



# Buloke Community Profile

## 2025

This document has been prepared to provide a data profile on the health and wellbeing of the local government areas of Loddon Mallee. 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.







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.



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Produced by Bendigo Health, Loddon Mallee Public Health Unit.  
October 2025

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# Data snapshot

Buloke Shire is a large, predominantly rural LGA in north-west Victoria with a population of 6,178 people spread across 8,000 square kilometres. The community is older than the state average, with a median age of 52 years (Victoria 38 years) and 21% of residents aged 70 years and over.

Agriculture is the dominant industry, and the area is classified as MMM5, reflecting small rural townships without a major service hub. Buloke is located on the traditional lands of the Wotjobaluk, Jaadwa, Jadawadjali, Wergaia, Jupagalk and Dja Dja Wurrung peoples. Aboriginal and Torres Strait Islander people comprise 1.5% of the population, higher than the Victorian average. Cultural diversity is low, with 83.7% Australian-born residents and only 4.1% of households speaking a language other than English at home.

Socio-economic indicators point to entrenched disadvantage. Median personal, family and household incomes are well below Victorian medians and the gap has widened over time. Buloke ranks as the 6th highest LGA in Victoria for low-income households, with 57.8% of households in the bottom 40% of the income distribution. Educational attainment is also lower, with only 11.4% of residents holding a bachelor degree or higher compared with 29.2% across Victoria. Despite low incomes, unemployment is lower than the state average and rental housing remains relatively affordable.

Health risk factors are a significant concern. Adult smoking (21.5%), obesity (33.5%), alcohol consumption at risky levels (18%), daily sugar-sweetened beverage intake (34.8%), sunburn incidence, and poor dental health are all statistically higher than Victorian averages. Childhood vulnerability is also higher, with 37.5% of children developmentally vulnerable on one or more domains.

In Buloke, 97.6% of the land mass is classified as bushfire-prone and with increasing average temperatures, the region is likely to be significantly impacted by climate change.

This snapshot highlights the indicators where the Buloke LGA is statistically different to expected levels\* or in the absence of statistical analysis, ranks in the top ten of Victoria's 79 LGAs.

- Areas of strength compared to Australian or Victorian measures
- Areas of concern compared to Australian or Victorian measures

Social determinants of health	
Household income	
Low income households	
Rental and mortgage affordability	
Homelessness	
Health risk factors	
Profound or severe disability	
Tolerance of diversity	
Alcohol and other drugs	
Tobacco smoking	
Obesity	
Sugar sweetened beverage	
Sunburn	
Dental health	
Health conditions	
Avoidable mortality (males)	
Asthma	
Arthritis	

\*Comparison may be with Victorian or Australian data based on primary data source

# Local government area summary: Buloke

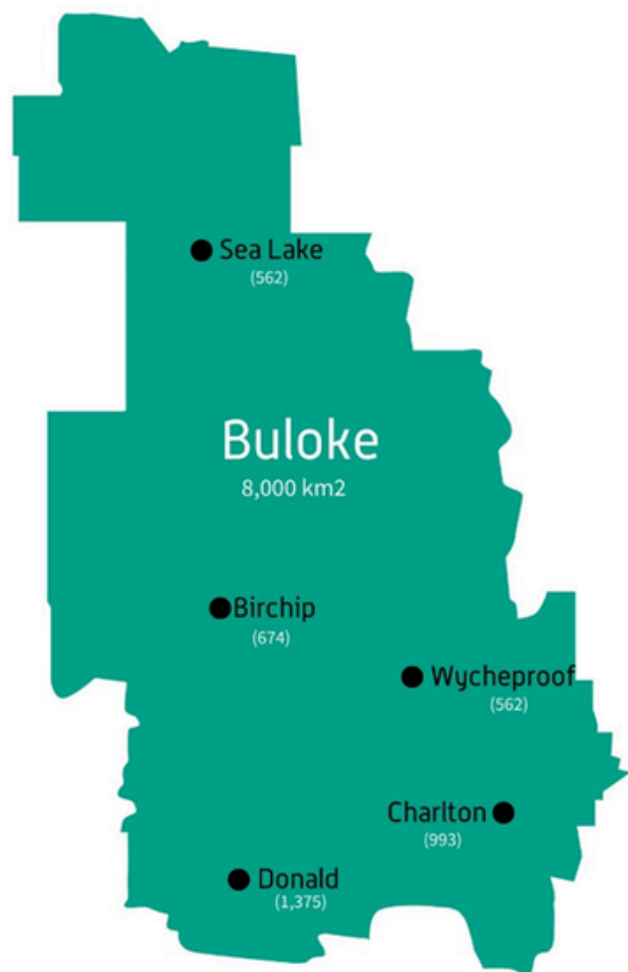
The Buloke Shire is located in the north west of Victoria between 210 and 360 kilometres from Melbourne. It is bounded by both the Mildura and Swan Hill in the north, Gannawarra and Loddon shires in the east, Northern Grampians Shire in the south and Yarriambiack Shire in the west. The total population 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 (92% ), particularly grain (wheat, oats and barley) production and sheep grazing.<sup>[1]</sup>

The largest industries of employment in Buloke are grain growing and sheep/beef farming (23.3%), followed by hospitals (6.5%) and local government administration (4.8%).<sup>[2]</sup>

According to geographical remoteness classifications within the Modified Monash Model (MMM) 2019, the region is classified MMM 5 categories which reflects the small rural towns and an absence of a large rural service hub.<sup>[3]</sup>

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 of cultural heritage places including an Aboriginal historical place, burials, artefact scatters, earth features, low density artefact distributions, scarred trees and a stone feature.



[1] Department of Agriculture, Fisheries and Forestry, Land use and management, 2023

[2] Australian Bureau of Statistics, 2021

[3] Modified Monash Model | Australian Government Department of Health and Aged Care

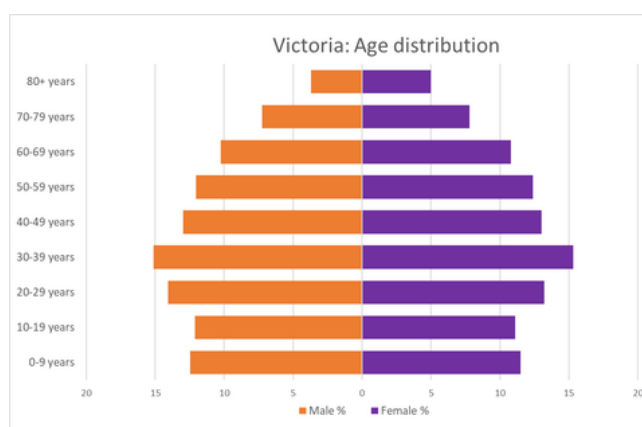
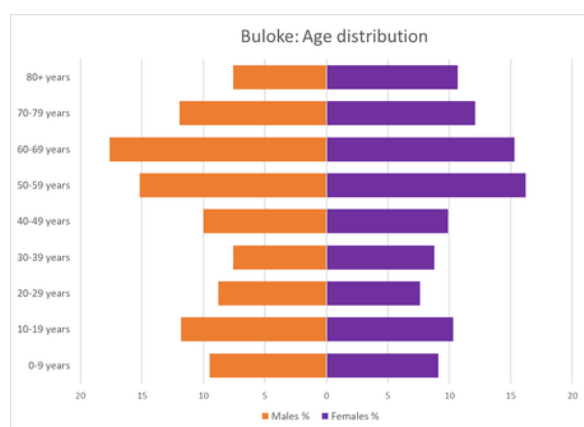
# 1. Population

Buloke's population profile, based on the Australian Bureau of Statistics (ABS) data obtained from the 2021 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 years and above is also higher in Buloke (21%) compared to the state average (11.9%) . The male-female ratio is slightly skewed towards males.



6,178 people reside in Buloke, in 2021

52yrs is the median age in Buloke (Victoria 38yrs), in 2021



Source: [Australian Bureau of Statistics, 2021](#)

Source: [Australian Bureau of Statistics, 2021](#)

Age groups	Buloke (n)		Buloke (%)		Victoria (%)	
	Male	Female	Male	Female	Male	Female
0-9 years	304	272	9.5	9.1	12.5	11.5
10-19 years	377	310	11.8	10.3	12.1	11.1
20-29 years	280	228	8.8	7.6	14.1	13.2
30-39 years	243	263	7.6	8.8	15.1	15.3
40-49 years	318	297	10.0	9.9	13.0	13.0
50-59 years	485	487	15.2	16.2	12.0	12.4
60-69 years	562	460	17.6	15.3	10.2	10.8
70 - 80 years	378	363	11.9	12.1	7.2	7.8
80+ years	241	320	7.6	10.7	3.7	5.0
Total	3,186	2991	100	100	100	100

Source: [Australian Bureau of Statistics, 2021](#)

## 2. Priority groups

### 2.1 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 (n)	Buloke (%)	Victoria (n)	Victoria (%)
Aboriginal and/or Torres Strait Islander	92	1.5	65,646	1.0
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 (years)	34		24	

Source: [Australian Bureau of Statistics, 2021](#)

Murray Primary Health Network's First Nations Health and Healing report provides an overview of the current state of First Nations health drawing on data and consultation with First Nations Peoples.



### 2.2 Multicultural communities

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.



Malayalam is the top non-English language spoken at home in Buloke

Country of birth, top responses	Buloke (n)	Buloke (%)	Victoria (%)
Australia	5,172	83.7	65.0
England	94	1.5	2.7
New Zealand	50	0.8	1.5
Philippines	45	0.7	1.1
India	30	0.5	4.0
South Africa	18	0.3	0.5

Source: [Australian Bureau of Statistics, 2021](#)



Language used at home other than English, top responses	Buloke (n)	Buloke (%)	Victoria (%)
Malayalam	28	0.5	0.4
Mandarin	20	0.3	3.4
Tagalog	18	0.3	0.4
Nepali	12	0.2	0.3
Thai	10	0.2	0.2
English only used at home	5,444	88.1	67.2
Households where a non-English language is used	106	4.1	30.2
Uses other languages and speaks English not well/not at all	16	0.2	4.4

Source: [Australian Bureau of Statistics, 2021](#)

## 2.3 LGBTIQ+ population

Unfortunately, there is a lack of local data on LGBTIQ+ (lesbian, gay, bisexual, transgender, intersex, queer, asexual and other sexually or gender diverse people) 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 \(www.vic.gov.au\)](#)

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 \(vahi.vic.gov.au\)](#)

## 2.4 People with disabilities

Data on disability indicate that 8.9% of people in Buloke have a profound or severe disability, compared with 6.1% across Victoria. This places Buloke among the local government areas with the highest proportions (ranked 4<sup>th</sup> highest) of residents experiencing profound or severe disability in the state.

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 Insurance Scheme (2.4/100 population) in 2022, higher compared with the Victorian Rate (2.2/100 population).

Disability indicators	Buloke (n)	Buloke	Victoria
People with a profound or severe disability, includes people in long-term accommodation (all ages), 2021	512	8.9% ●	6.1%
People with a profound or severe disability and living in households (all ages), 2021	452	7.9% ●	5.4%
People with a profound or severe disability, includes people in long-term accommodation (0 to 64 years), 2021	205	5%	3.3%
People with a profound or severe disability and living in households (0 to 64 years), 2021	205	5%	3.2%
Estimated number of total persons, living in households, with moderate or mild core activity limitation (modelled estimates, 2018)	880	10.8 ASR <sup>^</sup>	na
National Disability Insurance Scheme participants, 2022	143	2.6 ASR <sup>^</sup>	2.5 ASR <sup>^</sup>

Source: [Social Health Atlas](#)

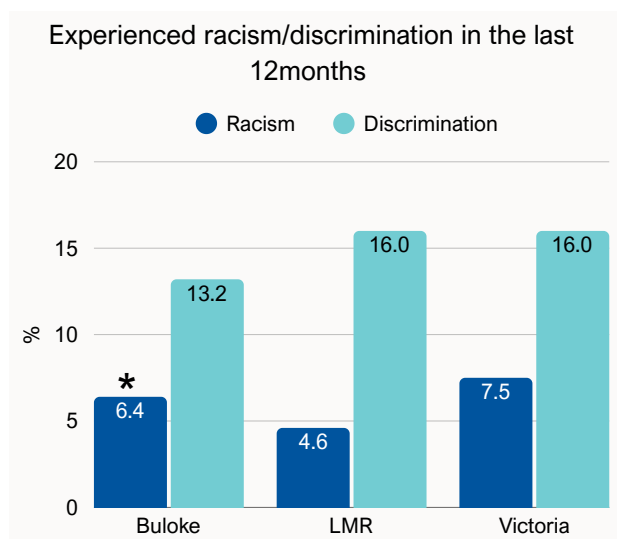
<sup>^</sup>Average annual ASR per 100. Age Standardise Rate (ASR) is used to remove the effect of the differing age distributions that we can make conclusions about the relative decreases or increases in mortality over time.

● Ranked in the top ten highest in the state

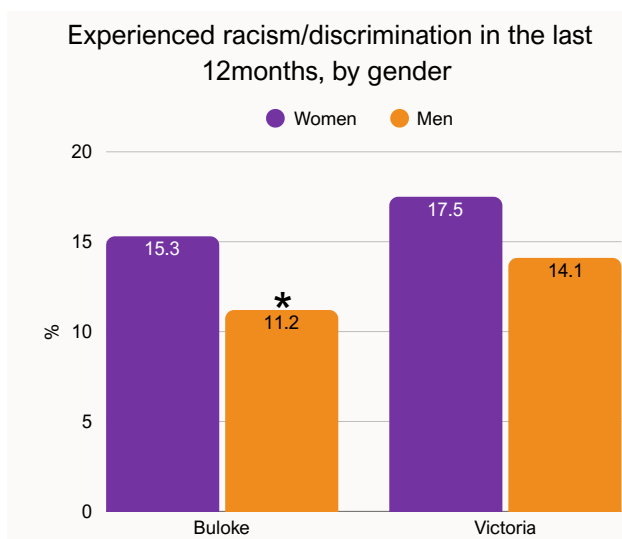
## 2.5 Racism and discrimination

On an individual level, racism refers to the beliefs and attitudes members of certain groups have of their superiority in relation to other groups who are regarded as inferior based on race, ethnicity or cultural background (Sanson et al, 1998).

Racism was defined as experiences of discrimination due to First People’s status, skin colour, nationality, race, ethnic group or language spoken at home. Discrimination was defined as experiences of discrimination due to gender identity, sexual orientation or intersex status.



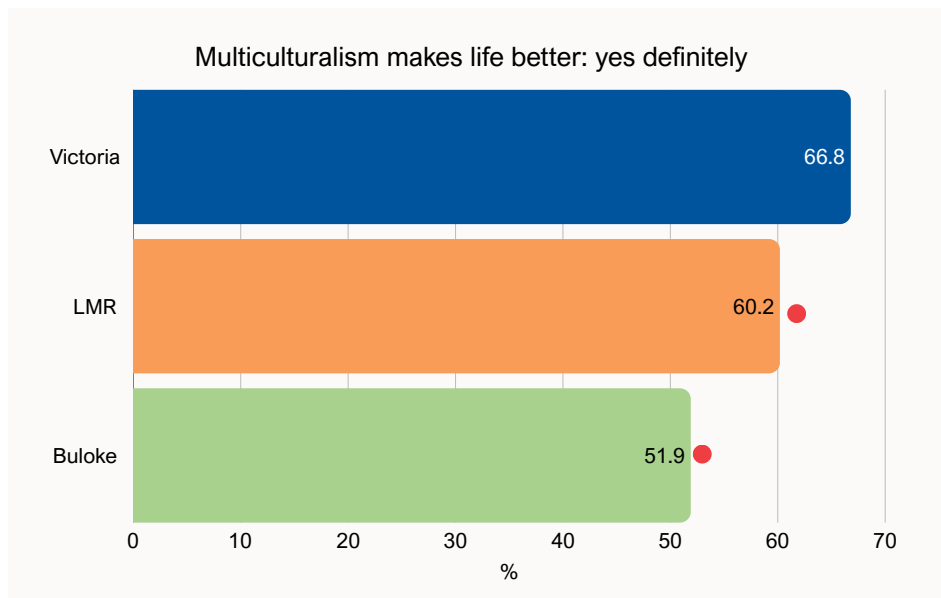
Source: [Victorian Population Health Survey 2023](#), age adjusted.  
\*high relative standard error so interpret with caution



Source: [Victorian Population Health Survey 2023](#), age adjusted.  
\*high relative standard error so interpret with caution

Buloke has lower proportion of racism and discrimination experienced in the last 12 months, compared to Victoria. A higher proportion of women (15.3%) have experienced discrimination in the last 12 months compared to men (11.2%) in Buloke.

To measure tolerance of diversity, adults were asked if multiculturalism makes life better. In Buloke there was statistically significantly less people who felt that multiculturalism makes life better, compared to Victoria.



Source: [Victorian Population Health Survey 2023](#), age adjusted.

● Statistically significantly lower than Victorian proportion

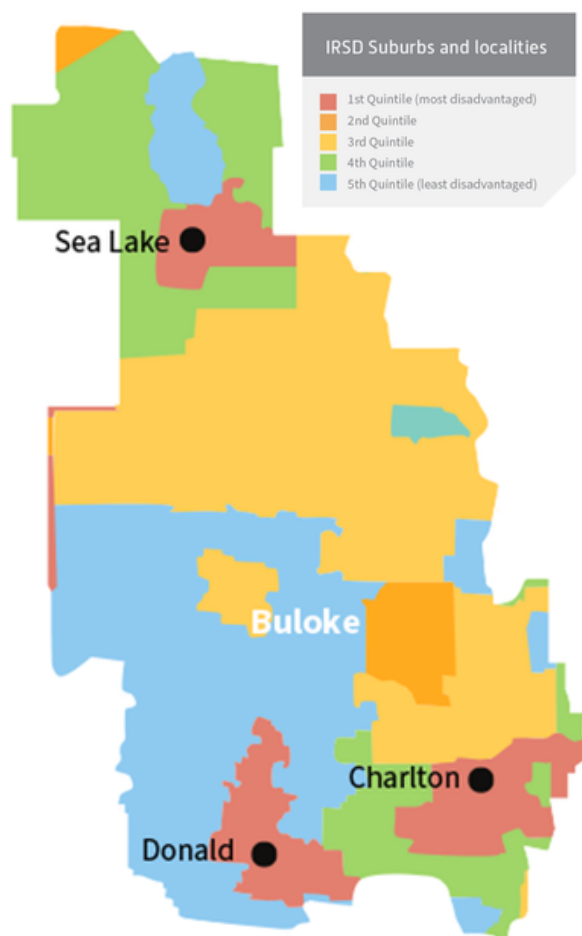
## 3. Determinants of health

### 3.1 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 five Australian quintile areas of 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 24<sup>th</sup> in Victoria of most disadvantage.



Source: [Socio-Economic Index for Areas, ABS, 2021](#)

LGA, 2021	IRSD Score	Victorian LGA ranking <sup>^</sup>
Mildura	940	5
Swan Hill	941	7
Loddon	948	11
Gannawarra	952	14
Campaspe	965	19
<b>Buloke</b>	<b>972</b>	<b>24</b>
Greater Bendigo	985	27
Mount Alexander	1007	47
Macedon Ranges	1063	73

Source: [ABS: Census of population and Housing: Socio-Economic Indexes from areas \(SEIFA\), 2021](#)

<sup>^</sup>Rank 1 = most disadvantage, rank 79 = least disadvantage

## 3.2 Educational attainment

### Level of highest education attainment

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%.



In Buloke, 11.4% completed bachelor degree and above (Vic. 29.2%)

People attending an educational institution	Buloke (n)	Buloke (%)	Victoria (%)
Preschool total	89	5.4	7.1
Primary total	404	24.6	26.5
Secondary total	380	23.1	21
Tertiary: Vocational education (including TAFE and private training providers)	81	4.9	7.9
Tertiary - University or other higher education	90	5.5	16.6
Tertiary total	165	10.0	24.5

Source: [Australian Bureau of Statistics](#), 2021

### Level of highest education 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 proportion.

Level of highest educational attainment	Buloke (n)	Buloke (%)	Victoria (%)
Bachelor degree level and above	598	11.4	29.2
Advanced diploma and diploma level	367	7.0	9.8
Certificate level IV	184	3.5	3.4
Certificate level III	814	15.5	10.9
Year 12	611	11.7	14.9
Year 11	517	9.9	5.7
Year 10	653	12.5	7.3
Certificate level 11	0	0	0.1
Certificate level 1	0	0	0
Year 9 or below	694	13.2	7.9
Inadequately described	84	1.6	2.1
No educational attainment	11	0.2	1.1
Not stated	713	13.6	7.6

Source: [Australian Bureau of Statistics](#), 2021, People aged 15yrs and over

### 3.3 Household income

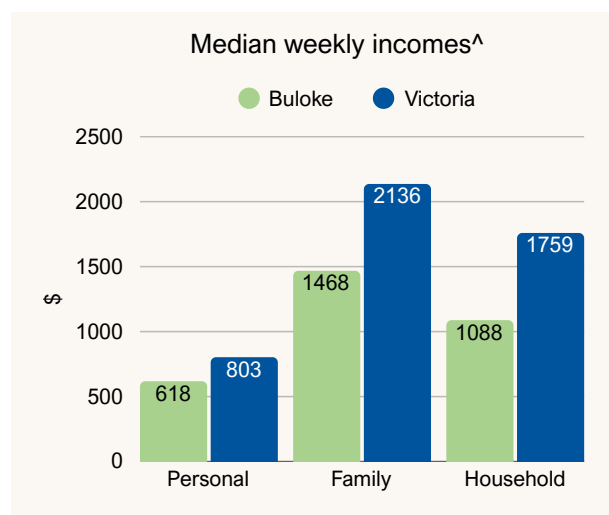
Data on household income for the Buloke region, compared to the state of Victoria, gives insights into the income distribution within the community. The median weekly incomes for people aged over 15 years, personal, families and households are all below the state medians. In Buloke, the percentage of occupied private dwellings in Buloke with a weekly income of less than \$650 is 26.8% and above \$3,000 is 9.6%, compared with a state proportion 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.

From 2006 to 2021, the median weekly household income for Buloke is continuously lower than the Victorian median and the pay gap is widening.

Buloke ranks as the 6th highest LGA in Victoria for the proportion of low-income households, with 57.8% of households in the bottom 40% of the income distribution, compared with 39.5% across the state.<sup>[1]</sup>

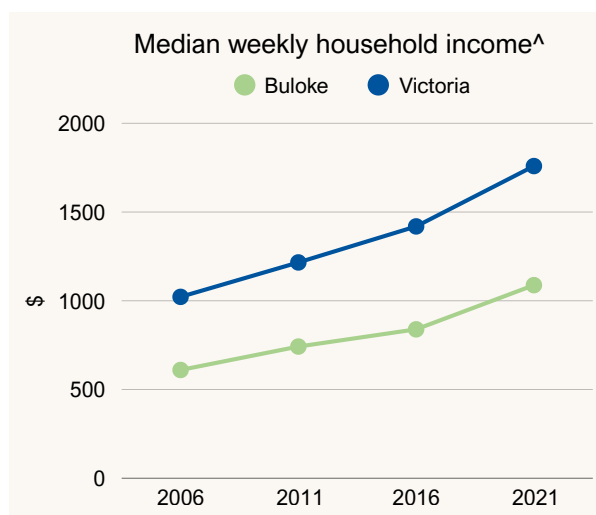
Occupied private dwellings (excl. visitor only and other non-classified households)	Buloke (%)	Victoria (%)
Less than \$650 total household weekly income	26.8	16.4
More than \$3,000 total household weekly income	9.6	24.2

Source: [Australian Bureau of Statistics](#), 2021, Percentages exclude dwellings with 'Partial income stated' and 'All incomes not stated.'



Source: [Australian Bureau of Statistics](#), 2021

^ 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.



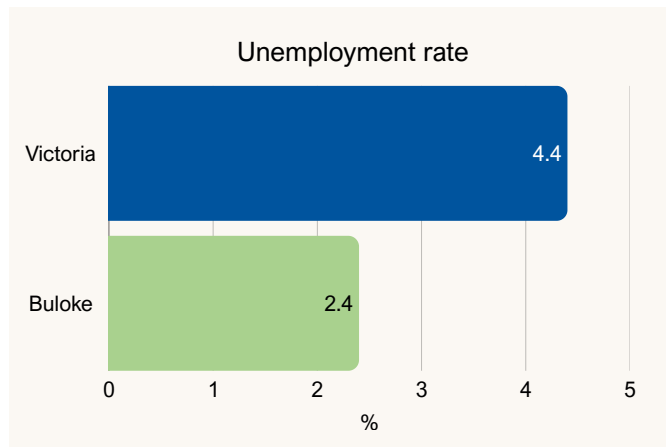
Source: [Australian Bureau of Statistics](#), 2021

^ 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.

[1] Source: [Social Health Atlas](#), 2021

### 3.4 Unemployment

The psychosocial stress caused by unemployment has a strong impact on physical and mental health and wellbeing. Employment in quality work helps to protect health, instilling self-esteem and a positive sense of identity, while providing the opportunity for social interaction and personal development.



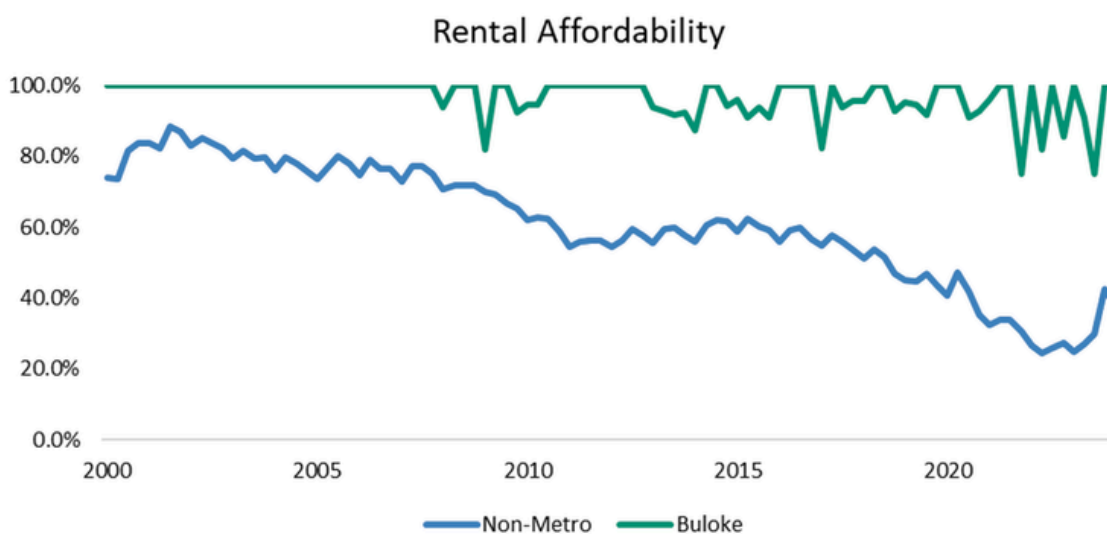
The data represents people aged 18 and over who are seeking employment and yet to find it.

Buloke's unemployment rate is 2.4%, which is lower to the Victorian state average of 4.4%.

Source: [Social Health Atlas](#), June 2025

### 3.5 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. In Buloke, the proportion of low income households under financial stress from mortgage or rent is very low (6.8%), compared to Victoria (27.8%). [1]



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.

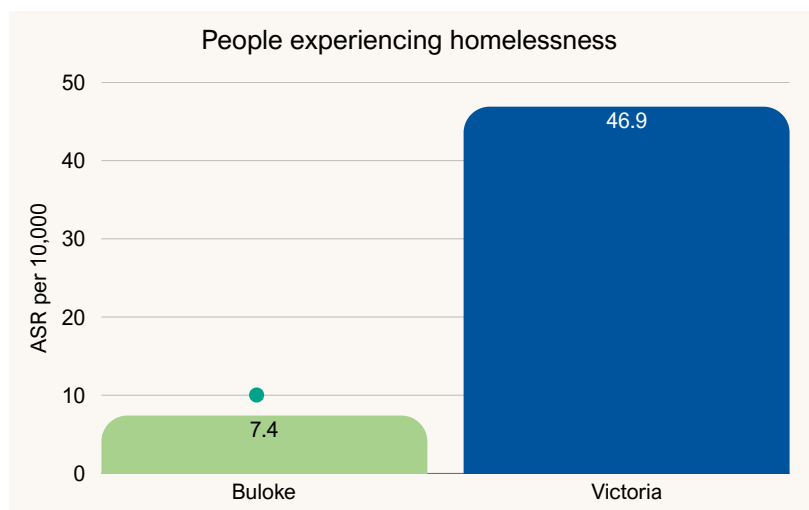
Lower income households are defined as those receiving Centrelink incomes

### 3.6 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. These data include:

- 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 of homelessness in Buloke is 7.4/10,000 people while the rate in Victoria is 46.9 per 10,000 people (n=4). This indicates the estimated rate of homelessness standardised to the age distribution of the population is statistically lower than expected (based on Australian data) in Buloke and considerably lower compared with Victoria.



Source: [Social Health Atlas](#), 2021

● Statistically significantly lower than expected (based on Australian data)

[1] Social Health Atlas

### 3.7 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 proportion of 1.7%.

All families	Buloke (n)	Buloke (%)	Victoria (%)
Couple family without children	826	51.2	37.6
Couple family with children	554	34.3	45.5
One parent family	200	12.4	15.2
Other family	31	1.9	1.7

Source: [Australian Bureau of Statistics](#), 2021

### Single (or lone parents)

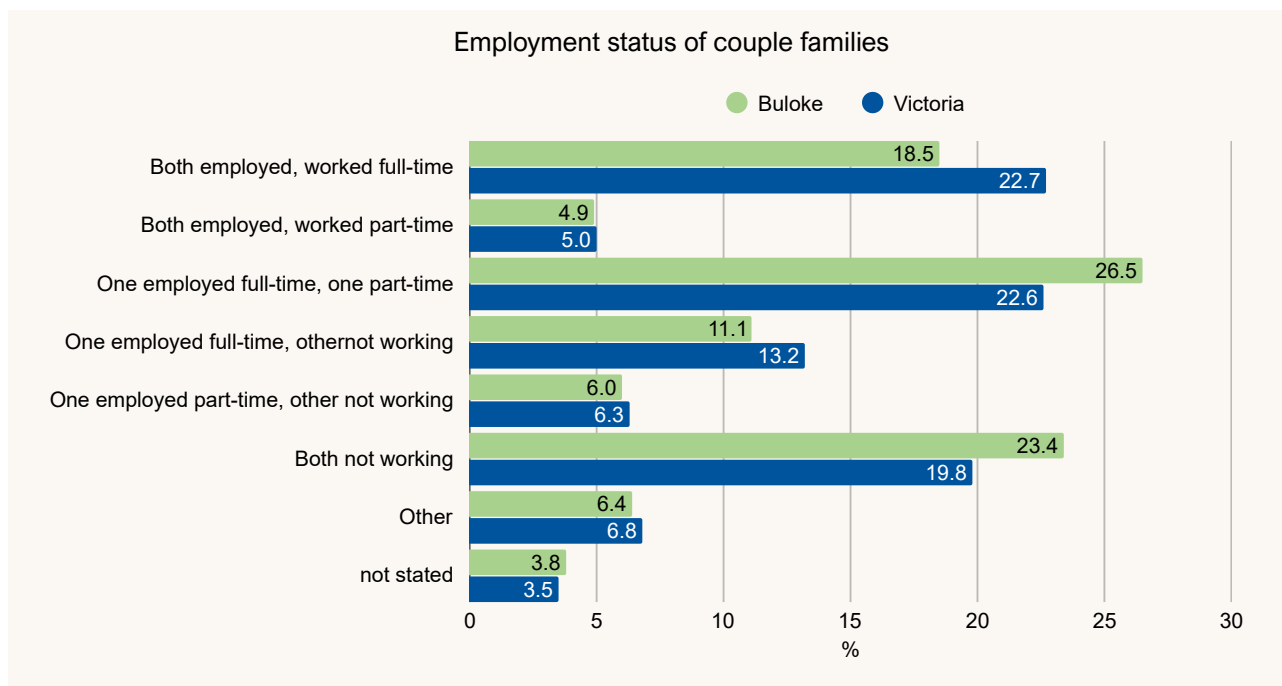
The data indicates the majority of single (or lone) parents in Buloke are female, constituting a substantial 76% of the total single parent population. This percentage is slightly lower than the female proportion in Victoria, which is 80.9%.

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

Source: [Australian Bureau of Statistics](#), 2021

## 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%), one employed full-time, one not working (18.5%) and both not working (23.4%). 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.



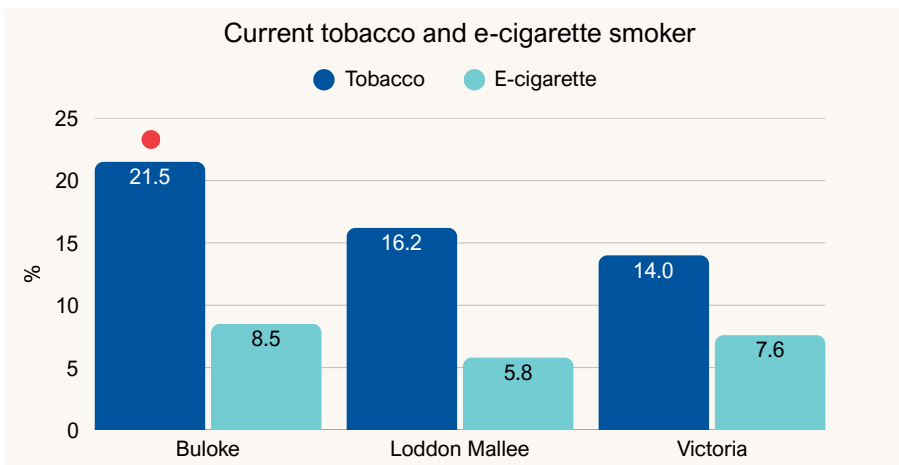
Source: [Australian Bureau of Statistics, 2021](#)

# 4. Health risk factors

## 4.1 Smoking and vaping

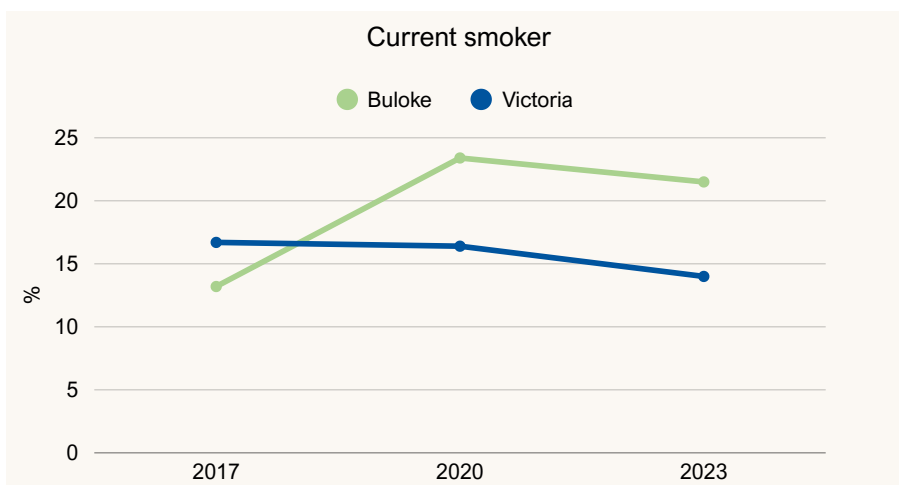
Smoking increases the risk of chronic diseases such as heart disease, diabetes, kidney disease, eye disease, stroke, dementia, certain cancers (for example, oral cancer), gum disease and respiratory diseases such as asthma, emphysema and bronchitis. Vapes are relatively new compared to cigarettes, so we are yet to see all the long-term effects they may have on the body. What we know now is vaping can damage many parts of the body, including the cardiovascular system, lungs and airways, and the brain and nervous system. <sup>[1]</sup>

Adult smoking (tobacco) rates in Buloke are statistically significantly higher, with 21.5% of adults currently smoking compared to Victorian (14.0%). While rates of current smoking in Buloke are gradually declining from 2020 to 2023, the trend is consistent with the overall decline observed across Victoria.



Source: [Victorian Population Health Survey, 2023, age adjusted.](#)

● Statistically significantly higher compared to Victoria



Source: [Victorian Population Health Survey, 2023, age adjusted.](#)

[Victorian Population Health Survey, 2020, age adjusted](#)

[Victorian Population Health Survey, 2017, age adjusted](#)

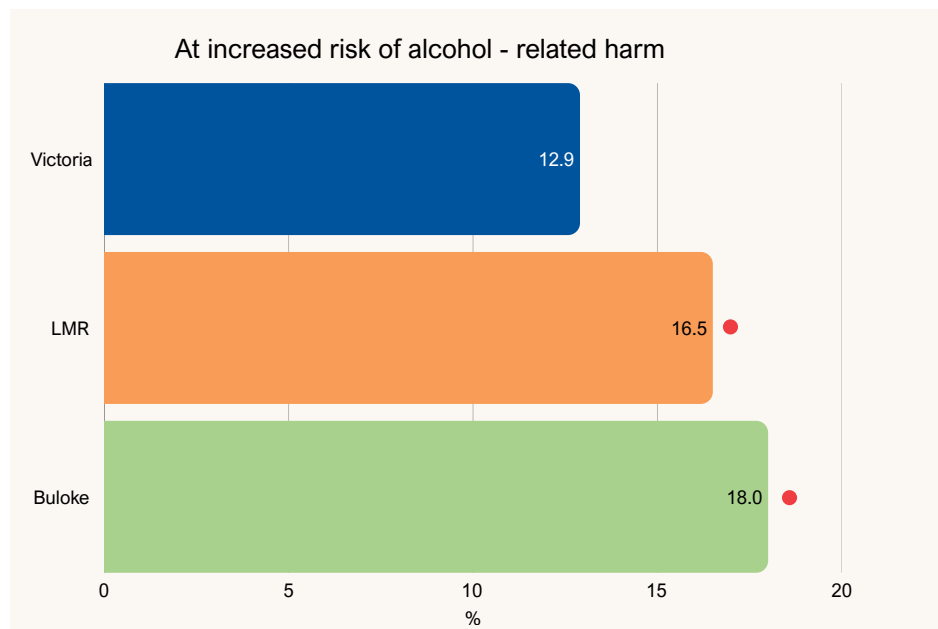
[1] [Quit, effects of vaping on the body.](#)

## 4.2 Alcohol and other drugs

While the impacts of drug use on health and wellbeing can vary, related harms can impact physical health through increased risk of chronic disease, exposure to infectious diseases, and mental health and wellbeing impacts. Adults in Loddon Mallee drink alcohol at higher rates than the Victorian average, with 16.5% drinking at levels that increase their risk of alcohol-related harm. In Buloke, this is even higher at 18%, compared to the Victorian average of 12.9%. Increased risk of alcohol-related harm is greater than 10 standard drinks a week and more than four standard drinks in one day.

Indicators per 100,000 population	Buloke	Victoria
Deaths for alcohol-related events, 2021	260.9	141.9
Deaths for illicit drug (any)-related events in, 2021	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	538.3	570
Hospital admissions for Illicit Drugs (Any), 2021/22	146.8	241.3

Source: [Alcohol and other drug statistics in Victoria](#) - AODstats, rate/100,000 population

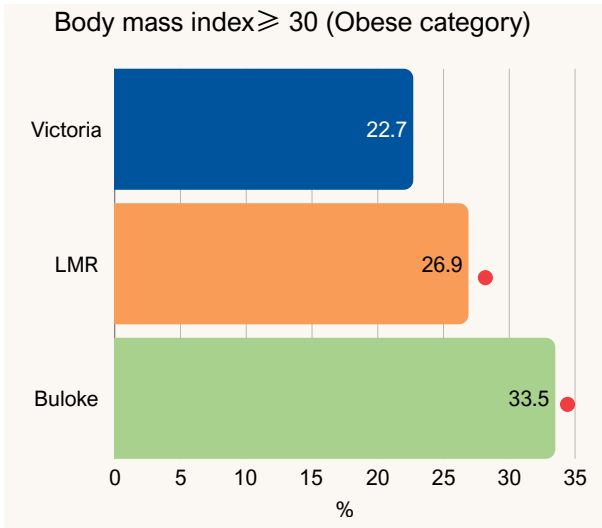


Source: [Victorian Population Health Survey 2023](#), age adjusted.

● Statistically significantly higher compared to Victoria

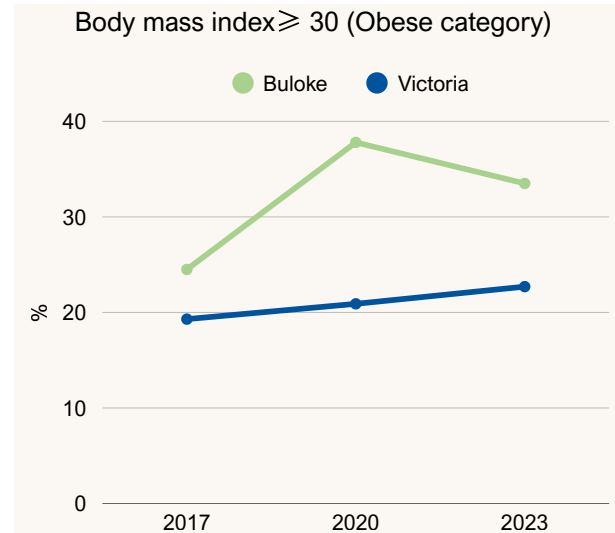
### 4.3 Obesity

Obesity contributes to cardiovascular disease, type 2 diabetes, musculoskeletal disorders and some cancers. Recent evidence shows the prevalence of obesity spiked in Buloke in 2020. In Buloke, 33.5% of adults have a BMI  $\geq 30$ , statistically significantly higher than the Victoria (22.7%). Buloke has the highest rates of obesity in the LMR.



Source: Victorian Population Health Survey, 2023, age adjusted

● Statistically significantly higher than Victoria



Source: Victorian Population Health Survey, 2023, age adjusted

Victorian Population Health Survey, 2020, age adjusted

Victorian Population Health Survey, 2017, age adjusted

### 4.4 Healthy eating and active living

Poor diet and lack of exercise contribute to being overweight and obese, which are leading contributors to chronic disease and premature death in Victoria [1]. Buloke (2.8%) is considerably lower for compliance with vegetable consumption guidelines compared to Victoria (5.5%). Buloke also has a statistically significantly higher proportion of people consuming sugar-sweetened beverages daily (34.8%) compared to Victoria (19.3%).



Recommended daily intake of fruit 2 serves: a serve is one medium piece or two small pieces of fruit or one cup of diced fruit.



Recommended daily intake of vegetables is 5-6 serves for adults: a serve is half a cup of cooked vegetables or one cup of salad leaves.

LGA	Compliance with fruit consumption guidelines (%)	Compliance with vegetable consumption guidelines (%)	Daily consumption of sugar sweetened beverage (%)	Moderate to vigorous physical exercise greater than 150mins/day (%)
Victoria	34.9	5.5	19.3	34.9
LMR	31.3	5.3	24.6	34.2
Buloke	28.8	2.8*	34.8 ●	33.0

Source: Victorian Population Health Survey, 2023, age adjusted

\*high relative standard error so interpret with caution

● Statistically significantly higher compared to Victoria

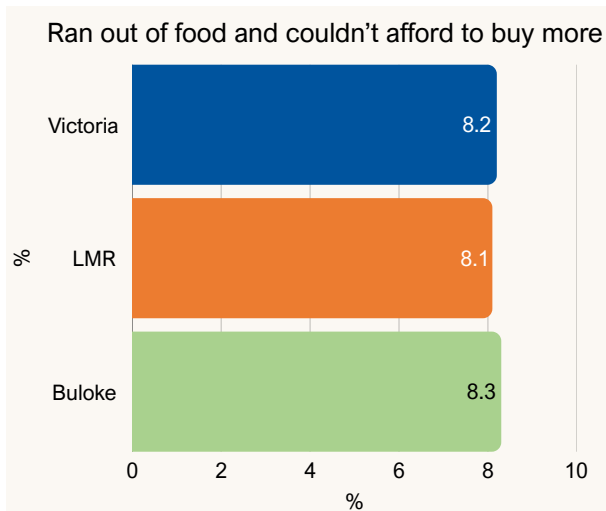
[1] Victorian Population Health and Wellbeing Plan 2023-27

## 4.5 Food insecurity

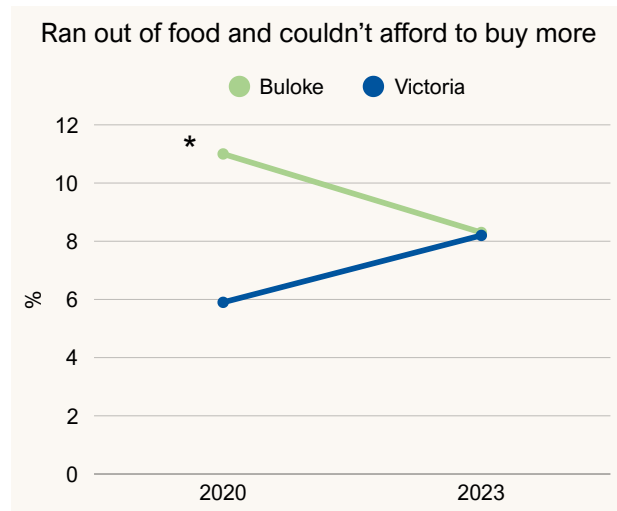
Food security is defined as access by all people at all times to enough food for an active, healthy life and includes at a minimum:

- the ready availability of nutritionally adequate and safe foods
- the assured ability to acquire food in socially acceptable ways.

Buloke’s food insecurity is comparable to Victoria in 2023 and has decreased considerably from 2020.



Source: Victorian Population Health Survey, 2023, age adjusted

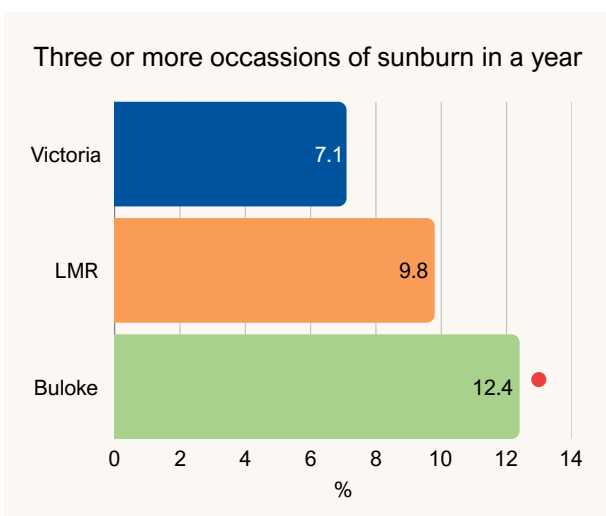


Source: Victorian Population Health Survey, 2023, age adjusted  
Victorian Population Health Survey, 2020, age adjusted

\*Interpret with caution

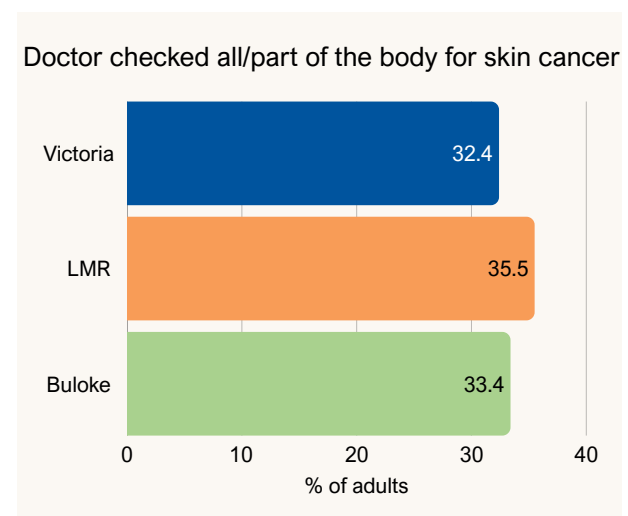
## 4.6 Sun exposure

Australia has one of the highest rates of skin cancer in the world. Skin cancer occurs when skin cells are damaged, for example by overexposure to ultraviolet radiation from the sun [1]. Buloke has a significantly higher proportion with 12.4% of people reporting three or more occasions of sunburn in a year, compared to Victoria 7.1%.



Source: Victorian Population Health Survey, 2023, age adjusted

• Statistically significantly higher compared to Victoria

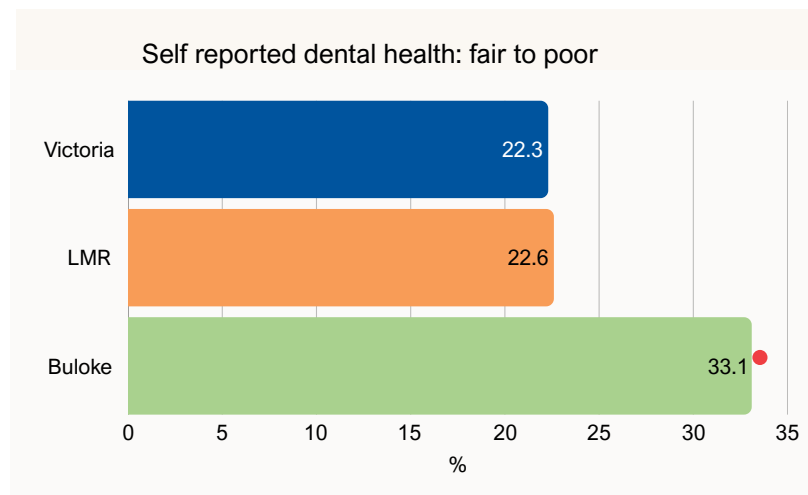


Source: Victorian Population Health Survey, 2023, age adjusted

[1] Australian Institute of Health and Welfare

## 4.7 Dental health

Oral disease can destroy the tissues in the mouth, leading to lasting physical and psychological disability. Tooth loss can make chewing and swallowing more challenging, which can then compromise nutrition. Poor oral health is also associated with a number of chronic diseases including stroke and cardiovascular disease. Dental disease can also impair a person's appearance and speech, impacting their self-esteem, which can lead to restricted participation at school, the workplace and other social settings.



The Loddon Mallee proportion of adults reporting fair to poor dental health is comparable to the whole of Victoria.

However, Buloke is significantly higher with 33.1% of people reporting fair to poor dental health compared to Victorian average of 22.3%.

Source: [Victorian Population Health Survey](#), 2023, age adjusted

● Statistically significantly higher than Victoria

## 4.8 Childhood development

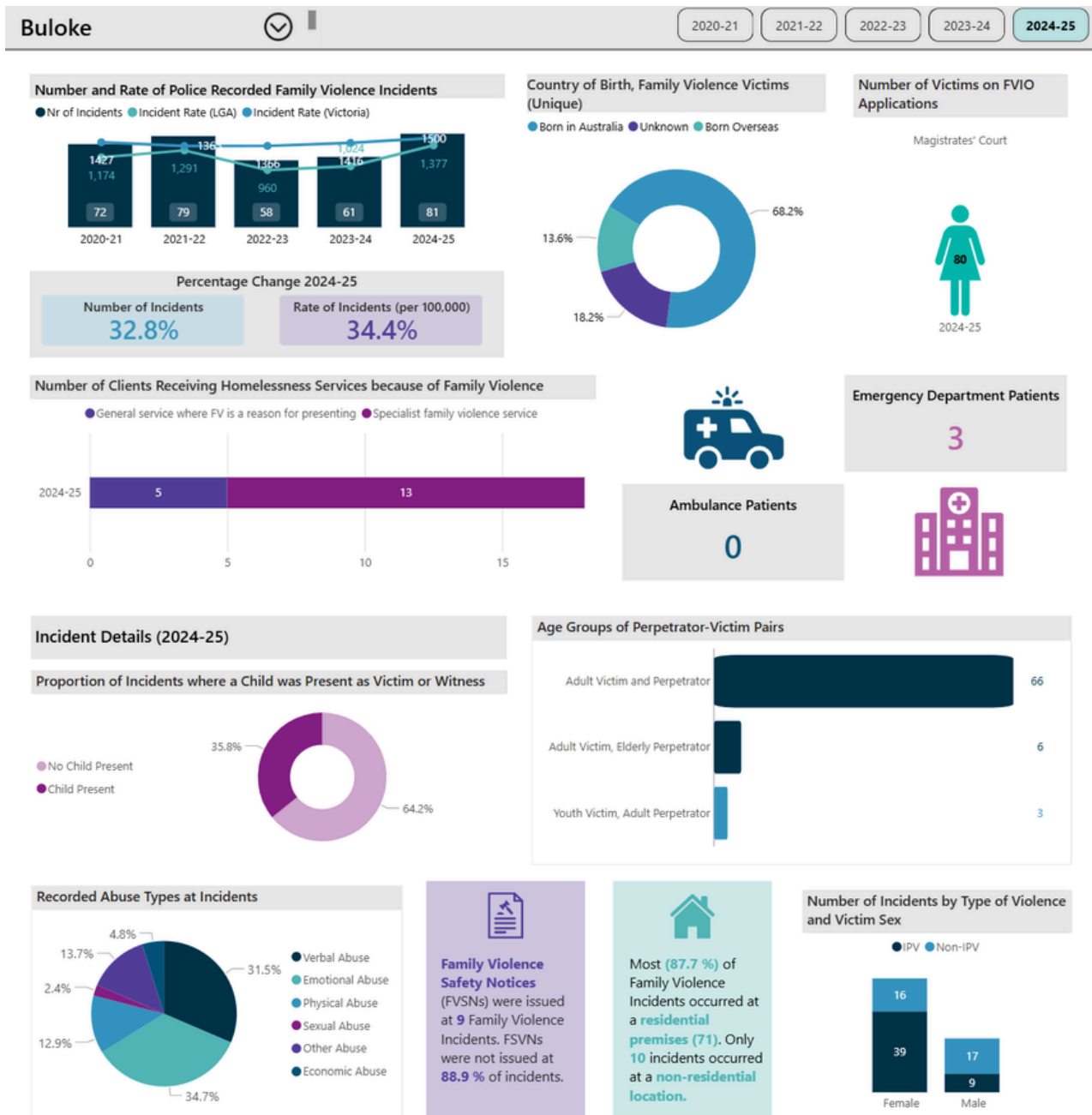
The Australian Early Development Census (AEDC) is a nationwide census of early child development that shows how young children have developed as they start their first year of full-time schooling. In 2024, 52 children in Buloke underwent developmental assessment. The Buloke figures indicate a higher proportion of vulnerable children in the physical, emotional and communication domains compared to the Victorian proportions. Overall, 37.5% of children in Buloke are vulnerable on one or more domains, compared with 22.3% across Victoria.

Indicator	Indicator description	Vulnerable (52 children assessed)		
		Buloke (n)	Buloke (%)	Victoria (%)
<b>Physical</b>	Child is healthy; independent; excellent gross and fine motor skills	10	20.8	8.5
<b>Social</b>	Gets along with others; shares; self-confident	4	8.3	10.6
<b>Emotional</b>	Able to concentrate; help others; patient, not angry or aggressive	8	16.7	9.9
<b>Language</b>	Interested in reading or writing; can count; recognises numbers and shapes	1	2.1	7.3
<b>Communication</b>	Can tell a story; communicate with adults and children; articulate themselves	6	12.5	8.2
<b>Vulnerability 1</b>	Developmentally vulnerable in one or more domains	18	37.5	22.3
<b>Vulnerability 2</b>	Developmentally vulnerable in two or more domains	5	10.4	11.8

Source: [Australian Early Development Census](#), 2024,

## 4.9 Family violence

A family incident is an incident attended by Victoria Police and a police report has been completed. Buloke recorded a family violence incident rate of 1,377/100,000 population, lower than the Victorian rate of 1,500/100,000 population. In over one-third of reported family incidents in Buloke (35.8%), a child was present either as a victim or a witness. Of the recorded abuse types in Buloke, emotional abuse was most common (34.7%), followed by verbal abuse (31.5%) and physical abuse (12.9%).

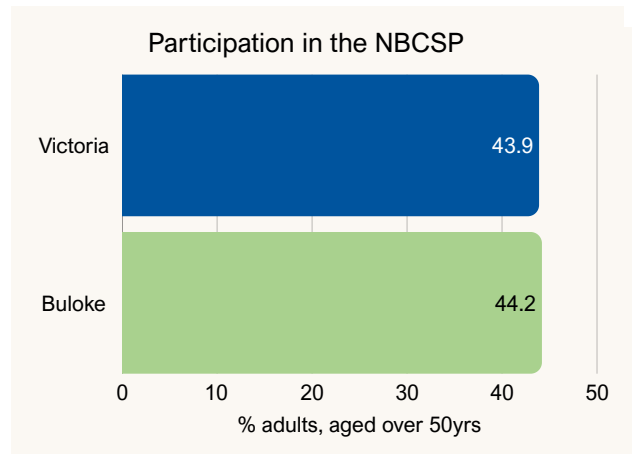


Source: [Crime Statistics Agency, 2024/25](#)

# 5. Health screening

## 5.1 Bowel screening

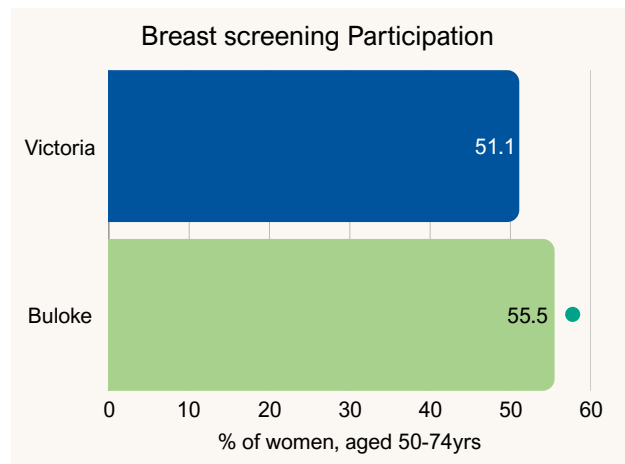
Bowel cancer, is the third most common type of newly diagnosed cancer in Australia. The National Bowel Cancer Screening Program (NBCSP) aims to reduce deaths from bowel cancer by detecting early signs of the disease. If found early, more than 90% of cases can be successfully treated.



Source: [Social Health Atlas](#), 2020-21

## 5.2 Breast screening

Research has shown that screening mammography is currently the most effective tool for the early detection of breast cancer in asymptomatic women in the target age group of women aged 50 to 74 years; and, that having a screening mammogram every two years, reduces the chance of dying from breast cancer by up to 40%.

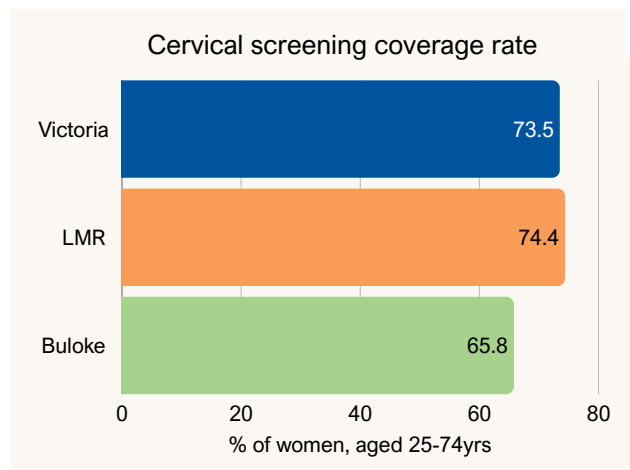


Source: [Social Health Atlas](#), 2021-22

● Ranked tenth highest LGA in Victoria

## 5.3 Cervical screening

The National Cervical Screening Program reduces illness and death from cervical cancer. Women and people with a cervix aged 25 to 74 years are invited to have a cervical screening test every 5 years through their healthcare provider. Buloke has a lower coverage of cervical screening (65.8%) compared with Victoria (73.5%).



Source: [National Cervical Screening Program](#), 2020 -2024

## 6. Health conditions

### 6.1 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 years), Buloke demonstrated positive trends.

Examining premature mortality (deaths occurring before the age of 75 years), Buloke demonstrated positive trends. For males, there was a substantial reduction from an average annual age standardised rate (ASR) of 416 to 360/100,000 population, indicating a percentage decrease of 13.5%. Similarly, for females, the average annual ASR decreased from 311.6 to 239.5/100,000 population, reflecting a percentage decrease of 23.1%. 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 206.3/100,000 population, representing a percentage reduction of 16.4%. For females, the average annual ASR decreased from 186.3 to 105.9/100,000 population, indicating a percentage reduction of 43.2%. However, avoidable death of males in Buloke is statistically significantly higher than expected (based on Australian data and notably higher compared with Victoria).

	2018 - 2022				2016-2020				% Difference between reports			
	Buloke		Victoria		Buloke		Victoria		Buloke		Victoria	
	M	F	M	F	M	F	M	F	M	F	M	F
Median age at death (yrs)	80	85	79	85	82	85	79	85	-2.4	0	0	0
Premature mortality, 0-74yrs of age <sup>^</sup>	360	239.5	281.8	176.8	416	311.6	269.5	171.2	-13.5	-23.1	4.6	3.3
Avoidable mortality, 0 to 74yrs of age <sup>^</sup>	206.3	105.9	142.1	80.8	246.7	186.3	138.3	80.5	-16.4	-43.2	3.0	0.4

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

<sup>^</sup>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.

● Statistically significantly higher than expected (based on Australian data)

## 6.2 Physical health conditions

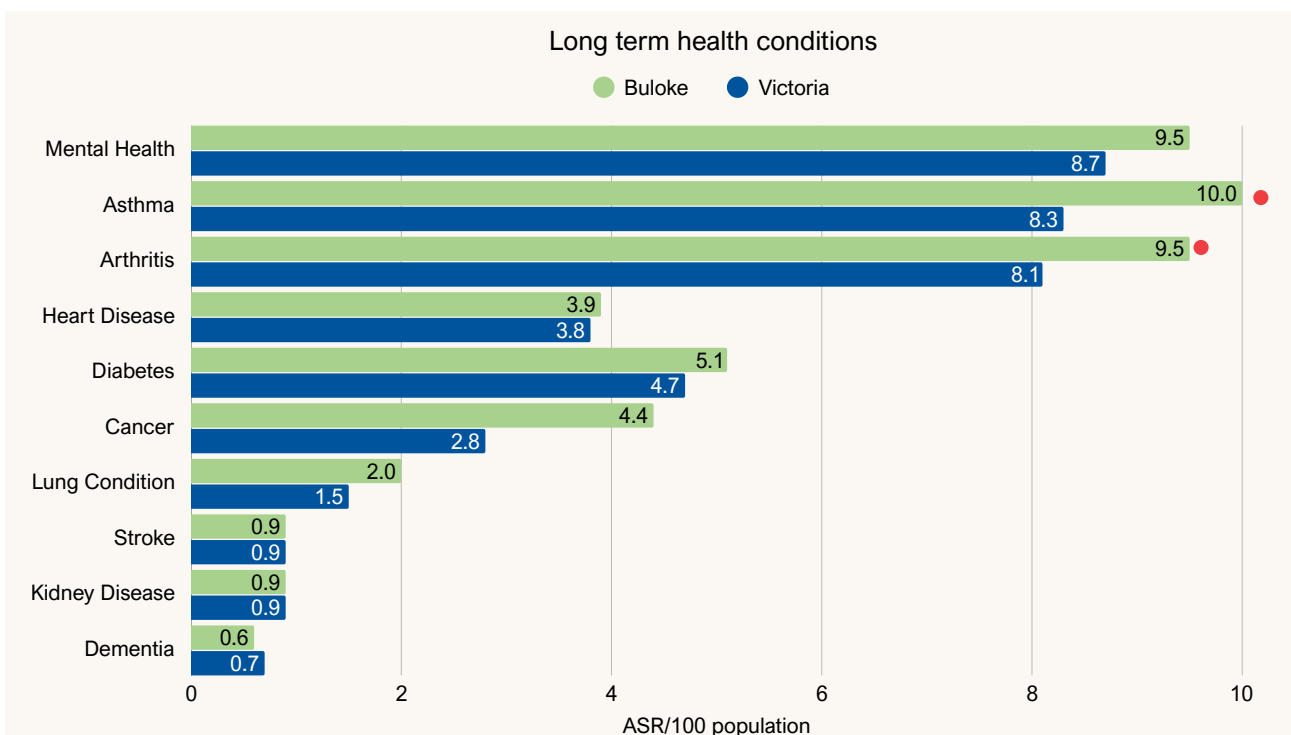
In the census, people were asked to indicate long-term conditions (six months or more) diagnosed by a doctor or nurse. Selected long-term health conditions include arthritis, asthma, cancer (including remission), dementia (including Alzheimer's), diabetes (excluding gestational diabetes), heart disease (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.

In Buloke, 5.6% reported having three or more long-term conditions, higher compared with Victoria (2.9%). High levels of multiple long-term health conditions place significant strain on individuals, communities and health systems, reducing quality of life, increasing service demand, and widening health inequities.

Long-term health conditions	Buloke (n)	Buloke (%)	Victoria (%)
None of the selected long term conditions	3,294	53.3	65
One condition	1,329	21.5	18.8
Three or more conditions	348	5.6	2.9

Source: Australian Bureau of Statistics, 2021, all people

In Buloke, asthma (10/100,000 population) and arthritis 99.5/100,000 population), were statistically significantly higher than expected (based on Australian data) and higher than the Victorian rates. Rates of cancer, diabetes, and heart disease were also above the Victorian rates.



Source: Social Health Atlas of Australia: Victoria, 2021, ASR/100,000 population

● Statistically significantly higher than expected (based on Australian data)

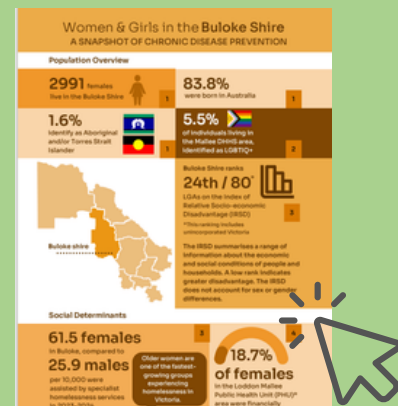
More recent data, using a different collection methodology and smaller cohort shows the proportion of adults reporting asthma in Buloke (25.1%) is higher than the Victorian average (20.1%). Similarly, the prevalence of chronic obstructive pulmonary disease (COPD) is also higher in Buloke (5.6%) compared with Victoria (3.6%).

LGA	COPD*	Asthma	Osteoarthritis	Diabetes (type 2)	Heart disease	Cancer
Victoria (%)	3.6	20.1	13.8	6.2	8.3	8.3
LMR (%)	4.6	23.5	15.5	6.2	8.6	11.3
Buloke (%)	5.6	25.1	12.9	6.4	8.2	10.6

Source: [Victorian Population Health Survey, 2023](#), age adjusted  
 \*COPD: Chronic Obstructive Pulmonary Disease

Women’s Health Loddon Mallee has developed a series of chronic disease infographic data snapshots for each LGA in the Loddon Mallee region using local sex-disaggregated data, where available.

These infographics highlight conditions more common among women and girls in the Loddon Mallee, such as osteoporosis and dementia, and snapshots of the individual, economic, social and structural factors which interact to influence the development and management of chronic conditions.



Source: [Women’s Health Loddon Mallee, 2025](#)

## 6.3 Avoidable deaths

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 were for circulatory system disease (49.8/100,000 population) and ischaemic heart disease (24.9/100,000 population), both with considerably higher rates compared with Victoria.

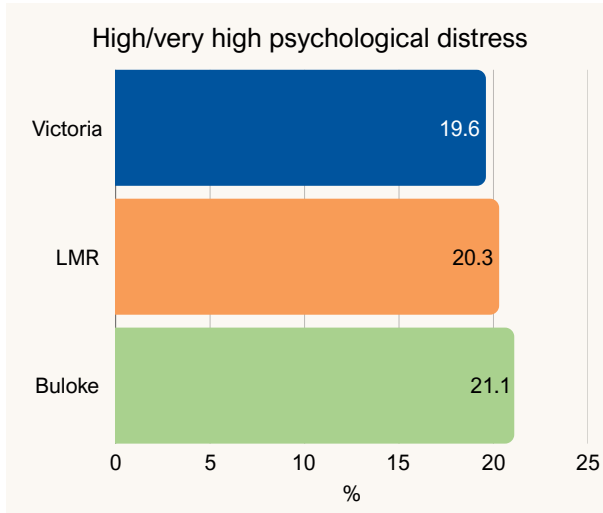
In Buloke, ischaemic heart disease rates fell from 30.0/100,000 population (2017–2021) to 24.9/100,000 population in 2018–2022. Cancer rates in Buloke increased from 25.3 to 30.2/100,000 population by 4.9%, compared with a small decline (1.8%) statewide.

Avoidable deaths by cause	2018-2022		2017-2021		%Difference between the reports	
	Buloke	Victoria	Buloke	Victoria	Buloke	Victoria
Circulatory system	49.8	33.3	50	32.7	-0.2	1.8
Ischaemic heart disease	24.9	21	30	20.6	-5.1	1.9
Cancer	30.2	27.5	25.3	27.8	4.9	-1.8
Transport accidents	na	4.1	22.3	4	na	2.5
Respiratory system disease	14.2	9.1	14.3	9	-0.1	1.1
Obstructive pulmonary disease	14.1	8.5	12.5	8.3	1.6	2.4
Cerebrovascular disease	14.9	7.7	na	7.6	na	1.3
Breast cancer	na	15.2	na	15.6	na	-2.5
Diabetes	12.4	5.5	na	5.2	na	5.8
Colorectal Cancer	12.6	10	na	10.1	na	-1
External causes (falls, burns, suicide, self-inflicted injuries etc)	na	14	na	13.5	na	3.7
Suicide and self-inflicted injuries	na	10.9	na	10.6	na	2.8

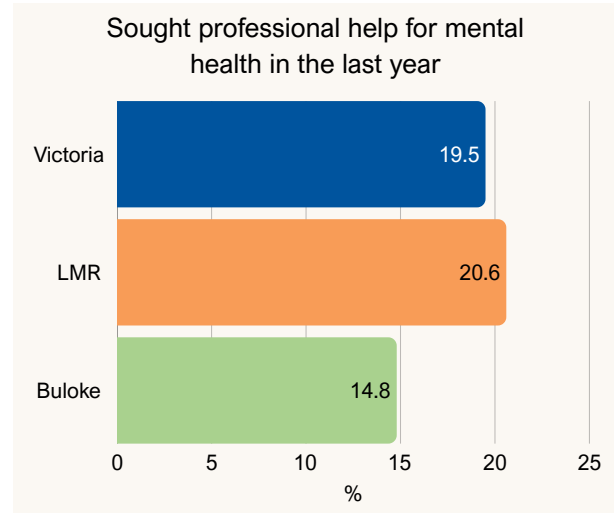
Source: [Social Health Atlas](#), 0-74 years, ASR/100,000 population

## 6.4 Mental wellbeing

By prioritising good mental health and wellbeing, we reduce stigma, increase social connection, improve physical health, promote productivity and create safer environments. Our mental health and our physical health are linked. In Buloke 21.1% reported experienced high/very high psychological distress compared with Victoria (19.6%).

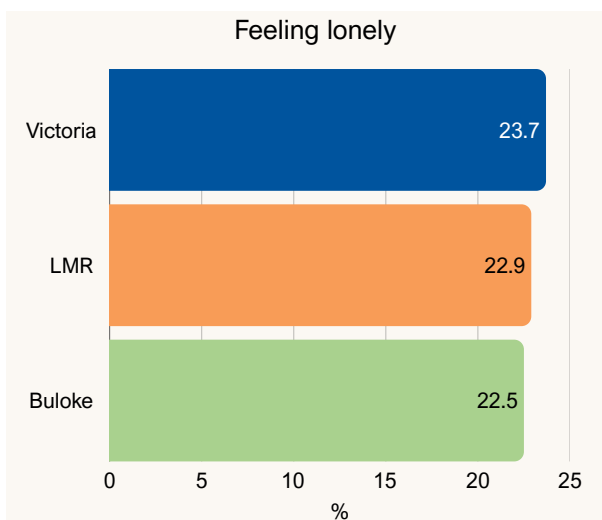


Source: [Victorian Population Health Survey, 2023, age adjusted](#)

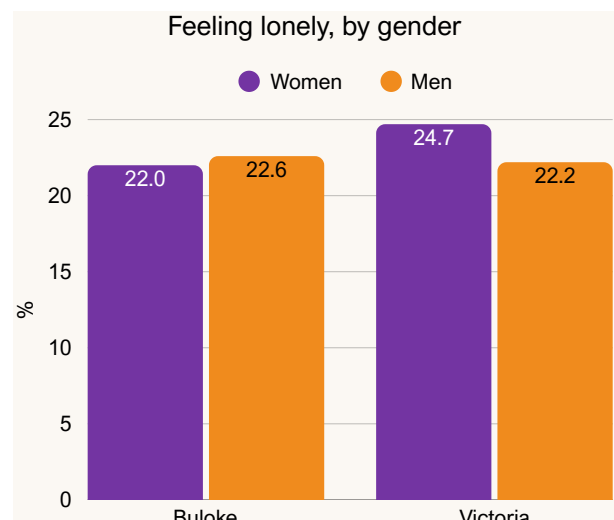


Source: [Victorian Population Health Survey, 2023, age adjusted](#)

Social connection is essential for our health and wellbeing. **Loneliness** is a subjective measure of low social connection and is defined as an ‘unpleasant or distressing feeling of a lack of connection to other people, along with a desire for more, or satisfying, social relationships’ (Badcock et al, 2022). In the Victorian Population Health Survey, loneliness was measured using the 3-item UCLA Loneliness Scale. Buloke has a slightly lower proportion of people feeling lonely (22.5%), compared to Victoria (23.7%), with more men reporting loneliness.



Source: [Victorian Population Health Survey, 2023, age adjusted](#)

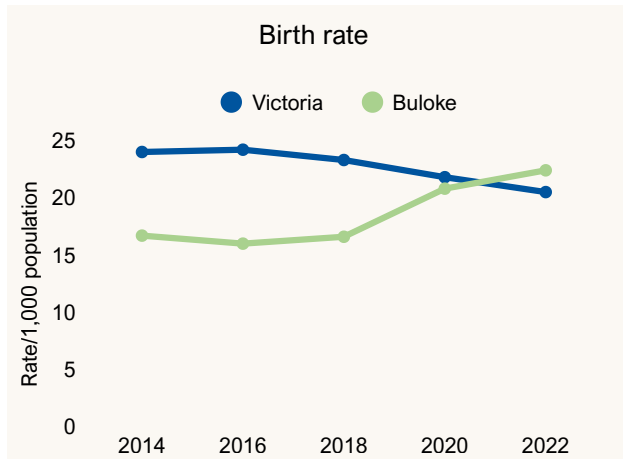


Source: [Victorian Population Health Survey, 2023, age adjusted](#)

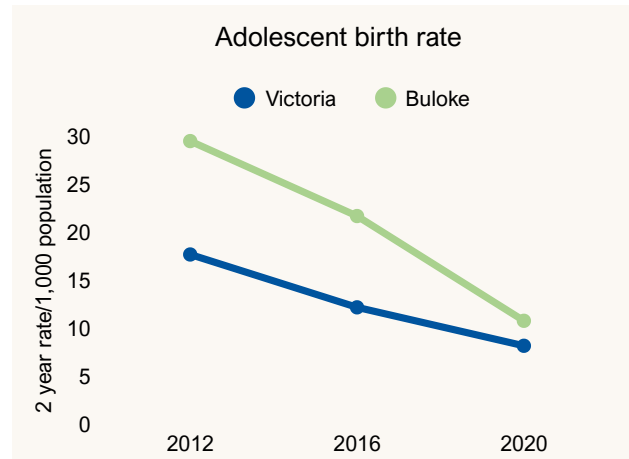
## 6.5 Sexual and reproductive health

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 (1.7) and Buloke's fertility rate is the second highest in Victoria.

Adolescent birth rates (younger than 20 years of age) in Buloke have decreased significantly, from 29.5/1,000 population in 2011/2012 to 10.8/1,000 population in 2019/2020. Buloke's adolescent birth rate of 10.8 (2 year rate/1,000 population) remains above the Victorian average of 8.2 (2 year rate/1,000 population).



Source: [Womens Health Atlas](#)



Source: [Womens Health Atlas](#)

Chlamydia rates were lower in Buloke, compared with the Victorian rate.

Newly acquired	Chlamydia <sup>^</sup>		Gonorrhoea <sup>^</sup>		Hep B <sup>^</sup>		Syphilis <sup>^</sup>	
	Female	Male	Female	Male	Female	Male	Female	Male
Victoria	324.6	412.4	60.5	281.1	^^	0.24	7.43	36.7
Buloke	238.3	283	^^	^^	^^	^^	^^	^^

Source: Victorian sexual and reproductive health and viral hepatitis strategy 2022-30: Monitoring indicators [dashboard](#),

<sup>^</sup>Rate/100,000 population, 2024

^^ less than five cases

**Women & Girls in the Buloke Shire**  
A SNAPSHOT OF SEXUAL & REPRODUCTIVE HEALTH IN THE REGION

**WHLM's Vision**  
All women and gender-diverse people across the Loddon Mallee Region have access to evidence-based, supportive, and culturally responsive sexual and reproductive health services, provided free of judgement and discrimination. Communities support and promote positive approaches to sexuality and the expression, enabling and empowering women to enjoy safe, respectful and pleasurable relationships and to have their voices heard.

For more information about how WHLM enhances the sexual and reproductive health of women and gender diverse people in the Loddon Mallee region and explores their voices, experiences and stories, visit our [Health Matters Sexual and Reproductive Health Strategy 2022-2026](#).

- 108 women reported speaking a language other than English at home in 2022. Multilingual, Mandarin & Tagalog were common.
- Buloke Shire ranks 74th out of 79 LGAs on the Mother Index. This index composites scores from five indicators relating to maternal wellbeing. A lower score indicates a better place for a mother to live.
- Buloke Shire ranks 24th out of 79 LGAs on the Index of Relative Socio-economic Disadvantage (IRSED). This index summarises a range of information about the economic and social conditions of people and households. A low rank indicates greater disadvantage.

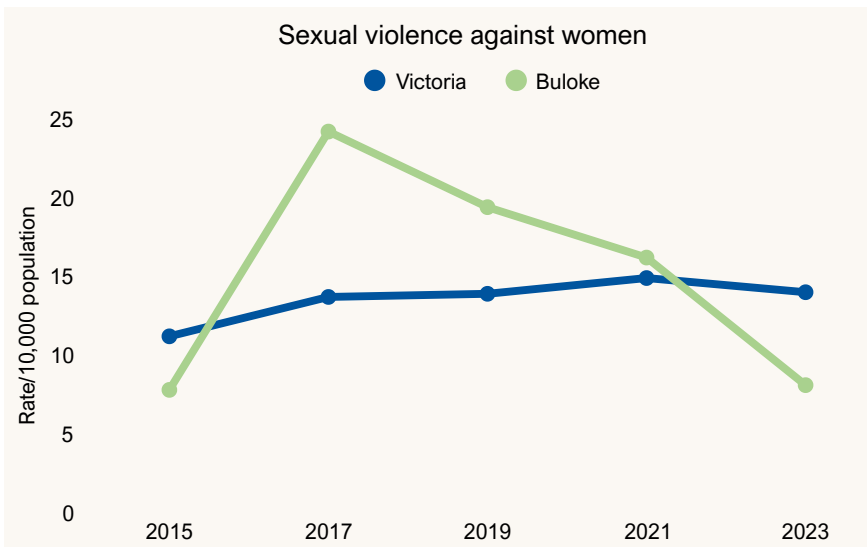
Womens Health Loddon Mallee (WHLM) have developed a snapshot of sexual and reproductive health in Buloke - click on image to view the snapshot.

WHLM have also compiled a comprehensive list of sexual and reproductive health [services](#) in the Loddon Mallee region

Source: [Women's Health Loddon Mallee](#), 2025

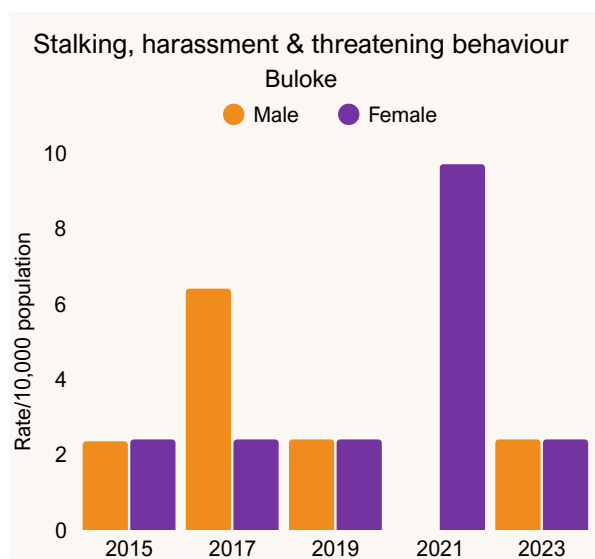
## Sexual assault

According to Victoria Police, sexual offences occur when someone does not or cannot consent to a sexual behaviour, act or acts. These sexual behaviours can include: rape, sexual or inappropriate touching, sexual assault, child sexual abuse, elder sexual abuse, sexual exposure of genitalia, image-based sexual offending, stealthing (non-consensual condom removal), stalking and grooming. Buloke's rates have been declining steadily from 2017.

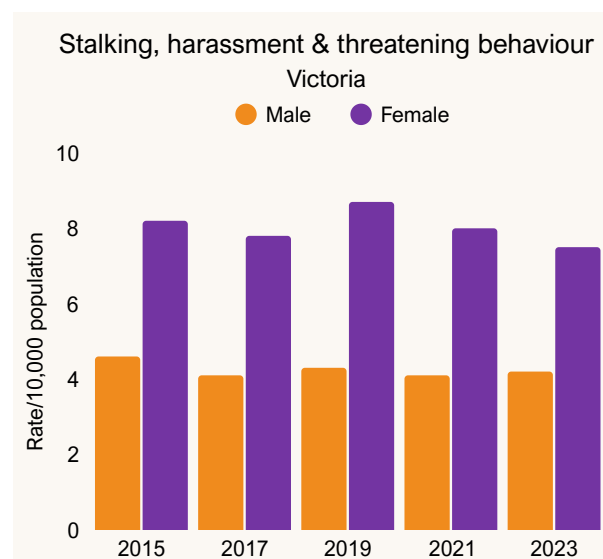


Source: [Womens Health Atlas](#), victim reports received where the woman is the victim

The Victorian Crime Statistics Agency (CSA) reports on stalking, harassment, and threatening behaviours as a group. This category includes repeated acts of unreasonable conduct intended to: cause physical or mental harm; arouse apprehension or fear; threaten or invade privacy; create nuisance or offend someone based on personal characteristics. In Buloke, the rate of male and female victims of stalking, harassment and threatening behaviour are relatively even with some variability in 2017 and 2021. These rates must take into account the small population of Buloke and many of these offences are not reported to police. In Victoria, female victim reports of stalking, harassment and threatening behaviour outnumber male victim reports by a ratio of almost 2 to 1.



Source: [Womens Health Atlas](#), victim reports received by police

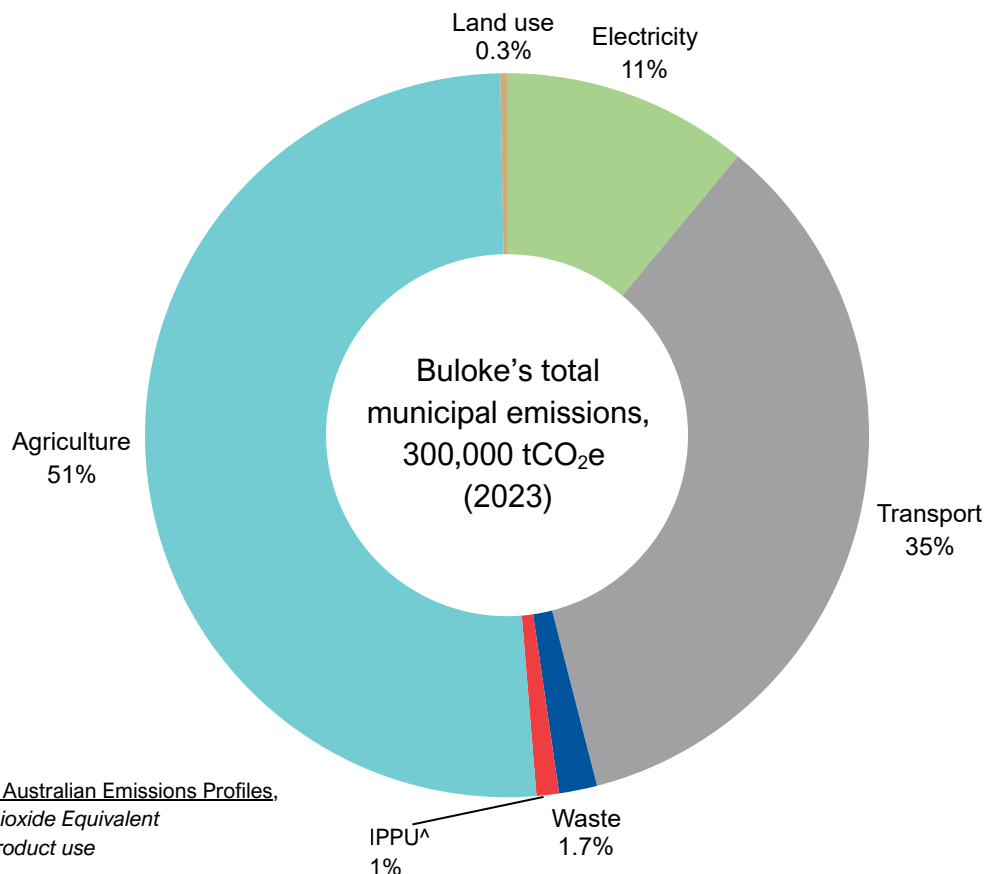
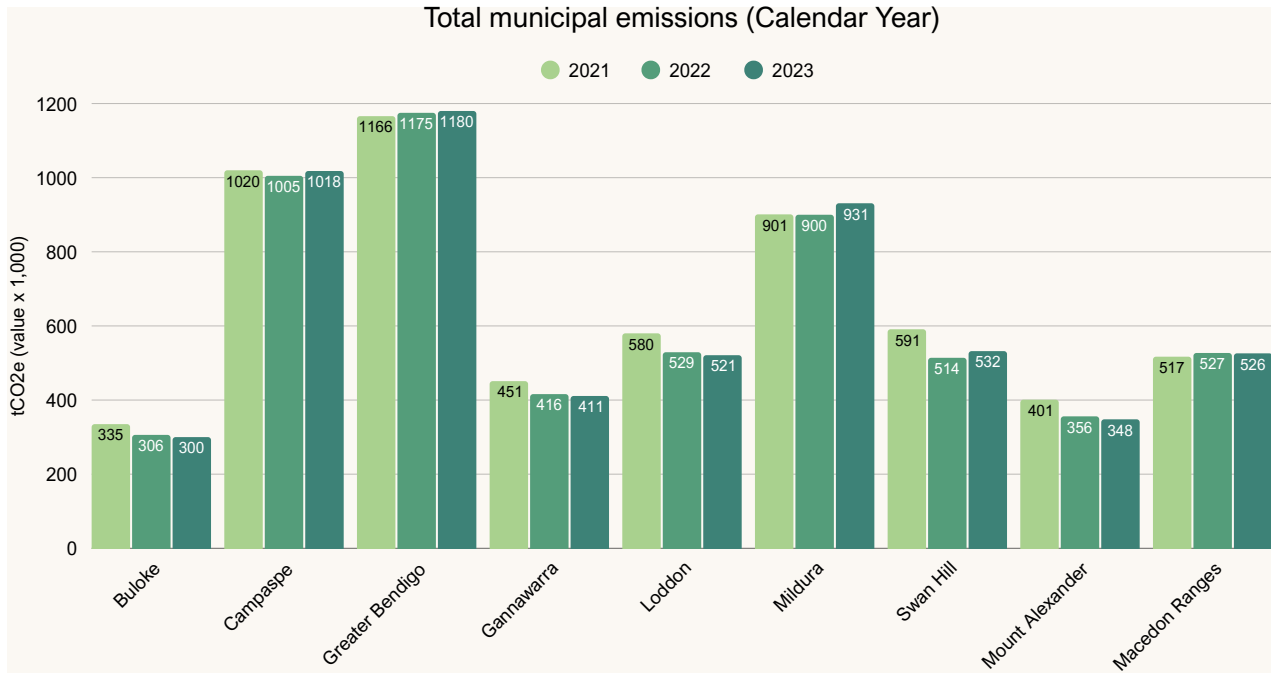


Source: [Womens Health Atlas](#), victim reports received by police

# 7. Environment

## 7.1 Municipal emissions

The LMPHU's climate change and health work is guided by the Loddon Mallee Climate Change and Health Framework. Some of the considerations in comparing carbon emissions across local government areas are population, industry mix, geographical area, transport patterns and land use. Buloke's total carbon emission for 2023 was 300,000 tCO<sub>2</sub>e. The top causes of carbon emissions in Buloke were agriculture (51%) and transport (35%).



Source: Snapshot Climate - Australian Emissions Profiles.  
 tCO<sub>2</sub>e: Tonnes of Carbon Dioxide Equivalent  
<sup>^</sup>Industrial processes and product use

## 7.2 Average temperature

Temperatures in the LMR differ significantly from north to south. The northern part of the region sees hotter summers while winters are mild. 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.

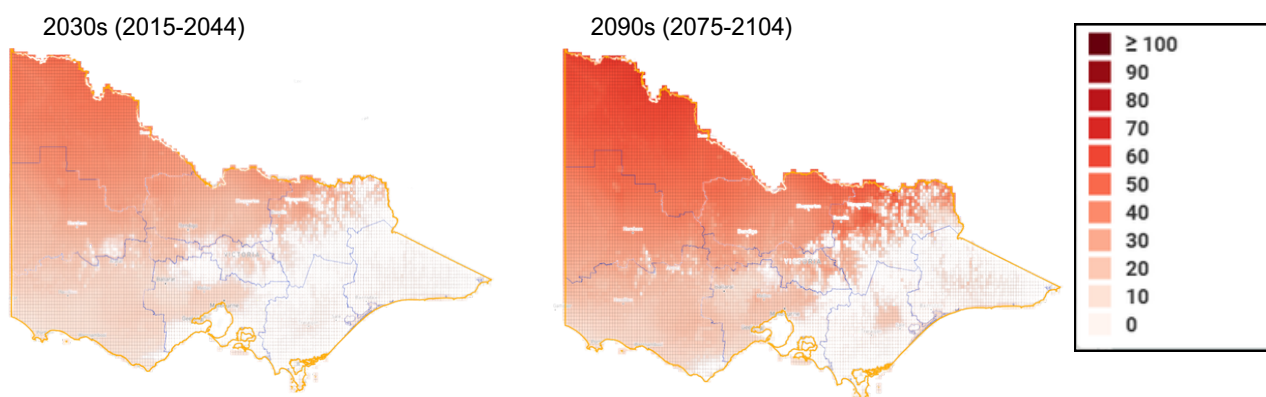
LGA (1961-1990)	Summer (Ave oC)		Winter (Ave oC)	
	Maximum	Minimum	Maximum	Minimum
LMR	28.9	13.5	13.7	4.1
Swan Hill	31.2	15	15.6	4.6
Mildura	31	14.8	15.9	5.2
Gannawarra	30.5	14.7	14.8	4.5
<b>Buloke</b>	<b>30</b>	<b>14</b>	<b>14.6</b>	<b>4.4</b>
Loddon	29.4	13.9	13.9	4.2
Campaspe	29.3	14.1	13.9	3.9
Greater Bendigo	28.2	13.4	13.1	3.9
Mount Alexander	27	12	12	3.1
Macedon Ranges	24.1	11.2	10.3	3.2

Source: [Loddon Mallee Environmental Scan](#) | Emergency Management Victoria, 1961-1990

### Projected number of days above 35°C in 2030s and 2090s by Bureau of Meteorology Forecast Districts.

This data demonstrates that the Mallee and Murray areas are projected to experience increasing days above 35°C, which will impact health and wellbeing. Heat kills more Australians than any other natural disaster.

Heat can cause serious and potentially fatal health problems such as heat exhaustion and heatstroke, trigger sudden events like heart attack or stroke, or worsen existing medical conditions like kidney or lung disease. <sup>[1]</sup>



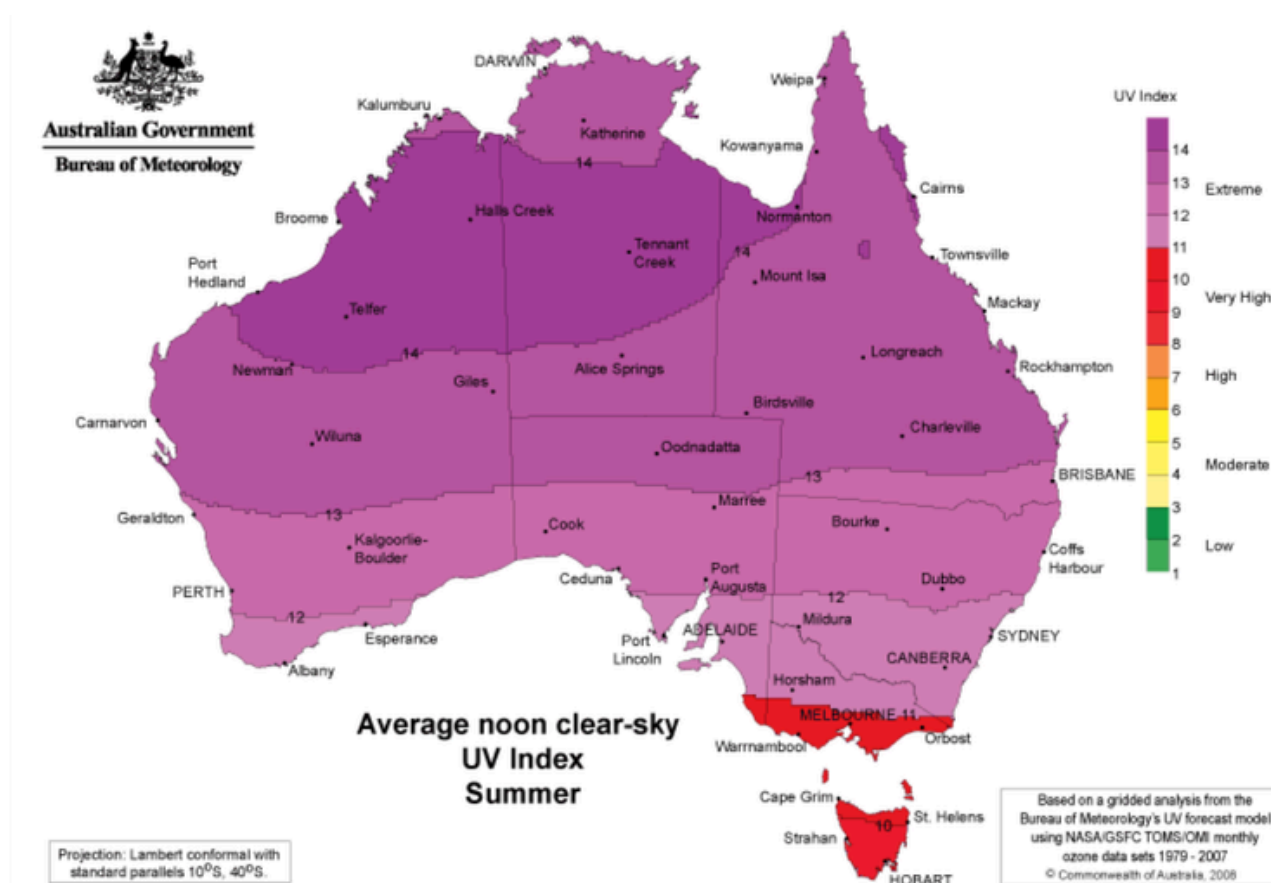
Source: Victorian Government, Energy, Environment and Climate Action

[1] [Better Health Channel](#), Extreme Heat, Victorian Department of Health

### 7.3 Ultraviolet radiation

Exposure to UV radiation from the sun and other sources, such as solariums, is the major cause of skin cancer. Australia has some of the highest levels of UV radiation in the world. Sun exposure has been estimated to cause around 95% of melanoma cases in areas of high exposure, such as Australia and around 99% of non-melanoma skin cancers in Australia. [1]

The map below show the average summer (noon clear sky) solar ultraviolet values over Australia. The LMR experiences extreme Ultraviolet index.



Source: [Australian Bureau of Meteorology](http://www.bom.gov.au).

[1] [Australian Government, Cancer Australia](http://www.cancer.gov.au)

## 7.4 Bushfire prone areas

Most of the LMR is classified as bushfire prone area (97.8%). This means high bushfire hazards in the LMR, many of which intersect with settlements and areas are experiencing growth in rural residential areas and tourism. Buloke has 96.7% of its area classified 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.

Smoke from fires, including planned burns, can also pose a hazard within the LMR. 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.

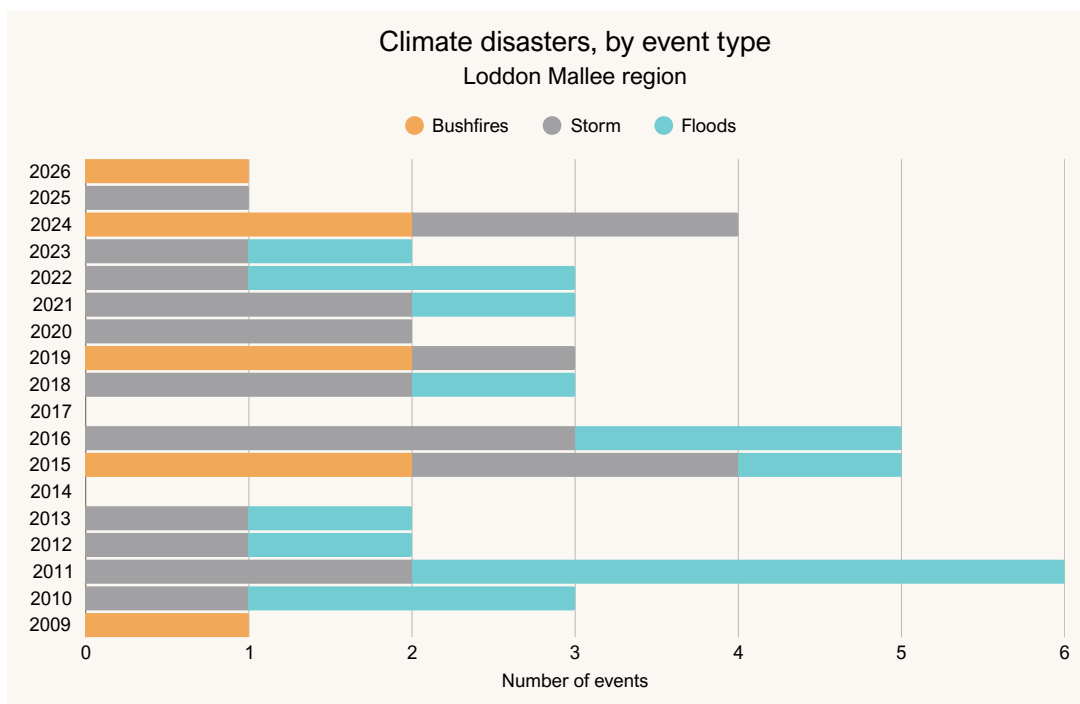
	Bushfire prone area (%)	Bushfire prone area (km2)	Total area (km2)
<b>Buloke</b>	<b>97.6</b>	<b>7,807</b>	<b>8,000</b>
Campaspe	97.7	4,415	4,519
Gannawarra	98.7	3,701	3,750
Greater Bendigo	97.6	2,930	3,000
Loddon	100	6,694	6,696
Macedon Ranges	98.6	1,723	1,748
Mildura	98.3	21,710	22,083
Mount Alexander	99.8	1,527	1,530
Swan Hill	92.0	5,625	6,115
Victoria	97.8	5,625	6,115

Source: [Loddon Mallee Environmental Scan](#) | [Emergency Management Victoria](#)

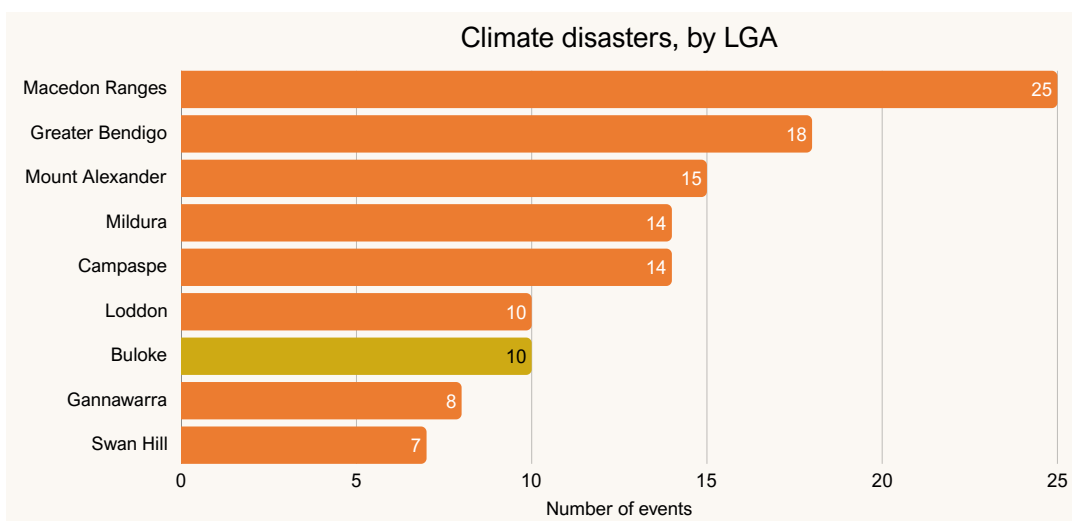
## 7.5 Climate emergencies

Climate change is increasingly affecting the frequency, intensity, and duration of extreme weather events in our region. Rising temperatures, shifting rainfall patterns, and more severe storm systems are contributing to a greater incidence of natural hazards such as bushfires, floods, and heatwaves. Acting as a risk multiplier, climate change not only amplifies the severity of these disasters, threatening lives, livelihoods, health and property, but also places significant pressure on disaster management systems.

The Disaster Recovery Funding Arrangements (DRFA) provide a framework for joint federal and state cost-sharing of disaster relief and recovery measures. These arrangements are triggered by state government when a natural disaster requires a coordinated multi-agency response and exceeds the small disaster financial threshold. Between 2019 and February 2026, 35 climate-related disaster events (storms, floods, bushfires) in the Loddon Mallee region have activated the DRFA, with multiple climate disaster events most years. Between 2009-2026, there were ten climate disasters that activated the DRFA in Buloke.



Source: [Australian Government Department of Home Affairs, Disaster assist, 2009 -2026](#)



Source: [Australian Government Department of Home Affairs, Disaster assist, 2009 -2026](#)

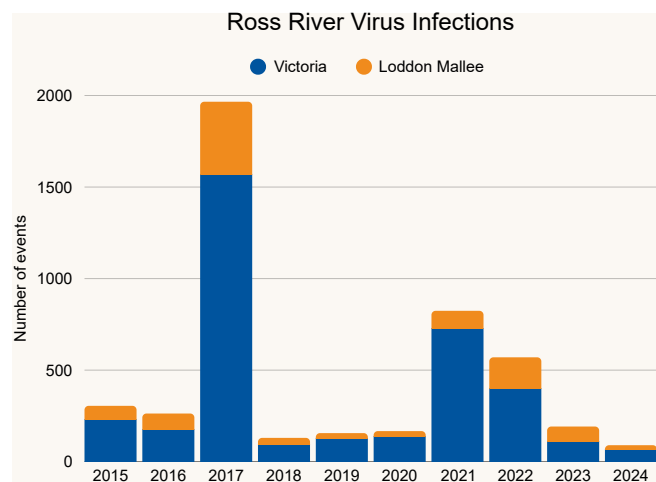
## 7.6 Mosquito borne disease

In 2024, there were five mosquito-borne viruses identified across Victoria with the potential for local transmission. These were Japanese encephalitis virus, Murray Valley encephalitis virus, Ross River virus, Barmah Forest virus and West Nile virus Kunjin strain (otherwise known as Kunjin virus).<sup>[1]</sup>

Mosquito surveillance is conducted throughout the Victorian mosquito breeding season by the Department of Health each year. In inland areas, the mosquito season typically starts from early November through to late April the following year, while in coastal areas it typically starts earlier and ends later. The mosquito trapping sites within the Loddon Mallee are in Campaspe, Gannawarra, Mildura and Swan Hill.

### Ross River virus

Ross River virus is a mosquito transmitted disease that occurs throughout most regions of Australia including regional Victoria, particularly around inland waterways and coastal regions. All nine LGAs within the Loddon Mallee are considered endemic. Epidemics occur from time to time and are related to environmental conditions that encourage mosquito breeding such as heavy rainfall, floods, high tides and temperature. The number of notifications of Ross River Virus from Loddon Mallee ranges from 25 to 397 in a year. In 2023, 43.2% of all Victorian notifications were from the Loddon Mallee.



Source: Victorian Department of Health, surveillance summary report

[1] Victorian Department of Health, [Mosquito surveillance report](#)

## 8. Data resources

<b>LMPHU</b>	<a href="https://www.bendigohealth.org.au/LMPHU/">https://www.bendigohealth.org.au/LMPHU/</a>
<b>ABS Quick Stats</b>	<a href="https://abs.gov.au/census/find-census-data/quickstats/2021/POA3523">https://abs.gov.au/census/find-census-data/quickstats/2021/POA3523</a>
<b>AECD</b>	<a href="https://www.aedc.gov.au/data-explorer/">https://www.aedc.gov.au/data-explorer/</a>
<b>AIHW</b>	<a href="https://www.aihw.gov.au/about-our-data/aihw-data-by-geography">https://www.aihw.gov.au/about-our-data/aihw-data-by-geography</a>
<b>Crimes Statistics Agency</b>	<a href="https://www.crimestatistics.vic.gov.au/">https://www.crimestatistics.vic.gov.au/</a>
<b>PHN Exchange</b>	<a href="https://www.phnexchange.com.au/">https://www.phnexchange.com.au/</a>
<b>Social Health Atlas</b>	<a href="https://phidu.torrens.edu.au/social-health-atlases">https://phidu.torrens.edu.au/social-health-atlases</a>
<b>Victorian Population Health Survey</b>	<a href="https://vahi.vic.gov.au/reports/victorian-population-health-survey-2023">https://vahi.vic.gov.au/reports/victorian-population-health-survey-2023</a>
<b>Womens Health Atlas</b>	<a href="https://victorianwomenshealthatlas.net.au/#/">https://victorianwomenshealthatlas.net.au/#/</a>

## 9. Notes on statistical significance

### **Public Health Information Development Unit/Social Atlas**

Statistical significance was assessed using indirect age standardisation and standardised ratios (SRs). Expected numbers were calculated by applying age-specific Australian standard rates to the local population age structure. Observed numbers were compared with expected numbers and statistical significance was evaluated using a Z-score calculation, with 95% confidence intervals around the SR to indicate reliability. More information on this calculation is available at the [Public Health Information Development Unit](#).

### **Victorian Population Health Survey**

Statistical significance differences between estimates were deemed to exist where the 95% confidence intervals for percentages did not overlap. More information is available in the Methodology section of the [Victorian Population Health Survey](#).

## 10. Abbreviations

Abbreviation table	
AEDC	Australian Early Development Census
AIHW	Australian Institute of Health and Welbeing
ARI	Average recurrence interval
COPD	Chronic Obstructive Pulmonary Disease
Greater Bendigo	City of Greater Bendigo
IRSD	Index of Relative Socio-economic Disadvantage
LGA	Local government area
LMPHU	Loddon Mallee Public Health Unit
LMR	Loddon Mallee region
LGBTIQA+	Lesbian, gay, bisexual, transgender, intersex, queer, asexual and other sexually or gender diverse people
NBCSP	National Bowel Cancer Screening Program
NDIS	National Disability Insurance Scheme
PHN	Primary Health Network
STI	Sexually Transmitted Infection



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