique key during a 10-day period, after which non-respondents were followed up via telephone call (CATI).

All data were collected from February to December 2023 by the Edith Cowan University Survey Research Centre, an ISO accredited social research agency.

\_

<sup>&</sup>lt;sup>1</sup> In 2021, Sensis was purchased by Thryv.

#### 1.3.2 Weighting and analysis of data

Surveys such as the HWSS are designed to provide information at a population level, e.g., to inform what proportion of the population have a particular characteristic. However, most surveys will only collect information from a sample of the target population. These raw data are then weighted to represent the population from which it was drawn, with each person given a weight which can be thought of as the number of people they represent.

In 2023, 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 aged 16 years and over, based on the Australian Bureau of Statistics 2021 Census usual place of residence (Table 1). This weighting method is known as raked weighting and allows the derivation of precise weights, by adjusting for non-response bias and respondent biases better than weights produced by design and post-stratification weighting methods<sup>2</sup>. Weights were calculated using the RAKE module in SPSS 24 and were trimmed at an upper limit. The 2023 data were raked using the WA estimated resident population for 2022 and the 2021 Census proportions for WA as listed below.3

Table 1: Demographic characteristics used in the raked weighting

Characteristic	Categories
Sex	Female
	Male
Age	• 16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+ years
Location	Metro
	Kimberley and Pilbara
	Rest of State
Country of Birth	Born in Australia
	Born in other country
Marital Status	Married or living with partner
	<ul> <li>Other (widowed, divorced, separated, never married)</li> </ul>
Employment Status	Employed (full time, part time)
	<ul> <li>Not Employed (unemployed, retired, home duties, student, unable to work)</li> </ul>
Education Status	Bachelor's degree or higher
	<ul> <li>Other (none to some high school, trade, certificate, diploma)</li> </ul>

<sup>&</sup>lt;sup>2</sup> Dal Grande et al. 2015. Health estimates using survey raked-weighting techniques in an Australian population health surveillance system. *American Journal of* Epidemiology. 182(6):544-556.

<sup>&</sup>lt;sup>3</sup> Dwelling status and household composition were not included in the raking process due to the sparsity of data across rural and remote areas of Western Australia that created extremely large weights for only a few respondents.

Data were then analysed in SAS EG 8.3. This raked weighting method differs from the design and post-stratification weighting method previously reported for HWSS estimates and so direct comparisons with previous HWSS reports using post stratification weights (2002-2020) are not recommended.

#### 1.3.3 Mode differences

We have not made any adjustment for the effects of the different data collections modes, such as online and CATI. Applying corrections for mode differences unilaterally would also impact on characteristics with no mode effect. Additionally, specific adjustments for mode for individual topics would add considerable burden due to the statistical processing, analysis and interpretation of the data required.<sup>4</sup>

#### 1.3.4 Content review

After an extensive consultation and review process in 2023, several topics were selected to be removed from data collection from 2024 onwards. Removal of these questions will allow for the introduction of alternative topics of public health concern.

#### **Topics or questions concluding with 2023 reporting:**

- Cancer (can be obtained from cancer registry)
- Perceived lack of control
- Major life events

#### Topics or questions to be introduced for 2024 reporting:

- Gender
- Non-melanoma skin cancer
- Rheumatoid arthritis
- Warwick Edinburgh Mental Wellbeing Scale (7 item)
- Non -fatal Intentional self-harm

#### 1.3.5 Survey response

A total of 45,896 households were contacted of which 52.1% were eligible, 16.7% were ineligible, and 31.2% had unknown eligibility. Of 23,916 eligible households, 11,889 were interviewed or completed the online survey. The full breakdown of the response rates for the survey is presented in **Figure 1**. The data presented in this report are for 11,307 Western Australian adults aged 16 years and over.

<sup>&</sup>lt;sup>4</sup> Olsen K et al. 2021. Transitions from telephone surveys to self-administered and mixed-mode surveys: AAPOR Task Force Report. *Journal of Survey Statistics and Methodology* 9(3):381–411.

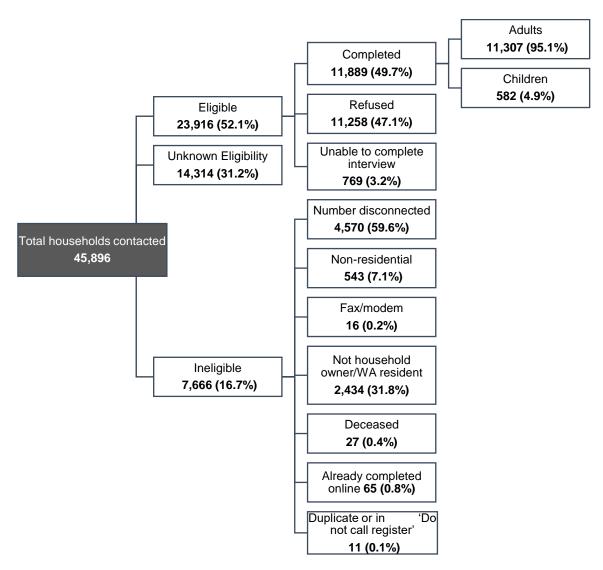


Figure 1: Flowchart of response rates to the HWSS survey, 2023

#### 1.4 How estimates are reported

#### 1.4.1 Percentage and prevalence

The information in this report is presented either as a percentage of the population who have a particular risk factor or demographic characteristic, or as the prevalence of a particular health condition within the adult population. Prevalence refers to the number or proportion of individuals in a community who exhibit a given condition or characteristic and is usually expressed as a percentage. Prevalence is distinct from incidence, which is a measure of the number of new cases of a condition or characteristic. Prevalence is concerned with all individuals with a given condition or characteristic regardless of when it began. Incidence on the other hand refers only to new cases of a condition or characteristic during a specified time interval. Surveys generally do not collect or report on incidence of disease.

There are three main types of prevalence that are typically reported.

- Lifetime prevalence represents the proportion of the population that have ever exhibited a given condition or characteristic.
- Period prevalence represents the proportion of the population who have exhibited a condition or characteristic within a specified time, for example 12 months.
- Point prevalence represents the proportion of the population who exhibited a condition or characteristic at the time of the survey. In this report, most of the prevalence estimates are presented as period prevalence. In some cases, such as with asthma, lifetime and point prevalence are reported. This is because a person may have had asthma at some point in their life but not have it currently.

#### 1.4.2 Confidence intervals and Statistical significance

Survey results are estimates of 'true' population values and will always contain some error because they are based on samples and not the entire population. Therefore, each table presents both a prevalence figure for a given condition or characteristic as well as a 95 per cent confidence interval for that estimate. The 95 per cent confidence interval is the range within which the true estimate would lie 95 out of 100 times. The wider the confidence interval is around an estimate, the less precise the estimate is, and the more caution that should be applied with using it.

One way to compare two prevalence estimates is to assess whether the difference between them is statistically significant. Statistical significance is a statement about the likelihood of a finding being due to chance. Confidence intervals can be used to determine

statistical significance. If the confidence intervals do not overlap, then the estimates are considered significantly different. When the confidence intervals of the estimates do overlap, the estimates are deemed similar; however, this should be considered a guide only and a formal test of statistical significance would be required to arrive at statistically credible conclusion.

Along with helping to determine statistically significant differences, confidence intervals can also be used as a measure of the level of stability around an estimate. The level of stability around an estimate can also 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.

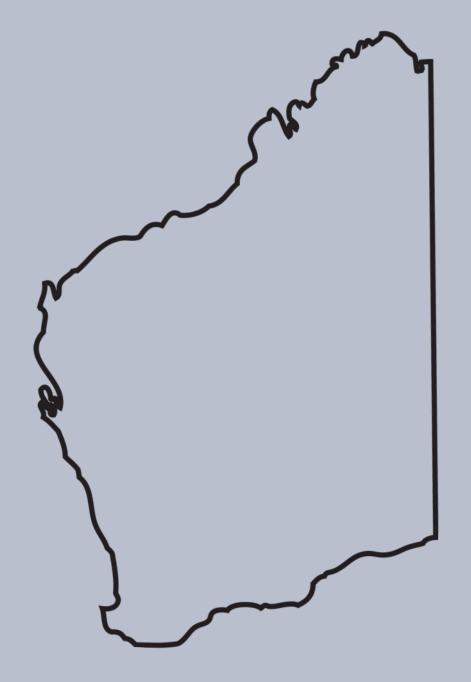
For example, in this report, wide confidence intervals and high RSEs can be present for younger age groups (e.g., 16 to 44 years) with certain chronic health conditions, because they are less likely to be present and detectable at younger ages. It is also possible to see wide confidence intervals and high RSEs for some variables that have multiple response options (four or more), for example, selfreported level of physical activity and fast-food intake.

Therefore, throughout this report, estimates with RSEs between 25 per cent and 50 per cent have been annotated by an asterisk and should be used with caution. Estimates with RSEs above 50 per cent are considered too unreliable for general use and have been withheld.

#### 1.5 Using this report

This report is intended to be a reference document and therefore contains little interpretative text. The confidence intervals should be used to determine statistical significance if no text has been provided. If more detailed information is required or interpretation needed, please contact the Health and Wellbeing Survey team, Epidemiology Directorate, WA Department of Health at DOH.HWSS@health.wa.gov.au.

## **DEMOGRAPHICS**



#### 2. Demographics

In 2023, a total of 11,307 Western Australians aged 16 years and over participated in the HWSS. The demographic and socioeconomic characteristics of the adults who participated in the 2023 HWSS data collection period is shown in Table 2 and Table 3. The tables show the unweighted number in the sample for each group and the weighted population prevalence estimate expressed as a percentage.



From the weighted prevalence estimates shown in Table 2 and Table 3:

- There were slightly more females (52.5%) than males (47.5%).
- More than half (58.1%) were born in Australia.
- Just over half (54.7%) of respondents were employed for wages, salary, or payment in kind.
- Nearly two thirds (61.7%) possessed private health insurance with both hospital and ancillary cover.

Table 2: Demographic characteristics, 16 years & over, HWSS 2023

	Unweighted sample (n)*	Weighted survey sample (%)
Data collection mode		
CATI	8,888	79.4
Online	2,419	20.6
Age group		
16 to 24 years	207	8.2
25 to 44 years	2,343	36.4
45 to 64 years	5,417	33.6
65 years & over	3,610	21.8
Sex		
Female	6,860	52.5
Male	4,447	47.5
Australian born		
Yes	7,937	58.1
No Control of Towns Con	3,353	41.9
Aboriginal or Torres Strait Islander	000	0.7
Yes No	333	2.7 97.3
Marital status	10,911	97.3
Married Status	6,695	40.6
De facto	1,332	10.6
Widowed	1,332 575	5.8
Divorced	1,081	12.2
Separated	436	5.6
Never married	1,151	25.2
Health region	1,101	20.2
East Metro	2,108	27.5
Goldfields	609	3.1
Great Southern	652	2.8
Kimberley	316	1.3
Midwest	718	3.2
North Metro	2,134	25.9
Pilbara	409	2.1
South Metro	2,106	24.7
South West	1,552	6.6
* Numbers may not add up to total sample or 100 due to refusal	703	2.7

<sup>\*</sup> Numbers may not add up to total sample or 100 due to refusal and "don't know" responses.

Table 3: Socioeconomic characteristics, 16 years & over, HWSS 2023

	Unweighted Sample (n)*	Weighted survey sample (%)
Current place of living		
Rented from government or public authority	369	3.6
Rented privately	1,287	17.3
Being paid off by you/your partner	3,914	37.2
Fully owned/outright owner	5,261	36.3
Other	421	5.6
Current living arrangement		
Living with parent(s)	259	8.1
Living with other family members	998	12.7
Living with friends	150	3.4
Living with a partner and children	3,370	26.3
Living with a partner but no children	4,254	22.8
Living alone	1,898	22.6
Living in a retirement village	274	3.4
Other living arrangement	81	0.8
Household income		
Under \$20,000	448	5.3
\$20,000 to \$40,000	1,251	13.4
\$40,000 to \$60,000	1,092	10.5
\$60,000 to \$80,000	944	10.1
\$80,000 to \$100,000	901	9.6
\$100,000 to \$120,000	841	9.2
\$120,000 to \$140,000	744	7.7
\$140,000 to \$160,000	702	7.9
More than \$160,000	2,551	26.2
Household spending		
Spend more money than earn/get	607	5.6
Have just enough money to get by	1,562	16.4
Spend left over money	478	4.9
Save a bit every now and then	2,866	27.3
Save some regularly	3,879	35.1
Save a lot	1,223	10.7

<sup>\*</sup> Numbers may not add up to total sample due to refusal and "don't know" responses.

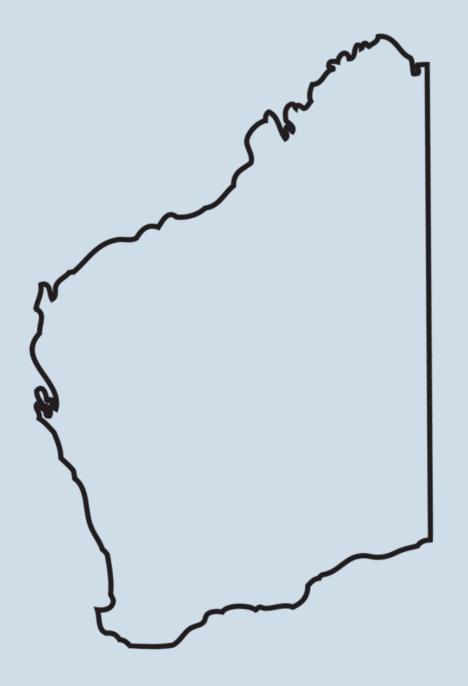
Table 3: Socioeconomic characteristics, 16 years & over, HWSS 2023

	Unweighted Sample (n)*	Weighted survey sample (%)
Highest level of education (a)		
Less than Year 10 Year 10 or Year 11 Year 12 TAFE/Trade qualification Tertiary degree or equivalent	281 1,322 1,008 5,337 3,326	1.8 9.4 11.6 51.2 25.9
Employment status	4.505	40.0
Self employed Employed for wages, salary or payment in kind Unemployed for less than one year Unemployed for more than one year Engaged in home duties Retired Unable to work A student Other	1,535 5,536 117 129 348 3,033 362 85 147	10.9 54.7 1.5 1.7 3.3 19.8 3.6 3.0
Working away (fly-in fly-out) (b) Yes	544	11.7
No	5,733	11.7 88.3
Shift worker (b)		
Yes No	547 5,178	10.8 89.2
Receiving a government pension		
Yes No	2,678 8,568	22.2 77.8
Possess a government health care card		
Yes No	3,420 7,825	30.3 69.7
Possess private health insurance		
Yes - Hospital only - Ancillary only - Both hospital and ancillary	385 811 7,443	4.4 8.3 61.7
No  (a) Evaluates reprondents who are currently still at appeal. (b)	2,536	25.6

<sup>(</sup>a) Excludes respondents who are currently still at school. (b) Adults who reported currently employed.

\* Numbers may not add up to total sample due to refusal and "don't know" responses

## **GENERAL HEALTH**



#### 3. General health

This section focuses on self-reported health status and disability.



50.2%

of Western Australian adults reported their current health status as 'excellent' or 'very good'





61.4%

of Western Australians with a disability in the family reported that the disability had a 'fairly big', 'big' or 'very big' impact on the family

#### 3.1 Self-reported health status

We asked respondents several questions regarding their general health, including their current health status.

• There were no differences between males and females in self-reported health status (**Table 4**).

Table 4: Self-reported health status, 16 years & over, HWSS 2023

	Excellent		Very Good		Good		Fair		Poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years										
Females	14.2	(12.1—16.3)	37.5	(34.4—40.6)	32.5	(29.5—35.5)	12.2	(10.0—14.4)	3.6	(2.4-4.8)
Males	19.8	(16.7—23.0)	39.7	(35.9—43.5)	30.4	(26.8-33.9)	7.8	(5.7—9.9)	2.3 *	(1.1—3.5)
Persons	16.8	(15.0—18.7)	38.5	(36.1—40.9)	31.5	(29.2—33.8)	10.2	(8.6—11.7)	3.0	(2.1—3.8)
45 to 64 years										
Females	16.3	(14.6—17.9)	35.0	(32.9—37.1)	30.2	(28.2-32.2)	13.0	(11.5—14.5)	5.6	(4.4—6.8)
Males	13.2	(11.2—15.1)	32.2	(29.6 - 34.8)	36.0	(33.2 - 38.7)	13.0	(10.9—15.1)	5.7	(4.3—7.1)
Persons	14.8	(13.6—16.1)	33.7	(32.0—35.3)	32.9	(31.2—34.6)	13.0	(11.7—14.2)	5.6	(4.7—6.6)
65+ years										
Females	12.2	(10.3—14.1)	33.2	(30.5—35.9)	32.5	(29.8—35.2)	15.6	(13.5—17.8)	6.6	(5.1—8.1)
Males	8.5	(6.9—10.1)	30.7	(27.9—33.5)	36.2	(33.2 - 39.2)	17.6	(15.0—20.1)	7.0	(5.1—8.8)
Persons	10.3	(9.1—11.6)	31.9	(30.0—33.9)	34.4	(32.4—36.4)	16.6	(14.9—18.3)	6.8	(5.6—8.0)
Total										
Females	14.5	(13.3—15.7)	35.7	(34.1—37.4)	31.7	(30.1—33.3)	13.2	(12.0—14.4)	4.9	(4.1—5.7)
Males	15.0	(13.4—16.6)	35.1	(33.1—37.1)	33.6	(31.6—35.5)	11.8	(10.5—13.1)	4.5	(3.7—5.3)
Persons	14.7	(13.8—15.7)	35.5	(34.2—36.8)	32.6	(31.3—33.8)	12.5	(11.6—13.4)	4.7	(4.1—5.3)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Self-reported health status was further categorised into three groups: i) excellent/very good, ii) good and iii) fair/poor. The prevalence for these groups was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults who rated their health as 'fair/poor' was higher in the Wheatbelt health region (25.1%) when compared with the state prevalence (17.2%); those who rated their health as 'good' was lower in the North Metro health region (28.8%) when compared with the state prevalence (32.6%); and those who rated their health as 'excellent/very good' was lower in the Wheatbelt health region (39.9%), in the Midwest health region (42.7%), and in the Goldfields health region (42.9%), and higher in the North Metro health region (56.8%) when compared to the state prevalence (50.2%) (**Figure 2**).

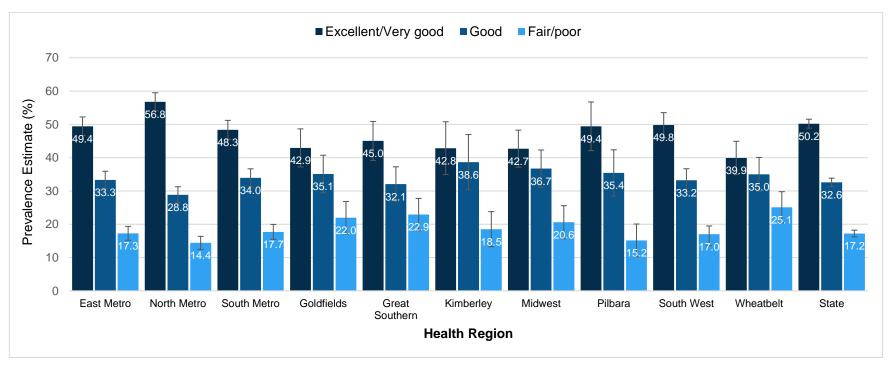


Figure 2: Prevalence of self-reported health status by health regions in WA, 16 years & over, HWSS 2023

#### 3.2 Disability

We asked respondents whether they or a family member had any disability. If respondents answered "yes", they were asked how much of an impact this is for them personally or for their family.

The prevalence of disability, long-term illness or pain did not vary by age group or sex (Figure 3).

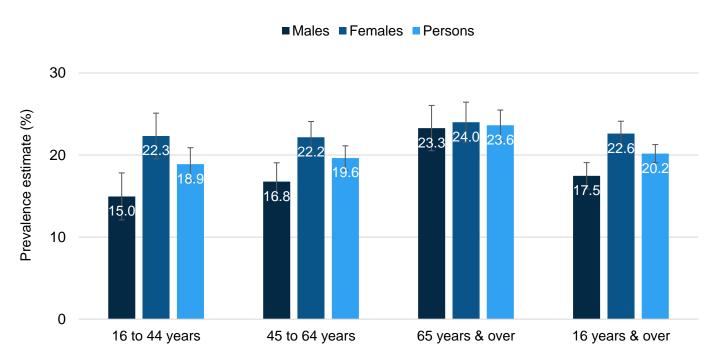


Figure 3: Prevalence of disability, long-term illness or pain within the family that impacts on them personally or on their family, 16 years & over, HWSS 2023

The prevalence of disability within the family was estimated for the WA health regions and compared with the state prevalence.

The prevalence of disability within the family was lower in the Pilbara health region (13.3%) when compared with the state prevalence (20.2%) (Figure 4).

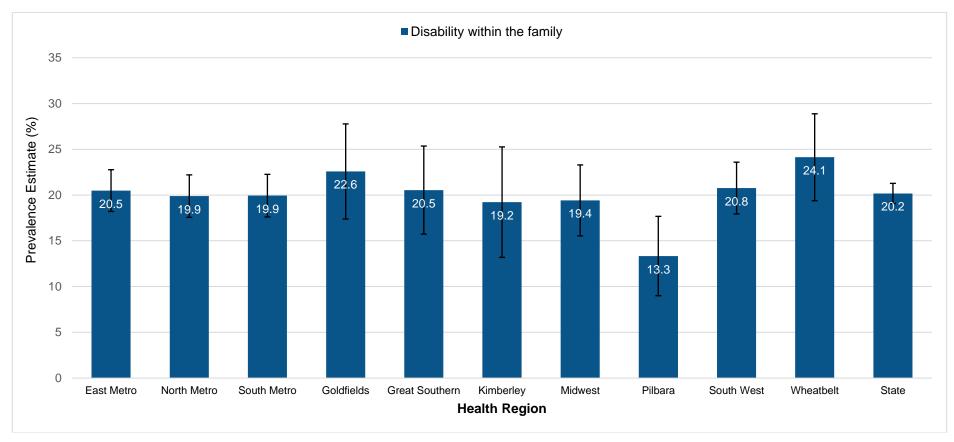


Figure 4: Prevalence of disability, long-term illness or pain within the family that puts pressure on them personally or on their family by health regions in WA, 16 years & over, HWSS 2023

Of those with a family member with some form of disability, 20.3% reported that this had 'a very big impact' on themselves or their family (Table 5).

Table 5: Rating of the impact of disability on the respondents themselves and their family, 16 years & over, HWSS 2023

	Not much of an impact		Some impact		A fairly big impact		A big impact		A very big impact	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years										
Females	14.0	(8.9—19.2)	23.9	(17.9—29.9)	24.3	(18.2—30.5)	17.1	(11.8—22.5)	20.6	(14.7—26.6)
Males	19.6	(11.4—27.9)	39.1	(28.6—49.6)	14.9	(7.8—21.9)	5.6 *	(1.7—9.4)	20.8	(12.5—29.2)
Persons	16.1	(11.6—20.6)	29.5	(24.0—35.1)	20.8	(16.1—25.5)	12.8	(9.1—16.6)	20.7	(15.9—25.5)
45 to 64 years										
Females	7.8	(5.4—10.1)	18.6	(14.9—22.2)	27.7	(23.2—32.3)	18.9	(14.9—22.8)	27.1	(22.6—31.6)
Males	14.0	(8.8—19.2)	20.2	(13.9—26.5)	24.6	(18.0—31.1)	22.1	(15.5—28.8)	19.1	(13.4—24.8)
Persons	10.2	(7.7—12.8)	19.2	(15.9—22.6)	26.5	(22.7—30.3)	20.2	(16.6—23.7)	23.9	(20.3—27.5)
65+ years										
Females	13.2	(9.1—17.2)	22.1	(17.3—26.9)	24.3	(19.4—29.2)	21.3	(16.2—26.5)	19.1	(14.7—23.6)
Males	19.7	(13.8—25.6)	22.9	(17.1—28.7)	26.7	(20.8—32.6)	20.1	(14.6—25.5)	10.7	(6.0—15.3)
Persons	16.4	(12.8—20.0)	22.5	(18.7—26.3)	25.5	(21.7—29.3)	20.7	(17.0—24.4)	14.9	(11.7—18.1)
Total										
Females	11.7	(9.1—14.3)	21.7	(18.6—24.9)	25.5	(22.1—28.8)	18.6	(15.7—21.6)	22.5	(19.3—25.7)
Males	17.8	(13.9—21.8)	28.1	(23.2—33.1)	21.6	(17.7—25.5)	15.3	(12.1—18.5)	17.2	(13.3—21.0)
Persons	14.3	(12.0—16.5)	24.4	(21.6—27.1)	23.9	(21.3—26.4)	17.2	(15.0—19.4)	20.3	(17.8—22.8)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The rating of the impact of disability was grouped into two: i) not much/some impact and ii) fairly big/big/very big impact. The prevalence for these groups was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults who reported that the disability had not much/some impact or fairly big/big/very big impact did not differ by health region when compared with the state (Figure 5).

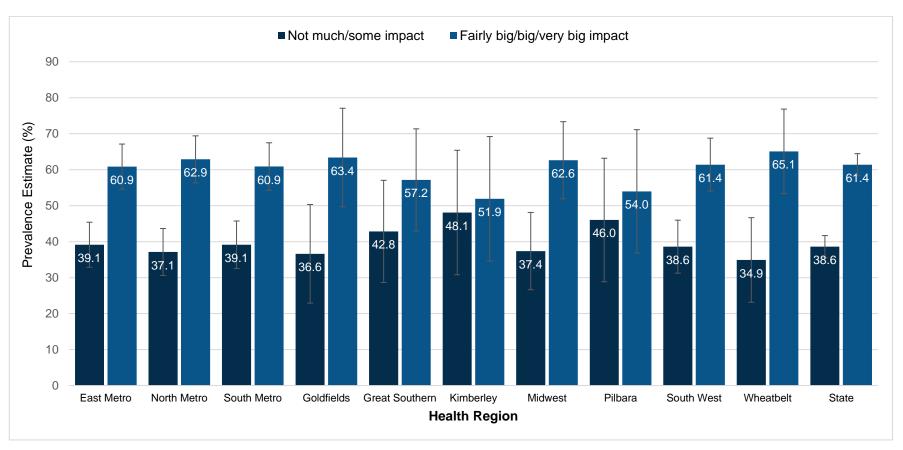
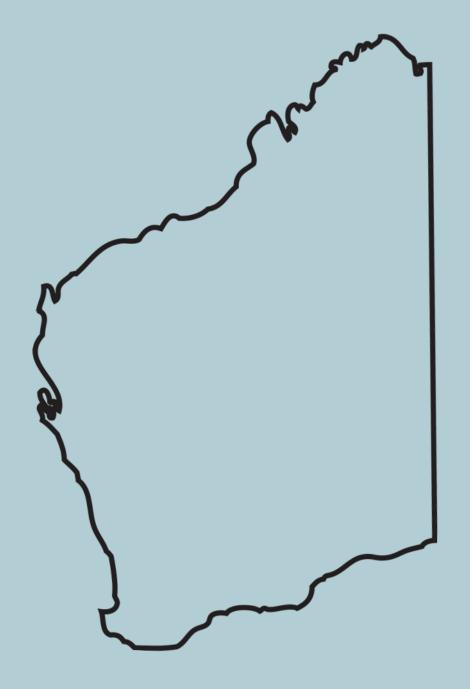


Figure 5: Rating of the impact of disability on the respondents themselves and their family by health regions in WA, 16 years & over, HWSS 2023

## CHRONIC HEALTH CONDITIONS



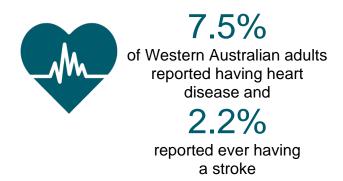
#### 4. Chronic health conditions

Chronic health conditions refer to long-term conditions (lasting more than six months) that can have a significant impact on a person's life. This section will focus on the following eight chronic condition groups:

- Arthritis and osteoporosis
- Heart disease and stroke
- Cancer and skin cancer
- **Diabetes**

- Injury
- Asthma
- Respiratory conditions other than asthma
- Mental health conditions







14.1%

of Western Australian adults reported ever having skin cancer and

8.2%

reported ever having other cancers



26.4%

of Western Australian adults reported an injury and

30.4%

of those injuries were due to falls.



4.1%

of Western Australian adults reported currently having other chronic respiratory conditions



9.8% of Western Australian

adults reported living with diabetes



10.3%

of Western Australian adults reported currently having asthma



22.5%

of Western Australian adults were told by a doctor that they have a mental health condition in the past 12 months

# 4.1 Arthritis and osteoporosis

We asked respondents whether a doctor had ever told them they had arthritis or osteoporosis.

- The prevalence of arthritis and osteoporosis increased with age: arthritis 16 to 44 years (7.3%), 45 to 64 years (28.4%), and 65 years and over (50.3%); osteoporosis – 16 to 44 years (0.8%), 45 to 64 years (6.6%), and 65 years and over (18.6%) (Table 6).
- Females were more likely than males to report having been told they had arthritis (27.8% compared to 19.2%) and osteoporosis (9.3% compared to 3.6%).

Table 6: Prevalence of arthritis and osteoporosis, 16 years & over, HWSS 2023

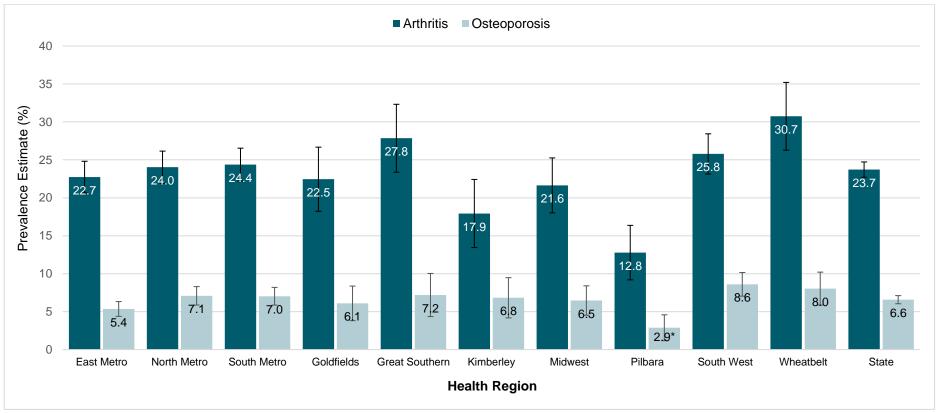
		Arthritis	C	Steoporosis
	%	95% CI	%	95% CI
16 to 44 years				
Females	9.5	(7.6—11.4)	1.2 *	(0.5—1.9)
Males	4.9	(3.4-6.4)	N/A	(N/A—N/A)
Persons	7.3	(6.1—8.6)	0.8 *	(0.4—1.2)
45 to 64 years				
Females	33.3	(31.2—35.4)	8.7	(7.5—10.0)
Males	22.9	(20.5—25.3)	4.1	(2.9—5.4)
Persons	28.4	(26.8—30.0)	6.6	(5.7—7.4)
65+ years				
Females	59.3	(56.5—62.1)	28.5	(25.7—31.2)
Males	41.3	(38.2—44.4)	9.0	(7.1—10.9)
Persons	50.3	(48.1—52.4)	18.6	(16.9—20.3)
Total				
Females	27.8	(26.4—29.2)	9.3	(8.5—10.1)
Males	19.2	(17.8—20.6)	3.6	(3.0—4.2)
Persons	23.7	(22.7—24.7)	6.6	(6.0—7.1)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The prevalence of arthritis and osteoporosis was estimated for the WA health regions and compared with the state prevalence.

- The prevalence of arthritis was lower in the Kimberley health region (17.9%) and the Pilbara health region (12.8%), and higher in the Wheatbelt health region (30.7%) when compared with the state prevalence (23.7%) (Figure 6).
- The prevalence of osteoporosis was lower in Pilbara health region (2.9%) when compared with the state prevalence (6.6%).



<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Figure 6: Prevalence of arthritis and osteoporosis by health regions in WA, 16 years & over, HWSS 2023

## 4.2 Heart disease and stroke

We asked respondents whether a doctor had ever told them they had heart disease or stroke.

- The prevalence of heart disease and stroke increased with age: heart disease 16 to 44 years (1.1%), 45 to 64 years (6.2%), and 65 years and over (22.9%); stroke – 16 to 44 years (0.6%), 45 to 64 years (1.6%), and 65 years and over (6.3%) (**Table 7**).
- Males were more likely than females to report being told they had heart disease (9.7% compared to 5.6%).

Table 7: Prevalence of heart disease and stroke, 16 years & over, HWSS 2023

	Hear	t Disease	;	Stroke
	%	95% CI	%	95% CI
16 to 44 years				
Females	1.5 *	(0.7—2.3)	0.9 *	(0.4—1.5)
Males	0.7 *	(0.1—1.2)	N/A	(N/A—N/A)
Persons	1.1	(0.6—1.6)	0.6 *	(0.3—1.0)
45 to 64 years				
Females	4.4	(3.6—5.3)	1.2	(0.8—1.7)
Males	8.2	(6.7—9.7)	2.0	(1.2—2.8)
Persons	6.2	(5.3—7.1)	1.6	(1.1—2.0)
65+ years				
Females	16.6	(14.3—18.8)	4.8	(3.5—6.1)
Males	29.1	(26.2—32.0)	7.8	(6.0—9.6)
Persons	22.9	(21.0-24.8)	6.3	(5.2—7.4)
Total				
Females	5.6	(4.9—6.2)	1.8	(1.4—2.2)
Males	9.7	(8.7—10.6)	2.6	(2.1—3.1)
Persons	7.5	(6.9—8.1)	2.2	(1.9—2.5)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The prevalence of heart disease and stroke was estimated for the WA health regions and compared with the state prevalence.

• The prevalence of heart disease was lower in the Pilbara health region (4.3%) when compared with the state prevalence (7.5%) (Figure 7).

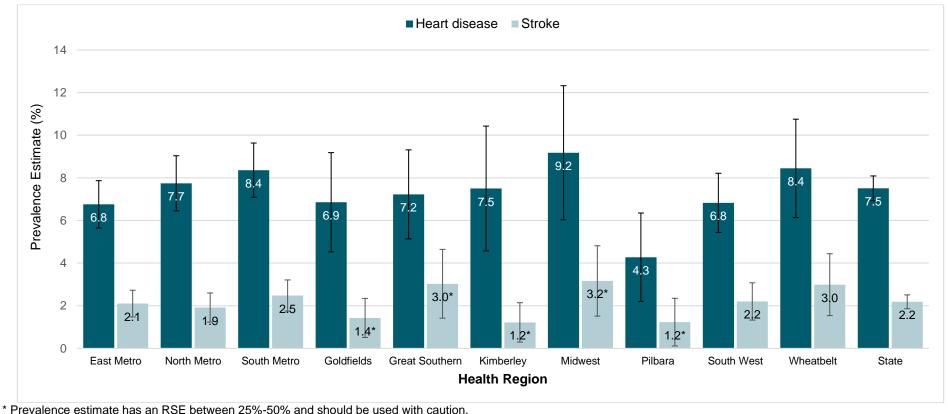


Figure 7: Prevalence of heart disease and stroke by health regions in WA, 16 years & over, HWSS 2023

## 4.3 Skin cancer and other cancer

We asked respondents whether a doctor had ever told them they had skin cancer or another type of cancer.

- Overall, the prevalence of skin cancer was higher than other cancers (14.1% compared with 8.2%) (Table 8).
- The prevalence of cancer increased with age: skin cancer 16 to 44 years (2.7%), 45 to 64 years (16.9%), and 65 years and over (33.1%); other cancer – 16 to 44 years (1.8%), 45 to 64 years (8.7%), and 65 years and over (20.5%).

Table 8: Prevalence of skin cancer and other cancer, 16 years & over, HWSS 2023

	Skir	n cancer	Ot	her cancer
	%	95% CI	%	95% CI
16 to 44 years				
Females	2.6	(1.7—3.5)	2.4	(1.7—3.2)
Males	2.8	(1.6—4.0)	1.0 *	(0.2—1.8)
Persons	2.7	(1.9—3.4)	1.8	(1.2—2.3)
45 to 64 years				
Females	16.3	(14.8—17.9)	10.8	(9.4—12.2)
Males	17.5	(15.4—19.6)	6.3	(5.0—7.6)
Persons	16.9	(15.6—18.2)	8.7	(7.7—9.7)
65+ years				
Females	31.0	(28.4—33.7)	18.0	(15.8—20.2)
Males	35.2	(32.3—38.1)	22.9	(20.3—25.6)
Persons	33.1	(31.2—35.1)	20.5	(18.7—22.2)
Total				
Females	13.1	(12.2—14.1)	8.5	(7.7—9.3)
Males	15.2	(14.0—16.4)	7.8	(6.9—8.7)
Persons	14.1	(13.3—14.9)	8.2	(7.6—8.7)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The prevalence of skin cancer and other cancers was estimated for the WA health regions and compared with the state prevalence.

- The prevalence of skin cancer was lower in the Pilbara health region (8.9%) when compared with the state prevalence (14.1%) (Figure 8).
- The prevalence of other cancers was lower in the Pilbara health region (5.3%) when compared with the state prevalence (8.2%).

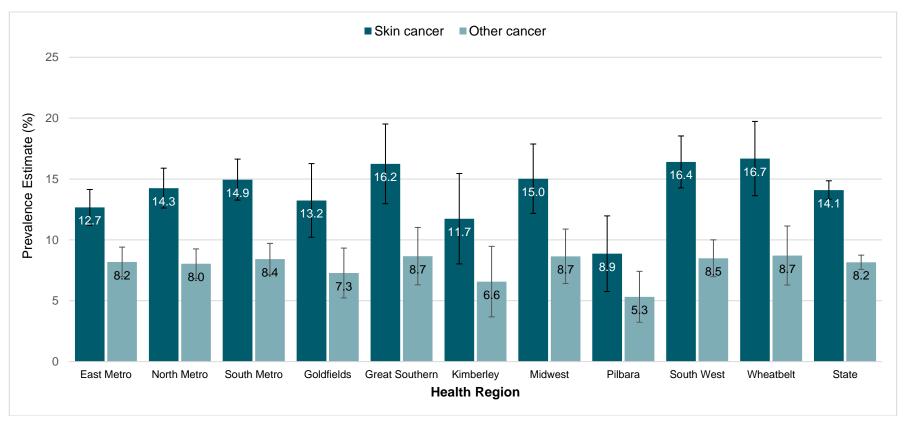


Figure 8: Prevalence of skin cancer and other cancer by health regions in WA, 16 years & over, HWSS 2023

## 4.4 Diabetes

We asked respondents whether a doctor had ever told them they had diabetes and what type of diabetes they had.

- The prevalence of diabetes increased with age: all diabetes 16 to 44 years (5.0%), 45 to 64 years (10.2%), and 65 years and over (19.2%); Type 2 diabetes – 16 to 44 years (1.9%), 45 to 64 years (8.0%), and 65 years and over (17.8%) (Table 9).
- Females (6.1%) were less likely to report having been told they had Type 2 diabetes than males (8.9%).

Table 9: Prevalence of diabetes and type 2 diabetes, 16 years & over, HWSS 2023

	All d	iabetes (a)	Туре	2 diabetes (b)
	%	95% CI	%	95% CI
16 to 44 years				
Females	6.3	(4.8—7.7)	1.6	(0.9—2.4)
Males	3.5	(2.0-4.9)	2.3 *	(1.1—3.4)
Persons	5.0	(4.0—6.0)	1.9	(1.3—2.6)
45 to 64 years				
Females	9.6	(8.4—10.9)	6.9	(5.7—8.0)
Males	10.8	(9.0—12.6)	9.4	(7.7—11.1)
Persons	10.2	(9.1—11.3)	8.0	(7.0—9.0)
65+ years				
Females	16.1	(14.0—18.2)	14.9	(12.8—17.0)
Males	22.2	(19.6—24.9)	20.6	(18.1—23.2)
Persons	19.2	(17.5—20.9)	17.8	(16.1—19.4)
Total				
Females	9.4	(8.5—10.3)	6.1	(5.5—6.8)
Males	10.2	(9.1—11.3)	8.9	(7.9—9.9)
Persons	9.8	(9.1—10.5)	7.4	(6.8—8.0)

<sup>(</sup>a) Includes type1, type 2, gestational, other and type unknown diabetes.

<sup>(</sup>b) Type 2 diabetes only.

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The prevalence of all diabetes and type 2 diabetes was estimated for the WA health regions and compared with the state prevalence.

• The prevalence of Type 2 diabetes was lower in the Pilbara health region (4.2%) when compared with the state prevalence (7.4%) (**Figure 9**).

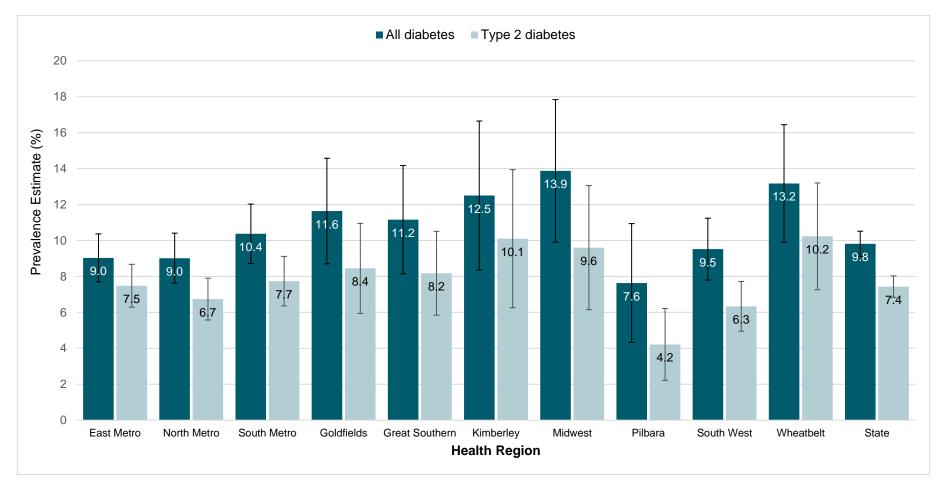


Figure 9: Prevalence of all diabetes and type 2 diabetes by health regions in WA, 16 years & over, HWSS 2023

# 4.5 Injury

We asked respondents whether they had any injuries in the past 12 months that required treatment from a health professional, and if so, whether these injuries were due to falls.

- The prevalence of injury was lower in adults aged 65 years and over (22.6%) when compared with those aged 16 to 44 years (28.3%) and 45 to 64 years (26.2%) (Table 10).
- Of those who sustained an injury, adults aged 65 years and over were more likely to indicate that this was due to a fall (46.7% compared with 28.3% in adults aged 16 to 44 years and 26.2% in adults aged 45 to 64 years).
- The prevalence of injury due to falls (all respondents) was lower in males compared with females (6.6% compared with 9.3%).

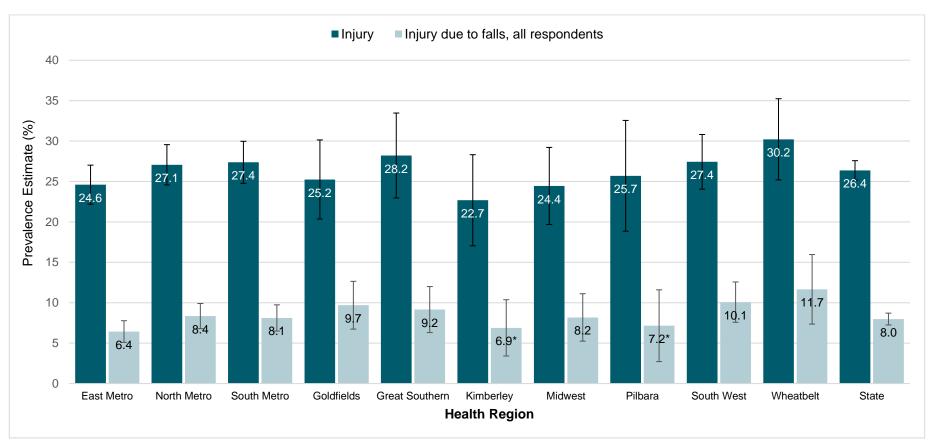
Table 10: Prevalence of injuries and falls in the past 12 months, 16 years & over, HWSS 2023

		Injury	_	s due to falls se injured) (a)	Injury due to falls, all respondents (b)	
	%	95% CI	%	95% CI	%	95% CI
16 to 44 years						
Females	28.0	(25.1—30.9)	30.9	(25.0—36.8)	8.5	(6.6—10.4)
Males	28.7	(25.1—32.2)	21.5	(15.4—27.6)	6.1	(4.2—8.1)
Persons	28.3	(26.0—30.6)	26.4	(22.1—30.7)	7.4	(6.1—8.8)
45 to 64 years						
Females	26.4	(24.5—28.4)	32.8	(28.9—36.8)	8.6	(7.4—9.8)
Males	26.0	(23.5—28.5)	20.5	(16.1—24.9)	5.3	(4.1—6.6)
Persons	26.2	(24.7—27.8)	27.1	(24.1—30.1)	7.1	(6.2—7.9)
65+ years						
Females	21.6	(19.3—24.0)	55.2	(49.3—61.2)	12.0	(10.0—13.9)
Males	23.6	(20.9—26.3)	38.9	(32.4—45.3)	9.1	(7.2—11.0)
Persons	22.6	(20.8—24.4)	46.7	(42.2—51.2)	10.5	(9.2—11.9)
Total						
Females	26.1	(24.6—27.7)	35.8	(32.4—39.1)	9.3	(8.2—10.3)
Males	26.6	(24.8—28.5)	24.7	(21.2—28.2)	6.6	(5.5—7.6)
Persons	26.4	(25.2—27.6)	30.4	(28.0—32.9)	8.0	(7.2—8.7)

<sup>(</sup>a) As a proportion of respondents reporting an injury. (b) As a proportion of all respondents.

The prevalence of injuries in the past 12 months and injuries due to falls in all respondents was estimated for the WA health regions and compared with the state prevalence.

• The prevalence of injuries in the past 12 months and injuries due to falls did not differ by health region when compared with the state prevalence (Figure 10).



<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Figure 10: Prevalence of injuries and falls in the past 12 months by health regions in WA, 16 years & over, HWSS 2023

## 4.6 Asthma

We asked respondents whether a doctor had ever told them they had asthma and whether they had symptoms or had taken treatment for asthma during the past 12 months. Respondents who reported ever being told they had asthma were also asked if they had a written asthma action plan; that is, a written instruction of what to do if their asthma gets worse or out of control.

- The prevalence of lifetime asthma decreased with age: 16 to 44 years (21.2%), 45 to 64 years (17.6%), and 65 years and over (13.7%) (**Table 11**).
- The prevalence of current asthma was higher in females (13.0%) than males (7.4%).
- Of those who had ever been told they had asthma, 20.1% reported they had an action plan on what to do if their asthma got worse. Females (23.5%) were more likely to have an action plan than males (15.2%).

Table 11: Prevalence of asthma and asthma action plan, 16 years & over, HWSS 2023

	Lifetim	ne asthma (a)	Curren	nt asthma (b)	Actio	on plan (c)
	%	95% CI	%	95% CI	%	95% CI
16 to 44 years						
Females	23.1	(20.4—25.7)	13.7	(11.5—15.8)	21.5	(16.3—26.8)
Males	19.1	(16.1—22.1)	7.3	(5.3—9.3)	12.2 *	(6.2—18.2)
Persons	21.2	(19.2—23.2)	10.7	(9.2—12.2)	17.6	(13.6—21.6)
45 to 64 years						
Females	20.0	(18.2—21.8)	13.1	(11.6—14.7)	22.6	(18.5—26.6)
Males	14.8	(12.8—16.8)	7.9	(6.5—9.3)	17.8	(12.1—23.6)
Persons	17.6	(16.2—18.9)	10.7	(9.7—11.8)	20.7	(17.3—24.1)
65+ years						
Females	16.3	(14.2—18.4)	11.3	(9.6—13.1)	31.4	(24.9—38.0)
Males	11.1	(9.2—13.1)	6.7	(5.1—8.2)	19.8	(12.9—26.8)
Persons	13.7	(12.3—15.1)	9.0	(7.8—10.2)	26.7	(21.8—31.5)
Total						
Females	20.6	(19.2—22.0)	13.0	(11.8—14.2)	23.5	(20.3—26.7)
Males	15.8	(14.3—17.3)	7.4	(6.3—8.4)	15.2	(11.4—19.0)
Persons	18.3	(17.3—19.4)	10.3	(9.5—11.1)	20.1	(17.6—22.5)

<sup>(</sup>a) People who reported they had been told by a doctor that they have asthma (ever).

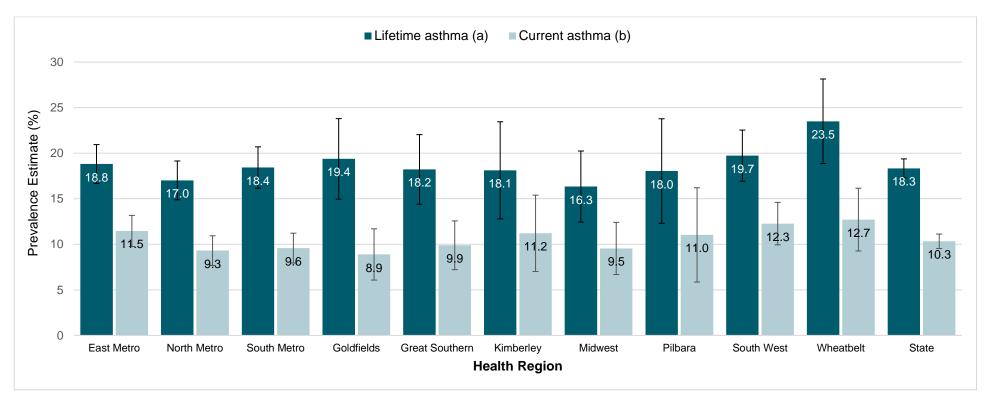
<sup>(</sup>b) People who reported they have had symptoms of, or treatment for, asthma in the last 12 months.

<sup>(</sup>c) For respondents with lifetime asthma, written instructions developed with a doctor of what to do if their asthma worsens.

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The prevalence of lifetime asthma and current asthma was estimated for the WA health regions and compared with the state prevalence.

• The prevalence of lifetime asthma and current asthma did not differ by health regions when compared with the state prevalence (Figure 11).



(a) People who reported they had been told by a doctor that they have asthma (ever). (b) People who reported they have had symptoms of, or treatment for, asthma in the last 12 months.

Figure 11: Prevalence of lifetime asthma and current asthma by health regions in WA, 16 years & over, HWSS 2023

We asked respondents with asthma how often their asthma had interfered with daily activities in the last 4 weeks.

- Of those adults who had ever been told they had asthma, 77.9% reported that their asthma had not interfered with their daily activities in the last 4 weeks (Table 12).
- Males were more likely than females to report that their asthma had not interfered with their daily activities (82.8% compared with 74.5%).

Table 12: Prevalence of asthma interfering with daily activities in the last 4 weeks, 16 years & over, HWSS 2023

	All or mo	ost of the time	Some	of the time	None of the time		
	%	95% CI	%	95% CI	%	95% CI	
16 to 44 years							
Females	3.4 *	(1.0—5.9)	21.1	(15.9—26.3)	75.5	(70.0—81.1)	
Males	N/A	(N/A—N/A)	11.1 *	(5.6—16.6)	87.4	(81.6—93.2)	
Persons	2.6 *	(0.9-4.3)	16.9	(13.0—20.7)	80.5	(76.4—84.6)	
45 to 64 years							
Females	6.6	(4.0—9.2)	19.6	(15.9—23.4)	73.8	(69.5—78.1)	
Males	4.0 *	(1.8—6.3)	17.5	(11.9—23.1)	78.4	(72.6—84.3)	
Persons	5.6	(3.7—7.4)	18.8	(15.6—22.0)	75.6	(72.1—79.1)	
65+ years							
Females	6.4	(3.3—9.5)	21.0	(15.7—26.2)	72.7	(66.8—78.5)	
Males	5.8 *	(0.4—11.3)	17.7	(10.2—25.3)	76.5	(67.9—85.1)	
Persons	6.1	(3.2—9.1)	19.6	(15.2—24.0)	74.2	(69.3—79.1)	
Total							
Females	4.9	(3.3—6.5)	20.6	(17.5—23.6)	74.5	(71.2—77.8)	
Males	3.0 *	(1.4—4.6)	14.2	(10.5—17.8)	82.8	(79.0—86.7)	
Persons	4.1	(3.0—5.3)	17.9	(15.6—20.3)	77.9	(75.4—80.4)	

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

## 4.7 Respiratory conditions other than asthma

We asked respondents if a doctor had told them they had a respiratory problem other than asthma, such as chronic bronchitis, emphysema, or chronic lung disease that lasted six months or more, and whether they still had the respiratory problem.

- The lifetime and point prevalence of a respiratory condition other than asthma increased with age (lifetime prevalence: 16 to 44) years - 2.6%, 45 to 64 years - 6.1%, 65 years and over - 11.9%; point prevalence: 16 to 44 years - 1.2%, 45 to 64 years -4.1%, 65 years and over – 10.0%) (**Table 13**).
- The prevalence of a respiratory condition other than asthma did not vary by sex.

Table 13: Prevalence of respiratory conditions other than asthma, 16 years & over, HWSS 2023

	_	_		-
	Lif	etime (a)		Point (b)
	%	95% CI	%	95% CI
16 to 44 years				
Females	3.2	(2.0-4.4)	1.6 *	(0.7—2.5)
Males	1.8 *	(0.8-2.9)	0.7 *	(0.0—1.3)
Persons	2.6	(1.8—3.4)	1.2 *	(0.6—1.8)
45 to 64 years				
Females	6.5	(5.3—7.6)	4.2	(3.3—5.1)
Males	5.8	(4.4—7.1)	4.0	(2.9—5.1)
Persons	6.1	(5.3—7.0)	4.1	(3.4—4.8)
65+ years				
Females	12.2	(10.2—14.1)	10.0	(8.1—11.8)
Males	11.7	(9.6—13.8)	10.1	(8.1—12.0)
Persons	11.9	(10.5—13.4)	10.0	(8.7—11.4)
Total				
Females	6.1	(5.4—6.9)	4.2	(3.6—4.9)
Males	5.4	(4.6—6.2)	3.9	(3.3—4.6)
Persons	5.8	(5.2—6.4)	4.1	(3.6—4.5)

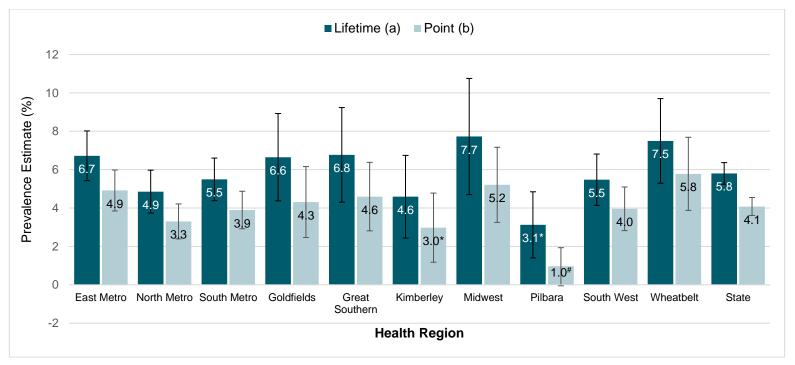
<sup>(</sup>a) People who reported they were told by a doctor that they have a respiratory condition other than asthma that lasted 6 months or more, such as bronchitis, emphysema, or chronic lung disease (ever).

<sup>(</sup>b) People who reported they had a respiratory condition other than asthma that lasted 6 months or more that is still present.

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The lifetime and point prevalence of respiratory conditions other than asthma was estimated for the WA health regions and compared with the state prevalence.

- The lifetime prevalence of respiratory conditions other than asthma was lower in the Pilbara health region (3.1%) when compared with the state prevalence (5.8%) (Figure 12).
- The point prevalence of respiratory conditions other than asthma was lower in the Pilbara health region (1.0%) when compared with the state prevalence (4.1%).



<sup>(</sup>a) People who reported they were told by a doctor that they have a respiratory condition other than asthma that lasted 6 months or more (b) People who reported they had a respiratory condition other than asthma that lasted 6 months or more and is still present.

Figure 12: Prevalence of respiratory conditions other than asthma by health regions in WA, 16 years & over, HWSS 2023

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

<sup>\*</sup>N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

## 4.8 Mental health

We asked respondents if a doctor had told them they have a mental health condition during the past 12 months.

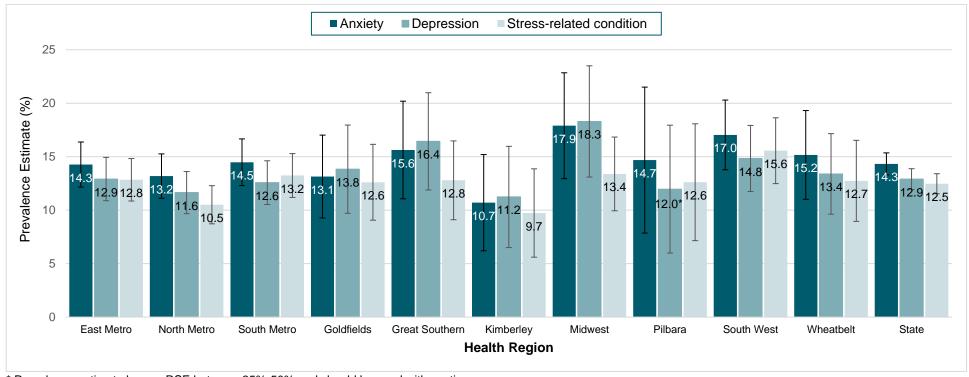
- The prevalence of anxiety, depression, and other mental health conditions within the past 12 months was lower in adults aged 65 years and over when compared with the younger age groups (Table 14).
- The prevalence of anxiety, depression and stress-related conditions was higher in females when compared with males.

Table 14: Prevalence of mental health conditions, 16 years & over, HWSS 2023

		Anxiety	D	epression	Stress-re	elated condition	Other ment	al health condition
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years								
Females	27.7	(24.7—30.7)	21.7	(18.9—24.5)	20.5	(17.8—23.3)	13.1	(10.8—15.4)
Males	9.1	(6.8—11.4)	9.5	(7.1—11.9)	8.0	(5.9—10.1)	4.5	(2.9—6.2)
Persons	19.0	(17.0—21.0)	16.0	(14.1—17.9)	14.6	(12.8—16.4)	9.1	(7.7—10.6)
45 to 64 years								
Females	14.6	(13.0—16.3)	14.7	(13.0—16.4)	15.6	(13.9—17.2)	4.6	(3.6—5.5)
Males	9.4	(7.6—11.2)	9.7	(7.8—11.5)	9.9	(8.1—11.7)	4.1	(2.9—5.2)
Persons	12.2	(10.9—13.4)	12.4	(11.1—13.6)	12.9	(11.7—14.1)	4.3	(3.6—5.1)
65+ years								
Females	10.5	(8.6—12.3)	9.8	(8.0—11.6)	8.9	(7.3—10.6)	1.3	(0.7—2.0)
Males	5.5	(4.1—7.0)	4.9	(3.6-6.2)	5.8	(4.3—7.3)	1.6	(0.9—2.3)
Persons	8.0	(6.8—9.2)	7.3	(6.2—8.4)	7.4	(6.3—8.5)	1.5	(1.0—1.9)
Total								
Females	19.7	(18.2—21.3)	16.9	(15.4—18.4)	16.4	(15.0—17.8)	7.8	(6.7—8.9)
Males	8.4	(7.1—9.6)	8.5	(7.2—9.7)	8.1	(7.0—9.3)	3.7	(2.9—4.5)
Persons	14.3	(13.3—15.4)	12.9	(11.9—13.9)	12.5	(11.5—13.4)	5.9	(5.1—6.6)

The prevalence of anxiety, depression and stress-related conditions was estimated for the WA health regions and compared with the state prevalence.

The prevalence of anxiety, depression and stress-related conditions did not differ by health region when compared with the state prevalence (Figure 13).



<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Figure 13: Prevalence of anxiety, depression, and stress-related conditions by health regions in WA, 16 years & over, **HWSS 2023** 

We asked respondents if they were currently receiving treatment for a mental health condition.

- The prevalence of any mental health condition decreased with age: 16 to 44 years (27.1%), 45 to 64 years (21.8%) and 65 years and over (14.1%) (Table 15).
- The prevalence of any mental health condition was higher in females (29.5%) when compared with males (14.8%).
- The prevalence of receiving treatment for a mental health condition was also higher in females (18.7%) than in males (8.0%).

Table 15: Current mental health status, 16 years & over, HWSS 2023

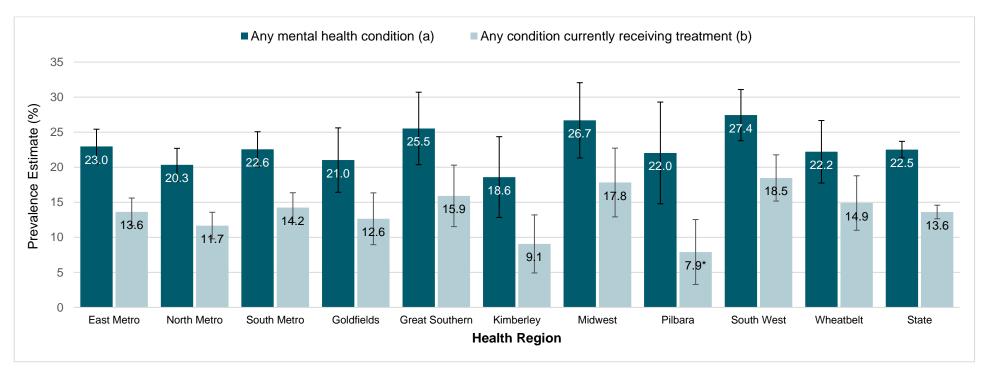
		nental health ndition (a)	Any condition currently receiving treatment (b)		
	%	95% CI	%	95% CI	
16 to 44 years					
Females	37.5	(34.3—40.7)	23.6	(20.7—26.4)	
Males	15.2	(12.4—18.0)	7.9	(5.8—10.0)	
Persons	27.1	(24.9—29.4)	16.3	(14.4—18.1)	
45 to 64 years					
Females	25.9	(23.9—27.9)	16.5	(14.8—18.3)	
Males	17.1	(14.8—19.5)	9.8	(8.0—11.5)	
Persons	21.8	(20.2—23.3)	13.4	(12.1—14.6)	
65+ years					
Females	17.5	(15.2—19.7)	11.5	(9.6—13.4)	
Males	10.9	(9.0—12.8)	5.7	(4.2—7.1)	
Persons	14.1	(12.6—15.6)	8.6	(7.4—9.8)	
Total					
Females	29.5	(27.7—31.2)	18.7	(17.2—20.2)	
Males	14.8	(13.3—16.4)	8.0	(6.9—9.1)	
Persons	22.5	(21.3—23.7)	13.6	(12.6—14.6)	

<sup>(</sup>a) People who reported that they had been told they have a mental health condition in the previous 12 months

<sup>(</sup>b) People who reported that they are currently receiving treatment for a mental health condition.

The prevalence of current mental health status (i.e., any mental health condition and currently receiving treatment for a mental health condition) was estimated for the WA health regions and compared with the state prevalence.

- The prevalence of any mental health condition was higher in the South West health region (27.4%) when compared with the state prevalence (22.5%) (Figure 14).
- The prevalence of currently receiving treatment for a mental health condition was lower in the Pilbara health region (7.9%) and higher in the South West health region (18.5%) when compared with the state prevalence (13.6%).

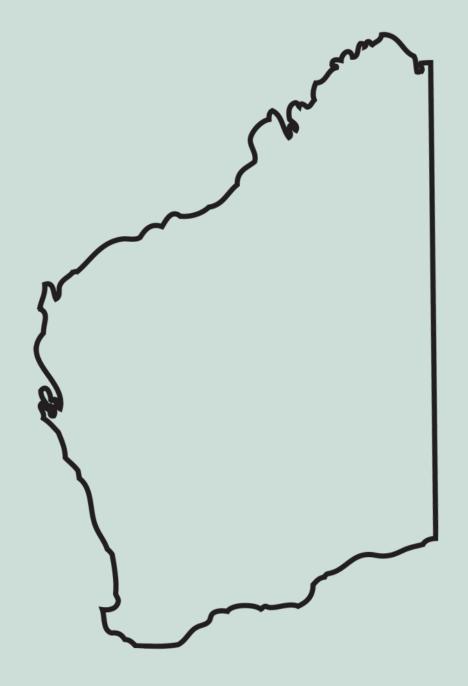


<sup>(</sup>a) People who reported that they had been told they have a mental health condition in the previous 12 months (b) People who reported that they are currently receiving treatment for a mental health condition.

Figure 14: Prevalence of current mental health status by health regions in WA, 16 years & over, HWSS 2023

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

# LIFESTYLE BEHAVIOURS



# 5. Lifestyle behaviours

Lifestyle behaviours can have a positive effect on health, such as the consumption of sufficient fruit and vegetables, or a negative effect, such as smoking and physical inactivity. This section will focus on the following lifestyle behaviours:

- **Smoking**
- Alcohol
- Illicit drug use
- Physical activity and sedentary behaviour
- Nutrition
- Sleep

12.5% of Western Australian adults are current smokers



24.3% of Western Australian adults had ever tried an e-cigarette



11.8% of Western Australian adults reported illicit drug use





35.5%

of Western Australian adults drink at levels considered to put people at risk of harm from alcohol - related disease or injury



36.3%

of Western Australian adults met the recommended minimum daily intake for fruit



5.1%

of Western Australian adults met the recommended minimum daily intake for vegetables



47.8%

of Western Australian adults consumed full fat/whole milk



6.6%

of Western Australian adults could not afford to buy food when they ran out in the past 12 months



11.7%

of Western Australian adults aged 65 years and over reported their teeth or dentures affected the type of food they were able to eat



6.2%

of Western Australian adults eat fast food meals three times or more a



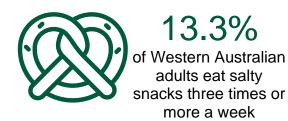
7.6%

of Western Australian adults eat fried hot potato products three times or more a week



32.7%

of Western Australian adults eat sweet baked snacks three times or more a week

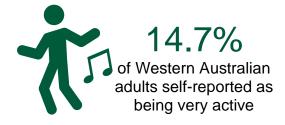




16.2% of Western Australian adults drink sugar sweetened soft-drinks or energy drinks three times or more a week



21.8% of Western Australian adults eat processed meats three times or more a week





66.2% of Western Australian adults do at least 150 minutes of moderate physical activity per week



50.6% of Western Australian adults reported spending most of their day sitting



33.2% of Western Australian adults spend 21 hours or more per week on screen-based activity



35.1% of Western Australian adults sleep less than the recommended number of hours on a usual night

## 5.1 Tobacco and e-cigarette use

# 5.1.1 Tobacco smoking

We asked respondents about their smoking status (including cigarettes, cigars, and pipes).

- Adults aged 45 to 64 years were more likely to report smoking daily compared with those aged 65 years and over (10.9% compared with 5.1%) (Table 16).
- Females were more likely to report never smoking compared with males (49.1% compared with 40.1%).

Table 16: Current smoking status, 18 years & over, HWSS 2023

	l sı	noke daily	l smok	e occasionally	I don't	t smoke now but I used to		ed it a few times never smoked regularly	ľve i	never smoked
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
18 to 44 years										
Females	9.0	(7.2—10.9)	2.3 *	(1.1—3.4)	20.4	(17.8—22.9)	13.6	(11.4—15.8)	54.7	(51.5—57.9)
Males	10.1	(7.8—12.5)	6.1	(4.1—8.1)	20.9	(17.8—24.1)	17.5	(14.5—20.6)	45.3	(41.4—49.2)
Persons	9.6	(8.1—11.0)	4.0	(2.9—5.1)	20.6	(18.6—22.7)	15.4	(13.6—17.3)	50.3	(47.8—52.8)
45 to 64 years										
Females	10.9	(9.5—12.3)	2.8	(2.0—3.6)	33.8	(31.7—35.9)	9.7	(8.5—11.0)	42.8	(40.6—45.0)
Males	12.1	(10.2—14.0)	3.5	(2.4—4.5)	39.0	(36.2—41.8)	8.3	(6.7—9.8)	37.2	(34.4—39.9)
Persons	11.5	(10.3—12.6)	3.1	(2.4—3.7)	36.2	(34.5—38.0)	9.0	(8.1—10.0)	40.2	(38.4—41.9)
65+ years										
Females	5.1	(3.9—6.3)	1.2	(0.7—1.8)	39.1	(36.2—41.9)	7.1	(5.6—8.6)	47.5	(44.6—50.4)
Males	6.1	(4.6—7.7)	1.5	(0.8—2.2)	50.7	(47.6—53.8)	7.0	(5.4—8.5)	34.6	(31.7—37.6)
Persons	5.6	(4.7—6.6)	1.4	(0.9—1.8)	44.9	(42.8—47.1)	7.1	(6.0—8.1)	41.0	(38.9—43.1)
Total										
Females	8.9	(7.9—9.8)	2.2	(1.6—2.8)	28.9	(27.4—30.4)	10.9	(9.8—12.0)	49.1	(47.3—50.8)
Males	9.9	(8.6—11.1)	4.1	(3.2—5.1)	34.0	(32.1—35.9)	11.9	(10.5—13.4)	40.1	(38.0—42.1)
Persons	9.3	(8.5—10.1)	3.1	(2.6—3.7)	31.4	(30.2—32.6)	11.4	(10.5—12.3)	44.8	(43.5—46.1)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Smoking status was categorised into those who currently smoke (daily or occasionally), ex-smokers, and those who have never smoked regularly according to definitions in the National Health Data Dictionary.<sup>5</sup> Those who had smoked 100 or more cigarettes in their lifetime but no longer currently smoked were classified as ex-smokers, while those who had smoked less than 100 cigarettes were classified as having never smoked or never smoked regularly.

- Adults aged 65 years and over were less likely to be current smokers compared with those aged 18 to 44 years and 45 to 64 years (6.3% compared with 11.3% and 13.7%) (**Table 17**).
- Adults aged 18 to 44 years were more likely to have never smoked or never smoked regularly compared with those aged 45 to 64 years and 65 years and over (68.5% compared with 50.6% and 54.9%).
- The prevalence of being an ex-smoker was higher among adults aged 65 years and over than those aged 18 to 44 years and 45 to 64 years (38.8% compared with 20.2% and 35.8%).
- Males were more likely to be current smokers compared with females (14.0% compared with 11.1%).
- Females were more likely to have never smoked or never smoked regularly compared with males (59.5% compared with 49.8%).

<sup>&</sup>lt;sup>5</sup> Australian Institute of Health and Welfare, 2015, National Health Data Dictionary: version 16.2, National Health Data Dictionary series. Cat. no. HWI 131., AIHW, Canberra, ACT, Available from: https://www.aihw.gov.au/getmedia/95a1c4b5-01ab-4524-9ea2-fd45df130a8e/18488-dictionary-v16-2.pdf.aspx?inline=true

Table 17: Lifetime smoking status, 18 years & over, HWSS 2023

	Curr	Current smoker		Ex-smoker		moked or never ked regularly
	%	95% CI	%	95% CI	%	95% CI
18 to 44 years						
Females	11.3	(9.2—13.4)	20.2	(17.7—22.6)	68.5	(65.6—71.5)
Males	16.2	(13.3—19.1)	24.3	(20.9—27.6)	59.5	(55.7—63.4)
Persons	13.6	(11.8—15.4)	22.1	(20.0—24.1)	64.3	(61.9—66.8)
45 to 64 years						
Females	13.7	(12.1—15.2)	35.8	(33.6—37.9)	50.6	(48.4—52.8)
Males	15.5	(13.4—17.6)	40.8	(38.0—43.6)	43.7	(40.8—46.5)
Persons	14.5	(13.3—15.8)	38.1	(36.4—39.9)	47.3	(45.6—49.1)
65+ years						
Females	6.3	(5.0—7.6)	38.8	(36.0—41.7)	54.9	(52.0—57.8)
Males	7.7	(6.0—9.3)	51.3	(48.2—54.4)	41.0	(38.0—44.1)
Persons	7.0	(5.9—8.0)	45.1	(43.0—47.2)	47.9	(45.8—50.0)
Total						
Females	11.1	(10.0—12.2)	29.5	(28.0—31.0)	59.5	(57.8—61.1)
Males	14.0	(12.5—15.5)	36.2	(34.3—38.1)	49.8	(47.7—51.9)
Persons	12.5	(11.5—13.4)	32.7	(31.5—33.9)	54.9	(53.6—56.2)

The prevalence of lifetime smoking status was estimated for the WA health regions and compared with the state prevalence.

- The prevalence of current smokers was lower in the North Metro health region (9.0%), and higher in the Midwest health region (18.2%), in the Wheatbelt health region (20.7%), in the Goldfield health region (21.6%), and in the Kimberley health region (32.5%) when compared with the state prevalence (12.5%) (Figure 15).
- The prevalence of adults who are ex-smokers was lower in the Pilbara health region (24.6%) when compared with the state prevalence (32.7%).
- The prevalence of adults who never smoked or never smoked regularly was lower in the Kimberley health region (34.5%), in the Goldfields health region (44.7%), and in the Wheatbelt health region (45.2%) when compared with the state prevalence (54.9%).

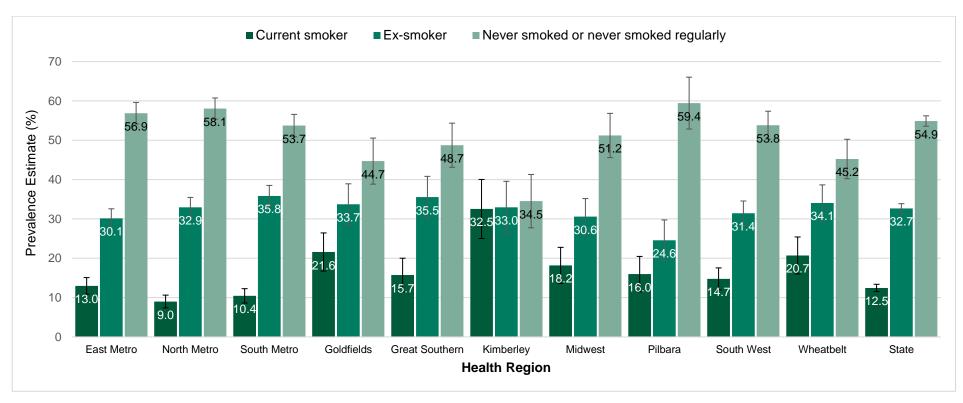


Figure 15: Prevalence of lifetime smoking status by health regions in WA, 18 years & over, HWSS 2023

We asked respondents if their home was smoke free or if people occasionally or frequently smoke in their home.

The majority (96.2%) of Western Australian adults live in a smoke free home (**Table 18**).

Table 18: Smoking in the home, 18 years & over, HWSS 2023

	Living in a smoke free home			
	%	95% CI		
18 to 44 years				
Females	96.8	(95.6—97.9)		
Males	94.6	(92.6—96.5)		
Persons	95.7	(94.6—96.8)		
45 to 64 years				
Females	96.0	(95.1—96.9)		
Males	95.3	(94.0—96.6)		
Persons	95.7	(94.9—96.4)		
65+ years				
Females	98.5	(97.8—99.1)		
Males	97.3	(96.3—98.3)		
Persons	97.9	(97.3—98.5)		
Total				
Females	96.9	(96.2—97.5)		
Males	95.4	(94.5—96.4)		
Persons	96.2	(95.6—96.7)		

# 5.1.2 E-cigarette use

We asked respondents if they had ever tried an electronic cigarette or e-cigarette including electronic-shisha, electronic-hookah, personal vaporisers and vape pens.

- The prevalence of adults having ever tried e-cigarettes was highest among the youngest age group (18 to 44 years 39.3%; 45 to 64 years – 17.6% and 65 and over – 4.8%) (**Table 19**).
- Males were more likely to have ever tried an e-cigarette compared with females (27.3% when compared with 21.5%).

Table 19: Prevalence of adults who have (ever) tried an e-cigarette, 18 years & over, HWSS, 2023

	Ever trie	Ever tried an e-cigarette		Never tried an e-cigarette		
	%	95% CI	%	95% CI		
18 to 44 years						
Females	33.7	(30.5—36.9)	66.3	(63.1—69.5)		
Males	45.7	(41.8—49.6)	54.3	(50.4—58.2)		
Persons	39.3	(36.8—41.8)	60.7	(58.2—63.2)		
45 to 64 years						
Females	15.6	(13.9—17.2)	84.4	(82.8—86.1)		
Males	19.9	(17.5—22.4)	80.1	(77.6—82.5)		
Persons	17.6	(16.2—19.0)	82.4	(81.0—83.8)		
65+ years						
Females	5.2	(3.9—6.5)	94.8	(93.5—96.1)		
Males	4.5	(3.2—5.8)	95.5	(94.2—96.8)		
Persons	4.8	(3.9—5.7)	95.2	(94.3—96.1)		
Total						
Females	21.5	(19.8—23.1)	78.5	(76.9—80.2)		
Males	27.3	(25.3—29.4)	72.7	(70.6—74.7)		
Persons	24.3	(22.9—25.6)	75.7	(74.4—77.1)		

The prevalence of adults who ever tried an e-cigarette was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults who ever tried an e-cigarette was higher in the Goldfields health region (35.9%) when compared with the state prevalence (24.3%) (Figure 16).

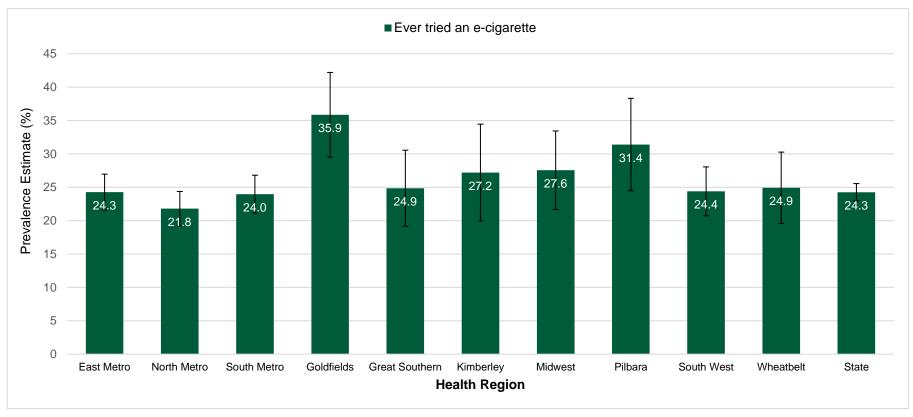


Figure 16: Prevalence of adults who ever tried an e-cigarette by health regions in WA, 18 years & over, HWSS 2023

We asked those respondents who said that they had ever tried an e-cigarette if they had tried an e-cigarette in the past 12 months.

- Of those adults who had ever tried e-cigarettes, more than two-thirds (64.5%) had used an e-cigarette in the past 12 months (Table 20).
- The prevalence of adults having ever tried e-cigarettes in the last 12 months was highest among the youngest age group: 18 to 44 years (68.7%); 45 to 64 years (57.9%) and 65 and over (34.8%).

Table 20: Prevalence of adults who tried an e-cigarette in the last 12 months of those who had ever tried an e-cigarette, 18 years & over, HWSS, 2023

		Tried an e-cigarette in the last 12 months		Did not try an e-cigarette in the last 12 months		
	%	95% CI	%	95% CI		
18 to 44 years						
Females	64.7	(59.0—70.4)	35.3	(29.6—41.0)		
Males	72.1	(66.8—77.3)	27.9	(22.7—33.2)		
Persons	68.7	(64.8—72.6)	31.3	(27.4—35.2)		
45 to 64 years						
Females	57.8	(52.0—63.7)	42.2	(36.3—48.0)		
Males	57.9	(51.2—64.6)	42.1	(35.4—48.8)		
Persons	57.9	(53.4—62.3)	42.1	(37.7—46.6)		
65+ years						
Females	31.4	(20.0—42.7)	68.6	(57.3—80.0)		
Males	38.7	(24.7—52.8)	61.3	(47.2—75.3)		
Persons	34.8	(25.8—43.8)	65.2	(56.2—74.2)		
Total						
Females	61.3	(57.0—65.6)	38.7	(34.4—43.0)		
Males	67.3	(63.1—71.5)	32.7	(28.5—36.9)		
Persons	64.5	(61.5—67.5)	35.5	(32.5—38.5)		

We asked respondents how often they use e-cigarettes during the past 12 months. Those who reported "daily", "less than daily but at least once a week", "less than weekly but at least once a month" and "less than once a month but occasionally" were considered as current e-cigarettes users.

- Around one in 10 (10.9%) adults were current e-cigarette users in 2023 (Table 21).
- The prevalence of adults who were current e-cigarette users in 2023 were highest among the youngest age group: 18 to 44 years (19.3%); 45 to 64 years (6.4%) and 65 and over (1.2%).

Table 21: Prevalence of adults who are current e-cigarette users,18 years and over, HWSS, 2023

	Current e-cigarette user		Not current e-cigarette user		
				4301	
	%	95% CI	%	95% CI	
18 to 44 years					
Females	15.8	(13.2—18.3)	84.2	(81.7—86.8)	
Males	23.4	(19.9—26.8)	76.6	(73.2—80.1)	
Persons	19.3	(17.2—21.4)	80.7	(78.6—82.8)	
45 to 64 years					
Females	5.3	(4.2—6.3)	94.7	(93.7—95.8)	
Males	7.7	(5.9 - 9.4)	92.3	(90.6—94.1)	
Persons	6.4	(5.4—7.4)	93.6	(92.6 - 94.6)	
65+ years					
Females	1.0 *	(0.5—1.6)	99.0	(98.4—99.5)	
Males	1.4 *	(0.7—2.1)	98.6	(97.9—99.3)	
Persons	1.2	(0.7—1.7)	98.8	(98.3—99.3)	
Total		,		,	
Females	9.0	(7.8—10.3)	91.0	(89.7—92.2)	
Males	12.9	(11.2—14.6)	87.1	(85.4—88.8)	
Persons	10.9	(9.8—11.9)	89.1	(88.1—90.2)	

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The prevalence of current e-cigarette use among current smokers was determined.

- Almost one-third (30.4%) of current smokers reported currently using e-cigarettes (**Table 22**).
- The prevalence of currently using e-cigarettes among current smokers did not vary by sex.

Table 22: Prevalence of current e-cigarette use among current smokers, 18 years & over, HWSS 2023

		Current e-cigarette use among current smokers		nt e-cigarette use current smokers
	%	95% CI	%	95% CI
Total				
Females	28.7	(23.3—34.1)	71.3	(65.9—76.7)
Males	32.0	(26.1—37.9)	68.0	(62.1—73.9)
Persons	30.4	(26.4—34.5)	69.6	(65.5—73.6)

## 5.2 Alcohol

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<sup>6</sup> and 2020 guidelines<sup>7</sup>. We will not be reporting on the alcohol prevalence based on the 2009 guidelines from 2024 and onward.

## The 2009 Guidelines state:

Guideline 1: To reduce the risk of alcohol-related harm over a lifetime (such as chronic disease or injury); a healthy adult should drink no more than 2 standard drinks a day.

Guideline 2: To reduce the risks of injury on a single occasion of drinking, a healthy adult should drink no more than 4 standard drinks on any one occasion.

Guideline 3: For children and young people under 18, not drinking is the safest option. For young people aged 15–17 years, delaying the start of alcohol consumption for as long as possible is the safest option.

## The 2020 Guidelines state:

Guideline 1: To reduce the risk of harm from alcohol-related disease or injury, healthy men and women should drink no more than 10 standard drinks a week and no more than 4 standard drinks on any one day.

Guideline 2: To reduce the risk of injury and other harms to health, children, and people under 18 years of age should not drink alcohol.

<sup>&</sup>lt;sup>6</sup> National Health and Medical Research Council, 2009, Australian guidelines to reduce health risks from drinking alcohol, NHMRC, Canberra, ACT.

<sup>&</sup>lt;sup>7</sup> National Health and Medical Research Council, 2020, Australian guidelines to reduce health risks from drinking alcohol, NHMRC, Canberra, ACT. Available from https://www.nhmrc.gov.au/about-us/publications/australian-guidelines-reduce-health-risks-drinking-alcohol

# 5.2.1 Alcohol consumption based on the NHMRC 2009 guidelines

- Males were more likely than females to report drinking at levels considered high risk for long-term alcohol related harm (38.7% compared with 20.4%) (Table 23).
- The prevalence of adults aged 65 years and over who were at high-risk of long-term alcohol consumption (19.7%) was lower when compared with younger age groups: 16 to 44 years (32.6%), and 45 to 64 years (30.6%).

Table 23: Risk of long-term alcohol related harm, NHMRC 2009 guidelines, 16 years & over, HWSS 2023

	Doe	Doesn't drink/		Long-term alcohol related harm			
	drinking le	vel undetermined	Low risk (a)		High risk (b)		
	%	95% CI	%	95% CI	%	95% CI	
16 to 44 years							
Females	50.6	(47.4—53.8)	25.1	(22.4—27.7)	24.3	(21.5—27.1)	
Males	32.8	(29.1—36.5)	25.0	(21.7—28.3)	42.1	(38.3—46.0)	
Persons	42.3	(39.9—44.8)	25.0	(22.9—27.2)	32.6	(30.3—35.0)	
45 to 64 years							
Females	42.0	(39.8—44.3)	36.1	(34.0—38.2)	21.9	(20.1—23.7)	
Males	29.9	(27.1—32.6)	29.8	(27.2—32.3)	40.4	(37.6—43.2)	
Persons	36.3	(34.6—38.1)	33.1	(31.5—34.7)	30.6	(28.9—32.2)	
65+ years							
Females	48.3	(45.4—51.1)	42.4	(39.5—45.2)	9.4	(7.8—11.0)	
Males	30.3	(27.3—33.2)	39.8	(36.8—42.8)	29.9	(27.1—32.7)	
Persons	39.2	(37.1—41.3)	41.1	(39.0—43.2)	19.7	(18.1—21.4)	
Total							
Females	47.2	(45.5—49.0)	32.4	(30.8—33.9)	20.4	(19.0—21.9)	
Males	31.3	(29.3—33.2)	30.0	(28.2—31.9)	38.7	(36.7—40.8)	
Persons	39.6	(38.3—41.0)	31.3	(30.1—32.4)	29.1	(27.9—30.4)	

<sup>(</sup>a) Drinks two or less standard drinks per day. (b) Drinks more than two standard drinks per day.

- Males were also more likely than females to report drinking at levels considered high risk for short-term alcohol related harm (17.5% compared with 6.8%) (Table 24).
- The prevalence of high risk of short-term alcohol consumption was lower for adults aged 65 years and over when compared with the younger age groups: 65 years and over (5.4%), compared with 16 to 44 years (15.6%), and 45 to 64 years (11.3%).

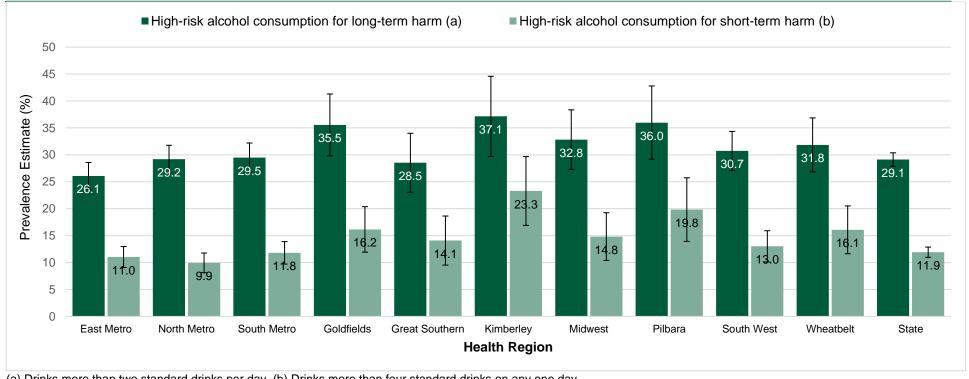
Table 24: Risk of short-term alcohol related harm, NHMRC 2009 guidelines, 16 years & over, HWSS 2023

	Doe	sn't drink/	Short-term alcohol related harm					
		vel undetermined	L	.ow risk (a)	High risk (b)			
	%	95% CI	%	95% CI	%	95% CI		
16 to 44 years								
Females	50.6	(47.4—53.8)	39.4	(36.3—42.5)	10.0	(8.0—12.0)		
Males	32.8	(29.1—36.5)	45.2	(41.4—49.1)	21.9	(18.7—25.2)		
Persons	42.3	(39.9—44.8)	42.1	(39.7—44.6)	15.6	(13.7—17.4)		
45 to 64 years								
Females	42.0	(39.8—44.3)	52.3	(50.1—54.6)	5.6	(4.6—6.6)		
Males	29.9	(27.1—32.6)	52.3	(49.4—55.2)	17.8	(15.7—20.0)		
Persons	36.3	(34.6—38.1)	52.3	(50.5—54.1)	11.3	(10.2—12.5)		
65+ years								
Females	48.3	(45.4—51.1)	49.9	(47.0—52.7)	1.9	(1.1—2.7)		
Males	30.3	(27.3—33.2)	60.9	(57.9—64.0)	8.8	(7.1—10.5)		
Persons	39.2	(37.1—41.3)	55.4	(53.3—57.6)	5.4	(4.4—6.3)		
Total								
Females	47.2	(45.5—49.0)	46.0	(44.2—47.7)	6.8	(5.8—7.8)		
Males	31.3	(29.3—33.2)	51.2	(49.1—53.3)	17.5	(15.9—19.2)		
Persons	39.6	(38.3—41.0)	48.5	(47.1—49.8)	11.9	(11.0—12.9)		

<sup>(</sup>a) Drinks four or less standard drinks on any one day. (b) Drinks more than four standard drinks on any one day.

The prevalence of high-risk alcohol consumption for long-term and short-term harm was estimated for the WA health regions and compared with the state prevalence.

- The prevalence of high-risk alcohol consumption for long-term harm did not differ by health region when compared with the state prevalence.
- The prevalence of high-risk alcohol consumption for short-term harm was higher in the Pilbara health region (19.8%) and in the Kimberley health region (23.3%) when compared with the state prevalence (11.9%) (Figure 17).



(a) Drinks more than two standard drinks per day. (b) Drinks more than four standard drinks on any one day.

Figure 17: Prevalence of high-risk alcohol consumption for long-term and short-term harm by health regions in WA, NHMRC 2009 guidelines, 16 years & over, HWSS 2023

# 5.2.2 Alcohol consumption based on the NHMRC 2020 guidelines

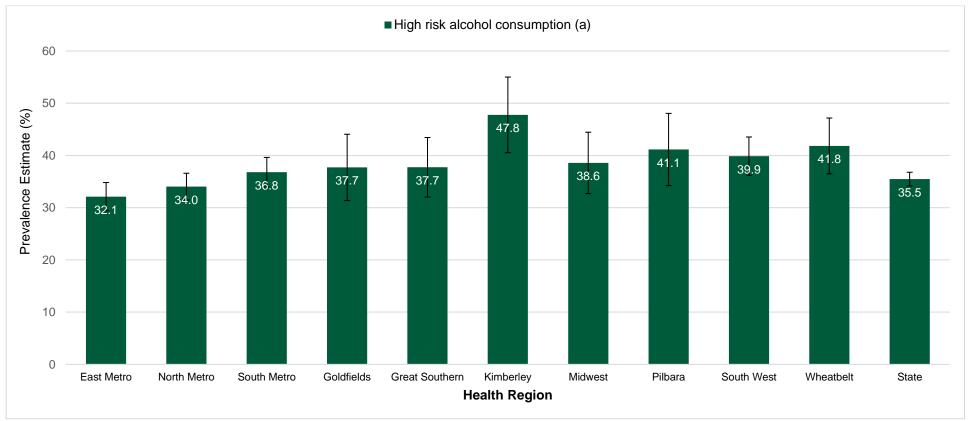
- Males were more likely than females to report drinking at levels that put them at risk of harm from alcohol-related disease or injury (46.4% compared with 25.5%) (Table 25).
- Persons aged 65 years and over were less likely to report drinking at level that put them at risk of harm from alcohol-related disease or injury (28.3%) as compared with 16 to 44 years (37.8%) and 45 to 64 years (37.1%).

Table 25: Drinking at levels that put people at risk of harm from alcohol-related disease or injury, NHMRC 2020 guidelines, 16 years & over, HWSS 2023

		that put people at risk of elated disease or injury (a)
	%	95% CI
16 to 44 years		
Females	28.2	(25.3—31.2)
Males	48.7	(44.8—52.6)
Persons	37.8	(35.3—40.2)
45 to 64 years		
Females	27.5	(25.5—29.4)
Males	47.9	(45.1—50.8)
Persons	37.1	(35.3—38.8)
65+ years		
Females	16.4	(14.3—18.5)
Males	40.0	(36.9—43.0)
Persons	28.3	(26.4—30.2)
Total		
Females	25.5	(24.0—27.1)
Males	46.4	(44.4—48.5)
Persons	35.5	(34.2—36.8)

<sup>(</sup>a) People aged 18 years and over who drink more than 10 standard drinks per week and more than 4 standard drinks on any one day, and people aged 16-17 who drink any alcohol.

The prevalence of consuming alcohol at levels that put people at risk of harm from alcohol related disease or injury was higher in the Kimberley health region (47.8%) when compared with the state prevalence (35.5%) (Figure 18).



(a) People aged 18 years and over who drink more than 10 standard drinks per week and more than 4 standard drinks on any one day, and people aged 16-17 who drink any alcohol.

Figure 18: Prevalence of consuming alcohol at levels that put them at risk of harm from alcohol related disease or injury by health regions in WA, NHMRC 2020 guidelines, 16 years & over, HWSS 2023

#### 5.3 Nutrition

#### 5.3.1 Fruit and Vegetables

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. As the consumption of half serves is not captured in the questions currently asked in the HWSS, for the purposes of reporting, the recommended number of serves are rounded down to the nearest whole number. The current Australian Dietary Guidelines8 developed in 2013 by the National Health and Medical Research Council (NHMRC) are presented in Table 26.

Table 26: NHMRC Australian Dietary Guidelines for fruit and vegetable daily consumption guidelines and HWSS reporting definitions, 16 years & over

	Minimum recommended serves of fruit per day	Minimum red serves of v per		Minimum serves of vegetables per day for HWSS reporting		
	Females and Males	Females	Males	Females	Males	
16-18 years	2	5	5.5	5	5	
19-50 years	2	5	6	5	6	
51-70 years	2	5	5.5	5	5	
70 + years	2	5	5	5	5	

<sup>&</sup>lt;sup>8</sup> National Health and Medical Research Council, 2013, Australian dietary guidelines, NHMRC, Canberra, ACT. Available from: https://www.nhmrc.gov.au/guidelines-publications/n55

- Adults aged 65 years and over (44.6%) were more likely to consume two or more serves of fruit daily compared with those age 16 to 44 years (32.9%) and 45 to 64 years (35.5%) (Table 27).
- Females aged 65 years and over were more likely to consume two or more serves of fruit daily compared with males in the same age group (48.9% compared with 40.3%).

Table 27: Serves of fruit consumed daily, 16 years & over, HWSS 2023

	Doesn't eat fruit			Eats less than one serve of fruit daily		Eats one serve of fruit daily		or more serves of ruit daily
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years								
Females	9.6	(7.7—11.5)	13.2	(11.0—15.5)	43.6	(40.5—46.8)	33.5	(30.5—36.5)
Males	13.1	(10.4—15.7)	17.7	(14.7—20.8)	37.0	(33.3—40.8)	32.2	(28.6—35.8)
Persons	11.2	(9.6—12.8)	15.3	(13.5—17.2)	40.5	(38.1—43.0)	32.9	(30.6—35.2)
45 to 64 years								
Females	9.8	(8.4—11.1)	13.1	(11.5—14.6)	41.0	(38.8—43.1)	36.2	(34.1—38.3)
Males	10.3	(8.5—12.1)	17.6	(15.4—19.8)	37.3	(34.6—40.1)	34.7	(32.0—37.4)
Persons	10.0	(8.9—11.1)	15.2	(13.9—16.5)	39.3	(37.5—41.0)	35.5	(33.8—37.2)
65+ years								
Females	4.6	(3.4—5.8)	9.0	(7.4—10.5)	37.6	(34.8—40.4)	48.9	(46.0—51.7)
Males	6.4	(4.9—7.9)	13.8	(11.7—15.8)	39.5	(36.5—42.6)	40.3	(37.3—43.4)
Persons	5.5	(4.5—6.5)	11.4	(10.1—12.7)	38.6	(36.5—40.6)	44.6	(42.4—46.7)
Total								
Females	8.6	(7.6—9.6)	12.3	(11.1—13.5)	41.5	(39.8—43.2)	37.6	(35.9—39.3)
Males	10.6	(9.3—12.0)	16.8	(15.2—18.4)	37.7	(35.7—39.7)	34.9	(33.0—36.9)
Persons	9.6	(8.7—10.4)	14.4	(13.4—15.4)	39.7	(38.4—41.0)	36.3	(35.0—37.6)

Females were more likely to consume three to four serves of vegetables daily and five or more serves of vegetables daily compared with males (29.4% compared with 21.3%; 7.2% compared with 4.1%, respectively) (Table 28).

Table 28: Serves of vegetables consumed daily, 16 years & over, HWSS 2023

	Doesn't eat vegetables			Eats less than one serve of vegetables daily		Eats one to two serves of vegetables daily		Eats three to four serves of vegetables daily		five or more of vegetables daily
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years										
Females	1.5 *	(0.7-2.4)	5.0	(3.4—6.6)	60.6	(57.5—63.8)	26.3	(23.6—29.0)	6.5	(5.0—8.1)
Males	2.8 *	(1.4—4.3)	7.4	(5.5—9.4)	64.6	(60.9—68.3)	20.7	(17.6—23.8)	4.4	(3.0—5.9)
Persons	2.1	(1.3—2.9)	6.1	(4.9—7.4)	62.5	(60.1—64.9)	23.7	(21.7—25.8)	5.6	(4.5—6.6)
45 to 64 years										
Females	1.5	(0.9—2.1)	4.9	(3.9—5.9)	54.9	(52.7—57.1)	31.1	(29.1—33.1)	7.6	(6.5—8.7)
Males	1.8 *	(0.9-2.6)	9.4	(7.5—11.3)	65.4	(62.6—68.1)	19.9	(17.7—22.1)	3.5	(2.6—4.4)
Persons	1.6	(1.1—2.1)	7.0	(6.0—8.1)	59.8	(58.1—61.6)	25.9	(24.4—27.4)	5.7	(5.0—6.4)
65+ years										
Females	1.2 *	(0.4—1.9)	4.8	(3.5—6.1)	52.2	(49.3—55.0)	33.7	(31.0—36.4)	8.2	(6.7—9.7)
Males	1.0 *	(0.4—1.5)	6.1	(4.6—7.6)	64.0	(61.1—67.0)	24.5	(21.9—27.1)	4.4	(3.2—5.5)
Persons	1.1	(0.6—1.5)	5.5	(4.5—6.5)	58.1	(56.1—60.2)	29.1	(27.2-31.0)	6.3	(5.3—7.2)
Total										
Females	1.4	(1.0—1.9)	4.9	(4.1—5.8)	57.0	(55.3—58.7)	29.4	(27.9—31.0)	7.2	(6.4—8.1)
Males	2.0	(1.3—2.7)	7.8	(6.7—8.9)	64.7	(62.8—66.7)	21.3	(19.7—23.0)	4.1	(3.4-4.9)
Persons	1.7	(1.3—2.1)	6.3	(5.6—7.0)	60.6	(59.3—61.9)	25.6	(24.5—26.7)	5.8	(5.2—6.3)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The prevalence of adults aged 16 years and over who met the 2013 Australian Dietary Guidelines for fruit and vegetable consumption (rounded down to the nearest whole number) was estimated.

- Adults aged 65 years and over (44.6%) were more likely to meet fruit consumption guidelines compared with those aged 16 to 44 years (32.9%) and those aged 45 to 64 years (35.5%) (**Table 29**).
- Females were more likely to meet vegetables consumption guidelines compared with males (7.2% compared with 2.6%).

Table 29: Prevalence of meeting fruit and vegetable consumption guidelines, 16 years & over, HWSS 2023

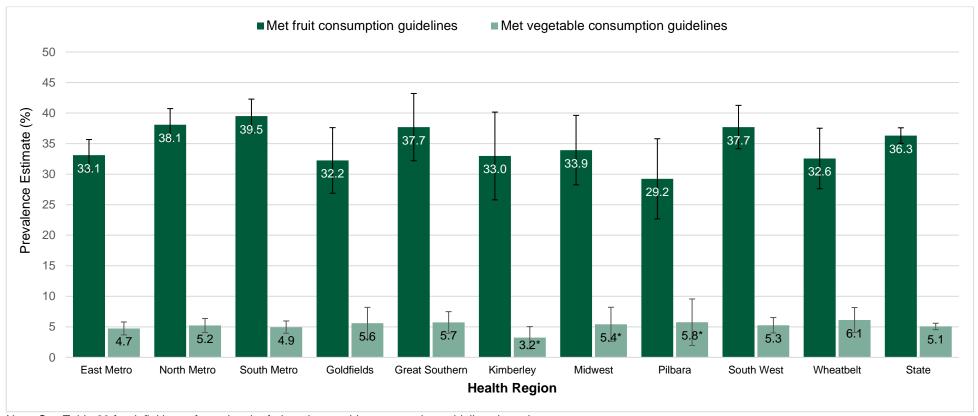
		iit consumption guidelines	Met vegetable consumption guidelines			
	%	95% CI	%	95% CI		
16 to 44 years						
Females	33.5	(30.5—36.5)	6.5	(5.0—8.1)		
Males	32.2	(28.6—35.8)	1.4 *	(0.6—2.3)		
Persons	32.9	(30.6 - 35.2)	4.2	(3.3—5.1)		
45 to 64 years						
Females	36.2	(34.1—38.3)	7.6	(6.5—8.7)		
Males	34.7	(32.0—37.4)	3.1	(2.2-3.9)		
Persons	35.5	(33.8—37.2)	5.5	(4.8—6.2)		
65+ years						
Females	48.9	(46.0—51.7)	8.2	(6.7—9.7)		
Males	40.3	(37.3—43.4)	4.4	(3.2—5.5)		
Persons	44.6	(42.4—46.7)	6.3	(5.3—7.2)		
Total						
Females	37.6	(35.9—39.3)	7.2	(6.4—8.1)		
Males	34.9	(33.0—36.9)	2.6	(2.1—3.2)		
Persons	36.3	(35.0—37.6)	5.1	(4.5—5.6)		

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Note: See Table 26 for definitions of meeting the fruit and vegetable consumption guidelines based on age

The prevalence of meeting fruit and vegetable consumption guidelines was estimated for the WA health regions and compared with the state prevalence.

The prevalence of meeting fruit consumption guidelines and the prevalence of meeting vegetable consumption did not differ by health region when compared with the state prevalence (Figure 19).



Note: See Table 26 for definitions of meeting the fruit and vegetable consumption guidelines based on age

Figure 19: Prevalence of meeting fruit and vegetable consumption guidelines by health regions in WA, 16 years & over, **HWSS 2023** 

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

#### 5.3.2 Milk

We asked respondents what type of milk they usually consume.

- Adults aged 16 to 44 years were more likely to consume full fat or whole milk (51.3%) compared with those aged 45 to 64 years (44.7%) and those aged 65 years and over (45.5%) (Table 30).
- Males were more likely to consume full fat or whole milk compared with females (54.1% compared with 42.1%).
- Females were more likely to consume other types of milk compared with males (16.6% compared with 8.9%).

Table 30: Type of milk consumed, 16 years & over, HWSS 2023

	Ful	Full fat/whole		Low/reduced fat/skim milk		Other	Do	n't use milk
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years								
Females	45.9	(42.7—49.0)	23.6	(20.9-26.4)	21.4	(18.7—24.0)	9.1	(7.2—11.0)
Males	57.4	(53.5—61.2)	21.0	(17.8—24.2)	11.4	(8.9—13.9)	10.2	(7.9—12.5)
Persons	51.3	(48.8—53.7)	22.4	(20.3-24.5)	16.7	(14.9—18.6)	9.6	(8.1—11.1)
45 to 64 years								
Females	39.1	(37.0—41.3)	36.2	(34.1—38.3)	15.9	(14.2—17.5)	8.8	(7.6—10.0)
Males	51.1	(48.2—53.9)	30.2	(27.6—32.7)	9.2	(7.4—11.0)	9.6	(7.9—11.2)
Persons	44.7	(42.9—46.5)	33.4	(31.7—35.0)	12.7	(11.5—14.0)	9.2	(8.2—10.2)
65+ years								
Females	38.7	(35.9—41.5)	45.4	(42.5—48.2)	7.4	(6.0—8.9)	8.5	(6.9—10.1)
Males	52.2	(49.1—55.4)	36.0	(33.0 - 39.0)	3.8	(2.6—5.0)	8.0	(6.4—9.7)
Persons	45.5	(43.4—47.6)	40.6	(38.5—42.7)	5.6	(4.6—6.5)	8.3	(7.1—9.4)
Total		· ,		· ,		· · · · · · · · · · · · · · · · · · ·		,
Females	42.1	(40.4—43.8)	32.4	(30.8—34.0)	16.6	(15.2—18.0)	8.9	(7.9—9.9)
Males	54.1	(52.0—56.2)	27.5	(25.7—29.3)	8.9	(7.6—10.2)	9.5	(8.3—10.7)
Persons	47.8	(46.5—49.2)	30.1	(28.9—31.3)	12.9	(12.0—13.9)	9.2	(8.4—10.0)

# 5.3.3 Food security

We asked respondents whether there was any time in the last 12 months when they had run out of food and could not afford to buy more.

- The prevalence of adults that were more likely to have experience running out of food in the last 12 months and could not afford to buy more decreased with age: 16 to 44 years (8.9%), 45 to 64 years (6.1%) and 65 years and over (2.6%)
- Females (8.6%) were more likely to have experienced running out of food in the last 12 months and could not afford to buy more compared with males (4.3%) (Table 31).

Table 31: Ran out of food and could not afford to buy more, 16 years & over, HWSS 2023

		Yes		No
	%	95% CI	%	95% CI
16 to 44 years				
Females	12.1	(9.9—14.3)	87.9	(85.7—90.1)
Males	5.2	(3.4—6.9)	94.8	(93.1—96.6)
Persons	8.9	(7.4—10.3)	91.1	(89.7—92.6)
45 to 64 years				
Females	7.6	(6.2—8.9)	92.4	(91.1—93.8)
Males	4.5	(3.2—5.8)	95.5	(94.2—96.8)
Persons	6.1	(5.2—7.1)	93.9	(92.9—94.8)
65+ years				
Females	2.8	(1.8—3.7)	97.2	(96.3—98.2)
Males	2.5	(1.4—3.6)	97.5	(96.4—98.6)
Persons	2.6	(1.9—3.3)	97.4	(96.7—98.1)
Total				
Females	8.6	(7.5—9.8)	91.4	(90.2—92.5)
Males	4.3	(3.4—5.3)	95.7	(94.7—96.6)
Persons	6.6	(5.9—7.3)	93.4	(92.7—94.1)

# 5.3.4 Impact of teeth/dentures on dietary intake

We asked respondents aged 65 years and over whether their teeth or dentures affected the type of food they were able to eat.

There were no differences between males and females in adults aged 65 years and over who reported their teeth and dentures affected the type of food they were able to eat (Table 32).

Table 32: Impact of teeth/dentures on dietary intake, 65 years & over, HWSS 2023

		Yes
	%	95% CI
Females	13.0	(11.0—15.0)
Males	10.4	(8.5—12.4)
Persons	11.7	(10.3—13.1)

# 5.4 Discretionary foods

#### 5.4.1 Fast food

We 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.

- The prevalence of adults who reported eating fast food meals or snacks once or twice a week and three or more times a week decreased with age: 'once or twice a week' 16 to 44 years (41.4%), 45 to 64 years (29.3%) and 65 years and over (12.4%); 'three or more times a week –16 to 44 years (10.3%), 45 to 64 years (4.1%) and 65 years and over (1.0%) (**Table 33**).
- Females were more likely to never eat fast food meals or snacks when compared with males (35.3% compared to 27.6%).
- Males were more likely to eat fast food meals or snacks three or more times a week when compared with females (8.5% compared to 4.1%).

Table 33: Meals from fast food outlets per week, 16 years & over, HWSS 2023

	Never		Less tha	Less than once a week		or twice a week	Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years								
Females	19.3	(16.8—21.7)	33.3	(30.3—36.3)	40.2	(37.0—43.3)	7.2	(5.4—9.1)
Males	14.2	(11.6—16.9)	29.1	(25.6—32.6)	42.9	(39.0—46.7)	13.8	(11.0—16.6)
Persons	16.9	(15.1—18.7)	31.3	(29.1—33.6)	41.4	(39.0—43.9)	10.3	(8.6—12.0)
45 to 64 years								
Females	37.1	(35.0—39.2)	35.5	(33.4—37.6)	25.2	(23.3—27.2)	2.2	(1.5—2.8)
Males	27.4	(24.9—29.9)	32.4	(29.7—35.0)	33.9	(31.2—36.7)	6.3	(4.8—7.9)
Persons	32.5	(30.9 - 34.2)	34.0	(32.4—35.7)	29.3	(27.6—31.0)	4.1	(3.3-4.9)
65+ years								
Females	67.8	(65.1—70.4)	23.5	(21.1—25.9)	8.1	(6.6—9.6)	0.6 *	(0.2—1.0)
Males	53.4	(50.3—56.5)	28.6	(25.8—31.3)	16.7	(14.4—19.0)	1.3 *	(0.6—2.0)
Persons	60.6	(58.5—62.6)	26.0	(24.2—27.9)	12.4	(11.0—13.8)	1.0	(0.5—1.4)
Total								
Females	35.3	(33.7—36.9)	32.1	(30.4—33.7)	28.5	(26.8—30.2)	4.1	(3.2-5.0)
Males	27.6	(25.9—29.3)	30.0	(28.2—31.9)	33.9	(31.8—35.9)	8.5	(7.1—9.8)
Persons	31.7	(30.5—32.8)	31.1	(29.9—32.3)	31.0	(29.7—32.3)	6.2	(5.4—7.0)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The prevalence of eating meals or snacks from fast food outlets at least once a week was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults who reported eating meals or snacks from fast food outlets at least once a week was higher in the Goldfields health region (48.8%) and lower in the Wheatbelt health region (25.9%) when compared with the state prevalence (37.2%) (Figure 20).

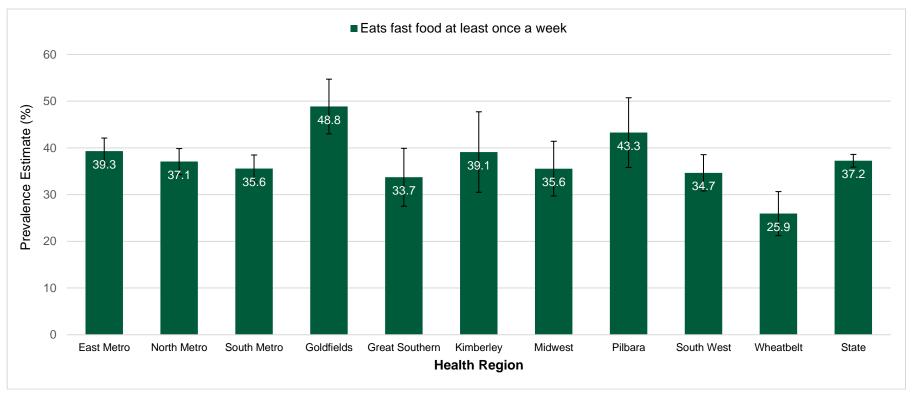


Figure 20: Prevalence of eating meals from fast food outlets at least once a week by health regions in WA, 16 years & over, **HWSS 2023** 

# 5.4.2 Fried hot potato products

We asked respondents how many times a week on average they ate hot chips, french-fries, wedges, hash browns or fried potatoes.

- The prevalence of adults who reported eating fried hot potato products three or more times a week decreased with age: 16 to 44 years (12.0%), 45 to 64 years (4.6%) and 65 years and over (3.3%) (**Table 34**).
- Males were more likely to eat fried hot potato products once or twice a week and three or more times a week compared with females (41.9% compared with 33.9%; and 10.2% compared with 5.3%, respectively).

Table 34: Hot chips, french-fries, wedges, hash browns or fried potatoes eaten per week, 16 years & over, HWSS 2023

	Never		Less tha	Less than once a week		Once or twice a week		Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
16 to 44 years									
Females	15.4	(13.1—17.7)	32.6	(29.6—35.6)	43.3	(40.1—46.4)	8.7	(6.8—10.6)	
Males	11.7	(9.2—14.2)	25.0	(21.6—28.3)	47.6	(43.7—51.5)	15.7	(12.8—18.7)	
Persons	13.7	(12.0—15.3)	29.1	(26.8—31.3)	45.3	(42.8—47.8)	12.0	(10.3—13.7)	
45 to 64 years									
Females	30.9	(28.8—32.9)	38.0	(35.8—40.2)	28.3	(26.4—30.3)	2.8	(2.1—3.4)	
Males	20.3	(17.9—22.6)	33.0	(30.3—35.7)	40.1	(37.3—42.9)	6.6	(5.2—8.1)	
Persons	25.9	(24.4—27.5)	35.7	(34.0—37.4)	33.9	(32.2—35.5)	4.6	(3.8—5.3)	
65+ years									
Females	43.1	(40.3—46.0)	32.5	(29.7—35.3)	22.6	(20.3—25.0)	1.8	(1.0—2.5)	
Males	30.0	(27.1—32.9)	31.4	(28.6—34.3)	33.8	(30.9—36.8)	4.7	(3.5—5.9)	
Persons	36.5	(34.5—38.6)	32.0	(30.0—34.0)	28.2	(26.3—30.2)	3.3	(2.5-4.0)	
Total									
Females	26.4	(24.9—27.8)	34.4	(32.8—36.1)	33.9	(32.3—35.6)	5.3	(4.3—6.2)	
Males	18.8	(17.2—20.3)	29.1	(27.3—31.0)	41.9	(39.9—44.0)	10.2	(8.8—11.6)	
Persons	22.8	(21.7—23.8)	31.9	(30.7—33.2)	37.7	(36.4—39.1)	7.6	(6.8—8.4)	

The prevalence of eating fried hot potato products at least once a week was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults who reported eating fried hot potato products at least once a week was higher in the Goldfields health region (56.6%) when compared with the state prevalence (45.3%) (Figure 21).

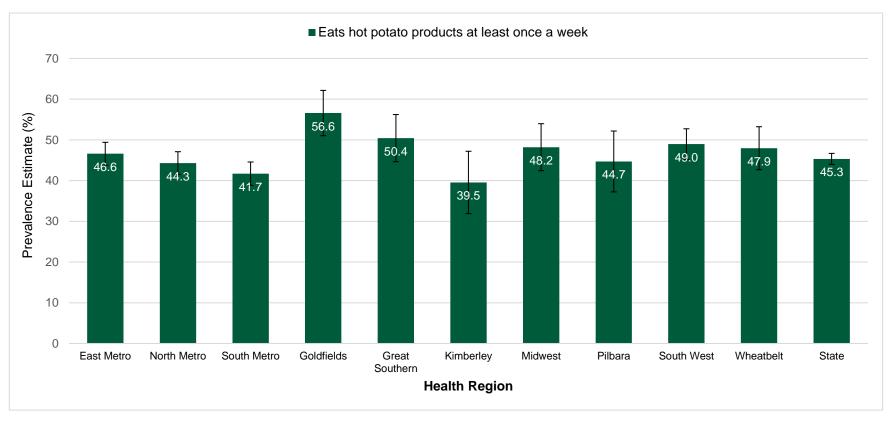


Figure 21: Prevalence of eating fried hot potato products at least once a week by health regions in WA, 16 years & over, **HWSS 2023** 

#### 5.4.3 Sweet baked snacks

We asked respondents how many times a week on average they ate sweet biscuits, cakes, doughnuts, muffins, pastries, or muesli bars.

Adults aged 65 years and over were more likely to report eating sweet biscuits, cakes, doughnuts, muffins, pastries, or muesli bars three or more times a week compared with those aged 16 to 44 years and 45 to 64 years (41.0% compared with 29.9% and 30.9%) (Table 35).

Table 35: Sweet biscuits, cakes, doughnuts, muffins, pastries or muesli bars eaten per week, 16 years & over, HWSS 2023

			-					
		Never	Less th	an once a week	Once o	r twice a week	Three or n	nore times a week
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years								
Females	15.8	(13.4—18.1)	19.3	(16.8—21.9)	33.1	(30.1—36.1)	31.8	(28.8—34.8)
Males	23.3	(20.0—26.7)	16.7	(13.8—19.6)	32.2	(28.6—35.8)	27.8	(24.3—31.2)
Persons	19.3	(17.3—21.3)	18.1	(16.2—20.0)	32.7	(30.4—35.0)	29.9	(27.6—32.2)
45 to 64 years								
Females	23.5	(21.7—25.4)	15.2	(13.6—16.8)	30.5	(28.4—32.5)	30.8	(28.7—32.8)
Males	22.9	(20.4—25.3)	14.3	(12.2—16.4)	31.7	(29.1—34.4)	31.1	(28.5—33.7)
Persons	23.2	(21.7—24.7)	14.8	(13.5—16.1)	31.1	(29.4—32.7)	30.9	(29.3—32.6)
65+ years								
Females	25.2	(22.7—27.7)	9.7	(8.0—11.3)	25.7	(23.2-28.2)	39.5	(36.6—42.3)
Males	21.4	(18.8—24.1)	9.9	(8.1—11.7)	26.2	(23.5—28.9)	42.4	(39.4—45.5)
Persons	23.3	(21.5—25.1)	9.8	(8.6—11.0)	26.0	(24.1—27.8)	41.0	(38.9—43.1)
Total								
Females	20.4	(19.0—21.7)	15.9	(14.6—17.3)	30.7	(29.1—32.3)	33.0	(31.4—34.7)
Males	22.7	(20.9—24.5)	14.3	(12.8—15.8)	30.7	(28.8—32.6)	32.3	(30.4—34.2)
Persons	21.5	(20.4—22.6)	15.2	(14.2—16.2)	30.7	(29.4—31.9)	32.7	(31.4—33.9)

The prevalence of eating sweet baked snacks at least once a week was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults who reported eating sweet baked snacks at least once a week was higher in the Great Southern health region (71.8%) and lower in the Kimberley health region (50.1%) when compared with the state prevalence (63.3%) (Figure 22).

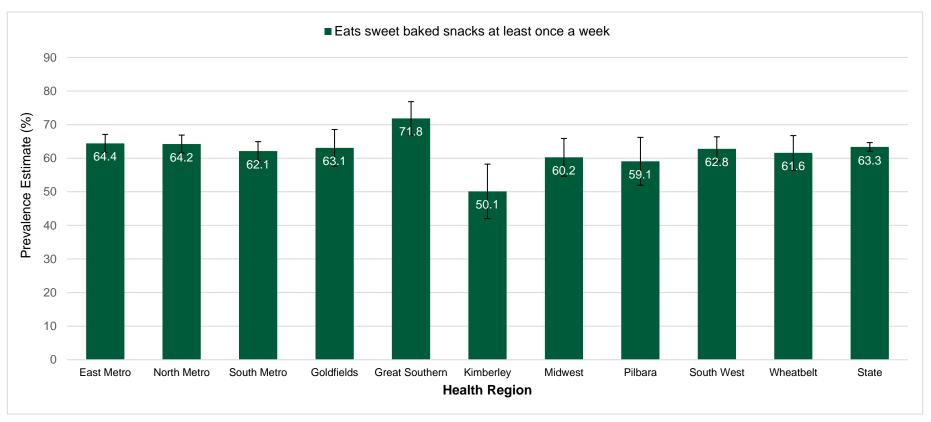


Figure 22: Prevalence of eating sweet baked snacks at least once a week by health regions in WA, 16 years & over, HWSS 2023

# 5.4.4 Salty snacks

We asked respondents how many times a week on average they ate salty snacks such as potato crisps, corn chips, crackers, or pretzels.

The prevalence of adults who reported eating salty snacks three or more times a week decreased with age: 16 to 44 years (17.7%), 45 to 64 years (10.9%) and 65 years and over (7.8%) (**Table 36**).

Table 36: Salty snacks eaten per week, 16 years & over, HWSS 2023

		Never		Less than once a week		Once or twice a week		Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
16 to 44 years									
Females	23.2	(20.5—25.9)	21.7	(19.0—24.4)	36.7	(33.6—39.7)	18.4	(15.9—21.0)	
Males	22.6	(19.3—25.9)	21.2	(18.1—24.4)	39.4	(35.6—43.1)	16.8	(13.9—19.8)	
Persons	22.9	(20.8—25.0)	21.5	(19.4—23.5)	37.9	(35.5—40.3)	17.7	(15.8—19.6)	
45 to 64 years									
Females	31.2	(29.2—33.3)	25.3	(23.4—27.2)	32.8	(30.8—34.9)	10.6	(9.2—12.1)	
Males	29.8	(27.1—32.5)	23.7	(21.4—26.1)	35.2	(32.5—37.9)	11.3	(9.4—13.2)	
Persons	30.6	(28.9—32.2)	24.6	(23.0—26.1)	33.9	(32.3—35.6)	10.9	(9.8—12.1)	
65+ years									
Females	55.5	(52.6—58.3)	18.0	(15.8—20.1)	19.4	(17.1—21.7)	7.2	(5.7—8.6)	
Males	49.9	(46.8—53.0)	18.6	(16.3—21.0)	23.1	(20.5—25.7)	8.4	(6.7—10.1)	
Persons	52.7	(50.5—54.8)	18.3	(16.7—19.9)	21.3	(19.5—23.0)	7.8	(6.7—8.9)	
Total				,		,		,	
Females	32.6	(31.0—34.2)	22.1	(20.7—23.6)	31.8	(30.2—33.4)	13.5	(12.1—14.8)	
Males	31.3	(29.4—33.1)	21.5	(19.8—23.1)	34.2	(32.2—36.2)	13.0	(11.6—14.5)	
Persons	32.0	(30.7—33.2)	21.8	(20.7—22.9)	33.0	(31.7—34.2)	13.3	(12.3—14.3)	

The prevalence of eating salty snacks at least once a week was estimated for the WA health regions and compared with the state prevalence.

• The prevalence of adults who reported eating salty snacks at least once a week did not differ by health region when compared with the state prevalence (**Figure 23**).

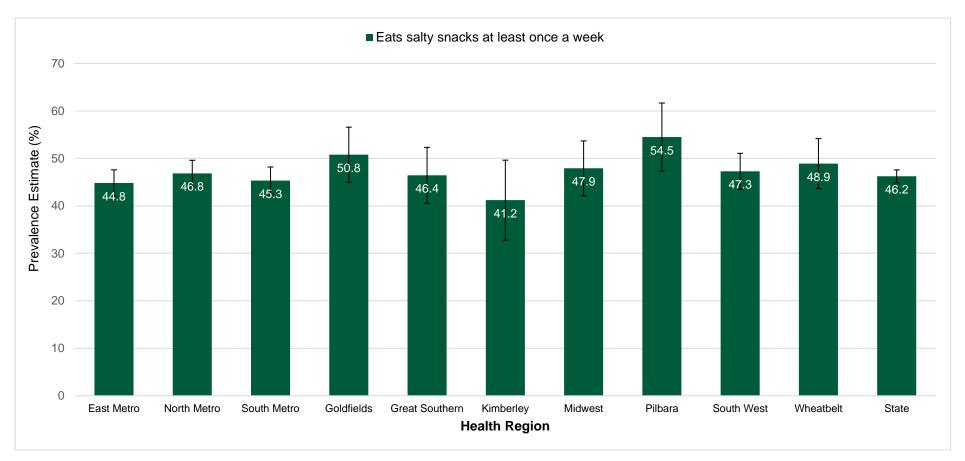


Figure 23: Prevalence of eating salty snacks at least once a week by health regions in WA, 16 years & over, HWSS 2023

# 5.4.5 Sugar-sweetened soft drinks and energy drinks

We asked respondents how many times a week on average they drank sugar-sweetened soft drinks, energy or sports drinks or cordial.

- The prevalence of adults drinking sugar sweetened soft drinks or energy drinks three or more times a week decreased with age: 16 to 44 years (21.8%), 45 to 64 years (13.0%), and 65 years and over (10.0%) (**Table 37**).
- Males were more likely to drink sugar sweetened soft drinks or energy drinks three or more times a week compared with females (19.4% compared with 13.4%).

Table 37: Drinking sugar-sweetened soft drinks or energy drinks per week, 16 years & over, HWSS 2023

		Never		Less than once a week One		or twice a week	Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years								
Females	51.0	(47.8—54.2)	12.4	(10.3—14.5)	17.3	(14.8—19.7)	19.3	(16.6—22.0)
Males	41.5	(37.7—45.3)	15.6	(12.8—18.5)	18.3	(15.3—21.3)	24.6	(21.2—28.0)
Persons	46.6	(44.1—49.0)	13.9	(12.2—15.6)	17.7	(15.8—19.7)	21.8	(19.7—23.9)
45 to 64 years								
Females	73.3	(71.3—75.3)	7.1	(5.9—8.2)	10.3	(8.9—11.8)	9.3	(8.0—10.5)
Males	56.4	(53.6—59.3)	10.8	(9.0—12.6)	15.6	(13.5—17.8)	17.1	(15.0—19.3)
Persons	65.4	(63.7—67.1)	8.8	(7.8—9.9)	12.8	(11.6—14.1)	13.0	(11.7—14.2)
65+ years								
Females	84.3	(82.2—86.3)	3.7	(2.6—4.9)	4.9	(3.8—6.0)	7.1	(5.6—8.5)
Males	73.1	(70.5—75.8)	5.4	(4.2—6.7)	8.6	(6.9—10.3)	12.8	(10.8—14.8)
Persons	78.7	(77.0—80.4)	4.6	(3.7—5.4)	6.8	(5.8—7.8)	10.0	(8.7—11.2)
Total								
Females	65.5	(63.7—67.2)	8.8	(7.7—9.9)	12.4	(11.1—13.6)	13.4	(12.0—14.8)
Males	53.7	(51.6—55.8)	11.7	(10.3—13.1)	15.2	(13.6—16.7)	19.4	(17.7—21.1)
Persons	59.9	(58.5—61.2)	10.2	(9.3—11.0)	13.7	(12.7—14.7)	16.2	(15.2—17.3)

The prevalence of drinking sugar-sweetened soft drinks or energy drinks at least once a week was estimated for the WA health regions and compared with the state prevalence.

• The prevalence of adults who reported drinking sugar-sweetened soft drinks or energy drinks at least once a week was higher in the Goldfields health region (43.2%), in the Kimberley health region (43.7%), and in the Pilbara health region (40.1%), and lower in the North Metro health region (25.3%) when compared with the state prevalence (30.0%) (**Figure 24**).

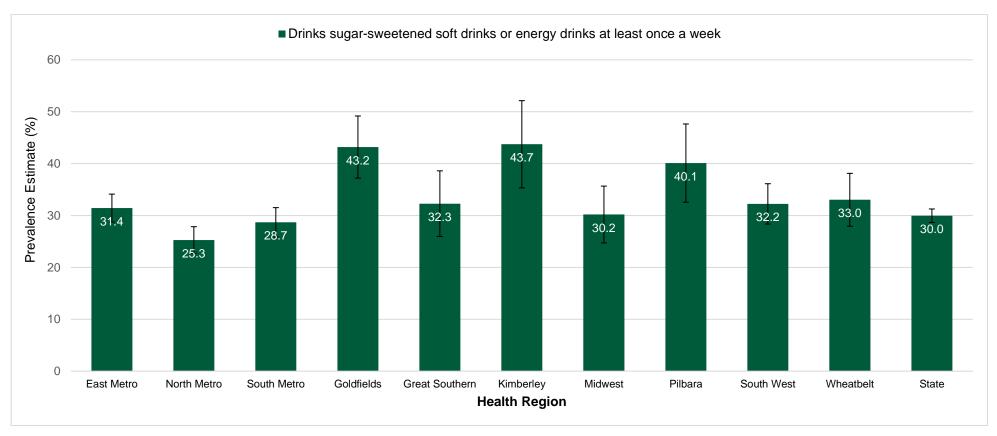


Figure 24: Prevalence of drinking sugar-sweetened soft drinks or energy drinks at least once a week by health regions in WA, 16 years & over, HWSS 2023

#### 5.4.6 Processed meats

We asked respondents how many times a week on average they ate processed meat products such as sausages, sausage-rolls, bacon, ham, salami, or other cold meats.

- The prevalence of adults eating processed meats three or more times a week decreased with age: 16 to 44 years (26.5%), 45 to 64 years (19.7%), and 65 years and over (15.5%) (Table 38).
- Males were more likely to report eating processed meats three or more times as compared with females (27.8% compared with 16.4%).

Table 38: Processed meats eaten per week, 16 years & over, HWSS 2023

		-	-					
		Never	Less tha	n once a week	Once o	r twice a week	Three or m	ore times a week
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years								
Females	22.4	(19.6—25.1)	17.1	(14.7—19.6)	38.8	(35.7—41.9)	21.7	(19.1—24.4)
Males	14.7	(11.9—17.5)	13.8	(11.1—16.4)	39.6	(35.8—43.4)	31.9	(28.3—35.5)
Persons	18.8	(16.8—20.8)	15.6	(13.8—17.4)	39.2	(36.7—41.6)	26.5	(24.3—28.7)
45 to 64 years								
Females	25.3	(23.3—27.3)	21.5	(19.7—23.4)	39.5	(37.4—41.7)	13.6	(12.2—15.1)
Males	14.2	(12.1—16.2)	16.2	(14.1—18.3)	43.0	(40.2—45.9)	26.6	(24.1—29.1)
Persons	20.1	(18.6—21.5)	19.0	(17.6—20.4)	41.2	(39.4—42.9)	19.7	(18.3—21.2)
65+ years								
Females	28.7	(26.0—31.3)	23.5	(21.1—25.9)	38.5	(35.7—41.3)	9.4	(7.8—11.0)
Males	16.1	(13.8—18.4)	16.9	(14.6—19.2)	45.4	(42.4—48.5)	21.5	(18.9—24.1)
Persons	22.3	(20.6—24.1)	20.2	(18.5—21.9)	42.0	(39.9—44.1)	15.5	(13.9—17.0)
Total		,				·		•
Females	24.7	(23.1—26.2)	19.9	(18.6—21.3)	39.0	(37.3—40.7)	16.4	(15.1—17.8)
Males	14.9	(13.3—16.4)	15.3	(13.8—16.8)	42.1	(40.0—44.1)	27.8	(25.9—29.7)
Persons	20.0	(18.9—21.1)	17.7	(16.7—18.7)	40.4	(39.1—41.8)	21.8	(20.7—23.0)

The prevalence of eating processed meats at least once a week was estimated for the WA health regions and compared with the state prevalence.

• The prevalence of adults who reported eating processed meats at least once a week was higher in the Goldfields health region (74.2%), in the Great Southern health region (71.1%), and in the Wheatbelt health region (75.3%) health region when compared with the state prevalence (62.3%) (**Figure 25**).

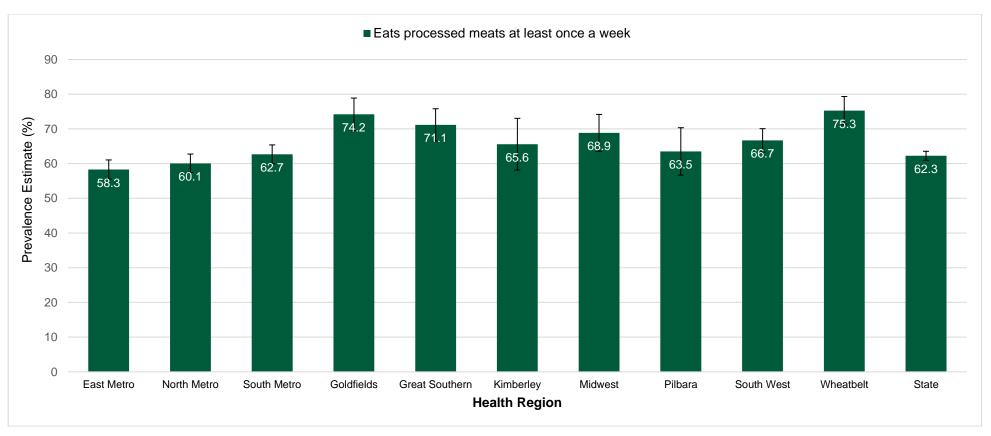


Figure 25: Prevalence of eating processed meats at least once a week by health regions in WA, 16 years & over, HWSS 2023

# 5.5 Physical activity and sedentary behaviour

# 5.5.1 Physical activity

We asked respondents to rate their own physical activity level as very active, active, moderately active, not very active, or not at all active.

- The prevalence of adults who were more likely to report being 'very active' decreased with age: 16 to 44 years (16.9%), 45 to 64 years (14.2%) and 65 years and over (10.8%) (Table 39).
- Males were more likely to report being 'very active' compared with females (17.4% compared with 12.2%).

Table 39: Self-reported level of physical activity, 16 years & over, HWSS 2023

	Very active			Active	Mode	erately active	Not	very active	Not at all active	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years										
Females	13.2	(11.0—15.3)	21.9	(19.2—24.5)	40.9	(37.8—44.1)	20.6	(18.0—23.1)	3.4	(2.2-4.6)
Males	21.2	(17.9—24.4)	29.1	(25.6—32.6)	33.0	(29.3—36.6)	14.7	(12.0—17.4)	2.1 *	(0.9-3.2)
Persons	16.9	(15.0—18.8)	25.2	(23.1—27.4)	37.2	(34.8—39.6)	17.8	(16.0—19.7)	2.8	(2.0-3.6)
45 to 64 years										
Females	12.0	(10.5—13.5)	19.8	(18.1—21.6)	39.3	(37.2—41.5)	23.5	(21.6—25.4)	5.3	(4.3-6.3)
Males	16.6	(14.4—18.8)	26.1	(23.6—28.6)	35.7	(32.9—38.4)	17.6	(15.4—19.8)	4.0	(2.8—5.2)
Persons	14.2	(12.9—15.4)	22.8	(21.3—24.3)	37.6	(35.9—39.3)	20.7	(19.3—22.2)	4.7	(3.9—5.5)
65+ years										
Females	10.3	(8.6—12.0)	21.5	(19.2—23.8)	40.0	(37.1—42.8)	20.2	(17.9—22.6)	8.0	(6.3—9.7)
Males	11.3	(9.6—13.1)	28.9	(26.1—31.8)	39.0	(36.0-42.1)	16.1	(13.8—18.4)	4.6	(3.1—6.0)
Persons	10.8	(9.6—12.1)	25.2	(23.4—27.1)	39.5	(37.4—41.6)	18.2	(16.5—19.8)	6.3	(5.1—7.4)
Total										
Females	12.2	(11.0—13.3)	21.1	(19.7—22.5)	40.2	(38.5—41.9)	21.5	(20.1—22.9)	5.0	(4.3—5.7)
Males	17.4	(15.7—19.0)	28.1	(26.2—29.9)	35.3	(33.3—37.2)	16.0	(14.5—17.5)	3.3	(2.6—4.0)
Persons	14.7	(13.7—15.6)	24.4	(23.3—25.6)	37.9	(36.6—39.2)	18.9	(17.9—19.9)	4.2	(3.7—4.7)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

We asked respondents how they usually spend most of the day.

- Adults aged 65 years and over were more likely to spend most of their day walking compared with those aged 16 to 44 years (25.3% compared with 21.4%) (Table 40).
- Adults aged 65 years and over were less likely to report spending most of their day in heavy labour or physically demanding work compared with those age 45 to 64 years (4.1% compared with 10.4%).
- Males were more likely than females to spend most of their day in heavy labour or physically demanding work (15.3% compared with 5.8%).

Table 40: How usually spend day, 16 years & over, HWSS 2023

		Sitting	Si	Standing		Walking		Heavy labour/ physically demanding work	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
16 to 44 years									
Females Males	47.8 49.2	(44.5—51.0) (45.3—53.1)	21.1 12.5	(18.5—23.7) (10.0—15.1)	23.1 19.4	(20.4—25.8) (16.2—22.5)	8.0 18.9	(6.1—9.9) (15.9—21.9)	
Persons	48.4	(45.9—50.9)	17.2	(15.3—19.0)	21.4	(19.3—23.4)	13.0	(11.3—14.8)	
45 to 64 years									
Females	53.9	(51.7—56.2)	19.2	(17.5—20.9)	21.7	(19.9—23.6)	5.1	(4.1—6.1)	
Males	53.1	(50.2—56.0)	13.8	(11.7—15.8)	16.7	(14.6—18.9)	16.4	(14.1—18.6)	
Persons	53.6	(51.7—55.4)	16.6	(15.3—18.0)	19.4	(18.0—20.8)	10.4	(9.2—11.6)	
65+ years									
Females	48.4	(45.4—51.4)	19.9	(17.6—22.2)	29.8	(27.1—32.5)	1.8	(1.1—2.6)	
Males	52.9	(49.7—56.1)	19.8	(17.2—22.5)	20.9	(18.4—23.4)	6.4	(5.1—7.7)	
Persons	50.7	(48.5—52.9)	19.9	(18.1—21.6)	25.3	(23.5—27.2)	4.1	(3.4-4.9)	
Total									
Females	50.0	(48.2—51.8)	20.2	(18.8—21.6)	24.0	(22.5—25.5)	5.8	(4.9—6.7)	
Males	51.3	(49.2—53.5)	14.6	(13.1—16.0)	18.8	(17.2—20.5)	15.3	(13.7—16.8)	
Persons	50.6	(49.3—52.0)	17.6	(16.5—18.6)	21.5	(20.4—22.6)	10.3	(9.4—11.2)	

In 2014, the Australian Department of Health updated Australia's Physical Activity and Sedentary Behaviour Guidelines, stating that adults aged 18 to 64 years should do at least 75 to 150 minutes of vigorous physical activity or 150 to 300 minutes of moderate physical activity per week.<sup>9</sup>

With no new guideline explicitly defined in the 2014 Physical Activity and Sedentary Behaviour guidelines for adults aged 65 years and over, the 2005 recommendation of 30 minutes of moderate physical activity on most and preferably all days of the week, is the most recent advice available. To avoid reporting against multiple guidelines, all persons aged 18 years and over will be defined as completing sufficient (or recommended) levels of physical activity if they complete at least 150 minutes of moderate physical activity in the last week. The questions used to estimate the amount of physical activity undertaken in a week are taken from the Active Australia Survey.<sup>10</sup>

• The prevalence of adults who reported not engaging in any moderate physical activity per week increased with age: 18 to 44 years (7.2%), 45 to 64 years (12.8%) and 65 years older (16.1%) (**Table 41**).

\_

<sup>&</sup>lt;sup>9</sup> Australian Government Department of Health, 2014, Australia's physical activity and sedentary behaviour guidelines: adults, Department of Health, Canberra, ACT. Available from <a href="https://www.health.gov.au/topics/physical-activity-and-exercise/physical-activity-and-exercise-guidelines-for-all-australians">https://www.health.gov.au/topics/physical-activity-and-exercise/physical-activity-and-exercise-guidelines-for-all-australians</a>
<sup>10</sup> Australian Institute of Health and Welfare, 2003, The Active Australia Survey, a guide and manual for implementation, analysis and reporting, cat. no. CVD 22, AIHW, Canberra, ACT. Available from: <a href="http://www.aihw.gov.au/publication-detail/?id=6442467449">http://www.aihw.gov.au/publication-detail/?id=6442467449</a>

Table 41: Physical activity level, based on the 2014 Australian Physical Activity and Sedentary Behaviour guidelines (150 minutes or more per week), 18 years & over, HWSS 2023

		Does no moderate physical activity per week		than 150 mins tivity per week	Does at least 150 mins physical activity per week		
	%	95% CI	%	95% CI	%	95% CI	
18 to 44 years							
Females	8.3	(6.5—10.1)	26.5	(23.6—29.5)	65.2	(62.1—68.4)	
Males	5.9	(4.1—7.8)	17.2	(14.3—20.1)	76.8	(73.6—80.1)	
Persons	7.2	(5.9—8.4)	22.1	(20.0—24.2)	70.7	(68.4—73.0)	
45 to 64 years							
Females	13.2	(11.6—14.7)	23.9	(21.9—25.8)	63.0	(60.8—65.2)	
Males	12.4	(10.4—14.5)	20.3	(18.0—22.7)	67.2	(64.4—70.0)	
Persons	12.8	(11.6—14.1)	22.2	(20.7—23.7)	65.0	(63.2—66.7)	
65+ years							
Females	17.6	(15.3—19.9)	29.3	(26.5—32.1)	53.1	(50.1—56.1)	
Males	14.7	(12.4—17.0)	20.9	(18.3—23.6)	64.4	(61.3—67.5)	
Persons	16.1	(14.5—17.7)	25.1	(23.1—27.0)	58.8	(56.6—61.0)	
Total				· ,			
Females	11.9	(10.8—13.0)	26.2	(24.6—27.8)	61.9	(60.2—63.7)	
Males	10.1	(8.9—11.3)	19.1	(17.5—20.7)	70.8	(68.9—72.6)	
Persons	11.0	(10.2—11.8)	22.8	(21.6—23.9)	66.2	(64.9—67.5)	

The prevalence of physical activity levels based on the 2014 Australian Physical Activity and Sedentary Behaviour guidelines (150 minutes or more per week) was estimated for the WA health regions and compared with the state prevalence.

- The prevalence of adults who reported not engaging in any moderate physical activity was higher in the Midwest (17.7%) and Wheatbelt (15.7%) health regions when compared with the state prevalence (11.0%) (Figure 26).
- The prevalence of adults who do at least 150 mins moderate physical activity per week was lower in the Goldfields health region (57.2%) when compared with the state prevalence (66.2%).

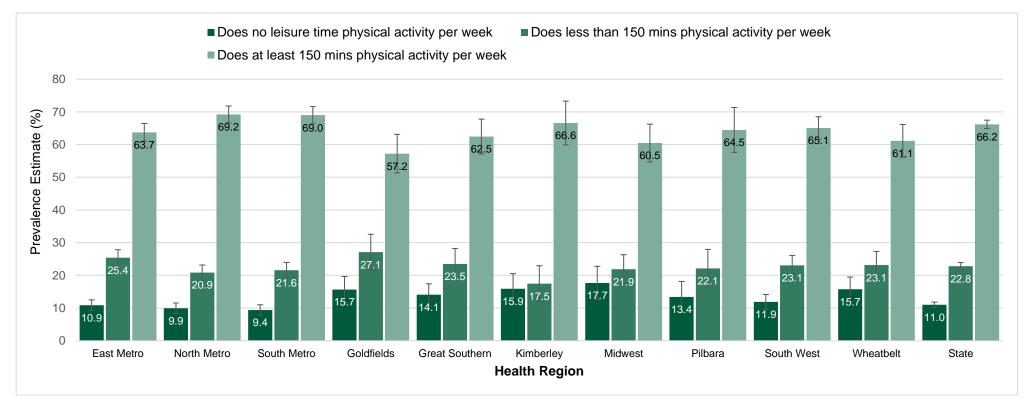


Figure 26: Physical activity levels based on the 2014 Australian Physical Activity and Sedentary Behaviour guidelines (150 minutes or more per week) by health regions in WA, 18 years & over, HWSS 2023

# 5.5.2 Sedentary recreational screen time

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.

The prevalence of adults who reported spending 21 hours or more per week in screen-based sedentary recreational leisure time activities increased with age: 16 to 44 years (25.5%), 45 to 64 years (29.9%) and 65 years and over (54.3%) (Table 42).

Table 42: Time spent watching TV/DVDs or using a computer/smartphone/tablet device per week, 16 years & over, HWSS 2023

	None		Les	s than 7hrs	7 to le	ess than 14hrs	14 to le	ess than 21hrs	21+ hrs	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years										
Females	1.9	(1.1—2.7)	20.0	(17.5—22.6)	25.2	(22.4—27.9)	26.5	(23.7—29.4)	26.4	(23.4—29.4)
Males	2.4	(1.3—3.5)	18.6	(15.7—21.6)	25.7	(22.3—29.0)	28.8	(25.2—32.3)	24.6	(21.1—28.0)
Persons	2.1	(1.4—2.8)	19.4	(17.4—21.3)	25.4	(23.3—27.6)	27.6	(25.3—29.8)	25.5	(23.2—27.8)
45 to 64 years										
Females	2.0	(1.3—2.7)	14.8	(13.2—16.3)	21.9	(20.1—23.7)	30.5	(28.5—32.6)	30.8	(28.7—32.9)
Males	2.1	(1.3—2.9)	16.8	(14.7—18.9)	22.7	(20.3—25.1)	29.6	(26.9—32.3)	28.8	(26.2—31.4)
Persons	2.1	(1.5—2.6)	15.7	(14.4—17.0)	22.3	(20.8—23.7)	30.1	(28.4—31.7)	29.9	(28.2—31.5)
65+ years										
Females	0.9	(0.5—1.4)	10.0	(8.4—11.7)	9.7	(8.1—11.3)	22.8	(20.4—25.1)	56.6	(53.7—59.4)
Males	0.6 *	(0.2—1.0)	12.0	(9.9—14.0)	13.5	(11.4—15.6)	21.9	(19.3—24.4)	52.0	(48.9—55.2)
Persons	8.0	(0.5—1.1)	11.0	(9.7—12.3)	11.7	(10.3—13.0)	22.3	(20.6—24.0)	54.3	(52.1—56.4)
Total										
Females	1.7	(1.3—2.2)	16.2	(14.9—17.5)	20.9	(19.5—22.4)	27.1	(25.6—28.7)	34.0	(32.3—35.7)
Males	1.9	(1.3—2.5)	16.5	(14.9—18.0)	21.9	(20.1—23.6)	27.4	(25.6—29.3)	32.3	(30.3—34.2)
Persons	1.8	(1.4—2.2)	16.3	(15.3—17.3)	21.4	(20.3—22.5)	27.3	(26.1—28.5)	33.2	(31.9—34.5)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The prevalence of adults who spend 21 hours or more per week in screen-based sedentary leisure time activities was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults who spend 21 hours or more per week in screen-based sedentary leisure time activities was similar across health regions when compared with the state prevalence (Figure 27).

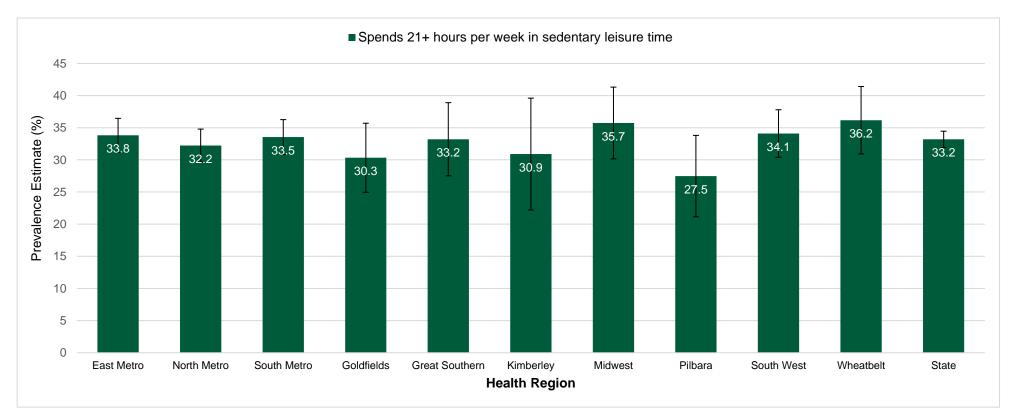


Figure 27: Prevalence of adults who spend 21 hours or more per week in screen-based sedentary leisure time activities by health regions in WA, 16 years & over, HWSS 2023

# 5.6 Sleep

We asked respondents how many hours sleep they get on a usual night, and these were grouped based on the Sleep Health Foundation recommendations, which vary by age group. 11 For ages 16-17, 8-10 hours are suggested; ages 18-64, 7-9 hours; and for adults 65 and over, 7-8 hours.

The prevalence of adults who reported sleeping the recommended number of hours on a usual night decreased with age: 16 to 44 years (66.0%), 45 to 64 years (61.1%) and 65 years and over (52.4%) (**Table 43**).

Table 43: Prevalence of adults sleeping the recommended number of hours on a usual night, 16 years & over, HWSS 2023

	Sleeps the recommended number of hours per night		recomme	less than the nded number of s per night	Sleeps more than the recommended number of hours per night		
Sex	%	95% CI	%	95% CI	%	95% CI	
16 to 44 years							
Females	65.7	(62.7—68.8)	32.0	(29.0—35.0)	2.3	(1.2—3.4)	
Males	66.4	(62.7—70.1)	32.5	(28.8—36.1)	1.1 *	(0.3—1.9)	
Persons	66.0	(63.7—68.4)	32.2	(29.9—34.6)	1.7	(1.1—2.4)	
45 to 64 years							
Females	61.0	(58.8—63.1)	37.9	(35.8—40.1)	1.1	(0.6—1.6)	
Males	61.3	(58.5—64.2)	36.6	(33.8—39.4)	2.0 *	(1.0—3.1)	
Persons	61.1	(59.4—62.9)	37.3	(35.6—39.1)	1.5	(1.0—2.1)	
65+ years							
Females	49.7	(46.8—52.6)	41.7	(38.8—44.6)	8.6	(7.0—10.1)	
Males	55.0	(51.9—58.1)	33.8	(30.9—36.8)	11.1	(9.2—13.1)	
Persons	52.4	(50.3—54.5)	37.7	(35.7—39.8)	9.9	(8.6—11.1)	
Total							
Females	60.8	(59.1—62.5)	36.0	(34.3—37.7)	3.2	(2.6—3.8)	
Males	62.1	(60.1—64.1)	34.2	(32.2—36.2)	3.7	(3.1—4.4)	
Persons	61.4	(60.1—62.7)	35.1	(33.9—36.4)	3.4	(3.0—3.9)	

<sup>&</sup>lt;sup>11</sup> Sleep Health Foundation, 2015, How Much Sleep Do You Really Need? Sleep Health Foundation, Blacktown, NSW. Available from: https://www.sleephealthfoundation.org.au/pdfs/HowMuchSleep-0716.pdf.

The prevalence of adults sleeping the recommended number of hours on a usual night was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults who reported sleeping the recommended number of hours on a usual night was similar across health regions when compared with the state prevalence (Figure 28).

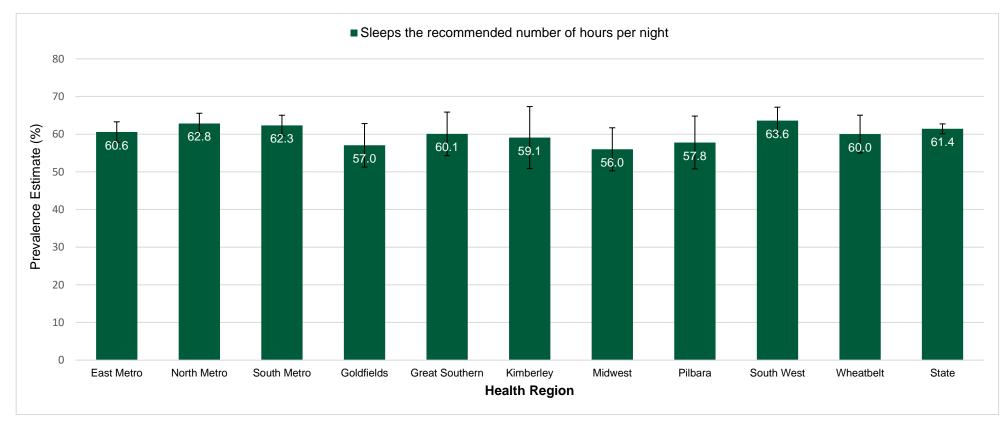


Figure 28: Prevalence of adults sleeping the recommended number of hours on a usual night by health regions in WA, 16 years & over, HWSS 2023

### 5.7 Illicit drug use

We asked respondents if they had used any drugs for non-medical purposes in the last 12 months. This could include illicit drugs such as cannabis, ecstasy, methamphetamines, or illicit use of pharmaceuticals such as pain-relievers, sleeping pills and steroids.

Cannabis was the most common illicit drug used (9.3%) followed by the illicit use of methamphetamines (1.2%) and cocaine (2.1%) (Table 44).

Table 44: Use of illicit drugs in the last 12 months for non-medical purposes, 16 years & over, HWSS 2023

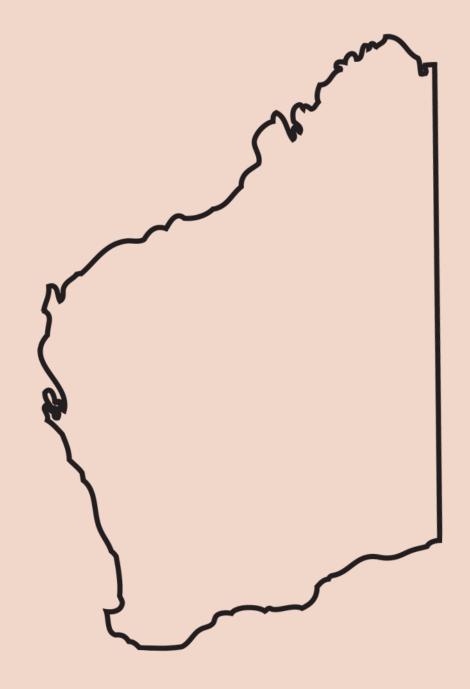
	Illicit drug use in the last 12 months			
Drug type	%	95% CI		
Cannabis	9.3	(8.4—10.2)		
Hallucinogens	2.2	(1.7—2.7)		
Cocaine	2.1	(1.6—2.6)		
Ecstasy	2.0	(1.5—2.5)		
Illicit use of pharmaceuticals (a)	1.8	(1.4—2.2)		
Amphetamines	1.6	(1.2—2.0)		
Methamphetamines	1.2	(0.8—1.5)		
Any illicit drug use (b) (c)	11.8	(10.8—12.8)		

<sup>(</sup>a) Includes painkillers, analgesics, opioids, tranquillisers, sleeping pills, steroids, methadone, and buprenorphine used for non-medical purposes.

<sup>(</sup>b) Includes cannabis, ecstasy, cocaine, methamphetamines, amphetamines, pharmaceuticals, heroin, hallucinogens, and illicit use of any other drug not listed.

<sup>(</sup>c) Refers to individuals who may have more than one drug use type.

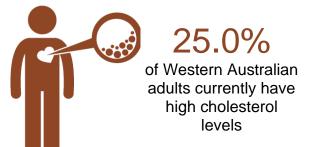
# BIOMEDICAL RISK FACTORS



# 6. Biomedical risk factors

Biomedical risk factors such as high cholesterol, high blood pressure and excess body mass are major contributors to disease burden. 12,13 However, they can be effectively managed through a combination of clinical practice, medications, population-based interventions, and lifestyle behaviours. This section will focus on the following biomedical risk factors:

- Cholesterol
- Blood pressure
- Body weight





21.4% of Western Australian adults currently have high blood pressure



38.2% of Western Australian adults are obese

and

37.7%

are overweight.

<sup>&</sup>lt;sup>12</sup> Australian Institute of Health and Welfare, 2023, Australia's health 2022: Topic Summaries – Biomedical risk factors, AIHW, Canberra, ACT. Available from: https://www.aihw.gov.au/reports/australias-health/biomedical-risk-factors

<sup>&</sup>lt;sup>13</sup> Australian Institute of Health and Welfare, 2023, Australia's health 2022: Topic Summaries – Overweight and obesity, AIHW, Canberra, ACT. Available from: https://www.aihw.gov.au/reports/overweight-obesity/overweight-and-obesity

#### 6.1 Cholesterol

We asked respondents whether a doctor had told them that they had high cholesterol and if they still have high cholesterol.

- The lifetime prevalence of high cholesterol increased with age: 16 to 44 years (21.4%), 45 to 64 years (41.0%), and 65 years and over (53.1%) (Table 45).
- The point prevalence of high cholesterol also increased with age: 16 to 44 years (9.0%), 45 to 64 years (26.1%), and 65 years and over (44.6%).

Table 45: Prevalence of adults with high cholesterol levels, 16 years & over, HWSS 2023

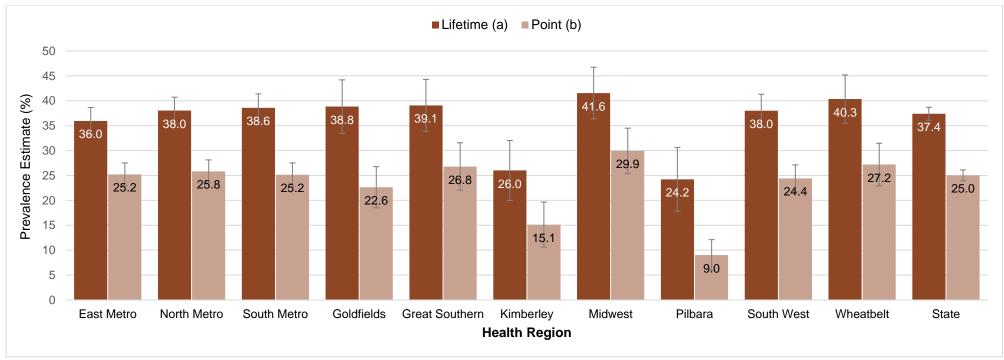
	Lif	etime (a)	Point (b)				
	%	95% CI	%	95% CI			
16 to 44 years							
Females	19.7	(16.6—22.9)	7.4	(5.4—9.4)			
Males	23.5	(19.5—27.5)	11.0	(8.0—13.9)			
Persons	21.4	(18.9—23.9)	9.0	(7.2—10.7)			
45 to 64 years							
Females	37.9	(35.7—40.2)	24.2	(22.3—26.2)			
Males	44.5	(41.5—47.4)	28.2	(25.6—30.8)			
Persons	41.0	(39.1—42.8)	26.1	(24.5—27.7)			
65+ years							
Females	52.7	(49.8—55.7)	43.6	(40.7—46.5)			
Males	53.4	(50.3—56.6)	45.6	(42.4—48.7)			
Persons	53.1	(50.9—55.2)	44.6	(42.4—46.7)			
Total							
Females	35.0	(33.3—36.7)	22.9	(21.6—24.3)			
Males	40.1	(38.1—42.1)	27.4	(25.6—29.1)			
Persons	37.4	(36.1—38.7)	25.0	(23.9—26.1)			

<sup>(</sup>a) People who reported having been told by a doctor that they have high cholesterol (ever).

<sup>(</sup>b) People who reported having been told by a doctor with high cholesterol and either still have high cholesterol or are taking medication for high cholesterol.

The lifetime and point prevalence of adults having been told they have high cholesterol was estimated for the WA health regions and compared with the state prevalence.

- The lifetime prevalence of high cholesterol was lower in the Kimberley (26.0%) and Pilbara (24.2%) health regions when compared with the state prevalence (37.4%) (Figure 29).
- The point prevalence of high cholesterol was lower in the Kimberley (15.1%) and Pilbara (9.0%) health regions when compared with the state prevalence (25.0%).



(a) People who reported having been told by a doctor that they have high cholesterol (ever). (b) People who reported having been told by a doctor with high cholesterol and either still have high cholesterol or are taking medication for high cholesterol.

Figure 29: Prevalence of adults with high cholesterol levels by health regions in WA, 16 years & over, HWSS 2023

We asked respondents when they last had their cholesterol measured.

The prevalence of adults who reported never testing for cholesterol levels decreased with age: 16 to 44 years (38.2%), 45 to 64 years (6.4%), and 65 years and over (1.1%) (Table 46).

Table 46: Prevalence of population by when cholesterol level was last tested, 16 years & over, HWSS 2023

	Never	With	in 6 months	6 mon	ths to a year	1 to 2	2 years ago	2 or mo	ore years ago		Unsure
%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
ars											
35.7	(32.4—38.9)	25.2	(22.4—28.1)	11.4	(9.4—13.4)	4.8	(3.5—6.0)	4.2	(2.9—5.5)	18.7	(16.2—21.3)
41.1	(37.1—45.1)	21.4	(18.2—24.5)	10.7	(8.4—13.0)	7.5	(5.6—9.4)	6.6	(4.8—8.4)	12.8	(10.1—15.4)
38.2	(35.6—40.8)	23.4	(21.3—25.5)	11.1	(9.6—12.6)	6.0	(4.9—7.1)	5.3	(4.2-6.4)	15.9	(14.1—17.8)
ars											
5.9	(4.8—7.0)	49.6	(47.1—52.0)	20.3	(18.4—22.2)	9.2	(7.7—10.7)	6.0	(4.8—7.1)	9.1	(7.7—10.5)
7.0	(5.2—8.7)	49.2	(46.0—52.3)	19.5	(17.0—21.9)	9.2	(7.3—11.0)	5.9	(4.5—7.4)	9.3	(7.5—11.2)
6.4	(5.4—7.4)	49.4	(47.4—51.3)	19.9	(18.4—21.4)	9.2	(8.0—10.3)	5.9	(5.0—6.8)	9.2	(8.1—10.4)
1.1	(0.6—1.6)	64.7	(61.7—67.8)	17.4	(15.0—19.8)	4.1	(2.9—5.4)	2.1	(1.3—2.9)	10.5	(8.5—12.5)
1.1 *	(0.5—1.8)	64.1	(60.5—67.7)	17.8	(14.9—20.7)	3.3	(2.0-4.7)	2.0	(1.2-2.9)	11.6	(9.1—14.2)
1.1	(0.7—1.5)	64.4	(62.1—66.7)	17.6	(15.7—19.4)	3.8	(2.9—4.7)	2.1	(1.5—2.7)	11.0	(9.4—12.7)
19.4	(17.6—21.1)	40.7	(38.9—42.5)	15.4	(14.2—16.7)	6.1	(5.3—6.9)	4.4	(3.6—5.1)	14.0	(12.7—15.4)
22.3	(20.0—24.5)	38.6	(36.5—40.8)	14.9	(13.4—16.4)	7.2	(6.1—8.3)	5.5	(4.5—6.5)	11.4	(9.9—12.9)
20.7	(19.3—22.1)	39.7	(38.4—41.1)	15.2	(14.2—16.2)	6.6	(5.9—7.3)	4.9	(4.3—5.5)	12.8	(11.8—13.8)
	35.7 41.1 38.2 ars 5.9 7.0 6.4 1.1 1.1 * 1.1	% 95% CI  ars  35.7 (32.4—38.9) 41.1 (37.1—45.1) 38.2 (35.6—40.8)  ars  5.9 (4.8—7.0) 7.0 (5.2—8.7) 6.4 (5.4—7.4)  1.1 (0.6—1.6) 1.1 * (0.5—1.8) 1.1 (0.7—1.5)  19.4 (17.6—21.1) 22.3 (20.0—24.5)	% 95% CI %  ars  35.7 (32.4—38.9) 25.2 41.1 (37.1—45.1) 21.4 38.2 (35.6—40.8) 23.4  ars  5.9 (4.8—7.0) 49.6 7.0 (5.2—8.7) 49.2 6.4 (5.4—7.4) 49.4  1.1 (0.6—1.6) 64.7 1.1 * (0.5—1.8) 64.1 1.1 (0.7—1.5) 64.4  19.4 (17.6—21.1) 40.7 22.3 (20.0—24.5) 38.6	%     95% CI     %     95% CI       ars       35.7     (32.4—38.9)     25.2     (22.4—28.1)       41.1     (37.1—45.1)     21.4     (18.2—24.5)       38.2     (35.6—40.8)     23.4     (21.3—25.5)       ars       5.9     (4.8—7.0)     49.6     (47.1—52.0)       7.0     (5.2—8.7)     49.2     (46.0—52.3)       6.4     (5.4—7.4)     49.4     (47.4—51.3)       1.1     (0.6—1.6)     64.7     (61.7—67.8)       1.1*     (0.5—1.8)     64.1     (60.5—67.7)       1.1     (0.7—1.5)     64.4     (62.1—66.7)       19.4     (17.6—21.1)     40.7     (38.9—42.5)       22.3     (20.0—24.5)     38.6     (36.5—40.8)	%     95% CI     %     95% CI     %       ars       35.7     (32.4—38.9)     25.2     (22.4—28.1)     11.4       41.1     (37.1—45.1)     21.4     (18.2—24.5)     10.7       38.2     (35.6—40.8)     23.4     (21.3—25.5)     11.1       ars       5.9     (4.8—7.0)     49.6     (47.1—52.0)     20.3       7.0     (5.2—8.7)     49.2     (46.0—52.3)     19.5       6.4     (5.4—7.4)     49.4     (47.4—51.3)     19.9       1.1     (0.6—1.6)     64.7     (61.7—67.8)     17.4       1.1*     (0.5—1.8)     64.1     (60.5—67.7)     17.8       1.1     (0.7—1.5)     64.4     (62.1—66.7)     17.6       19.4     (17.6—21.1)     40.7     (38.9—42.5)     15.4       22.3     (20.0—24.5)     38.6     (36.5—40.8)     14.9	%     95% CI     %     95% CI     %     95% CI       ars       35.7     (32.4—38.9)     25.2     (22.4—28.1)     11.4     (9.4—13.4)       41.1     (37.1—45.1)     21.4     (18.2—24.5)     10.7     (8.4—13.0)       38.2     (35.6—40.8)     23.4     (21.3—25.5)     11.1     (9.6—12.6)       ars       5.9     (4.8—7.0)     49.6     (47.1—52.0)     20.3     (18.4—22.2)       7.0     (5.2—8.7)     49.2     (46.0—52.3)     19.5     (17.0—21.9)       6.4     (5.4—7.4)     49.4     (47.4—51.3)     19.9     (18.4—21.4)       1.1     (0.6—1.6)     64.7     (61.7—67.8)     17.4     (15.0—19.8)       1.1*     (0.5—1.8)     64.1     (60.5—67.7)     17.8     (14.9—20.7)       1.1     (0.7—1.5)     64.4     (62.1—66.7)     17.6     (15.7—19.4)       19.4     (17.6—21.1)     40.7     (38.9—42.5)     15.4     (14.2—16.7)       22.3     (20.0—24.5)     38.6     (36.5—40.8)     14.9     (13.4—16.4)	%       95% CI       %       95% CI       %         ars         35.7       (32.4—38.9)       25.2       (22.4—28.1)       11.4       (9.4—13.4)       4.8         41.1       (37.1—45.1)       21.4       (18.2—24.5)       10.7       (8.4—13.0)       7.5         38.2       (35.6—40.8)       23.4       (21.3—25.5)       11.1       (9.6—12.6)       6.0         ars         5.9       (4.8—7.0)       49.6       (47.1—52.0)       20.3       (18.4—22.2)       9.2         7.0       (5.2—8.7)       49.2       (46.0—52.3)       19.5       (17.0—21.9)       9.2         6.4       (5.4—7.4)       49.4       (47.4—51.3)       19.9       (18.4—21.4)       9.2         1.1       (0.6—1.6)       64.7       (61.7—67.8)       17.4       (15.0—19.8)       4.1         1.1*       (0.5—1.8)       64.1       (60.5—67.7)       17.8       (14.9—20.7)       3.3         1.1       (0.7—1.5)       64.4       (62.1—66.7)       17.6       (15.7—19.4)       3.8         19.4       (17.6—21.1)       40.7       (38.9—42.5)       15.4       (14.2—16.7)       6.1         22.3       (20.0—24.5)       38.6 <td>%         95% CI         %         95% CI         %         95% CI           ars           35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)           ars           5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)           1.1         (0.6—1.6)         64.7         (61.7—67.8)         17.4         (15.0—19.8)         4.1         (2.9—5.4)           1.1.*         (0.5—1.8)         64.1         (60.5—67.7)         17.8         (14.9—20.7)         3.3         (2.0—4.7)           1.1         (0.7—1.5)</td> <td>%         95% CI         %         95% CI         %         95% CI         %         95% CI         %           ars           35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)         4.2           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)         6.6           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)         5.3           ars           5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)         6.0           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)         5.9           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)         5.9           1.1         (0.6—1.6)         64.7         (61.7—67.8)         17.4         (15.0—19.8)         4.1         (2.9—5.4)         2.1           1.1.*         (0.5—1.8)         64.1<td>%         95% CI         %         95% CI           ars         35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)         4.2         (2.9—5.5)           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)         6.6         (4.8—8.4)           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)         5.3         (4.2—6.4)           ars         5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)         6.0         (4.8—7.1)           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)         5.9         (4.5—7.4)           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)         5.9         (5.0—6.8)           1.1         (0.6—1.6)         64.7         (61.7—67.8)         17.4<!--</td--><td>%         95% CI         %           atrs         35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)         4.2         (2.9—5.5)         18.7           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)         6.6         (4.8—8.4)         12.8           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)         5.3         (4.2—6.4)         15.9           ars         5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)         6.0         (4.8—7.1)         9.1           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)         5.9         (4.5—7.4)         9.3           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)         5.9         (5.0—6.8)         9.2           <td< td=""></td<></td></td></td>	%         95% CI         %         95% CI         %         95% CI           ars           35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)           ars           5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)           1.1         (0.6—1.6)         64.7         (61.7—67.8)         17.4         (15.0—19.8)         4.1         (2.9—5.4)           1.1.*         (0.5—1.8)         64.1         (60.5—67.7)         17.8         (14.9—20.7)         3.3         (2.0—4.7)           1.1         (0.7—1.5)	%         95% CI         %         95% CI         %         95% CI         %         95% CI         %           ars           35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)         4.2           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)         6.6           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)         5.3           ars           5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)         6.0           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)         5.9           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)         5.9           1.1         (0.6—1.6)         64.7         (61.7—67.8)         17.4         (15.0—19.8)         4.1         (2.9—5.4)         2.1           1.1.*         (0.5—1.8)         64.1 <td>%         95% CI         %         95% CI           ars         35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)         4.2         (2.9—5.5)           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)         6.6         (4.8—8.4)           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)         5.3         (4.2—6.4)           ars         5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)         6.0         (4.8—7.1)           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)         5.9         (4.5—7.4)           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)         5.9         (5.0—6.8)           1.1         (0.6—1.6)         64.7         (61.7—67.8)         17.4<!--</td--><td>%         95% CI         %           atrs         35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)         4.2         (2.9—5.5)         18.7           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)         6.6         (4.8—8.4)         12.8           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)         5.3         (4.2—6.4)         15.9           ars         5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)         6.0         (4.8—7.1)         9.1           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)         5.9         (4.5—7.4)         9.3           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)         5.9         (5.0—6.8)         9.2           <td< td=""></td<></td></td>	%         95% CI           ars         35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)         4.2         (2.9—5.5)           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)         6.6         (4.8—8.4)           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)         5.3         (4.2—6.4)           ars         5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)         6.0         (4.8—7.1)           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)         5.9         (4.5—7.4)           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)         5.9         (5.0—6.8)           1.1         (0.6—1.6)         64.7         (61.7—67.8)         17.4 </td <td>%         95% CI         %           atrs         35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)         4.2         (2.9—5.5)         18.7           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)         6.6         (4.8—8.4)         12.8           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)         5.3         (4.2—6.4)         15.9           ars         5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)         6.0         (4.8—7.1)         9.1           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)         5.9         (4.5—7.4)         9.3           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)         5.9         (5.0—6.8)         9.2           <td< td=""></td<></td>	%         95% CI         %           atrs         35.7         (32.4—38.9)         25.2         (22.4—28.1)         11.4         (9.4—13.4)         4.8         (3.5—6.0)         4.2         (2.9—5.5)         18.7           41.1         (37.1—45.1)         21.4         (18.2—24.5)         10.7         (8.4—13.0)         7.5         (5.6—9.4)         6.6         (4.8—8.4)         12.8           38.2         (35.6—40.8)         23.4         (21.3—25.5)         11.1         (9.6—12.6)         6.0         (4.9—7.1)         5.3         (4.2—6.4)         15.9           ars         5.9         (4.8—7.0)         49.6         (47.1—52.0)         20.3         (18.4—22.2)         9.2         (7.7—10.7)         6.0         (4.8—7.1)         9.1           7.0         (5.2—8.7)         49.2         (46.0—52.3)         19.5         (17.0—21.9)         9.2         (7.3—11.0)         5.9         (4.5—7.4)         9.3           6.4         (5.4—7.4)         49.4         (47.4—51.3)         19.9         (18.4—21.4)         9.2         (8.0—10.3)         5.9         (5.0—6.8)         9.2 <td< td=""></td<>

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

### 6.2 Blood pressure

We asked respondents whether a doctor had told them that they had high blood pressure and if they still have high blood pressure.

- The lifetime prevalence of high blood pressure increased with age: 16 to 44 years (16.2%), 45 to 64 years (33.5%), and 65 years and over (55.9%) (**Table 47**).
- The point prevalence of high blood pressure also increased with age: 16 to 44 years (6.1%), 45 to 64 years (23.9%), and 65 years and over (47.7%).
- Both lifetime and point prevalence of high blood pressure was higher in males compared with females (lifetime prevalence: 34.4% compared with 27.9%; point prevalence: 24.3% compared with 18.8%).

Table 47: Prevalence of adults with high blood pressure, 16 years & over, HWSS 2023

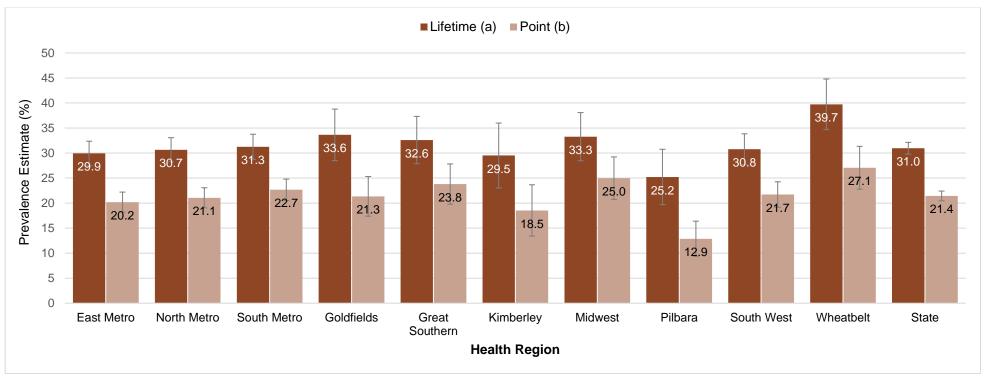
	Life	etime (a)		Point (b)
	%	95% CI	%	95% CI
16 to 44 years				
Females	14.3	(12.1—16.5)	4.8	(3.4—6.2)
Males	18.4	(15.4—21.4)	7.5	(5.5—9.6)
Persons	16.2	(14.4—18.0)	6.1	(4.9—7.3)
45 to 64 years				
Females	29.4	(27.3—31.4)	20.7	(18.9—22.5)
Males	38.3	(35.5—41.1)	27.5	(25.0—30.1)
Persons	33.5	(31.8—35.3)	23.9	(22.4—25.4)
65+ years				
Females	54.1	(51.3—57.0)	45.5	(42.6—48.3)
Males	57.6	(54.6—60.7)	50.0	(46.9—53.1)
Persons	55.9	(53.8—58.0)	47.7	(45.6—49.9)
Total				
Females	27.9	(26.4—29.4)	18.8	(17.7—20.0)
Males	34.4	(32.5—36.3)	24.3	(22.7—25.9)
Persons	31.0	(29.8—32.1)	21.4	(20.5—22.4)

<sup>(</sup>a) People who reported having been told by a doctor that they have high blood pressure (ever).

<sup>(</sup>b) People who reported having been told by a doctor with high blood pressure and either still have high blood pressure or are taking medication for high blood pressure.

The lifetime and point prevalence of adults with high blood pressure was estimated for the WA health regions and compared with the state prevalence.

- The lifetime prevalence of high blood pressure was higher in the Wheatbelt health region (39.7%) when compared with the state prevalence (31.0%) (Figure 30).
- The point prevalence of high blood pressure was lower in the Pilbara health region (12.9%) and higher in the Wheatbelt health region (27.1%) when compared with the state prevalence (21.4%).



(a) People who reported having been told by a doctor that they have high blood pressure (ever). (b) People who reported having been told by a doctor with high blood pressure and either still have high blood pressure or are taking medication for high blood pressure.

Figure 30: Prevalence of adults with high blood pressure by health regions in WA, 16 years & over, HWSS 2023

We asked respondents when they last had their blood pressure measured.

The prevalence of adults who reported measuring their blood pressure within the last six months increased with age: 16 to 44 years (60.2%), 45 to 64 years (77.2%), and 65 years and over (91.0%) (**Table 48**).

Table 48: Prevalence of population by when blood pressure was last tested, 16 years & over, HWSS 2023

		Never	With	Within 6 months		onths to a year	1 to 2	2 years ago	2 or m	ore years ago		<b>Jnsure</b>
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 year	ars											
Females	3.6	(2.1—5.2)	64.4	(61.0—67.8)	15.4	(12.8—18.0)	4.6	(3.1—6.1)	3.7	(2.4—5.0)	8.3	(6.3—10.3)
Males	6.0	(3.8—8.2)	55.6	(51.5—59.7)	15.1	(12.2—18.1)	6.7	(4.6—8.8)	4.2	(2.6—5.8)	12.3	(9.4—15.2)
Persons	4.8	(3.5—6.1)	60.2	(57.5—62.8)	15.3	(13.3—17.2)	5.6	(4.3—6.9)	3.9	(2.9-4.9)	10.2	(8.5—12.0)
45 to 64 year	ars											
Females	0.5 *	(0.2-0.8)	78.2	(76.2—80.2)	11.0	(9.5—12.5)	4.4	(3.4—5.5)	1.2	(0.7—1.7)	4.6	(3.6—5.7)
Males	0.6 *	(0.1—1.1)	76.1	(73.4—78.9)	12.2	(10.0—14.3)	4.2	(2.9—5.4)	2.7	(1.6—3.9)	4.2	(3.0-5.4)
Persons	0.5 *	(0.3—0.8)	77.2	(75.6—78.9)	11.5	(10.3—12.8)	4.3	(3.5—5.1)	1.9	(1.3—2.5)	4.4	(3.6—5.2)
65+ years												
Females	N/A	(N/A—N/A)	90.0	(88.2—91.9)	5.3	(3.8—6.7)	1.0 *	(0.4—1.5)	0.3 *	(0.1—0.5)	3.4	(2.2-4.6)
Males	0.4 *	(0.0-0.9)	92.0	(90.1—93.9)	4.4	(3.1—5.8)	0.8 *	(0.2—1.3)	N/A	(N/A—N/A)	1.9 *	(0.9-3.0)
Persons	0.2 *	(0.0-0.4)	91.0	(89.6—92.3)	4.9	(3.9-5.9)	0.9	(0.5—1.3)	0.3 *	(0.1—0.5)	2.7	(1.9—3.5)
Total												
Females	1.9	(1.1—2.6)	74.1	(72.3—76.0)	11.9	(10.6—13.2)	3.8	(3.0—4.6)	2.2	(1.6—2.8)	6.1	(5.1—7.1)
Males	3.1	(2.1—4.2)	69.5	(67.2—71.8)	12.1	(10.5—13.6)	4.7	(3.6—5.8)	3.0	(2.1—3.8)	7.6	(6.1—9.1)
Persons	2.5	(1.8—3.1)	71.9	(70.5—73.4)	12.0	(11.0—13.0)	4.2	(3.6—4.9)	2.6	(2.0—3.1)	6.8	(5.9—7.7)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use

### 6.3 Body weight

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.<sup>14</sup> Each respondent's BMI was then classified as not overweight or obese (BMI<25), overweight (25≤BMI<30) or obese (BMI≥30).

- The prevalence of obesity was higher in adults aged 45 to 64 years (43.2%) when compared with those aged 16 to 44 years (34.4%) and 65 years and over (38.1%) (**Table 49**).
- Males were more likely to be overweight compared with females (43.7% compared with 32.0%).

Table 49: Prevalence by Body Mass Index categories, 16 years & over, HWSS 2023

	Not over	weight or obese	0\	verweight		Obese
	%	95% CI	%	95% CI	%	95% CI
16 to 44 years						
Females	34.5	(31.2—37.8)	29.5	(26.5—32.5)	36.0	(32.8—39.1)
Males	25.7	(22.0—29.3)	41.7	(37.9—45.6)	32.6	(29.0—36.2)
Persons	30.3	(27.9—32.8)	35.3	(32.9—37.8)	34.4	(32.0—36.8)
45 to 64 years						
Females	23.8	(21.8—25.7)	34.2	(32.1—36.4)	42.0	(39.7—44.2)
Males	10.8	(8.9—12.6)	44.8	(41.9—47.7)	44.5	(41.6—47.3)
Persons	17.6	(16.2—18.9)	39.3	(37.5—41.1)	43.2	(41.4—45.0)
65+ years						
Females	25.8	(23.1—28.5)	33.8	(30.9—36.6)	40.4	(37.5—43.3)
Males	18.3	(15.8—20.8)	45.8	(42.6—48.9)	36.0	(33.0—39.0)
Persons	22.0	(20.1—23.8)	39.9	(37.8—42.1)	38.1	(36.0—40.2)
Total						
Females	29.0	(27.3—30.7)	32.0	(30.4—33.7)	39.0	(37.2—40.7)
Males	18.9	(17.1—20.8)	43.7	(41.6—45.8)	37.4	(35.4—39.3)
Persons	24.1	(22.9—25.4)	37.7	(36.3—39.0)	38.2	(36.9—39.5)

<sup>&</sup>lt;sup>14</sup> Hayes A., Kortt M., Clarke P. and Brandup J., 2008. Estimating equations to correct self-reported height and weight: implications for prevalence of overweight and obesity in Australia. Australian and New Zealand Journal of Public Health, 32(6): 542-45.

The prevalence of adults by BMI category was estimated for the WA health regions and compared with the state prevalence.

• The prevalence of obesity was higher in the Goldfields (47.6%), Midwest (48.0%), and Wheatbelt (48.7%) health regions; and lower in the South Metro health region (33.7%) when compared with the state prevalence (38.2%) (**Figure 31**).

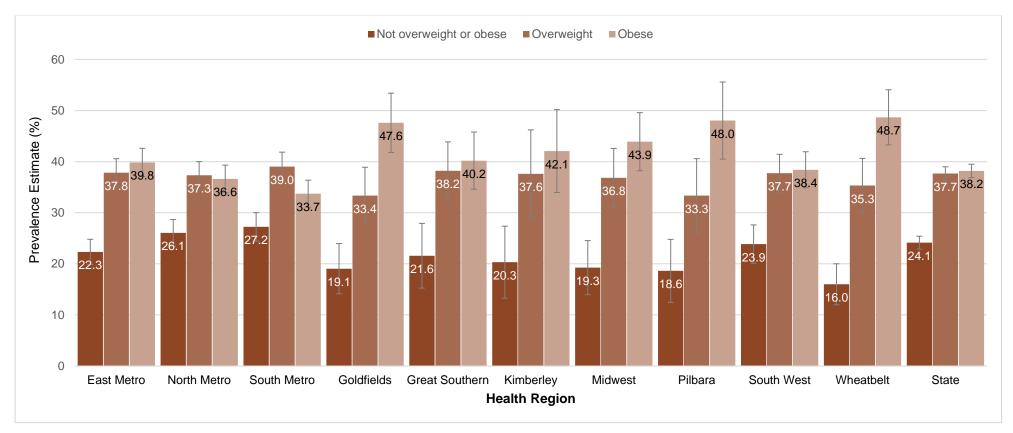


Figure 31: Prevalence of adults by BMI categories by health regions in WA, 16 years & over, HWSS 2023

We asked respondents about their perceptions of their own weight. Perceptions of weight have been reported against BMI based weight classifications which were derived from corrected self-reported height and weight.

- Of those adults with a BMI classification of overweight, half (53.6%) perceived their weight to be normal (**Table 50**).
- Of those adults with a BMI classification of obese, three in four (75.3%) perceived themselves to be overweight and one in ten (10.2%) perceived their weight to be normal.

Table 50: Prevalence of self-perception of body weight, by BMI classification, 16 years & over, HWSS 2023

Dady Mass Index		Self-perception of body weight											
Body Mass Index classification	Un	derweight	Nor	mal weight	O	verweight	Very overweight						
	%	95% CI	%	95% CI	%	95% CI	%	95% CI					
Underweight	67.9	(45.1—90.8)	19.6*	(2.1—37.2)	N/A	(N/A—N/A)	N/A	(N/A—N/A)					
Normal weight	10.8	(8.8—12.8)	82.1	(79.8—84.4)	7.1	(5.6—8.5)	N/A	(N/A—N/A)					
Overweight	1.2	(0.7—1.7)	53.6	(51.4—55.8)	44.8	(42.6—46.9)	0.4*	(0.1—0.8)					
Obese	0.5*	(0.0-0.9)	10.2	(8.9—11.4)	75.3	(73.5—77.1)	14.1	(12.7—15.5)					

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use

We asked respondents what they were trying to do about their weight. Intentions around weight change have been reported against BMI based weight classifications which were derived from corrected self-reported height and weight.

Almost one in two adults (48.6%) with a BMI classification of overweight had intentions to lose weight, this increased to almost three in four (73.0%) among adults with a BMI classification of obese (Table 51).

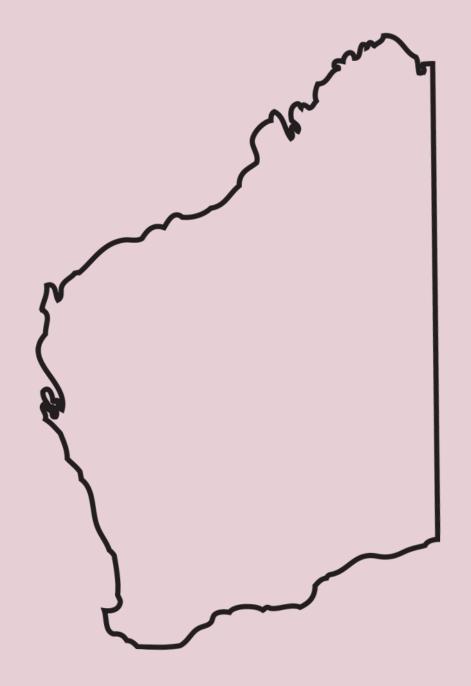
Table 51: Prevalence of intentions to change weight, by BMI classification, 16 years & over, HWSS 2023

	Intentions around weight										
Body Mass Index classification	Lo	se weight	Ga	ain weight	Stay the	same weight	I am not trying to do anything about my weight				
	%	95% CI	%	95% CI	%	95% CI	%	95% CI			
Underweight	N/A	(N/A—N/A)	44.5*	(20.6—68.4)	22.4*	(1.9—42.9)	30.6*	(10.3—50.8)			
Normal weight	17.5	(15.2—19.8)	10.7	(8.5—12.9)	33.4	(30.5—36.3)	38.4	(35.4—41.5)			
Overweight	48.6	(46.4—50.8)	3.1	(2.0—4.1)	21.1	(19.4—22.8)	27.3	(25.3—29.2)			
Obese	73.0	(71.1—74.8)	0.5*	(0.1—0.8)	7.6	(6.6—8.6)	18.9	(17.3—20.6)			

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use

# **MENTAL HEALTH**



# 7. Mental Health

This section will focus on the following mental health risk factors:

- Psychological distress
- Major life events
- Feeling a lack of control
- Suicidal ideation
- Social support



18.2% of Western Australian adults reported high or very high levels of psychological distress



29.2% of Western Australian adults reported the death of someone close, which was the most common major life event reported



9.4% of Western Australian adults reported often or always feeling a lack of control over life in general



8.2% of Western Australian adults reported having seriously thought about ending their own life over the past 12

months



57.0% of Western Australian adults reported belonging to at least one social group or association

#### 7.1 Psychological distress

The Kessler Psychological Distress Scale-10 (K10) is a standardised instrument consisting of 10 questions that measure psychological distress by asking 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 have then been categorised into four groups. Moderate and high levels of psychological distress may indicate the presence of mental health issues, while very high levels indicate that professional help or treatment for a diagnosable mental health condition may be required.<sup>15</sup>

- The prevalence of adults who reported very high psychological distress decreased with age: 16 to 44 years (9.4%), 45 to 64 years (5.5%), and 65 years and over (3.3%) (**Table 52**).
- Males were more likely to report low levels of psychological distress compared with females (65.5% compared with 50.9%).

Table 52: Psychological distress as measured by Kessler Psychological Distress Scale-10, 16 years & over, HWSS 2023

,	•		•	,	-		,	,
		Low	M	oderate		High	'	Very high
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years								
Females	38.9	(35.9—41.9)	29.0	(26.1—32.0)	18.4	(15.8—21.0)	13.7	(11.2—16.1)
Males	60.9	(57.1—64.8)	25.9	(22.5-29.4)	8.7	(6.4—11.0)	4.4	(2.8—6.1)
Persons	49.1	(46.6—51.6)	27.6	(25.4-29.8)	13.9	(12.1—15.7)	9.4	(7.8—10.9)
45 to 64 years								
Females	57.4	(55.2—59.6)	22.7	(20.9 - 24.5)	13.8	(12.2—15.4)	6.1	(5.0—7.2)
Males	66.3	(63.5—69.1)	20.5	(18.1—22.9)	8.5	(6.9—10.1)	4.7	(3.3-6.2)
Persons	61.6	(59.8-63.3)	21.7	(20.2-23.2)	11.3	(10.1—12.4)	5.5	(4.6-6.4)
65+ years								
Females	66.7	(63.9—69.4)	21.1	(18.7—23.5)	8.1	(6.5—9.7)	4.1	(2.9—5.3)
Males	73.2	(70.3—76.1)	18.5	(15.9—21.0)	5.9	(4.2-7.5)	2.5	(1.4-3.6)
Persons	69.9	(67.9—71.9)	19.8	(18.1—21.5)	7.0	(5.8—8.1)	3.3	(2.5-4.1)
Total								
Females	50.9	(49.2—52.7)	25.3	(23.7—26.8)	14.7	(13.3—16.1)	9.1	(7.9—10.4)
Males	65.5	(63.5—67.6)	22.4	(20.6—24.2)	8.0	(6.8—9.2)	4.1	(3.2-5.0)
Persons	57.8	(56.5—59.2)	23.9	(22.7—25.1)	11.5	(10.6—12.4)	6.7	(6.0-7.5)

<sup>&</sup>lt;sup>15</sup> Andrews G & Slade T, 2001. Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian And New Zealand Journal of Public Health*, 25(6): 494-97.

The prevalence of high or very high psychological distress was estimated for the WA health regions and compared with the state prevalence.

• The prevalence of high or very high psychological distress was higher in the South West health region (23.6%) when compared with the state prevalence (18.3%) (**Figure 32**).

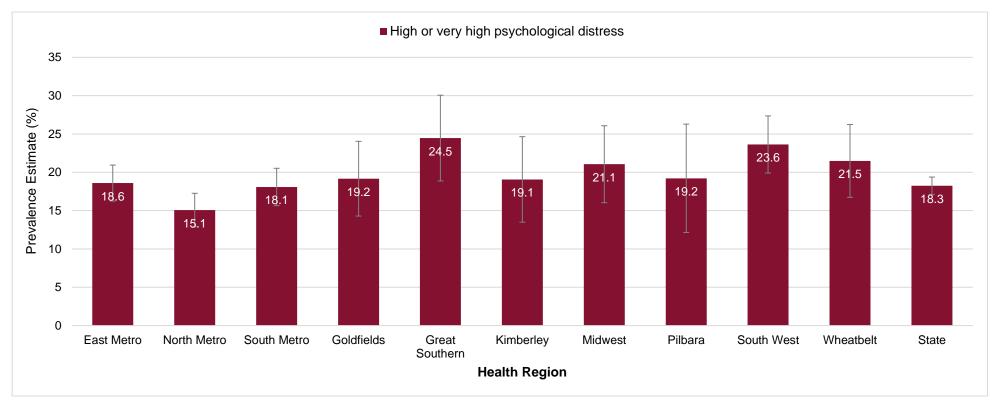


Figure 32: Prevalence of adults with high or very high psychological distress by health regions in WA, 16 years & over, HWSS 2023

#### 7.2 Major life events

We asked respondents whether they had been personally affected by major life events in the past 12 months.

- The prevalence of adults who reported moving houses in the past 12 months decreased with age: 16 to 44 years (21.9%), 45 to 64 years (13.1%) and 65 years and older (8.4%) (Table 53).
- The prevalence of adults who reported a relationship breakdown in the past 12 months decreased with age: 16 to 44 years (15.9%), 45 to 64 years (10.3%) and 65 years and older (5.0%).
- Adults aged 16 to 44 years (7.0%) were more likely to report being robbed or burgled in the past 12 months when compared with those aged 65 years and over (3.0%).
- There were no differences in the self-reported serious injury in the past 12 months between the different age groups.
- Adults aged 16 to 44 years and 45 to 64 years were more likely to have experienced financial hardship in the past 12 months compared with those aged 65 years and over (15.3% and 15.9% compared with 7.7%).
- Females were more likely to report experiencing financial hardship in the past 12 months compared with males (16.9% compared with 10.5%).
- Females were also more likely to report being seriously ill in the past 12 months compared with males (17.5% compared with 14.0%).

Table 53: Prevalence by major life events experienced, 16 years & over, HWSS 2023

	Мо	ved house		obbed or ourgled		Death of neone close		elationship reakdown	Ser	ious injury	Finan	cial hardship		of drivers	s	eriously ill	Other	major event
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 y	ears																	
Females	22.5	(19.7—25.3)	6.0	(4.5—7.5)	29.9	(26.9—32.8)	17.5	(14.8—20.1)	10.1	(8.0—12.2)	19.9	(17.2—22.6)	1.6 *	(0.7—2.4)	15.4	(13.1—17.8)	16.1	(13.7—18.5)
Males	21.3	(18.0—24.5)	8.2	(5.9— 10.4)	23.8	(20.5—27.1)	14.1	(11.2—17.0)	7.5	(5.5—9.6)	10.1	(7.8—12.4)	2.7 *	(1.3—4.1)	9.1	(6.8—11.3)	9.2	(7.1—11.3)
Persons	21.9	(19.8—24.0)	7.0	(5.7—8.3)	27.0	(24.9—29.2)	15.9	(13.9—17.9)	8.9	(7.4—10.4)	15.3	(13.5—17.1)	2.1	(1.3—2.9)	12.5	(10.8—14.1)	12.9	(11.3—14.5)
45 to 64 y	ears																	
Females	13.1	(11.6—14.7)	3.9	(3.0—4.8)	31.6	(29.5—33.6)	9.0	(7.7—10.3)	9.5	(8.2—10.8)	17.9	(16.1—19.8)	1.1	(0.6—1.6)	18.4	(16.7—20.1)	16.2	(14.5—17.9)
Males	9.6	(7.8—11.3)	4.5	(3.3—5.7)	30.6	(28.0—33.2)	11.7	(9.6—13.7)	9.1	(7.5—10.8)	13.6	(11.5—15.7)	1.5	(0.8—2.3)	14.6	(12.5—16.7)	9.5	(7.9—11.0)
Persons	11.5	(10.3—12.6)	4.2	(3.5—4.9)	31.1	(29.5—32.7)	10.3	(9.1—11.5)	9.3	(8.3—10.4)	15.9	(14.5—17.3)	1.3	(0.9—1.7)	16.6	(15.3—18.0)	13.0	(11.9—14.2)
65+ years																		
Females	8.4	(6.8—10.1)	2.1	(1.3—2.9)	31.6	(28.9—34.2)	5.6	(4.2—7.0)	8.0	(6.5—9.6)	8.6	(7.0—10.2)	1.6	(0.8—2.4)	20.6	(18.2—23.0)	11.5	(9.7—13.4)
Males	6.5	(5.0—8.0)	4.0	(2.7—5.3)	30.2	(27.3—33.0)	4.5	(3.2—5.8)	7.7	(6.0—9.4)	6.8	(5.0—8.6)	2.7	(1.5—4.0)	22.5	(19.7—25.2)	8.2	(6.3—10.0)
Persons	7.4	(6.3—8.6)	3.0	(2.3—3.8)	30.9	(28.9—32.8)	5.0	(4.1—6.0)	7.9	(6.7—9.0)	7.7	(6.5—8.9)	2.2	(1.5—2.9)	21.5	(19.7—23.4)	9.8	(8.5—11.1)
Total																		
Females	16.4	(15.0—17.8)	4.5	(3.7—5.2)	30.8	(29.2—32.4)	12.1	(10.8—13.5)	9.5	(8.4—10.6)	16.9	(15.5—18.3)	1.4	(1.0—1.9)	17.5	(16.2—18.8)	15.2	(13.9—16.5)
Males	14.0	(12.4—15.6)	6.0	(4.9—7.1)	27.5	(25.7—29.3)	11.1	(9.6—12.6)	8.1	(7.0—9.2)	10.5	(9.2—11.8)	2.3	(1.6—3.0)	14.0	(12.6—15.4)	9.0	(7.9—10.2)
Persons	15.3	(14.2—16.3)	5.2	(4.5—5.8)	29.2	(28.0—30.4)	11.6	(10.6—12.6)	8.8	(8.0—9.6)	13.9	(12.9—14.8)	1.8	(1.4—2.3)	15.8	(14.9—16.8)	12.3	(11.4—13.1)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

#### 7.3 Lack of control

We asked respondents to rate how often they felt a lack of control over their life in general during the past four weeks.

- The prevalence of adults who reported never feeling a lack of control over life in general during the past four weeks increased with age: 16 to 44 years (44.4%), 45 to 64 years (55.5%) and 65 years and over (66.7%) (**Table 54**).
- Males were more likely to report never feeling a lack of control over life in general during the past four weeks compared with females (59.3% compared with 47.5%).

Table 54: Lack of control over life in general during past four weeks, 16 years & over, HWSS 2023

		Never		Rarely	Sc	ometimes		Often	Α	lways
	%	95% CI	%	95% CI						
16 to 44 years										
Females	37.0	(34.0-40.0)	22.5	(19.8—25.1)	25.8	(22.9—28.7)	10.7	(8.5—12.8)	4.1	(2.7—5.5)
Males	52.9	(49.0—56.8)	23.1	(19.7—26.4)	15.2	(12.4—18.0)	6.7	(4.7—8.7)	2.1 *	(1.0—3.2)
Persons	44.4	(41.9—46.8)	22.7	(20.6—24.9)	20.9	(18.8—22.9)	8.8	(7.3—10.3)	3.2	(2.3—4.1)
45 to 64 years										
Females	52.1	(49.9—54.4)	20.1	(18.3—21.8)	17.3	(15.6—19.0)	7.8	(6.4—9.1)	2.7	(2.0-3.4)
Males	60.1	(57.3—63.0)	17.4	(15.2—19.5)	14.5	(12.4—16.6)	5.0	(3.6-6.4)	3.0	(1.9-4.2)
Persons	55.9	(54.1—57.7)	18.8	(17.5—20.2)	16.0	(14.7—17.3)	6.5	(5.5—7.4)	2.8	(2.2-3.5)
65+ years										
Females	63.1	(60.3—65.9)	17.7	(15.4—19.9)	13.4	(11.6—15.3)	4.0	(2.8—5.2)	1.8	(1.0-2.6)
Males	70.3	(67.5—73.2)	15.5	(13.3—17.7)	11.5	(9.4—13.6)	1.5	(0.8-2.2)	1.1 *	(0.4—1.8)
Persons	66.7	(64.7—68.7)	16.6	(15.0—18.1)	12.5	(11.1—13.9)	2.7	(2.1—3.4)	1.5	(0.9-2.0)
Total										
Females	47.5	(45.8—49.2)	20.7	(19.2—22.1)	20.4	(18.9—21.9)	8.3	(7.2 - 9.4)	3.1	(2.5—3.8)
Males	59.3	(57.3—61.4)	19.4	(17.7—21.1)	14.1	(12.6—15.6)	4.9	(3.9—5.9)	2.2	(1.5—2.8)
Persons	53.1	(51.8—54.5)	20.1	(19.0—21.2)	17.4	(16.3—18.5)	6.7	(6.0—7.5)	2.7	(2.2—3.2)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

We asked respondents to rate how often they felt a lack of control over their personal life during the past four weeks.

- The prevalence of adults who reported never feeling a lack of control over their personal life during the past four weeks increased with age: 16 to 44 years (49.9%), 45 to 64 years (58.2%) and 65 years and over (69.0%) (Table 55).
- Males were more likely to report never feeling a lack of control over their personal life during the past four weeks compared with females (62.5% compared to 51.7%).

Table 55: Lack of control over personal life during past four weeks, 16 years & over, HWSS 2023

		Never		Rarely	Sc	ometimes		Often	Α	lways
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years										
Females	41.9	(38.8—45.0)	21.4	(18.7—24.1)	23.8	(20.9—26.6)	9.9	(7.8—12.0)	3.0	(1.7—4.2)
Males	59.1	(55.3—63.0)	19.2	(16.1—22.2)	16.0	(13.1—19.0)	3.8	(2.2—5.3)	1.9 *	(0.8-3.0)
Persons	49.9	(47.4—52.4)	20.4	(18.4—22.4)	20.2	(18.1—22.2)	7.1	(5.7—8.4)	2.5	(1.7—3.3)
45 to 64 years										
Females	55.6	(53.3—57.8)	19.2	(17.5—20.9)	16.7	(15.0—18.4)	6.5	(5.2—7.8)	2.0	(1.4—2.7)
Males	61.2	(58.4—64.1)	18.7	(16.4—20.9)	13.2	(11.2—15.3)	4.5	(3.1—5.8)	2.4	(1.4—3.4)
Persons	58.2	(56.4—60.0)	18.9	(17.5—20.3)	15.1	(13.8—16.4)	5.5	(4.6—6.5)	2.2	(1.7—2.8)
65+ years										
Females	67.2	(64.5—69.9)	15.8	(13.6—18.0)	12.2	(10.4—13.9)	3.3	(2.2-4.4)	1.5	(0.9-2.2)
Males	70.8	(68.0—73.7)	16.4	(14.1—18.7)	10.3	(8.3—12.3)	1.9	(1.0—2.8)	0.6 *	(0.1—1.0)
Persons	69.0	(67.1—71.0)	16.1	(14.5—17.7)	11.2	(9.9—12.6)	2.6	(1.9—3.3)	1.0	(0.7—1.4)
Total										
Females	51.7	(50.0—53.5)	19.5	(18.1—20.9)	19.0	(17.5—20.5)	7.4	(6.3—8.5)	2.4	(1.8—3.0)
Males	62.5	(60.5—64.6)	18.4	(16.7—20.0)	13.8	(12.3—15.3)	3.6	(2.7—4.4)	1.8	(1.2-2.4)
Persons	56.9	(55.5—58.2)	19.0	(17.9—20.0)	16.5	(15.5—17.6)	5.6	(4.9-6.3)	2.1	(1.7—2.5)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

We asked respondents to rate how often they felt a lack of control over their health during the past four weeks.

- The prevalence of adults who reported never feeling a lack of control over their health during the past four weeks was higher among 65 years and over compared with 16 to 44 years (55.0% compared to 49.5%) (Table 56).
- Males were more likely to report never feeling a lack of control over their health during the past four weeks compared with females (58.4% compared to 45.1%).

Table 56: Lack of control over health during past four weeks, 16 years & over, HWSS 2023

		Never		Rarely	Sc	metimes		Often		Always
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 years										
Females	39.4	(36.3—42.4)	20.5	(17.9—23.2)	23.3	(20.5—26.0)	11.3	(9.0—13.5)	5.5	(4.0—7.1)
Males	61.3	(57.5—65.1)	18.6	(15.6—21.6)	14.2	(11.5—16.9)	3.8	(2.3—5.3)	2.2 *	(1.0-3.4)
Persons	49.5	(47.0—52.0)	19.6	(17.6—21.6)	19.1	(17.1—21.0)	7.8	(6.4—9.2)	4.0	(3.0-5.0)
45 to 64 years										
Females	47.5	(45.2—49.7)	17.5	(15.8—19.2)	21.0	(19.2—22.7)	9.2	(7.9—10.6)	4.9	(3.8-5.9)
Males	56.1	(53.3—59.0)	18.6	(16.4—20.9)	16.7	(14.6—18.9)	5.7	(4.3—7.1)	2.8	(1.7—3.9)
Persons	51.5	(49.7—53.3)	18.1	(16.7—19.4)	19.0	(17.6—20.4)	7.6	(6.6—8.5)	3.9	(3.2-4.6)
65+ years										
Females	53.9	(51.0—56.8)	17.9	(15.6—20.2)	19.6	(17.3—21.8)	6.1	(4.7—7.4)	2.5	(1.6—3.5)
Males	56.2	(53.0—59.3)	18.2	(15.8—20.6)	18.4	(16.0—20.9)	4.6	(3.2—6.1)	2.6	(1.5—3.7)
Persons	55.0	(52.9—57.2)	18.1	(16.4—19.7)	19.0	(17.3—20.7)	5.4	(4.4—6.3)	2.6	(1.8—3.3)
Total										
Females	45.1	(43.4—46.8)	19.0	(17.6—20.4)	21.7	(20.3—23.2)	9.5	(8.4—10.7)	4.7	(3.9—5.5)
Males	58.4	(56.3—60.4)	18.5	(16.9—20.1)	16.0	(14.5—17.5)	4.6	(3.7—5.5)	2.5	(1.8—3.2)
Persons	51.4	(50.0—52.7)	18.8	(17.7—19.8)	19.0	(18.0—20.1)	7.2	(6.4—7.9)	3.6	(3.1—4.2)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The prevalence of adults who reported often or always feeling a lack of control was determined.

- The prevalence of adults who reported often or always feeling a lack of control over life in general, over their personal life and over their health decreased with age (Table 57).
- Females were more likely than males to report often or always feeling a lack of control in general (11.5% compared to 7.1%), lack of control over their personal life (9.8% compared to 5.3%) and lack of control over health (14.2% compared to 7.1%).

Table 57: Often or always perceive a lack of control, 16 years & over, HWSS 2023

	G	eneral	F	Personal	Health			
	%	95% CI	%	95% CI	%	95% CI		
16 to 44 years								
Females	14.8	(12.3—17.2)	12.9	(10.6—15.3)	16.8	(14.2—19.4)		
Males	8.8	(6.6—11.1)	5.7	(3.8—7.5)	6.0	(4.0—7.9)		
Persons	12.0	(10.3—13.7)	9.6	(8.0—11.1)	11.8	(10.1—13.5)		
45 to 64 years								
Females	10.5	(9.0—11.9)	8.5	(7.2—9.9)	14.1	(12.4—15.7)		
Males	8.0	(6.2—9.7)	6.9	(5.3—8.5)	8.5	(6.8—10.2)		
Persons	9.3	(8.2—10.4)	7.8	(6.7—8.8)	11.4	(10.3—12.6)		
65+ years								
Females	5.8	(4.4—7.2)	4.8	(3.6—6.1)	8.6	(7.0—10.2)		
Males	2.6	(1.7—3.6)	2.5	(1.4—3.5)	7.2	(5.4—9.0)		
Persons	4.2	(3.4—5.0)	3.6	(2.8—4.4)	7.9	(6.7—9.1)		
Total								
Females	11.5	(10.2—12.7)	9.8	(8.6—11.0)	14.2	(12.9—15.5)		
Males	7.1	(5.9—8.3)	5.3	(4.3—6.3)	7.1	(6.0—8.2)		
Persons	9.4	(8.5—10.3)	7.7	(6.9—8.5)	10.8	(9.9—11.7)		

#### 7.4 Suicide ideation

We asked respondents whether they had suicidal thoughts in the past 12 months.

Adults aged 16 to 44 years were more likely to report having thought about suicide compared with those aged 65 years and over (10.4% compared with 4.3%) (Table 58).

Table 58: Suicide thoughts over past 12 months, 16 years & over, HWSS 2023

	Yes						
	%	95% CI					
16 to 44 years							
Females	13.0	(10.6—15.4)					
Males	7.5	(5.4—9.6)					
Persons	10.4	(8.8—12.1)					
45 to 64 years							
Females	7.3	(6.0—8.6)					
Males	8.3	(6.6—10.1)					
Persons	7.8	(6.7—8.9)					
65+ years							
Females	3.9	(2.7—5.1)					
Males	4.7	(3.2—6.1)					
Persons	4.3	(3.4—5.2)					
Total							
Females	9.2	(8.0—10.4)					
Males	7.1	(6.0—8.3)					
Persons	8.2	(7.3—9.0)					

We asked respondents if any of their friends or family had attempted suicide in the past 12 months.

- The prevalence of adults who reported that a friend had tried to end their own life in the past 12 months decreased with age: 16 to 44 years (13.3%), 45 to 64 years (7.6%) and 65 years and over (3.7%) (**Table 59**).
- The prevalence of adults who reported that a member of their family had tried to end their own life in the past 12 months does not differ by age groups.

Table 59: Friends/family suicide attempts over past 12 months, 16 years & over, HWSS 2023

			_	
	Friend	(s) attempted	Fam	ily attempted
	%	95% CI	%	95% CI
16 to 44 years				
Females	14.0	(11.6—16.4)	6.2	(4.7—7.7)
Males	12.6	(9.9—15.3)	4.9	(3.2—6.5)
Persons	13.3	(11.5—15.1)	5.6	(4.4—6.7)
45 to 64 years				
Females	8.1	(6.9—9.4)	7.3	(6.1—8.6)
Males	7.0	(5.6—8.5)	3.3	(2.3—4.3)
Persons	7.6	(6.7—8.6)	5.5	(4.7—6.2)
65+ years				
Females	3.6	(2.5—4.8)	5.4	(4.0—6.8)
Males	3.8	(2.7—4.9)	2.9	(1.8—3.9)
Persons	3.7	(2.9-4.5)	4.1	(3.2—5.0)
Total				
Females	9.8	(8.6—11.0)	6.4	(5.6—7.3)
Males	8.6	(7.3—10.0)	3.9	(3.0—4.7)
Persons	9.2	(8.4—10.1)	5.2	(4.6—5.8)

<sup>\*</sup> Prevalence estimate has an RSE between 25%-50% and should be used with caution

## 7.5 Social support

As an alternative measure of social support, we asked respondents how many groups/associations they belong to, including church, social, community, political and professional groups.

Adults aged 16 to 44 years and 45 to 64 years were more likely to report not belonging to any groups or associations compared with adults aged 65 years and over (45.0% and 44.8% compared with 36.3%) (Table 60).

Table 60: Number of groups/associations belonging to, 16 years & over, HWSS 2023

		None		One		Two		Three	Four or more		
	%	95% CI	%	95% CI							
16 to 44 years											
Females	48.2	(45.0—51.4)	22.6	(19.9—25.4)	13.0	(10.9—15.1)	7.6	(5.9—9.2)	8.6	(6.9—10.4)	
Males	41.3	(37.5—45.2)	25.5	(22.1—28.8)	15.0	(12.3—17.7)	8.1	(6.0—10.3)	10.1	(7.6—12.5)	
Persons	45.0	(42.5—47.5)	23.9	(21.8—26.1)	13.9	(12.3—15.6)	7.8	(6.5—9.2)	9.3	(7.8—10.8)	
45 to 64 years											
Females	45.6	(43.4—47.8)	22.7	(20.8—24.5)	16.7	(15.1—18.3)	8.0	(6.9—9.2)	7.0	(5.9—8.1)	
Males	44.0	(41.1—46.8)	22.4	(20.0—24.7)	17.6	(15.4—19.7)	8.8	(7.3—10.4)	7.3	(5.8—8.7)	
Persons	44.8	(43.0—46.6)	22.5	(21.0—24.0)	17.1	(15.8—18.4)	8.4	(7.5—9.4)	7.1	(6.2—8.0)	
65+ years											
Females	33.4	(30.7—36.0)	22.4	(20.0—24.8)	19.6	(17.2—22.0)	12.4	(10.5—14.4)	12.2	(10.3—14.0)	
Males	39.2	(36.1—42.3)	27.3	(24.5—30.1)	16.4	(14.2—18.6)	9.2	(7.5—10.9)	7.8	(6.1—9.5)	
Persons	36.3	(34.3—38.4)	24.9	(23.0—26.7)	18.0	(16.4—19.6)	10.8	(9.5—12.1)	10.0	(8.7—11.2)	
Total											
Females	44.2	(42.5—46.0)	22.6	(21.1—24.1)	15.6	(14.4—16.8)	8.7	(7.8—9.7)	8.8	(7.9—9.8)	
Males	41.7	(39.7—43.8)	24.9	(23.1—26.7)	16.2	(14.7—17.6)	8.6	(7.5—9.8)	8.6	(7.4—9.9)	
Persons	43.0	(41.7—44.4)	23.7	(22.5—24.8)	15.9	(14.9—16.8)	8.7	(7.9—9.4)	8.7	(8.0—9.5)	

The prevalence of adults who reported belonging to at least one group/association was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults who reported belonging to at least one group/association was similar across health regions when compared with the state prevalence (Figure 33).

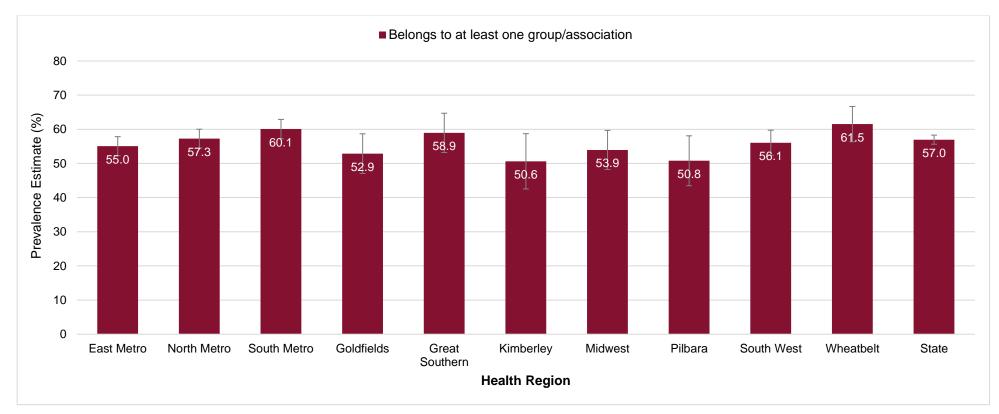
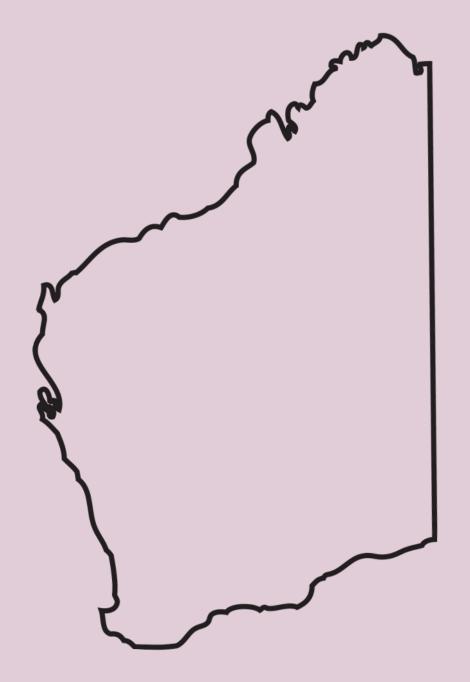


Figure 33: Prevalence of adults who reported belonging to at least one group/association by health regions in WA, 16 years & over, HWSS 2023

# HEALTH SERVICE UTILISATION



# 8. Health service utilisation

Health services are the ways in which health care is provided to the general population such as through GPs, hospitals, dental, mental, and alternative health services. This section will focus on the following:

Health services



89.5% of Western Australian adults used primary health services within the past 12 months



17.0% of Western Australian adults used mental health services within the past 12 months

#### 8.1 Health services

We asked respondents whether they had used any common health services such as GPs, hospitals, allied, dental, mental, and alternative health services within the past 12 months.

- Adults aged 65 years and over were more likely to have used primary health care services and hospital services in the past 12 months compared with those aged 16 to 44 years and 45 to 64 years (primary: 96.2% compared with 86.0% and 89.8%; hospital: 39.2% compared with 29.7% and 30.9%) (Table 61).
- Adults aged 65 years and over were less likely to have alternative health services in the past 12 months compared with those aged 16 to 44 years and 45 to 64 years (6.8% compared with 11.2% and 12.9%).
- The prevalence of adults who reported using allied health services in the past 12 months increased with age: 16 to 44 years (51.5%), 45 to 64 years (64.9%), 65 years and over (73.3%).
- The prevalence of adults who reported using mental health services in the past 12 months decreased with age: 16 to 44 years (24.3%), 45 to 64 years (14.9%), 65 years and over (5.3%).
- For all types of health services, females were more likely to have utilised services in the past 12 months compared with males (primary: 92.7% compared with 86.0%; hospital: 35.1% compared with 28.9%; allied health: 66.7% compared with 54.2%; dental: 65.2% compared with 58.0%; mental health: 22.2% compared with 11.3%; alternative health: 13.7% compared with 7.6%).

Table 61: Health service utilisation in the past 12 months, 16 years & over, HWSS 2023

	Primary (a)		Primary (a) Hospital based (b)		F	Allied (c)	Dental		Mental (d)		Alternative (e)	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 year	rs											
Females	91.7	(89.9—93.6)	35.4	(32.4—38.5)	58.1	(54.9—61.3)	60.6	(57.5—63.8)	33.2	(30.0—36.3)	13.8	(11.7—15.8)
Males	79.5	(76.3—82.7)	23.1	(19.9—26.4)	43.9	(40.0—47.7)	54.0	(50.2—57.9)	14.2	(11.4—16.9)	8.2	(6.1—10.2)
Persons	86.0	(84.2—87.8)	29.7	(27.4—31.9)	51.5	(49.0—54.0)	57.6	(55.1—60.0)	24.3	(22.1—26.5)	11.2	(9.7—12.6)
45 to 64 year	rs											
Females	91.8	(90.5—93.0)	33.1	(31.0—35.2)	71.9	(69.9—73.9)	69.1	(67.0—71.1)	17.2	(15.5—18.9)	16.3	(14.6—17.9)
Males	87.5	(85.5—89.5)	28.4	(25.9—31.0)	56.9	(54.1—59.8)	58.4	(55.6—61.2)	12.4	(10.3—14.5)	9.2	(7.5—10.9)
Persons	89.8	(88.6—90.9)	30.9	(29.3—32.5)	64.9	(63.2—66.6)	64.1	(62.3—65.8)	14.9	(13.6—16.3)	12.9	(11.8—14.1)
65+ years												
Females	96.2	(95.1—97.3)	37.9	(35.1—40.7)	77.0	(74.6—79.3)	69.1	(66.4—71.7)	6.2	(4.8—7.6)	9.4	(7.7—11.1)
Males	96.2	(95.1—97.2)	40.6	(37.5—43.7)	69.7	(66.9—72.5)	65.1	(62.2—68.1)	4.5	(3.1—5.8)	4.2	(3.0—5.5)
Persons	96.2	(95.4—96.9)	39.2	(37.2—41.3)	73.3	(71.5—75.2)	67.1	(65.1—69.1)	5.3	(4.4—6.3)	6.8	(5.7—7.9)
Total												
Females	92.7	(91.7—93.6)	35.1	(33.5—36.8)	66.7	(65.0—68.4)	65.2	(63.5—66.9)	22.2	(20.5—23.8)	13.7	(12.6—14.9)
Males	86.0	(84.4—87.6)	28.9	(27.1—30.7)	54.2	(52.1—56.2)	58.0	(56.0—60.1)	11.3	(9.9—12.8)	7.6	(6.5—8.7)
Persons	89.5	(88.5—90.4)	32.2	(30.9—33.4)	60.7	(59.4—62.1)	61.8	(60.5—63.1)	17.0	(15.9—18.1)	10.8	(10.0—11.6)

<sup>(</sup>a) e.g., medical specialist, general practitioner, community health centre, community, or district nurses.

<sup>(</sup>b) e.g., overnight stay, accident and emergency department or outpatients.

<sup>(</sup>c) e.g., optician, physiotherapist, chiropractor, podiatrist, dietician, nutritionist, occupational therapist, diabetes/other health educator. (d) e.g., psychiatrist, psychologist, or counsellor.

<sup>(</sup>e) e.g., acupuncturist, naturopath, homeopath, or any other alternative health service.

The prevalence of adults who reported using primary health care services in the past 12 months was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults who reported using primary health care services in the past 12 months did not differ by health region when compared with the state prevalence (Figure 34).

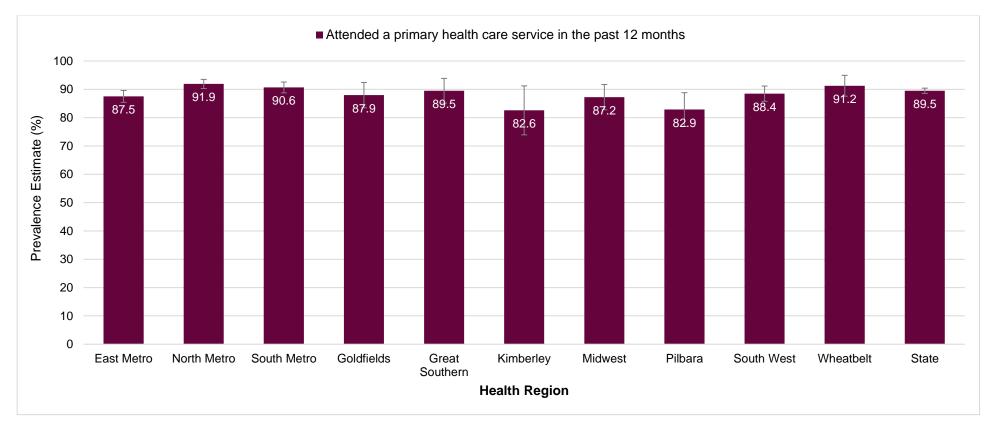


Figure 34: Prevalence of adults attending a primary health care service in the past 12 months by health regions in WA, 16 years & over, HWSS 2023

The mean number of visits to health services in the past 12 months are presented in **Table 62**.

- The most used health service at a population level was primary health care services, with a mean of 5.1 visits in the past 12 months, followed by allied health services with 4.2 visits.
- Adults aged 65 years and over had a higher mean number of visits for primary health care services compared with those aged 16 to 44 years and 45 to 64 years (6.3 visits compared with 4.7 visits and 4.7 visits).
- Adults aged 65 years and over had a lower mean number of visits for mental health services compared with those aged 16 to 44 years and 45 to 64 years (0.3 visits compared with 2.0 visits and 1.0 visits).
- Females had a higher mean number of visits for primary health care services, allied, dental, mental, and alternative health services when compared with males.

Table 62: Mean visits to health services in the past 12 months, 16 years & over, HWSS 2023

	Primary (a)		(a) Hospital based (b)		Α	llied (c)		Dental	Me	ental (d)	Alternative (e)	
	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI
16 to 44 year	ırs											
Females	6.2	(5.5—6.9)	8.0	(0.7—0.9)	4.8	(4.1—5.5)	1.2	(1.1—1.3)	3.0	(2.3-3.6)	1.0	(0.5—1.5)
Males	3.0	(2.7-3.4)	0.4	(0.3—0.5)	2.9	(2.4-3.5)	1.0	(0.9—1.1)	0.9	(0.6—1.1)	0.4	(0.3-0.5)
Persons	4.7	(4.3—5.1)	0.6	(0.6—0.7)	3.9	(3.5-4.4)	1.1	(1.0—1.2)	2.0	(1.6—2.4)	0.7	(0.5—1.0)
45 to 64 year	ırs											
Females	5.2	(4.9—5.5)	0.7	(0.6—0.9)	4.8	(4.4—5.2)	1.4	(1.3—1.5)	1.3	(1.0—1.6)	0.8	(0.7—0.9)
Males	4.2	(3.9-4.6)	8.0	(0.5—1.1)	3.5	(3.0-4.0)	1.2	(1.1—1.3)	0.7	(0.6-0.9)	0.6	(0.4-0.9)
Persons	4.7	(4.5—5.0)	8.0	(0.6-0.9)	4.2	(3.9-4.5)	1.3	(1.2—1.4)	1.0	(0.9—1.2)	0.7	(0.6-0.8)
65+ years												
Females	6.4	(6.0—6.8)	0.9	(0.7—1.1)	5.5	(4.8—6.2)	1.4	(1.4—1.5)	0.4	(0.3—0.5)	0.5	(0.4—0.6)
Males	6.2	(5.6—6.8)	8.0	(0.7—0.9)	3.8	(3.3-4.3)	1.3	(1.2—1.4)	0.2	(0.1—0.3)	0.2*	(0.1—0.4)
Persons	6.3	(5.9—6.6)	0.9	(0.7—1.0)	4.7	(4.2—5.1)	1.4	(1.3—1.4)	0.3	(0.2-0.4)	0.4	(0.3—0.4)
Total												
Females	5.9	(5.6—6.3)	8.0	(0.7—0.9)	4.9	(4.6—5.3)	1.3	(1.3—1.4)	1.9	(1.5—2.2)	0.8	(0.6—1.0)
Males	4.1	(3.9-4.4)	0.7	(0.5—0.8)	3.3	(3.0—3.6)	1.1	(1.1—1.2)	0.7	(0.6—0.8)	0.4	(0.3—0.5)
Persons	5.1	(4.9—5.3)	0.7	(0.7—0.8)	4.2	(3.9—4.4)	1.2	(1.2—1.3)	1.3	(1.1—1.5)	0.6	(0.5—0.8)

<sup>(</sup>a) e.g., medical specialist, general practitioner, community health centre, community, or district nurses. (b) e.g., overnight stay, emergency department or outpatients.

<sup>(</sup>c) e.g., optician, physiotherapist, chiropractor, podiatrist, dietician, nutritionist, occupational therapist, diabetes/other health educator.

<sup>(</sup>d) e.g., psychiatrist, psychologist, or counsellor. (e) e.g., acupuncturist, naturopath, homeopath, or any other alternative health service.

<sup>\*</sup> Mean estimate has an RSE between 25%-50% and should be used with caution.

The mean number of visits to health services amongst those who used the type of service at least once in the past 12 months are presented in Table 63.

The most used health service at a population level among adults who used the type of service at least once in the past 12 months was mental health services (7.7 visits) followed by allied health services (6.9 visits).

Table 63: Mean visits to health services in the past 12 months of those who attended the service, 16 years & over, HWSS 2023

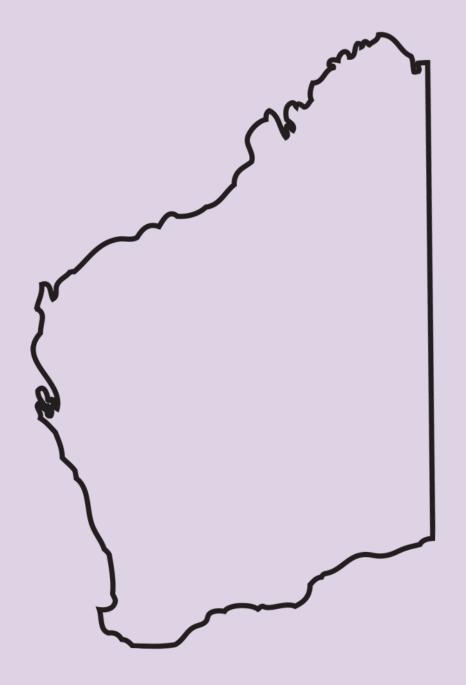
	Primary (a)		Hospital based (b)		Al	lied (c)	Dental		Mental (d)		Alte	rnative (e)
	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI
16 to 44 ye	ars											
Females	6.8	(6.0—7.5)	2.2	(2.0-2.5)	8.2	(7.1—9.3)	2.0	(1.9—2.1)	8.9	(7.2—10.7)	7.3	(4.1—10.5)
Males	3.8	(3.4-4.2)	1.9	(1.6—2.3)	6.7	(5.6—7.7)	1.9	(1.7—2.1)	6.3	(5.0—7.6)	5.0	(3.8—6.2)
Persons	5.5	(5.0—6.0)	2.1	(1.9—2.3)	7.6	(6.8—8.4)	1.9	(1.8—2.0)	8.2	(6.9—9.5)	6.5	(4.3—8.7)
45 to 64 ye	ars											
Females	5.7	(5.4—6.0)	2.3	(2.0-2.5)	6.7	(6.2—7.1)	2.0	(1.9—2.1)	7.6	(6.3—8.9)	4.8	(4.3—5.4)
Males	4.8	(4.4—5.2)	2.8	(1.8—3.8)	6.1	(5.3—7.0)	2.0	(1.9—2.2)	5.9	(4.9 - 7.0)	6.7	(4.2 - 9.2)
Persons	5.3	(5.0—5.5)	2.5	(2.1—3.0)	6.5	(6.0-6.9)	2.0	(1.9—2.1)	6.9	(6.1—7.8)	5.4	(4.5—6.4)
65+ years												
Females	6.6	(6.2—7.0)	2.4	(1.8—3.0)	7.2	(6.3—8.0)	2.1	(2.0—2.2)	6.4	(4.7—8.0)	5.2	(4.5—6.0)
Males	6.4	(5.8—7.0)	2.0	(1.8—2.3)	5.4	(4.7—6.2)	2.0	(1.9—2.1)	5.4	(3.8-7.1)	5.4*	(2.5—8.2)
Persons	6.5	(6.2—6.9)	2.2	(1.9—2.5)	6.4	(5.8—6.9)	2.1	(2.0—2.1)	6.0	(4.8—7.1)	5.3	(4.2-6.3)
Total												
Females	6.4	(6.0—6.7)	2.3	(2.1—2.5)	7.4	(6.9—7.9)	2.0	(2.0—2.1)	8.4	(7.2—9.7)	6.0	(4.5—7.5)
Males	4.8	(4.6—5.1)	2.3	(1.9—2.6)	6.1	(5.6—6.6)	2.0	(1.9—2.1)	6.1	(5.3—6.9)	5.7	(4.5—6.9)
Persons	5.7	(5.4—5.9)	2.3	(2.1—2.5)	6.9	(6.5—7.2)	2.0	(1.9—2.1)	7.7	(6.8—8.6)	5.9	(4.8—7.0)

<sup>(</sup>a) e.g., medical specialist, general practitioner, community health centre, community, or district nurses. (b) e.g., overnight stay, emergency department or outpatients.

<sup>(</sup>c) e.g., optician, physiotherapist, chiropractor, podiatrist, dietician, nutritionist, occupational therapist, diabetes/other health educator.

<sup>(</sup>d) e.g., psychiatrist, psychologist, or counsellor. (e) e.g., acupuncturist, naturopath, homeopath, or any other alternative health service.

# SOCIAL CHARACTERISTICS



# 9. Social characteristics

In Australia, private health insurance operates in conjunction with the publicly funded universal healthcare cover, Medicare. Private health insurance can be purchased by individuals to contribute to the cost of private patient hospital care as well as ancillary medical services such as dental care, optical, chiropractic and physiotherapy treatments.



25.6% of Western Australian adults do not have any kind of private health insurance



61.7% of Western Australian adults have both hospital and ancillary private health insurance

We asked respondents about their health insurance status.

Females were more likely to report having 'ancillary only' private health insurance compared with males (10.0% compared with 6.5%) (Table 64).

Table 64: Private health insurance status, 16 years & over, HWSS 2023

		None		pital only	Anci	llary only	Hospital and ancillary		
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	
16 to 44 years									
Females	29.0	(26.0—32.0)	5.9	(4.3—7.4)	10.1	(8.0—12.1)	55.1	(51.9—58.4)	
Males	25.8	(22.3—29.3)	5.9	(4.0—7.8)	7.7	(5.5-9.9)	60.6	(56.7—64.5)	
Persons	27.5	(25.2-29.8)	5.9	(4.7—7.1)	9.0	(7.5—10.5)	57.6	(55.1—60.2)	
45 to 64 years									
Females	20.8	(18.9—22.7)	2.8	(2.0—3.6)	10.2	(8.7—11.6)	66.2	(64.1—68.4)	
Males	26.4	(23.8-29.0)	4.2	(3.0—5.5)	5.8	(4.4—7.2)	63.6	(60.8—66.4)	
Persons	23.4	(21.8—25.0)	3.5	(2.7—4.2)	8.1	(7.1—9.1)	65.0	(63.3—66.8)	
65+ years									
Females	24.5	(21.9—27.0)	2.0	(1.2—2.8)	9.4	(7.6—11.2)	64.1	(61.3—66.9)	
Males	25.7	(22.9—28.5)	3.8	(2.6—5.0)	5.1	(3.8—6.5)	65.4	(62.3—68.4)	
Persons	25.1	(23.2—27.0)	2.9	(2.2—3.6)	7.3	(6.1—8.4)	64.7	(62.7—66.8)	
Total									
Females	25.2	(23.6—26.8)	4.0	(3.2-4.8)	10.0	(8.8—11.1)	60.8	(59.1—62.6)	
Males	26.0	(24.1—27.8)	4.8	(3.9—5.8)	6.5	(5.4—7.6)	62.7	(60.7—64.8)	
Persons	25.6	(24.4—26.8)	4.4	(3.8—5.0)	8.3	(7.5—9.1)	61.7	(60.4—63.1)	

The prevalence of adults having at least one type of private health insurance was estimated for the WA health regions and compared with the state prevalence.

The prevalence of adults having at least one type of private health insurance was lower in the Goldfields (62.7%), Great Southern (54.3%), Kimberley (37.1%), Midwest (59.7%), South West (67.3%), and Wheatbelt (63.8%) health regions, and higher in the North Metro health region (80.0%) compared with the state prevalence (74.7%) (Figure 35).

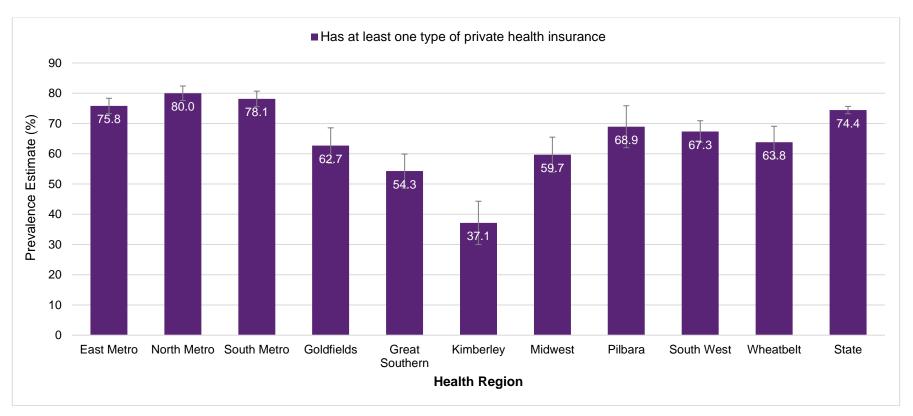


Figure 35: Prevalence of having at least one type of private health insurance by health regions in WA, 16 years & over, **HWSS 2023** 

#### **Enquiries**

Epidemiology Directorate +61 6373 3804 epi@health.wa.gov.au

This document can be made available in alternative formats on request for a person with disability.

© Department of Health 2025

Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the Copyright Act 1968, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.

health.wa.gov.au