



Population Health Catchment Plan 2023–2029

Barwon South West Public Health Unit



Prepared by the Barwon South West Public Health Unit, June 2023

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Acknowledgement of Country

Barwon South West Public Health Unit acknowledges the Traditional Owners of the lands that make up our region, the Bunganditj, Coladjin, Djab Wurrung, Djargurd Wurrung, Eastern Maar, Gadubanud, Girai Wurrung, Gulidjan, Gunditjmara, Jardwadjali, Tjap Wurrung and Wadawurrung peoples.

We pay our respects to their Elders past and present.

We thank the Traditional Owners for custodianship of the land, and celebrate their continuing cultures, acknowledging the memory of honourable ancestors.



Executive Summary

The Barwon South West Public Health Unit (BSWPHU) has developed the Barwon South West Population Health Catchment Plan (the Catchment Plan). The Catchment Plan was informed by population health needs, equity assessment and priorities for place-based health promotion, primary prevention and early intervention, including measures of impact aligned to outcomes frameworks, and will extend over a six-year period (2023–2029). The Catchment Plan supports the goals and objectives of the overarching Barwon South West Public Health Unit Strategy.

The Catchment Plan represents a collaboration of thought and effort. BSWPHU is grateful to the many people who contributed to its development. The Catchment Plan, developed over ten months, is informed by collaboration and consultation with our key prevention partners including local governments, community health organisations, rural and regional health services, women's health organisations, sexual health clinics, Aboriginal Community Controlled Health Organisations (ACCHOs), Primary Health Networks (PHNs) and other key local and state-wide agencies.

The Catchment Plan will:

- Facilitate the implementation of state-wide programs, priorities, and policy at a local level while ensuring these inform and are informed by local priorities and responses;
- Strengthen local prevention capacity and networks to drive coordinated and collective impact with sufficient scale and reach; and
- Promote health and wellbeing outcomes that matter to people, their communities, and the environments in which they live.

The Catchment Plan presents a regional approach to health prevention as part of the Victorian Public Health Vision that *Victorians are the healthiest people in the world*. The anticipated outcomes of the Catchment Plan include:

- The environments where people live, work, play and study are safe and healthy, and promote the wellbeing of future generations.
- Everyone is supported to live their healthiest life, and intergenerational health outcomes are improved.
- People are connected with the right support, in the right place and at the right time to deliver outcomes that matter to them.

The Barwon South West region comprises a population of nearly 460,000 people across 10 local government areas, spanning from Queenscliff Heads to the South Australian border. Traditional land owners are the Bunganditj, Coladjin, Djab Wurrung, Djargurd Wurrung, Eastern Maar, Gadubanud, Girai Wurrung, Gulidjan, Gunditjmarra, Jardwadjali, Tjap Wurrung and Wathaurong (Wadawurrung) Aboriginal people.

The region's population is growing and ageing, with 24% projected growth between 2021 and 2036, and highest projected growth in the 80+ year and 60–79 year age groups. A total of 1.4% of the Barwon South West population are Aboriginal and/or Torres Strait Islander peoples. People born in non-English speaking countries comprise 8.6% of the population, while 7.0% of the population reside in an area that sits within the lowest quintile for relative social disadvantage.

Non-communicable diseases (NCDs) pose a significant burden of disease in the Barwon South West region, with 31.8% of the population reporting that they have one or more long

term health conditions. Of particular note are over 50% of the population reports living with overweight and obesity, and the region has higher rates of risk alcohol consumption and smoking than the Victorian average. Tobacco use, physical inactivity, high body mass index, poor quality or unhealthy diet, and harmful use of alcohol and illicit drugs are common modifiable risk factors that account for around one third of the total health burden in Australia. Our prevention partners feel that solutions to these issues can be implemented; however, have identified that they require support to build capacity to evaluate programs both collaboratively and within their own organisations.

The Catchment Plan recognises that reducing the associated modifiable risk factors, in addition to addressing the wider social determinants of health, is imperative for controlling and preventing NCDs. By completing a needs analysis of the Barwon South West region, investigating the burden of NCDs and their modifiable risk factors in Australia and the Barwon South West region, and listening to voices of the community and our prevention partners, the following health priorities were identified:

- Increasing healthy eating
- Increasing active living
- Reducing tobacco and e-cigarette related harm
- Reducing harm from alcohol and other drugs
- Increasing the uptake of cancer screening
- Improving mental health and wellbeing
- Prevention of violence, family violence and promotion of gender equity
- Tackling climate change and its impact on health and strengthening community resilience

Over the next six years, BSWPHU will lead the implementation of the Catchment Plan along with partners and stakeholders to strengthen the region-wide prevention system. BSWPHU will be responsible for bringing regional partners together, including local government (councils), community health organisations, rural and regional health services, and various not-for-profit and private organisations, and for embedding prevention and health promotion planning and delivery at the local level.

The Catchment Plan is developed and designed to be a live document that will be updated and refreshed over time, through to 2029. BSWPHU is working collaboratively and collectively with our prevention partners across the Barwon South West region to ensure minimal duplication of effort across local government, state and nationally funded prevention efforts. BSWPHU will ensure that prevention activity is captured as progress and achievement of short-term impacts as well as long term shifts by the efforts of BSWPHU and prevention system partners.

In preparing this Catchment Plan, BSWPHU has undertaken comprehensive surveillance of the region's population, including a deep dive into modifiable risk factors associated with the preventable chronic disease burden within the Barwon South West region. The Catchment Plan maps current prevention activity and along with supporting population datasets, identifies eight health priorities that form the focus of the Catchment Plan implementation. The Community Partnerships team engaged in extensive consultation with prevention partners, including meetings with stakeholders, forums and direct engagement with community groups. BSWPHU has identified the Monitoring and Evaluation and Learning (MEL) framework to be implemented in the first year of the Catchment Plan. We look forward to collectively approaching challenges within the region with a solutions focused, outcomes measured approach to all prevention activity.

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List of acronyms

ABS: Australian Bureau of Statistics
ACCHO: Aboriginal Community Controlled Health Organisation
AIHW: Australian Institute of Health and Welfare
BSWPHU: Barwon South West Public Health Unit
CALD: Culturally and linguistically diverse
CH-HP: Community Health – Health Promotion
COPD: Chronic obstructive pulmonary disease
DALY: Disability-adjusted life year
DH: Department of Health
FY: Financial year
GP: General practitioner
HEAL: Healthy eating and active living
IRSD: Index of relative social disadvantage
KPI: Key performance indicator
LGA: Local Government Area
LPHU: Local Public Health Unit
MEL: Monitoring, evaluation and learning
MPHWP: Municipal Public Health and Wellbeing Plan
NCD: Non-communicable disease
OECD: Organisation for Economic Co-operation and Development
PCP: Primary Care Partnerships
PHN: Primary Health Network
PM: Particulate matter
SA: Statistical Area
SSB: Sugar-sweetened beverages
T2DM: Type 2 diabetes mellitus
VKEW: Vic Kids Eat Well
VPHS: Victorian Population Health Survey
VPHWOF: Victorian Public Health and Wellbeing Outcomes Framework
YLD: Years of life lost
YLL: Years lived with disability

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Chapter 1: Purpose

The Barwon South West Public Health Unit (BSWPHU) has developed the Barwon South West Population Health Catchment Plan (the Catchment Plan). The Catchment Plan will extend over a six-year period (2023–2029). It is informed by population health needs, equity assessment and priorities for place-based health promotion, primary prevention and early intervention, including measures of impact aligned to outcomes frameworks.

BSWPHU has developed this Catchment Plan in collaboration and consultation with our key prevention partners including local governments, community health organisations, rural and regional health services, women’s health organisations, sexual health clinics, Aboriginal Community Controlled Health Organisations (ACCHOs), Primary Health Networks (PHNs) and other key local and state-wide agencies. The Catchment Plan supports the goals and objectives of the overarching Barwon South West Public Health Strategy.

The Catchment Plan will:

- Facilitate the implementation of state-wide programs, priorities, and policy at a local level while ensuring these inform and are informed by local priorities and responses;
- Strengthen local prevention capacity and networks to drive coordinated and collective impact with sufficient scale and reach; and
- Promote health and wellbeing outcomes that matter to people, their communities, and the environments in which they live.



Chapter 2: Background

2.1 Public Health Vision

BSWPHU's prevention and population health focus is to support Victoria's public health vision that *Victorians are the healthiest people in the world* [1], and Barwon Health's vision that *by 2050, everyone in our community enjoys the best health and wellbeing in Victoria* [2].

This entails aligning collective efforts across the three geographical catchment areas of Barwon (also known as G21), South West and Southern Grampians Glenelg, which make up the Barwon South West region.

Anticipated outcomes include:

1. The environments where people live, work, play and study are safe and healthy, and promote the wellbeing of future generations.
2. Everyone is supported to live their healthiest life, and intergenerational health outcomes are improved.
3. People are connected with the right supports, in the right place and at the right time to deliver outcomes that matter to them.

A values-based, equity-focused population health approach will support the attainment of the short and long-term health and wellbeing outcomes across the Barwon South West region.

A *population health approach* considers the wider determinants of health when designing and delivering public health interventions to promote and improve community health and wellbeing. This equitable approach is aimed at reduction of risk factors and prevention of chronic disease, in order to lessen the burden on the health care system while also providing pathways for people to access the support they need when required.

A *values-based approach* embeds an outcomes focus around identified population health needs. It involves maximising the effectiveness of resources, having a shared sense of purpose, and working collaboratively to deliver evidence-based interventions in a local context and then measuring the impact.

A map of influence for prevention and population health within the Barwon South West region is shown in Figure 2.1. It includes diverse organisations across many sectors, reflecting broad cross-sectoral influences on prevention and population health. BSWPHU will be responsible for bringing regional partners together, including local government (councils), community health organisations, health services, and various not-for-profit and private organisations, and for embedding prevention and health promotion planning and delivery at the local level.

BSWPHU's prevention and population health priorities are guided by *The Victorian Public Health and Wellbeing Plan 2019–2023* and the *Victorian Cancer Plan 2020–2024*, as well as the *National Preventive Health Strategy 2021–2030*, with a focus on preventable chronic disease and modifiable risk factors [3-5]. Initiatives will be focused on collective outcomes for the catchment, as well as reinforcing actions and interventions delivered by partner agencies utilising a co-benefits approach across priority areas.

2.2 Development

The Catchment Plan has been developed over ten months, facilitated by the establishment of the BSWPHU Community Partnerships team (see below). The process has been directed by the *LPHU Population Health Catchment Planning Framework* [6], developed by the Victorian Government Department of Health (DH). The below sections detail the steps taken in developing the Catchment Plan.

POLICY
Prevention and Population Health, Regional Public Health Division – West

Barwon South West Public Health Unit

Outcomes focused planning, implementation, monitoring and reporting linked to statewide policy and accountability frameworks including the Victorian Public Health and Wellbeing Plan, Outcomes Framework and Cancer Plan, local Municipal Public Health and Wellbeing Plans and local Community Health Plans

Catchment oversight of non-communicable disease prevention, healthy eating, active living, tobacco control, women’s health, alcohol and other drugs, community resilience, uptake of cancer screening, and sexual health

Prevention infrastructure

Community Health

Barwon Health, Bellarine Community Health, Casterton Memorial Hospital, Colac Area Health, Great Ocean Road Health, Hesse Rural Health, Portland District Health, South West Healthcare, Terang & Mortlake Health Service, Timboon & District Health Service, Western District Health Service

Aboriginal Health

Winda-Mara Aboriginal Corporation, Dhauwurd Wurrung Elderly and Community Health, Gunditjmara Aboriginal Co-operative, Wathaurong Aboriginal Co-operative, Kirrae Health Service

Sexual Health

Barwon Reproductive and Sexual Health (BRaSH) Clinic, Women’s Sexual and Reproductive Health Hub (South West Healthcare), Kardinia Health, Sexual Health Victoria

Women’s Health

Women’s Health and Wellbeing Barwon South West Women’s Sexual and Reproductive Health Hub (South West Healthcare)

Statewide

VicHealth, Cancer Council Victoria

National

Alcohol and Drug Foundation

Government

Local Government

Colac-Otway, Corangamite, Glenelg, Greater Geelong, Golden Plains, Moyne, Queenscliffe, Southern Grampians, Surf Coast, Warrnambool

Victorian Government

Department of Health; Department of Families, Fairness and Housing; Department of Education; Department of Premier and Cabinet; Department of Energy, Environment and Climate Action; Department of Jobs, Skills, Industry and Regions; Department of Justice and Community Safety; Emergency Management Victoria

Commonwealth Government

Department of Health – including Western Victoria Primary Health Network

Sector

Community sector and non-profit organisations

Peak bodies and advocacy organisations

Universities and academia

Private sector

Figure 2.2: Map of influence for prevention and population health, Barwon South West region. Adapted from “West Region Prevention System” developed by Prevention and Population Health – West Region (Victoria Department of Health)

2.2.1 Community Partnerships team

Prevention partnerships across the Barwon South West region are strengthened by the successful transition of two of the three Primary Care Partnerships (PCP) teams to BSWPHU as a result of Victorian State government health reform beginning July 2022. The high-value functions of the three PCP teams (Barwon, Southern Grampians Glenelg, and South West) have been transferred across to a newly formed Community Partnerships team within the BSWPHU, recognising local knowledge and networks, the need for local prevention and promotion and the success of place-based approaches. The Community Partnerships team brings long-term established relationships with refined skillsets to engage with partner and local stakeholder organisations and their networks to reach communities in a range of settings and deliver prevention and health promotion activities within communities. This includes proactively connecting with the diverse populations and organisations in the Barwon South West catchment, considering diversity in voice across gender, age and culture. The Community Partnerships team brings a proven ability to support public health planning, coordination and collaboration that takes a targeted approach to improve equity of health outcomes, informed by local population health needs assessment and surveillance to achieve shared outcomes across the catchment.

2.2.2 Alignment with existing plans

To ensure alignment with existing local strategic planning processes, a scan of the ten local Municipal Public Health and Wellbeing Plans (MPHWPs) was conducted [7-16]. This provided a high-level understanding of local priorities, partnerships, approaches and actions as well as evaluation and measurement across the region. Community Health – Health Promotion (CH-HP) plans, where available, provided additional local information and contributed to the development of the Catchment Plan.

Parameters set in the *National Preventive Health Strategy 2021–2030*, the *Victorian Public Health and Wellbeing Plan 2019–2023* and the *Victorian Cancer Plan 2020–2024*, as well as more specific state-wide strategies and plans (e.g., Healthy Kids, Healthy Futures; Victoria’s Climate Change Strategy; Free from Violence; Ageing Well in Victoria; Victorian Cancer Screening Framework Strategic Plan) will provide additional alignment [3-5, 17-22]. Figure 2.2 and Appendix 1 provide details of existing plans with which the Catchment Plan will align.

2.2.3 Alignment with the Barwon South West Public Health Strategy

The Catchment Plan has been developed in parallel with, and is aligned to, the overarching Barwon South West Public Health Strategy. The Public Health Strategy provides overarching goals and objectives across all aspects of public health, including prevention and population health. The Catchment Plan presents a detailed summary of health needs across the region, identifies key health priorities, provides details about implementation to address these priorities over a six-year period, and outlines a monitoring and evaluation framework.

2.2.4 Consultation and engagement with stakeholders (mapping)

Extensive consultation has been undertaken with stakeholders across the region to enhance our understanding of local priorities, challenges and emerging issues as well as prevention work already in place and to ensure local knowledge is captured within the Catchment Plan. The catchment plan seeks to build on and strengthen existing prevention work.

Over 50 formal and informal consultations and conversations, have been held with public health services, local government, ACCHOs, community sector organisations and women’s health services. A list of organisations with whom consultations were undertaken is shown in

Appendix 2, and an example of a semi-structured interview template used for consultations is shown in Appendix 3. As discussed above, the integration of PCP teams into BSWPHU as the Community Partnerships team has added value to the consultation process, in terms of existing connections and knowledge of local prevention approaches.

Consultation with ACCHOs has remained intentionally minimal for the initial phase of the Catchment Plan development. This is due to feedback from ACCHOs in the region that they are forming and creating a collective over a large geographical part of the Barwon South West region. Once this collective is established, consultation and partnership can occur through the collective. However, where appropriate, strategic consultation has occurred. BSWPHU is fully supportive of Aboriginal self-determination as an ongoing process to ensure that Aboriginal communities are able to meet their social, cultural and economic needs.

Development of the Catchment Plan has been undertaken using a staged approach, informed by the DH *LPHU Population Health Catchment Planning Framework* [6]. Steps taken for stakeholder consultation and engagement are detailed in Table 2.1 below.

Stage 1
<ul style="list-style-type: none"> • Identification of local prevention partners and stakeholders • Review of MPHWP's and Community Health – Health Promotion action plans (where available) with mapping of health priority areas, implementation initiatives and/or strategies and outcome measures • Formal introductions to partners/stakeholders outlining the roles and functions of BSWPHU • Engagement with local prevention partners/stakeholders to gauge what is happening “on the ground” to identify community needs, emerging issues particularly in the context of the COVID-19 pandemic, workforce capacity and professional development needs • Liaison with BSWPHU’s Public Health Strategy Director to align work and avoid duplication
Stage 2
<ul style="list-style-type: none"> • Identification of key health priorities through consultation and reviewing MPHWP's, available CH-HP plans and organisational plans • Healthy Eating and Active Living were identified as the main priorities among the list of identified priorities. This information was presented back to partners via a Healthy Eating and Active Living Forum. At this forum, partners were invited to participate in a survey/poll to identify, in order, the priorities of greatest importance to their organisations. • Feedback from consultations and mapping identified the additional health priorities.

Table 2.1: Stakeholder engagement and consultation in development of the Catchment Plan

2.2.5 Needs assessment

Existing and publicly available data were collated, analysed and interpreted, with a focus on health status, risk factors and the wider determinants of health. Along with information obtained during the stakeholder consultation and engagement process, this provided a broad picture of health and wellbeing across the region and informed the development of Health Priorities for the Catchment Plan.

Figure 2.2: Alignment of the Catchment Plan with national, state and regional Plans



2.3 Partnerships structures (governance)

2.3.1 Primary Care and Population Health Advisory Committee

The Barwon Health Board has endorsed the Primary Care & Population Health Advisory Committee (Committee) as the oversight body for the Barwon South West Public Health Strategy (the Strategy). Board has also agreed to an expanded membership of the Committee to better reflect the region-wide remit and multisector responsibility for primary care and public health.

The Committee will receive regular updates regarding the Catchment Plan as part of the Public Health Strategy.

2.3.2 Catchment leadership

Catchment Leadership arrangements will be established across each of the three catchments (Barwon, Southern Grampians Glenelg and South West) to provide a platform for local and regional place-based prevention and planning organisations. This will:

- Enhance collaboration and partnership;
- Share learnings and challenges and explore opportunities for an enhanced prevention system; and
- Build local and regional capacity through planning, implementation, monitoring and evaluation.

These arrangements may take the form of catchment leadership groups, or the functions and aims may be integrated into existing networks across the catchments, depending on local capacity. Each group or integrated network will retain a local focus with the opportunity to inform regional approaches through the BSWPHU Community Partnerships team. The catchment leadership arrangements will not hold a governance role but rather will provide a platform to build local collaboration and learning locally across the Barwon South West region.

2.3.3 BSWPHU structure

BSWPHU is organised under the streams of Health Protection (encompassing communicable diseases) and Prevention and Population Health. A Change Impact Statement is being developed to review the structure and function for Prevention and Population Health.

Chapter 3: Our Region

3.1 Geography

The Barwon South West region encompasses 10 local government areas (LGAs) in the South West of Victoria (Figure 3.1). It is a large and diverse region, extending from the tip of the Queenscliff Heads to the border of South Australia. The region includes Victoria's second largest city of Geelong, fast growing coastal areas along the Bellarine Peninsula and Surf Coast, large areas dominated by primary production, the coastal populations of Port Fairy, Warrnambool and Portland in the South West, and isolated townships and localities stretching out to the South Australian border.

Traditional land owners are the Bunganditj, Coladjin, Djab Wurrung, Djargurd Wurrung, Gadubanud, Girai Wurrung, Gulidjan, Gunditjmara, Jardwadjali, Tjap Wurrung and Wathaurong (Wadawurrung) Aboriginal people.

In line with the catchment areas of the previous PCPs that now comprise the BSWPHU Community Partnerships team (described in Section 2.2.1), the LGAs in the Barwon South West Region can be classified into three subregions:

- **Barwon:** Colac-Otway, Golden Plains, Greater Geelong, Surf Coast, and Queenscliffe
- **South West:** Corangamite, Moyne and Warrnambool
- **Southern Grampians Glenelg:** Southern Grampians and Glenelg

3.2 Health services

3.2.1 Health workforce

In 2020 the Barwon South West region overall had 125.4 general practitioners (GPs) per 100,000 population, marginally higher than the state-wide rate of 123.6. There was wide variability across LGAs, with lowest rates in Golden Plains (49.5 GPs per 100,000 population) and Moyne (58.7 GPs per 100,000 population), and highest in Queenscliffe (432.2 GPs per 100,000 population) and Warrnambool (160.4 GPs per 100,000 population) [23].

Similarly, in the Barwon South West region overall there were 1727.5 nurses per 100,000 population, which was higher than the state-wide average of 1425.1 nurses per 100,000 population. This includes registered nurses, enrolled nurses, and midwives. The lowest rates were found in Golden Plains (276.3 nurses per 100,000 population) and Surf Coast (629.8 nurses per 100,000 population) and highest in Warrnambool (2732.7 nurses per 100,000) and Southern Grampians (2411.1 nurses per 100,000 population), due to these LGAs containing large regional health services [23].

3.2.2 Access to health services

Figure 3.2 depicts the locations of public health services and Aboriginal Community Controlled Health Organisations across the Barwon South West region.

In 2016, 19.5% of residents aged 45 and over in the Western Victoria PHN catchment (which includes, but is not limited to, the Barwon South West region) reported not being able to see a GP when they needed to in the past 12 months. This was slightly higher than the state-wide proportion of 18.4% [24]. Local observations have included challenges relating to affordability (e.g., low availability of bulk billing medical practices), availability (e.g., waiting lists, clinics not taking new patients) and accessibility (e.g., clinics not being able to recruit and/or retain GPs, and challenges accessing GPs in nearby towns due to lack of transport).

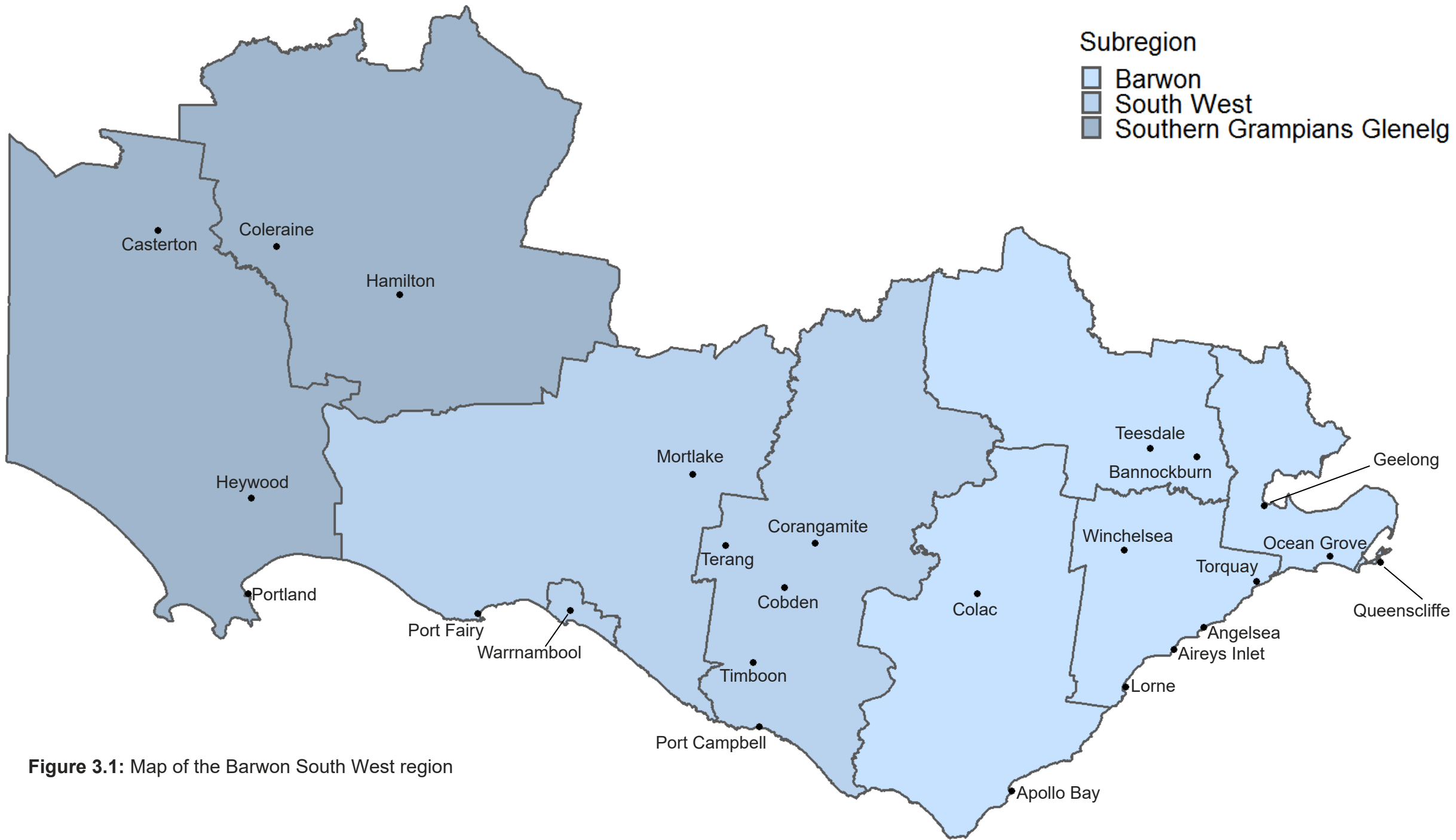
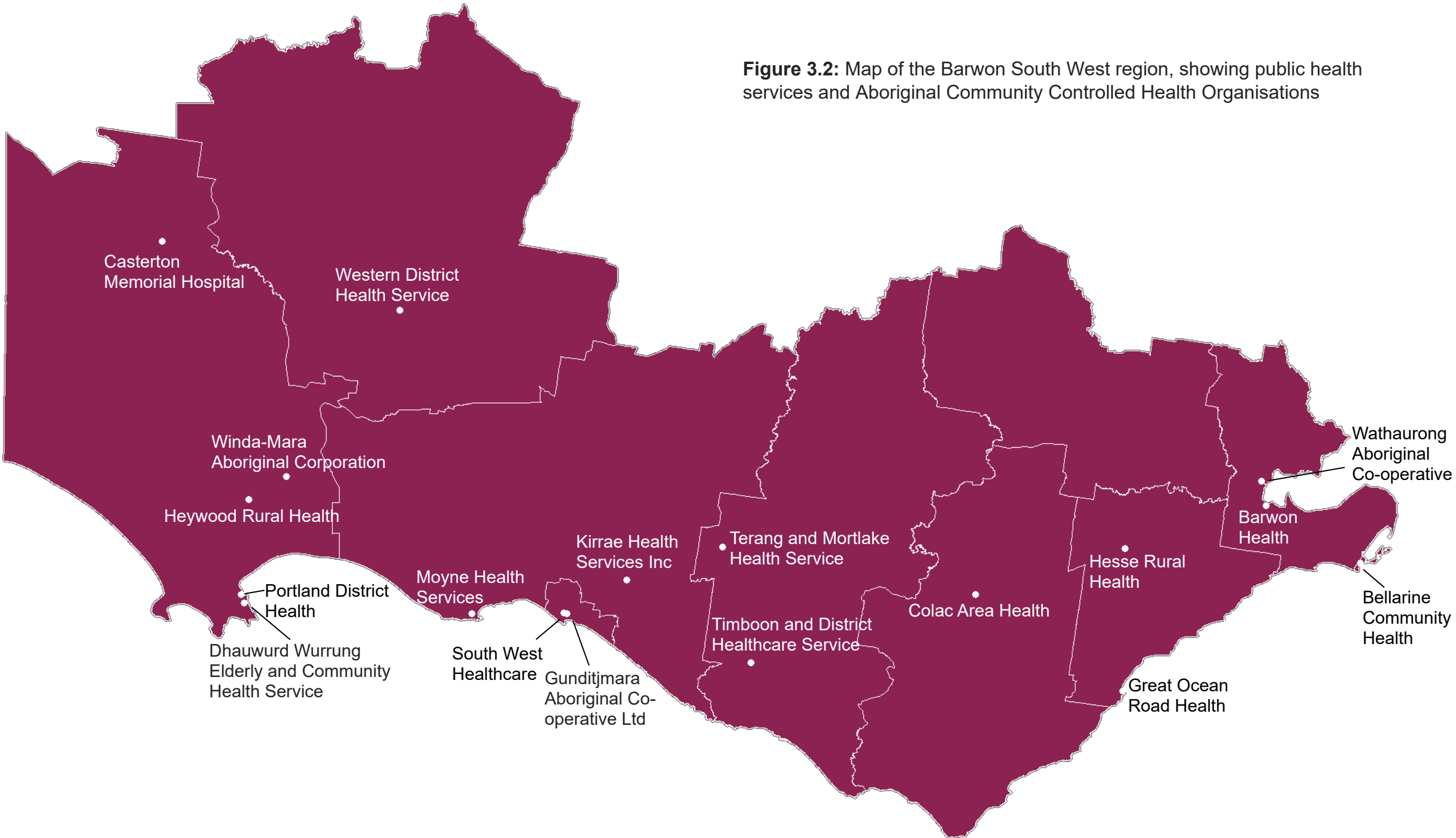


Figure 3.1: Map of the Barwon South West region

Figure 3.2: Map of the Barwon South West region, showing public health services and Aboriginal Community Controlled Health Organisations



3.3 Demographics

3.3.1 Population size and growth

In 2021, the Barwon South West region had a total population of 459,857 people, representing 7.1% of the total Victorian population [25]. The observed overall population of the region increased by 9.6% between 2016 and 2021; however, varied population growth estimates were observed across the subregions, with the majority of growth seen in the Barwon subregion. The population size in Barwon and South West subregions grew by 12.4% and 2.3%, respectively; whereas the Southern Grampians and Glenelg subregion recorded a decline of 0.5% [26].

It is projected that the region’s population will expand by 24.4% from 2021 to 2036, which is slightly lower than the 27.1% overall projected growth across the state [26]. Figure 3.3 depicts predicted population growth across the state, and the Barwon South West region.

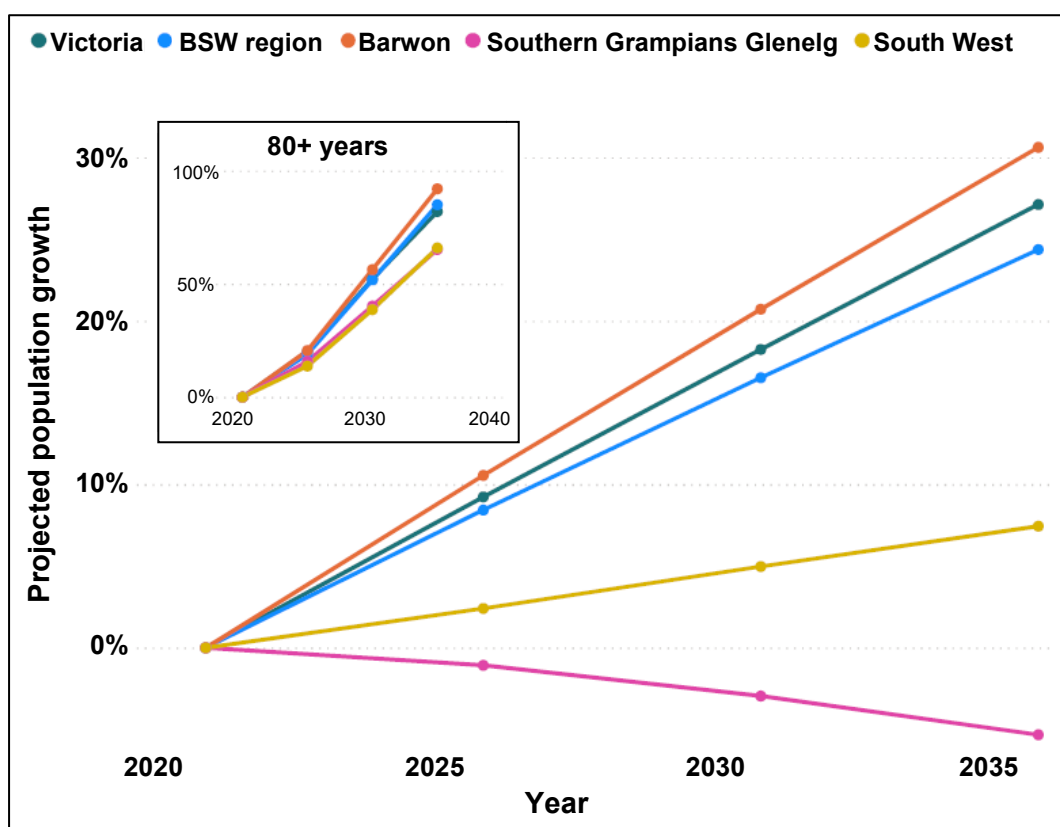


Figure 3.3: Projected population growth in Victoria, the Barwon South West region and its subregions, 2021–2036. BSW: Barwon South West. Source: Victoria in Future, 2019 [26].

Similar to trends observed between 2016 and 2021, the rate of projected growth from 2021-2036 varies significantly between subregions, with 30.6% growth predicted in Barwon, 7.4% growth in South West and a 5.3% decline in Southern Grampians Glenelg. By LGA, projected population growth is highest in Golden Plains (33.9%) and Greater Geelong (32.8%), and lowest in Southern Grampians (-6.7%) and Corangamite (-5.8%).

Of note, the highest projected growth across the region (including in every LGA) is in the 80+ year age group. Overall, there is a projected population growth in this age group of 85%, with highest growth projected in the Barwon subregion (92%). By LGA, highest projected growth in the 80+ year age group is in Golden Plains (188%) Surf Coast (149%) and Greater Geelong (85.4%). There is also significant population growth projected in the 60–79 year age group with 28.9% growth projected across the region [26].

3.3.2 Age and sex profiles

Females comprise 51% of the Barwon South West region population, which is consistent across subregions and in line with the overall Victorian population [25]. Population pyramids for the Barwon South West region and Victoria based on 2021 Census data are displayed in Figure 3.4 (over page).

Based on 2021 Census data, the median age in the Barwon South West region is 41 years, which is slightly higher than the state-wide median age of 38 years. The median age is highest in the Southern Grampians Glenelg subregion (48 years), followed by South West (44 years), and lowest in the Barwon subregion (40 years) [25].

Compared to the overall Victorian population, the Barwon South West region has a lower proportion of individuals aged 30–39 years (12.7% vs 15.2% state-wide), and higher proportions of individuals aged 50–69 years (25.4% vs 22.7%) and 70 years and over (14.5% vs 11.8%) [25]. The age structure is therefore relatively stationary, indicative of fairly low birth rates and/or migration to the region, maintaining the population within each age group relatively constant.

There is some variability in age structure across the region. Most notably, both the South West and Southern Grampians Glenelg subregions have higher proportions of people aged 50 years and over (43% in SW and 48% in SGG) compared to the Victorian population (35%) and the overall Barwon South West region (40%) [25].

3.4 Priority populations

3.4.1 First Nations people

In the Barwon South West region, based on 2021 data, 1.4% of the population identify as Aboriginal and/or Torres Strait Islander. This proportion is higher than the overall Victorian population (1.0%), but significantly lower than in the overall Australian population (3.2%) [23].

Based on 2021 Census data, the First Nations population age structure in the Barwon South West region (see Figure 3.5 over page) shows a wider base of younger age groups with tapering towards older age groups, pointing to higher fertility rates and known lower life expectancies among Aboriginal and Torres Strait Islander Australians.

Among the First Nations people living in the Barwon South West region, around two thirds (67.3%) live in the Barwon subregion, while 18.2% and 14.5% live in the South West and Southern Grampians Glenelg, respectively. The LGAs with the highest proportions of Aboriginal and Torres Strait Islander people are Glenelg (2.9%), Southern Grampians (2.3%) and Warrnambool (2.0%). LGAs with the lowest proportions are Queenscliffe (0.3%), Surf Coast (0.6%) and Corangamite (1.2%) [23].

3.4.2 Culturally and linguistically diverse (CALD) groups

As per the 2021 Census, 8.6% of people living in the Barwon South West region were born in non-English speaking countries. This was significantly lower than the proportion in Victoria as a whole (24.1%). The proportion of people born in non-English speaking countries was highest in the Barwon subregion (10%), followed by South West (4.2%) and Southern Grampians Glenelg (3.7%). By local government area, Greater Geelong (11.7%) and Colac-Otway (6.2%) had the highest proportion of people born in non-English speaking countries, while Corangamite (3.1%) and Southern Grampians (3.3%) had the lowest [23].

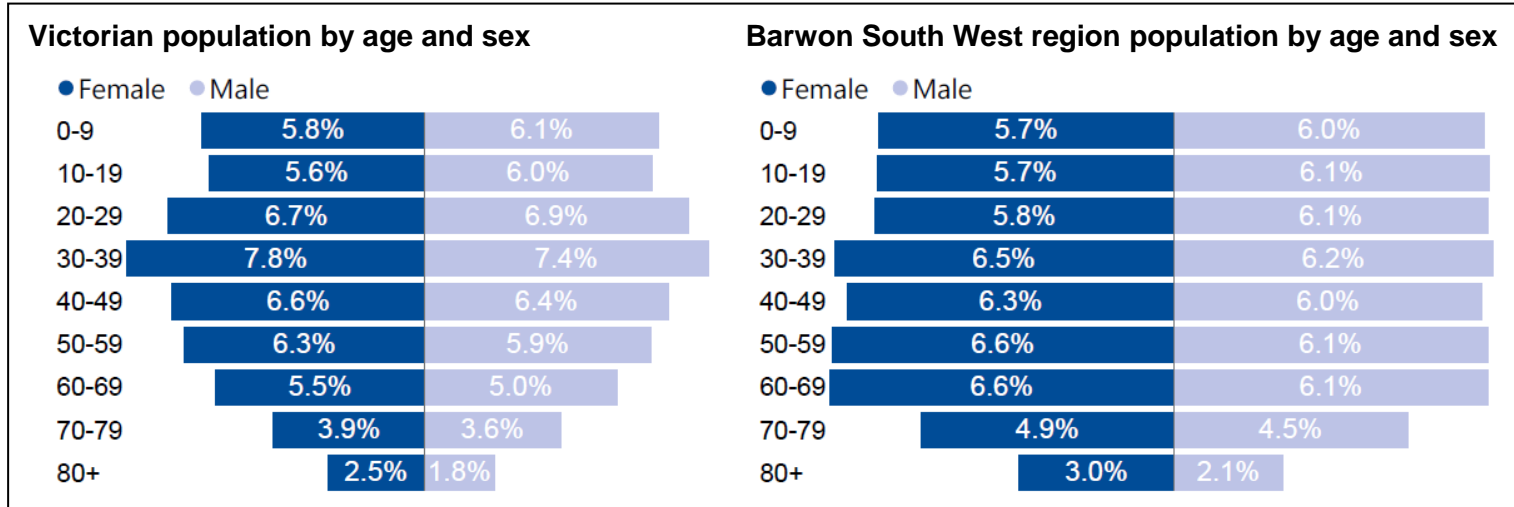


Figure 3.4: Population pyramids for Victoria and the Barwon South West region, 2021.

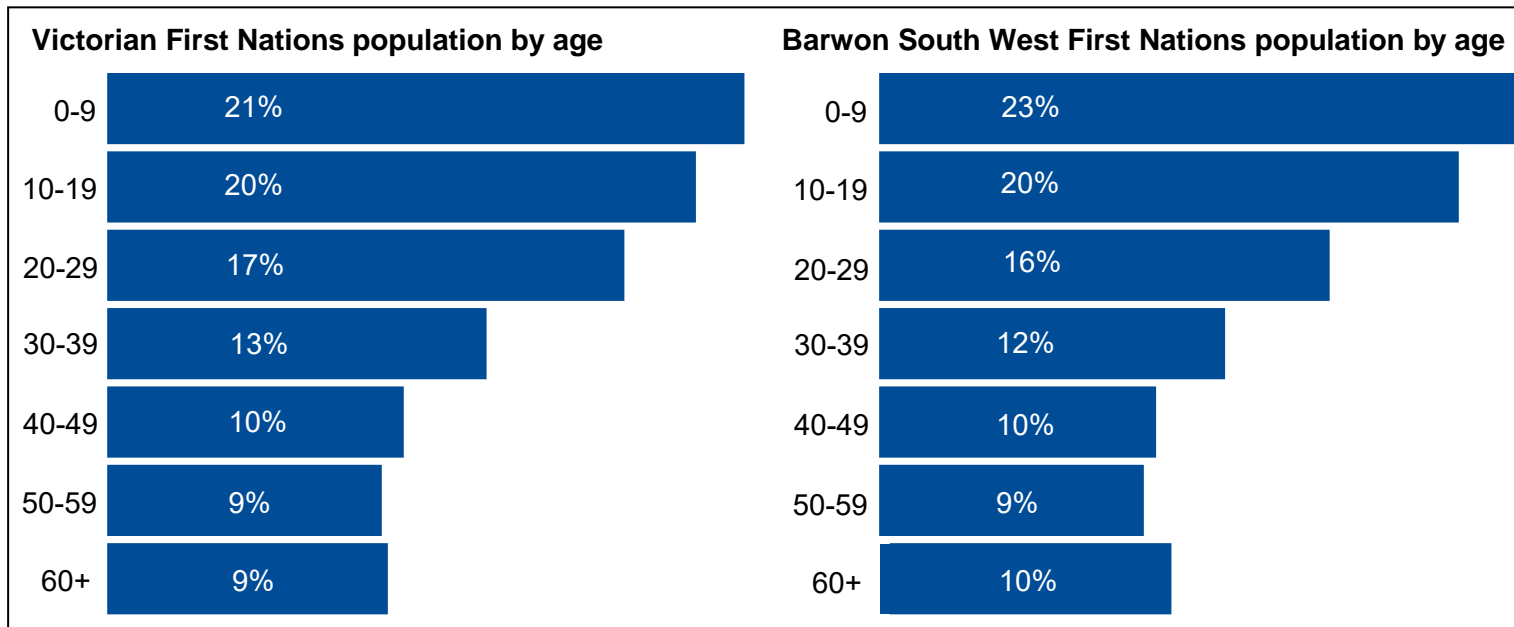


Figure 3.5: Population pyramids for First Nations people in Victoria and the Barwon South West region, 2021.

Across the Barwon South West region, people who were born in non-English speaking countries and have lived in Australia for less than 5 years make up 1.7% of the population, compared to 4.1% across Victoria. This is a key priority cohort that may require targeted public health messaging including information on available health services. Of those who have lived in Australia for less than 5 years, 86% reside in the Barwon subregion; 11% reside in South West and 3% in Southern Grampians Glenelg [23]. Trends by LGA are similar to those for the overall proportion of people born in non-English speaking countries across the region.

Key language groups in the Barwon South West region include Mandarin, Italian, Punjabi, Croatian and Greek. These are mirrored in the Barwon subregion, while others such as Filipino, Malayalam, Vietnamese, Sinhalese, Tagalog and Nepali are key language groups in the South West and Southern Grampians Glenelg [25].

3.4.3 Maritime arrivals (refugees)

Greater Geelong receives 2% (100–130 people) of Victoria’s maritime arrival population each quarter. This proportion has been consistent since May 2019, which translates to over 1300 refugees in Greater Geelong over a two-year period [27]. Unfortunately, limited data availability precludes us from identifying these figures for other LGAs.

3.4.4 LGBTIQ+ community

The 2017 Victorian Population Health Survey (VPHS) reported varying proportions of survey respondents (aged 18+ years) identifying as LGBTIQ in Barwon South West LGAs, from 6.6% in Colac-Otway and 5.9% in Surf Coast to 1.5% in Southern Grampians. Colac-Otway and Surf Coast LGAs were the only LGAs where the LGBTIQ proportions of the LGA population were higher than the overall Victorian proportion (5.7%) [28].

3.4.5 Persons with profound and severe disability

In the 2021 Census, 6.5% of the Barwon South West population reported living with a profound and severe disability, similar to the state-wide Victorian proportion of 6.1%. Among the subregions, Southern Grampians Glenelg had the highest proportion of people living with profound and severe disability (7.7%), followed by South West (6.6%) and Barwon (6.4%). By LGA, the highest proportions of people living with profound and severe disability were in Glenelg (8.2%) and Corangamite (7.3%); the lowest were in Moyne (5.3%) and Golden Plains (5.5%) [23].

3.5 Social determinants of health

Social Determinants of Health

The World Health Organization describes the social determinants of health as “the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life” [29].

They are the non-medical factors that influence health outcomes and are responsible for the majority of health inequities – the unfair and avoidable differences in health status seen within and between populations.

Social determinants of health include, but are not limited to: income, education, employment and job security, working conditions, housing, environmental conditions, food security, and social inclusion.

3.5.1 Index of relative social disadvantage (IRSD)

The IRSD index is calculated by geographical area (at a number of different levels) using census data on income, education, occupation, housing and other socio-economic variables [30]. Figure 3.6 depicts the 2021 population distribution profiles for relative disadvantage across Barwon South West subregions.

By LGA, the highest IRSD index in the Barwon South West region in 2021 was in Surf Coast (1086) followed by Queenscliffe (1082), indicating lower overall levels of disadvantage in these LGAs. On the other hand, the lowest IRSD index was in Glenelg (952) and Colac-Otway (973), indicating relatively higher overall levels of disadvantage [25].

Disaggregated to Statistical Area (SA) 1 level, in 2021 7.0% of the Barwon South West region resided in an area that sits within the lowest IRSD index decile (threshold level 850), compared to 5.8% state-wide. The proportion of the population residing in areas within the lowest decile was highest in the Barwon subregion (7.8%), followed by Southern Grampians Glenelg (6.8%) and lowest in the South West subregion (3.5%) [25].

Norlane, Corio-Lovely Banks and Newcomb-Moolap in Greater Geelong as well as Portland in Glenelg and Colac in Colac-Otway ranked among the top 10% most disadvantaged areas (Statistical Area (SA) 2 level) in Victoria in 2021 [25].

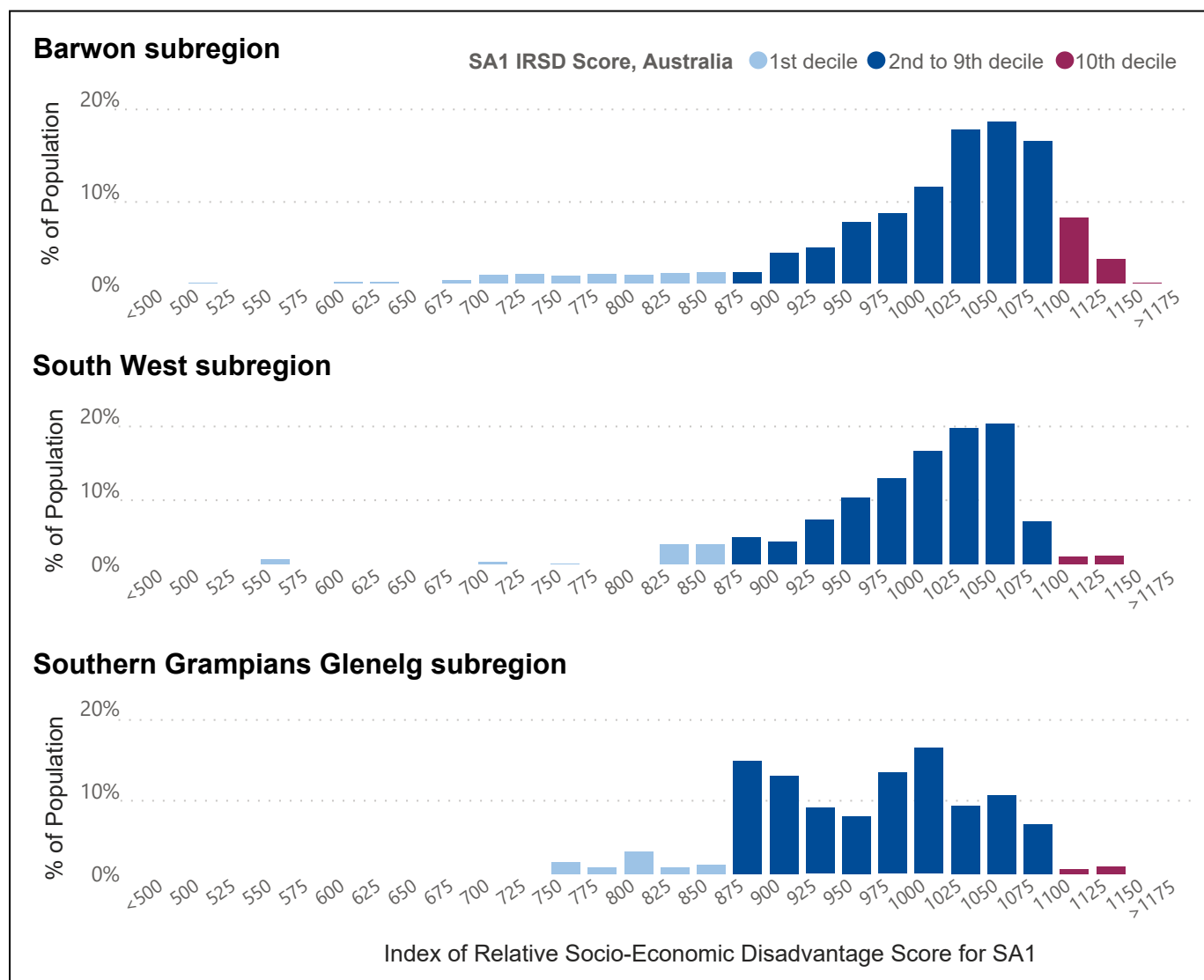


Figure 3.6: Population distribution profiles for relative disadvantage in the Barwon South West region, by subregion. Source: Australian Bureau of Statistics, 2021 Census [25].

3.5.2 Income, employment, education, housing and transport

Table 3.1 details indicators relating to income, employment, education, housing and transport across the Barwon South West region, as well as state-wide. It is important to note that these data were collected in 2021, and as such are influenced by the acute impacts of the COVID-19 pandemic.

	Proportion of the population				
	Victoria	BSW region	Barwon subregion	SGG subregion	SW subregion
Income					
Low-income households (bottom 40% of income distribution)	39.5%	43.3%	41.6%	52.3%	46.8%
Households in dwellings receiving rent assistance from the Australian Government	18.1%	19.1%	20.1%	14.9%	16.9%
Employment					
Labour force participation (aged 15 years and over)	66.8%	63.7%	63.1%	62.6%	67.4%
Unemployment (% of labour force)	6.2%	3.8%	3.8%	4.3%	3.4%
Education					
Full-time participation in secondary school at age 16	88.5%	85.9%	87.1%	79.3%	83.0%
Completion of year 12 or equivalent	61.8%	52.2%	55.0%	38.8%	45.1%
Did not go to school	1.3%	0.6%	0.6%	0.4%	0.4%
Housing					
Persons living in social housing	2.1%	2.4%	2.3%	2.9%	2.8%
Persons living in crowded dwellings	6.1%	3.8%	3.8%	3.6%	3.7%
Households experiencing financial stress from mortgage or rent (proportion of low-income households)	27.8%	22.0%	23.9%	14.1%	18.8%
Transport					
Dwellings with no motor vehicle	7.5%	4.6%	4.6%	4.7%	4.4%

Table 3.1: Income, employment, education, housing and transport indicators in Victoria, Barwon South West region, and subregions, 2021. BSW = Barwon South West; SGG = Southern Grampians Glenelg; SW = South West. Sources: Social Health Atlas of Australia, PHIDU, Torrens University Australia; 2021 Census [23, 25].

Across the region, many indicators were suggestive of greater disadvantage in LGAs including Glenelg and Corangamite, and greater advantage in LGAs including Queenscliffe and Surf Coast. For example, unemployment rates were highest in Glenelg (4.7%) and Greater Geelong (4.1%); and lowest in Surf Coast (2.6%) and Queenscliffe (2.9%). More than half of households Glenelg (53.4%) and Corangamite (51.8%) were low-income households, compared to less than 40% of households in Queenscliffe (39.4%) and Golden Plains (39.7%). On the other hand, around a quarter of low-income households were experiencing financial stress from mortgage or rent in Greater Geelong (25.3%) and Warrnambool (23.4%), compared to 13.5% in both Corangamite and Southern Grampians [23].

3.6 Health and wellbeing outcomes

3.6.1 Life expectancy

Median age at death in 2016–2020 ranged from 72 to 85 years in males, 80 to 86 years in females, and 76 to 85 years overall, across LGAs in the Barwon South West region. Overall median age at death was lowest in Golden Plains (76 years), Moyne (81 years) and Glenelg (81 years), and highest in Queenscliffe (85 years), and Greater Geelong, Southern Grampians, Surf Coast and Warrnambool (83 years). Furthermore, there was significant variability across areas when further disaggregated to SA2 level, with lowest median age at death in Golden Plains (73 years) and Corio/Lovely Banks/Norlane (75 years) and highest in Grovedale (86 years) and Belmont/Geelong, Colac, Leopold, Lorne/Anglesea/Torquay and Ocean Grove/Barwon Heads/Armstrong Creek (84 years) [31].

Data on life expectancy at birth is available at SA4 level. For the Barwon South West region, life expectancy data are available for two areas at this level: Geelong, and Warrnambool & South West.

In Geelong, life expectancy at birth in 2019–2021 was 82.5 years overall, 80.1 years for males and 84.4 years for females. These represented slight declines from peaks of 83.1 years overall and 81.3 years for males in 2016–2018, and 85.0 years for females in 2017–2019 [32].

In Warrnambool and South West, life expectancy at birth in 2019–2021 was slightly lower at 81.8 years overall, 79.7 years for males and 83.9 years for females. These similarly represented slight declines from previous peaks in 2016–2018 of 82.7 years overall, 80.5 years for males, and 84.9 years for females [32].

3.6.2 Premature death

Premature death is defined as a death of an individual before the age of 75 years. There were declines in premature death rates between 2010 and 2017 in the Barwon South West region and state-wide for deaths due to any cause; deaths due to cancer, cardiovascular disease (CVD), diabetes and chronic respiratory conditions; and deaths due to cancer only [33].

However, there was a significantly higher rate of premature death due to any cause in the Barwon South West region (215.4 per 100,000 population) compared to Victoria (191.9 per 100,000 population) during this time period. Similar trends were observed in premature deaths due to cancer, cardiovascular disease, diabetes or chronic respiratory conditions, and deaths due to cancer only, with some narrowing of the gap over time. Premature death rates followed similar trends in decline compared to the state-wide rates, despite rates in the Barwon South West region remaining higher throughout the period for most causes [33].

With relatively few premature deaths, small numbers within LGA and temporal breakdowns, and the consequent uncertainty/lack of precision in the estimates, it is not possible to confidently comment further on regional differences over time.

3.6.3 Chronic diseases

In 2021, almost one-third (31.8%) of the Barwon South West region's population aged 15 years and over reported having one or more long-term health conditions. This is higher than the overall proportion across the state of Victoria (27.4%). There was significant variability in this measure across LGAs, ranging from 27.3% of the population in Queenscliffe and 29.5% in Surf Coast, to 35.4% in Golden Plains and 35.1% in Greater Geelong [23].

Figure 3.7 (over page) depicts the age-standardised rates of major non-communicable diseases in the Barwon South West region in 2021. Table 3.2 (over page) summarises age-standardised rates of chronic diseases in the Barwon South West region and subregions in 2021. Of note is the higher rate of self-reported mental health conditions in the Barwon South West region (10.4%) compared to state-wide (8.7%). Across LGAs, this was highest in Greater Geelong (11.2%), Glenelg (10.5%) and Warrnambool (10.4%) [23].

Rates of other chronic conditions are broadly similar between the Barwon South West Region and Victoria, and across subregions; however, some variability occurs across LGAs. For example, self-reported rates of diabetes in 2021 were highest in Glenelg (4.7%) and Greater Geelong (4.6%) and lowest in Queenscliffe (2.3%) and Warrnambool (2.7%) [23].

3.6.4 Modifiable risk factors

Important modifiable risk factors for chronic disease include overweight and obesity, physical activity, smoking, alcohol and nutrition. Here we provide a snapshot of modifiable risk factors in the Barwon South West region based on the most recent available data, while trends over time and differences across the region are discussed in further detail in the subsequent Chapter. Table 3.2 provides a summary of key modifiable risk factors in the Barwon South West region and subregions, based on most recently available data, with key points highlighted below.

Age-standardised rates of overweight and obesity among adults, based on self-reported height and weight, were higher in 2017 in the Barwon South West region (52.8%) compared to Victoria (50.8%), with variability across LGAs. Overweight and obesity rates were highest in Corangamite (63.2%) and Surf Coast (58.7%) and lowest in Queenscliffe (44.3%) and Greater Geelong (49.9%) [33].

Despite having a higher overall rate of overweight and obesity compared to the state-wide rate, in 2017 the proportion of adults undertaking sufficient physical activity was higher in the Barwon South West region (53.9%) compared to state-wide (51.1%) [33]. Undertaking sufficient physical activity is defined as self-reported physical activity levels that meet the requirements in *2014 Australia's Physical Activity and Sedentary Behaviour Guidelines*.

The proportion of adults consuming alcohol at lifetime risk of harm (defined as self-reported alcohol consumption at frequency and quantities that do not meet the *2009 Australian Guidelines to Reduce Health Risks from Drinking Alcohol*) in 2017 was higher in the Barwon South West region (65.7%) compared to Victoria (59.5%) [33]. Similarly, the proportion of adults who self-reported their current smoking status as "smoking daily" in 2017 was higher in the Barwon South West region (14.4%) than state-wide (12%) [33].

Each of the indicators discussed above displayed variability across LGAs. Physical activity was lowest in Warrnambool (48.2%) and Colac-Otway (49.4%). Alcohol intake was highest in Queenscliffe (80.5%) and Surf Coast (74.1%), and daily smoking was highest in Greater Geelong (16.6%) and Warrnambool (15.8%) [33].²⁵

The burden of chronic disease and modifiable risk factors across the Barwon South West region, including trends over time, was considered and analysed in detail to inform the identification of health priorities for the catchment, as detailed in the subsequent Chapter.

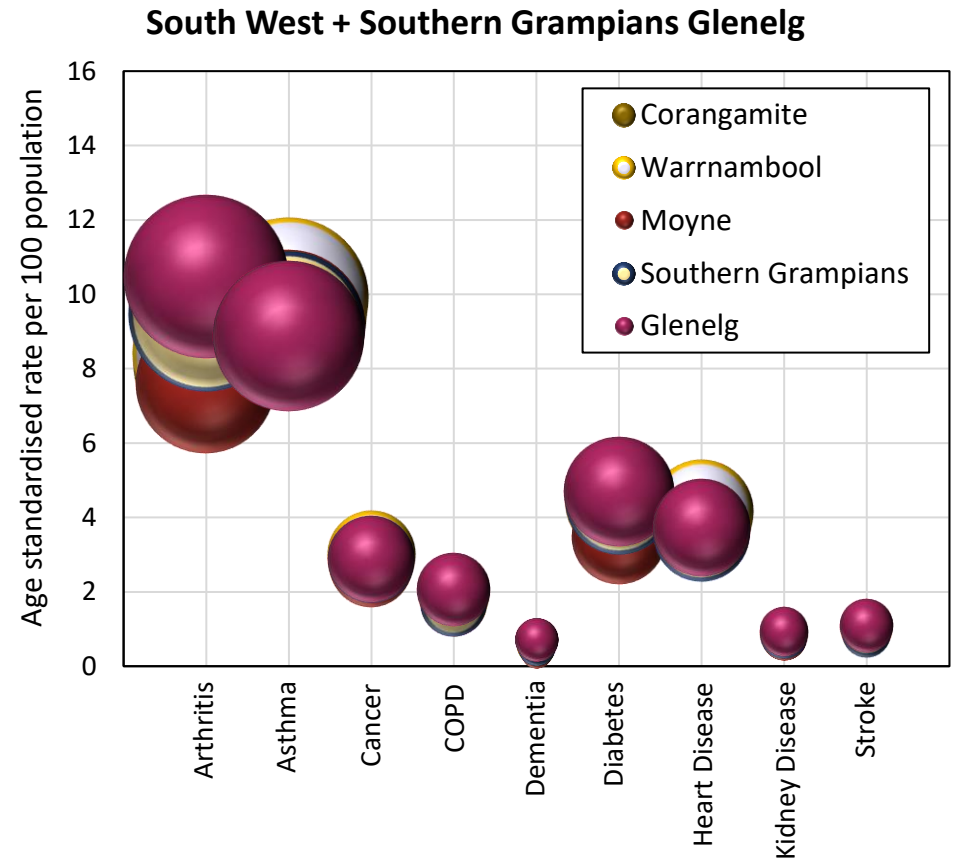
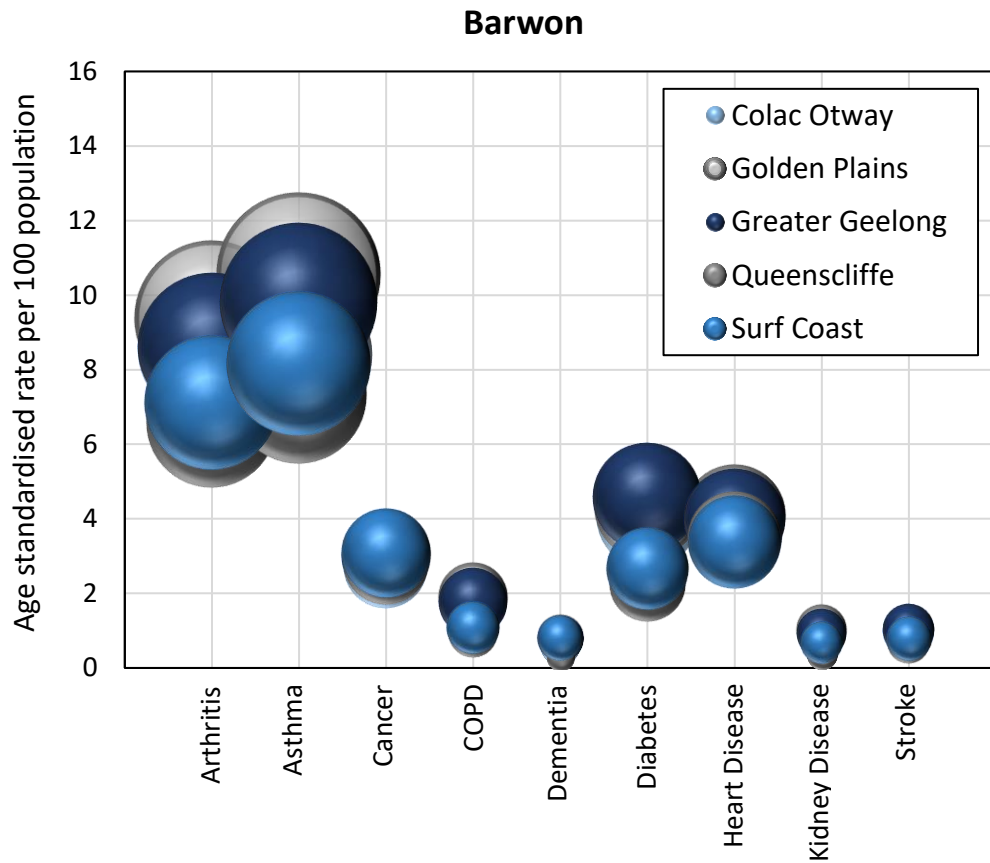


Figure 3.7: Major non-communicable diseases in the Barwon South West region, by subregions (Barwon and South West/Southern Grampians Glenelg) and local government areas. Source: Social Health Atlas of Australia, PHIDU, Torrens University Australia [23].

	Age standardised prevalence (%)				
	Victoria	BSW region	Barwon subregion	SGG subregion	SW subregion
Chronic health conditions (self-reported; 2021*)					
Heart disease (including heart attack or angina)	3.8	3.9	3.9	3.6	4.0
Diabetes (excluding gestational diabetes)	4.7	4.3	4.3	4.6	4.2
Kidney disease	0.9	0.9	0.9	0.9	0.8
Lung disease (including COPD and emphysema)	1.5	1.7	1.7	1.9	1.8
Stroke	0.9	1.0	1.0	1.0	1.0
Mental health condition (including depression and anxiety)	8.7	10.4	10.6	10.2	9.8
Risk factors[†] (over 18 years of age; self-reported; data from 2017–2018 except where noted)					
Overweight or obese	50.8	52.8	51.7	58.0	63.0
Daily consumption of sugar-sweetened beverages	10.1	9.8	9.2	9.9	11.0
Consume sufficient fruit and vegetables	3.6	4.6	4.9	3.5	3.7
Undertake sufficient physical activity	50.9	53.9	54.4	58.8	49.6
Smoke at least daily (data from 2020)	12	14.4	14.8	11.6	14.4
Consume alcohol at lifetime risk of harm	59.5	65.7	66.2	61.2	65.9
High or very high psychological distress	23.5	24.2	25.2	17.2	18.8
Childhood health indicators and risk factors (data from 2017–2018)					
Overweight (but not obese), age 2–17 years [‡]	16.4	17.4	17.6	16.7	16.3
Obese, age 2–17 years [‡]	8.0	9.8	9.5	10.7	10.7
Infants exclusively breastfed to 3 months of age [†]	51.1	57.5	57.4	49.5	63.0
Potentially preventable dental hospitalisations [†]	21.4	14.9	NA	NA	NA

Table 3.2: Rates of chronic diseases and key risk factors in Victoria, the Barwon South West region and each subregion. BSW: Barwon South West; COPD” chronic obstructive pulmonary disease; NA: no data available; SGG: Southern Grampians Glenelg; SW: South West. Sources: * 2021 Census [25]; † VPHWOF Dashboard [33]. ‡ Modelled estimates from Social Health Atlas of Australia, PHIDU, Torrens University Australia [23].

Chapter 4: Health Priorities

This Chapter identifies the health priorities for the Catchment Plan. The health priorities were determined by completing a needs analysis of the Barwon South West region, mapping existing prevention programs, conducting consultations with our prevention and community partners, and investigating the burden of non-communicable disease and their modifiable risk factors in Australia, Victoria and the Barwon South West region.

4.1 Engagement

Mapping of prevention activities across the Barwon South West region commenced with a literature review of Municipal Public Health and Wellbeing Plans and available health promotion plans. We wish to acknowledge from our partners that not all documents are available for public access.

Structured interviews were undertaken with identified prevention stakeholders, including health services, local councils, Women's Health and Wellbeing Barwon South West, Aboriginal Community Controlled Health Organisations, not-for-profit organisations, and other private and community organisations. More information in relation to the consultation process is provided in Section 2.2.4.

Appendix 2 details a list of organisations with whom consultations were undertaken, and an example of the semi-structured interview template is available in Appendix 3. Existing health promotion and prevention programs and initiatives in the Barwon South West region are mapped in Appendix 4; however, this is not an exhaustive list.

The identified health priorities align with the *Victorian Public Health and Wellbeing Plan 2019–2023* and the *Victorian Cancer Plan 2020–2024* [3, 4]. Further information about alignment with municipal, state and national plans is provided in sections 2.2.1 and 2.2.2.

Health Priorities identified for the Barwon South West region:

- Increasing healthy eating
- Increasing active living
- Reducing tobacco and e-cigarette related harm
- Reducing harm from alcohol and other drugs
- Increasing the uptake of cancer screening
- Improving mental health and wellbeing
- Prevention of violence, family violence and promotion of gender equity
- Tackling climate change and its impact on health and strengthening community resilience

4.2 Burden of disease and risk factors

Health is determined and influenced by a range of genetic, social behavioural, economic, environmental, political and cultural factors that influence behaviours and contribute to the health and wellbeing of individuals and communities.

4.2.1 Burden of disease

Burden of disease measures the difference between the actual health of a population against their ideal health [34]. It is estimated using a number of indicators including:

- Years of Life Lost (YLL): measures the fatal burden of disease in terms of number of years of life lost, defined as dying before the ideal life span.
- Years Lived with Disability (YLD): measures the non-fatal burden of disease in terms of number of years spent in less than full health.
- Disability Adjusted Life Years (DALY): Summary measure of YLL and YLD that provides an overall estimate of disease burden. One DALY is one year of healthy life lost due to disease and injury.
- Attributable burden: measures the disease burden due to exposure to a given risk factor. Represents the amount of disease that could be avoided if the risk factor was removed.

The World Health Organization estimates that non-communicable diseases (NCDs) are responsible for 74% of all deaths worldwide [35]. NCDs pose a significant burden of disease in Australia, and there are inequities in disease distribution, illustrated by higher rates of chronic disease and lower life expectancies among Aboriginal and Torres Strait Islander people and people with higher socioeconomic disadvantage [36, 37].

Figure 4.1 (over page) illustrates that dementia, coronary heart disease, lung cancer and cerebrovascular disease are leading causes of death in both men and women [38]. Figure 4.2 (over page) shows the leading causes of death by age group, illustrating that coronary heart disease, lung cancer, dementia and suicide are prominent causes of death in the Australian population, with varying impacts across different age groups [38].

Figure 4.3 (over page) depicts causes of fatal disease burden in the Barwon South West region. Cancers, circulatory conditions (e.g., coronary heart disease), external causes (e.g., injuries/accidents) and respiratory disease present the greatest fatal disease burden.

In addition to premature death, NCDs are responsible for a significant non-fatal disease burden. NCDs significantly impact individuals, as well as their families and support networks, through disability and reduced quality of life and productivity [39]. People with NCDs report higher rates of psychological distress, have lower participation in the labour force, and may require complex interventions and treatments to manage their health conditions [39]. Treatment costs, as well as loss of income due to poor health, can also cause significant financial strain on individuals and families, and businesses can be impacted through reduced productivity. NCDs place significant demands on the health care system through costs of disease management, with treatment of chronic diseases consuming more than a third of health spending [40]. In 2019–20, \$12.7 billion was spent on cardiovascular disease and \$12.1 billion on cancer and other neoplasms [41].

As populations age, so too do the rates of NCDs and their associated burden on individuals, the community and the health care system [42]. The population projections described in Chapter 3 depict an ageing population for the Barwon South West region, making NCDs an increasingly important problem to address.

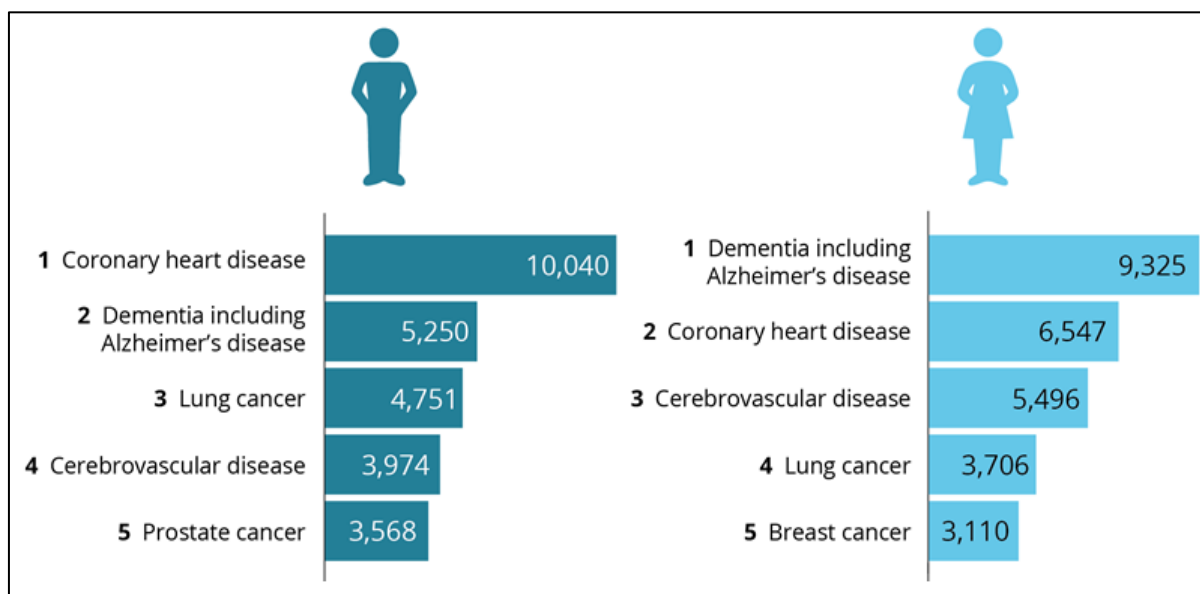


Figure 4.1: Leading underlying causes of death in Australia, by sex, 2020. Source: Australian Institute of Health and Welfare [38].

	Rank				
	1st	2nd	3rd	4th	5th
Under 1 year	Perinatal and congenital conditions	Other ill-defined causes	Sudden infant death syndrome	Accidental poisoning	Selected metabolic disorders
1–14 years	Land transport accidents	Perinatal and congenital conditions	Brain cancer	Other ill-defined causes	Suicide
15–24 years	Suicide	Land transport accidents	Accidental poisoning	Other ill-defined causes	Assault
25–44 years	Suicide	Accidental poisoning	Land transport accidents	Coronary heart disease	Other ill-defined causes
45–64 years	Coronary heart disease	Lung cancer	Suicide	Colorectal cancer	Breast cancer
65–74 years	Lung cancer	Coronary heart disease	COPD	Colorectal cancer	Cerebrovascular disease
75–84 years	Coronary heart disease	Dementia incl. Alzheimer's disease	Lung cancer	Cerebrovascular disease	COPD
85 years and over	Dementia incl. Alzheimer's disease	Coronary heart disease	Cerebrovascular disease	COPD	Heart failure

Figure 4.2: Leading underlying causes of death in Australia, by age group, 2018–2020. COPD: chronic obstructive pulmonary disease. Source: Australian Institute of Health and Welfare [38].

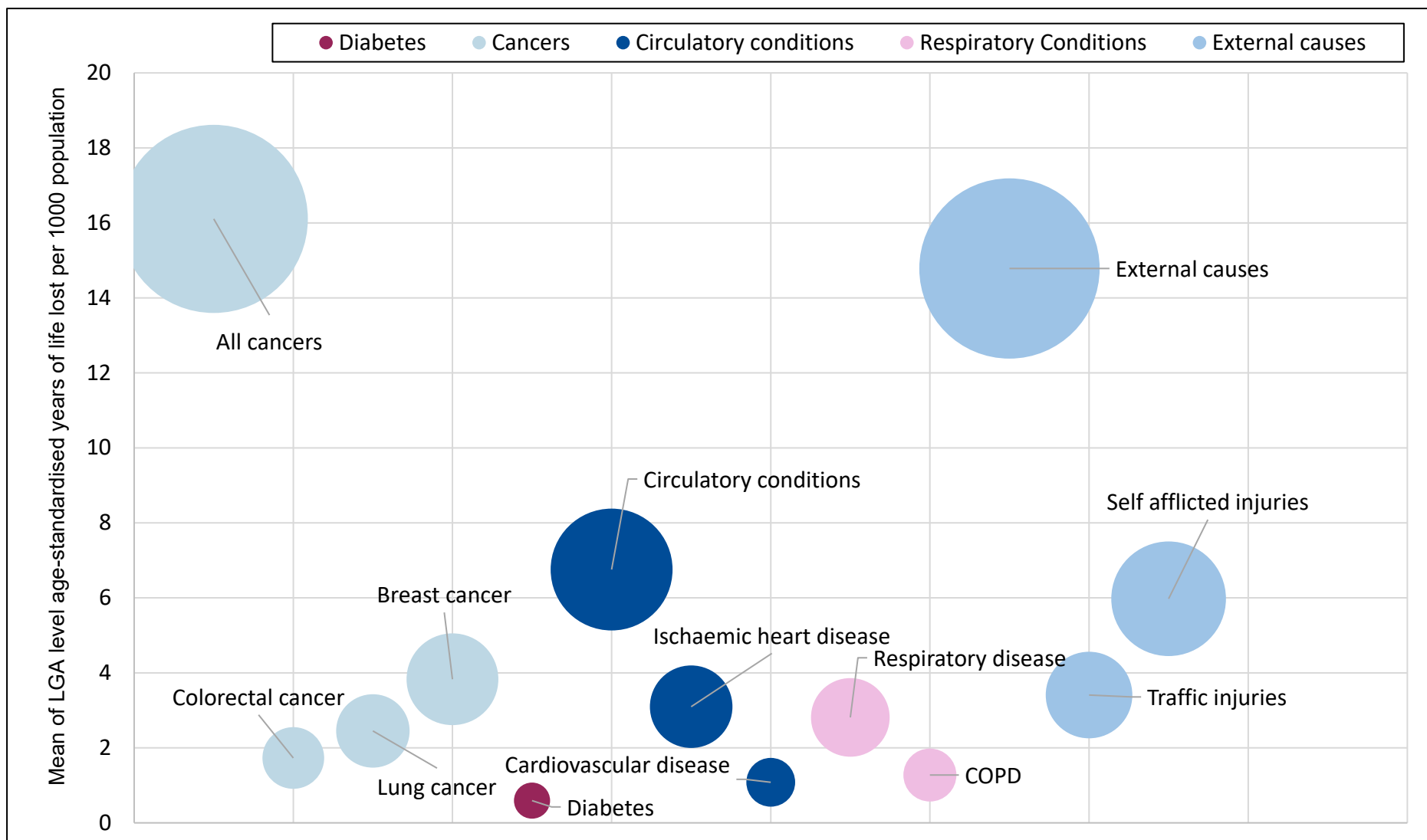


Figure 4.3: Age-standardised fatal burden of disease in the Barwon South West by condition, 2017. Larger circles indicate a higher burden of disease. COPD: chronic obstructive pulmonary disease. Source: Social Health Atlas of Australia, PHIDU, Torrens University Australia [23].

4.2.2 Risk factors

Within Australia, a large proportion of chronic disease is attributable to behavioural risk factors that are mostly preventable or modifiable. Tobacco use, overweight and obesity, dietary risk factors, physical inactivity, and harmful alcohol use are among the most common modifiable risk factors. These risk factors contribute to the development of chronic conditions including, but not limited to, cardiovascular and cerebrovascular disease, type 2 diabetes mellitus (T2DM), various types of cancer, and chronic respiratory disease [43].

In total, modifiable risk factors accounted for over a third (38%) of the fatal and non-fatal health burden in Australia in 2018 [43]. In 2018–19, the total health system expenditure attributable to potentially avoidable risk factors was \$24 billion [44].

A broader set of risk factors for NCDs encompasses environmental, infectious, genetic, physiological and idiopathic factors. These have been linked to conditions including cervical cancer and rheumatic heart disease (infectious origin), type 1 diabetes (infectious, environmental, and genetic origin), and asthma (environmental and genetic origin) [45].

Modifiable risk factors represent a key opportunity to improve health through prevention-driven interventions. It should be noted that similar to chronic diseases, the distribution of modifiable risk factors is inequitable across the population, with higher rates of many risk factors among Aboriginal and Torres Strait Islander people and people with greater socioeconomic disadvantage [36, 37]. Along with primary prevention activities, concurrent efforts to improve the social determinants of health (primordial prevention) and reduce inequities are essential to reduce the burden of disease.

Figure 4.4 (over page) shows the total burden of disease attributable to the top five modifiable or preventable risk factors in Australia: tobacco use, overweight/obesity, high blood pressure, dietary risk factors and alcohol use. The proportion of the total burden of different disease groups attributable to leading risk factors in Australia is shown in Figure 4.5 (over page). This Figure shows, for example, that 40% of cardiovascular disease is attributable to dietary risk factors, 41% of respiratory disease is due to tobacco smoking, and 45% of endocrine disease is due to overweight and obesity.

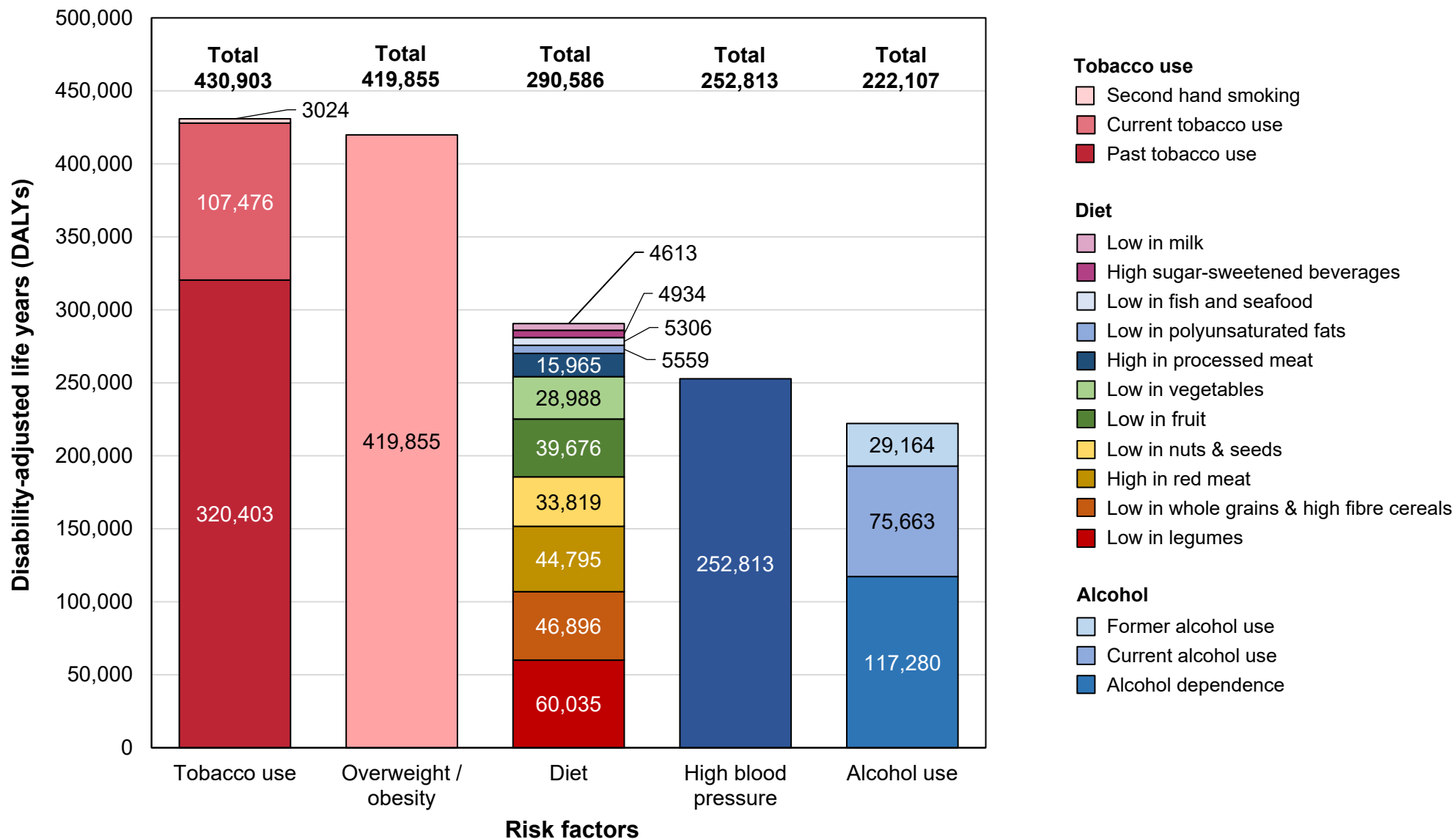


Figure 4.4: Disability-adjusted life years (DALYs) attributable to leading risk factors in Australia, 2018. Source: Australian Burden of Disease Study 2018 [38].

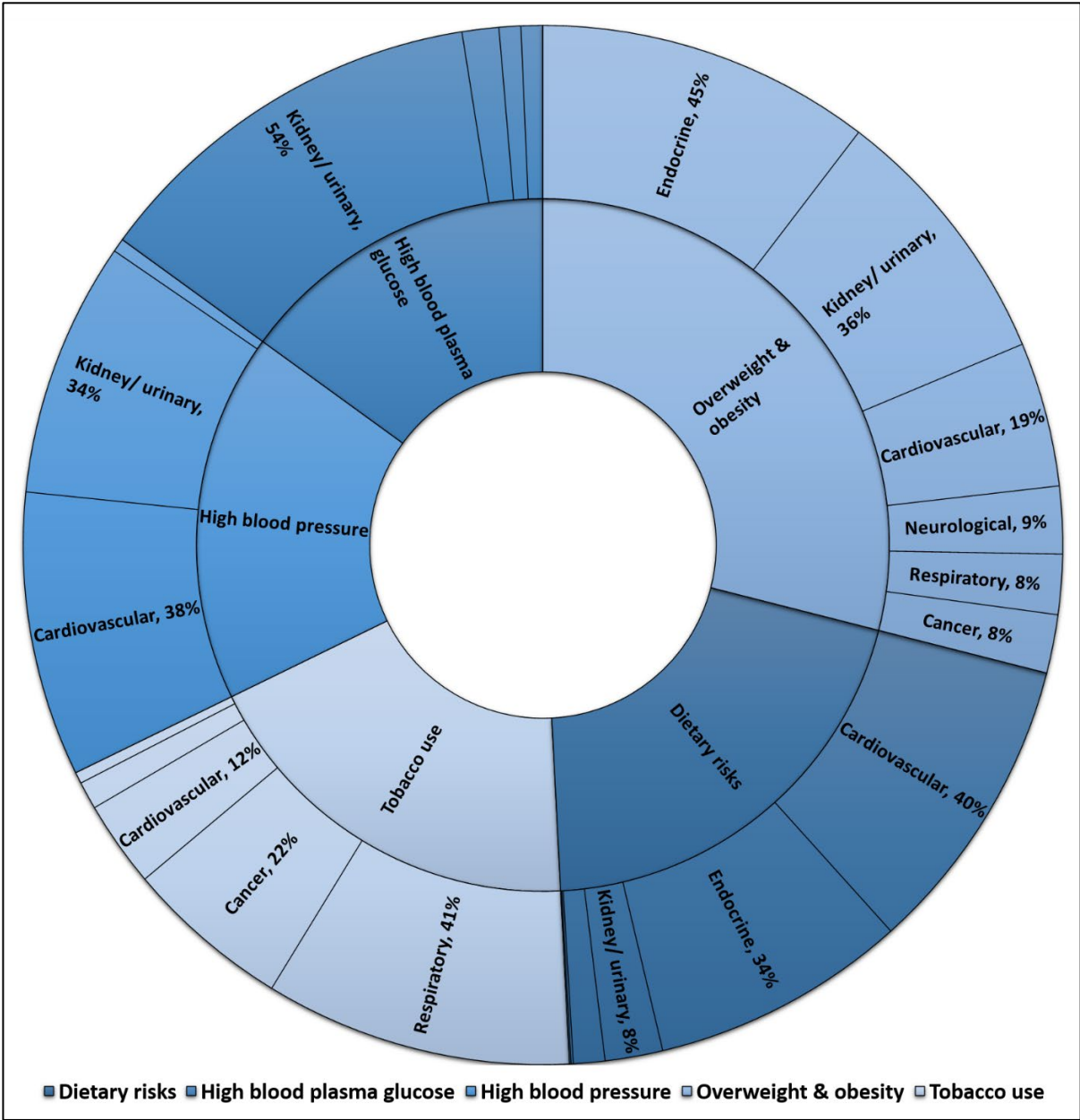


Figure 4.5: Proportion of total disease burden from different disease groups attributable to leading risk factors in Australia, 2015. Source: Australian Institute of Health and Welfare [46].

4.3 Health Priorities

In addition to addressing the wider social, environmental, cultural and commercial determinants of health, reducing modifiable risk factors is imperative for controlling and preventing NCDs and their associated disease burden. The following sections detail the identified health priorities for the Barwon South West Region, including discussion of the relevant modifiable risk factors within the region, associated burden of disease, and information captured from consultations with prevention partners across the region.

4.3.1 Increasing healthy eating

Unhealthy diet is a major contributor to chronic disease and premature death. Good nutrition is necessary to maintain a healthy weight, optimise mental and physical health, and protect against infections and chronic disease. Poor diet, including the excessive consumption of sugar-sweetened beverages (SSB), increases the risk of obesity, cardiovascular disease, T2DM, dental caries and some cancers, among other diseases [47]. In 2018, 5.4% of total disease burden in DALYs were attributable to dietary risks [43].

In 2015, more than half (50.4%) of the adult population of the Barwon South West region were overweight or obese (see Figure 4.6 below) which was slightly higher than the state average (49.2%). This troubling percentage has continued to trend upwards over time, with a spike in 2018 (56.9%) and 2019 (56.4%) followed by a slight decrease in 2020 (53.3%), remaining higher than the state average (51%) [33].

In 2017–2018, over one fifth (21.6%) of Victorian children aged 5–17 years were overweight or obese, a proportion which had changed minimally from 2011–2012 (23%) [33]. Modelled LGA-level estimates from 2017–2018 indicated relatively consistent proportions of children aged 2–17 years who were overweight or obese across the Barwon South West region, with highest rates in Colac-Otway (28.6%) and Surf Coast (28.3%) and lowest rates in Greater Geelong (26.5%) and Corangamite (26.7%). The modelled estimate for Victoria at the same time point was 24.3% [23].

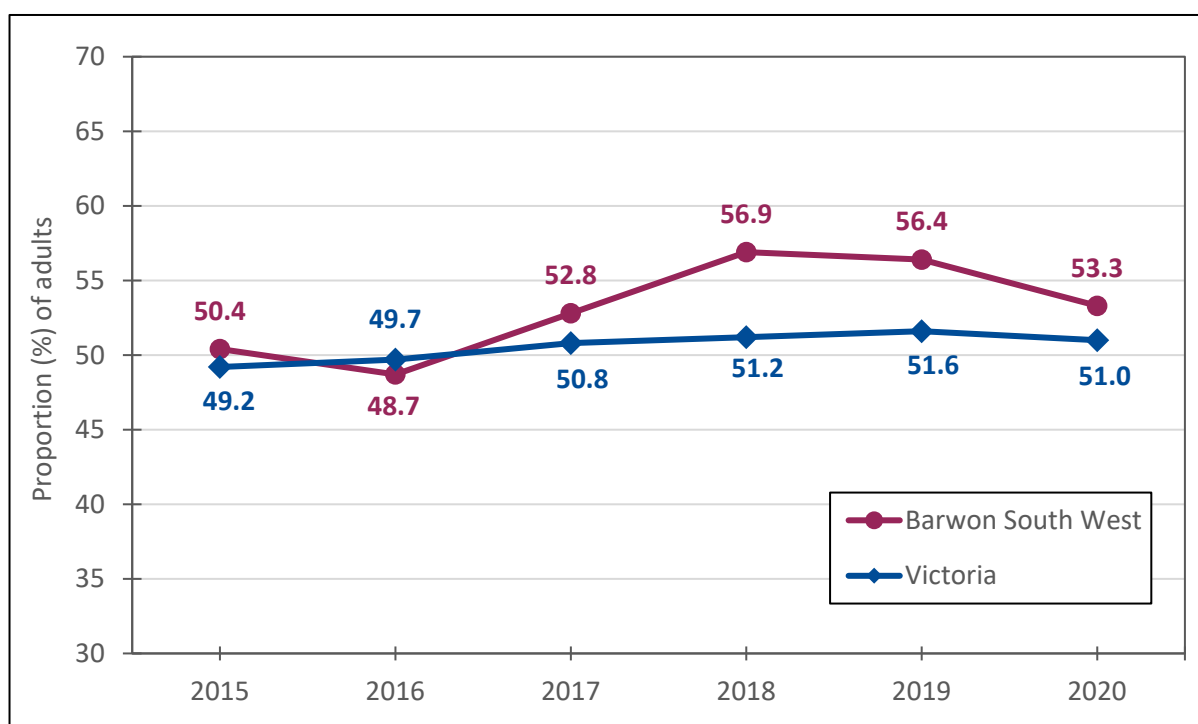


Figure 4.6: Proportion of adults who are overweight or obese, Barwon South West region and Victoria, 2015–2020. Source: VPHWOF Dashboard [33].

In 2018, 8.4% of the total disease burden in Australia was due to overweight and obesity, representing the second leading risk factor in terms of disease burden. This includes 43.4% of deaths (1,474 deaths) and 54.7% of disease burden in disability-adjusted years (DALYs) (61,489 DALY) from T2DM [43].

Consuming less than the recommended amounts of vegetables was associated in 2018 with 6.5% of disease burden (8,127 DALYs) from stroke and 6.1% of disease burden (18,966 DALYs) from coronary heart disease. Similarly, a lack of adequate fruit intake was linked to 5.2% of disease burden (6,440 DALYs) from stroke and 5.1% of disease burden (15,914 DALYs) from coronary heart disease [43]. Concerningly, in 2018 and 2019, only 3.3–5% of the adult population in the Barwon South West region consumed sufficient fruit and vegetables to meet the *2013 Australian Dietary Requirements Guidelines*. These proportions have remained relatively stable since 2015 (see Figure 4.7 below) [33].

However, there is variability across the region. In 2017, the proportion of adults eating sufficient fruit and vegetables was highest in Queenscliffe (9.5%), Corangamite (6.2%) and Greater Geelong (5.3%), and lowest in Warrnambool (2.7%) and Glenelg (2.7%) [33]. Overall, the mean daily serves of fruit in adults the Barwon South West region (2.3 serves) was not different from the Victorian average (2.1 serves). The mean daily serves of vegetables were also comparable between the Barwon South West region and the Victorian average [33].

Consumption of sugar-sweetened beverages (SSB) is associated with cardiovascular disease and T2DM, and had 192 attributable deaths and 4923 attributable DALYs (from all causes) in Australia in 2018 [43]. In 2017, the proportion of adults consuming SSB daily in the Barwon South West region (9.8%) was similar to Victoria (10.1%). Daily consumption of SSB was highest in Colac-Otway (17.1%), Golden Plains (13.1%) and Southern Grampians (12.2%), and lowest in Surf Coast (5.3%), Glenelg (8.0%), and Moyne (8.1%) [33].

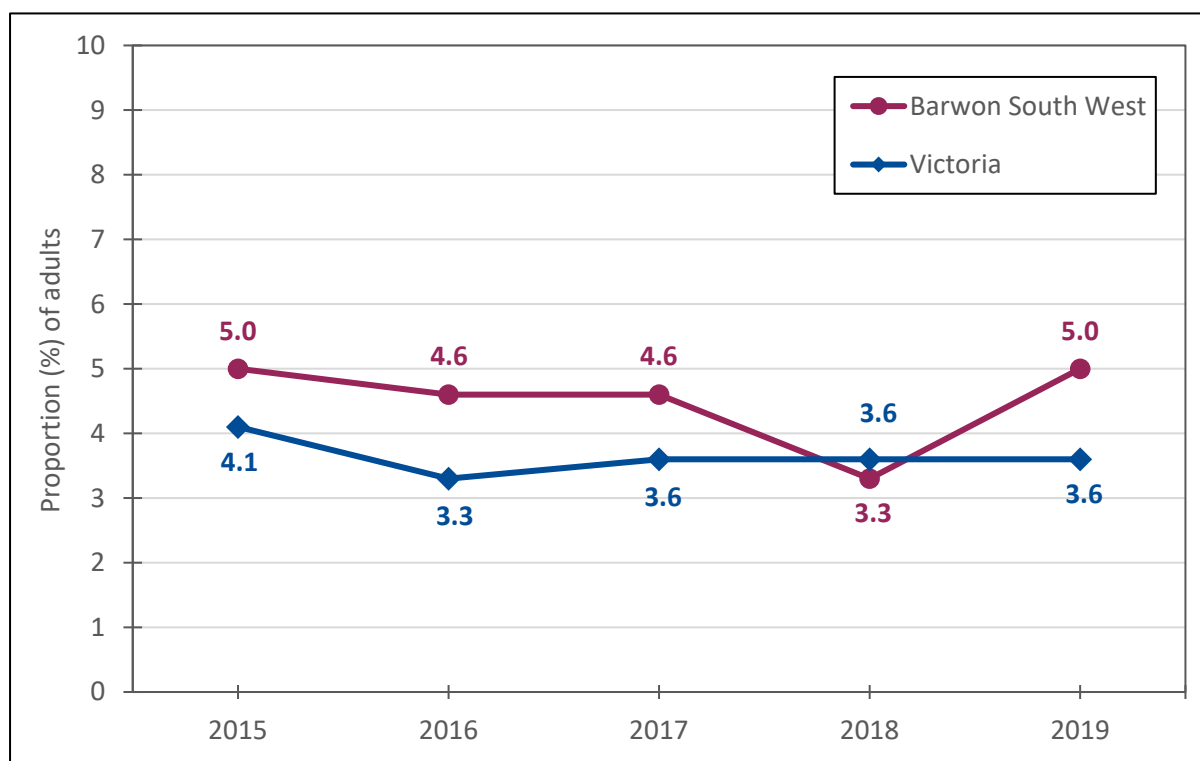


Figure 4.7: Proportion of adults who consume sufficient fruit and vegetables, Barwon South West region and Victoria, 2015–2019. Source: VPHWOF Dashboard [33].

Partners in all subregions identified food insecurity as a significant concern and a barrier to healthy eating. Within the Barwon subregion, partners also identified that the cost of food is high and access to fresh produce is limited, particularly in rural coastal areas, with minimal assistance to support people who are unable to afford food. Potential opportunities were highlighted to work with local and independent supermarkets and food retailers on food security initiatives. Similarly, partners in Southern Grampians Glenelg and South West identified that there is an increasing number of families whose basic needs are not being met, with particularly vulnerable cohorts including LGBTIQ+ people, youth, women, Aboriginal and Torres Strait Islander people, and people living with disabilities.

The increasing population size in the South West subregion is applying pressure on food security. Other issues include challenges to families due to economic stress, low level of food literacy around healthy eating, low food skills (budgeting for food, food preparation and cooking skills) and reports of a “diet culture” with increased presentations of disordered eating among young people. In a project investigating food security, the South West Healthcare Health Promotion team identified low incomes and high cost of living as barriers to accessing healthy food. The project found that building lifelong skills from childhood can enable healthy eating behaviours, and that communities can be supported to enjoy healthy food if affordable food is more easily accessible (e.g., within walking distance or close commute) [48].

With obesity and overweight contributing to a substantial fatal and non-fatal disease burden, and an overall worsening of overweight and obesity rates over time, it is essential to address healthy eating in the Barwon South West region as a major health priority. As discussed, the quality of food consumed can affect physical health; however, it can also have co-benefits including an impact on mental health and wellbeing [49]. Consideration also needs to be given to the social determinants of health in relation to underlying food security and accessibility of healthy foods, which have been identified as barriers to healthy eating.

4.3.2 Increasing active living

There is a bi-directional relationship between exercise and health; physical inactivity may be the cause and/or consequence of poor mental and physical health [50]. Physical inactivity increases the risk of NCDs including coronary heart disease, T2DM, stroke, and several different cancers [51, 52]. In terms of mental health and emotional wellbeing, there is evidence that regular exercise is associated with lower rates of depression and anxiety, and with improved cognitive function [53-55]. Low levels of physical activity are associated with overweight and obesity [52], the significant burden of which has been discussed above.

In Australia in 2018, 7.2% of total deaths and 3.0% of total disease burden in DALYS were attributable to physical inactivity. This included 22% of deaths (748 deaths) and 20% of disease burden (22,984 DALYs) from T2DM, and 17.6% of deaths (3,693 deaths) and 16% of disease burden (49,661 DALYs) from coronary heart disease [43].

Between 2015 and 2019, the proportion of adults in the Barwon South West region meeting the physical activity thresholds in *Australia’s Physical Activity and Sedentary Behaviour Guidelines 2014* were similar to the state-wide average (see Figure 4.8 over page). In 2019, just over half (51.1%) of adults in the Barwon South West region were sufficiently physically active. This has increased slightly over time from 47% in 2015 [33].

In 2017–18, the estimated age-standardised proportion of people aged 18 and over undertaking low, very low or no physical activity was higher than the state average (65.7%) in 6 out of 10 LGAs in the Barwon South West region, with highest proportions in Corangamite (73.3%), Moyne (71.3%) and Glenelg (71.1%). Lowest proportions of adults undertaking low, very low or no physical activity were in Queenscliffe (49.2%), Surf Coast (56.2%), and Greater Geelong (61.1%) [23].

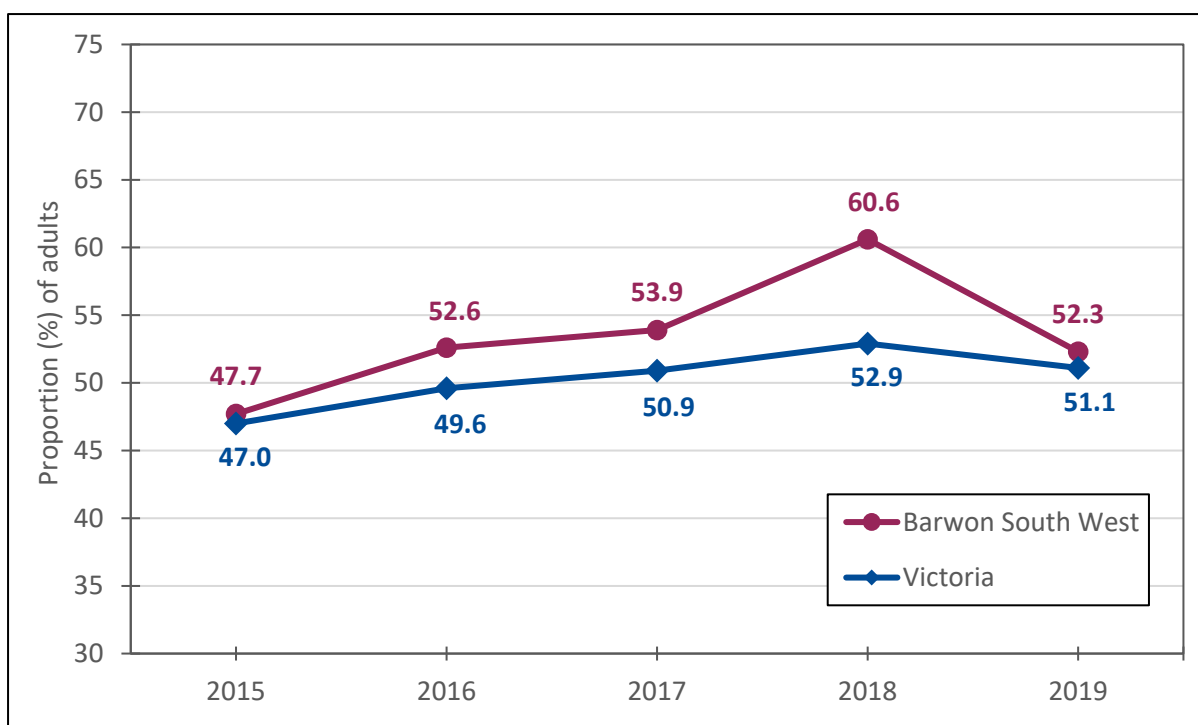


Figure 4.8: Proportion of adults who are sufficiently physically active, Barwon South West region and Victoria, 2015–2019. Source: VPHWOF Dashboard [33].

Consultations with partners in the Barwon subregion indicated high demand for active participation programs and services. A number of key barriers were highlighted including limited grass roots community programs; lack of capacity, resources and/or funding to deliver programs; and complexity of grant applications. Partners in Southern Grampians Glenelg also highlighted challenges, including re-engaging young people into sporting programs and activities, and limited facilities available for access to recreational spaces. Partners in South West subregion voiced concerns about the felt need for recreation facilities for young people, but a number of challenges including limited local facilities, facilities being shared resources in larger towns, limited transport options, and facilities requiring maintenance.

With only modest improvements over time, and just over half of the adult population of the Barwon South West region being sufficiently active, and in the context of high community demand for active living programs, it is imperative to continue to address physical activity as a key health priority, including overcoming challenges identified by our prevention partners.

4.3.3 Reducing tobacco and e-cigarette related harm

Tobacco use causes the highest disease burden of any modifiable risk factor in Australia with 8.6% of the total fatal and non-fatal disease burden attributable to tobacco use in 2018 [43]. It has been causally linked to the burden of 41 individual diseases including 19 types of cancer; numerous cardiovascular diseases; chronic obstructive pulmonary disease (COPD); and asthma [43]. Tobacco use is responsible for a high proportion of both premature death, causing more than 1 in 8 deaths in Australia in 2018, and years lived with disability [43]. Tobacco use impacts on quality of life and compounds existing social inequalities and poverty [56], with a clear social gradient for tobacco use and related illnesses in Victoria [57].

E-cigarettes were initially considered a less harmful alternative to cigarette smoking. Although little is known about long-term health effects, current evidence shows that the use of e-cigarettes (vaping) increases the risk of a range of adverse health outcomes, including poisoning, toxicity from inhalation (such as seizures), trauma, burns and lung injury [58].

Concerningly, an association has been identified between e-cigarette use and future smoking, particularly in young people [58]. The 2022 Victorian Smoking and Health Survey indicated that over 77,000 Victorians who had previously never smoked had used e-cigarettes in the past year, tripling their risk of smoking uptake. Between 2018-19 and 2022, ever use of e-cigarettes increased from 17.0% to 22.0%; current use doubled from 3.0% to 6.1%; and regular use more than doubled from 1.6% to 3.5% [59].

Of the 89,990 deaths that occurred from lung cancer in 2018 in Australia, 79% were attributed to tobacco use. More than three-quarters (76%) of disease burden (122,177 DALYs) due to lung cancer were attributable to tobacco use. In the same year, tobacco use was responsible for 75% of deaths (5,457 death) and 73% of total disease burden (129,104 DALYs) from COPD in Australia [43].

Within the Barwon South West region, the proportion of adults who smoke daily has remained relatively stable since 2015 (see Figure 4.9). Whilst the proportion has been generally similar to the state-wide average, the most recent data in 2020 show a higher proportion of adults smoking daily in the Barwon South West region (14.4) compared to state-wide (12.0%) [33].

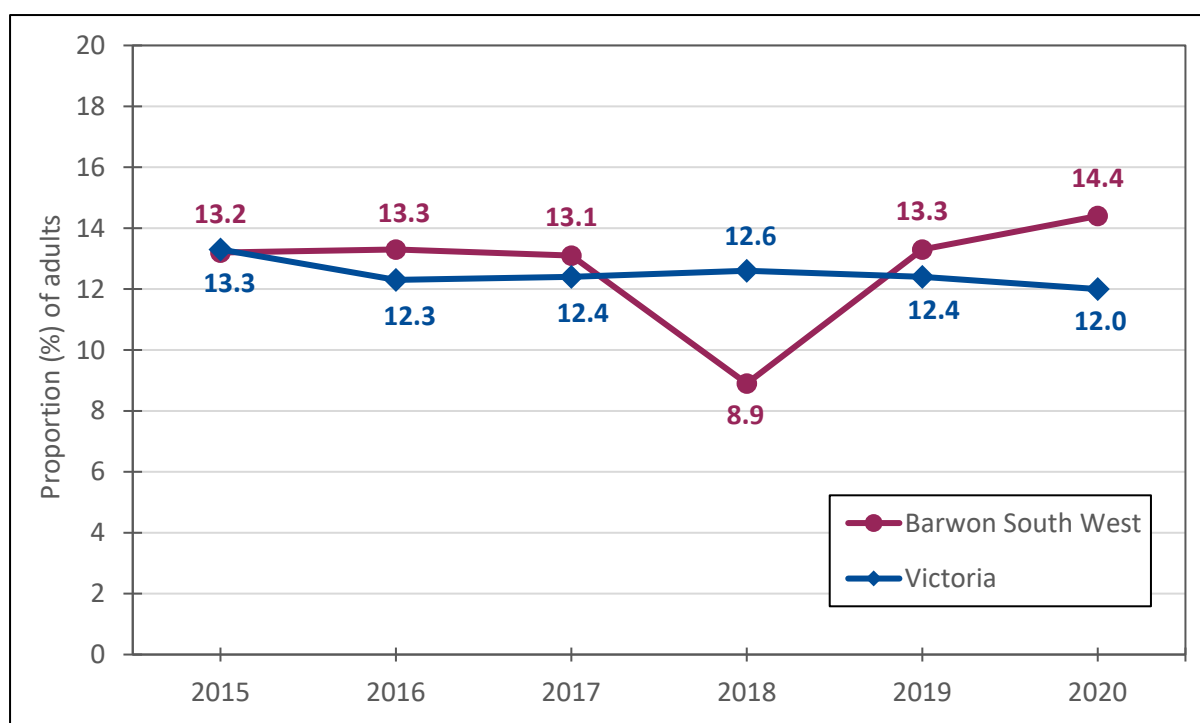


Figure 4.9: Proportion of adults who smoke daily, Barwon South West region and Victoria, 2015–2020. Source: VPHWOF Dashboard [33].

Although many of the estimates for smoking rates in individual LGAs are imprecise, some general comments can be made regionally:

- The Barwon subregion tended to have a higher proportion of adults who smoke daily. Smoking rates in Greater Geelong increased from 13.7% in 2017 to 16.6% during 2020, which may have been impacted by the COVID-19 pandemic. Higher prevalence of daily smoking was observed in Colac-Otway (15.3% in 2017 and 14.5% in 2020), while Golden Plains noted a decrease from 18.2% in 2017 to 12.9% in 2020.
- Warrnambool (15.8%) also had slightly higher smoking rates than the overall Barwon South West region (14.4%) in 2020.
- Lowest prevalence of daily smoking in 2020 was found in Surf Coast (3.6%), Southern Grampians (10.1%) and Corangamite (12.3%) [33].

Although there are minimal data available to understand rates of, and trends in, e-cigarette use in the Barwon South West region, consultation with partners recognised vaping as an emerging significant and increasing health issue, particularly among young people and adults who did not previously smoke tobacco. Partners identified concerns relating to a lack of understanding regarding the health implications associated with vaping, as well as laws as to where vaping is permitted. A community consultation session undertaken by Barwon Health's Healthy Communities Unit with schools, agencies, services and community organisations to identify opportunities to reduce vaping incidence revealed that the effects of vaping extend well beyond students and young people, to their teachers, families, and peers [60]. Schools have identified a need for support from health and government sectors to address the prevalence of e-cigarette use, and there is an identified need to support student understanding, management of addiction and the subsequent health implications of vaping.

The Barwon South West region must continue to address tobacco use, which remains the leading modifiable risk factor in terms of burden of disease, and these efforts should be focussed concurrently the significant emerging risks from e-cigarette use.

4.3.4 Reducing harm from alcohol and other drugs

Alcohol consumption is common among Australian adults; in 2019, with 77% of the population aged 14 and over reported consuming a full serve of alcohol in the previous 12 months [61]. Australia has a relatively high apparent alcohol consumption per capita that is higher than global and OECD averages [62, 63]. In 2021–22, alcohol was the most common substance for which people sought treatment for addiction in Australia [62]. Alcohol consumption contributes to the development of 30 different diseases and injuries, including alcohol use disorders and NCDs such as chronic liver disease, different types of cancer, and cardiovascular disease [43]. In addition, harmful patterns of alcohol consumption are associated with risky behaviour that can result in crime, motor vehicle accidents, drownings, pedestrian injuries, and violence, including family violence [64].

Illicit drug use, which includes use of illegal drugs, misuse or non-medical use of pharmaceutical drugs, or inappropriate use of other substances, increases the risk of a variety of health conditions ranging from overdoses to bloodborne viruses. Illicit drug use also has significant social impacts including violence, crime and trauma, and illicit drug use is associated with risks to users' family and social networks, as well as the wider community [65].

In Australia in 2018, alcohol use accounted for 4.1% of total deaths and 4.5% of disease burden in DALYs. A significant proportion of death from liver cancer (39%, 846 deaths), chronic liver disease (19.6%, 437 deaths) and oesophageal cancer (19%, 265 deaths) was attributed to alcohol use. Illicit drug use accounted for 1.8% of total deaths and 3.0% of total disease burden in DALYs in Australia, contributing to 27% of deaths from liver cancer (573 deaths) and 27% of deaths from chronic liver disease (609 deaths). Illicit drug use contributed to 74% of disease burden from hepatitis C and 7.2% of disease burden from HIV/AIDS [43].

Since 2015, the proportion of adults in the Barwon South West region who consume alcohol in amounts posing a lifetime risk of harm (defined as alcohol intake exceeding the limits in the *2009 Australian Guidelines to Reduce Health Risks from Drinking Alcohol*) has been well over 50%, with some fluctuation over time (see Figure 4.10 over page) [33]. Between 2015 and 2018, the Barwon South West region showed a higher proportion of adults consuming alcohol at lifetime risk of harm compared to the state-wide average. However, the most recent estimates for 2019 indicate that the proportions are very similar, with 58.8% of adults in the Barwon South West region and 59.6% state-wide being at lifetime risk of harm due to alcohol consumption [33].

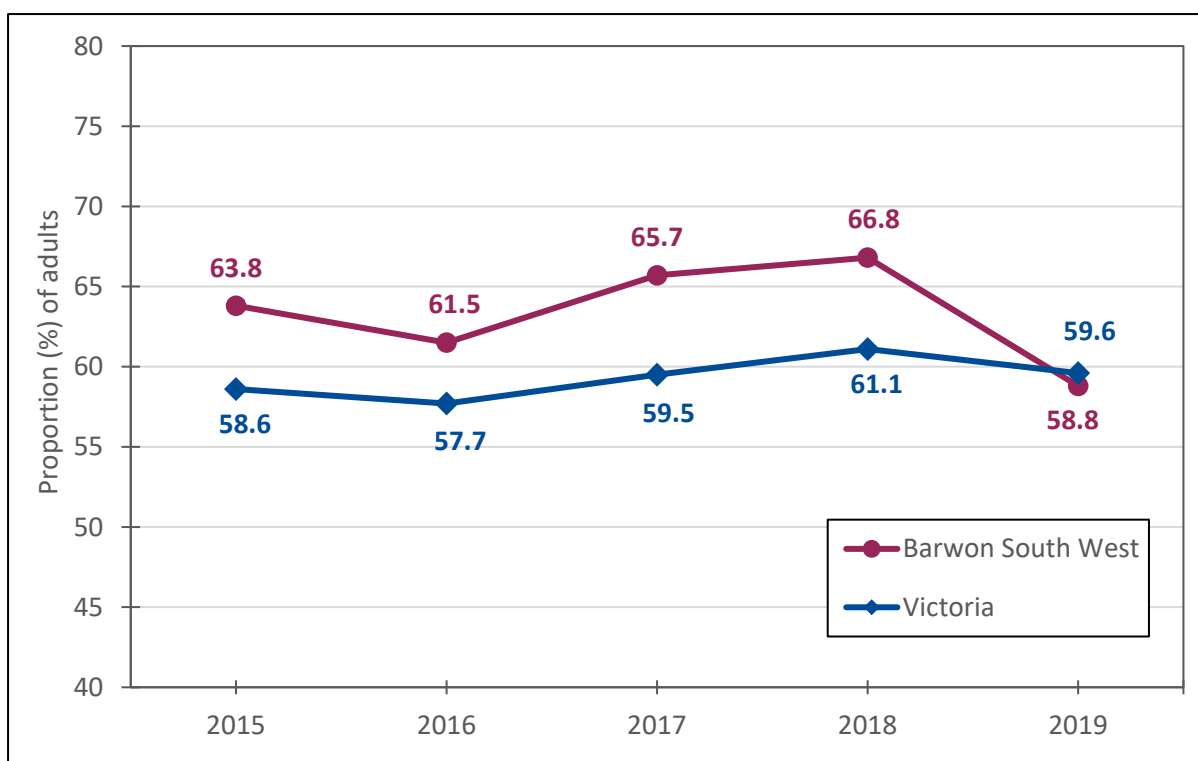


Figure 4.10: Proportion of adults who consume alcohol at lifetime risk of harm, Barwon South West region and Victoria, 2015–2019. Source: VPHWOF Dashboard [33].

In 2017, all LGAs in the Barwon South West region, except for Colac-Otway, had a higher proportion of the population who consume alcohol at lifetime risk of harm, compared to the state-wide average (59.5%). The proportion of people consuming alcohol at lifetime risk of harm varied across the regions, with lowest proportions in Colac-Otway (58.8%) and Southern Grampians (59.8%), and highest in Queenscliffe (80.5%) and Surf Coast (74.1%) [23].

Recent estimates demonstrate that 16.1% of adults in the Barwon South West region consume alcohol at levels posing a risk of alcohol-related injury on a single occasion at least monthly, higher than the state-wide average of 13.6%. As shown in Figure 4.10, state-wide data suggest a gradual increase in this risky alcohol consumption over time, and this trend is similar in the Barwon South West region although with greater year-to-year variation [33].

Alcohol related injury risk varies across the Barwon South West region. In 2017, highest overall proportions of people consuming alcohol at risk of alcohol-related injury were in the South West subregion, with estimates ranging from 17.2% in Warrnambool to 18.3% in Moyne. High proportions were also seen in Glenelg (20.3%), Surf Coast (15.5%) and Greater Geelong (15.2%), while Colac Otway (8.1%), Queenscliffe (8.7%) and Golden Plains (9.8%) had the lowest proportions of people consuming alcohol at risk of injury at least monthly [23].

The National Drug Strategy Household Survey 2019 indicated that the Western Victoria PHN catchment area, which includes but is not limited to the Barwon South West region, had the highest age-standardised rate of recent illicit drug use in Victoria at 24.1%, compared to a state-wide average of 17.1%. This had increased significantly from 15.2% since the previous survey in 2016. Disaggregated to SA4 level, 21% of respondents in Geelong in 2019 indicated illicit drug use in the previous 12 months, which was the third highest level in the state, after Inner Melbourne (31.8%) and Ballarat (24.4%) [61]. Across the Barwon South West region, the number of ambulance attendances with transport to hospital due to illicit drug use increased steadily from 210 attendances in 2012 to 774 attendances in 2020 [66].

Alcohol and other drug use is a complex problem to address, and the health burden described above in conjunction with high levels of risky alcohol intake and illicit drug use in the Barwon South West region make this an important health priority to address. During consultation, partners within the Southern Grampians Glenelg subregion in particular identified risk-taking behaviour by young people as a major concern, as well as significant levels of harmful alcohol and drug use.

4.3.5 Increasing the uptake of cancer screening

Cancer is a leading cause of death and disability in Australia. Cancer and other neoplasms contribute 17.1% of the total burden of disease in Victoria [43]. Within the Barwon South West region, cancer (all types combined) accounts for the highest rates of premature death, defined as death among individuals aged less than 75 years. The cancers contributing the highest fatal burden of disease in the Barwon South West region at LGA level are breast cancer (3.8 mean age-standardised YLL per 1000 population), lung cancer (2.5 mean age standardised YLL per 1000), and colorectal cancer (1.7 mean age-standardised YLL per 1000) [23].

Population-based screening for cancer is a form of secondary prevention that enables the identification of pre-cancerous conditions or early-stage cancer before symptoms appear. This provides an opportunity for early investigation and treatment that can improve outcomes for affected individuals and on a population level. For example, if detected early, 90% of bowel cancer cases can be successfully treated [67].

Australia has three population-based cancer screening programs: BreastScreen Australia, the National Cervical Screening Program, and the National Bowel Cancer Screening Program.

Breast cancer screening

BreastScreen Australia provides two-yearly screening mammograms for women aged 40 and above, with the program actively targeting women aged 50–74 years [68]. Breast cancer screening rates (2019–2021) for eligible individuals were higher in the Barwon South West region (53.2%) compared to the state-wide rate (45.3%), with relatively similar rates across the three subregions (Barwon 52.7%, South West 55.7% and Southern Grampians Glenelg 52.3%) [65]. However, these screening rates remain relatively low. The National Preventive Health Strategy 2021–2030 has a target of increasing participation rates for breast cancer screening to at least 65% by 2025 [5], while the Victorian Cancer Plan includes a goal of achieving a 75% rescreening rate by 2030 [4].

Screening rates in Victoria, including the Barwon South West region, show that barriers to breast cancer screening need to be examined to inform the implementation of interventions to improve uptake of screening. Partners in the Barwon subregion identified that while mobile breast screening vans visit regional/rural areas, access for people living on remote properties can be a challenge if residents are unable to drive and/or there are no public transport options. Golden Plains Shire has initiated a community bus, picking up isolated registrants as an initiative to bolster participation rates.

Cervical cancer screening

Australia is currently on track to become the first country to eliminate cervical cancer as a public health problem [69]. The National Cervical Screening Program targets women and people with a cervix aged 25–74 years, with screening for low-risk people recommended every five years through primary health care providers [70]. The five-year (2017–2021) cervical cancer screening estimate among the eligible population in Victoria was 71.9%. This state-wide screening rate is comparable with the rates in Barwon South West region (73.5%), the Barwon subregion (74.4%) and the South West subregion (73.0%), while screening rates in

Southern Grampians Glenelg subregion (65.7%) were lower [65], making this subregion a particular priority for efforts to improve uptake of cancer screening within the catchment. Increased availability of a self-collection option for cervical cancer screening presents an opportunity to address some key barriers to screening uptake [71].

Bowel cancer screening

The National Bowel Cancer Screening Program targets eligible Australians aged 50–74 years, with home faecal test kits mailed to participants every two years [67]. The two-year participation rate (2020–2021) for bowel cancer screening of eligible persons was higher in the Barwon South West region (46.3%) than in Victoria overall (41.9%). Bowel cancer screening rates in the Barwon South West region are higher among females (48.7%) than males (43.8%), similar to the pattern observed for the state (43.8% and 40.0% respectively) [65]. The National Preventive Health Strategy 2021–2030 has a target of increasing participation rates for bowel cancer screening to at least 65% by 2025 [5].

Consultation with partners identified concern about potential impending increase in cancer and chronic disease, with low cancer screening rates among some cohorts being a possible risk factor. Barriers to accessing healthcare are demonstrated by a reduction of people visiting their GPs due to multiple factors; for example, limited access to GPs (e.g., some towns have no local GP, and some clinics aren't accepting new patients) and lack of affordability with low access to bulk billing practices. Partners highlighted a need for more prevention strategies for cancer. Overall, although the screening rates in the Barwon South West region were higher in comparison to state-wide rates, there remains work to be done to address barriers, particularly for under-screened groups, in order to optimise screening uptake and cancer outcomes.

4.3.6 Improving mental health and wellbeing

Mental health is an important component of overall health and wellbeing that affects all Australians either directly or indirectly. Almost half (44% or 8.6 million people) of the Australia population between the ages of 16 and 85 years have experienced mental illness at some point throughout their life, while an estimated 4.2 million people in Australia have experienced mental illness in the preceding 12 months [72]. Mental and substance use disorders contributed 13% of Australia's total burden of disease in 2018, making it the fourth highest disease group in terms of disease burden [43]. Anxiety, affective disorders (such as depression) and substance use disorders are the most common types of mental health disorders in Australia [72].

Poor mental health is often associated with risk factors for NCDs such as physical inactivity, dietary risk factors, harmful use of alcohol and tobacco use, and mental illness often co-occurs with NCDs such as diabetes, cancer, respiratory disease and cardiovascular disease [73].

The proportions of adults reporting high or very psychological distress were relatively stable and similar in the Barwon South West region and state-wide from 2015 to 2019 (see Figure 4.11 over page) [33]. However, there was a clear increase in psychological distress during 2020, likely due to the COVID-19 pandemic and resultant restrictions. Psychological distress levels in these data have been measured using the validated Kessler 10 scale.

Before the COVID-19 pandemic, the areas with the highest proportions of adults experiencing high to very high psychological distress were Colac-Otway (20.3%), Greater Geelong (18%) and Warrnambool (16.7%). In 2020, all LGAs showed an increased proportion of psychological distress with exception of Colac-Otway, Queenscliffe and Moyne. The areas reporting the most marked increases between 2017 and 2020 were Golden Plains (10.6% to 23.7%) and Greater Geelong (18.0% to 27.3%).

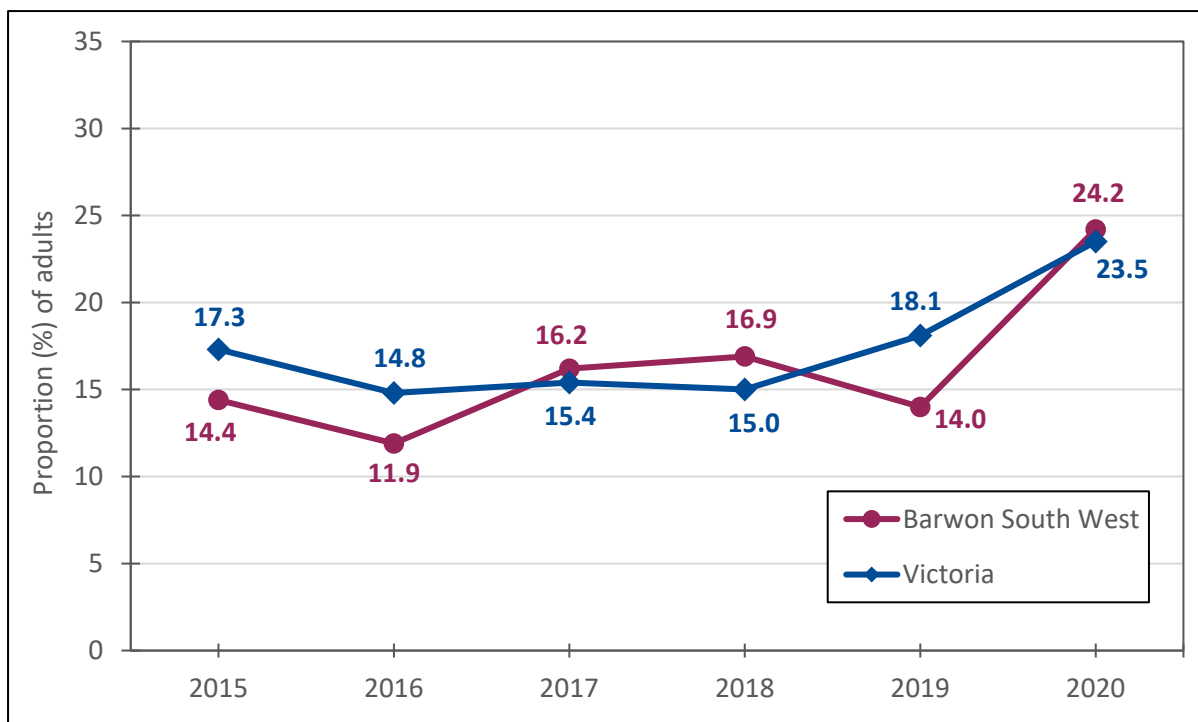


Figure 4.11: Proportion of adults reporting high or very high psychological distress, Barwon South West region and Victoria, 2015–2020. Source: VPHWOF Dashboard [33].

Mental health was highlighted as a key issue by partners across all subregions. Partners in the Barwon subregion highlighted increasing demand for youth mental health supports, and the links between mental health and social connectedness, housing security and links to transport. Partners identified that there is community demand for social inclusion activities in order to address mental health needs.

Partners in the South West identified that Home and Community Care staff have recognised the need to upskill to work with clients with mental health challenges. Partners in the Barwon subregion identified access to local mental health services (including after hours) as a significant priority, along with the importance of cultural safety, inclusion and recognition of culture for Aboriginal and Torres Strait Islander people. Mental health of children and young people was also highlighted as a significant concern. Partners in the Southern Grampians Glenelg subregion indicated increasing prevalence of anxiety and school refusal in children, particularly those in year 1–2 and year 8–9 who had difficult transitions to primary and secondary school during periods of school closures. Partners also described difficulties re-engaging young people into programs and activities, and the ongoing need for young mental health promotion and suicide prevention. Challenges in recruiting mental health professionals in rural areas were also noted.

Mental health is a significant and increasing concern across Australia, Victoria and in the Barwon South West region, with the medium- and long-term impacts of the COVID-19 pandemic yet to be demonstrated. It was uniformly identified as a key priority area for prevention and health promotion efforts across the region.

4.3.7 Prevention of violence, family violence and promotion of gender equity

Domestic, family and sexual violence is an important social, welfare and health issue, with lifelong implications for victims/survivors and people who use violence. When looking at disease burden from homicide and violence in Australia in 2018, 50% of deaths (50 deaths) 46% of disease burden (2557 DALYs) in females were attributable to intimate partner violence.

Additionally, 20% of deaths (167 deaths) and 19% of disease burden (6,686 DALYs) in females from suicide and self-inflicted injury were attributable to intimate partner violence [43].

Within the Barwon South West region, the LGAs with the highest rates of domestic, family and sexual violence events recorded by Ambulance Victoria between July 2017 and June 2022 were Glenelg (165 events per 100,000 population), Warrnambool (164.5 per 100,000 population), Greater Geelong (140.7 per 100,000 population), Southern Grampians (134.1 per 100,000 population) and Colac-Otway (108.4 per 100,000 population) [74].

In 2021–22, the highest rates of Emergency Department presentations from family violence in the Barwon South West region were seen in Southern Grampians (127.7 presentations per 100,000 population), Warrnambool (42 presentations per 100,000 population), Glenelg (29.9 presentations per 100,000 population) and Greater Geelong (18.4 presentations per 100,000 population) [74]. Over the same time period, the rate of family incidents recorded by Victoria Police was highest in Glenelg (2058 per 100,000 population), Warrnambool (1824 per 100,000 population), Greater Geelong (1585 incidents per 100,000 population) and Southern Grampians (1459 per 100,000 population) [74].

Consultation with partners from the Southern Grampians Glenelg subregion recognised high rates of family violence, while South West region identified a need to access response services for family violence. Partners in the Barwon subregion also identified needing support, specifically in relation to local place-based prevention and population efforts from BSWPHU for prevention, focused on gendered violence and gender equality.

To support the objectives and outcomes of the Victoria's strategy to prevent family violence and all forms of violence against women, and in line with the Gender Equality Act 2020, our partners have identified that promotion of gender equity and prevention of violence and family violence is a crucial priority. The state-wide and action plan will be utilised to support the implementation; and the Women's Health Service are available to provide support with applying a gender lens to planning.

4.3.8 Tackling climate change and its impact on health and strengthening community resilience

Climate change is the greatest health risk facing humanity [75]. The impacts of climate change on human health and wellbeing include physical, psychological and social effects. Extreme heat, bushfires, drought and floods have both direct and indirect impacts on human health in the form of injury, displacement of people and destruction of the ecosystem. Climate change also results in declines of water and air quality, affects food safety, and causes ecological and land use changes, all of which impact population health (see Figure 4.12 over page) [76].

Air quality

Air pollution in the form of particulate matter (PM2.5) released from industrial processes, vehicle emissions, wood heaters and smoke, increases the risk of NCDs such as chronic obstructive pulmonary disease, cardiovascular disease and lung cancer [77]. In Australia, 1.3% of the total burden of disease in 2018 was attributable to PM2.5 air pollution [43].

Victoria experienced the world's largest epidemic of thunderstorm asthma on 21 November 2016, in which thousands of people experienced breathing difficulties and sadly nine deaths were attributed to the event [78]. The Victorian pollen-monitoring network has set up traps across the state including at Waurin Ponds and Hamilton in the Barwon South West region that contribute to the provision of thunderstorm asthma risk forecasts in order to provide early warning messages to populations at risk [79].

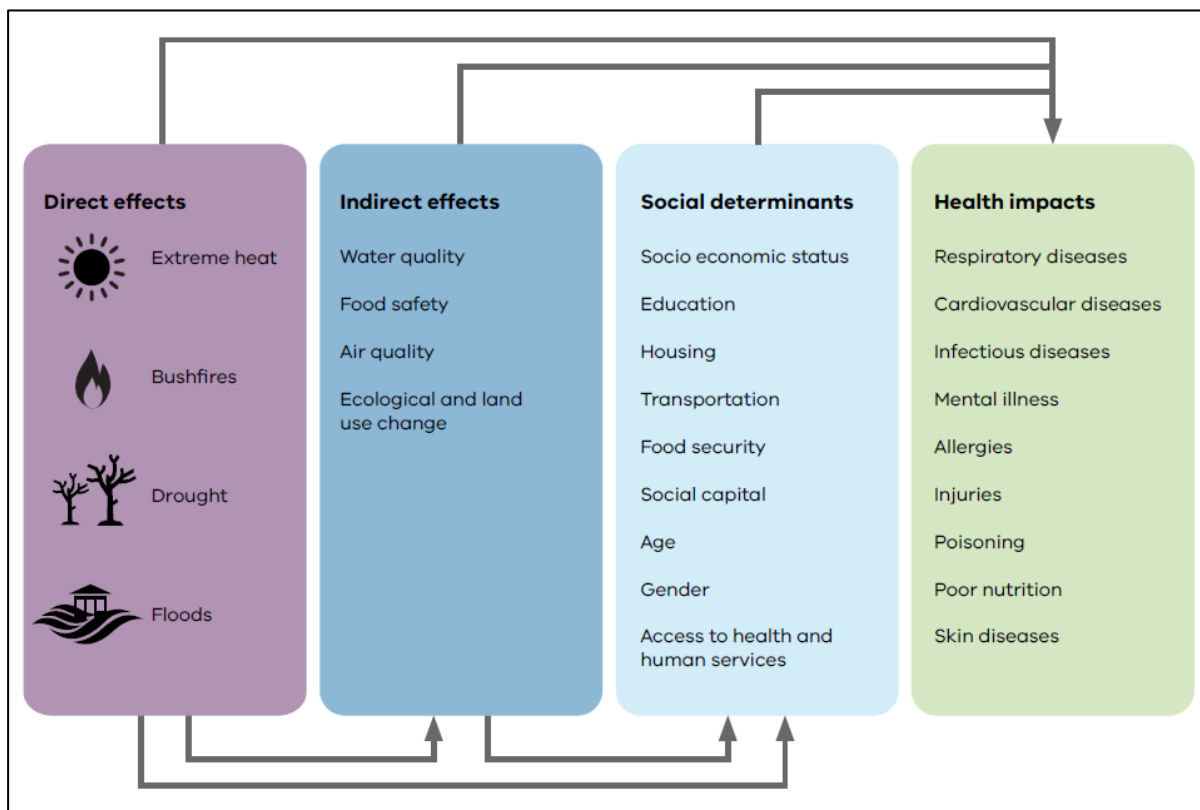


Figure 4.12: Direct and indirect impacts of climate change on human health and wellbeing. Source: Health and Human Services Climate Change Adaptation Plan 2022–2026 [76].

Changes in environmental temperatures

Maximum and minimum daily temperatures are expected to increase over this century with the extent of these increases being dependent on the global greenhouse gas emissions. Careful planning and action are required to reduce greenhouse gas emissions as continued rise in global emissions are modelled to result in the doubling of high fire danger days, a 24cm rise in sea level and 35–37% decline in alpine snowfall by 2050 [18].

Changes in rainfall amounts

Rainfall patterns in the Barwon South West region are expected to be variable over time but in the longer term, a decline in rainfall amounts is expected to continue. However, extreme rainfall events are expected to become more intense but to remain highly variable in time and location. Reduced rainfall and droughts are known to cause increases in some water-borne pathogens, making controlling water quality difficult. Other impacts of reduced rainfall and drought include increase occurrence of airborne and dust-related disease, vector-borne diseases and restricted physical and financial access to healthy foods [80].

Extreme weather conditions

Extreme heat wave days are projected to double in the coming century in Victoria and in the Barwon South West region. Excessive heat can exacerbate chronic health conditions including cardiovascular disease, diabetes and kidney disease. These hotter and potentially drier climates also increase the danger of fires. Smoke generated by bushfires can affect respiratory and cardiovascular health of larger geographical areas [80].

Extreme weather events can also be in the form of storms and floods, which have short-term (e.g., physical trauma), medium-term (e.g., spread of vector-borne diseases) and long-term

(e.g., post-traumatic stress and depression) health impacts. Flood damage can also restrict the availability of food and result in an increase in food prices [80].

The impacts of extreme weather conditions are likely to be more significant for certain population groups including the elderly and very young, people with existing chronic health conditions, lower income households and people that are socially isolated. Aboriginal and Torres Strait Islander people are also likely to be disproportionately affected by extreme weather given the higher prevalence of chronic conditions and social determinants such as overcrowding and poor housing conditions [81]. Increases in inpatient admissions, ambulance attendances and excess mortality have been associated with higher heat days in Victoria and many other areas across the country [82, 83].

Biodiversity and nature

Biodiversity including animals, plants and other forms of life in our natural world regulate climate, filter air and water, enable soil formation and are important in the mitigation of natural disasters. Exposure to nature is reported to increase health through increased attention, energy and tranquillity and the decrease of psychological distress. The inclusion of nature parks in new settlements and urban development is an important public health intervention for maintaining the benefits nature has on human health and wellbeing.

Climate change as a regional health priority

Partners across the region recognised climate change as a vital health priority moving forwards. Partners in the Southern Grampians Glenelg subregion identified the need for action on climate change and its impact on health. They identified strengthening community resilience through social connectedness and participation, addressing the broader impacts of climate change and the alignment with health outcomes, and climate change adaptation as key priorities. Partners in the Barwon subregion recognised a need for capacity building to better understand climate change and how to communicate this to the community. Partners in the South West subregion identified resilience and safety from the impacts of climate change and the impact on health to be priority areas.

Climate change is one of the major global and planetary health risks. Regional efforts to tackle climate change and its impact on health and strengthening community resilience is essential and will also address co-benefits of increasing healthy eating, increasing active living and improving mental health and wellbeing.

4.4 Addressing the health priorities

The above health priorities were identified through a consultative and collaborative process including a needs analysis, identifying the health status and wider determinants of health across the Barwon South West region, reviewing data and completing consultation with partners. Challenges and barriers were identified across all health priorities. Chapter 5 details implementation to address the health priorities across the region.

Chapter 5: Implementation

Implementation of the Catchment Plan over 2023–2029 includes a clear, methodical process for addressing the eight identified health priorities. The BSWPHU Community Partnerships team will be responsible for coordinating, monitoring and overseeing the collation of activities and collaborative investment. This Chapter briefly outlines aspects of the current activity in each priority area, and explores the process for implementation. Targets and indicators from the Victorian Public Health and Wellbeing Outcomes Framework have been adopted and aligned with the *National Preventive Health Strategy 2021–2030* [5, 21]. We also highlight current challenges, gaps and opportunities in the prevention space in the Barwon South West region, and propose timeframes for meeting objectives and delivering agreed priorities. Every step of the way involves a collaborative partnership approach with our partners, such that decisions around shared outcomes and activity are collaborative and co-designed.

5.1 Building on strong foundations in the region

The Barwon South West region has a long and successful history of prevention partnerships and collaboration through three high-functioning Primary Care Partnership teams (PCP), namely Barwon/G21 (for 10 years), South West and Southern Grampians and Glenelg, who have supported collective work for the past 21 years. The transition of the PCPs to the BSWPHU in the 2022–2023 financial year (FY) as the newly formed Community Partnerships team has enabled the transition of knowledge and relationships within the region, and the continuation of these established and trusted networks, providing the supportive architecture for strong foundations into the future. The existence of partnerships across all levels of prevention including a strategic focus (leadership and management) and operational focus (prevention practitioners and community) has utilised combined skills, knowledge and local assets for better outcomes for health and wellbeing across the Barwon South West region. A list of current networks in the Barwon South West Region can be found in Appendix 5.

Building on existing collaborations and foundational relationships across the Barwon South West region, our consultation with prevention partners has highlighted the breadth of place-based prevention and health promotion programs currently being implemented in the region. State-wide and local prevention programs and initiatives currently being implemented were mapped in relation to the identified health priorities, and some of these initiatives have been highlighted below. A more detailed list of programs and initiatives is available in Appendix 4.

As part of the implementation process, a theory of change for each priority will be developed in collaboration with stakeholders, to demonstrate the collective works of our partners and indicate broad scale impact. This will be implemented in collaboration with our prevention partners across the Barwon South West region. All actions will include a co-benefits lens, particularly around climate and mental health. The theory of change is supported by objectives, some of which are outlined below for each health priority, feeding into the Monitoring and Evaluation and Learning Framework (MEL) which is described in Chapter 6.

BSWPHU will work collaboratively with our partners to develop agreed outcomes and measures. These will align with Victorian Public Health and Wellbeing Outcomes Framework, as well as the *National Preventive Health Strategy 2021–2030* [5, 21]. BSWPHU will supplement short term measures to monitor progress against shared priorities.

In the tables below, specific targets identified in the Victorian Health and Wellbeing Outcomes Framework are adopted for the Barwon South West region. We acknowledge that current targets adopted from the Victorian Public Health and Wellbeing Outcomes Framework are set for 2025, with a new four-year Victorian Public Health and Wellbeing Plan expected this

calendar year. The Catchment Plan will therefore undergo a substantive refresh and review in 2025. Aspirational targets for 2030 that align with the *National Preventive Health Strategy* are shown in Appendix 6.

5.2 Addressing the shared health priorities

The BSWPHU consultation process identified that the highest shared regional catchment wide health priorities as detailed in Chapter 4 were increasing healthy eating and increasing active living (Healthy Eating and Active Living – HEAL). These have continued to be the top priority areas of focus in the 2022–2023 FY. Work on these health priorities is ongoing, through a combination of place-based activities and utilisation of state-wide programs such as INFANT and the Achievement Program (see Appendix 4). The Community Partnerships team has supported these health priorities by bringing together the prevention partners for the first time in a Barwon South West region-wide forum, which highlighted activities and shared challenges for the region. Through needs analysis, review of disease burden and modifiable risk factors, and consultation with partners, an additional six health priorities were determined, to give the complete list of priorities described in Chapter 4.

The following sections will describe existing health prevention and promotion programs in the Barwon South West region in relation to the identified health priorities, the objectives to address the health priorities [84-88], and the relevant outcome measures from the Victorian Public Health and Wellbeing Outcomes Framework [21]. This work also aligns with the *National Preventive Health Strategy 2021–2030* [5]. There will continue to be ongoing collaboration with our partners to work towards the achievement of these outcomes.

5.3 Increasing healthy eating and active living

Case study: Healthy Eating in the Workplace

Western District Health Service (WDHS) has led the way, initially ceasing the sale of sugary drinks in health service canteens and more recently “going green” by establishing the Green Bean Canteen, which only serves healthy food, in the quest to reduce rates of overweight and obesity. WDHS has compiled over 150 recipes that have been assessed as GREEN by the Healthy Eating Advisory Service.



The recipes were created by chefs, for chefs in organisations working towards implementing the Healthy Choices guidelines. The recipes are not only delicious and nutritious, but also profitable, easy-to-use, and designed specifically for catering, staff meals and food outlet menus.

Initiatives to increase healthy eating and active living in the Southern Grampians and Glenelg catchment are founded in collaboration, systems thinking and asset-based community development. These initiatives, GenR8 Change, Hands Up Casterton and SEA Change Portland, promote a partnership approach designed to build partner and community capacity to lead change by understanding the complexity of the local system, identifying areas for action and driving change at a local level. These approaches were established due to challenges faced by local services in delivering short-term programs that were often resource intensive, low impact and not sustainable. The collaborative backbone groups comprise health services, local government, community sector organisations, education and community. These collaborative groups build operational and strategic capacity and capability, drive connection and communication, and support shared monitoring and evaluation. These initiatives add

value to the other assets within the community including the Healthy Kids Advisors and the VicHealth Local Government Partnership program.

The Barwon subregion has a strong HEAL collective impact that has 5 working groups and is supported by a backbone support group with representatives from key health and local government agencies. This activity has been interrupted by the COVID-19 pandemic, as well as staff and funding challenges, however there is a continued drive from partners to work collaboratively and leverage off a partnership approach.

Within the state-wide Vic Kids Eat Well (VKEW) initiative addressing healthy eating [89], the Barwon subregion has an active Community of Practice consisting of health promotion practitioners from health services, local government and the VicHealth Local Government Partnership Healthy Kids Advisor program. These stakeholders meet regularly to discuss engagement techniques, barriers and success stories. While some partners are not actively working on this intervention, they have established relationships with children's settings through previous work with the Achievement Program as well as current place-based efforts. Healthy Kids Advisors are gaining greater traction with VKEW, which is a state-wide funded framework initiative from DH with greater support systems and capacity building opportunities being driven by the Stephanie Alexander Foundation.

Some organisations in the Barwon subregion have been innovative, piloting new programs and finding innovative ways to work. Other organisations have experienced changes to their funding and their role in program delivery. This has resulted in a shift in focus to provide a more supportive and enabling role including co-design approaches to engage disadvantaged communities and grant recipients.

The South West subregion has multiple community and state programs currently addressing healthy eating and active living, including VKEW, INFANT, delivering and upgrading of walking tracks and promoting open spaces. The Corangamite Shire utilised collaborative partnerships between Maternal and Child Health team and local health services, and seed funding to invest in additional hours for an Enhanced Maternal and Child Health Project worker to implement the state-wide INFANT program. Ensuring the delivery of the program across the Corangamite Local Government Area relied upon partnerships with dietetics, community health nurses and health promotion at South West Healthcare, Terang and Mortlake Health Service, and Timboon Health Services.

5.3.1 Key objectives: increasing healthy eating

The Catchment Plan objectives for *increasing healthy eating* are:

- Increase access to healthier food and drinks, and decrease access to discretionary foods and drinks
- Create supportive environments to increase capacity to breastfeed
- Explore opportunities to prepare and consume healthier foods and drinks
- Decrease consumption of discretionary food and drinks
- Increase socio-cultural norms reinforcing healthier eating, drinking and breastfeeding
- Decrease sodium, saturated fat and added sugar, and increase fruit, vegetables, wholegrains and dairy/alternatives in processed and ready-to-eat foods
- Work with supermarkets and community organisations to increase purchase of healthier food and drinks, and decrease purchase of discretionary food and drinks
- Decrease the quantity of discretionary food and drinks served eating out and at home
- Decrease exposure to marketing of discretionary food and drink and increase exposure to marketing of healthier food and drinks.

Case study: Choose Water Every Day

Choose Water Every Day is a collective impact initiative founded by the Barwon/G21 region Healthy Eating Active Living (HEAL) collaborative partnership comprised of local government, health service, community health and Barwon Water. It was originally branded *Choose Water This Summer*, to encourage water consumption over the summer period.



After the initial success, the campaign was rebranded for ongoing sustainability and year-round promotion of water as the drink of choice. A social media toolkit was developed to ensure community exposure to consistent evidence-based messaging across multiple channels. Promotional material and collateral included advertising (e.g., bus, cinema, radio, signage), distribution of free re-usable drink bottles, and installation of public drinking fountains.

Evaluation over a four-year period highlighted an estimated population reach of 900,000 from combined actions. The campaign has a strong climate and planetary health focus (e.g., reducing single use plastics, hydration during extreme heat), is adaptable for public health messaging (e.g. hygiene practices for public fountain use, COVID safe practices, water quality) and is embedded in organisational practices for encouraging health behaviour change. Barwon Water are heavily invested in the Choose Water Every Day initiative and in continuing collaborative action, and there is potential for the initiative to be scaled up across the Barwon South West region.

5.3.2 Key objectives: increasing active living

The Catchment Plan objectives for *increasing active living* are:

- Support local government to improve neighbourhood and precinct planning to better support active living
- Support local government to increase accessible and adaptable spaces for active living, ensuring compliance with appropriate state and national regulations and standards
- Increase socio-cultural norms reinforcing active living
- Increase capacity of the community to be more physically active and less sedentary
- Support Department of Transport to improve integration and accessibility of public transport
- Increase active transport opportunities
- Increase participation in sport and active recreation activities targeting priority cohorts.
- Decrease sedentary behaviour in workplaces, schools and early learning centres and during leisure time

5.3.3 Key outcome measures

Outcome measures are detailed in Table 5.1 (over page), showing indicators, targets, measures and measure details from the Victorian Public Health and Wellbeing Outcomes Framework [21].

Indicator	Targets	Measures	Measure details
Increasing healthy eating and increasing active living			
Increase healthy eating and active living		Proportion of adults, adolescents and children who consume sufficient fruit and vegetables	<ul style="list-style-type: none"> • Proportion of adults who consume sufficient fruit and vegetables • Proportion of adolescents 10–17 years who consume sufficient fruit and vegetables • Proportion of children 4–12 years who consume sufficient fruit and vegetables
		Mean serves of fruit and vegetables for adults, adolescents and children	<ul style="list-style-type: none"> • Mean daily serves of fruit in adults • Mean daily serves of fruit in adolescents 10–17 years • Mean daily serves of fruit in children 4–12 years • Mean daily serves of vegetables in adults • Mean daily serves of vegetables in adolescents 10–17 years • Mean daily serves of vegetables in children 4–12 years
		Proportion of adults, adolescents and children who consume SSB daily	<ul style="list-style-type: none"> • Proportion of adults who consume SSB daily • Proportion of adolescents 10–17 years who consume SSB daily • Proportion of children 5–12 years who consume SSB daily
		Discretionary food consumption of adults, adolescents and children (to be determined)	<ul style="list-style-type: none"> • Discretionary food consumption of adults (to be determined) • Discretionary food consumption of adolescents (to be determined) • Discretionary food consumption of children (to be determined)
		Proportion of infants exclusively breastfed to three months of age	<ul style="list-style-type: none"> • Proportion of infants exclusively breastfed to three months of age
	10 per cent increase in sufficient physical activity prevalence of adults by 2025 from 2011–12 baseline. <i>Source: World Health Organization 2013, Global monitoring framework on non-communicable diseases</i>	Proportion of adults, adolescents and children who are sufficiently physically active	<ul style="list-style-type: none"> • Proportion of adults who are sufficiently physical active • Proportion of adolescents 10–17 years who are sufficiently physically active • Proportion of children 5–12 years who are sufficiently physically active
	20 percent increase in sufficient physical activity prevalence of adolescents by 2025 from 2014 baseline. <i>Source: State Government of Victoria, Education State</i>		
	20 per cent increase in sufficient physical activity prevalence of adolescents by 2025 from 2014 baseline. <i>Source: State Government of Victoria, Education State</i>		<ul style="list-style-type: none"> • Proportion of adolescents 10–17 years who are sufficiently physically active • Proportion of children 5–12 years who are sufficiently physically active

Indicator	Targets	Measures	Measure details
Increasing healthy eating and increasing active living			
Increase healthy eating and active living		Proportion of people participating in organised sport (to be determined)	<ul style="list-style-type: none"> Proportion of people participating in organised sport (to be determined)
		Proportion of adults sitting for seven or more hours on an average weekday	<ul style="list-style-type: none"> Proportion of adults sitting for seven or more hours on an average weekday
		Proportion of journeys that use active transport	<ul style="list-style-type: none"> Proportion of journeys that use active transport
		Proportion of adolescents and children who use excess electronic media for recreation	<ul style="list-style-type: none"> Proportion of adolescents 10–17 years who use electronic media for recreation for more than two hours per day Proportion of children 5–12 years who use electronic media for recreation for more than two hours per day
Reduce overweight and obesity	Five per cent decrease in prevalence of overweight and obesity in adults by 2025 from 2011–12 baseline Five per cent decrease in prevalence of overweight and obesity in children by 2025 from 2011–12 baseline. <i>Source: World Health Organization 2013, Global monitoring framework on non-communicable diseases</i>	Proportion of adults, adolescents and children who are overweight and obese	<ul style="list-style-type: none"> Proportion of adults who are overweight or obese (measured)Proportion of adults who are overweight or obese (self-report) Proportion of adults who are obese (measured) Proportion of adults who are obese (self-report) Proportion of children 5– 17 years who are overweight or obese (measured) Proportion of children 5–17 years who are obese (measured)
Decrease financial stress		Proportion of adults and children who ran out of food and could not afford to buy more	<ul style="list-style-type: none"> Proportion of adults who ran out of food and could not afford to buy more Proportion of children 0–12 years living in households that ran out of food and could not afford to buy more
		Proportion of households with housing costs that represent 30 per cent or more of household gross income	<ul style="list-style-type: none"> Proportion of households with housing costs that represent 30 per cent or more of household gross income
		Proportion of people living in households below the 50 per cent poverty line	<ul style="list-style-type: none"> Proportion of people living in households below the 50 per cent poverty line

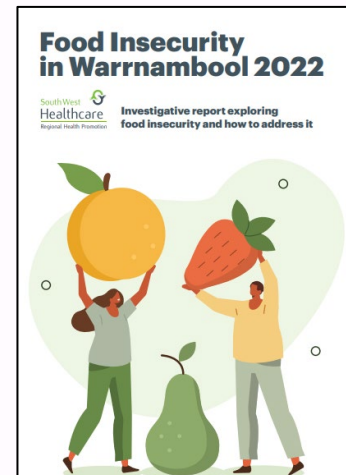
Table 5.1: Outcome measures for increasing healthy eating and active living. SSB = Sugar-sweetened beverages. Source: Victorian Public Health and Wellbeing Outcomes Framework [21].

Case study: Food Insecurity in the South West

Initiated by growing local concerns around food insecurity in the community, the South West Healthcare (SWH) Health Promotion team completed an investigative project to understand food insecurity in the Warrnambool LGA using funding from the Community Health – Health Promotion program. The investigation included a literature review, environmental scan, completing the Victorian Healthy Food Basket Survey in Warrnambool, interviewing service providers and community members, conducting a community food survey, and mapping of local food outlets.

Low incomes and increased costs of living were identified as barriers to accessing healthy food. Findings showed that communities can be supported to enjoy healthy food if affordable food is more easily accessible (walking distance or close commute), and that building lifelong skills from childhood can enable healthy eating.

Recommendations were to remove barriers to accessing healthy food, ensure availability of affordable healthy food and support opportunities for people to learn about food [48].



5.4 Reducing tobacco and e-cigarette related harm

Due to the hidden rise in e-cigarette use, often known as vaping, over the course of the COVID-19 pandemic, there is an identified need to establish a new network for practitioners working to reduce tobacco-related harm. This is to enable sharing of information and resources, identify “who needs to be at the table” and progress a regional approach to combat youth vaping. The BSWPHU Community Partnerships team will continue to facilitate this network. This work is supported by a state-wide campaign from Quit around the harms of e-cigarettes.

BSWPHU is having ongoing consultation with Quit and the Cancer Council around how to leverage state-wide communication campaigns, and how to best support partner organisations to utilise these resources with a place-based approach to maximise impact. Partners have identified that better connection between settings (e.g., schools and other places frequented by young people) would enable a co-ordinated systems approach to address the rise in e-cigarette use in young people. The Commonwealth Government has set an agenda to regulate the sale of vapes and e-cigarettes, which will strengthen the place-based approach to reduce and eliminate the use of vaping not only in young people, but across the population.

5.4.1 Key objectives and outcome measures

The Catchment Plan objectives for *reducing tobacco and e-cigarette related harm* are:

- Support and advocate for policy that decrease access and affordability of tobacco products
- Support and advocate for decreased number of environments in which to smoke
- Explore opportunities to decrease exposure to second- and third-hand smoke
- Advocate and promote decreased social acceptability of smoking
- Increase capacity within the Barwon South West region to stop tobacco smoking and use of e-cigarettes
- Increase awareness of uptake of stop-smoking supports (e.g., Quit program)

Outcome measures are detailed in Table 5.2 (over page), showing indicators, targets, measures and measure details from the Victorian Public Health and Wellbeing Outcomes Framework [21].

5.5 Reducing harm from alcohol and other drugs

Prevention and health promotion to address youth alcohol and other drug issues continues to be a high priority among Southern Grampians and Glenelg partners, who are focused on building protective factors, as well as delivering specific programs including the Alcohol & Drug Foundation's Local Drug Action Team Program, which is led in Southern Grampians by Youth Live4Life Inc and in Glenelg by the BSWPHU Community Partnerships team. A simultaneous focus on mental health (see below) acknowledges the strong inter-relationship between alcohol and other drugs and mental health.

A focus on diversifying revenue streams from reliance on alcohol sales within sporting clubs, free water at community events and implement the place-based setting of Good Sport program are some of the strategies aimed at reducing harm from alcohol and other drugs in the Barwon and South West subregions.

As described in Chapter 4, the Barwon South West region has been identified as having some of the highest levels of risky alcohol consumption and illicit drug use in the state. However, in townships such as Torquay, there has been rapid expansion of liquor licensed dispensaries and outlets. Tourism for the region continues to espouse the wonders of high-quality wineries, distilleries and breweries. Community consultation has shown that despite what the data are showing us, the region has not shown community readiness ready to acknowledge the problems that exist with the consumption of alcohol, nor actively embrace addressing this as a health or social issue. This presents both challenges and opportunities to work collaboratively with educating the community and increasing community readiness to reflect on the impacts of problematic alcohol consumption.

5.5.1 Key objectives and outcome measures

The Catchment Plan objectives for *reducing harm from alcohol and other drugs* are:

- Improve communication to target groups and cohorts
- Improve awareness and understanding of alcohol harms
- Support the reduction in alcohol related injury and harm
- Increase safe drinking setting
- Reduce non safe drinking incidences

Outcome measures are detailed in Table 5.2 (over page), showing indicators, targets, measures and measure details from the Victorian Public Health and Wellbeing Outcomes Framework [21].

Indicator	Targets	Measures	Measure details
Reducing tobacco and e-cigarette related harm			
Reduce smoking	30 per cent decrease in smoking by adults by 2025 from 2011–12 baseline. <i>Source: World Health Organization 2013, Global monitoring framework on non-communicable diseases</i>	Proportion of adults and adolescents who smoke	• Proportion of adults who smoke daily
	30 per cent decrease in smoking by adolescents by 2025 from 2014 baseline. <i>Source: World Health Organization 2013, Global monitoring framework on non-communicable diseases</i>		• Proportion of adolescents 12–17 years who currently smoke
		Age of smoking initiation	• Age of smoking initiation
		Proportion of children who live with a smoker who smokes inside the home	• Proportion of children who live with a smoker who smokes inside the home
Reducing harm from alcohol and other drugs			
Reduce harmful alcohol and drug use	10 per cent decrease in excess alcohol consumption by adults by 2025 from 2014 baseline. <i>Source: World Health Organization 2013, Global monitoring framework on non-communicable diseases</i>	Proportion of adults and adolescents who consume excess alcohol	• Proportion of adults who consume alcohol at lifetime risk of harm
	10 per cent decrease in excess alcohol consumption by adolescents by 2025 from 2014 baseline. <i>Source: World Health Organization 2013, Global monitoring framework on non-communicable diseases</i>		• Proportion of adolescents 12–17 years who consume alcohol at least monthly
		Proportion of adults and adolescents using an illicit drug in the past 12 months	• Proportion of people 14 years and older using an illicit drug in the past 12 months
		Rate of alcohol, prescription drug or illicit drug related ambulance attendances	• Rate of alcohol-related ambulance attendances • Rate of prescription drug-related ambulance attendances • Rate of illicit drug-related ambulance attendances

Table 5.2: Outcome measures for reducing tobacco, e-cigarette, alcohol and other drug related harm. Source: Victorian Public Health and Wellbeing Outcomes Framework [21].

5.6 Increasing the uptake of cancer screening

Increasing the uptake of cancer screening has been identified as a health priority through review of the data for the Barwon South West region and state-wide. Whilst most prevention partners in the Barwon South West region did not identify increasing cancer screening as a priority, many identified underlying concern that health checks in general had fallen behind or ceased due to the COVID-19 related restrictions over the last 3 years. As described in Chapter 4, cancer screening rates in the Barwon South West region sit above the state average; however, screening rates remain suboptimal. BSWPHU believes that with strong partnerships across the region, we can actively increase awareness and therefore uptake of cancer screening, and lead the way in introducing the values-based approach to our work. There have been recent advances in cancer screening, including increased availability of self-collection for cervical cancer screening [71], and a National Lung Cancer Screening Program will commence by July 2025 [90]. BSWPHU has identified an opportunity to monitor and evaluate, contribute to improved outcomes in the early detection and prevention of cancers, and ultimately reduce the burden on health services.

5.6.1 Key objectives

The Catchment Plan objectives for *increasing the uptake of cancer screening* are:

- Increase the participation and uptake of cancer screening
- Explore barriers to cancer screening
- Support and lead region wide Communication plans to encourage the uptake of cancer screening

5.7 Improving mental health and wellbeing

There are several networks that support collaborative action to support health and wellbeing in the South West subregion, including Healthy Well Corangamite, South West Health Promotion Network, South West Alliance and Communities of Practice that support the Healthy Warrnambool Plan. To improve mental wellbeing, the region is promoting volunteering programs, continuing implementation of Live4Life and working to improve social housing access.

Addressing youth mental health and the impacts on young people from the COVID-19 pandemic has been a focus in the Barwon subregion. Headspace collaborates with local health services to raise awareness of supports and promotes ways to stay mentally well. There is a region wide shared goal of approaching all activities with a social connection lens that aims to have good mental health as an outcome of prevention activities in the region.

Case study: Casterton Community Garden

At the Hands Up Casterton Community Workshops in November 2019, a small group identified an opportunity to address access to fresh food, increase gardening skills and social connection. The group collaborated with the Glenelg Shire and other stakeholders to establish a community garden located in the community recreation centre of town, near the bowling, croquet, sports oval, camp ground and three other Hands up Casterton initiatives: half basketball court, BMX pump track and the Kelpie walk (with exercise stations).



Addressing youth mental health issues also continues to be a high priority among Southern Grampians and Glenelg partners, who are focused on building protective factors, as well as delivering specific programs such as Live4Life (youth mental health), which is led in Southern Grampians by Western District Health Service and in Glenelg by Glenelg Shire Council.

5.7.1 Key objectives and outcome measures

The Catchment Plan objectives for *improving mental health and wellbeing* are:

- Reduce the prevalence of mental illness and increase resilience among Victorian individuals, families and communities
- Reduce the gap in social and emotional wellbeing for at risk groups, including Aboriginal Victorians, with an emphasis on loneliness and increasing social connectedness
- Reduce the occurrence of suicide deaths, suicidal ideation and suicidal attempt, and the gap between the suicide rates for vulnerable groups and the general population

Outcome measures are detailed in Table 5.3 (over page), showing indicators, targets, measures and measure details from the Victorian Public Health and Wellbeing Outcomes Framework [21].

5.8 Prevention of violence, family violence and promotion of gender equity

Across the Barwon South West region, there is an endorsed action of Respect 2040, led by Women's Health and Wellbeing Barwon South West [91]. This is currently divided into the Barwon subregion and the South West, with plans to come together as a region-wide initiative in the coming years. There are a number of programs being implemented to address the priority area of preventing gender violence and improving gender equity. Examples are 'The Respect Effect' youth led group pilot, Respectful Relationships and supporting women's and girls' participation in sport.

5.8.1 Key objectives and outcome measures

The Catchment Plan objectives for *prevention of violence, family violence and promotion of gender equity* are:

- Increase opportunities for women to have equal pay in the workforce
- Increase opportunities for equal participation in sport, employment and community life
- Support and build the Respect 2040 Barwon South West regional approach to address gender inequity.

Outcome measures are detailed in Table 5.3 (over page), showing indicators, targets, measures and measure details from the Victorian Public Health and Wellbeing Outcomes Framework [21].

5.9 Tackling climate change and its impact on health and increasing community resilience

Climate change impacts on health has been recognised as an emerging priority across the catchment, and Southern Grampians Glenelg Community Partnerships has been recognised as a leader in climate change & community resilience. The team is currently facilitating Harvesting Resilient Futures, with a focus on developing a shared understanding of local community resilience and identifying a more collaborative and coordinated strategic approach.

This project, alongside other opportunities to build local awareness and capacity, remains a key component of the local work within the Southern Grampians Glenelg subregion.

Warrnambool City Council, Moyne Shire and Corangamite Shire have a focused effort in their MPHWBPs to increase resilience and safety from impacts of climate change. There is strong leadership, collaborative community action and working with traditional owners to deliver climate action interventions in the South West subregion. Through renewable energy projects, waste management projects, improving natural environments, sustainable living and regenerative agriculture, the South West is committed to tackling climate change and its impact on health. There are several networks that support collaborative action to support health and wellbeing in the South West subregion, including Healthy Well Corangamite, South West Health Promotion Network, South West Alliance and Communities of Practice that support the Healthy Warrnambool Plan.

In the Barwon subregion, Surf Coast Youth 4 Climate action collective is a focused effort of young people working to promote ways to prevent global warming and mitigate against climate change. Health services and CH-HP funded health promotion teams aim to approach all prevention activity with a “reducing climate change” lens. This ensures multiple or co benefits when looking at outcomes and adds further evidence to support values-based initiatives.

5.9.1 Key objectives and outcome measures

The Catchment Plan objectives for *tackling climate change and its impact on health and increasing community resilience* are:

- Build resilient and safe communities that are adapting to the public health impacts of climate change
- Experience decreased health impacts associated with climate change (for example, fewer deaths from extreme heat events, fewer mosquito-borne diseases, fewer food outbreaks, fewer algal blooms in drinking water catchments)
- Support and implement increased action to reduce greenhouse gas emissions and realise health co-benefits

Outcome measures are detailed in Table 5.3 (over page), showing indicators, targets, measures and measure details from the Victorian Public Health and Wellbeing Outcomes Framework [21].

Indicator	Targets	Measures	Measure details
Improving mental health and wellbeing			
Increase mental wellbeing	20 per cent increase in resilience of adolescents by 2025 from 2014 baseline. <i>Source: State Government of Victoria, Education State</i>	Proportion of adolescents with high level of resilience	<ul style="list-style-type: none"> Proportion of adolescents 10–17 years with high level of resilience
		Proportion of adults and adolescents with psychological distress	<ul style="list-style-type: none"> Proportion of adults who report high/very high psychological distress Proportion of adolescents 10–17 years who experience psychological distress
		Proportion of children living in families with unhealthy family functioning	<ul style="list-style-type: none"> Proportion of children living in families with unhealthy family functioning
Decrease suicide		Suicide rate	<ul style="list-style-type: none"> Suicide rate
Prevention of violence, family violence and promotion of gender equity			
Reduce prevalence and impact of family violence		Rate of incidents of family violence recorded by police	<ul style="list-style-type: none"> Rate of incidents of family violence recorded by police
		Family violence index (to be determined)	<ul style="list-style-type: none"> Family violence index (to be determined)
Increase community safety		Proportion of adults experiencing at least one incident of sexual violence since the age of 15 years	<ul style="list-style-type: none"> Proportion of adults experiencing at least one incident of sexual violence since the age of 15 years
		Hospitalisation rate due to assault	<ul style="list-style-type: none"> Hospitalisation rate due to assault
		Proportion of adults feeling safe walking in their street at night	<ul style="list-style-type: none"> Proportion of adults feeling safe walking in their street at night
		Proportion of adults experiencing at least one incident of crime in the past 12 months	<ul style="list-style-type: none"> Proportion of adults experiencing at least one incident of crime in the past 12 months
		Rate of victimisation due to crimes recorded by police	<ul style="list-style-type: none"> Rate of victimisation due to crimes recorded by police
Tackling climate change and its impact on health and strengthening community resilience			
Increase neighbourhood liveability		Liveability (to be determined)	<ul style="list-style-type: none"> Liveability (to be determined)
Increase adaptation to the impacts of climate change		Excess death during extreme heat and heatwaves	<ul style="list-style-type: none"> Excess death during extreme heat and heatwaves
		Community resilience (to be determined)	<ul style="list-style-type: none"> Community resilience (to be determined)

Table 5.3: Outcome measures for improving mental health and wellbeing; prevention of violence, family violence and promotion of gender equity; and tackling climate change and strengthening community resilience. Source: Victorian Public Health and Wellbeing Outcomes Framework [21].

5.10 Challenges and threats for successful implementation

Whilst the prevention workforce brings strength and knowledge across the region, challenges have been highlighted throughout consultations with partners and stakeholders. These challenges are important to highlight to facilitate a solution focussed mindset across the region and are categorised under the following themes.

Workforce

Numerous challenges exist for the prevention workforce. During the COVID-19 pandemic, health service prevention staff were redeployed to response roles, and prevention activity therefore ceased for long periods of time. The extended period of lockdowns in Victoria had the roll-on effect that community gatherings and traditional ways of completing prevention activities in the community had to cease to protect life and abide by direction implemented by the State.

There has been increased concern around health and community organisations retaining and attracting staff. This is further exacerbated by rurality, part time job offerings and chronic shortage of housing options in rural and regional areas. Smaller rural services have generally only one part time health promotion staff member, highlighting implications resulting from working in isolation.

Recent fiscal measures include reductions in funding to Victorian CH-HP funded organisations. Local Government Agencies are scaling back community prevention work to offset growing inflation and spiralling costs related to infrastructure, which has led to an overall reduction in FTE in prevention across the Barwon South West region.

Resources

Partners reported that there appear to be fewer or limited opportunities to apply for grants for specific prevention activities. For example, health services and schools could previously apply for once off small grants to facilitate and promote students to walk to school as part of the Walk to School program, but it is now an expectation that schools and health services do this without grants.

Historically, prevention work has received limited funding. During the consultation process, partners indicated that this may be due to the long-term nature of prevention work, and lack of recognition of its impacts. Partners reported that more rural and regional locations are further impacted by lack of staff in the prevention area. This is shown through lack of available housing for staff, lack of sufficient infrastructure such as schools, and challenges in access to medical care locally, with some in the Southern Grampians Glenelg subregion having to travel upwards of 100kms to access a GP.

Programmatic approaches

It has been identified that whilst opportunities exist to implement programmatic interventions (projects and programs with a very clearly defined time frame), these tend to be unsustainable in the long term. A reliance on these approaches in isolation poses a risk to effective practices. It has been widely recognised across the region that a tendency towards the promising practice of building place-based, community led approaches is likely to have better impacts long term. The challenge is centred on monitoring and evaluating these approaches effectively to prove the benefits.

Engagement with specific settings (e.g., schools)

There is a widely held assumption that schools will positively engage with state-wide health promotion programs. The reality currently experienced across the region is that many schools

are overwhelmed with meeting educational needs and while schools recognise the valuable role they can play in health and wellbeing, they are more willing to facilitate this work when it is more flexible and tailored to each school's individual capacity and needs.

Reactive planning

The nature of funding cycles linked with politics and election cycles has been a longstanding issue for long-term health interventions and activity. The short-term nature of funding has favoured the uptake and funding of "once off projects". The evolution of the PCPs over time and introduction of technology and adoption of systems thinking approaches has led to the compilation of evidence showing that collective impact and working in partnership is key for successful community initiatives.

However, there has been limited opportunity for prevention stakeholders to work together on long term collaborative planning, particularly during the COVID-19 pandemic. As a result, planning has become more reactive to issues based on capacity and resources such as staff.

Community engagement and volunteering

Volunteering has a highly valued and longstanding role in the Barwon South West region. However, a considerable decline in volunteering was noted widely across the catchment, commencing prior to and further impacted by the COVID-19 pandemic. There are increasingly more community activities, organisations and clubs relying on volunteers, with the small pool of people who have the capacity to contribute experiencing fatigue. Placing community at the centre and mobilising local action with and by the community is a feature of place-based approaches and asset-based community development and is at risk when community engagement is challenged.

Reduced opportunities for collaboration

The ongoing impacts of the COVID-19 pandemic has meant that the opportunities for collaboration have been reduced. Whilst meeting online or in a hybrid format are now part of everyday professional working life, the ability to get all relevant partners and resources together is somewhat limited.

Access to reliable and useful data

The process of consultation with partners across the region exposed the challenges accessing data. Often data are hard to source without a financial burden, and locating up to date data that have been collected through reputable processes and have relevance at a local level can be difficult for prevention partners. This is particularly the case for local data that could be used to inform both impact of prevention work and future planning. Duplication of effort occurs across multiple organisations completing data reviews or needs assessments. Working collaboratively and sharing data could reduce duplication and become a strength of the Barwon South West Region.

Monitoring and Evaluation capacity

Consultations highlighted the limited or non-existent capacity of partners to evaluate prevention activities that are currently being implemented. Across the Barwon South West region there is variability in evaluation capacity. It was widely acknowledged through consultation that this is an area in which partners require assistance, and that BSWPHU should focus on capacity building for our community partners in this area.

5.11 Interventions, programs and approaches

Across the Victorian prevention system, interventions such as INFANT, VKEW, VicHealth Local Government Partnership, and the Achievement Program exist to support consistent, evidence-based programs designed to be delivered in conjunction with health promotion practitioners and other partners in early years, schools, recreation and community settings [89, 92-94].

Along with alignment to the Victorian Public Health and Wellbeing Outcomes Framework, there will be alignment with the *National Preventive Health Strategy 2021–2030* [5]. BSWPHU will supplement short term measures to monitor progress against shared priorities. Whilst specific targets identified in the Victorian Health and Wellbeing Outcomes Framework are adopted for the Barwon South West region, we note that these also align with the *National Preventive Health Strategy* [5, 21]. We acknowledge that current targets adopted from the Victorian Public Health and Wellbeing Outcomes Framework are set for 2025, with a new four-year Victorian Public Health and Wellbeing Plan expected this calendar year. The Catchment Plan will therefore undergo a substantive refresh and review in 2025.

Within the Barwon South West region, VKEW is currently supported through VicHealth and the Stephanie Alexander Kitchen Garden Program with advisors in the local government areas of Colac-Otway, Glenelg and Southern Grampians adding additional and necessary resources to the areas. Sustainability of actions presents a challenge when the Healthy Kids Advisors funding ceases in June 2024, and it is essential to establish partnerships to promote long-term success. The Achievement Program is a free health and wellbeing program that helps create healthier environments for working and learning. It is aligned with the World Health Organization's model for health promotion in schools and workplaces [93]. The Achievement Program can provide structured programmatic approaches to schools and workplaces; however, there have been barriers to program uptake throughout the Barwon South West region. Barriers were noted from partners around the limited capacity of schools, particularly since the COVID-19 pandemic. Partners are interested in working collaboratively to examine possible solutions.

There are, however, promising, new and emerging practices across the Barwon South West region that consider the complexity of the issues, the prevention needs of the community and the capacity of the health promotion workforce. Essentially these are centred predominantly around place-based approaches.

Alongside place-based approaches, much of the prevention work across the Barwon South West region considers complexity and uses a systems thinking lens to work with stakeholders and community to mobilise local action. This work also takes into account the role of community, identifying asset-based community development principles as key to implementing a robust, sustainable prevention approach.

BSWPHU will work collaboratively with partners in the region to achieve positive health outcomes related to the Health Priorities identified in Chapter 4. Prior to new specific health interventions being implemented with partners, BSWPHU will work to fill current needs. Capacity building has been identified as a key component of current needs, in particular around Monitoring and Evaluation.

Specific interventions and programs will be determined in the implementation phase of the Catchment Plan as we continue to work alongside our partners. Interventions will work towards achieving prevention outcomes that promote the following:

- The environments where people live, work, play and study are safe and healthy, and promote the wellbeing of future generations.

- Everyone is supported to live their healthiest life, and intergenerational health outcomes are improved.
- People are connected with the right supports, in the right place and at the right time to deliver outcomes that matter

5.12 Opportunities and the way forward

The establishment of BSWPHU provides tremendous opportunity to support and co-ordinate activities across the region and build a robust Barwon South West region prevention system. A region-wide approach will provide opportunities to leverage multiple sector networks and enhance investment in prevention while retaining subregional local approaches and activities. Using the collective wisdom of the region, BSWPHU can provide a platform for capacity building, collaborating and aligning effort, as well as collective problem solving particularly across region-wide issues, and advocate for and support best practice approaches.

Actions to be agreed on in collaboration and co design with our prevention partners in the first year of the Catchment Plan (2023–2024) include the following:

Advocacy

This will entail utilising BSWPHU to advocate for local issues (e.g., housing shortages, transport, service access, and workforce), and can provide a regional platform to shine the light on social determinants of health and highlight the needs of priority cohorts within the region. The BSWPHU Community Partnerships team can advocate for local issues from a social determinants of health perspective. For instance, availability of affordable housing leads to better health outcomes on a population level. A plan for strategic advocacy will be developed with partners through the establishment of sub regional catchment leadership groups.

Regional collaboration structure

The Community Partnerships team has begun the establishment of Leadership Groups that will have the ability to bring partner organisations together to work collaboratively in the Prevention space. The establishment of subregional Catchment Leadership Groups will enable communication and collaboration for regional collective work. This provides a mechanism at the manager level to collaborate and avoid duplication of effort on the ground for health promotion and population health staff. This will also focus effort on the development of the implementation plan.

Development of implementation plan

BSWPHU will develop the implementation plan for the Barwon South West region's prevention workforce development and capacity building across the region in collaboration with partners. This includes exploring and designing infrastructure to support a collaborative communication and learning platform. This will include the development of a shared vision and objectives. This could have the potential to develop and utilise shared resources

The implementation plan will be supported by a Monitoring, Evaluation and Learning (MEL) framework which will include shared approaches to measurement. The implementation plan will take a whole of system approach to identify and evaluate locally led, promising practice interventions that have potential for broad scale impact. The implementation plan will support the delivery, monitoring and evaluation of identified state wide programs at a local level.

Support for Municipal Public Health and Wellbeing Planning

The Community Partnerships team will provide support for the collaborative planning, delivery and evaluation of Health Promotion and MPHWP across the 10 LGAs of the Barwon South West Region. This includes:

- Facilitating professional development, capacity building and learning opportunities
- Facilitating collective problem solving to address local issues
- Facilitating coordination and collaboration of efforts
- Providing a platform for sharing and learning
- Providing expert data support
- Creating the structures to enable ongoing collaboration and joined up prevention effort
- Providing linkages with experts, policy makers and research
- Facilitating partnerships

These activities will link strongly back to the aligned local, state and national plans (shown in Figure 2.1 and Appendix 1), including targets highlighted above to outline effectiveness of activity outcome. In order to collate data, outcomes and activity, the BSWPHU Community Partnerships team will co-design with partners a Monitoring, Evaluation and Learning (MEL) framework. This will form the overarching structure for the collective prevention work of the Barwon South West region. The MEL framework, detailed further in Chapter 6, will enable the Community Partnerships team to collect data and activity information, and provide the foundation to share challenges and achievements and successes in each of the health priorities in the Barwon South West region.

Chapter 6: Monitoring and evaluation

BSWPHU recognises that population health catchment planning is intended to drive outcomes focus to health promotion and prevention and leverage collective action toward improving key health metrics. To achieve this aim, BSWPHU will develop a monitoring, evaluation and learning (MEL) framework that will provide a transparent approach to monitoring and reporting progress on collective efforts to achieve better health outcomes across the Barwon South West Region.

During consultation with prevention partners, it was repeatedly highlighted that knowledge and expertise around monitoring and evaluation was limited across the region. Multiple partners reported not effectively evaluating their interventions, whilst some reported not having funding or resources to evaluate and thus being unable to undertake evaluation at all. As discussed in Chapter 5, this was highlighted as a key gap and an area in which BSWPHU could build capacity to retain knowledge within the region.

6.1 Building a monitoring, evaluation and learning framework

A MEL framework combines monitoring, evaluation and learning into one integrated system so partners and stakeholders can reflect, adapt and continuously improve. It is key for BSWPHU to develop a robust MEL framework in the early stages of Catchment Plan implementation and clearly align it with a theory of change agreed to by all partners.

6.1.1 Key MEL deliverables for Year 1: 2023–24

- Develop a framework in consultation with partners that will enable BSWPHU and partners to monitor, evaluate and learn about the state and national prevention long term outcome measures in a local context.
- Develop shorter term progress measures, linked to outcomes.
- Develop a mechanism to monitor and adapt the implementation of the catchment plan.

6.1.2 Key principles

Purpose and scope: The MEL framework will measure longer term population level outcomes and shorter-term impact/key performance indicator (KPI) measures relevant to place-based interventions.

Alignment: The MEL longer term outcome measures will align with the Victorian Public Health and Wellbeing Outcomes framework which guided the LPHU Outcomes Framework 2022–23 [95] and DH data collection, analysis and reporting systems. Examples of shorter-term progress measures tied to population outcomes include annual review of local council MPHWP's and health promotion funding streams in community health and women's health.

Shared responsibility: BSWPHU and partner organisations will share responsibility for monitoring outcomes to satisfy any formal departmental reporting requirements and demonstrate progress against the nominated shorter-term measures linked to broader population outcomes.

Mechanism established for continual review and adaption: A continual review mechanism will be built into the MEL framework to enable the catchment plan to be used in a 'live' way and ensure that adaptations are made as needed.

Value-based approach: In order to shift to a value-based approach it will be necessary over time to capture a range of outcomes and cost metrics. At an intervention and program evaluation level it will also be important to understand the costs avoided as a result of interventions, this will be included in evaluation frameworks where possible. BSWPHU is supportive of a values-based approach and recognise this as a new and major reform.

Co-developed with local partners: The MEL framework will be developed in collaboration with our local partners.

6.1.3 Prevention and population health outcomes

Long term outcomes

Long term outcomes, shown in Table 6.1, will be aligned with the Victorian Public Health and Wellbeing Outcomes Framework [21] which has guided the LPHU Outcomes Framework [95].

Aspirational 2-to-5-year outcomes	2022–2023 outcome statement	2022–2023 performance indicator	2022–2023 measure
<p>Prevention and Population Health</p> <p>Demonstrated reduction in risk factors contributing to the burden of preventable chronic disease as a result of the place-based prevention and population health initiatives delivered and co-ordinated by the LPHUs.</p>	<p>Communities are supported to live healthier lives through place-based prevention and population health initiatives delivered in partnership with local organisations.</p>	<p>LPHUs collaborate with local organisations to better understand and respond to local population health priorities.</p>	<p>LPHUs develop population health catchment plans reflecting state-wide public health and wellbeing priorities. This includes supporting local priorities where identified through population health needs assessment / Municipal Public Health and Wellbeing Planning.</p> <p>LPHUs work in partnership with organisations and community to target at least two population health priorities in the first year. The priorities and indicators are to be agreed with DH. Wherever possible LPHUs draw on existing evidence-informed programs and services.</p>

Table 6.1: Prevention and population health LPHU outcomes framework. Source: LPHU Outcomes Framework [95].

Short term indicators

Prevention and population health outcomes

The Catchment Plan (2023–2029) will have shorter term progress measures, linked to health outcomes. Healthy eating and active living are two health priorities that were identified and submitted to DH for the Barwon South West region. These priority areas were a focus of the Community Partnerships team for 2022–2023.

Examples of shorter-term progress measures will be tied to population outcomes including annual review of local council MPHWP, health promotion funding streams in community health and women’s health.

Resilient and sustainable local public health systems

Building the foundations for resilient and sustainable local public health systems will be key to achieving health outcomes. The development of the Catchment Plan will support this systems change.

Examples of short-term performance indicators will include:

- Engagement and Partnerships: BSWPHU will continue to build effective partnerships with key stakeholders in their community and develop an engagement plan.
- System connectedness: BSWPHU will continue to identify opportunities to improve connectedness in our region by implementing a region wide approach to understand gaps and develop processes to increase health outcomes with an equity focus.
- Workforce capacity building: BSWPHU will identify prevention workforce needs and build capacity to strengthen local public health systems.

6.1.4 Utilising existing systems to support data collection, analysis and reporting

DH is leading the development of data collection, analysis and reporting systems that can extend the capability to track shorter term progress on key investments linked to population outcomes. BSWPHU will utilise the information technology being developed by DH. In addition, BSWPHU will also consider new ways to collect information from community or from partners on progress to support monitoring and evaluation.

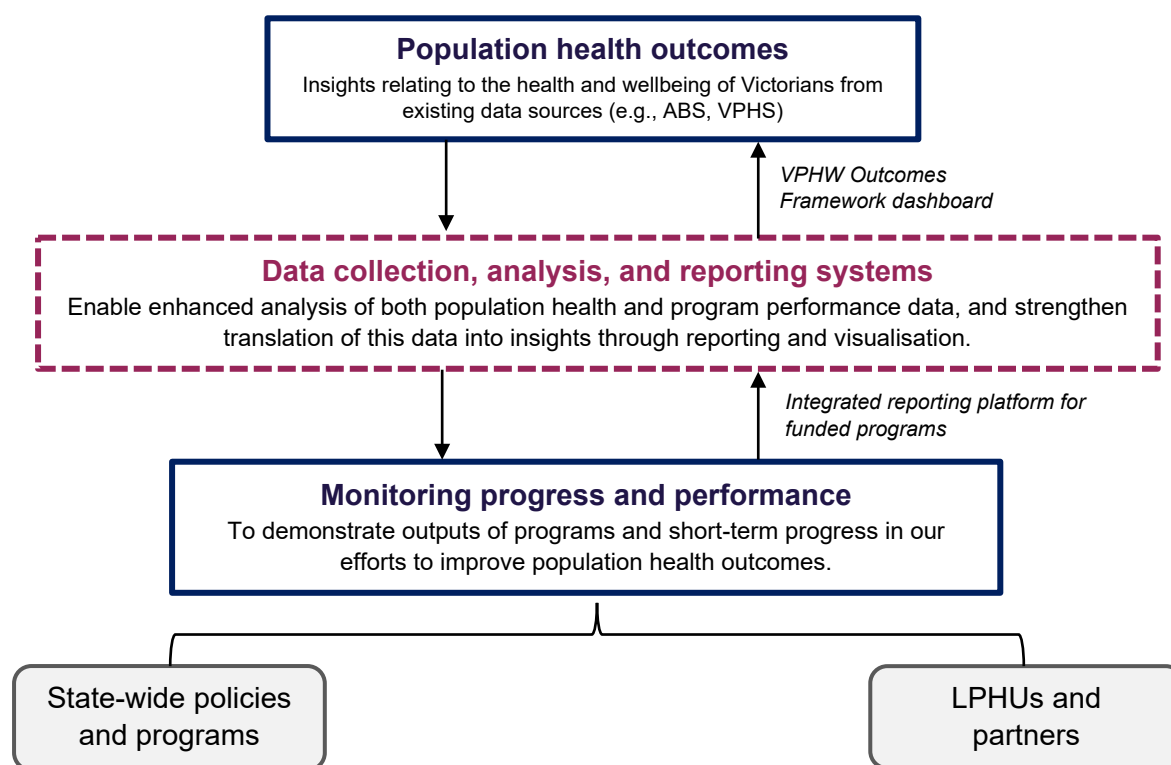


Figure 6.1: Systems to support monitoring of population and performance outcomes. ABS: Australian Bureau of Statistics, VPHS: Victorian Population Health Survey, VPHW: Victorian Public Health and Wellbeing. Source: LPHU Population Health Catchment Planning Framework [6].

BSWPHU will also utilise a range of existing programs and services which have links to data that will enable measurement of shorter-term progress linked to the broader outcomes in the *Public Health and Wellbeing Outcomes framework* [21]. These include:

- Healthy eating and oral health (VKEW, Healthy Eating Advisory Service, Smiles 4 Miles)
- Active living (Achievement program, active schools)
- Early years (INFANT program)

- Tobacco and e-cigarettes (Achievement program)
- Prevention of cardiovascular disease and T2DM (referrals into evidence-based risk reduction program (Life!) and increased Heart Health checks and T2DM risk assessments)
- Increase participation rate for identified under screened population groups across catchment (cervical, bowel, breast)
- Annual review of Local Council MPHWP

6.1.5 The planning steps to develop the MEL framework

BSWPHU will draw on existing planning guidelines and resources to develop the MEL framework including *Place-based approaches: A guide for the Victorian Public Service* [96]. Gaps and limited understanding of monitoring and evaluating interventions is a key priority to address with our partners, so all steps will be done collaboratively to build knowledge and capacity around monitoring and evaluation for our partners across the region.

As shown in Table 6.2, key processes in developing the MEL framework will include:

- Working with local partners to co-develop (or co-design) a monitoring, evaluation and learning framework
- Establish a mechanism for continual review and adaption: This mechanism will draw on departmental representatives, subject matter experts and relevant partners.
- Build the Barwon South West prevention workforce MEL capability
- Embed a culture of reflection and learning in their program

Step 1: Frame and scope the evaluation task	Step 2: Clarify the theory of change and principles	Step 3: Plan the monitoring, evaluation and leaning	Step 4: Plan for strategic learning and reporting
Clarify the 'thing' we are evaluating Identify the audience for the MEL plan and their requirements Define the purpose of the MEL Determine what success would look like for our MEL plan Illuminate resourcing and degree of investment in evaluation and choose our 'level' Highlight who should be engaged in MEL Clarify which aspects of context you need to consider	Refine the high-level theory of change – the population level changes we are seeking to improve Identify the outcomes and theory of change (co-developed with local partners.) Refine the locally developed practice principles and enablers for change	Select our key evaluation questions Develop our sub-questions and key indicators Select suitable methods	Key mechanisms for data consolidation and strategic learning Strategy to ensure findings get used for strategic learning Consider the need for evaluation studies Consider what reports may be needed Plan governance and sign-off Operational considerations

Table 6.2: Developing the MEL framework: The planning steps for year 1–2 (2023–24). Source: *Place-based approaches: A guide for the Victorian Public Service* [96].

6.2 Summary

The Catchment Plan is developed and designed to be a live document that will be updated and refreshed over time, through to 2029. BSWPHU is working collaboratively and collectively with our prevention partners across the Barwon South West region to ensure minimal duplication of effort across local government, state and nationally funded prevention efforts. BSWPHU will ensure that prevention activity is captured as progress and achievement of short-term impacts as well as long term shifts by the efforts of BSWPHU and prevention system partners.

In preparing this Catchment Plan, BSWPHU has undertaken comprehensive surveillance of the region's population, including a deep dive into modifiable risk factors associated with the preventable chronic disease burden within the Barwon South West region. The Catchment Plan has mapped current prevention activity and along with supporting population datasets, has identified eight health priorities that form the focus of the Catchment Plan implementation. The Community Partnerships team engaged in extensive consultation with prevention partners, including meetings with stakeholders, forums and direct engagement with community groups. BSWPHU has identified the MEL framework to be implemented in the first year of the Catchment Plan. We look forward to collectively approaching challenges within the region with a solutions focused, outcomes measured approach to all prevention activity.

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Appendix 1: National, State and Municipal plans

The below table provides hyperlinks to national, state and municipal level plans with which the Catchment Plan is aligned. All links are current as of 6th June 2023.

National level plans
National Preventive Health Strategy 2021-2030
State level plans and tools and acts
Victorian Public Health and Wellbeing Plan 2019-2030
Victorian Public Health and Wellbeing Outcomes Framework
Victorian Cancer Plan 2020-2024
Healthy Kids, Healthy Futures
Ageing well in Victoria: An action plan for strengthening wellbeing for senior Victorians: 2022-2026
Free from Violence: Victoria's strategy to prevent family violence and all forms of violence against women
Free from Violence Second Action Plan 2022-2025
Gender Equality Action Plan 2021-2025: Guidance for Defined Entities
Victoria's Climate Change Strategy
Adaptation Action Plans
Municipal level plans
Council Plan: Borough of Queenscliffe 2021-2025
City of Greater Geelong: Our Community Plan 2021-25
Healthy Warrnambool 2021-25 Plan
Colac-Otway Shire: Council Plan 2021-2025
Corangamite Shire Council: Municipal Public Health & Wellbeing Plan 2021-2025
Golden Plains Shire: Council Plan 2021-2025
Thriving Glenelg: The Glenelg Shire Municipal Public Health and Wellbeing Plan 2021-2025
Moyne Shire Council: 2021-25 Council Plan
Southern Grampians Shire Council: Community Public Health and Wellbeing Plan 2021-2025
Surf Coast Shire Council: Council Plan Incorporating the Health and Wellbeing Plan 2021-2025

Appendix 2: Consultations

The Barwon South West Public Health Unit is grateful to the many people who made completing this catchment plan possible. This Plan represents a collaboration of thought and effort.

Particular *recognition* is given to the extensive array of individuals and organisations who participated throughout the various stages of the *consultation process*.

Local Government Areas

Borough of Queenscliffe
City of Greater Geelong
Warrnambool City Council
Colac-Otway Shire Council
Corangamite Shire Council
Glenelg Shire Council
Golden Plains Shire Council
Moyne Shire Council
Southern Grampians Shire Council
Surf Coast Shire Council

Health Services and Community Health Organisations

Barwon Health
Bellarine Community Health
Casterton Memorial Hospital
Colac Area Health
Great Ocean Road Health
Hesse Rural Health Service
Heywood Rural Health
Portland District Health
South West Healthcare
Western District Health Service
Terang and Mortlake HS
Timboon & District HS

Women's Health Organisations

Women's Health and Wellbeing Barwon South West

Sexual and Reproductive Health Services

Barwon Health

Aboriginal and Torres Strait Islander Organisations

Dhauwurd-Wurrung Elderly & Community Health Service INC (DWECH)

Wathaurong Aboriginal Co-Operative

Gunditjmara Aboriginal Co-Operative

Other Partners

Active Geelong

Barwon Water

Batforce

Brophy Family and Youth Services

Cultura (formerly Diversitat)

Encompass

Geelong Cats

Geelong Region Local Learning & Employment Network (GRLEN)

Give Where You Live

Glenelg Southern Grampians Local Learning & Employment Network (GSGLLEN)

GMHBA

Great South Coast Youth Strategic Advocacy Group (YSAG)

Leisure Networks

Meli (recent amalgamation of Bethany and Barwon Child Youth and Family)

Neighbourhood Houses

SAFVC – Sexual Assault and Family Violence Centre

Sirovilla

Northern Futures

Headspace

Wannon Water

WDV – Women with Disabilities Victoria

Western Victoria Primary Health Network

Youth Affairs Council of Victoria

Appendix 3: Interview template

The below is an example of a semi-structured interview template used to undertake consultation with partners.

Aims of discussion
<ul style="list-style-type: none"> To reconnect and check in with you, see how things are going To have an initial conversation about what's working well - strengths/ achievements in prevention / HP - and needs/ gaps and to any barriers/ support/ capacity issues
Catchment Plan – Engagement
Name
Organisation
Position
Contact details
BSWPHU interviewer
Section 1: Updates
<p>BSWPHU introduction</p> <ul style="list-style-type: none"> Nine Local Public Health Units (LPHUs) have been established across Victoria, each hosted by a health service. The Barwon South West Public Health Unit (BSWPHU) is hosted by Barwon Health. With an initial focus on the public health response to COVID-19, the expansion of focus has now commenced delivering an expanding range of health protection, prevention and population health functions. On July 1 2022, Southern Grampians Glenelg PCP transitioned to the BSWPHU. The staff and role of the former PCP have transitioned to the Community Partnerships team within the BSWPHU. LPHUs are working together with the Department of Health towards a common vision for public health in Victoria, including three basic aims (<i>simplify as needed</i>): <ul style="list-style-type: none"> Environments where people live, work, play and study are safe and healthy, and promote the wellbeing of future generations Everyone is supported to live their healthiest life, and intergenerational health outcomes are improved People are connected with the right supports, in the right place and at the right time to deliver outcomes that matter to Victorians Aim to achieve better health outcomes through place-based prevention and population health initiatives delivered in partnership with local organisations – we recognise that there is already great work happening on the ground in Southern Grampians/Glenelg. Our next step is to develop Population Health Catchment Plans for the next two years which will be informed by population health needs and equity issues and by input from our local partners.

Partner agency updates

Section 2 - Current work focus and priorities

What are your current work priorities and focus and why? (Any particular population groups?)

What does this look like (current activities, partnerships, collaboration, measurement and outcomes)?

Is this the same or different from the past?

Section 3 – Support and Capacity Needs

Are you able to meet needs with current skills and capacity?
What are the needs and opportunities?

Section 4 – Gaps and Emerging Issues

What are the gaps or emerging concerns?
Do you / others have capacity/ interest to address these?

Section 5 – Partnerships and Collaboration

Role interest in Partnership Group – local/regional

Other

Appendix 4: Existing programs & initiatives

Priority	Programs / Initiatives*	
	State**	Local (including Community Led & Emerging Practice)
Increasing healthy eating	<p><i>Universally available:</i></p> <ul style="list-style-type: none"> • Vic Kids Eat Well (VKEW) • Achievement Program • INFANT • Healthy Eating Advisory Service • Healthy Choices • Healthy Retail • Menu Planning for Long Day Care • Smiles 4 Miles <p><i>Funded in some LGAs:</i> VicHealth Local Government Partnership Healthy Kids Advisors (VKEW)</p>	<ul style="list-style-type: none"> • Community Kitchens • Choose Water Every Day Refill Station Program • Hydration Station Program • Additional public water drinking fountains • Great Tasting Water • Healthy Heroes • Water Heroes • Farm My School • Youth Gorilla Garden • Little Growers • Water consumption/hydration education initiatives • GenR8 Change • SEA Change Portland • Hands Up Casterton • Golden Growers • Edible Gardens Webinars • Common Ground Project
Increasing active living	<p><i>Universally available:</i></p> <ul style="list-style-type: none"> • Active Schools • Achievement Program • Regional Sports Program • Together More Active • This Girl Can • Walk to School • Walk to Work • INFANT <p><i>Funded in some LGAs:</i> VicHealth Local Government Partnership</p>	<ul style="list-style-type: none"> • Active OUR Way • No Lights No Lycra • Lacrosse for young people • Mini Movers • Power to Pedal • Proud to Play • Play Streets • GenR8 Change • SEA Change Portland • Hands Up Casterton • Upgrades to existing sport and recreation reserves and facilities, walk & ride trails. • Flexible/modified sport & rec options • Neighbourhood activation program • Fit Kids • Young Active Kids (YAK) • Walk to Wellness
Reducing tobacco and e-cigarette related harm Reducing harm from alcohol and other drugs	<p><i>Universally available:</i></p> <ul style="list-style-type: none"> • Quit • Achievement Program • Good Sports Program <p><i>Funded in some LGAs:</i> Alcohol and Drug Foundation Local Drug Action Teams (LDATs)</p>	<ul style="list-style-type: none"> • Smoking cessation support • Tackling Indigenous Smoking program • Tackling Youth Vaping • Building protective factors to prevent alcohol harm among young people • Community campaign to increase awareness of NHMRC alcohol guidelines

Increasing the uptake of cancer screening	<i>Universally available:</i> <ul style="list-style-type: none"> • Breast Screen Australia (delivered at State level) • Mobile Breast Screen Service • National Cervical Cancer Screening Program (delivered at State level) • National Bowel Cancer Screening Program (delivered at National level) 	
Improving mental health & wellbeing	<i>Universally available:</i> <ul style="list-style-type: none"> • R U OK? <i>Funded in some LGAs:</i> <ul style="list-style-type: none"> • Future Healthy (Youth social connections – incorporates HEAL) • Big Connect • Jumpstart • VicHealth Local Government Partnership • Achievement Program 	<ul style="list-style-type: none"> • Youth Ambassador Program • Youth Leading Change (culturally appropriate foods in sporting clubs) • Live4Life • Mental Health First Aid Training • Youth engagement & development including LGBTIQ+ support groups, youth mentoring • Western Victoria PHN Suicide Prevention Trial • Reconciliation and Aboriginal Partnership strategies • Increasing visibility of Aboriginal culture in public spaces, arts + culture program • Digital literacy sessions, social connection and volunteering opportunities for older people • The Resilience Project • Transport to increase access to services, telehealth
Prevention of violence, family violence and promotion of gender equity	<i>Universally available:</i> <ul style="list-style-type: none"> • Achievement Program • Respectful Relationships 	<ul style="list-style-type: none"> • Respect Cup • Respect 2040 • Fair Access Road show (addressing toxic masculinity & gender equality in sporting clubs) • Gender Impact Assessments & Gender Equity Action Plans • The Respect Effect • Men’s Behaviour Change Program
Tackling climate change and its impact on health and strengthening community resilience	<i>Universally available:</i> <ul style="list-style-type: none"> • Achievement Program 	<ul style="list-style-type: none"> • Harvesting Resilient Futures • Climate Resilience Planning at LGAs • Climate change and Health Community of Practice • Surf Coast Youth 4 Climate

* This is not intended to be an exhaustive list

** State programs and initiatives: While some of the state initiatives and programs are available state-wide, take up within the region is not universal. Other state programs have funded staff in particular LGAs only.

Appendix 5: List of networks

The below list is a snapshot of networks and groups in the Barwon South West region, with which the Community Partnerships team has a connection.

We recognise that our partners also participate in and lead a number of other networks.

This list is current as of May 2023

Barwon Region E-Cig & Tobacco Working Group (G21 CH-HP funded partners)

Beyond the Bell Great South Coast

GenR8 Change Strategic Group

GenR8 Change Operational Group

Glenelg Youth Network

Glenelg Southern Grampians Local Learning Employment Network Board

GSC Youth Strategic Advocacy Group

Hands Up Casterton Collaborative Group

Healthy Glenelg Local Drug Action Team

Healthy Supermarkets CoP (state-wide)

Healthy Warrnambool (Communities of Practice)

Healthy Well Corangamite

Integrate Glenelg

Live 4 Life Glenelg Partnership Group

Live 4 Life Southern Grampians Partnership Group

Partnership Brokerage Community of Practice – South West

Respect 2040 G21 Region Partnership Advisory Group meeting

SEA Change Portland Collaborative Group

Southern Grampians Glenelg Change Communities Learning Circle

Southern Grampians Local Drug Action Team

Southern Grampians Shire Council Municipal Emergency Management Planning Committee

Southern Grampians Youth Network

South West Healthcare Health Promotion Network

South West Local Drug Action Team (Warrnambool)

South West Vic Alliance (formally the Great South Coast Group) is an alliance between the Shires of Colac Otway, Corangamite, Glenelg, Moyne, Southern Grampians, City of Warrnambool and Industry

South West Volunteer Network Coordinators Meeting

Thriving Communities Partnership South West Victoria

Victorian Active Living Alliance (state-wide)

Victorian Healthy Eating Enterprise (state-wide)

Victorian Local Government Partnership Group Network(s)

Warrnambool City Council Climate Change Community of Practice

Youth Strategic Advocacy Group Great South Coast

Youthlink 55 (WCC, Moyne, Corangamite)

Appendix 6: Targets from the *National Preventive Health Strategy*

Target	Relevant strategy, action plan, guideline
Increasing healthy eating	
Halt the rise and reverse the trend in the prevalence of obesity in adults by 2030	
Reduce overweight and obesity in children and adolescents aged 2-17 years by at least 5% by 2030	
Adults and children (≥9 years) increase their vegetable consumption to an average 5 serves per day by 2030	National Obesity Prevention Strategy 2020 Australian Dietary Guidelines
Reduce the proportion of children and adults' total energy intake from discretionary foods from >30% to <20% by 2030	
Reduce the average population sodium intake by at least 30% by 2030	
Increase the proportion of adults and children who are not exceeding the recommended intake of free sugars by 2030	
At least 50% of babies are exclusively breastfed until around 6 months of age by 2025	COAG Health Council Australian National Breastfeeding Strategy: 2019 and beyond
Increasing active living	
Reduce the prevalence of physical inactivity amongst children, adolescents and adults by at least 15% by 2030	Australia's 24-Hour Movement Guidelines and Australia's Physical Activity and Sedentary Behaviour Guidelines
Reduce the prevalence of Australians (≥15 years) undertaking no physical activity by at least 15% by 2030	
Increase the prevalence of Australians (≥15 years) who are meeting the strengthening guideline by at least 15% by 2030	
Reducing tobacco and e-cigarette related harm	
Achieve a national daily smoking prevalence of less than 10% by 2025 and 5% or less for adults (≥18 years) by 2030	National Tobacco Strategy 2020–2030
Reduce the daily smoking rate among Aboriginal and Torres Strait Islander people (≥15 years) to 27% or less by 2030	

Target	Relevant strategy, action plan, guideline
Reducing harm from alcohol and other drugs	
At least a 10% reduction in harmful alcohol consumption by Australians (≥14 years) by 2025 and at least a 15% reduction by 2030	National Alcohol Strategy 2019–2028 National Drug Strategy 2017–2026
Less than 10% of pregnant women aged 14 to 49 are consuming alcohol whilst pregnant by 2030	
Less than 10% of young people (14-17 year olds) are consuming alcohol by 2030	
At least a 15% decrease in the prevalence of recent illicit drug use (≥14 years) by 2030	
Increasing the uptake of cancer screening	
Increase participation rates for bowel cancer (to at least 53%), breast cancer (to at least 65%) and cervical cancer (to at least 64%) screening by 2025	
Eliminate cervical cancer as a public health issue in Australia by 2035	
Improving mental health and wellbeing	
Towards zero suicides for all Australians	The Fifth National Mental Health and Suicide Prevention Plan

Source: National Preventive Health Strategy 2021–2030, Australian Government Department of Health [5].

