

BULOKE DATA PROFILE

2024



Loddon Mallee Public Health Unit


Buloke Data Profile


This document has been prepared to provide a data profile on the health and wellbeing of the local government area of Buloke. It contains publicly available data that has been collated and summarised to inform local government, health services, advocacy and community groups.

All effort has been made to report data accurately and represent data available at time of publishing. These estimates may differ from those seen elsewhere due to differences in calculation methodologies and/or source data used.

Produced by Bendigo Health,
Loddon Mallee Public Health Unit
Version 1st October 2024

Bendigo Health
100 Barnard Street. Bendigo VIC 3550
✉ lmphu@bendigohealth.org.au
☎ 1800 959 400
🌐 www.bendigohealth.org.au/LMPHU/

 We acknowledge the First Peoples of Australia who are the Traditional Custodians of the land and water where we live, work and play. We celebrate that this is the oldest living and continuous culture in the world. We are proud to be sharing the land that we work on and recognise that sovereignty was never ceded.

 We welcome all cultures, nationalities and religions. Being inclusive and providing equitable healthcare is our commitment.

Data snapshot

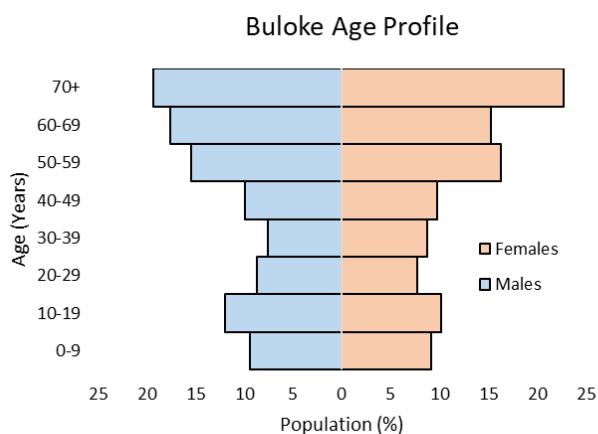
The Buloke Shire is located in the northwest of Victoria. Buloke encompasses a total land area of 8,000 square kilometres. The Agriculture, Forestry and Fishing industry sector is the largest employer supporting 33% of employment followed by healthcare and social assistance and education and training.

The 2021 ABS Census indicates there are 6,178 people in Buloke with a median age of 52 years. 1.5% of the population indicated they were Aboriginal and/or Torres Strait Islander. 83.7% of the population were born in Australia and the top responses for ancestry include Australian (41.3%), English (39.1%), Irish (16.1%) and Scottish (13.3%). 106 (4.1%) households use a language other than English with Malayalam, Mandarin and Tagalog the top three. 34.3% of the population are couple families with children. 12.4% of the Buloke population are one parent families and 51.2% couple family without children.

Buloke has a higher than state average rate for persons who are current smokers at 22.5% compared to 15.5% for Victoria; higher rates of obesity 36.4% (vs 31.3%) and alcohol consumption of persons who consume more than two standard drinks per day on average at 25% vs 14.4% of Victorians.

The median income for individuals, families and households are significantly below state averages, however Buloke has a very low rate of homelessness.

97.6% of the Buloke area is bushfire prone along with being subject to flooding from the Avoca, and Avon-Richardson rivers.



Median household income:
 Buloke \$1,468
 Victoria \$1,746

Rental affordability in 2023:
 Buloke 90.9%
 Victoria 26.9%

Percentage of people with at least one long term health condition

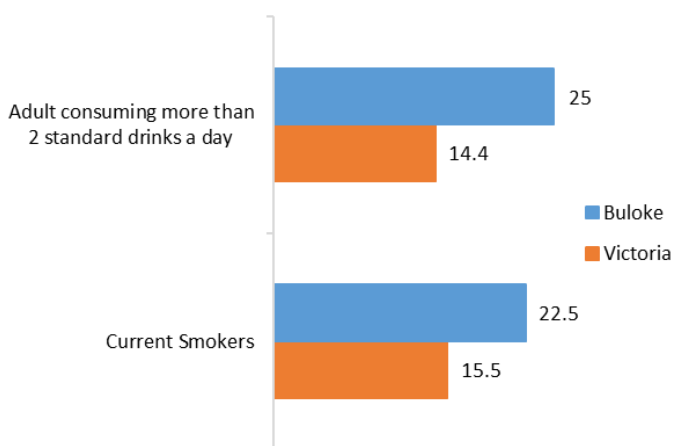
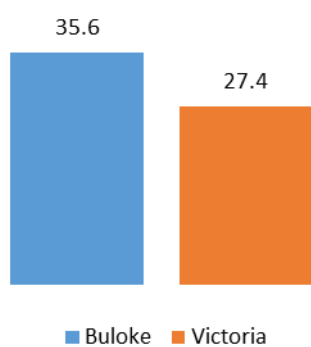
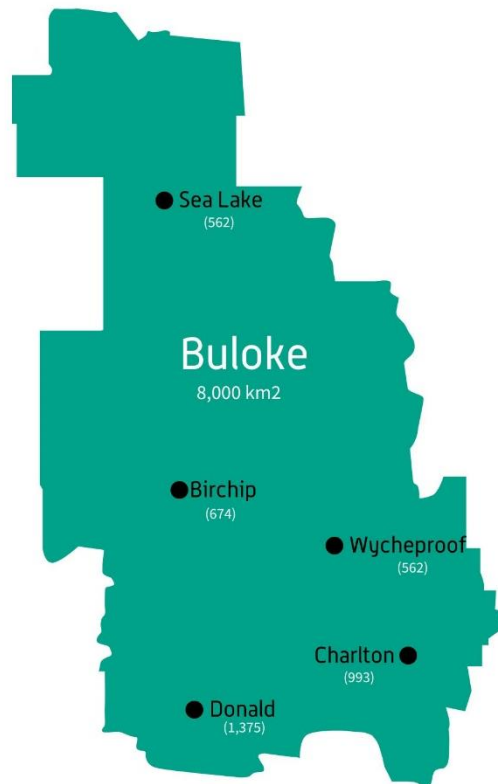


Table of Contents

Buloke Data Profile.....	1
Data snapshot.....	2
Local Government Area (LGA) summary - Buloke.....	4
1. Population.....	5
1.1 General Population.....	5
1.2 Indigenous Status.....	5
1.3 Culture Diversity.....	6
1.4 LGBTIQ+ population.....	7
1.5 Areas of Disadvantage.....	7
2. Prevention and Determinants.....	8
2.1 Prevalence of selected health risk factors for adults.....	8
2.2 Alcohol and other drugs.....	8
2.3 Life Expectancy.....	9
2.4 Sexual and Reproductive Health.....	9
2.5 Sexually transmitted diseases.....	10
2.6 Selected long-term health condition.....	10
2.7 Avoidable deaths by cause.....	12
3. Family Violence.....	13
4. Family and Income.....	14
4.1 Family composition.....	14
4.2 Single (or lone) parents.....	14
4.3 Employment status of couple families.....	14
4.4 Early child development.....	15
4.5 Household income.....	16
4.6 Rental affordability.....	16
4.7 Homelessness.....	17
5. Education.....	18
5.1 Type of educational institution attending.....	18
5.2 Level of highest educational attainment.....	18
6. Disability.....	19
7. Environment.....	20
7.1 Municipal emissions snapshot.....	20
7.2 Average temperature from a 30-year climate period.....	20
7.3 Bushfire prone areas.....	21
7.4 Areas potentially impacted by flooding.....	22
Abbreviations.....	24
Resources.....	24
Feedback.....	24



The Buloke Shire is located in the north west of Victoria between 210 and 360 kilometres from Melbourne. It is bounded by both the Mildura and Swan Hill in the north, Gannawarra and Loddon shires in the east, Northern Grampians Shire in the south and Yarriambiack Shire in the west. The total population of Buloke is 6,178 (2021).

Buloke is a predominantly rural area. The main townships are Birchip, Charlton, Donald, Sea Lake and Wycheproof. Buloke encompasses a total land area of 8,000 square kilometres and land is used largely for agriculture, particularly grain (wheat, oats and barley) production and sheep grazing. The agriculture, forestry and fishing industry sector is the largest employer supporting 33% of employment followed by healthcare and social assistance (12.1%) and education and training (9.7%).

According to geographical remoteness classifications within the [Modified Monash Model \(MMM\) 2019](#), the region is classified MM 5 categories which reflects the small rural towns and an absence of a large rural service hub.

It is acknowledged that Buloke is the traditional lands of the Wotjobaluk, Jaadwa, Jadawadjali, Wergaia and Jupagalk Nations and the Dja Dja Wurrung people as the traditional owners. Buloke has a significant number cultural heritage places including an Aboriginal historical place, burials, artefact scatters, earth features, low density artefact distributions, scarred trees and a stone feature.

Source: [Modified Monash Model | Australian Government Department of Health and Aged Care](#), <https://www.buloke.vic.gov.au/>, <https://www.rdv.vic.gov.au/resources/reds>

1. Population

1.1 General Population

Buloke's population profile, based on ABS data obtained from the census reveals an older demographic. The median age of 52 years is considerably higher than the state median of 38 years. The percentage of people aged 70 and above is also higher in Buloke compared to the state average. The male-female ratio is slightly skewed towards males.

	Buloke	Victoria
Median age	52	38

Age Groups	Buloke		% Buloke		% Victoria	
	Male	Female	% Male	% Female	% Male	% Female
0-9 years	300	274	9.4	9.2	6.1	5.8
10-19 years	379	306	11.9	10.2	6.0	5.6
20-29 years	276	230	8.7	7.7	6.9	6.9
30-39 years	241	262	7.6	8.8	7.4	7.8
40-49 years	317	293	9.9	9.8	6.4	6.6
50-59 years	490	489	15.4	16.3	5.9	5.9
60-69 years	562	457	17.6	15.3	5.0	5.5
70+ years	615	680	19.3	22.7	5.4	6.5
Total	3,186	2,991	51.6	48.4	49.2	50.6

Source: [2021 Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](https://abs.gov.au)

1.2 Indigenous Status

Buloke has a higher Indigenous population (1.5%) compared to the Victorian proportion (1%). The median age of Buloke's Indigenous population is older at 34 years, compared to the state median of 24 years. The median age of the Indigenous population is also younger than the average of the total Buloke population (52 years).

Indigenous status	Buloke	% Buloke	Victoria	% Victoria
Aboriginal and/or Torres Strait Islander	92	1.5	65,646	1
Non-Indigenous	5,567	90.1	6,148,188	94.5
Indigenous status not stated	522	8.4	289,665	4.5
Median age of Indigenous population	34		24	

Source: [2021 Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](https://abs.gov.au)

1.3 Culture Diversity

A substantial majority of Buloke's residents, accounting for 88.5% of the total population, are Australian citizens with 83.7% being born in Australia. It is noteworthy that 8.3% of the population in Buloke consists of people who are not Australian citizens. In Buloke, 4.1% of the population households use a language other than English (106 households). Language use patterns reveals a vast majority (88.1%) of Buloke's residents speak English only. However, a small percentage (0.2%) speak other languages and doesn't speak English well. The data shows 106 (4.1%) households use a language other than English with Malayalam, Mandarin and Tagalog the top three. Overall, Buloke's population has less diversity when compared to Victoria.

Australian Citizenship	Buloke	% Buloke	Victoria	% Victoria
Australian Citizen	5,470	88.5	5,389,821	82.9
Not an Australian Citizen	512	8.3	810,344	12.5
Not stated	198	3.2	303,333	4.7
Speaks English only	5,444	88.1	4,369,804	67.2
Uses other language and speaks English: Not well	13	0.2	216,541	3.3
Uses other language and speaks English: Not at all	3	0	69,334	1.1
Total Population	6,178	100	6,503,491	100

Source: [Census of Population and Housing, 2021, TableBuilder](#)

Country of birth, top responses (all people)	Buloke	% Buloke	Victoria	% Victoria
Australia	5,172	83.7	4,228,667	65.0
<i>Other top responses:</i>				
England	94	1.5	174,552	2.7
New Zealand	50	0.8	99,344	1.5
Philippines	45	0.7	68,463	1.1
India	30	0.5	258,193	4.0
South Africa	18	0.3	31,274	0.5

Source: [2021 Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

Language used at home, top responses, other than English (all people)	Buloke	% Buloke	Victoria	% Victoria
Malayalam	28	0.5	25,342	0.4
Mandarin	20	0.3	221,798	3.4
Tagalog	18	0.3	29,044	0.4
Nepali	12	0.2	21,955	0.3
Thai	10	0.2	14,724	0.2
English only used at home	5,444	88.1	4,369,804	67.2
Households where a non-English language is used	106	4.1	722,004	30.2

Source: [2021 Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

1.4 LGBTIQ+ population

Unfortunately, there is a lack of local data on LGBTIQ+ population including population size and health and wellbeing data. There is data at a state and national level that can be used as an indicator. The Victorian Population Health Survey 2017 estimates 5.7 per cent of Victorian adults identify as LGBTIQ+, however some rural areas have attracted significantly higher proportion of LGBTIQ+ people to their communities.

State and national data indicates poorer mental and physical health for LGBTIQ+ community members. There is also significantly higher rates of drug use, alcohol, smoking, chronic disease, homelessness, and disability along with higher rates of anxiety and depression, psychological stress and low satisfaction with life.

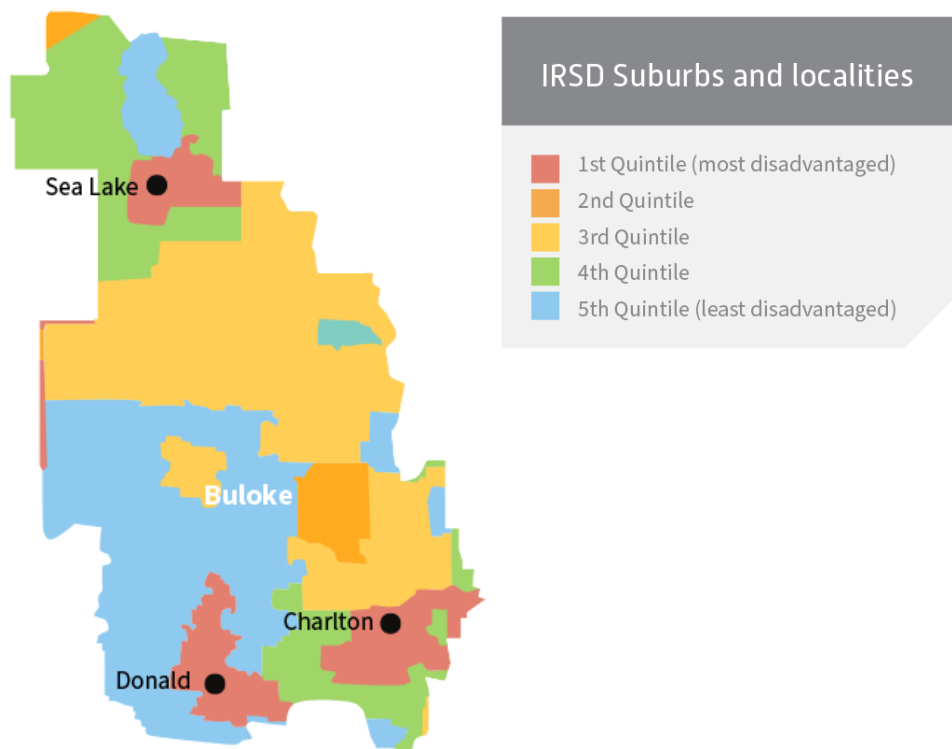
Sources and for more information: [Pride in our future: Victoria's LGBTIQ+ strategy 2022–32 | vic.gov.au \(www.vic.gov.au\)](https://www.vic.gov.au/pride-in-our-future-victoria-s-lgbtiqa-strategy-2022-32)
[The health and wellbeing of the lesbian, gay, bisexual, transgender, intersex and queer population in Victoria - Findings from the Victorian Population Health Survey 2017 | Victorian Agency for Health Information \(vahi.vic.gov.au\)](https://www.vic.gov.au/the-health-and-wellbeing-of-the-lesbian-gay-bisexual-transgender-intersex-and-queer-population-in-victoria-findings-from-the-victorian-population-health-survey-2017)

1.5 Areas of Disadvantage

The Index of Relative Socio-economic Disadvantage (IRSD) is a general socio-economic index that summarises a range of information about the economic and social conditions of people and households within an area.

A low score indicates relatively greater disadvantage. For example, an area could have a low score if there are: many households with low income, or many people without qualifications, and many people in low skilled occupations. A high score indicates a relative lack of disadvantage. For example, an area may have a high score if there are: few households with low incomes, few people without qualifications, few people in low skilled occupations.

Within the Buloke LGA there are areas calculated to have the highest relative disadvantage and areas with the least relative disadvantage. The areas of the most disadvantage cluster around the most populated areas of Sea Lake, Donald and Charlton. The average IRSD score for Buloke is 975 (2021), which ranks Buloke LGA 24th in Victoria of most disadvantage.



Source: [ABS: Census of population and Housing: Socio-Economic Indexes from areas \(SEIFA\), 2021](https://www.abs.gov.au/census-of-population-and-housing/socio-economic-indexes-from-areas-seifa)
Rank 1 = most disadvantage, rank 79 = least disadvantage

2. Prevention and Determinants

2.1 Prevalence of selected health risk factors for adults

In 2017-18, 11.6 per 100 population of Buloke residents aged 18 years and over reported experiencing high or very high psychological distress. This is lower compared to the state rate of 13.3 per 100 population.

The region exhibits a higher rate of high blood pressure (23.4 per 100 in Buloke versus 22.7 per 100 in Victoria) and obesity (36.4 per 100 in Buloke versus 31.3 per 100 in Victoria). Buloke also shows a considerably higher rate of current smokers (22.5 per 100 compared to 15.5 per 100 in Victoria) and people consuming more than two standard alcoholic drinks per day on average (25 per 100 in Buloke versus 14.4 per 100 in Victoria). The data suggests Buloke experiences higher rates in most health risk factors which may impact long-term health measures.

Indicators [^] (modelled estimates, ASR/100 population) 18 years and over, 2017-2018	Buloke	Victoria
High or very high psychological distress	11.6	13.3
High blood pressure	23.4	22.7
Overweight (but not obese)	37.0	36.4
Obese	36.4	31.3
Current smokers	22.5	15.5
Consumed more than two standard alcoholic drinks per day on average	25.0	14.4
Consumed adequate fruit intake	49.0	51.5
Undertook low, very low or no exercise in the previous week	71.3	65.7

Source: [Social Health Atlas of Australia: Victoria](#)

[^]ASR per 100. Age Standardise Rate (ASR) is used to remove the effect of the differing age distributions that we can make conclusions about the relative decreases or increases in mortality over time.

2.2 Alcohol and other drugs

The alcohol and other drug statistics for Buloke, based on the provided data highlight certain trends and patterns in the region's substance use landscape. Buloke has considerably higher rates of deaths for alcohol related events (260.9 per 100,000) compared to the Victorian rate (141.9 per 100,000).

In general, it appears Buloke experiences significantly higher rates of alcohol-related incidents, including deaths, ambulance attendances but lower hospital admissions when compared to Victoria. On the other hand, Victoria has higher rates of deaths, ambulance attendances and hospital admissions for illicit drug-related issues.

Alcohol and other drug Indicators per 100,000 population	Buloke Shire	Victoria
Deaths for alcohol-related events, 2021	260.9	141.9
Deaths for illicit drug (any)-related events in, 2021	0.0	0.6
Ambulance attendances for Alcohol Intoxication (w/wo Other Substance), 2022/23	457.7	393.5
Ambulance attendances for Alcohol Only (Intoxication), 2022/23	408.6	319.7
Ambulance attendances for Illicit Drugs (Any), FY-2022/23	130.8	204.6
Hospital admissions for Alcohol, 2021/22	538.34	574.0
Hospital admissions for Illicit Drugs (Any), 2021/22	146.82	241.3

Source: [Alcohol and other drug statistics in Victoria - AODstats](#)

These statistics are presented per 100,000 population

2.3 Life Expectancy

The median age at death for males in Buloke has reduced, while females remain stable from 2016 to 2021, showing no percentage difference compared to Victoria.

Examining premature mortality (deaths occurring before the age of 75), Buloke demonstrated positive trends. For males, there was a substantial reduction from an average annual age standardised rate (ASR) of 416.8 to 338.0, indicating a percentage decrease of 18.9%. Similarly, for females, the average annual ASR decreased from 311.6 to 246.8, reflecting a percentage decrease of 8.4%. These figures signify progress in reducing premature deaths in Buloke, outperforming the state average.

Avoidable mortality (deaths that could have been prevented) also showed improvement in Buloke. For males, there was a decline from an average annual ASR of 246.7 to 192.5, representing a percentage reduction of 22%. For females, the average annual ASR decreased from 186.3 to 124.2, indicating a percentage reduction of 33.3%. Once again, Buloke demonstrates positive strides in addressing avoidable causes of death, surpassing the state average.

	Report - 2016 to 2020 ASR [^] per 100,000				Report - 2017 to 2021 ASR [^] per 100,000				% Difference between reports			
	Buloke		Victoria		Buloke		Victoria		Buloke (%)		Victoria (%)	
	Male (M)	Female (F)	M	F	M	F	M	F	M	F	M	F
Median age at death (yrs)	82	85	79	85	81	86	79	85	-1.2	0.0	0.0	0.0
Premature Mortality, 0 to 74 yrs of age [^]	416.0	311.6	269.5	171.2	338.0	246.8	273.4	172.9	-18.9	-8.4	1.4	1.0
Avoidable Mortality, 0 to 74 yrs of age [^]	246.7	186.3	138.3	80.5	192.5	124.2	139.5	80	-22.0	-33.3	0.9	-0.6

Source: [Social Health Atlas of Australia: Victoria](#)

[^]Average annual ASR per 100,000. Age Standardise Rate (ASR) is used to remove the effect of the differing age distributions that we can make conclusions about the relative decreases or increases in mortality over time.

2.4 Sexual and Reproductive Health

Buloke's birth rate has increased and is now higher than the Victorian rate. Total fertility rates continue to be higher in Buloke (2.57) compared to the Victoria rate (2.44) and Buloke's fertility rate in the second highest in Victoria. Adolescent birth rates in Buloke also continue to be higher than the Victorian rate.

Indicators	2022		2021	
	Buloke	Victoria	Buloke	Victoria
Female Birth - Rate (per 1,000) ¹	22.4	20.5	20.73	20.7
Female Total Fertility Rate - Rate (lifetime) ²	2.57	1.7	2.44	1.7

Indicators	2020		2019	
	Buloke	Victoria	Buloke	Victoria
Female Adolescent Birth - Aggregate 2 year rate (per 1,000) ³	10.9	8.2	10.9	9.1

Source: [Victorian Women's Health Atlas \(victorianwomenshealthatlas.net.au\)](#)

¹The rate equals the number of live births in 2020, per 1,000 women of the corresponding LGA. Note: Care should be taken when interpreting changes in fertility rates for Victoria from 2015 to 2018 due to registry system changes and processing of backlogs which may have inflated the birth counts for 2016 and 2017.

²The average number of children that a woman in a particular LGA could expect to bear during her reproductive lifetime if current fertility rates in that LGA continue. Note: Care should be taken when interpreting changes in fertility rates for Victoria from 2015 to 2018 due to registry system changes and processing of backlogs which may have inflated the birth counts for 2016 and 2017.

³The rate equals the number of live births to women younger than 20 years in the two-year period Jan 2019-Dec 2020, by LGA, per 1,000 women aged 13-19 residing in that LGA.

2.5 Sexually transmitted diseases

Data is not reported where there are less than five cases. Therefore, the only data reported for Buloke is Chlamydia which shows lower rates in 2023 compared to the Victorian rate.

Sexually transmitted diseases	2023				2022			
	Buloke		Victoria		Buloke		Victoria	
	Indicators per 10,000							
	F	M	F	M	F	M	F	M
Chlamydia ¹	11.33	9.71	16.3	18.7	16.19	^	14.4	15.7
Gonorrhoea ²	^	^	2.5	8.6	^	^	2.2	8.0
Hepatitis B ³	^	^	0.6	0.8	^	^	0.7	0.9
Syphilis ⁴	^	^	0.7	2.7	^	^	0.5	2.5

Source: [Victorian Women's Health Atlas \(victorianwomenshealthatlas.net.au\)](https://victorianwomenshealthatlas.net.au)

^ Where there were less than five cases reported in 2023 the case rate will not be included

¹ The rate equals the number of chlamydia cases notified in the year period 2021, by LGA, per 10,000 persons of the corresponding LGA. Notes: (1) Rates based on counts of <5 are assigned an arbitrary count value of 2.5 to enable rate calculation.

² The rate equals the number of gonorrhoea cases notified in the year period 2021, by LGA, per 10,000 persons of the corresponding LGA. Notes: (1) Rates based on counts of <5 are assigned an arbitrary count value of 2.5 to enable rate calculation. (2) State and region total and averages shown in the Atlas are automatically generated based on LGA location data for female/male sex only and may differ to Victorian totals published elsewhere.

³ The rate equals the number of hepatitis B cases (total of both newly acquired and unspecified) notified in the year period 2021, by LGA, per 10,000 persons of the corresponding LGA. Notes: (1) Rates based on counts of <5 are assigned an arbitrary count value of 2.5 to enable rate calculation. (2) State and region total and averages shown in the Atlas are automatically generated based on LGA location data for female/male sex only and may differ to Victorian totals published elsewhere.

⁴ The rate equals the number of syphilis cases (total of both newly acquired and unspecified) notified in the year period 2021, by LGA, per 10,000 persons of the corresponding LGA. Notes: (1) Rates based on counts of <5 are assigned an arbitrary count value of 2.5 to enable rate calculation. (2) State and region total and averages shown in the Atlas are automatically generated based on LGA location data for female/male sex only and may differ to Victorian totals published elsewhere.

2.6 Selected long-term health condition

Arthritis and asthma are prevalent in the community, with 14% and 10.1% of the population reporting these conditions respectively. Both conditions show higher prevalence rates in Buloke compared to the state of Victoria.

Cancer affects 4.4% of Buloke's population, which is higher than the state average of 2.8%. Dementia, diabetes, heart and kidney disease, mental health conditions and stroke all have a higher prevalence in Buloke compared to Victoria.

The proportion of Buloke residents having one or more long-term health condition (35.6%) is higher than the state average (27.4%). Further data looking at heart health shows the rates of heart-related hospitalisations (32.1 per 10,000) is lower than the Victorian rate (40.6/10,000 pop) and coronary heart disease mortality (69.7 per 100,000) is higher than the Victorian average (60.2 per 100,000).

Type of long-term health condition, 2021	Buloke	% Buloke [^]	Victoria	% Victoria [^]
Arthritis	870	14.1	518,633	8
Asthma	623	10.1	543,047	8.4
Mental health condition (including depression or anxiety)	585	9.5	571,150	8.8
Diabetes (excluding gestational diabetes)	441	7.1	303,371	4.7
Heart disease (including heart attack or angina)	380	6.2	243,130	3.7
Cancer (including remission)	270	4.4	179,326	2.8
Lung condition (including COPD or emphysema)	191	3.1	97,270	1.5
Kidney disease	92	1.5	57,437	0.9
Stroke	90	1.5	59,844	0.9
Dementia (including Alzheimer's)	71	1.1	45,946	0.7
Any other long-term health condition(s)	479	7.8	519,110	8
No long-term health condition(s)	3,113	50.4	3,969,506	61
Not stated	686	11.1	492,709	7.6

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](https://abs.gov.au)

[^]Calculated percentages represent a proportion of the number of people in the area (including those who did not answer the long-term health conditions question).

Count of selected long-term health conditions* (all people)	Buloke	Victoria	% Buloke	% Victoria
None of the selected conditions	3,294	4,228,219	53.3	65.0
One condition	1,329	1,224,496	21.5	18.8
Two conditions	528	371,819	8.5	5.7
Three or more conditions	348	186,237	5.6	2.9
Not stated	686	492,709	11.1	7.6

* Selected long-term health conditions include arthritis, asthma, cancer (including remission), dementia (including Alzheimer's), diabetes (excluding gestational diabetes), heart disease (including heart attack or angina), kidney disease, lung condition (including COPD or emphysema), mental health condition (including depression or anxiety) and stroke. Other long-term health conditions are not included in this count.

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](https://abs.gov.au)

Heart health indicators	Buloke	Victoria
Heart related hospital admissions (2021-2016)		
ASR (per 10,000 persons)	32.1	40.6
Coronary heart disease mortality (2012-2020)		
ASR (per 100,000 persons)	69.7	60.2

Source: [Heart Foundation – Australian Heart Maps](https://heartfoundation.org.au)

2.7 Avoidable deaths by cause

Avoidable deaths are deaths from conditions that are potentially preventable through individualised care and/or treatable through existing primary or hospital care. The highest rate of avoidable deaths (0-74 years) in Buloke are circulatory system disease (50 per 100,000) and ischaemic heart disease (30 per 100,000), both with considerably higher rates compared to Victoria (32.7 per 100,000, 20.6 per 100,000 respectively).

Of the reliable data, Buloke has higher rates of avoidable deaths (0-74yrs) compared to Victoria from cardiovascular conditions and cerebrovascular and lung disease. Buloke has the second highest death rate from transport accidents in Victoria (22.3 per 100,000; 4 per 100,000 respectively).

Avoidable deaths by cause [^] (ASR per 100,00) 0-74 yrs, 2017 -2021	Buloke	Victoria
Circulatory system	50	32.7
Ischaemic heart disease	30	20.6
Cancer	25.3	27.8
Transport accidents	22.3	4.0
Respiratory system disease	14.3	9.0
Obstructive pulmonary disease	14.2	8.3
Cerebrovascular disease	12.5	7.6
Breast cancer	^^	15.6
Diabetes	^^	5.2
Colorectal cancer	^^	10.1
External causes (Falls, burns, suicide and self-inflicted injuries etc)	^^	13.5
Suicide and self-inflicted injuries	^^	10.6

Source: [Social Health Atlas of Australia: Victoria](#)

[^] For all indicators, the data presented are the average annual indirectly age-standardised rates per 100,000 total population (aged 0 to 74 years); and/or indirectly age-standardised ratios, based on the Australian standard. The exception is for 'Deaths from breast cancer (females)', where the rates are limited to the female population.

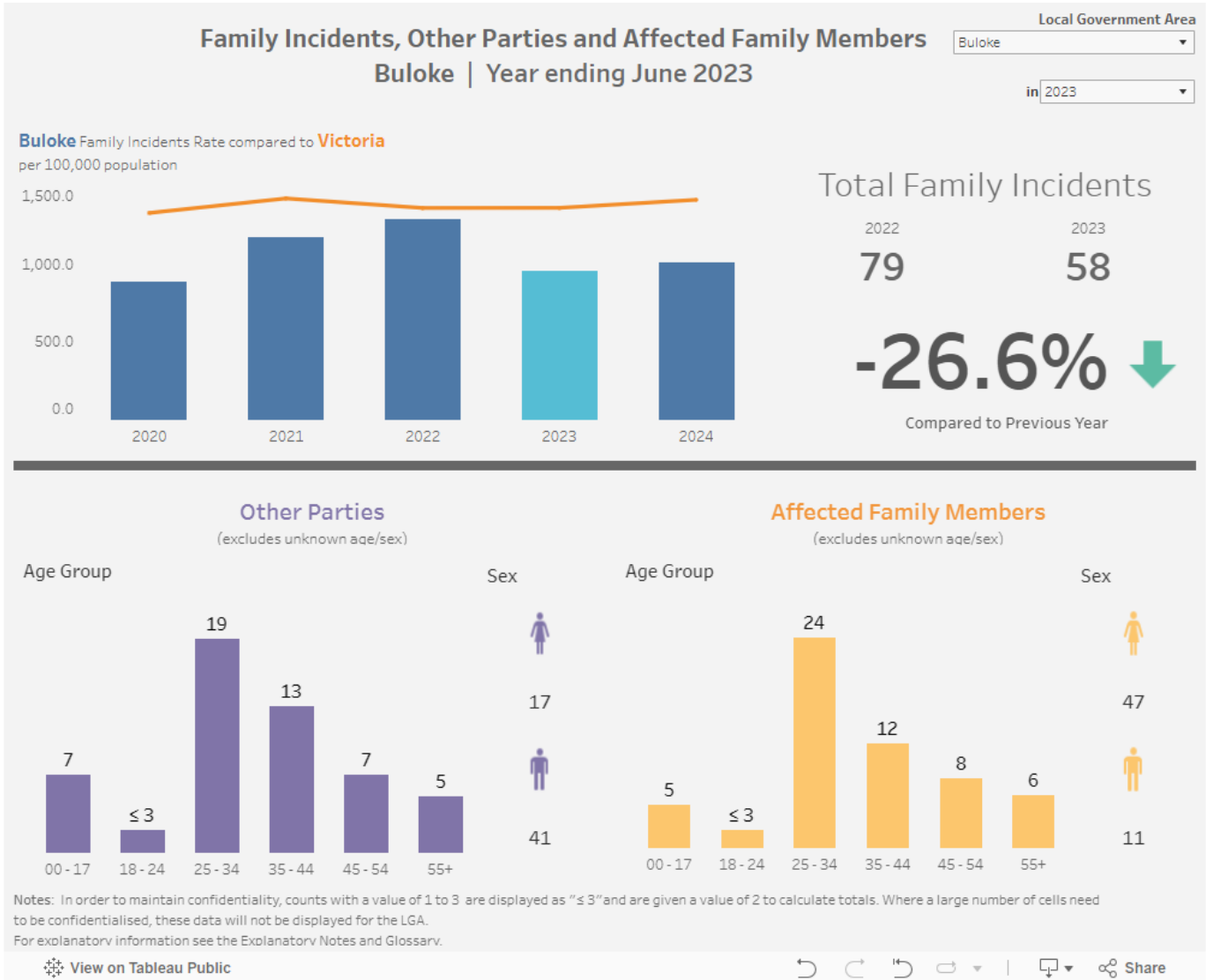
^{^^} modelled estimates for these areas are considered to be unreliable

3. Family Violence

A family incident is an incident attended by Victoria Police and a police report has been completed. Buloke reported family violence incidents are consistently below the State rate with 960.3 per 100,000 compared to the Victorian rate 1366.2 per 100,000 in 2023.

An 'affected family member' is the individual who is deemed to be affected by events occurring during a family incident. The majority of the 'affected family' are women. The largest age group of 'effected family' is 25-34 years.

The other individual involved in a family incident is referred to as the 'other party'. The other party could be a current partner, former partner or a family member. The 'other party' are mostly men. The highest age group for other parties is 25-35 years.



Source: [Latest crime data by area | Crime Statistics Agency Victoria](#)

4. Family and Income

4.1 Family composition

Couple families without children constitutes the largest proportion in Buloke, accounting for 51.2% of all families, which is higher than the state average of 37.6%. Couple families with children make up 34.3% of all families in Buloke, which is lower than the state average of 45.5%. This indicates a smaller proportion of families in Buloke have children compared to the broader state.

One-parent families represent 12.4% of all families in Buloke, which is lower than the state average of 15.2%. This suggests single-parent households are less prevalent in Buloke compared to the state as a whole.

Other families, which may include non-traditional family structures, account for a small percentage (1.9%) in Buloke, slightly higher than the state average of 1.7%.

All families	Buloke	% Buloke	Victoria	% Victoria
Couple family without children	826	51.2	645,543	37.6
Couple family with children	554	34.3	782,321	45.5
One parent family	200	12.4	262,040	15.2
Other family	31	1.9	28,875	1.7

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

4.2 Single (or lone) parents

The data indicates the majority of single (or lone) parents in Buloke are female, constituting a substantial 76% of the total single parent population. This percentage is slightly lower than the female proportion in Victoria, which is 80.9%.

Proportion of the total single (or lone) parent population	% Buloke	% Victoria
Male	20.5	19.1
Female	76.0	80.9

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

4.3 Employment status of couple families

In Buloke, the three most common employment statuses for couple families are one employed full-time, one part-time (26.5%), both not working (23.4%) and both employed, working full time (18.5%). The proportion of both adults not working is higher in Buloke (23.4) than the state average (19.8%). This could indicate an older population, lack of employment opportunities but may also be due to caregiving responsibilities, study or other reasons.

Couple families where parents or partners were aged 15 years and over	Buloke	% Buloke	Victoria	% Victoria
Both employed, worked full-time	255	18.5	323,693	22.7
Both employed, worked part-time	68	4.9	70,928	5
One employed full-time, one part-time	365	26.5	322,757	22.6
One employed full-time, other not working	153	11.1	189,173	13.2
One employed part-time, other not working	82	6.0	90,569	6.3
Both not working	322	23.4	283,160	19.8
Other	88	6.4	97,725	6.8
Labour force status not stated	52	3.8	49,854	3.5

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

4.4 Early child development

The Australian Early Development Census (AEDC) is a nationwide census of early child development that shows how young children have developed as they start their first year of full-time schooling. The Buloke figures indicate a higher proportion of vulnerable children for physical, social and language indicators compared to the Victorian proportions. Children in Buloke have considerable vulnerability with language (15.7%) compared to Victoria (7.2%). There is also a higher proportion of children in Buloke who have one or more developmentally vulnerable domains (33.3%) compared to Victoria (19.9%).

Vulnerable (n=56, 2021)				
Indicator	Indicator description	Buloke	Buloke (%)	Victoria (%)
Physical	Child is healthy; independent; excellent gross and fine motor skills	6	11.8	8.1
Social	Gets along with others; shares; self-confident	7	13.7	9.0
Emotional	Able to concentrate; help others; patient, not angry or aggressive	3	6.1	7.7
Language	Interested in reading or writing; can count; recognises numbers and shapes	8	15.7	7.2
Communication	Can tell a story; communicate with adults and children; articulate themselves	3	5.9	7.4
Vulnerability 1	Developmentally vulnerable in one or more domains	17	33.3	19.9
Vulnerability 2	Developmentally vulnerable in two or more domains	7	14.0	10.2

Source: [Australian Early Development Census](#)

The provided data on household income for the Buloke region, compared to the state of Victoria, gives insights into the income distribution within the community. The median weekly incomes for people aged over 15, personal, families and households are all below the state medians. In Buloke, the percentage of occupied private dwellings in Buloke with a weekly income of less than \$650 is 26.8% and above is \$3,000 (9.6%) compared with a state average of 16.4% and 24.2% respectively. This indicates Buloke has a greater number of households with low income when compared to the state average.

Occupied private dwellings (excl. visitor only and other non-classifiable households) [^]	% Buloke	% Victoria
Less than \$650 total household weekly income	26.8	16.4
More than \$3,000 total household weekly income	9.6	24.2

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

[^] Percentages exclude dwellings with 'Partial income stated' of 'All incomes not stated.'

Median weekly incomes [^] People aged 15 years and over	Buloke	Victoria
Personal	\$618	\$805
Family	\$1,468	\$2,120
Household	\$1,088	\$1,746

[^] Incomes are collected in ranges and exclude people, families and households where at least one member aged 15 years and over did not state their income.

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

4.5 Household income

The provided data on household income for the Buloke region, compared to the state of Victoria, gives insights into the income distribution within the community. The median weekly incomes for people aged over 15, personal, families and households are all below the state medians. In Buloke, the percentage of occupied private dwellings in Buloke with a weekly income of less than \$650 is 26.8% and above is \$3,000 (9.6%) compared with a state average of 16.4% and 24.2% respectively. This indicates Buloke has a greater number of households with low income when compared to the state average.

Occupied private dwellings (excl. visitor only and other non-classifiable households) [^]	% Buloke	% Victoria
Less than \$650 total household weekly income	26.8	16.4
More than \$3,000 total household weekly income	9.6	24.2

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

[^] Percentages exclude dwellings with 'Partial income stated' of 'All incomes not stated.'

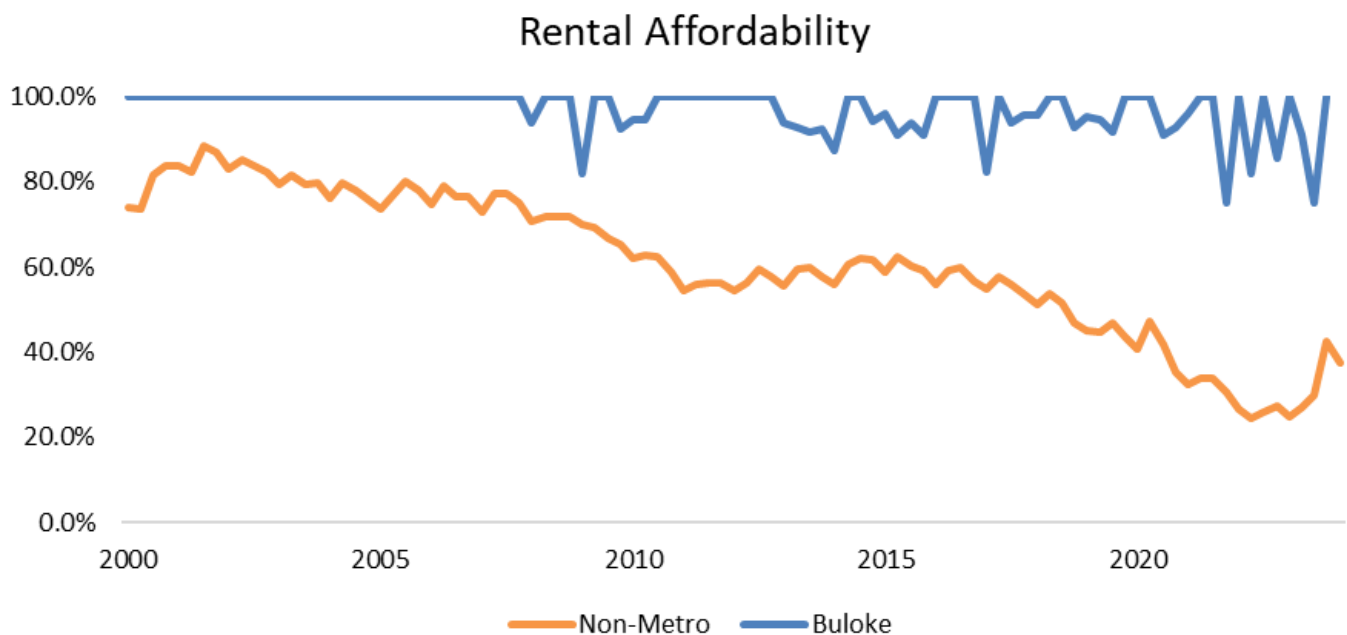
Median weekly incomes [^] People aged 15 years and over	Buloke	Victoria
Personal	\$618	\$805
Family	\$1,468	\$2,120
Household	\$1,088	\$1,746

[^] Incomes are collected in ranges and exclude people, families and households where at least one member aged 15 years and over did not state their income.

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

4.6 Rental affordability

Median rent prices are continuing to increase and rentals are becoming less affordable. The graph below represents affordability of rental homes for lower income households. The affordability benchmark used is that no more than 30% of gross income is spent on rent. Buloke has a high proportion of affordable rental, with 90.9% in 2023. This is much higher than the Victorian non-metro areas at 26.9% at the same time point.



Source: [Rental Report - Quarterly: Affordable Lettings by LGA - Dataset - Victorian Government Data Directory](#)

The affordability benchmark used is that no more than 30% of gross income is spent on rent.

Lower income households are defined as those receiving Centrelink incomes

4.7 Homelessness

Access to safe, adequate housing is central to the health and wellbeing of individuals and families. Secure and affordable housing is the basis for social connectedness and a contributor to the social determinants of health and wellbeing. This data includes:

- living in improvised dwellings, tents or sleeping out
- living in supported accommodation for the homeless
- staying temporarily with other households
- living in boarding houses
- living in 'severely' crowded dwellings

The rate in Buloke is 7.4 per 10,000 people while the rate in Victoria is 46.9 per 10,000 people. This indicates the estimated rate of homelessness standardised to the age distribution of the population is considerably lower in Buloke compared to the broader state of Victoria. While the overall rate is different between Buloke and Victoria, the specific challenges and characteristics of homelessness may vary between regions.

Indicator	ASR [^] per 10,000	
	Buloke	Victoria
People experiencing homelessness, 2021	7.4	46.9

Source: [Social Health Atlas of Australia: Victoria](#)

[^]Average annual ASR per 10,000. Age Standardise Rate (ASR) is used to remove the effect of the differing age distributions that we can make conclusions about the relative decreases or increases in mortality over time.

5. Education

5.1 Type of educational institution attending

Buloke has a comparable percentage of the population attending early and secondary education to the state average. However, Buloke has a significantly lower percentage of people attending university or other higher education compared to the state-wide average, with Buloke at 10% and Victoria at 24.5%.

People attending an educational institution	Buloke	% Buloke	Victoria	% Victoria
Preschool total	89	5.4	139,502	7.1
Primary total	404	24.6	520,258	26.5
Secondary total	380	23.1	412,219	21
Tertiary - Vocational education (including TAFE and private training providers)	81	4.9	155,358	7.9
Tertiary - University or other higher education	90	5.5	325,961	16.6
Tertiary total	165	10.0	482,005	24.5

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

5.2 Level of highest educational attainment

The data on the highest educational attainment in Buloke for people aged 15 years and over reveals a diverse educational landscape. Buloke shows lower percentages of individuals with higher education qualifications (Bachelor's degree and above) and advanced Diploma and Diploma level, while having higher percentages in Certificate III qualifications and Year 11 and below, indicating a diverse educational profile. This could potentially reflect accessibility to different forms of higher education compared to metropolitan areas. The percentage of individuals in Buloke with a Bachelor's degree or higher is notably lower than the state-wide average, accounting for 11.4% in Buloke compared to 29.2% in Victoria. Meanwhile, Buloke has 15.5% of individuals with Certificate III qualifications compared to the 10.9% state-wide average.

People aged 15 years and over	Buloke	% Buloke	Victoria	% Victoria
Bachelor Degree level and above	598	11.4	1,557,447	29.2
Advanced Diploma and Diploma level	367	7.0	521,291	9.8
Certificate level IV	184	3.5	179,000	3.4
Certificate level III	814	15.5	580,494	10.9
Year 12	611	11.7	797,281	14.9
Year 11	517	9.9	304,927	5.7
Year 10	653	12.5	389,680	7.3
Certificate level II	0	0.0	3,250	0.1
Certificate level I	0	0.0	647	0
Year 9 or below	694	13.2	422,139	7.9
Inadequately described	84	1.6	111,674	2.1
No educational attainment	11	0.2	59,722	1.1
Not stated	713	13.6	406,049	7.6

Source: [Buloke, Census All persons Quick Stats | Australian Bureau of Statistics \(abs.gov.au\)](#)

6. Disability

The provided data on disability shows that 8.9% of people with a profound or severe disability in Buloke is higher than the Victorian average of 6.1%. Most people with profound or severe disability are living in households rather than long-term accommodation.

In Buloke there are 133 people participating in the National Disability Scheme (2.4 per 100) in 2022, higher compared to the Victorian Rate (2.2 per100).

Indicator, 2021	Buloke	Buloke	Victoria
People with a profound or severe disability, includes people in long-term accommodation (all ages)	512	8.9%	6.1%
People with a profound or severe disability and living in households (all ages)	452	7.9%	5.4%
People with a profound or severe disability, includes people in long-term accommodation (0 to 64 years)	205	5%	3.3%
People with a profound or severe disability and living in households (0 to 64 years)	205	5%	3.2%
Estimated number of total persons, living in households, with moderate or mild core activity limitation (modelled estimates, 2018)	880	10.4 ASR [^]	n.p.
National Disability Insurance Scheme participants, 2022	133	2.4 ASR [^]	2.2 ASR [^]

Source: [PHIDU Torrens University Australia](#)

[^]Average annual ASR per 100. Age Standardise Rate (ASR) is used to remove the effect of the differing age distributions that we can make conclusions about the relative decreases or increases in mortality over time.

7. Environment

7.1 Municipal emissions snapshot

Buloke is a rural municipality that is large in geographical area relative to the state average and has very low urban density. Its major emissions source is agriculture, due to the community's relatively large amount of agricultural activity and low population. The second largest source of emissions is on road transportation.

In 2020/21, there was 358,000 (t CO₂e) total emissions for the Buloke area which decreased to 316,000 (t CO₂e) in 2021/22 - this is a reduction of 11.7%.

Source (2021/22)		Buloke		Victoria	
	Sector	Emissions (t CO ₂ e)	% Emissions (t CO ₂ e)	Emissions (t CO ₂ e)	% Emissions (t CO ₂ e)
Electricity	Residential	15,000	5	13,049,000	15
	Commercial	11,000	3	12,037,000	13
	Industrial	7,000	2	10,798,000	12
Gas	Residential			6,128,000	7
	Commercial			1,192,000	1
	Industrial			4,174,000	5
Transport	On road	134,000	42	17,313,000	19
	Rail			229,000	0
	Aviation			1,171,000	1
Waste		2,000	1	2,683,000	3
IPPU		3,000	1	6,370,000	7
Fugitive		0		2,911,000	3
Agriculture		144,000	46	11,523,000	13
Land Use		1,000	0	230,000	0
Total municipal emissions		316,000		89,578,000	100

Source: [Buloke, VIC :: Snapshot \(snapshotclimate.com.au\)](https://www.snapshotclimate.com.au)

7.2 Average temperature from a 30-year climate period

Temperatures in the Loddon Mallee region differ significantly from north to south. The northern part of the region sees hotter summers with Buloke area experiencing an average maximum temperature of 30°C. While winters are mild, and the maximum temperature is around 14°C on average. Conversely, the southern part of the region experiences cool and rainy winters and warm and arid summers. In the elevated southern regions, the average maximum temperature is below 25°C. Frosty weather is frequent in the whole region.

LGA (1961-1990)	Summer (Ave °C)		Winter (Ave °C)	
	Max	Min	Max	Min
Swan Hill Rural City	31.2	15	15.6	4.6
Mildura Rural City	31	14.8	15.9	5.2
Gannawarra Shire	30.5	14.7	14.8	4.5
Buloke Shire	30	14	14.6	4.4
Loddon Shire	29.4	13.9	13.9	4.2
Campaspe Shire	29.3	14.1	13.9	3.9
City of Greater Bendigo	28.2	13.4	13.1	3.9
Mount Alexander Shire	27	12	12	3.1
Macedon Ranges Shire	24.1	11.2	10.3	3.2
LMR Average	28.9	13.5	13.7	4.1

Source: [Loddon Mallee Environmental Scan | Emergency Management Victoria \(emv.vic.gov.au\)](#)

7.3 Bushfire prone areas

There are numerous areas with high bushfire hazards in the Loddon Mallee region, many of which intersect with settlements and areas are experiencing growth in rural residential and tourism. Buloke has 96.7% of its area as bushfire prone.

The fire danger period in Victoria has become lengthier, indicating a trend towards extended fire seasons. The seasonal fire restriction dates are determined by the municipality and are dependent on factors such as amounts of rain, grassland curing (grass dies, dormant or dry out), and other local conditions. In 2019-2020, fire restriction dates for Victoria were extended as early as 23 September 2019 to 23 March 2020.

Smoke from fires, including planned burns, can also pose a hazard within the Loddon Mallee region. The individuals most at risk from smoke exposure include young children, adults over 65 years of age, people with asthma or existing heart or lung conditions, pregnant women, outdoor workers, and smokers. Bushfire-prone areas are either subject to or likely to be subject to bushfires and are subject to specific bushfire construction standards. Nearly all of the land in the region is designated as a bushfire area.

LGA	Bushfire Prone Area* (km ²)	Total Area^ (km ²)	% Area Bushfire Prone
Buloke Shire	7,807	8,000	97.6
Campaspe Shire	4,415	4,519	97.7
Central Goldfields Shire	1,529	1,533	99.7
City of Greater Bendigo	2,930	3,000	97.6
Gannawarra Shire	3,701	3,750	98.7
Loddon Shire	6,694	6,696	100
Macedon Ranges Shire	1,723	1,748	98.6
Mildura Rural City	21,710	22,083	98.3
Mount Alexander Shire	1,527	1,530	99.8
Swan Hill Rural City	5,625	6,115	92.0
LMR Total or Average	57,662	58,960	97.8

Source: [Loddon Mallee Environmental Scan | Emergency Management Victoria \(emv.vic.gov.au\)](#)

7.4 Areas potentially impacted by flooding

The Mallee sub-region has a significant number of urban settlements exposed to flood risk. Floods have caused significant damage to farms through inundation, isolation, and flash floods following heavy rainfall. Flooding provides important inflows to wetlands and lake systems but may also impact towns and infrastructure.

The flood warning service coverage is shown in the figure below with both the Flood Watch and Flood Warning catchment shown. The table below shows the effected main localities. This is not an extensive list and there are smaller localities that may be impacted. The flood risk and area impacted by flooding varies around the region. The table (below) shows the percentage of each LGA which is impacted by flooding at the 1:100-year average recurrence interval (ARI). There is a one percent chance (1% annual exceedance probability (AEP)) of these areas experiencing flooding of this level in any given year based on flood modelling results from flood studies. The localities listed have some defined built up area in or near the flood impact area defined by the 1:100-year ARI.

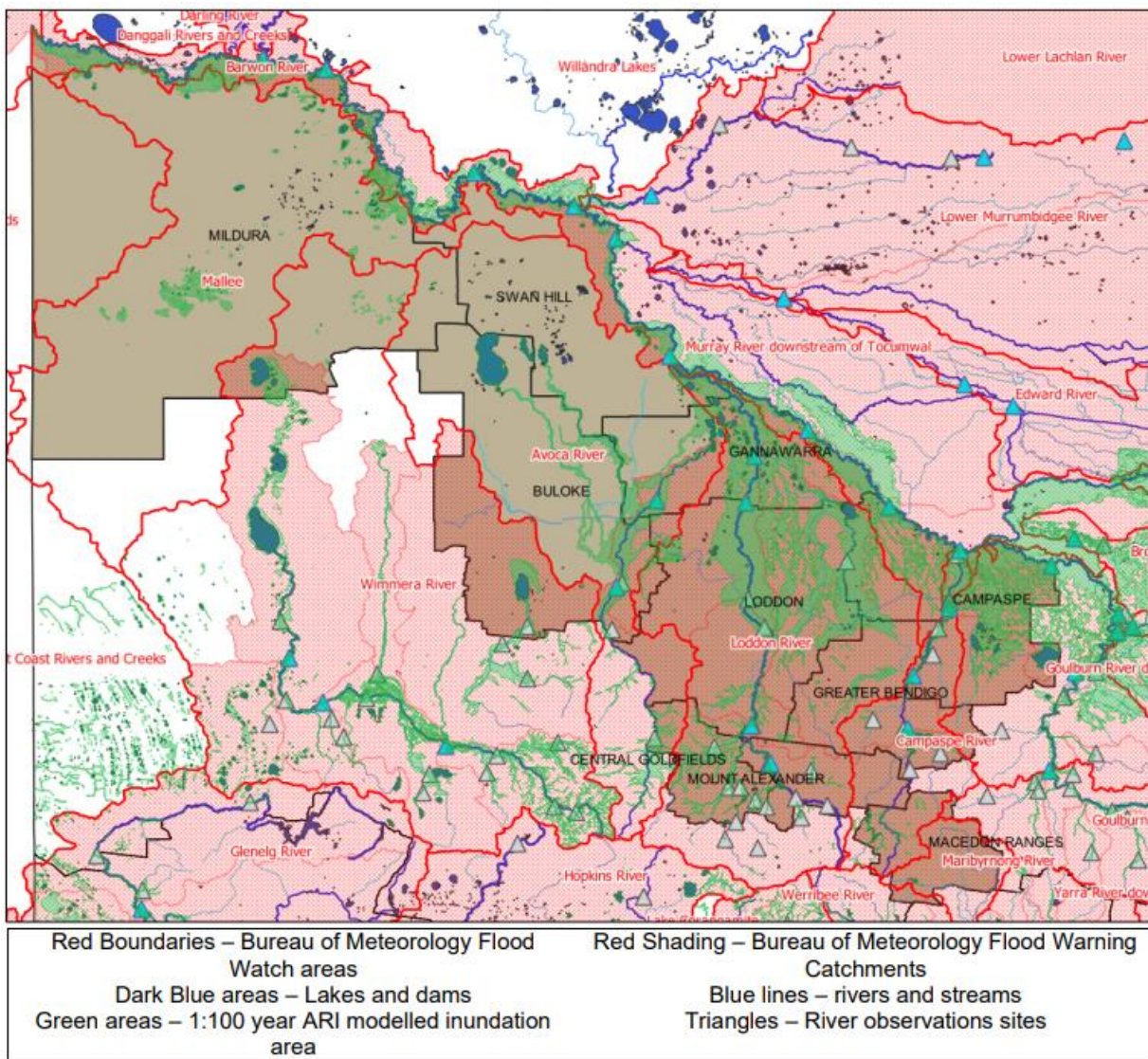


Figure 1: Flood warning and 1:100-year ARI inundation.

LGA	%Included in 1:100 Ari Area^	Main Localities with Affected Built Up Areas
Buloke	11.2	Charlton, Donald
Campaspe	31.7	Echuca, Kyabram, Moama (NSW), Rochester, Tongala, Wharparilla
Central Goldfields	20.1	Carisbrook, Dunolly, Maryborough
Gannawarra	40.4	Barham (NSW), Cohuna , Kerang ,Koondrook , Quambatook
Greater Bendigo	5.9	Ascot (Bendigo), Bendigo, Eaglehawk, East, Bendigo, Elmore, Epsom, Flora Hill, Golden Square, Heathcote, Huntly, Kangaroo Flat, Kennington, Long Gully, Maiden Gully, North Bendigo, Quarry Hill, Spring Gully, Strathdale, Strathfieldsaye, White Hills
Loddon	29.1	Boort, Pyramid Hill
Macedon Ranges	2.0	Gisborne, Kyneton , Riddells Creek , Romsey , Woodend
Mildura	6.7	Mildura , Nichols Point
Mount Alexander	2.4	Campbells Creek, Castlemaine, Moonlight Flat
Swan Hill	10.2	Murray Downs (NSW), Nyah, Pental Island, Robinvale, Swan Hill

Source: [Loddon Mallee Environmental Scan | Emergency Management Victoria \(emv.vic.gov.au\)](#)

^Percentage of each LGA which is impacted by flooding at the 1:100-year average recurrence interval (ARI).

Abbreviations

Abbreviation Table	
ABS	Australian Bureau of Statistics
AEP	Annual Exceedance Probability
ARI	Age Recurrence Interval
ASR	Age Standardise Rate
COPD	Chronic Obstructive Pulmonary Disease
DELWP	Department of Environment, Land, Water and Planning
FDP	Fire Danger Period
FY	Financial Year
HIV	Human Immunodeficiency Virus
IPPU	Industrial processes and product use
IRSD	Index of Relative Socio-economic Disadvantage
LGA	Local Government Area
NDIS	National Disability Insurance Scheme
TAFE	Technical and Further Education

Resources

LMPHU	Bendigo Health Website - Loddon Mallee Public Health Unit
PHIDU	https://phidu.torrens.edu.au/
Women's Health Atlas	https://victorianwomenshealthatlas.net.au/#/
ABS Quick stats	https://abs.gov.au/census/find-census-data/quickstats/2021/SAL21682
AEDC	https://www.aedc.gov.au/data-explorer/

Feedback

Any feedback on this profile is welcome and should be provided to the Loddon Mallee Public Health Unit via email: lmphu@bendigohealth.org.au