NEPHU POPULATION HEALTH CATCHMENT PLANNING

STAGE 1 REPORT

PHASES 1 - 3

DECEMBER 2022

NEPHU NORTH EASTERN PUBLIC HEALTH UNIT

ACKNOWLEDGEMENTS

We acknowledge the traditional owners of the land on which we work and live. We pay our respects to elders past and present, and extend that respect to all Aboriginal and Torres Strait Islander people.

We recognise, celebrate and respect Aboriginal and Torres Strait Islander people as the First Australians. We acknowledge their unique cultural and spiritual relationships to the land and waters, as we strive for equality and safety in health and wellbeing outcomes.

CONTRIBUTORS

NEPHU would like to acknowledge the contribution of the following teams in preparing this report:

- Public Health Integrated Planning and Programs
- Epidemiology
- Communications
- Senior Leadership

We would also like to thank the many stakeholder contributors for their time and the knowledge and insights they shared during the Listening Lab phase of this project.

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NEPHU POPULATION HEALTH CATCHMENT PLANNING

SUMMARY ANALYSIS FOR STAGE 1, PHASES 1–3

Background

The North Eastern Public Health Unit (NEPHU) is required by the Department of Health to develop a Population Health Catchment Plan by 30 June 2023. This will identify priorities for place-based primary and secondary prevention activity focused on preventable chronic disease and modifiable risk factors. As part of this process, NEPHU must identify two population health priorities for targeted collective effort in FY22-23.

To deliver the Catchment Plan and enable evidence-based selection of immediate priorities, NEPHU has designed and is progressively implementing a collaborative, multi-stage population health planning process.

This report contains the findings from Stage 1, Phases 1 – 3 of the catchment planning process:

1. Desktop review of the prevention landscape across the NEPHU catchment
2. Listening Lab Program
3. Population Health Profile.

This information will enable informed participation of stakeholders in Stage 1, Phase 4 – the interactive stakeholder workshop – which will generate recommendations for the two immediate priority areas for focus.

The output forms a foundation upon which to build in the next stage of the Population Health Catchment Plan development. It may also be drawn upon to inform design, delivery and evaluation of prevention initiatives and activities.

Aligned priorities and an enabling policy environment

The review of the prevention landscape confirmed there is strong inter-sectoral alignment to health and wellbeing priorities driven by key state-wide and sector-based policy and planning documents.

This alignment creates an environment conducive to coordination, collaboration and collective effort towards improving health and wellbeing outcomes for Victorians living in the north eastern suburbs of Melbourne.

The review of planning documents alongside organisational health promotion and prevention strategies and plans and stakeholder recommendations for NEPHU prevention priorities showed there is particularly strong alignment across seven strategic planning drivers.

Stakeholder recommendations for NEPHU prevention priorities

Priority	Stakeholder recommendations for NEPHU prevention priorities	
	External	Internal
Increasing active living	58%	57%
Increasing healthy eating	58%	57%
Reducing preventable chronic disease	47%	57%
Reducing harm from alcohol and drug use	42%	43%
Improving sexual and reproductive health	38%	43%
Reducing tobacco related harm	33%	29%
Reducing injury in the community	28%	7%

Mental health and wellbeing, and prevention of violence also featured strongly in both the landscape review and top three current prevention priorities identified in the Listening Lab Program. With significant work underway led by other agencies, NEPHU has defined these areas as out of scope for selection as priority focus areas for FY22-23.

Appetite for collaborative action

The participation of stakeholders from 40 organisations across the catchment in the Listening Lab Program demonstrates significant interest in, and commitment to, collaboration. Responses and participation also show a recognition of the importance of collective action to drive impact in improving health and wellbeing outcomes.

The importance of coordinated and functional partnerships and collaboration was recognised as critical for success. This was highlighted as both a current strength and an opportunity for improvement where NEPHU may play a role.

The emerging NEPHU role

The Listening Lab findings reveal key functional opportunities for NEPHU to add value in the current landscape. These elements will serve to strengthen partnerships and collaboration and include:

- Enhancing coordination, alignment and integration in planning, program delivery and evaluation
- Community engagement with a focus on priority populations and the application of an equity lens
- Provision of data and analysis to deepen understanding of community needs, inform planning and programs and demonstrate outcomes and impact
- Workforce capacity development
- Advocacy to support the needs and activity of the region.

Insights support an equity-driven approach, underpinned by engagement with priority populations, informed by epidemiological data and analysis, and measured through robust evaluation. To maximise impact, effort must be aligned and coordinated at both the regional and local level with consistent network communication and sharing of learnings to build capacity.

The importance of regional coordination with a local approach tailored to communities

The NEPHU Population Health Profile forms a picture of the health and wellbeing of the NEPHU population. These findings, reported at LGA level, may conceal significant local and cohort-based variation in the health and wellbeing of the NEPHU communities. Further analyses, in collaboration with local knowledge, will be essential to ensure appropriately targeted and place-based responses to population health and prevention priorities.

A diverse population

At approximately 1.8 million people, the NEPHU catchment has the largest population of all nine LPHU's. It is a diverse and growing catchment. The NEPHU region is projected to have significantly larger population growth than Victoria as a whole (30% versus 20%) with the Northern corridor LGAs – Whittlesea and Hume, and the inner suburb LGAs – Yarra and Darebin, all expected to exceed 40% population growth by 2036.

Over 30% of the population was born overseas, with 40% or more born overseas in pockets of the North and East, noting significant differences these pockets in terms of country of birth. In Manningham and Whitehorse, the most common country of birth outside of Australia is China, followed by Malaysia, India and Hong Kong. While in the northern LGAs of Hume and Whittlesea, the most common country of birth is India, followed by Iraq, North Macedonia, Turkey and Italy. In contrast, 80% or more people residing in Nillumbik and the Yarra Ranges LGAs were born in Australia with 90% or more speaking English at home.

Education level also varied, with Hume and Whittlesea having the lowest proportion of the population with tertiary qualifications (20% and 23%) and the lowest proportion with no qualification (45% and 42%). This corresponds with areas where unemployment is highest.

Hume, Whittlesea, and Nillumbik have the highest proportion of children and adolescents, while Manningham, Banyule, and Knox have the highest proportion of people aged 60 years and older. Almost half of the population of Yarra (48%) is aged between 21 and 39 years, while almost two-thirds of Hume (61%) are aged below 40 years.

There are significant populations who identify as lesbian, gay, bisexual, transgender, intersex or gender diverse in the LGAs of Darebin and Yarra at over 10%, compared to 5% for the whole of Victoria.

The NEPHU catchment overall has a lower proportion of Aboriginal and Torres Strait Islander population compared to Victoria (0.7% to 1.0%). Whittlesea, Hume and the Yarra Ranges have the highest populations of Aboriginal and Torres Strait Islander people in the NEPHU catchment.

Environmental variability

NEPHU has a lower Social Infrastructure Index (SII) – a measure of community support services and their ability to enhance community wellbeing – than the metropolitan region (7.1 vs 7.4). There is significant variation in SII across the catchment, with inner city LGAs Yarra and Boroondara having higher SII scores than outer suburban LGAs Nillumbik, Yarra Ranges, Hume and Whittlesea. Similarly, scores for the Walkability Index were higher for inner city compared to outer suburban LGAs.

The Index of Relative Socioeconomic Disadvantage (IRSD) indicates that the LGAs experiencing the most socioeconomic disadvantage are Hume (947), Whittlesea (991) and Darebin (1004).

Differing health needs and risk factors

Active Living

Nearly half of NEPHU is overweight or obese, consistent with the Victorian average. The LGAs with the highest proportion of overweight and obese people are Hume and Whittlesea at 58%.

Over 44% of the NEPHU population are insufficiently physically active. There is small variation in the reported insufficient physical activity levels across the region, ranging from 37% in Nillumbik to 48% in Darebin.

Healthy eating

Across the NEPHU population there is low reported compliance with recommended guidelines for both fruit and vegetable consumption. Vegetable consumption aligned with guidelines varied from 2% in Hume and Whittlesea to 8% in Boroondara and Yarra. Fruit consumption aligned with guidelines varied from 36% in Hume to 48% in Banyule, Boroondara, Nillumbik and Yarra.

NEPHU has a slightly lower reported proportion of the population who reported daily sugar sweetened soft drink consumption compared to wider Victoria (9% vs 10%). Despite this, four LGAs in the NEPHU catchment had higher reported soft drink consumption compared to the state average: Yarra Ranges (15%), Hume (14%), Maroondah (13%) and Whittlesea (13%).

The NEPHU catchment reported a slightly higher proportion of take-away food consumption greater than one time per week compared to wider Victoria (16% vs 15%). The Banyule (18%) LGA has the highest proportion of take-away food consumption.

Alcohol and drug use

NEPHU has a similar proportion of an increased lifetime risk of alcohol-related harm than wider Victoria (61% vs 59%). The highest proportion of an increased lifetime risk of alcohol-related harm in NEPHU are in the Nillumbik and Yarra LGAs (70%), whereas the lowest proportion are in the Whittlesea (48%) and Hume (51%) LGAs.

Tobacco-related harm

The highest proportion of current daily smokers in NEPHU are in the Knox (16%) and Whittlesea (16%) LGAs, with the lowest proportion in the Boroondara, Maroondah and Whitehorse LGAs (7%).

Vaping was identified as an emerging issue of concern with little data available at this time.

Preventable chronic disease

The most commonly reported health conditions in the NEPHU population are arthritis (7.49%), mental health (8.4%), asthma (8.02%), diabetes (4.45%) and heart disease (3.48%) This is consistent with Victorian averages.

LGAs with a high proportion of their population under 40 (Huma and Whittlesea), had higher than the NEPHU average reported health conditions such as diabetes and kidney disease. LGAs with a higher proportion of their population over 40 (Yarra Ranges and Manningham) had a higher proportion of the population reporting long term health conditions such as Arthritis, Cancer, Dementia, Heart Disease.

The LGAs of Yarra and Darebin had the highest reported rates of mental health conditions.

While the overall cancer screening rates for NEPHU are aligned with the Victorian average, screening rates are lower than other LGAs for bowel, breast and cervical cancer in Hume (40%; 45%; 43%) and Whittlesea (42%; 45%; 45%) and for bowel and breast in Yarra (41%; 45%) and Darebin (42%; 44%).

Sexual and reproductive health

The rates of STIs in the NEPHU community were consistently lower than state rates. The difference in STI burden between NEPHU and Victoria may represent a gap in testing. Yarra was found to have the largest burden of all four STIs in the NEPHU community, with most cases found in males. The high burden of STIs in Yarra is likely being influenced by its young population and community of gay, bisexual, and men who have sex with men.

Considerations in selection of priorities

There are a range of options for consideration in selection of two priority areas for NEPHU focus in FY22-23. The relative benefits of these choices will be weighed during Phase 4 – the stakeholder workshop. Options include:

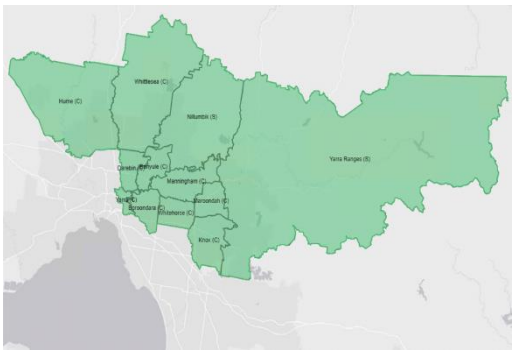
- Selecting priority areas such as health eating and active living with existing strong, multi-sector alignment as demonstrated through common planning drivers, current activity and stakeholder prioritisation. NEPHU could work to optimise the impact and enhance existing work where alignment enables collective effort and impact. However, these are areas where significant effort is already being placed, mature networks exist, and work is underway so value add will need to be clear.
- Choosing priority areas that have dedicated focus from fewer agencies and possible evidence of reduced service access and screening, such as sexual and reproductive health, with a view to strengthen prevention work and resources.
- Taking the lead on a priority area where very few agencies are currently focused, such as decreasing the risk of drug-resistant infections in the community or reducing skin cancer risk.
- Prioritising an area with clear and achievable state targets, such as the elimination of hepatitis by 2030.
- Picking up on an emerging issue such as vaping as a subset of reducing tobacco related harm to explore the problem and develop interventions in an area where potentially large numbers of young people may be amplifying their risk of future chronic disease.
- Purposefully leveraging the potential of NEPHU's close connection to tertiary health services to develop the prevention system connectedness in an area such as secondary prevention of chronic disease.

Once priority areas are selected, initiatives must be planned and developed with consideration to local areas, priority groups and communities with highest burden or risk.

Insights support an equity-driven approach, underpinned by engagement with priority populations, informed by data and analysis, and measured through robust evaluation.

Coordinated, functional partnerships and collective effort will drive impact for population health and wellbeing outcomes across our large, diverse and growing catchment.

1 INTRODUCTION



Map showing the NEPHU catchment and 12 local government areas

1.1. BACKGROUND

The North Eastern Public Health Unit (NEPHU) is one of three metropolitan Local Public Health Units (LPHUs) created during 2020 as part of major Victorian Public Health Reform in response to the COVID-19 pandemic.

NEPHU maps directly onto twelve local government areas (LGAs) in the North and North East of metropolitan Melbourne. Our catchment population is 1.8 million people (27% of the population of Victoria) and our geographic area is covered by 13 Community Health Services, five Aboriginal Community Controlled Health Organisations (ACCHOs), two Women's Health Agencies, two Sexual Health Services, two Primary Health Networks (PHNs) and six Public Health Services.

From 1 July 2022, the remit of the Victorian LPHUs expanded beyond COVD-19 to include broader public health activity, encompassing other communicable diseases and health promotion, prevention and early intervention activity.

1.2 POPULATION HEALTH CATCHMENT PLANNING

In working towards Victoria's public health vision that *'Victorians are the healthiest people in the world'*, LPHUs are required to produce, by June 2023, a Population Health Catchment Plan. The plan is to be informed by population health needs and equity assessments and identify priorities for place-based health promotion, primary prevention and early intervention, including measures and impacts aligned to outcomes frameworks.

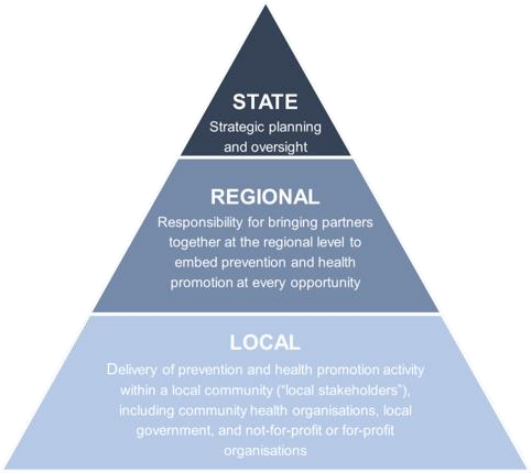
To deliver on the specified Population Health Catchment Plan requirements, NEPHU has designed and is progressively implementing a collaborative, multi-stage strategic planning process. The first stage of the process consists of four phases as set out in the NEPHU Health Promotion and Prevention Priority Setting Roadmap (Appendices document, Section 1: A1).

A Victoria free of the avoidable burden of disease and injury so that all Victorians can enjoy the highest attainable standards of health, wellbeing and participation at every age.

Victorian Government vision for the public health and wellbeing of Victorians.

1.3 THE HEALTH PROMOTION AND PREVENTION STAKEHOLDER ENVIRONMENT

The Victorian Department of Health Commissioning Framework outlines key functions of stakeholders at state, regional and local levels. LPHUs are positioned at regional level with respect to this framework.



The Victorian Department of Health Commissioning Framework

In Victoria, Community Health and Women's Health organisations are funded by the state government to undertake health promotion activities. These organisations must therefore undertake planning and reporting according to Department of Health's Community Health – Health Promotion Program Guidelines (currently transitional) and Victorian Women's Health Program Funding and Reporting Guidelines respectively.

Local government has a legislated requirement to develop a Municipal Health and Wellbeing Plan but does not receive dedicated health promotion funding. There are no legislated requirements for reporting against the plan, however, there is a requirement to review the plan annually.

Other organisations contributing to health promotion, prevention and/or early intervention in Victoria include:

- Primary Health Networks (PHNs) – Funded by the Commonwealth Government
- Aboriginal Community Controlled Health Organisations (ACCHOs)
- Sexual and Reproductive Health Organisations
- Mental Health and Wellbeing Promotion Office (in development)
- Tertiary health services
- Not for profit and community-based organisations.

There is an opportunity, as LPHUs are embedded within this environment, to align catchment level and local level planning across key agencies.

1.4 SCOPE OF NEPHU'S HEALTH PROMOTION AND PREVENTION PRIORITIES FOR 2022-23

Domain 1 Victorian Health and Wellbeing Outcomes Framework

Our approach to planning for population health promotion and prevention has been informed by direction from the Department of Health, the wider public health landscape, and our funding horizon (currently to 30 June 2023 with only a small portion of recurrent funding).

Recent communications from the Department of Health indicate that the LPHU prevention role will span primary and secondary prevention with a focus on preventable chronic disease and modifiable risk factors. LPHUs must target two population health priorities in FY22-23.

Based on these specifications, our population health catchment planning process aligns with the Victorian Public Health and Wellbeing Outcomes Framework *(the Outcomes Framework),* specifically Domain 1: "Victorians are healthy and well".

NEPHU will focus on priorities selected from within two of the three outcomes within Domain 1 of the Victorian Public Health Outcomes Framework:

> ***Domain 1: Victorians are healthy and well***
> *Outcome 1: Victorians have good physical health*
> *Outcome 3: Victorians act to protect and promote health*

We have made the pragmatic decision to excluding *Domain 1.2: Victorians have good mental health* as a potential focus in FY22-23. While we recognise the criticality of this priority area, immediate, coordinated action will be challenging in the context of significant sector reform currently underway.

In selecting this focus for our foundational year, NEPHU acknowledges the inter-dependencies between all five domains within the Outcomes Framework. While our primary focus will be on priorities selected from within Domain 1, initiatives will, where relevant, integrate co-benefits across other domains, priority areas and social determinants.

Initiatives will be focused on collective outcomes for the catchment, delivered in partnership with organisations and the community. Where possible, work should draw on existing evidence-based programs and services, thereby reinforcing actions, and interventions delivered by partnering agencies.

2. CURRENT LANDSCAPE

This section relates to findings of Catchment Planning Stage 1, Phase 1 – Desktop Review of the Prevention Landscape across the NEPHU catchment.

The findings of the desktop review are presented here and will be used to inform subsequent phases of the population health promotion and prevention priority setting process.

2.1 ABOUT THE HEALTH PROMOTION AND PREVENTION LANDSCAPE REVIEW

2.1.1 Purpose

The purpose of the desktop review is to build an understanding of the current prevention landscape across the NEPHU catchment and elicit insights and emergent opportunities. This evidence base will be used to inform activity within subsequent phases of NEPHU's health promotion and prevention priority setting process.

2.1.2 Scope

The scope of this review includes both the primary and secondary prevention landscape as defined in Table 1.

Table 1. The Prevention Continuum

	Primary	Secondary	Tertiary
Prevention	Primary prevention.	Secondary prevention/ early intervention.	Tertiary prevention / treatment, management, and rehabilitation.
Definition	Aims to prevent problems occurring in the first place by eliminating or reducing the underlying causes, controlling exposure to risk, and promoting factors that are protective of health.	Aims to stop, interrupt, reduce or delay progression of a problem through early detection, usually by screening at an asymptomatic stage, and early intervention.	Aims to minimise the impact of an established problem and prevent (or delay) complications and subsequent events through treatment, management and rehabilitation.
Target	Whole of population. Whole of system.	Higher risk cohorts and populations. Individuals with early stages of a problem.	Individuals with an established problem.

2.1.3 Objectives

1. To document an overview of key departmental policy documents and guidelines shaping current health promotion and prevention activity in Victoria and the synergies between priority areas identified across the policy documents.
2. To document a sector-based current primary prevention priority area map applicable to the NEPHU catchment landscape.
3. To document the secondary prevention context in Victoria, presenting key priority health areas and the associated sector and peak body focus.
4. To identify and document insights generated via mapping of the strategic context, priorities and multi-sector stakeholders within the current health promotion, prevention and early intervention landscape.

2.2 METHOD

The following steps were taken in this landscape review:

1. Collect and review key strategic policy and stakeholder guiding documents and identify stated health priorities.
2. Map alignment on health priorities against the strategic policy drivers.
3. Collect and review individual organisation health promotion and prevention plans.
4. Map alignment on priorities across organisational plans for primary and secondary prevention.

Detailed mapping at program level has been completed, however the work is too extensive and detailed to compile and present in this format. Once two priority focus areas are selected, this detailed mapping will inform development of target initiatives.

Strategic priority areas that form the basis of the framework against which alignment was assessed are drawn from:

- Ten priority areas identified within the Victorian Health and Wellbeing Plan 2019-2023
- Prevention priorities identified in the Victorian Cancer Plan 2020-2024
- Outcomes described within Domain 1 of the Victorian Health and Wellbeing Outcomes Framework.
- Specified fields for inclusion within the Department of Health Draft LPHU Population Health Catchment Planning Framework.

Publicly available Victorian guiding policy and planning documents and regional and local stakeholder plans and strategies were collected and reviewed to inform the health promotion and primary and secondary prevention landscape maps located in Section 2.3.2 and 2.3.3 of this report.

These documents included:

- Victorian Public Health and Wellbeing Plan 2019 – 2023
- Victorian Public Health and Wellbeing Outcomes Framework
- The Victorian Cancer Plan 2020-2024
- The Victorian Sexual and Reproductive Health and Viral Hepatitis Strategy 2022-2030
- Victorian Action Plan to Prevent Oral Disease 2020 - 2030
- Korin Korin Balit-Djak: Aboriginal health, wellbeing and safety strategic plan 2017-2027

- Ageing Well Action Plan: An action plan for strengthening wellbeing for senior Victorians 2022-2026
- Healthy Kids, Healthy Futures
- Victoria's Climate Change Strategy and adaptation plans
- Victorian Aboriginal Health Service, Summary of the Strategic Plan: Caring for the Community 2017-2022
- VACCHO, On Solid Ground: Strategic Plan 2021-2026
- Eastern Melbourne Primary Health Network Needs Assessment Report 2018-2021
- North Western Melbourne Primary Health Network Health Needs Assessment 2022-2025
- Local Public Health Unit Outcomes Framework
- LPHU Population Health Catchment Planning Framework (draft)
- Municipal Health and Wellbeing Plan of the 12 local government authorities within the NEPHU catchment
- Integrated Health Promotion Plans of the 13 Community Health Services within the NEPHU catchment
- Austin Health 2018- 2022 Strategic Plan
- Austin Health Gender Equality Action Plan 2021-2024
- Northern Health Strategic Plan 2020-2024
- Northern Health Gender Equality Action Plan 2021-2025
- Eastern Health Strategic Plan 2017-2022
- Eastern Health Gender Equality Action Plan 2021-2025

Further detail on the major strategies and plans and focus within sectors and agencies can be viewed in the Appendices document, Section 2: A1 and A2.

2.3 FINDINGS

2.3.1 Key policies which shape health promotion and prevention stakeholder priorities in Victoria

There are six key policy documents that drive planning and priority selection for LPHU and key stakeholders. These are:

- Victorian Public Health and Wellbeing Plan 2019 – 2023
- Victorian Cancer Plan 2020-2024
- Victorian Public Health and Wellbeing Outcomes Framework Domain 1.1 and 1.3
- LPHU Population Health Catchment Planning Framework (draft)
- Victorian Women's Health Program Funding and Reporting Guidelines 2022-23
- Municipal Public Health and Wellbeing Planning 2021-2025 – Advice Note 1
- Community Health – Health Promotion Program Guidelines 2021-2025

Matrix 1 provides a Strategic Planning Driver and Priority Area Map, highlighting synergies between the priority health areas contained within these guiding documents.

Matrix 1. Strategic Policy Drivers and Priority Area Map

Strategic planning drivers	Priority Areas																
		Tackling climate change and its impact on health	**Reducing injury**	**Preventing all forms of violence**	**Increasing healthy eating**	**Decreasing the risk of drug resistant infections in the community**	**Increasing active living**	**Improving mental wellbeing**	**Improving sexual and reproductive health**	**Reducing tobacco-related harm**	**Reducing harmful alcohol and drug use**	**Improving oral health**	**Reducing skin cancer risk**	**Improving immunisation**	**Reducing preventable chronic disease**			
															Improving cancer screening	Decreasing diabetes	Decreasing cardiovascular disease	Decreasing hepatitis
	Victorian public health and wellbeing plan 2019-2023	Priority ***Focus area***	Priority	Priority	Priority ***Focus area***	Priority	Priority ***Focus area***	Priority	Priority	Priority ***Focus area***	Priority							
	Victorian Cancer Plan 2020-2024		Environmental and workplace hazards											Hepatitis HPV				
	Victorian Health and Wellbeing Outcomes Framework Domain 1 (1.1 & 1.3)																	
	LPHU Population Health Catchment Planning Framework (draft)																	
	Victorian women's health program funding and reporting guidelines 2022-23	Women in a changing society – climate change, emergency and disaster situations		Gendered violence Prevention														
	Municipal Public Health and Wellbeing Planning 2021-2025 – Advice Note 1																	
	Community Health-Health Promotion Guidelines 2021-2025																	

The Strategic Planning Driver and Priority Area Matrix presents the following points for consideration:

- Very strongly aligned priorities across majority of applicable guiding documents are:
    - Increasing active living (6/7)
    - Increasing healthy eating (6/7)
    - Reducing tobacco related harm (6/7)

  Most other priorities are supported by multiple planning drivers.
- This suggests that collaborative work across these priority areas would be strongly supported by enabling strategic drivers.
- Given the strong primary relationship of 'drug resistant infections' to health protection, as opposed to health promotion and prevention, it is not surprising that this priority area does not map across health promotion and prevention strategic planning drivers.
- It is noted that of the above strategic drivers, the LPHU Population Health Catchment Planning Framework (draft) is designed to capture both primary and secondary prevention requirements. Therefore, whilst the priority areas on the right of the matrix do not align strongly with planning guidelines of other sectors, they must still be considered within the identification of priorities for NEPHU's Population Health Catchment Plan.

2.3.2 The primary prevention landscape – NEPHU Catchment

Matrix 2 provides a sector-based primary prevention priority area map applicable to the NEPHU catchment landscape. It has been generated via review of local stakeholder health and wellbeing strategies and action plans as documented within Section 2.2 of this report.

Matrix 2: Primary Prevention Sector-Based Priority Area Map

Sector Type	Priority Areas												
	Tackling climate change and its impact on health	Reducing injury	Preventing all forms of violence	Increasing healthy eating	Decreasing the risk of drug resistant infections	Increasing active living	Improving mental wellbeing	Improving sexual and reproductive health	Reducing tobacco-related harm	Reducing harmful alcohol and drug use	Improving oral disease	Improving immunisation	Reducing skin cancer risk
Local Government													
Community Health Services													
Women's Health Services	Women in a changing society – climate change, emergency and disaster situations												
Sexual Health Services													
Department of Health													
Tertiary Health Services													
ACCHOs			*	*		*	*	*	*	*	*		
Dental Health Services Victoria													

* ACCHOs address health and wellbeing through a self-determination approach. The key priorities for 2021-2026 reflect their aspirations to bring about generational change through strength, innovation and sustainability. To achieve vibrant, healthy and self-determining Aboriginal communities, they prioritise the following:

1. Our Foundations
2. Strong Voice
3. Health and Healing

The Primary Prevention Sector-Based Priority Area Matrix presents the following points for consideration:

- Demonstration that improving mental wellbeing and preventing violence are current shared priorities and areas of action for the majority of sector types represented. This supports NEPHU logic of acknowledging this volume of work and therefore, investing 2022/23 efforts in alternative areas of focus within Domain 1 of the outcomes framework.
- There is a strong alignment of focus on improving sexual and reproductive health between Women's Health Services, Sexual Health Services, Department of Health, Tertiary Health Services and ACCHOs. However, it should be noted that this is not commonly identified as a key activity area for two sectors with significant community reach: local government and community health. Value could be gained from exploring need and opportunity within this space.
- There is a common commitment by Community Health Services, ACCHOs, Local Government and the Department of Health to address heathy eating, active living, reducing tobacco-related harm, and reducing harmful alcohol and drug use. The shared identification of these priority areas presents opportunity to explore collaborative and collective planning, initiatives, and partnerships.
- Few service providers are focusing on decreasing the risk of drug-resistant infections in the community, reducing injury, improving immunisation and reducing skin cancer risk. This may make achieving collective impact in these areas challenging, though also presents a gap opportunity for NEPHU to step into.

2.3.3 The secondary prevention landscape – NEPHU catchment

Following a review of key state-wide secondary prevention strategies and action plans, an overview of key priority health areas and the associated sectors and peak bodies targeting early intervention programs is provided in Matrix 3.

Matrix 3. Secondary Prevention Sector / Peak Body Based Priority Area Map

Sector Type / Peak Body	Priority Areas: Reducing preventable chronic disease									
	Breast cancer	Cervical cancer	Lung cancer	Oral disease (incl cancer)	Bowel cancer	Mental health	Sexual and reproductive health (incl. BBV/HIV, AIDS)	Diabetes	Cardiovascular disease	Hepatitis
Victorian Cancer Council	■	■	■	■	■					Liver cancer prevention
Community Health Services				■		■	■	■	■	■
Sexual Health Services		■					■			■
ACCHOs	■	■			■		■	The Life! Program with Diabetes Victoria	The Life! Program with Diabetes Victoria	■
Primary Health Networks	■	■			■	■	■	■	■	■
Diabetes Victoria						■		■	■	
Heart Foundation						■			■	
Dental Health Services				■						
Tertiary Health Services				■		■	■	■	■	■

The Secondary Prevention Sector and peak body Priority Area Matrix presents a mixed picture with the following points for consideration:

- Aligned priorities across more than 50% of secondary prevention providers toward reducing preventable chronic disease are:
    - Cardiovascular disease
    - Hepatitis
    - Mental health
    - Sexual and reproductive health (including BBV/HIV, AIDS)
    - Diabetes
- This suggests that collaborative work across these priority areas would be underpinned by enabling strategic drivers.
- There are fewer priorities with shared alignment across sectors and agencies due to the specialised nature of providers mapped. When seeking to identify secondary prevention priority areas for NEPHU focus within 2022/23, decisions must be driven by population and priority cohort burden of disease.
- Localised secondary prevention data is limited at this stage and detailed localised intelligence will be collected once priority areas are identified.
- PHN's and community health services play an integral role across the breadth of secondary prevention and will be key collaborators for NEPHU.

Further detail on key sector and peak bodies working within the health promotion and prevention landscape can be viewed in the Appendices document, Section 2: A2.

2.4 CONCLUSION AND RECOMMENDATIONS

The desktop review provided an understanding of key stakeholder current health promotion and prevention priorities across the NEPHU catchment.

Illuminated was the health promotion and prevention sectors co-ordination and alignment to the strategic planning and operating environment provided by the Department of Health and key documentation, such as the Victorian Public Health and Wellbeing Plan 2019-2023. This alignment is key to fostering an environment conducive to collaboration, coordination and collective impact in order to maximise impact and positive and equitable health and wellbeing outcomes.

Significant findings generated via the desk top review include:

- Significant primary prevention collaboration opportunity exists across the following priority areas:
    - Increasing active living
    - Increasing healthy eating
    - Reducing harm from alcohol and drug use
    - Improving sexual and reproductive health
    - Reducing tobacco related harm.
- Few service providers are focusing on decreasing the risk of drug resistant infections in the community. This could be a potential opportunity for coordination and leadership.
- When seeking to identify secondary priority areas for NEPHU focus within 2022/23, decisions must be driven by population and priority cohort burden of disease findings across the secondary prevention priority areas.
- Localised secondary prevention data is limited at this stage and detailed localised intelligence will be collected once priority areas are identified.

The knowledge obtained through the desktop review will be utilised to inform subsequent activities within NEPHU's Population Health Promotion and Prevention Strategic Planning Project that will inform the development of NEPHU's Population Health Catchment Plan 2022/23.

3. LISTENING LAB

This section relates to findings of Stage 1, Phase 2 – The Listening Lab Program.

The Listening Lab Program was a catchment wide stakeholder consultation program, targeting both internal and external stakeholders. It was designed to generate an evidence base that captured stakeholder reflections on the current state of the health promotion and prevention landscape, opportunities and expectations of NEPHU.

Listening Lab results in summary form will be combined with findings from other phases of the process to enable informed participation of stakeholders at a NEPHU Priority Setting Workshop (Phase 4) to be held in December 2022. From this, we will identify the prevention priorities for 2022/23. Findings will also be used to inform further stages of the Population Health Catchment Planning Process.

3.1. ABOUT THE LISTENING LAB PROGRAM

3.1.1. Purpose

To undertake a consultative process involving internal and external stakeholders to generate an evidence base which will inform the development of NEPHU's Health Promotion and Prevention Priorities for 2022/23.

3.1.2. Objectives

To collect and document the reflections and insights of internal and external stakeholders on:

1. The current health promotion and prevention landscape, both at their organisation and across the broader system.
2. Local needs and insights.
3. Current gaps and opportunities for improving health and wellbeing through health promotion and prevention.

3.2. METHOD

3.2.1. Participant selection and data collection

Internal leader interviews

The internal Listening Lab consisted of 1:1 online interviews undertaken with members of the NEPHU Leadership Team.

The NEPHU Leadership Team (n = 15) were invited to participate in an individual online interview. These interviews were conducted by NEPHU's Integrated Planning and Programs team members using a structured interview guide (shown in the Appendices document, Section 3: A1).

Questions in the structured interview guide were developed according to the objectives of the Listening Lab Program (section 3.1.2). A notetaker produced a detailed written summary for each interview.

The internal interviews both contributed to the Listening Lab evidence base and familiarised the leadership team with the interview process, in preparation for the external component of the Listening Lab Program.

Internal interviews – summary of participation

Fourteen members of the NEPHU Leadership Team participated in an internal Listening Lab interview (Table 1). One additional invitee agreed to participate but was unavailable for interview during the interview timeframe.

Tables 1 and 2 show a summary of key characteristics of the internal interviewees, including their role within NEPHU, and their primary content expertise.

Table 1. Characteristics of internal participants: role type

Role	Number
Director	2
Senior public health physician	1
Clinical Lead	6
Operations Lead	3
Branch Lead	2
Total	**14**

Table 2. Characteristics of internal participants: primary expertise

Primary expertise	Number
Infectious diseases physician	5
Public health physician	3
Epidemiologist	1
Other clinical and/or other public health	5
Total	**14**

External stakeholder leader interviews

Key organisations operating in health promotion and prevention across the NEPHU catchment were invited to participate in a 1:1 interview with a representative from the NEPHU Leadership Team.

Organisations invited for interview are shown in the Appendices document, Section 3: A2. The CEO of each organisation was contacted by email and provided with information about NEPHU's priority setting process. The CEO was invited to nominate 1 – 2 leaders from their organisation to participate in a one-hour interview. Interviews were generally conducted online via Microsoft teams, while face-to-face interviews were arranged where preferred and feasible.

Prior to undertaking the interviewer role, attended an Interviewer Briefing Session and were provided with an Interviewer Briefing Pack which included structured interview questions and a sample interview script.

At the commencement of each interview, the interviewer stated the purpose of the Listening Lab interviews and requested the interviewees' permission to video record the interview. The interviewer then facilitated the interview using the structured interview question guide.

An assigned notetaker took notes during each interview, and interviews were recorded using the Microsoft Teams recording function. Once the interview was complete, the video file was stored, and a Microsoft Teams transcript of the interview was downloaded and saved. These were drawn upon as required to supplement notes taken during the interview, fill in any gaps and produce a final record of the interview.

External stakeholder online survey

The external component of the Listening Lab Program also included an online survey, which was incorporated to enable broader input from across the sector. This included input from relevant staff within organisations who had been invited to participate in an interview (Appendix 3), and a small number of additional organisations.

The CEO of each organisation was contacted by email and invited to nominate a relevant staff member to submit the survey on behalf of their organisation. Organisations were encouraged to consult widely within their organisation in compiling their survey response. Questions asked in the online survey were identical to the external interview questions in order to provide both equity in opportunity for discussion and also an aggregated evidence base. (Appendices document, Section 3: A3). The online survey was created using Microsoft Forms.

External interviewees and survey respondents – summary of participation

A total of 65 responses were collected during the Listening Lab Program, which included 36 interviews with leadership representatives and 29 online survey responses (Table 3). A diverse range of organisations were represented within the Listening Lab responses (Table 4) which is reflective of the multi-sector nature of the health promotion and prevention landscape. Overall, there was strong participation in the Listening Lab from organisations across the NEPHU region (Table 5).

Just over one third of all responses were from Community Health organisations across the NEPHU region. Similarly, around one third of all responses were from Local Government. The 'Other' category included two CALD community organisations and one university.

Table 3. Summary of participation in external Listening Lab Program by response type

Response type	Number	Percentage
Interview	36	55%
Online survey	29	45%
Total	**65**	**100%**

Table 4. Participation in external interviews and online survey by organisation type

Organisation type	Interviews		Online survey		All responses	
	Number	≈%	Number	≈%	Number	≈%
Community Health	13	36	10	34	23	35
Local Government	11	31	9	31	20	31
Department of Health	3	8	2	7	5	8
Women's Health	2	6	3	10	5	8
Sexual Health	1	3	1	3	2	3
ACCHO	2	6	-	-	2	3
Primary Health Network	2	6	-	-	2	3
Health Service	2	6	1	3	3	5
Other	-	-	3	10	3	5
Total	**36**	**100**	**29**	**100**	**65**	**100**

Table 5. Total participation in the Listening Lab across the NEPHU region

Organisation type	Invited to participate (Number)	Completed interview and/or survey response (Number)	Participation fraction ≈%	Total number in NEPHU region (reference)
Community Health	13	13	100	13
Local Government	12	11	92	12
Department of Health	3	3	100	N/A
Women's Health	2	2	100	2
Sexual Health	2	1	50	2
ACCHO	5	2	40	5
Primary Health Network	2	2	100	2
Health Service	4	3	75	6
Other	20	3	15	N/A

The roles of interview participants differed from survey respondents. While a mix of role types were observed for each participation type, interviewees were more likely to be in executive level roles, while survey respondents were more likely to be in coordinator, planner or officer level roles (Table 6).

Table 6. Characteristics of external participants: role type by participation type

Role level	Participation type	
	Interview	Online survey
Executive	47%	14%
Senior Manager or Manager	47%	38%
Coordinator, Planner or Officer	6%	48%
Total	**100%**	**100%**

3.3. DATA ANALYSIS AND REPORTING

All data analysis and reporting were undertaken by the NEPHU Public Health Integrated Planning and Programs Team.

Analysis of internal and external participant data was undertaken at separate timepoints, due to the different timeframes for internal and external data collection. The analysis method was consistent across both datasets. Interview notes were reviewed and responses to each question were entered into a Microsoft Forms database. As the external interview questions were identical to the online survey questions this allowed the generation of a single dataset for external stakeholder responses.

Each question was analysed using the same approach:

1. Themes were generated for each question based on common responses emerging within the data for each question ((e.g., partnerships, funding, workforce).
4. An Excel sheet was used to code each interview or survey response according to identified themes. Multiple coders were involved in the development of themes and coding, with one coder allocated to each question.
5. Themes for each question were reviewed and finalised in discussion with a single team leader to ensure a consistent approach across all questions.

After coding for each question was complete, the number and proportion of responses falling under each theme was quantified and graphed. A summary of key points and selection of quotes illustrating stakeholder perspectives was compiled to accompany each graph.

3.4. FINDINGS: REFLECTIONS ON THE CURRENT HEALTH PROMOTION AND PREVENTION LANDSCAPE

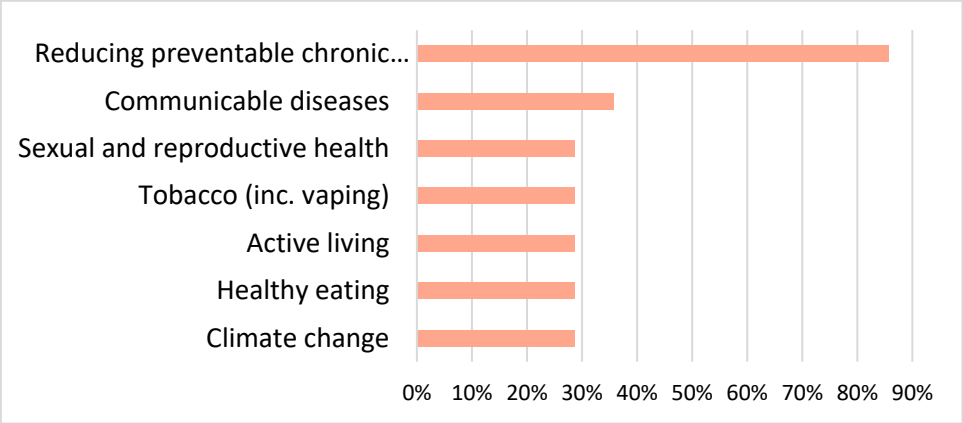
3.4.1. Top three current priorities in health promotion and prevention

All participants (internal and external) were asked to state their top three current priorities when thinking about their organisation's work within health promotion and prevention (outside of the COVID-19 response).

NEPHU participants

The NEPHU Leadership Team were asked to think specifically about NEPHU's role within health promotion and prevention (albeit in its infancy) and to identify their top three current priorities. A summary of their responses is shown in Figure 1.

Figure 1. Internal: Top three current priorities in health promotion and prevention



Amongst the NEPHU Leadership Team, many respondents were reticent to rank their top three priorities at this early stage in the priority setting process and stressed the importance of the external Listening Lab findings and the NEPHU Population Health Profile (Phase 3) for informing their final views. However, when pressed for their initial thoughts on top three priorities, the most common response was to address preventable chronic disease (86%).

The next most common response amongst top three priorities was to reduce communicable disease (36%), within which respondents specifically mentioned increasing immunisation coverage and addressing Hepatitis C.

Beyond this, five priority areas were consistently and equally identified which were:

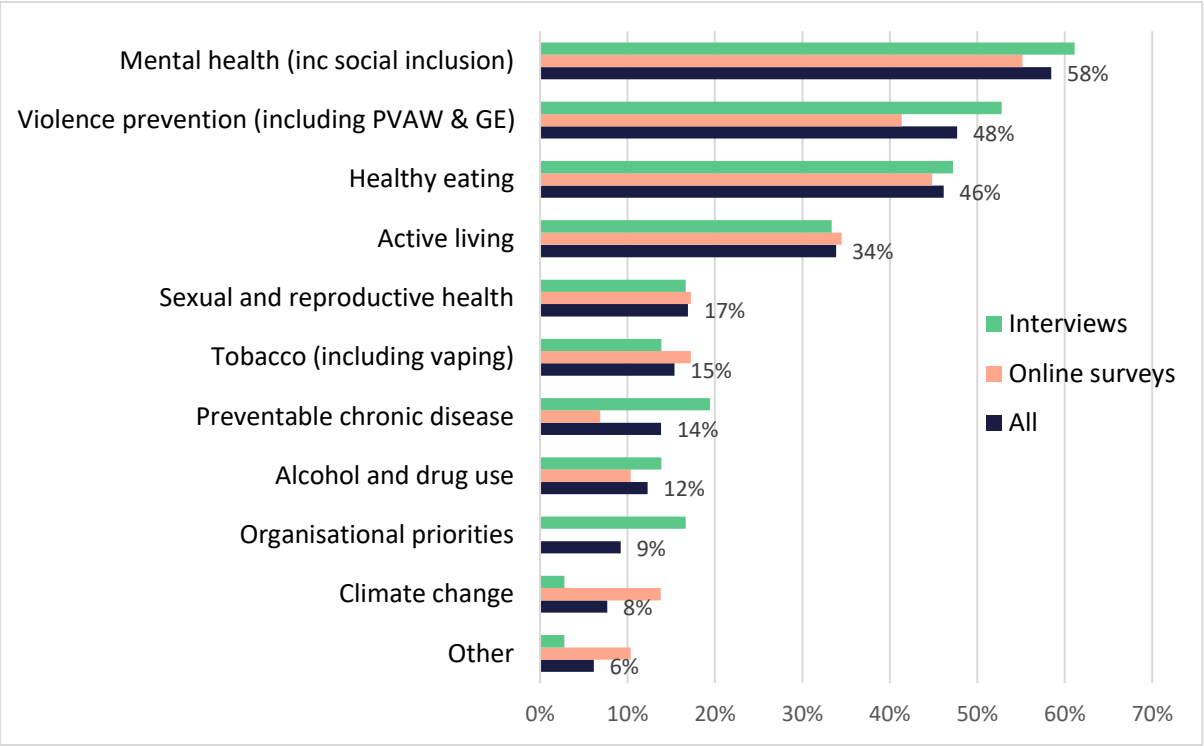
- Sexual and reproductive health – 29%
- Tobacco – 29%
- Active living – 29%
- Healthy eating – 29%
- Climate change – 29%

> ***"(We should) be driven by a combination of evidence, consultation and learning"***

External stakeholders

External stakeholder responses, which were collected either by interview or through the online survey, are summarised in Figure 2.

Figure 2. External: Top three current priorities in health promotion and prevention



Mental health emerged as the most common theme identified amongst the top three current health promotion and prevention priorities for external stakeholders (58%). Social inclusion was included within this broad theme, as many respondents mentioned mental health and social inclusion together. The impact of the COVID-19 pandemic on mental health was also mentioned.

Violence prevention and gender equity (GE) were also commonly mentioned together, and when combined emerged as the second most common theme identified in the top three current priorities of external stakeholders (48%). Almost all responses discussing violence prevention made reference to the prevention of violence against women (PVAW) with only a small proportion highlighting other types of violence. Gender equity was acknowledged as a fundamental driver in the prevention of violence against women (PVAW).

While these top two themes fall outside of NEPHU's pre-defined scope, the next five most commonly mentioned themes fell within Domain 1. These were:

- Healthy eating – 46%
- Active living – 34%
- Sexual and reproductive health – 17%
- Tobacco, including vaping – 15%
- Preventable chronic disease – 14%
- Alcohol and drug use –12%

The most common responses falling into the 'Other' category were oral health and immunisation.

"We've got a healthy eating and active living component to our work […] (It's) very place-based and we're doing that with families in school settings and the community garden – food security sort of issues."

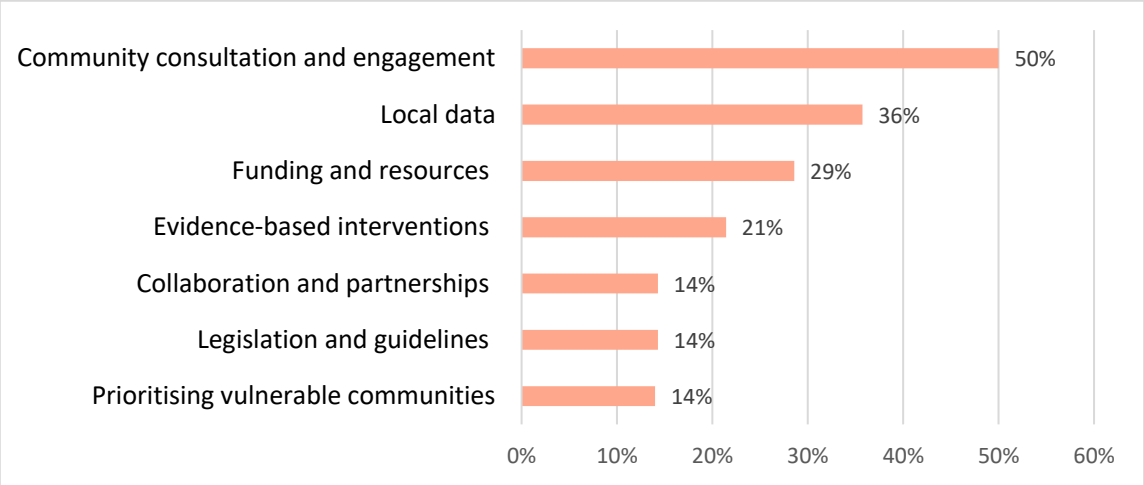
3.4.2. Top three drivers of current priorities in health promotion and prevention

All participants (internal and external) were asked to state their top three drivers of current health promotion and prevention priorities outside of the COVID-19 response.

NEPHU participants

The NEPHU Leadership Team were asked to state the three main drivers that should shape NEPHU's annual health promotion and prevention priorities, and to provide a reason for their choices. Their responses are summarised in Figure 3.

Figure 3. Three main drivers that should shape NEPHU's annual health promotion and prevention priorities.



The most common response from the NEPHU Leadership Team was that community consultation and engagement should shape NEPHU's annual health promotion and prevention priorities (50%). Interviewees said that listening to community voices, understanding community priorities, and community acceptability should be key drivers.

The next most common theme was the need for data and evidence to drive decisions and approaches.

It was also strongly acknowledged that funding and resources play a critical role in the determination of priorities.

"Use data to select where we put our efforts"

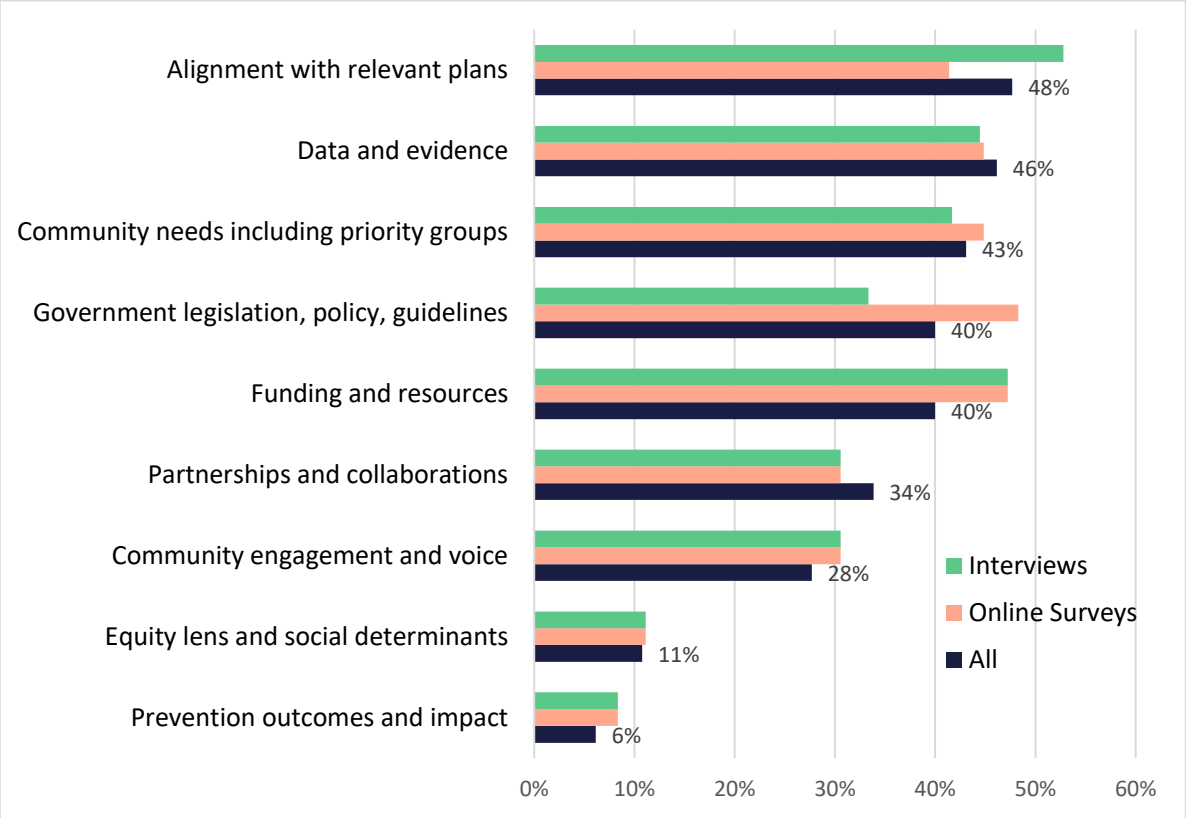
"Community itself […] we should be listening […] and understanding their concerns and their difficulties"

"Vulnerable communities – CALD, First Nations communities, others […] (let's) put our energies into these communities […] and make sure they are supported."

External stakeholders

External stakeholders were asked to state the top three drivers of their current priorities in health promotion and prevention. Their responses are shown in Figure 4.

Figure 4. External stakeholders: Top three drivers of current priorities in health promotion and prevention



External respondents identified a range of drivers which shaped their annual health promotion and prevention priorities, most commonly the importance of aligning with relevant plans (48%) and, similarly, with government legislation, policy and guidelines (40%). State plans and priorities, particularly the Victorian Health and Wellbeing Plan, were identified as key drivers, as were Municipal Health and Wellbeing Plans.

As with internal findings data and evidence were a common driver (46%).

Community needs, including the specific needs of priority populations also featured highly (43%), as did funding and resources (40%).

Overall, online survey responses were largely consistent with interview responses, however leadership representatives more commonly identified funding and resources, and alignment with state plans and priorities, as key drivers of their current priorities.

"Alignment with state-wide priorities and DOH funding guidelines; these outline the priorities that we can choose and shape the settings and actions we can implement."

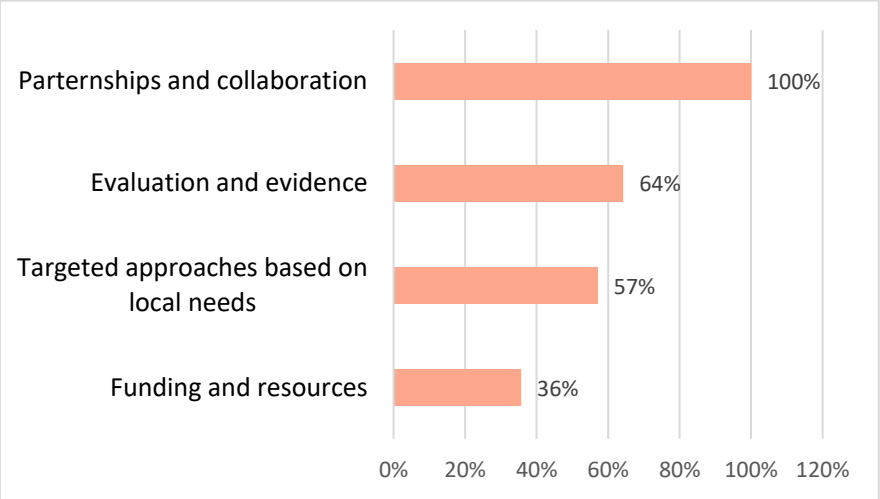
"Migrant settlement is the main driver […] A lot of newly arrived migrant community is settling in the northern suburbs with […] cultural barriers and a lack of awareness around health issues (mean that) the needs are quite different and urgent to be addressed."

3.4.3. Enablers of success in health promotion and prevention

NEPHU participants

The NEPHU Leadership Team were asked for their views on what will enable success within health promotion and prevention for NEPHU, and why. Their responses are shown in Figure 5.

Figure 5. Internal: Anticipated enablers of success within health promotion and prevention for NEPHU



Overwhelmingly, the NEPHU Leadership Team identified partnerships and collaboration as the most important enabler of success within NEPHU's future approach to health promotion and prevention (100%). This included further development of relationships that were established during the COVID-19 response – for example, with community health, local government and Primary Health Network – as well as the need for new collaborations.

Establishing a clear, shared mission, and working to understand synergies with existing work were identified as key enablers in a successful collaborative approach to health promotion and prevention.

Evaluation and evidence were also identified as key enablers of success, which included implementing evidence-based interventions, piloting interventions and evaluating impact and effectiveness.

Targeted approaches based on local needs, and funding and resources were other key enablers of success.

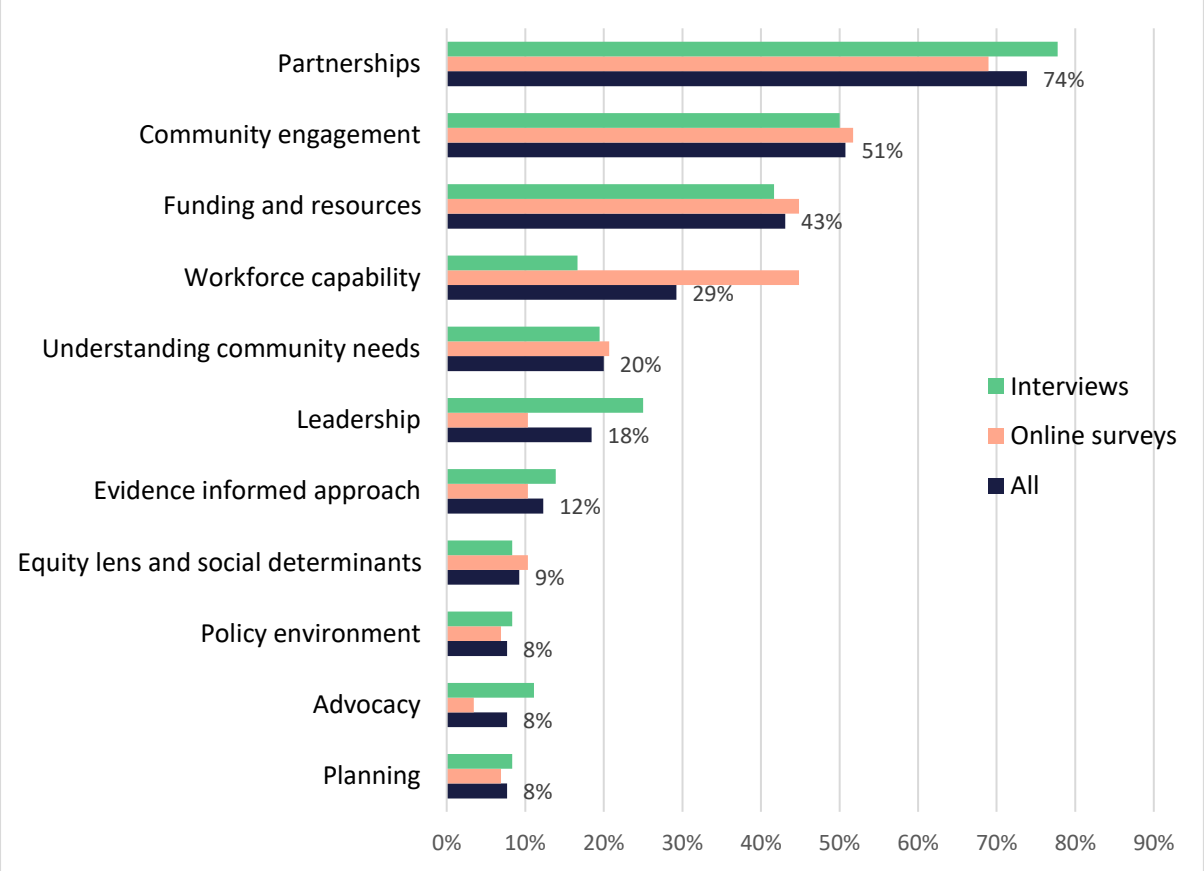
"Getting our collaborations done right and well, in a meaningful and genuine way"

"There are lots of experienced people already there – we are new players. [We must] acknowledge the work that has been done already."

External stakeholders

External stakeholders were also asked to consider and describe the enablers of their greatest successes within health promotion and prevention. Their responses are shown in Figure 6.

Figure 6. External stakeholders: Enablers of success within health promotion and prevention



In line with the views of internal stakeholders, external respondents also identified partnerships as the top enabler of their greatest successes in health promotion and prevention (74%). Stakeholders said that partnerships, collaboration and integrated approaches were important for promoting efficiency and reducing duplication, and also acknowledged the need for a shared vision when working as a collaborative.

The second most identified enabler for external respondents was community engagement (51%), which encompassed listening to community and ensuring that communities voices informed program design (e.g., through co-design approaches).

Funding and resources (43%) featured highly across both internal and external responses.

Workforce capability also featured strongly (29%), including a skilled workforce, development opportunities, and employing local community members and those with lived experience. Aboriginal Community Controlled Health Organisations highlighted the essential role of the Aboriginal health workforce in enabling success in health and wellbeing programs.

The pattern of themes emerging from the external leadership interviews and the online survey were noticeably similar, with the exception that staff responding to the online survey more commonly mentioned workforce capability, while interviewees more commonly mentioned organisational leadership and support as an enabler.

"None of our work succeeds without collaboration"

"The cultural lens that (our local workforce) brings to our work and the capacity building for the rest of the team is absolutely essential."

"A lot of Aboriginal staff actually are part of the community, so we have really good intel on what the issues are and how to address them. It's just part of the DNA of an Aboriginal Community Controlled Health service […] Self-determination has to be central to your work. Led by community, for community"

"The Women's Health sector is amazing… their organised effort to come together and advocate to government… they've got a voice"

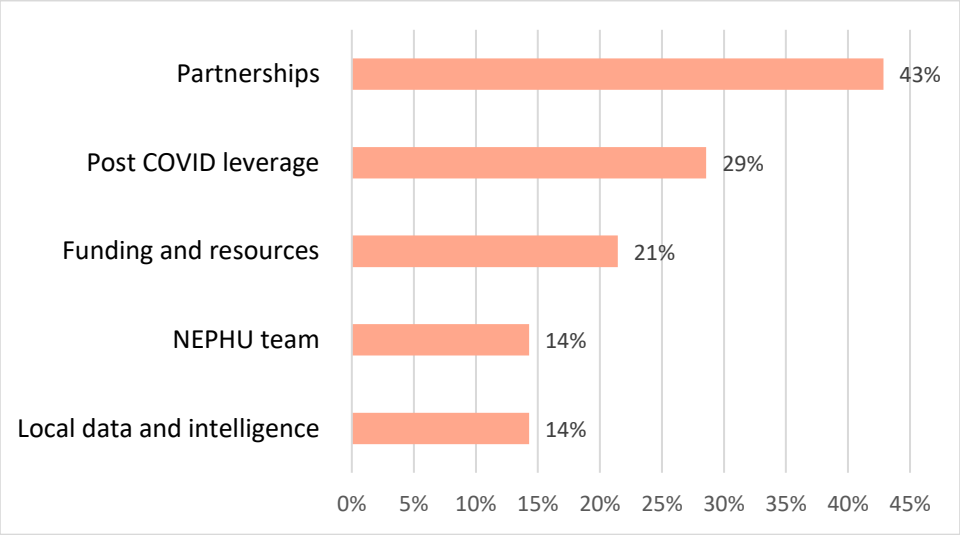
3.4.4. Strengths and weaknesses of the current health promotion landscape

Respondents were asked to identify strengths and weaknesses of the current health promotion landscape.

NEPHU participants

Figure 7 shows the perceived strengths of the current health promotion landscape, as identified by the NEPHU Leadership Team.

Figure 7. Internal: Strengths of the current landscape



Existing partnerships were the most common strength of the current landscape identified by the NEPHU Leadership Team (43%). Respondents described local partnerships as a key means of generating innovative, targeted programs, and for extending the reach and impact of initiatives.

Respondents also described the momentum and goodwill built during the COVID-19 response as a key strength that may be leveraged for new collaborative endeavors in health promotion and prevention (29%).

Local Public Health Unit resourcing was identified as a strength that will bring additional value and resourcing to the current landscape (21%).

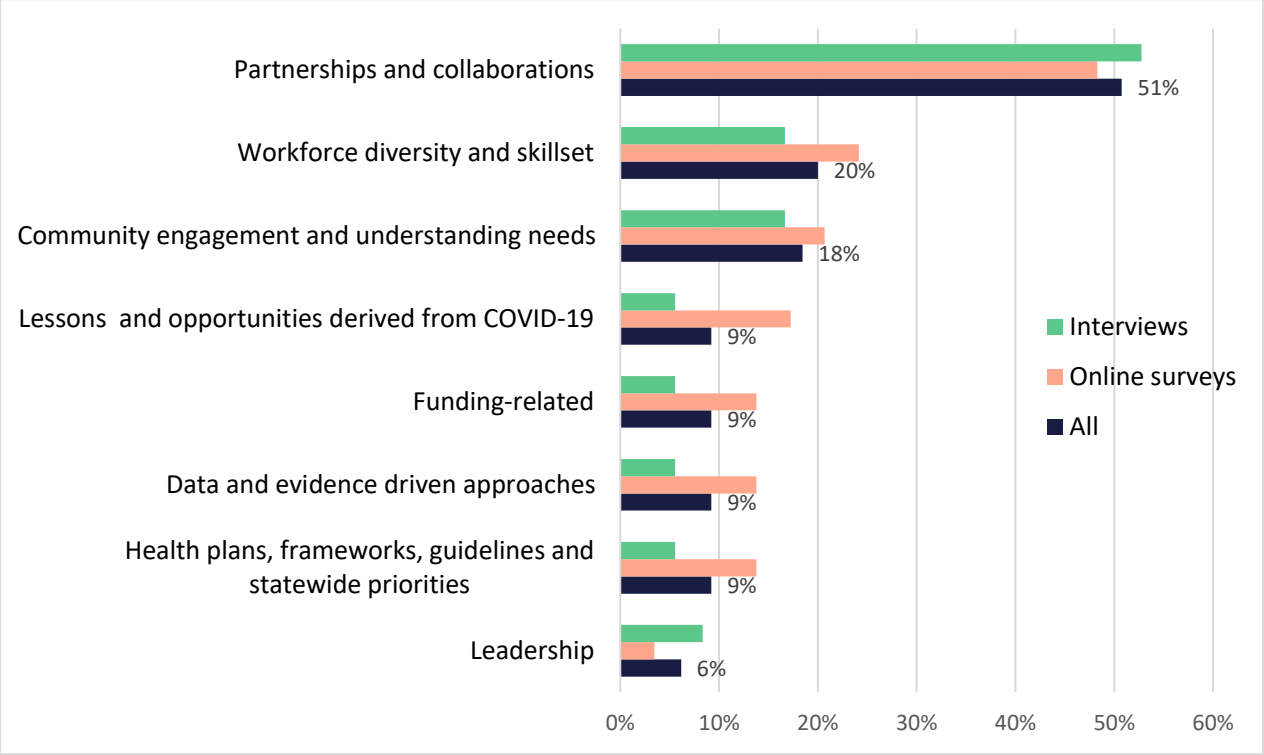
As a new stakeholder in health promotion and prevention, many members of the NEPHU Leadership Team did not feel well placed to comment in detail on weaknesses of the current landscape. Rather, respondents tended to comment on challenges they expected NEPHU to face in embarking on its role within health promotion and prevention. These included:

- Navigating the complexity of the existing landscape
- A lack of confirmed long-term funding for Local Public Health Units
- Multiple establishment and expansion requirements occurring concurrently (such as governance structures, workforce recruitment and strategic planning), whilst also delivering and demonstrating impact and value within a 12-month period.

External stakeholders

External stakeholders identified both strengths and weaknesses of the existing landscape, shown in Figure 8 and Figure 9, respectively.

Figure 8. External stakeholders: Strengths of the current landscape



In alignment with the responses of the NEPHU leadership team, external stakeholders also commonly identified existing partnerships and collaborations as a strength of the current landscape (51%), as these brought opportunities to share knowledge and learning, and to achieve greater impact.

The diversity and skillset of the workforce was an identified strength (20%), including the significant value brought to the sector by culturally competent and informed staff. Similarly, community engagement and understanding the needs of local communities was identified as a strength of the current landscape (18%).

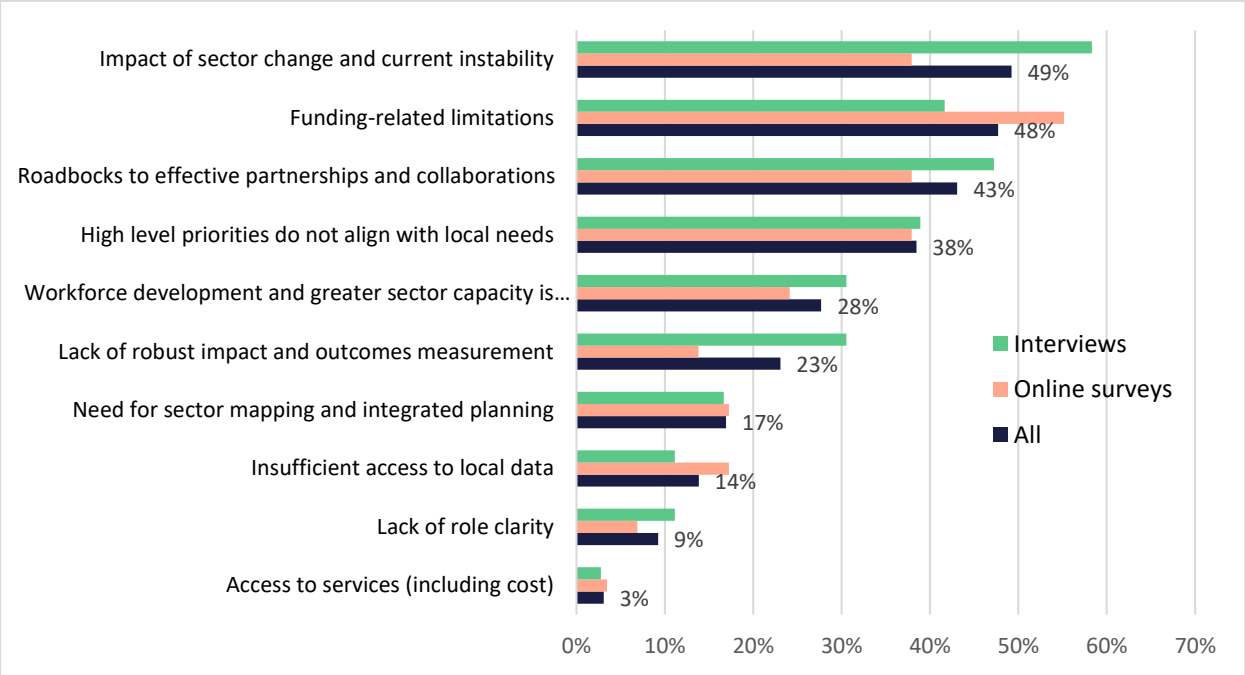
Respondents also identified strengths emerging from the COVID-19 pandemic (9%), such as increased community health literacy and engagement, a stronger platform for delivering health promotion messages, and stronger organisational relationships.

Some respondents discussed the strengths of statewide plans and guidelines (9%), including the Victorian Health and Wellbeing Plan, as a facilitator of alignment of effort across the sector. Sector consultation about the development of funded-agency health promotion guidelines was also identified as a strength.

Funding-related strengths included examples of increased or long-term funding for specific programs or initiatives.

> ***"Increased partnerships have enabled more cross sector collaboration and greater collective impact."***
>
> ***"[We have] a highly skilled workforce with experience in co-design, working with diverse populations, and understanding of intersectionality"***
>
> ***"Some Covid funding […] enabled an unprecedented level of support to cohorts of our community who are hardly reached and an incredible insight into community need."***

Figure 9. External: Weaknesses of the current landscape



External respondents identified a number of weaknesses in the current health promotion landscape. Trends emerging from the responses from interviewees were similar but not identical to those emerging from the online survey.

Most commonly, interviewees said that instability due to the impact of reform was a weakness of the current landscape, whereas online survey respondents most mentioned funding-related limitations as a weakness of the current landscape. Funding-related limitations included short-term funding, insufficient funding, and insecure staff roles. A lack of dedicated funding for health promotion and prevention within local government was also raised as a weakness.

Roadblocks to strong and effective partnerships included concerns about the loss of a coordination and backbone role with the cessation of Primary Care Partnerships. Some respondents commented on variation in the strength of high-level prevention partnerships across geographic regions, while others mentioned the need for centralized networks to support local government health planners.

Some stakeholders raised concerns that high level sector priorities do not always align with local needs. They commented on the requirements of guidelines meaning that they could not adequately respond to the greatest needs of their communities and raised concerns about a shift away from a focus on the social determinants approach within primary prevention.

External stakeholders also commented upon a lack of robust impact and outcomes measurement as a weakness of the current landscape. This included inherent challenges in measuring the impact of health promotion and prevention work as well as variation in skills and experience in measurement across the sector.

"There's a lot of change going on in the current landscape […] Many stakeholders are looking for a little bit more direction and clarity in the work ahead."

3.5. FINDINGS: REFLECTIONS ON LOCAL NEEDS

3.5.1. Key local insights

Respondents were asked to share any key insights relating to the health and wellbeing needs of their local communities, which may not be reflected in population data.

NEPHU participants

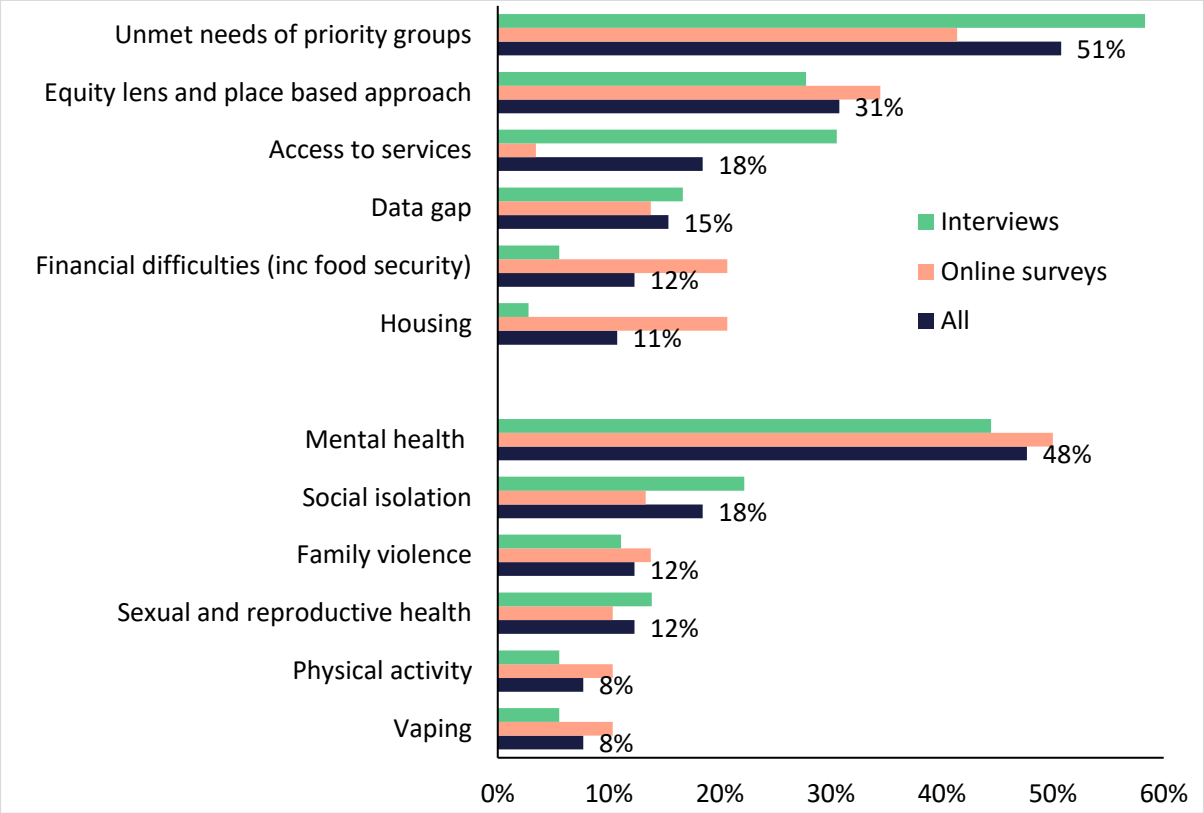
The NEPHU Leadership Team shared reflections from previous work, particularly in relation to the COVID-19 response. Their insights included:

- The importance of effective engagement with culturally and linguistically diverse (CALD) communities to understand their health-related needs.
- The importance of collaborating with faith and community leaders for the success of community-based initiatives and the need to build trust with communities as a prerequisite for the undertaking initiatives.
- Unmet needs in sexual and reproductive health, for example, high rates of unplanned pregnancy in some communities, and concerns that data showing low rates of syphilis in some areas may be indicative of low testing rates.
- The need to ensure access to health services for vulnerable populations such as refugees.

External stakeholders

External stakeholders shared many insights relating to the health and wellbeing needs of their local communities, with two broad themes emerging. Their responses are summarised in Figure 10: insights related to barriers and approaches are grouped in the top half of the figure, whilst insights related to specific priority areas are grouped in the lower half.

Figure 10. External stakeholders: Key local insights shared



External stakeholders most commonly mentioned the unmet needs of local priority populations (51%), which included, for example, international students, the local Aboriginal community, older people, youth, people identifying as LGBTQI+, and other groups considered to be vulnerable.

Respondents identified the importance of place-based approaches for addressing needs within their local communities, and the need to take an equity lens in health promotion and prevention work (31%).

Many respondents shared their concerns about mental health within their local communities (48%) and social isolation (18%).

"Data is not just about raw numbers […] you often won't see the need and those most in need. […] We need to triangulate multiple sources […] and types of information."

"Partnering with community health is a gateway to a whole lot of smaller community groups […] gaining that data is really valid and necessary in determining priorities and approaches."

"I would like to emphasise […] the negative experiences of LGBTIQ+ people accessing health services, particularly in outer suburban Melbourne and regional Victoria. A lack of awareness, sensitivity to and understanding of LGBTIQ+ people and their needs can lead to very poor health outcomes for these populations."

"(Our) community is experiencing vulnerability in rates that it never has before. Anecdotally, service providers and partners are sharing high rates of financial, housing and food insecurity. This is difficult to address, and many don't reach out for assistance as there is a prevailing narrative of low amounts of vulnerability."

3.6. FINDINGS: GAPS AND OPPORTUNITIES

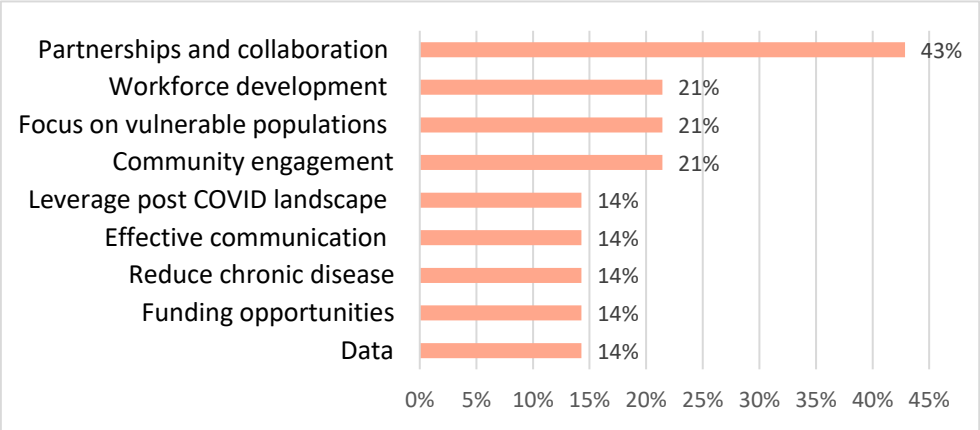
3.6.1. Top three current opportunities for improving our local health promotion and prevention landscape

Respondents were asked for their reflections on the top three current opportunities for improving our local health promotion and prevention landscape.

NEPHU participants

Internal stakeholder responses are summarised in Figure 11, below.

Figure 11. Internal: Top three opportunities for improving our local health promotion landscape



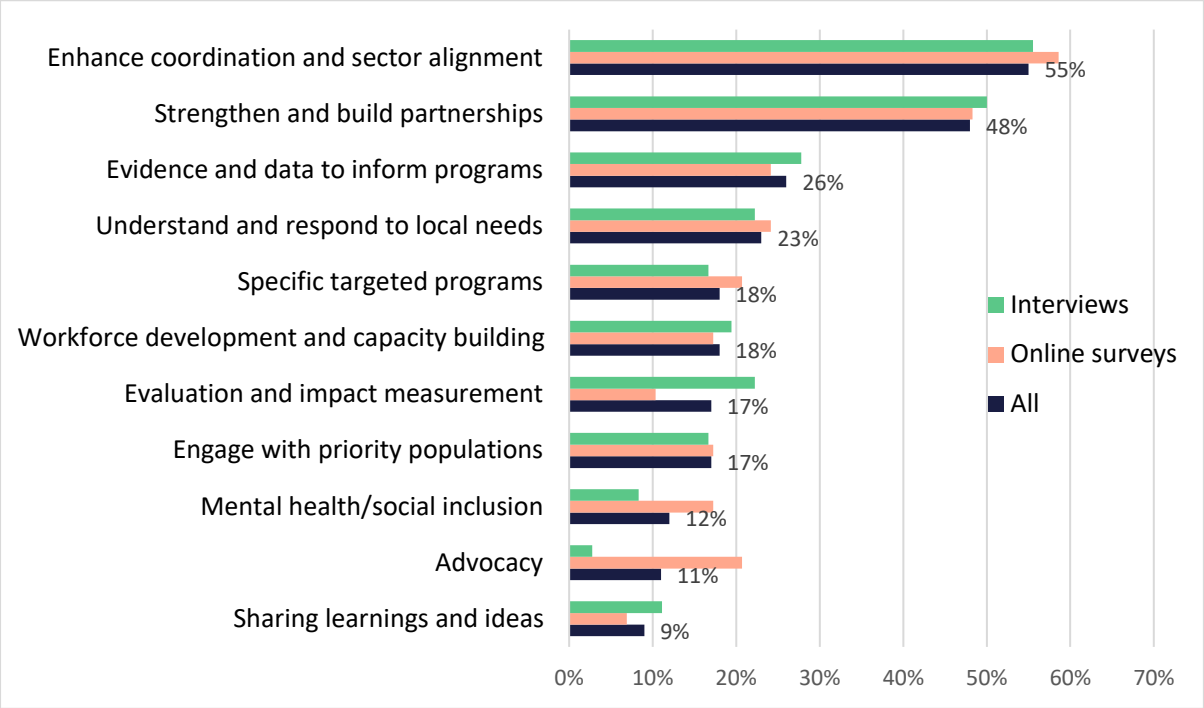
The NEPHU Leadership Team identified building partnerships and collaborations as a significant opportunity (43%) and within this, acknowledged the importance of building a detailed understanding of existing prevention work and the organisations involved.

Developing targeted approaches for vulnerable populations (21%) and developing a diverse workforce with a wide skillset within NEPHU (21%) were identified as other key opportunities.

External stakeholders

External stakeholder reflections on the top three current opportunities for improving our local health promotion and prevention landscape are summarised in Figure 12.

Figure 12. External: Top three opportunities for improving our local health promotion landscape



More than half of external stakeholder respondents identified enhancing coordination and sector alignment in the top three opportunities for strengthening the local health promotion landscape (55%). Many mentioned the potential for NEPHU to play a role in achieving this.

Strengthening and building partnerships (48%) and using evidence and data to inform programs were commonly mentioned, including the role NEPHU could play in data provision for the sector.

Aboriginal Community Controlled Health Organisations highlighted that Aboriginal health promotion initiatives present a valuable opportunity to engage community members in clinical services, and to foster ongoing relationships and enable earlier attention to health and wellbeing needs.

> ***"There could be an opportunity for NEPHU to connect us all up more […] to identify synergies and where we can work to amplify effort rather than just do our own thing. […] we may be missing the bigger picture and the opportunity to have a better impact."***

> ***"The population health data and epi strength of NEPHU - local government planners are really keen to strengthen up the data on their local communities. Ready access to data expertise is lacking"***

> ***"Make sure health promotion initiatives link back to (ACCHO) service delivery, not just conversations and posters"***

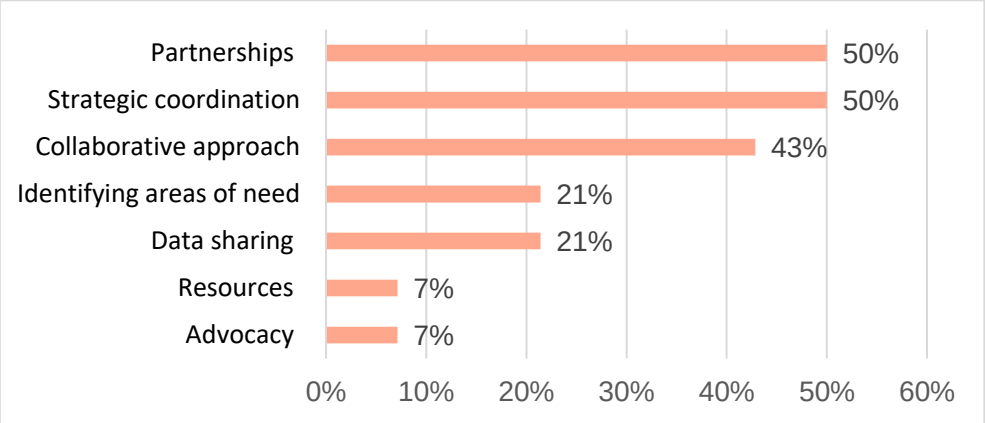
3.7. FINDINGS: CURRENT UNDERSTANDING AND EXPECTATIONS OF NEPHU'S ROLE IN HEALTH PROMOTION AND PREVENTION

Stakeholders were asked about their current understanding and expectation of NEPHU's role in health promotion and prevention.

NEPHU participants

Responses from internal stakeholders are shown in Figure 13 below.

Figure 13. Internal: Current understanding and expectations of NEPHU's role in health promotion and prevention



The NEPHU Leadership Team viewed NEPHU's role to involve strategic coordination, facilitation of partnerships and networks (50%), and taking a collaborative approach to planning, implementing and evaluating identified initiatives across a range of health promotion, prevention and early intervention priority areas.

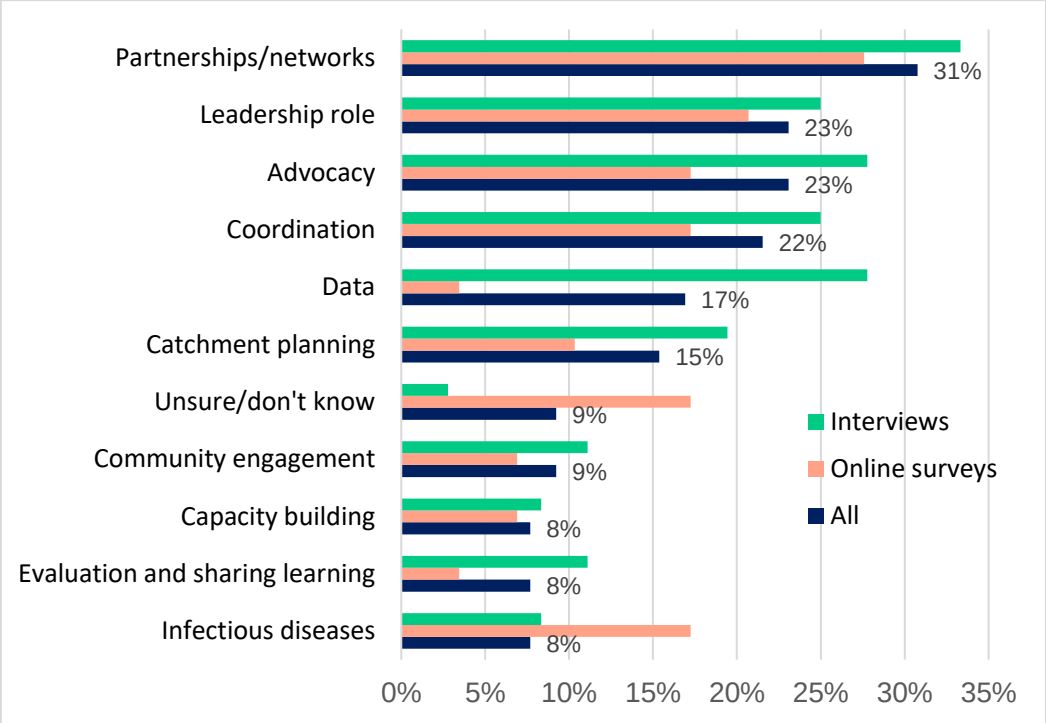
Internal stakeholders also anticipate NEPHU's role to involve identifying areas of need, providing data to inform health promotion and prevention work, and undertaking advocacy.

> ***"We could add value in a regional coordination role, in taking the lead in certain priorities, and in adding supportive infrastructure"***

External stakeholders

The understandings and expectations of external stakeholders in regard to NEPHU's role in health promotion and prevention are summarised in Figure 14, below.

Figure 14. External: Current understanding and expectations of NEPHU's role in health promotion and prevention



In alignment with the views of the NEPHU Leadership Team, the most common response from external stakeholders was to describe a role for NEPHU in facilitating and coordinating stakeholder partnerships and networks (31%).

While external interviewees and survey respondents shared this common top response, beyond this there were some notable differences between external interviewees and survey respondents. Interviewees commonly mentioned a role for NEPHU in advocacy, including to the Department of Health, as well as leadership and data. While survey respondents mentioned advocacy and leadership, they also said that they were unsure of NEPHU's role, and some mentioned NEPHU's role in infectious diseases.

External respondents who mentioned advocacy discussed the potential for NEPHU to be a voice for stakeholders and the region regarding funding and policy, and broader advocacy efforts with relevance to prevention. Whilst one internal interviewee mentioned advocacy, it was not a common response amongst the NEPHU Leadership Team (7%).

Other roles included leading planning and evaluation across the catchment, supporting shared strategic action, leading place-based prevention and health promotion practices, and supporting the workforce via professional development opportunities.

Both external and internal stakeholders mentioned a role for NEPHU in providing data for the region to inform health promotion and prevention work.

“NEPHU's size and reach makes it a more powerful voice for advocacy than any one agency or regional partnership could have on its own”.

"Be a voice for advocacy – put the spotlight on some long-term determinants"

“Continue to genuinely engage and leverage the capacity of community health organisations to reach into communities”.

"The data and expertise from NEPHU was excellent for us to make informed decisions.”

“Lead stronger place-based prevention and health promotion approaches that deliver outcome-based targets for the catchment.”

“NEPHU is brilliantly placed to bring together all your resources and expertise and people together in the sector. We need it, the system needs it”.

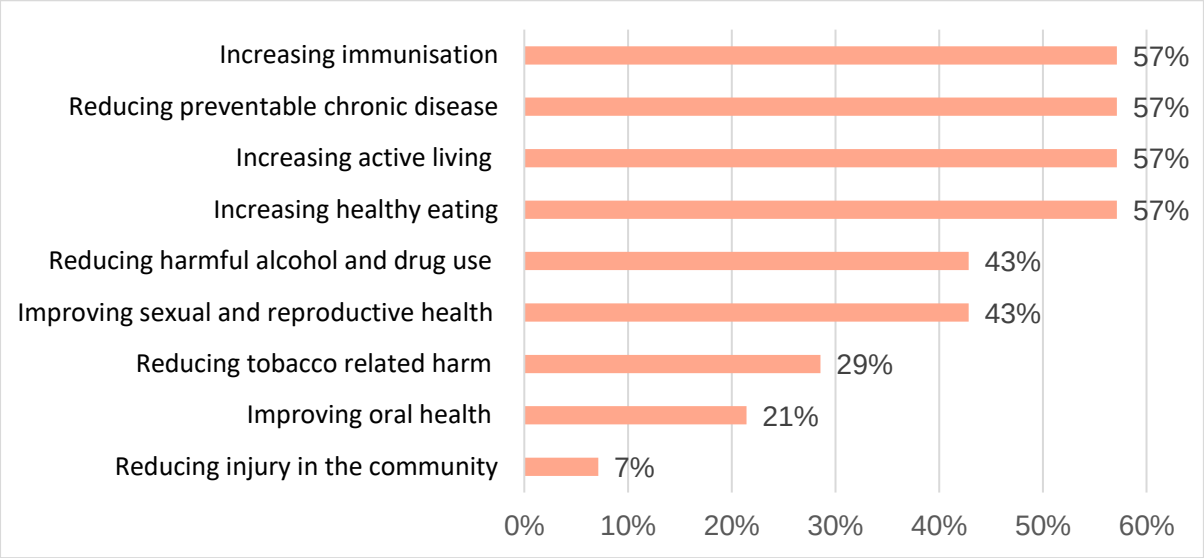
3.8. FINDINGS: STAKEHOLDER RECOMMENDATIONS FOR NEPHU'S HEALTH PROMOTION AND PREVENTION PRIORITIES

Respondents were asked to consider health promotion and prevention priorities aligning with outcomes 1.1 and 1.3 of the Victorian Health and Wellbeing Outcomes Framework, and to give their views on which of these NEPHU should prioritise, and why.

NEPHU participants

The responses of the NEPHU Leadership Team are shown in Figure 15 below.

Figure 15. Internal: Recommendations for NEPHUs health promotion and prevention priorities



The top priorities for internal stakeholders were to increase immunisation, reduce preventable chronic disease (which included screening), increase healthy eating and increase active living, with 57% of interviewees identifying each of these areas.

Respondents prioritised healthy eating and active living because of the downstream effects on chronic disease. Similarly, the prevention of chronic disease was prioritised because of downstream benefits for health and for reducing hospital admissions.

Respondents who prioritised sexual and reproductive health (43%) noted limited access to affordable services as a key rationale for this priority.

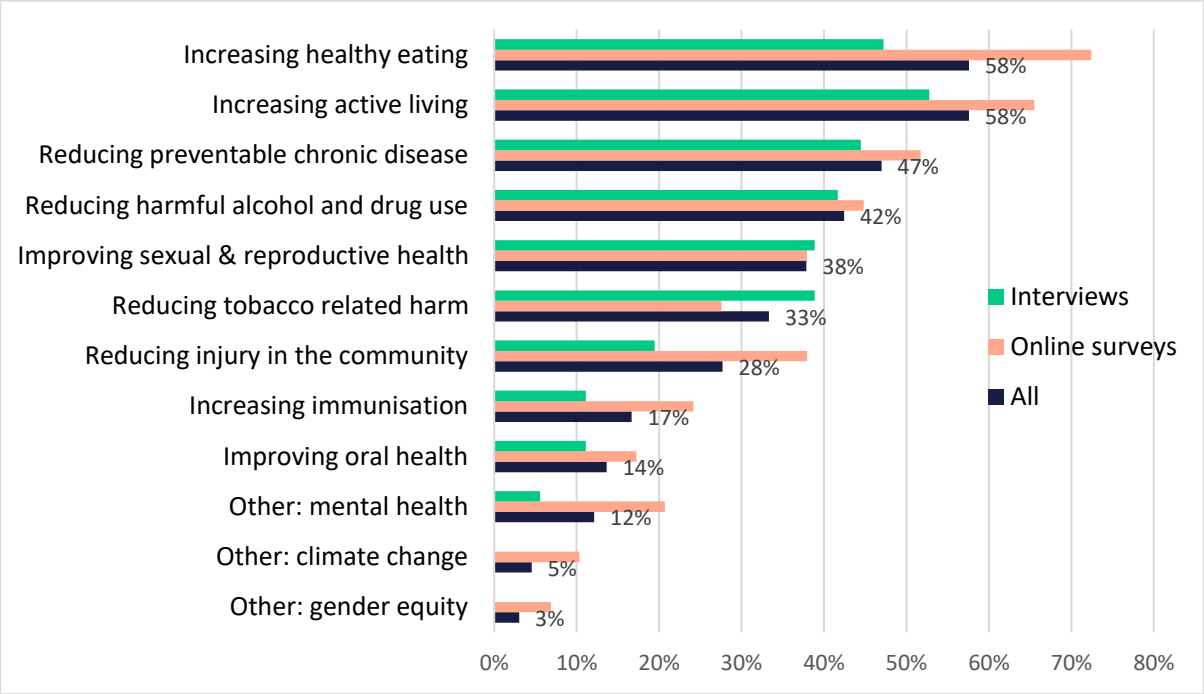
> ***"In the north it's a high growth corridor with lots of young families […] I think supporting families to provide healthy eating is an important one."***

> ***"The impact so far has been weak in diabetes and chronic disease. (Reducing) sugary drinks has been opposed by the food industry every step of the way. We could make an impact here"***

External stakeholders

The views of external stakeholders are summarised in Figure 16 below.

Figure 16. External: Recommendations for NEPHUs health promotion and prevention priorities



The top two recommendations from external stakeholders were that NEPHU should prioritise increasing healthy eating and increasing active living. The proportion of online survey respondents choosing these two priorities was particularly high and positioning of these two priorities in the top two was consistent for interviewees as well. Respondents chose these priorities because of the established evidence for the prevention of chronic disease. In line with this, reducing preventable chronic disease was the next most common priority recommendation.

Reducing harmful alcohol and drug use ranked fourth amongst priorities recommended for focus by external stakeholders, a choice that was informed by local knowledge and data as well as the impact of alcohol and drug use on chronic disease.

When respondents prioritised reducing tobacco related harm, they consistently flagged vaping as an emerging problem for their local communities and commented on the need for legislative change to make real impact in this area. Anecdotal information and local data were cited as key reasons for prioritising vaping and the reduction of tobacco-related harm.

Respondents who recommended prioritising sexual and reproductive health identified this as an under-resourced and neglected area, with unmet needs supported by local data.

Some respondents said they found it difficult to choose priorities, either because so many were important, or because they thought that priorities outside of this list were most important for their communities, for example, social inclusion, mental health, and the impacts of climate change on health.

Overall, there was strong alignment between external stakeholders and the NEPHU Leadership Team in recommended priorities, with increasing healthy eating, increasing active living, and reducing preventable chronic disease in the top three rankings for both groups.

For both groups, the next most commonly recommended priorities were reducing harmful alcohol and drug use, improving sexual and reproductive health and reducing tobacco-related harm.

One notable difference was that the NEPHU Leadership Team commonly recommended increasing immunisation, whereas this recommendation was less common amongst external stakeholders.

> ***"I think there's definitely a role in sexual and reproductive health, and especially given that the North area, the northern metropolitan regions, the only metropolitan region that don't have a sexual and reproductive health hub. To improve access, better solutions for unwanted pregnancy etc."***

3.9. CONCLUSION

This Listening Lab Consultation Program (Phase 2) has documented reflections from internal and external stakeholders on the current health promotion and prevention landscape, gaps and opportunities, and expectations for NEPHU's role within this landscape.

The findings presented here indicate that, within the defined scope of NEPHU's priority-setting process (Domain 1, Outcomes 1.1 and 1.3), top current priorities for external stakeholders are as follows:

- Healthy eating
- Active living
- Improving sexual and reproductive health
- Reducing tobacco-related harm (including vaping)
- Reducing preventable chronic disease
- Reducing harmful alcohol and drug use

The findings of Phase 2 regarding current stakeholder priorities align with the conclusions of Phase 1) and suggest that significant opportunity exists for regional collaboration across these six priority areas.

It should also be noted that although mental health and the prevention of violence against women fall outside of the scope of NEPHU's health promotion and prevention priorities for Year 1, these priority areas are of high importance for stakeholders.

The top recommendations from external stakeholders regarding NEPHU's choice of priority areas for 2022/23 are shown below, alongside the recommendations of the NEPHU leadership team:

Priority area	External stakeholders	NEPHU
Increasing healthy eating	58%	57%
Increasing active living	58%	57%
Reducing preventable chronic disease	47%	57%
Reducing harmful alcohol and drug use	42%	43%
Improving sexual and reproductive health	38%	43%
Reducing tobacco-related harm	33%	29%
Reducing injury in the community	28%	7%
Increasing immunisation	17%	57%

The recommendations and rankings of external stakeholders were closely aligned with those of internal stakeholders, with the exception that the NEPHU Leadership Team commonly identified 'Increasing immunisation' as a recommended priority (57%).

The Listening Lab Consultation findings confirm that sector-wide alignment with relevant shared planning documents generates an enabling policy context and mutually reinforcing strategic drivers of priorities across the sector. Locally, community needs – particularly those of priority populations – are also key drivers of current health promotion and prevention priorities, as are data and evidence illuminating these needs.

Both external stakeholders and the NEPHU Leadership Team identified partnerships and community engagement as key enablers of success in health promotion and prevention, along with funding and resources, and a skilled and diverse workforce.

The criticality of strengthening partnerships and collaboration was highlighted repeatedly. Other key functional opportunities to strengthen the current landscape were identified including:

- Enhancing coordination, alignment and integration in planning, program delivery and evaluation;
- Community engagement with a focus on priority populations and the application of an equity lens;
- Provision of data and analysis to deepen understanding of community needs, inform planning and programs and demonstrate outcomes and impact;
- Workforce capacity development; and,
- Advocacy to support the needs and activity of the region.

Each of these functions presents a significant opportunity for NEPHU to add value to the current landscape. Notably, stakeholders expected that NEPHU may play a role in coordination and partnerships at a regional and local level, provision of data, workforce development and catchment planning.

The findings of the Listening Lab Consultation Program (Phase 2) are one component of the evidence base that will inform NEPHU's health promotion and prevention priority-setting process, and subsequent NEPHU Population Health Catchment Plan.

Phase 1 of the process (Section 2 in this document) found that alignment is key to fostering an environment that is conducive to coordination and collaboration. Within such an environment, use of available resourcing can be maximised, and collective effort can be supported towards achieving positive and equitable health and wellbeing outcomes. Phase 2 supports and reinforces this finding.

Findings of both Phases 1 and 2 will now be considered against statistical data within the NEPHU Population Health Profile.

4. HEALTH PROFILE

This section relates to Stage 1, Phase 3 – The Population Health Profile.

The findings of data collection and analysis are presented here and will be used to inform subsequent phases of the priority setting and population health catchment planning process.

Work undertaken in Phase 3 will serve as a foundation for future work to provide further detailed insights about the needs of the NEPHU population, including at the level of priority cohorts and pockets of need within LGAs.

4.1. ABOUT THE POPULATION HEALTH PROFILE

4.1.1. Purpose

The Population Health Profile draws upon key demographic, environmental, and health indicators to form a picture of the health and wellbeing of the NEPHU community.

The population health profile outlined in this report forms part of Phase 3 of NEPHU's multi-stage, collaborative population health planning process.

4.1.2. Objective

1. To generate a NEPHU Population Health Profile through the identification, extraction and compilation of relevant data from existing Population Health and other data sources.

4.1.3 Data sources

Local Government Area (LGA) level data was used throughout this analysis. Where LGA level data was not available, statistical area level-3 (SA3) data was collated. Other key data sources are outlined below:

- Australian Bureau of Statistics, 2021 Census
- Australian Urban Observatory
- Victorian population health survey (VPHS), 2020 and 2017 findings
- Australian Immunisation Register, Australian Department of Health
- Victorian Notifiable Disease Surveillance System, the Department of health
- Victoria Injury Atlas.

4.1.4 Limitations

This report has a number of limitations, outlined below:

- The findings, reported at LGA level, may mask significant local level variation in the health and wellbeing of the NEPHU community.
- All data within VPHS is self-reported and therefore subject to biases relating to recall and social desirability.
- For the VPHS, only participants 18 and older are sampled within the survey, we therefore cannot understand trends in the outlined indicators for younger people in NEPHU.
- Indicators for the VPHS are from 2020 and in some cases 2017. Significant changes in these measures may impact the interoperability of the results.

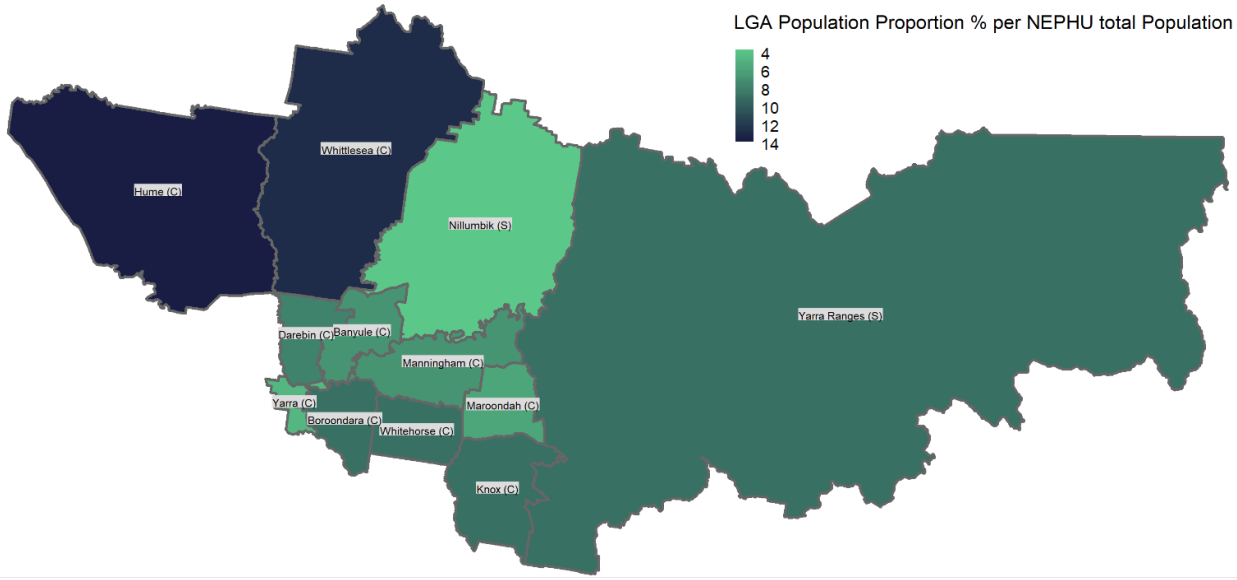
4.2 WHO WE ARE

4.2.1 Population and growth

The NEPHU catchment has the largest population of all nine LPHUs in Victoria and is comprised of 12 LGAs (Banyule, Boroondara, Darebin, Hume, Knox, Manningham, Maroondah, Nillumbik, Whitehorse, Whittlesea, Yarra and Yarra Ranges).

NEPHU's 2021 population (1,793,282) formed approximately 27% of the total Victorian population (6,494,115). Thirty-six percent of NEPHU's population reside in the Hume, Whittlesea, and Whitehorse LGAs. Conversely, Yarra and Nillumbik are NEPHU's least populated LGAs, each with fewer than 100,000 residents (Figure 1).

Figure 1. Map of LGA population as a proportion of the total NEPHU population



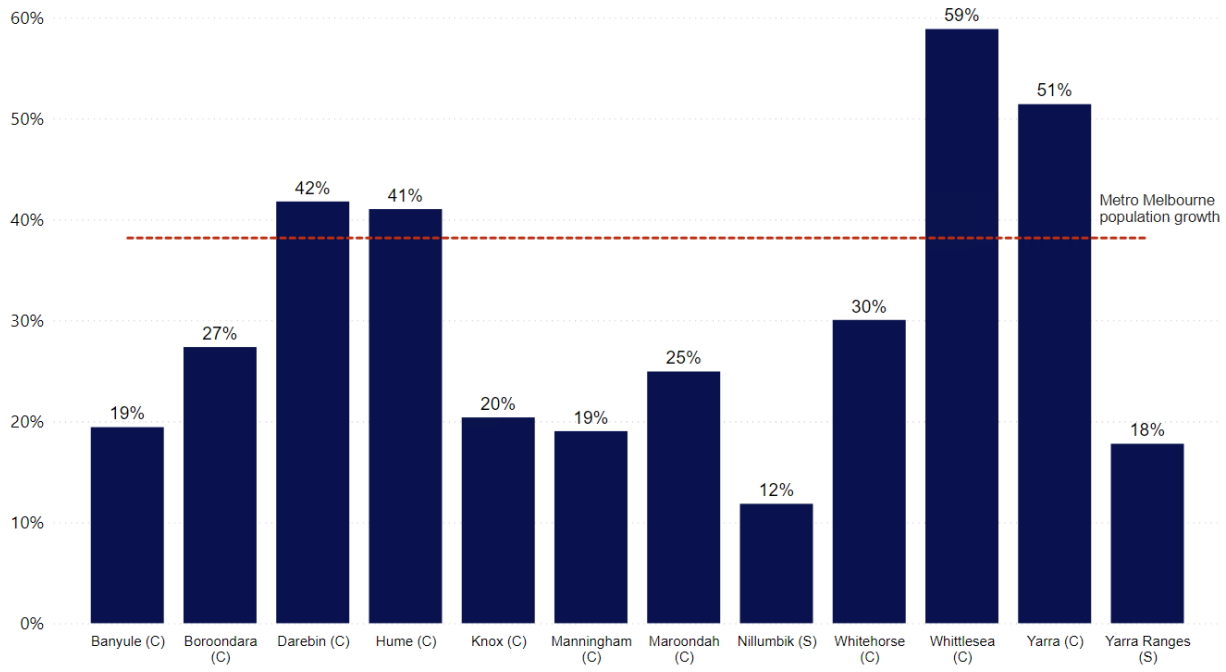
Source: Australian Bureau of Statistics

Note: Light green indicates a low LGA population as a proportion of the total NEPHU population; dark blue indicates a high LGA population as a proportion of the total NEPHU population.

Figure 2 shows projected population change for LGAs in the NEPHU region over the next 15 years. Compared to 2021, the NEPHU population is expected to grow by 15% by 2026, and by almost 30% by 2036 (Appendices document, Section 4: A1).

Yarra, Whittlesea, Darebin and Hume are expected to experience the largest population growth, with projected increases of more than 20% over the next five years, and more than 40% over the next 15 years. As a result, it is projected that population change for the NEPHU region will be relatively greater than for Victoria as a whole (30% versus 20%).

Figure 2. Projected population change from 2021 to 2036 by LGA



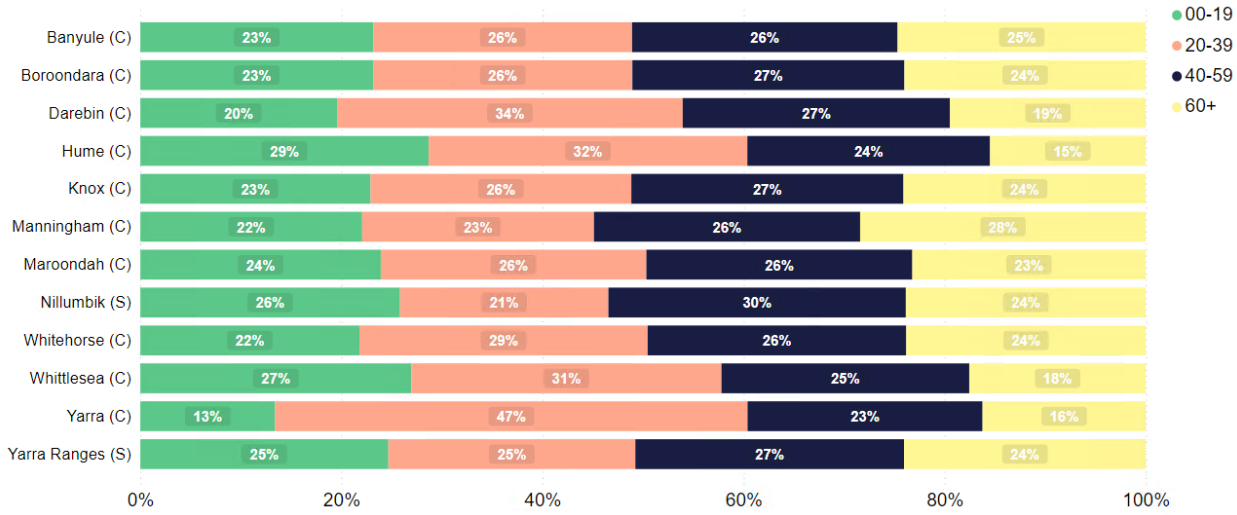
Source: Australian Bureau of Statistics

4.2.2 Population age profile

Across the NEPHU region, 23% of the population is aged under 19 years, while 21% are aged 60 years and above, which is similar profile to Victoria as a whole (Appendices document, Section 4: A2). Figure 3 shows the age profile of the population in each LGA in the NEPHU region.

Hume, Whittlesea, and Nillumbik have the highest proportion of children and adolescents, while Manningham, Banyule, and Knox have the highest proportion of people aged 60 years and older. Almost half of the population of Yarra (48%) is aged between 21 and 39 years, while almost two-thirds of Hume (61%) are aged below 40 years.

Figure 3. Proportion of population by age group and LGA



Source: Australian Bureau of Statistics

4.2.3 Cultural diversity

Compared to wider Victoria, the NEPHU population has a higher proportion of people born overseas, and a higher proportion of people who speak a language other than English at home (Appendices document, Section 4: Table A3.1).

Figure 4 shows the proportion of the population in each NEPHU LGA who speaks a language other than English at home, and the proportion who were born overseas.

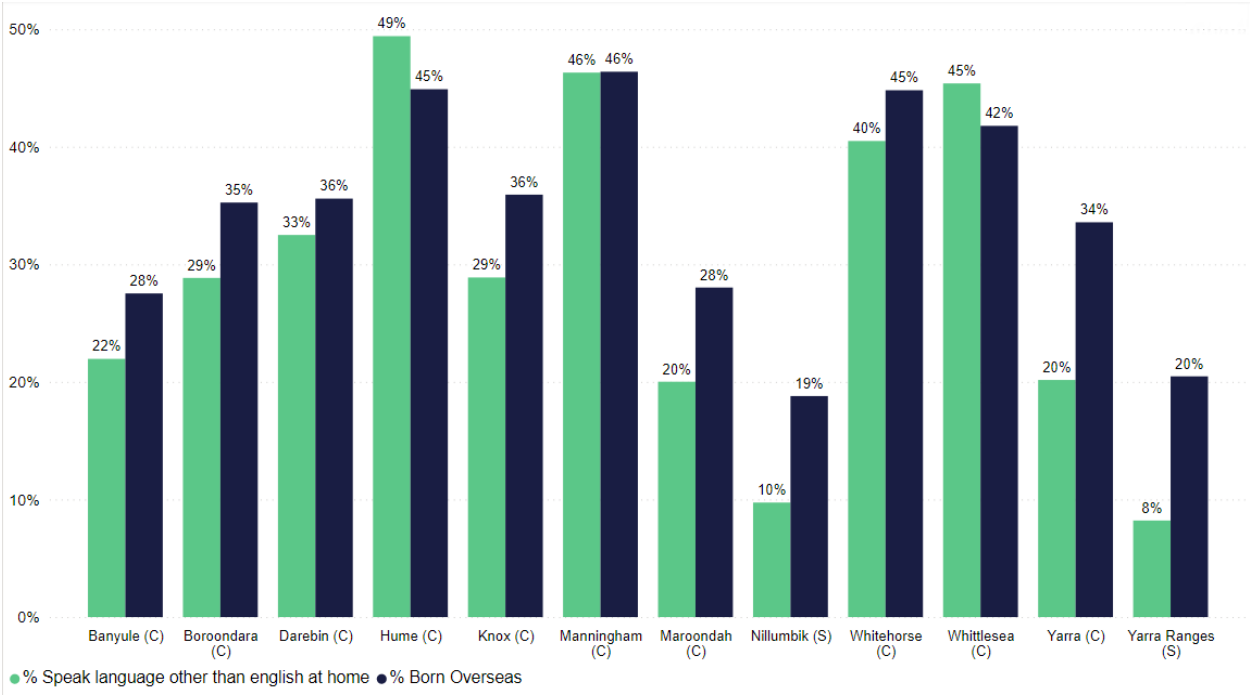
In Hume, Whittlesea, Whitehorse and Manningham, more than 40% of the population speak a language other than English at home, compared with fewer than 10% in Yarra Ranges and Nillumbik (Figure 4).

Consistent with language other than English spoken at home, the LGAs with the highest proportion of people born overseas are Manningham (46%), Hume (45%), Whitehorse (45%) and Whittlesea (42%) (Table A6). The lowest proportion of people born overseas is found in the Yarra Ranges (20.5%) and Nillumbik (18.8%) LGAs (Figure 4). These figures are lower than for Victoria as a whole (36%).

Figure 5 provides a snapshot of English proficiency by LGA, including level of English spoken by people who speak a language other than English at home, as well as the proportion of English speakers only. Figure 5 demonstrates that a variety of proficiencies of languages other than English are found in the NEPHU households that speak a different language at home.

From this, the LGAs with the highest proportions of people born overseas (Manningham and Hume) have the lowest proportions of English only speakers in the NEPHU region (24% and 22% respectively) (Figure 5). The same pattern exists in the LGAs with the lowest proportion of people born overseas (Yarra Ranges and Nillumbik) with the highest proportions of English only speakers (77% and 74% respectively) (Figure 5).

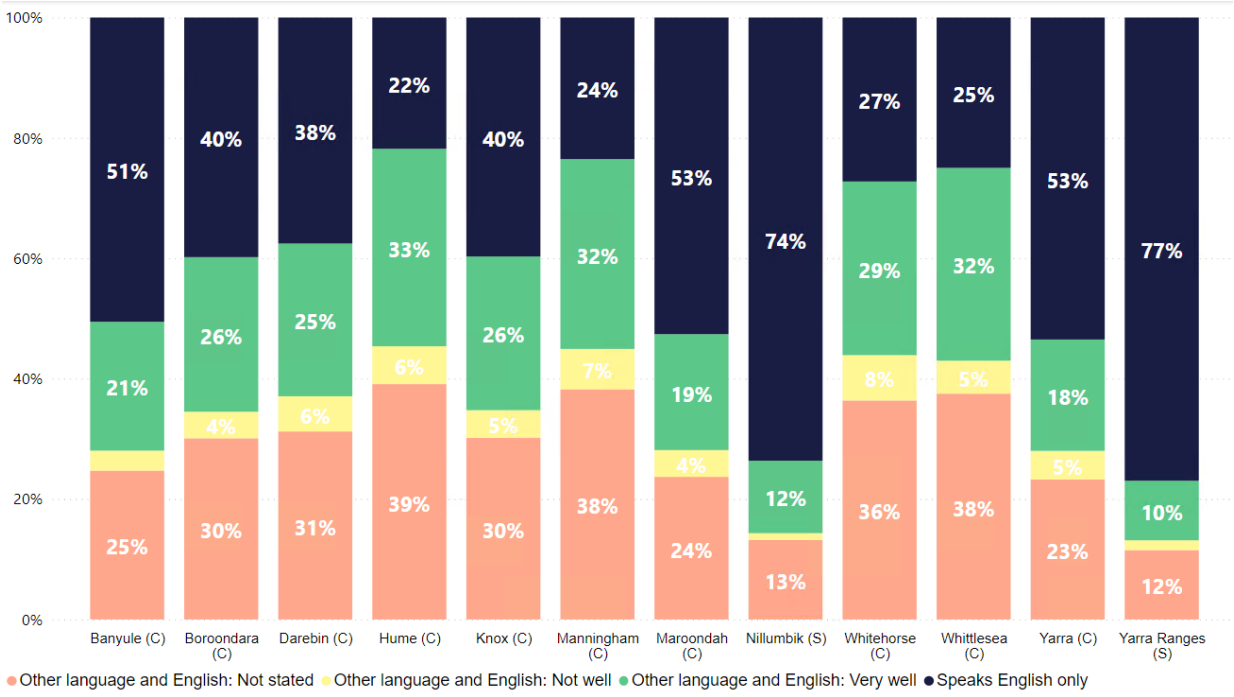
Figure 4. Proportion of population speaking a Language(s) other than English at home, and proportion born overseas, by LGA



Green: percentage of the population that speaks a language(s) other than English at home
Dark Blue: percentage of the population born overseas.

Source: Australian Bureau of Statistics

Figure 5. English proficiency and other language spoken, by LGA



Source: Australian Bureau of Statistics

Table 1 shows the top three most common countries of birth (excluding Australia), consisting of China, India and England, therefore indicates a diverse profile for LGAs across the NEPHU region.

In Manningham (22.3%) and Whitehorse (25.9%), the most common country of birth is China, followed by Malaysia (Manningham) and India (Whittlesea). In the northern LGAs of Hume (13.5%) and Whittlesea (14.8%), the most common country of birth is India, followed by Iraq (Hume) and North Macedonia (Whittlesea).

Table 1: Most common countries of birth outside of Australia by LGA

LGA	Most common birthplace (CALD Pop, %)	2nd most common birthplace (CALD Pop, %)	3rd most common birthplace (CALD Pop, %)
Banyule	China (7,576 6%)	England (6,791 5.4%)	India (4,897 3.9%)
Boroondara	China (26,769 15.9%)	England (9,582 5.7%)	India (8,091 4.8%)
Darebin	Italy (10,448 7%)	Greece (18,488 5.7%)	China (7,718 5.2%)
Hume	India (32,886 13.5%)	Iraq (30,962 12.7%)	Turkey (14,666 6%)
Knox	China (16,931, 10.6%)	India (10,339, 6.5%)	England (10,013, 6.3%)
Manningham	China (27,830 22.3%)	Malaysia (9,442 7.6%)	Hong Kong (7,545 6.1%)
Maroondah	China (8,576 7.5%)	England (8,272 7.2%)	India (5,056 4.4%)
Nillumbik	England (5,161 8.2%)	New Zealand (1,369 2.2%)	Italy (1,152 1.8%)
Whitehorse	China (43,923 25.9%)	India (13,231 7.8%)	Malaysia (11,107 6.6%)
Whittlesea	India (34,055 14.8%)	North Macedonia (11,557 5%)	Italy (11,491 5%)
Yarra	England (7,415 8.2%)	New Zealand (5,231 5.8%)	Vietnam (4,787 5.3%)
Yarra Ranges	England (15,271 9.8%)	New Zealand (3,677 2.4%)	Netherlands (2,754 1.8%)

Source: Australian Bureau of Statistics.

Note: Percentages are calculated as percentages of total of resident LGA population.

4.2.4 Aboriginal and Torres Strait Islander population

The Aboriginal and Torres Strait Islander population in the NEPHU region is 0.7%, which is smaller than for Victoria overall (1.0%). Whittlesea, Darebin and Yarra Ranges LGAs have the highest proportion of the population who identify as Aboriginal and Torres Strait Islander people in the NEPHU catchment. Yarra Ranges has the highest proportion of Aboriginal and Torres Strait Islander people within the LGA population (1.1%) (Appendices document, Section 4: Table A3.2).

Table 2: Estimated Aboriginal and Torres Strait Islander population size and proportion of population (%), by LGA

LGA	Estimated Aboriginal and/or Torres Strait Islander Population size	Aboriginal and/or Torres Strait Islander Population (%)
Banyule	877	0.7%
Boroondara	442	0.3%
Darebin	1,450	1.0%
Hume	1,865	0.8%
Knox	1,027	0.6%
Manningham	304	0.2%
Maroondah	733	0.6%
Nillumbik	378	0.6%
Whitehorse	527	0.3%
Whittlesea	2,272	1.0%
Yarra	519	0.6%
Yarra Ranges	1,710	1.1%
NEPHU	**12,104**	**0.7%**

Source: Australian Bureau of Statistics

4.2.5 Gender and sexual diversity

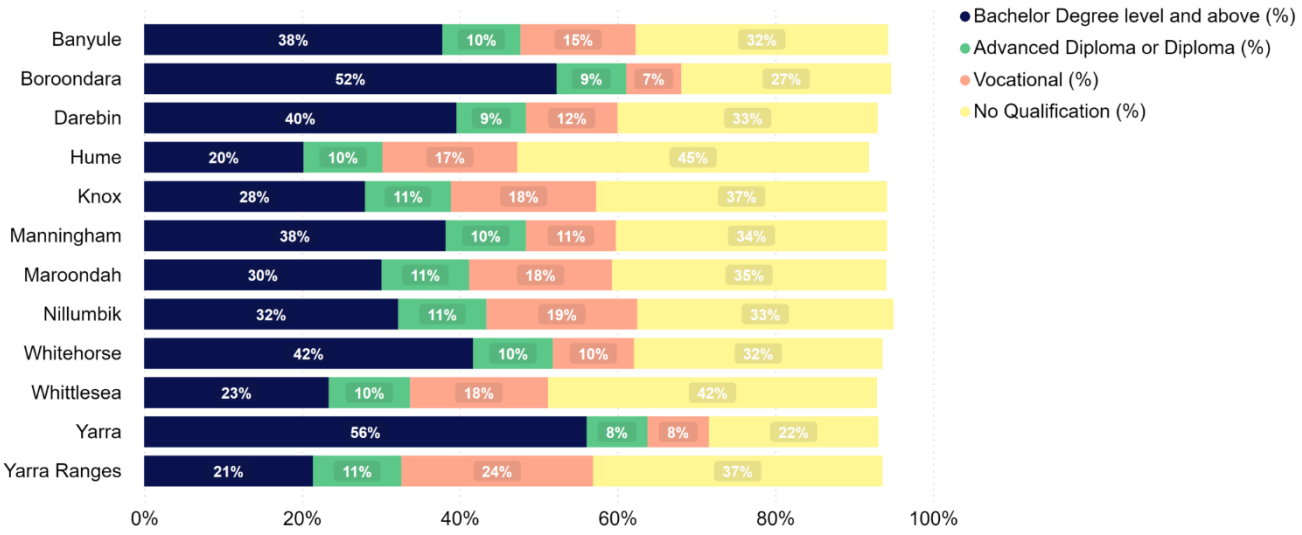
According to the 2017 VPHS, there are significant populations of people who identify as lesbian, gay, bisexual, transgender, intersex or gender diverse in the LGAs of Darebin and Yarra at over 10%, compared to 5% for the whole of Victoria.

4.2.6 Education and employment

A snapshot of educational attainment across the NEPHU region is shown in Figure 6. More than half the population in Yarra (56.1%) and Boroondara (52.3%) hold a qualification at bachelor's degree level or higher, whilst less than one quarter of the population in Hume (20.2%) and Yarra Ranges (21.4%) hold this same level of qualification.

The Yarra, Boroondara, and Whitehorse LGAs have the highest proportion of people who have a bachelor's or higher degree, while Hume, Whittlesea, and Darebin LGAs have the highest proportion of people with vocational education.

Figure 6: Highest Qualification Achieved by population aged 15+, by LGAs in the NEPHU catchment



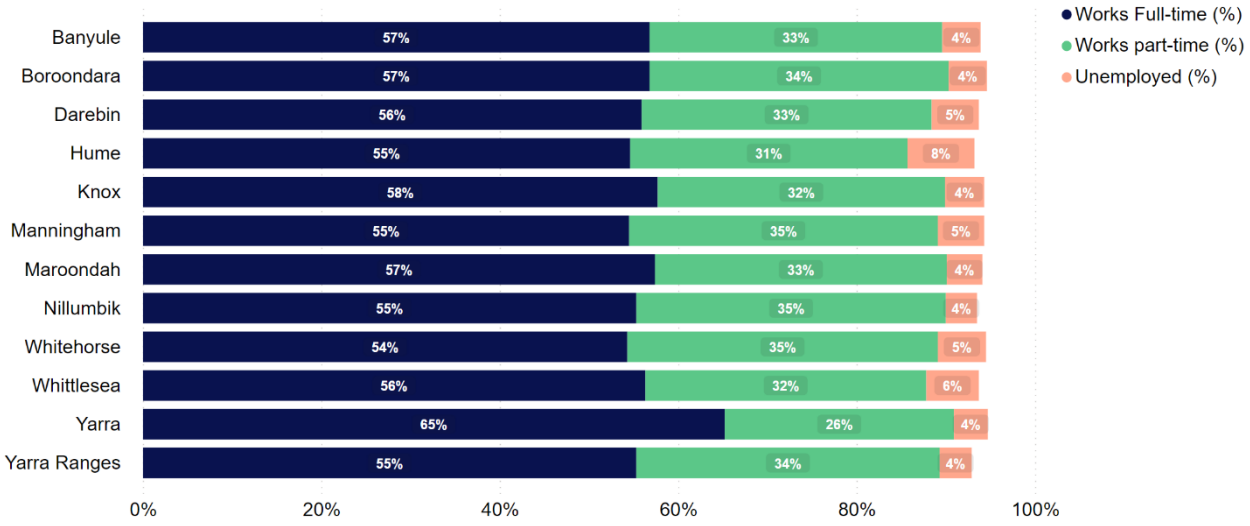
Source: Australian Bureau of Statistics

Note: Proportions do not add to 100% as visual does not include unknown/not answered

Across the NEPHU region, 4.8% of people aged 15 years and older are unemployed. Unemployed includes people who are not in a paid job, but who are actively looking for work. Working status across the NEPHU region is shown in Figure 7.

The LGAs who have the highest proportion of full-time workers are the Yarra (65.2%) and Knox (57.7%) LGAs, whilst the Whitehorse (34.8%) and Manningham (34.6%) LGAs have the highest proportion of part-time workers (Figure 7). However, the unemployment proportion is highest in the Hume LGA (7.5%) (Appendices document, Section 4: A4).

Figure 7: Work Status by population aged 15+, by LGAs in the NEPHU catchment



Source: Australian Bureau of Statistics
Note: Proportions do not add to 100% as visual does not include unknown/not answered

4.3 OUR ENVIRONMENT

4.3.1 Social Infrastructure Index

The social infrastructure index (SII) is a measure of community support services and their ability to enhance community wellbeing. The SII ranges from a minimum score of 0 to a maximum score of 16. A maximum score of 16 represents the greatest mix of social infrastructure (e.g. health services, education, culture and leisure, and community and sport) that is present. Subdomains exist for this index where individual support services have their own minimum and maximum. These are displayed with each title of Table 3. (Appendices document, Section 4: Table A6.3)

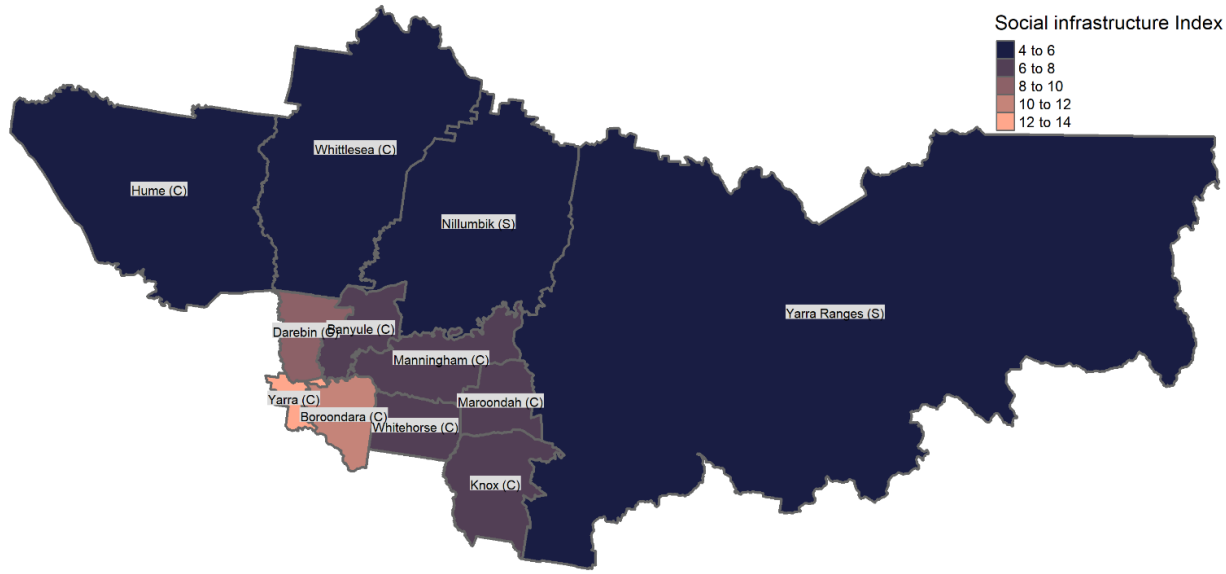
NEPHU has a lower SII than the metropolitan region (7.1 vs 7.4) (Table 3). NEPHU has lower subdomain indices than wider Victoria in all services.

From this, the LGA with the highest SII in the NEPHU catchment area is Yarra (12.8) followed by Boroondara (10.2), while Nillumbik (4.1) and Yarra Ranges (4.2) have the lowest (Table 3).

The LGA with the highest subdomain index for health services, education, culture and leisure, and community and sport in the NEPHU catchment area is the Yarra LGA (Table 3). The LGA with the lowest subdomain index for health services, education, and community and sport in the NEPHU catchment area is the Yarra Ranges LGA (Table 3).

Finally, the LGA with the lowest subdomain index for health services and culture and leisure in the NEPHU catchment area is the Nillumbik LGA (Table 3).

Figure 8. Social infrastructure index by LGAs in NEPHU catchment.



Source: Australian Urban Observatory.
Note: Blue LGAs represent a lower SII and pink LGAs represent a higher SII.

Table 3: Combined social infrastructure index and individual social infrastructure indices by LGAs in NEPHU and in metropolitan Victoria LGAs

LGA	Social Infrastructure Index (min=0, max=16)	Health Services (min=0, max=6)	Education (min=0, max=4)	Culture and Leisure (min=0, max=3)	Community and Sport (min=0, max=3)
Banyule (C)	7.7	2.6	2.7	1.3	1.2
Boroondara (C)	10.2	3.7	3.2	1.9	1.3
Darebin (C)	8.9	3.1	2.8	1.7	1.3
Hume (C)	5.2	1.6	2.3	0.3	1.0
Knox (C)	6.3	1.7	2.5	1.1	1.0
Manningham (C)	6.4	1.9	2.5	1.1	0.9
Maroondah (C)	6.7	1.8	2.5	1.3	1.0
Nillumbik (S)	4.1	1.1	2.0	0.2	0.7
Whitehorse (C)	7.8	2.6	2.9	1.2	1.1
Whittlesea (C)	5.3	1.7	2.4	0.4	0.8
Yarra (C)	12.8	4.5	3.6	2.6	2.1
Yarra Ranges (S)	4.2	1.1	1.8	0.6	0.7
NEPHU	**7.1**	**2.3**	**2.6**	**1.1**	**1.1**
31 Metropolitan LGAs	7.4	2.4	2.6	1.2	1.1

Source: Australian Urban Observatory.

4.3.2 Walkability index

The walkability index is a measure of three factors: street connectivity (paths to get to destination), dwelling density (population densities in a neighbourhood) and the index of access to services of daily living (services people can walk to). The walkability index is a standardised score, therefore a walkability index of 0 is the average walkability of the LGAs studied.

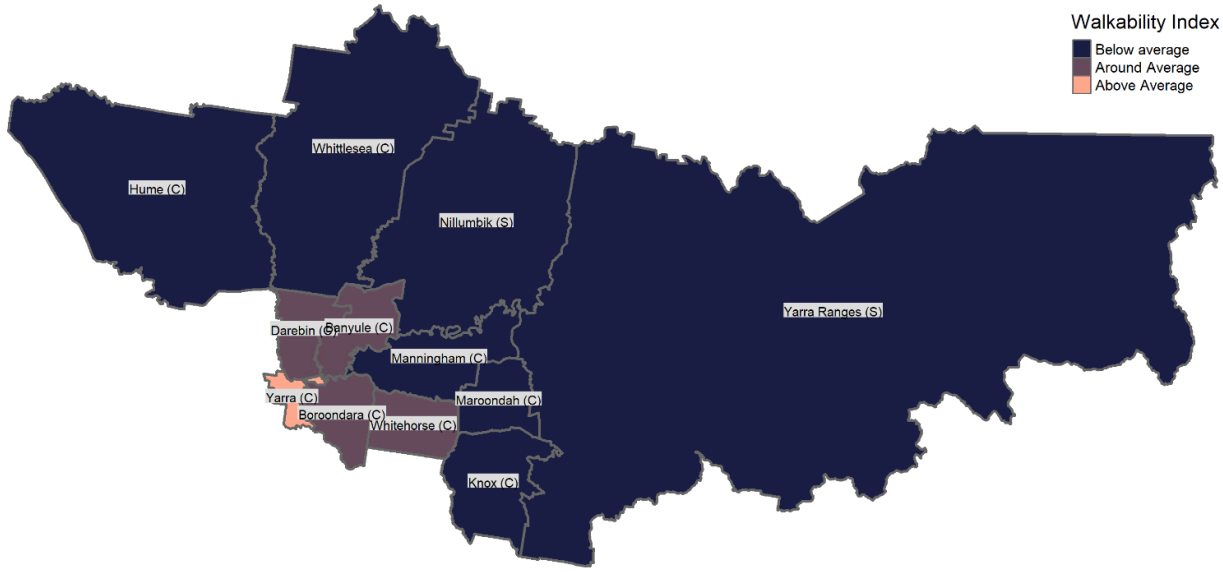
In Table 4, NEPHU has a lower walkability index compared to the metropolitan region (0.4 vs 1.0). The LGAs with a much lower walkability index than the NEPHU average include Nillumbik (-2.4) and the Yarra Ranges (-2.1) (Table 4).

The LGAs with a higher walkability index than the metropolitan region include Boroondara, Darebin and Yarra (Table 4). NEPHU LGAs have the same percentage of dwellings with access to public transport within 400m as the metropolitan LGAs (Table 4).

However, NEPHU has a higher percentage of dwellings with access to public open space within 400m compared to metropolitan LGAs (Table 4), with all LGAs having a greater percentage than the metropolitan average (Appendices document, Section 3: A5)

The NEPHU LGAs have less access to off-license alcohol stores with a greater distance and a smaller number of stores compared to metropolitan LGAs (Table A9). However, the Yarra LGA has a significantly higher number of off-license alcohol stores (16 stores) and the lowest walking distance (248.8m) to a store compared to other NEPHU LGAs (Table A9). The most common number of off-license alcohol stores in the NEPHU LGAs is 1 store (Table A9).

Figure 9. Walkability index by LGAs in NEPHU catchment.



Source: Australian Urban Observatory.

Note: blue LGAs have a below average walkability index and pink LGAs have an above average walkability index.

Table 4: Combined walkability index and individual walkability measures by LGAs in NEPHU and in metropolitan Victoria LGAs

LGA	Walkability Index	% of dwellings within 400m of public transport	% of dwellings within 400m of public open space
Banyule (C)	0.2	58.2%	85.8%
Boroondara (C)	1.7	69.9%	79.1%
Darebin (C)	2.8	82.2%	83.2%
Hume (C)	-0.8	40.6%	88.7%
Knox (C)	-0.6	37.8%	76.4%
Manningham (C)	-0.4	64.3%	82.0%
Maroondah (C)	-0.8	50.3%	78.8%
Nillumbik (S)	-2.4	27.3%	82.3%
Whitehorse (C)	0.8	68.9%	80.5%
Whittlesea (C)	-0.8	32.4%	89.6%
Yarra (C)	7.7	85.5%	93.1%
Yarra Ranges (S)	-2.1	16.0%	59.8%
NEPHU	**0.4**	**52.8%**	**81.6%**
31 Metropolitan LGAs	1.0	53.8%	34.3%

Source: Australian Urban Observatory.

4.3.3 Housing stress

NEPHU has a lower percentage of low-income housing stress compared to wider Victoria (34.1% vs 37.1%) (Table 5). Low-income housing stress is defined as lower income households (lowest 40% of income) that spend more than 30% of gross household income on housing costs.

The highest level of low-income housing stress in the NEPHU catchment is in the Yarra LGA (44.3%) and Hume LGA (44.2%) (Figure 10).

The lowest level of low-income housing stress in the NEPHU catchment is in the Nillumbik LGA (24.8%).

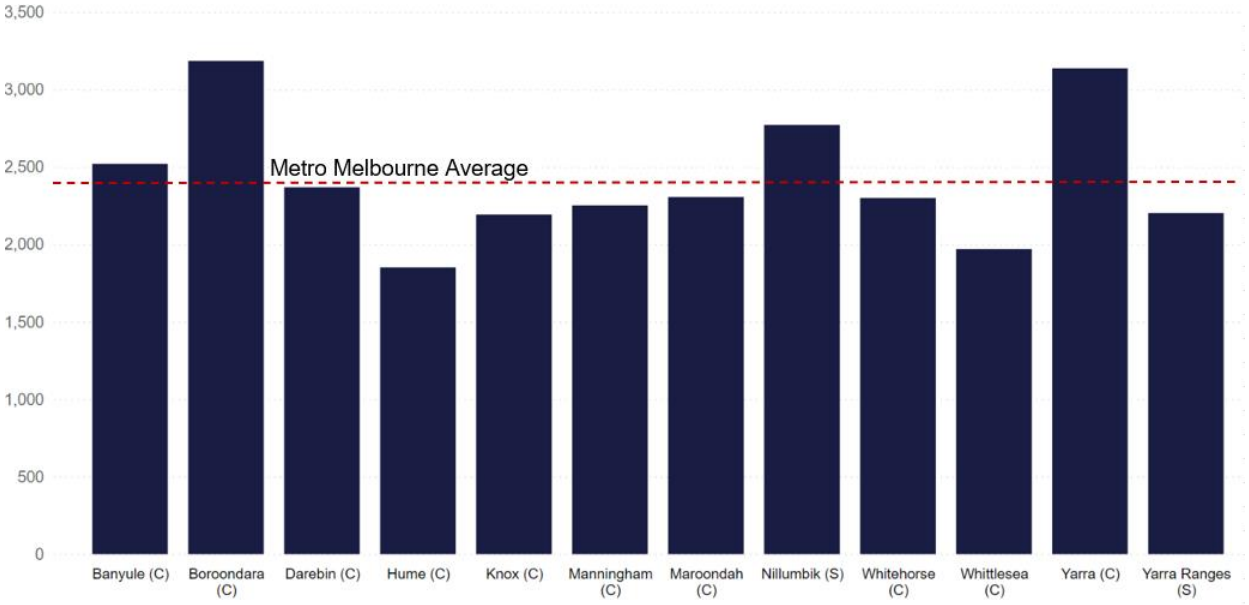
Table 5: Combined Low-income housing stress by LGAs in NEPHU and in metropolitan Victoria LGAs

Regions	Low Income Housing Stress
Banyule (C)	29.4%
Boroondara (C)	36.7%
Darebin (C)	36.2%
Hume (C)	44.2%
Knox (C)	30.5%
Manningham (C)	26.7%
Maroondah (C)	33.1%
Nillumbik (S)	24.8%
Whitehorse (C)	34.1%
Whittlesea (C)	40.3%
Yarra (C)	44.3%
Yarra Ranges (S)	28.4%
NEPHU	**34.1%**
31 Metropolitan LGAs	37.1%

Source: Australian Urban Observatory.

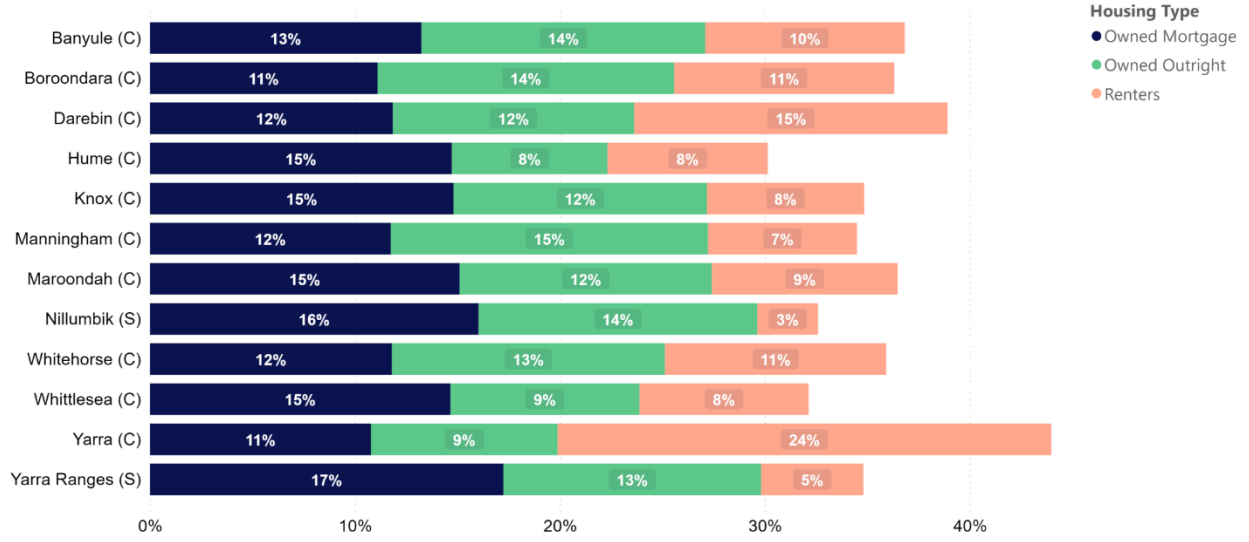
The median weekly family income in the Yarra ($3,138) LGA is $1,286 greater than that in Hume ($1,852) (Figure 10) (Appendices document, Section 4: Table A6.1). As demonstrated in Figure 11, there is a higher level of renters in the LGAs of Yarra and Darebin (Appendices document, Section 4: Table A6.2).

Figure 10. Median total family income ($/weekly) by LGAs in NEPHU catchment.



Source: Australian Bureau of Statistics

Figure 11. Housing by tenure type by LGAs in the NEPHU catchment



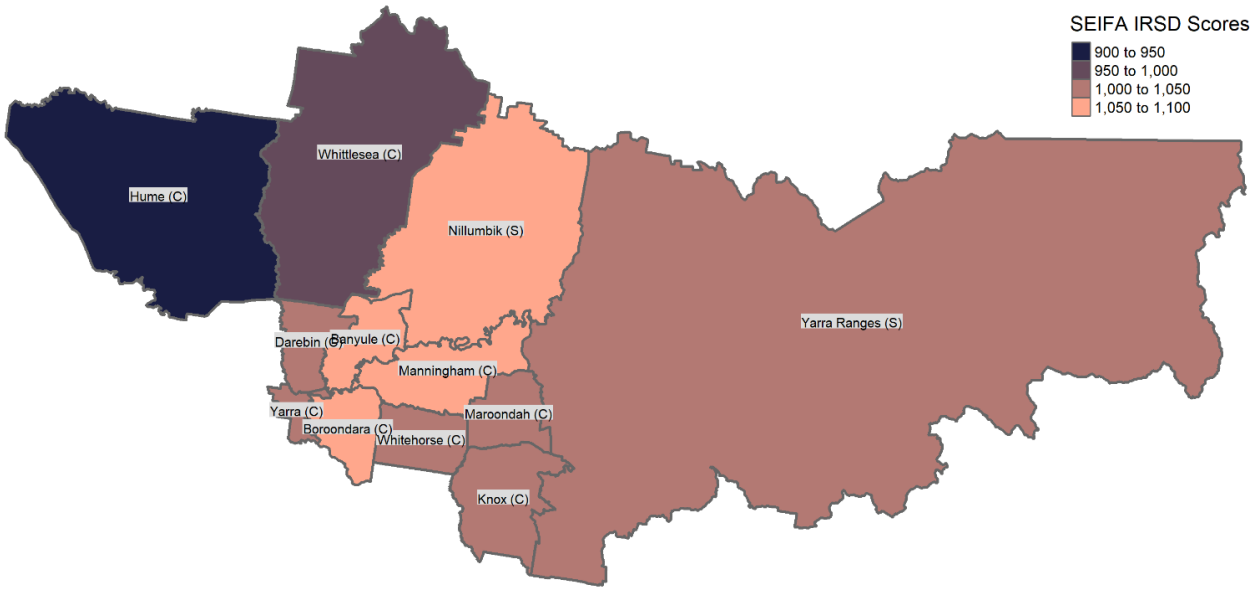
Source: Australian Bureau of Statistics

Note: Percentages do not add to 100% due to not stated/incomplete responses.

4.3.4 Socioeconomic factors

The Index of Relative Socio-economic Disadvantage (IRSD) is a measure of social and economic conditions within an area, specifically measuring relative disadvantage. For example, a low IRSD indicates relatively higher disadvantage socioeconomically. The Hume (947), Whittlesea (991), and Darebin (1004) LGAs have the lowest IRSD scores in the NEPHU catchment, while Nillumbik (1099) and Boroondara (1097) have the highest (Appendices document, Section 4: Table A6.3).

Figure 12. SEIFA Index of Relative Socio-economic Disadvantage (IRSD) Score by LGA in NEPHU Catchment.



Source: Australian Bureau of Statistics
Note: Dark blue areas represent areas with low IRSD scores while pink areas reflect areas with high IRSD scores.

4.4 OUR HEALTH

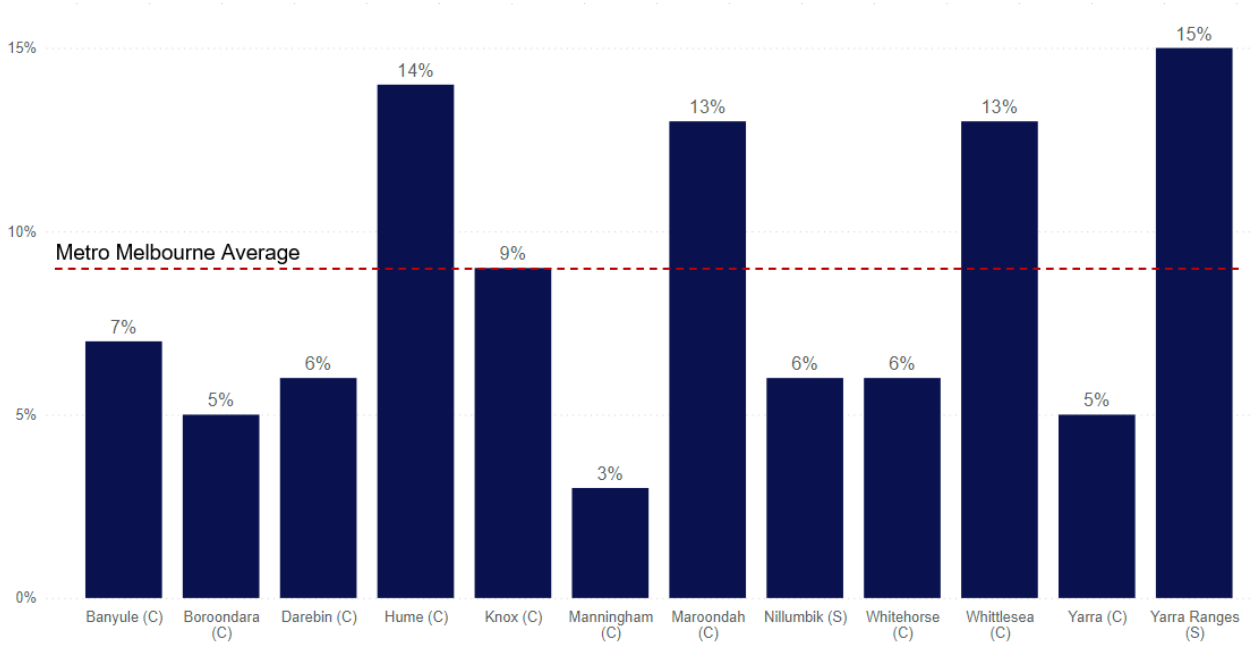
4.4.1 Healthy behaviours

Healthy eating

According to data from the Victorian population health survey, NEPHU has a slightly lower reported proportion of the population who reported daily sugar sweetened soft drink consumption compared to wider Victoria (9% vs 10%) (Appendices document, Section 4: A7).

Despite this, four LGAs in the NEPHU catchment had higher reported soft drink consumption compared to the state average: the Yarra Ranges (15%), Hume (14%), Maroondah (13%) and Whittlesea (13%) LGAs (Figure 13). The LGA with the lowest reported proportion of daily consumption of sugar sweetened soft drinks is Manningham (3%) (Figure 13).

Figure 13. Consumption of sugar sweetened soft drinks by LGA

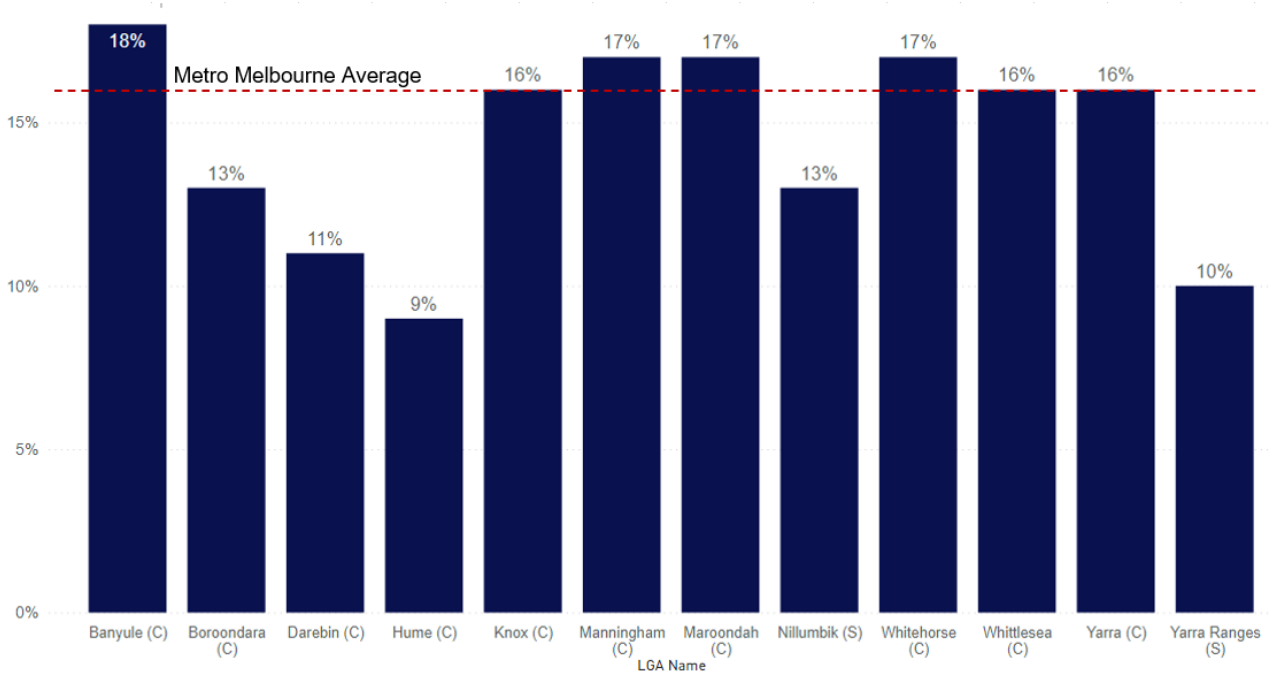


Source: Victorian Population Health Survey 2017.

According to the survey, overall, the NEPHU catchment reported a slightly higher proportion of take-away food consumption greater than one time per week compared to wider Victoria (16% vs 15%) (Table A13).

The Banyule (18%) LGA has the highest proportion of take-away food consumption in the NEPHU catchment while the lowest proportion is the Hume LGA (9%) (Figure 14). This Hume LGA finding is a much lower proportion compared to the state average and other NEPHU LGAs.

Figure 14. Consumption of take-away food > 1 day/week by LGA

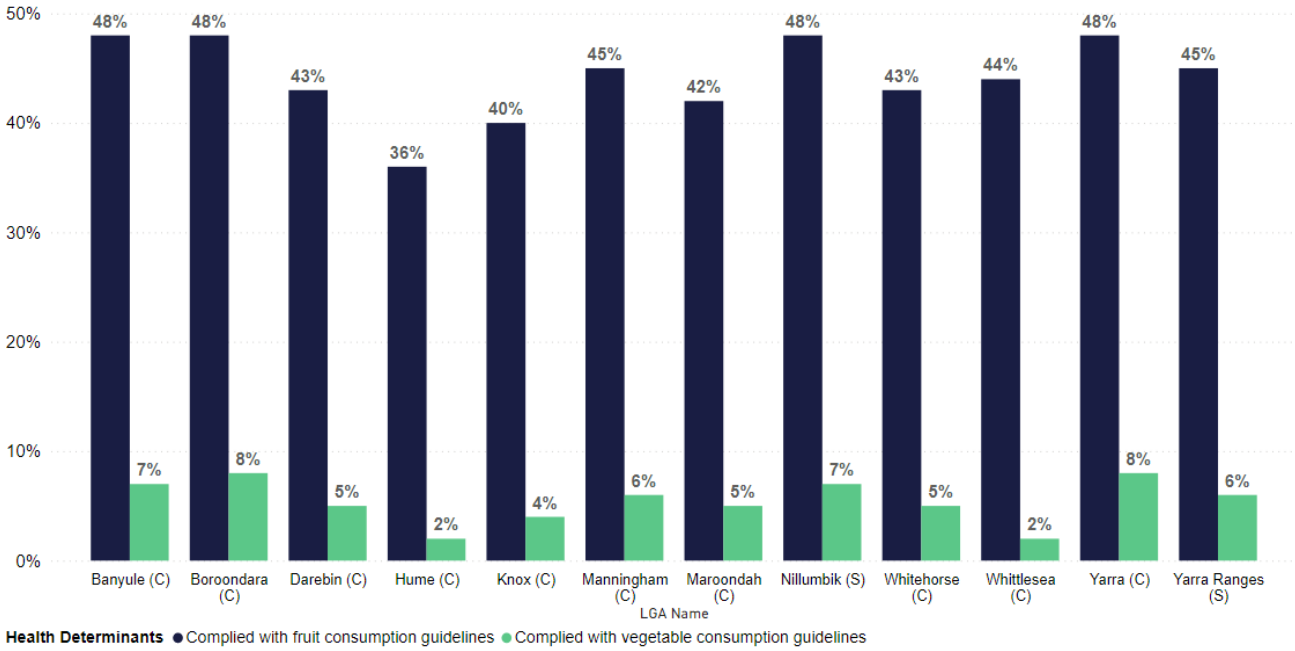


Source: Victorian Population Health Survey 2017.

Across the NEPHU population there is low reported compliance with recommended fruit and vegetable guidelines. Fruit and vegetable guidelines recommend at least 2 pieces of fruit and 5 pieces of vegetable a day.

Compliance with fruit consumption guidelines ranged from 36% in Hume to 48% in Banyule, Boroondara, Nillumbik and Yarra. Compliance with vegetable guidelines was especially low, 2% in Hume and Whittlesea to 8% in Boroondara and Yarra.

Figure 15. Compliance with fruit and vegetable guidelines by LGA



Source: Victorian Population Health Survey 2017.

Active living

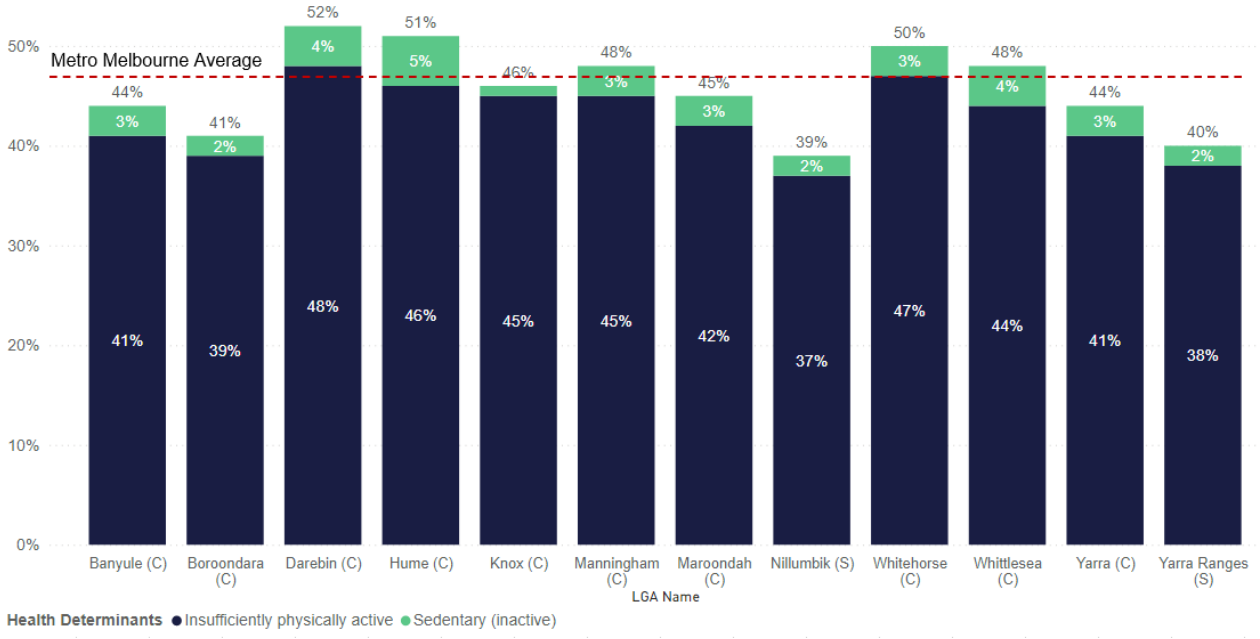
Over 44% of the NEPHU population are insufficiently physically active. Insufficient physical activity is reported as not completing 150 minutes of moderate to vigorous activity (where time spent on vigorous activity is multiplied by two) across five or more days a week.

The highest proportion of insufficiently physically active people of the NEPHU LGAs are Darebin (48%) and Whitehorse (47%) (Figure 16). The lowest proportions are in the Nillumbik (37%) and Yarra Ranges (38%) LGAs (Figure 16).

According to self-reported active lifestyles by participants in the survey, NEPHU has the same proportion of people who are sedentary as metropolitan Victoria (3%). Living a sedentary lifestyle involves sitting or lying down for extended periods of time, leading to poorer health outcomes.

The highest proportion of sedentary people of the NEPHU LGAs is in the Hume (5%) LGA and the lowest proportion of sedentary people is in Knox (1%) (Figure 16) (Appendices document, Section 4: A8).

Figure 16. Proportion of insufficiently physical active and sedentary population by LGA



Source: Victorian Population Health Survey 2017.

4.4.2 Lifestyle factors

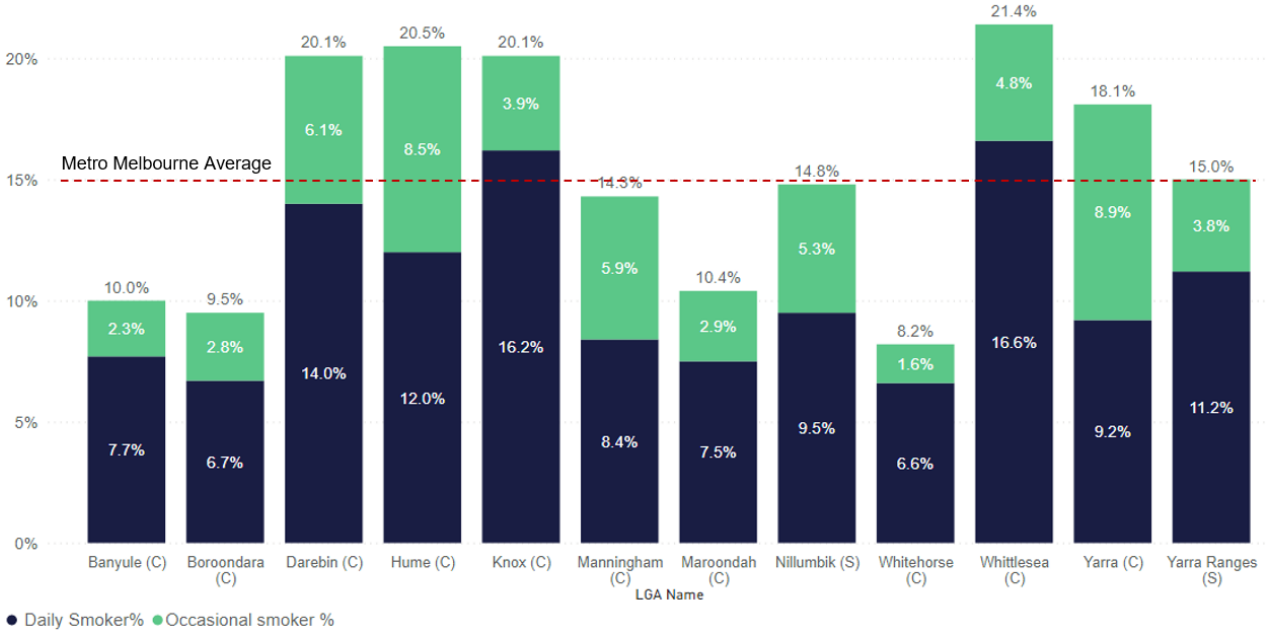
Tobacco-related Harm

From the results of the VPHS, NEPHU's daily current smoker proportion is lower but consistent with metro Melbourne (10% vs 11%) (Appendices document, Section 4: A9).

The highest proportion of current daily smokers in NEPHU are in the Knox (16.2%) and Whittlesea (16.6%) LGAs and the lowest proportion are present in the Boroondara (6.7%) and Whitehorse (1.6%) LGAs (Figure 17).

Conversely, the highest proportion of current occasional smokers in NEPHU are in the Yarra (8.9%) and Hume (8.5%) LGAs with the lowest proportion are in the Banyule (2.3%) and Whitehorse (1.6%) LGAs (Figure 17).

Figure 17. Proportion of daily and occasional smokers by LGA



Source: Victorian Population Health Survey 2020.

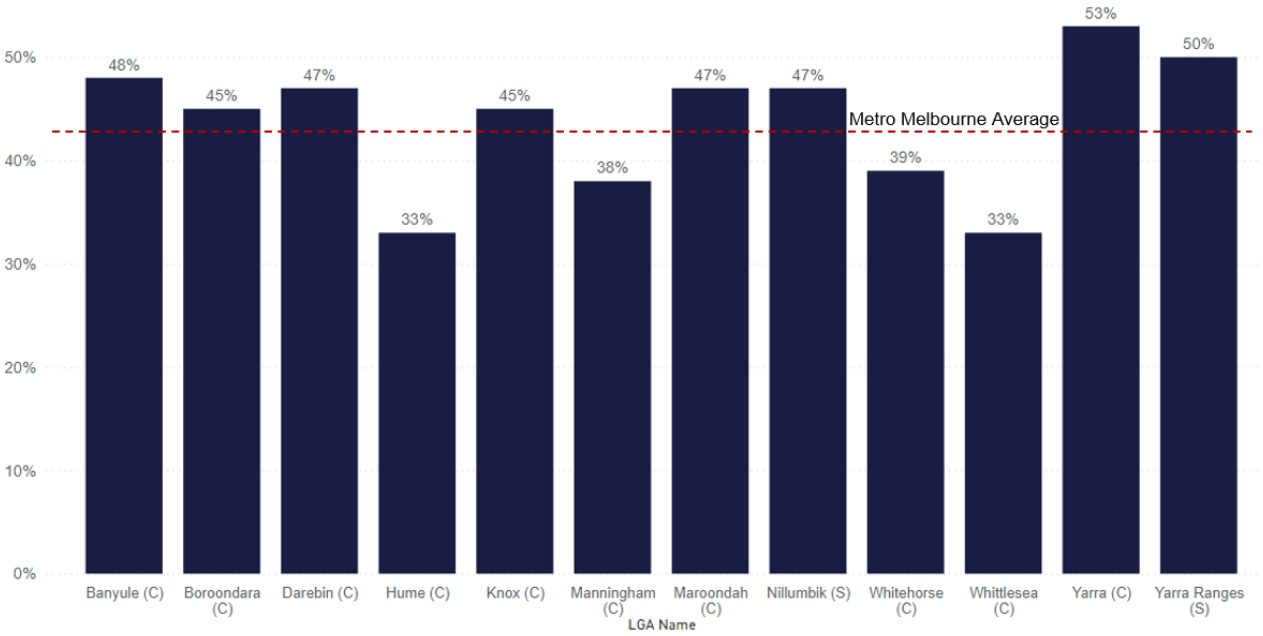
Harmful alcohol use

NEPHU has a similar proportion of an increased lifetime risk of alcohol-related harm than wider metropolitan Melbourne (61% vs 60%) as shown in Figure 19 (Appendices document, Section 4: A10).

The highest proportion of an increased lifetime risk of alcohol-related harm in NEPHU are in the Nillumbik and Yarra LGAs (70%), whereas the lowest proportion are in the Whittlesea (48%) and Hume (51%) LGAs (Figure 19).

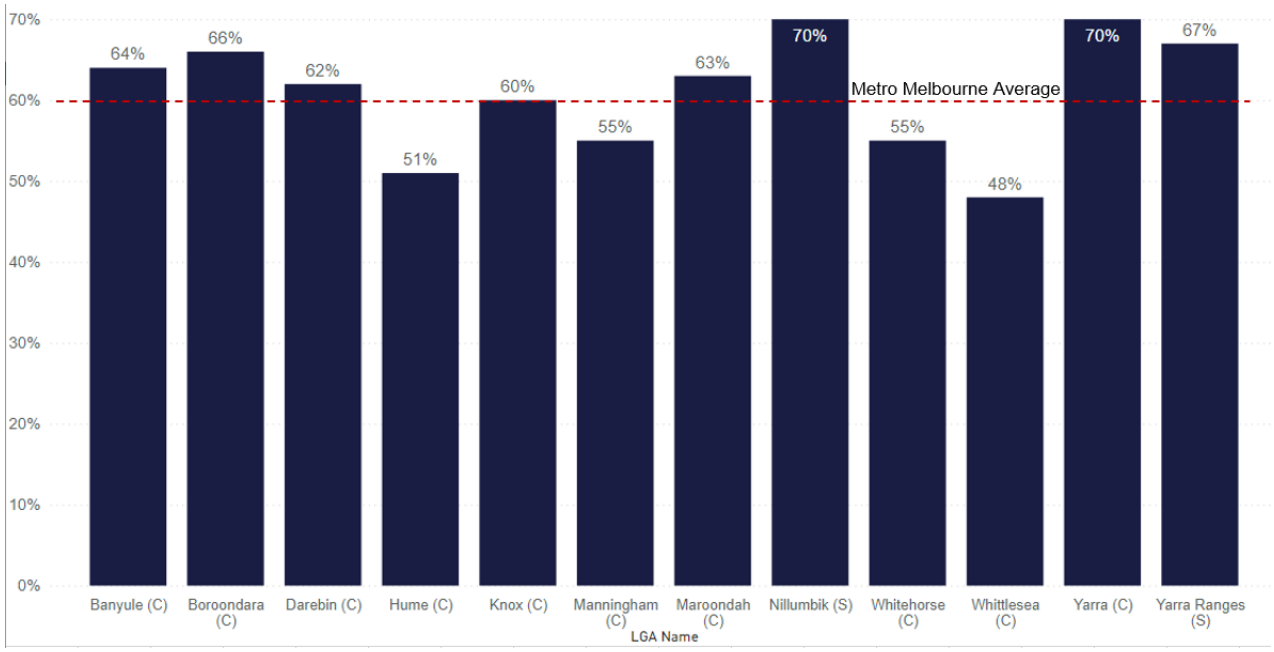
However, Figure 18 demonstrates that the highest proportion of an increased risk of injury from a single occasion of drinking either yearly, monthly or weekly in NEPHU are in the Yarra (53%) and Yarra Ranges (50%) LGAs with the lowest proportion being in the Hume and Whittlesea LGAs (33%).

Figure 18. Proportion of increased risk of injury from a single occasion of drinking either yearly, monthly or weekly by LGA



Source: Victorian Population Health Survey 2017.

Figure 19. Proportion of increased lifetime risk of alcohol-related harm by LGA



Source: Victorian Population Health Survey 2017.

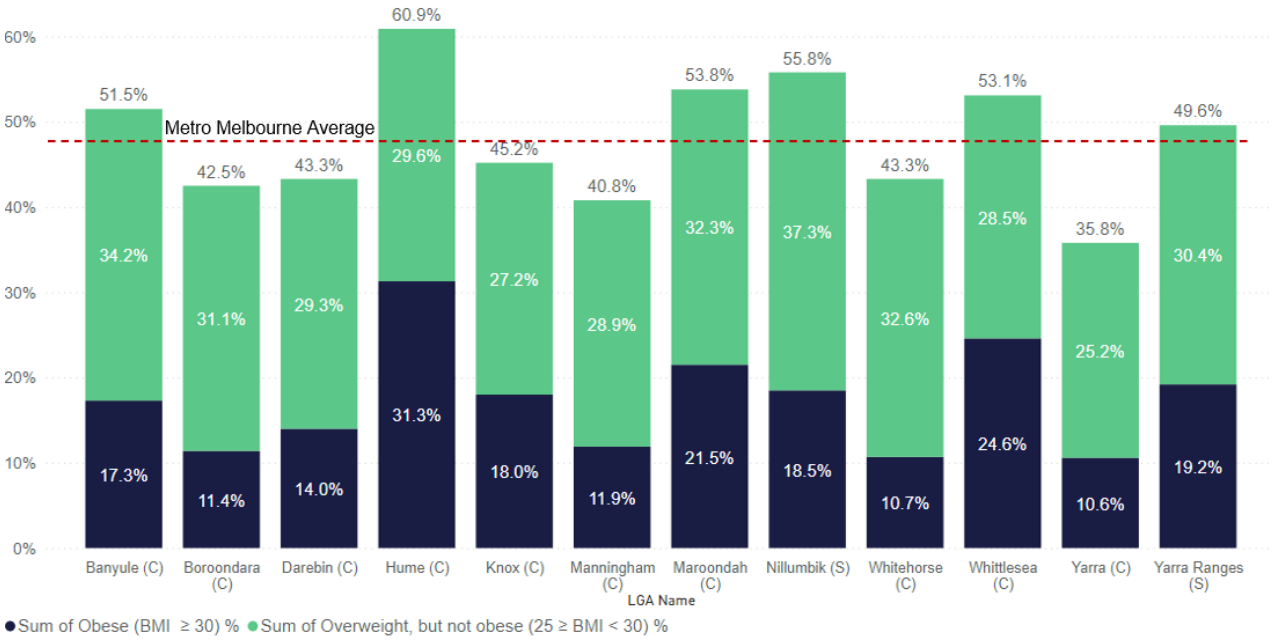
4.5 Non-communicable diseases

Chronic disease

NEPHU has a lower proportion of people who are overweight and obese than Metro Melbourne according to BMI, based on self-reported data (Figure 20). From this, the highest proportion of people who are overweight and obese in NEPHU are in the, Hume (60.9%), Nillumbik (55.8%), Maroondah (53.8%) and Whittlesea (53.1%) LGAs respectively (Appendices document, Section 4: Tables A11.1 and A11.2).

It should be noted that data for overweight and obesity based on self-reported data are likely to be underestimates of true prevalence; recent estimates from the Australian Institute of Health and Welfare suggest that nationally the proportion of people who are overweight or obese is closer to 67%.

Figure 20. Proportion of people who are obese or overweight by LGA

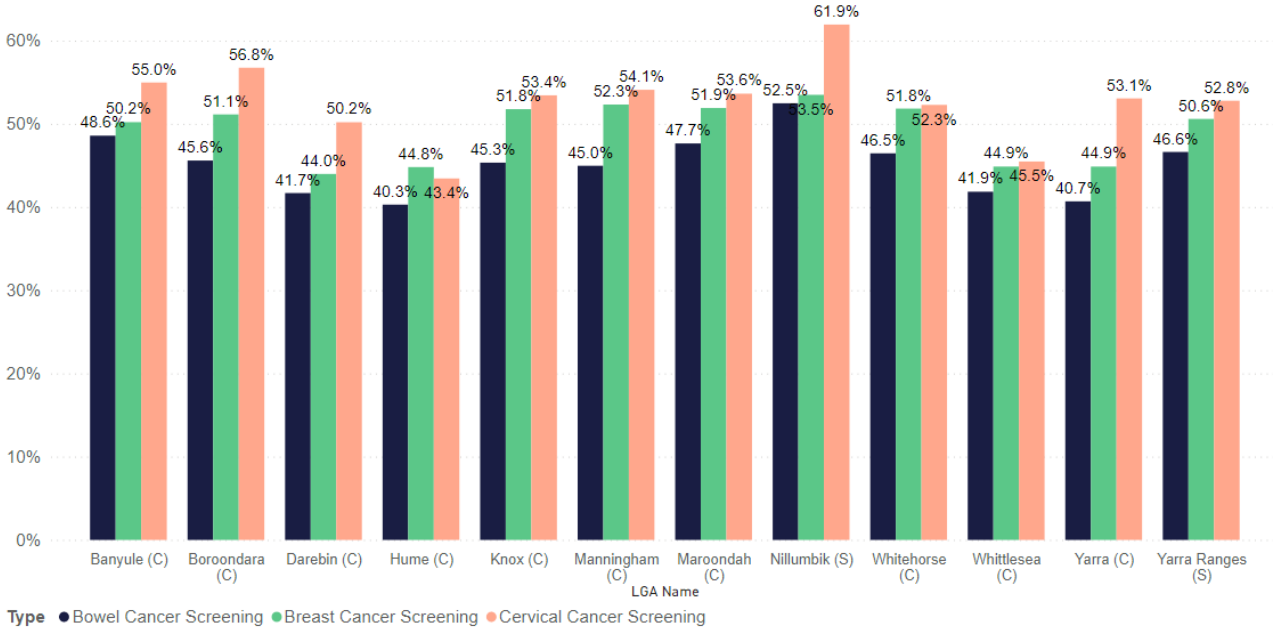


Source: Victorian Population Health Survey 2020.

NEPHU has similar proportions of those who participate in bowel and cervical cancer screenings as wider Victoria, with a slightly higher participation proportion in breast cancer screenings (Appendices document, Section 4: Tables A11.3 and A11.4).

The highest proportion of bowel, breast and cervical cancer screenings in NEPHU is in the Nillumbik LGA (52.5%, 53.5% and 61.9% respectively) (Figure 21). The lowest proportion of bowel and cervical cancer screenings in NEPHU is in the Hume LGA (40.3% and 43.4% respectively) and, for breast cancer screenings, it is the lowest in the Darebin LGA (44.0%) (Figure 21).

Figure 21. Proportion of screening participation (bowel, breast, cervical cancer) by LGA



Source: Australian Bureau of Statistics.

Long-term health conditions

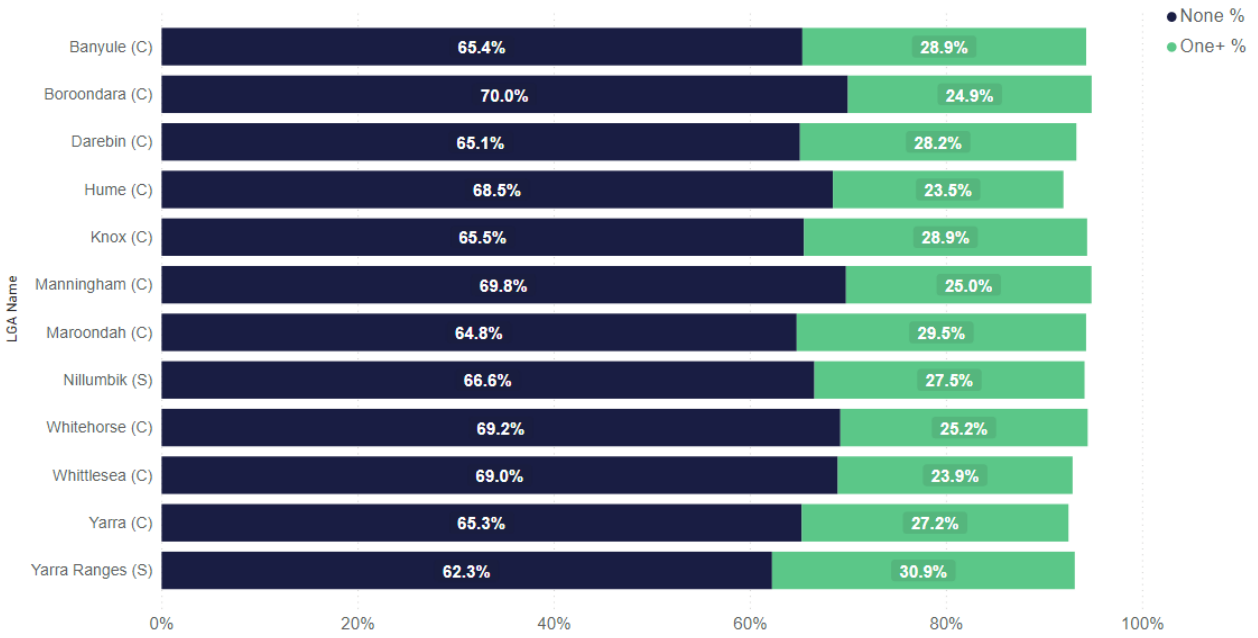
According to the survey, NEPHU has a lower proportion of long-term health conditions compared to wider Victoria (Appendices document, Section 4: A12).

The largest proportion of people with no long-term health conditions in NEPHU is in the Boroondara LGA (70.0%) and the lowest proportion is in the Yarra Ranges LGA (62.3%) (Figure 22). Further from this, the largest proportion of one or more health conditions in the NEPHU region is in the Yarra Ranges LGA (30.9%) and the lowest proportion is in the Hume LGA (23.5%) (Figure 22).

In the NEPHU catchment, females have a higher proportion of mental health conditions, asthma, arthritis, cancer, lung conditions and dementia compared to males (Figure 23). Males have a higher proportion of diabetes, heart disease, stroke and kidney disease compared to females in the NEPHU catchment (Figure 23).

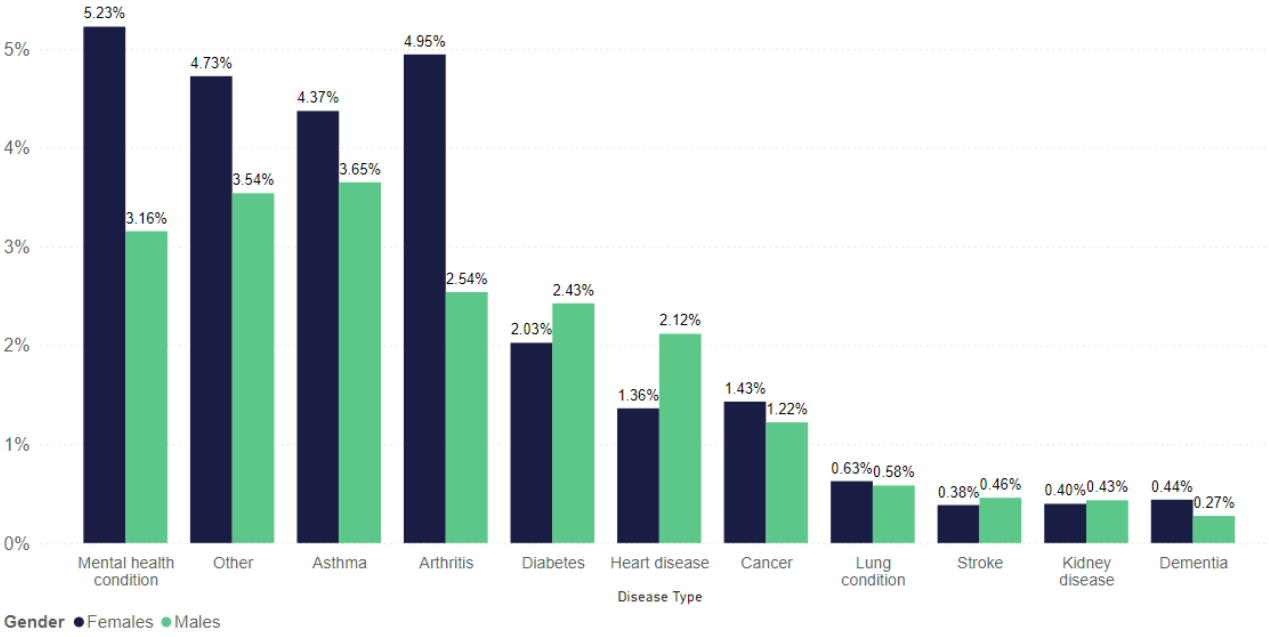
According to the 2021 census, the most commonly reported health conditions in the NEPHU population are Arthritis (7.49%), Mental Health (8.4%), Asthma (8.02%), Diabetes (4.45%) and heart disease (3.48%) (Table 6). This is consistent with Victorian averages.

Figure 22. Proportion of long-term health conditions by LGA



Source: Australian Bureau of Statistics.

Figure 23. Type of long-term health condition by sex



Source: Australian Bureau of Statistics.

As highlighted in Table 6, there is significant variation in the distribution of long-term health outcomes across LGAs and likely a reflection of the age profile of the LGAs.

LGAs such as Hume and Whittlesea, which have a high proportion of their population under 40, had higher than the NEPHU average reported health conditions such as Diabetes and Kidney Disease. While LGAs with a higher proportion of their population over 40, such as Yarra Ranges and Manningham, had higher proportion of the population reporting long term health conditions such as Arthritis, Cancer, Dementia, Heart Disease.

The LGAs of Yarra and Darebin had the highest reported rates of Mental Health.

Table 6: Reported Long-term health conditions (%) by LGAs in the NEPHU

LGA	Arthritis (%)	Mental health (%)	Other (%)	Ashtma (%)	Diabetes (%)	Heart Disease (%)	Cancer (%)	Lung condition (%)	Stroke (%)	Kidney (%)	Dementia (%)
Banyule (C)	8.73%	9.22%	9.01%	8.41%	4.23%	3.92%	3.14%	1.44%	0.96%	0.93%	0.90%
Boroondara (C)	6.62%	7.08%	7.85%	7.39%	3.04%	3.53%	3.07%	0.92%	0.73%	0.70%	0.92%
Darebin (C)	7.24%	11.04%	8.67%	8.49%	4.26%	3.14%	2.33%	1.16%	0.83%	0.81%	0.78%
Hume (C)	6.61%	6.95%	7.65%	7.53%	5.45%	3.06%	1.85%	1.17%	0.73%	0.90%	0.50%
Knox (C)	8.29%	8.66%	8.75%	8.87%	5.36%	3.98%	2.93%	1.46%	0.96%	0.86%	0.75%
Manningham (C)	7.90%	5.82%	8.22%	6.20%	4.64%	4.09%	3.18%	1.07%	1.02%	0.90%	1.15%
Maroondah (C)	8.55%	9.78%	9.27%	9.12%	4.38%	3.78%	3.11%	1.51%	0.98%	0.86%	0.78%
Nillumbik (S)	8.12%	8.31%	7.97%	8.30%	3.17%	3.41%	3.11%	1.17%	0.79%	0.78%	0.61%
Whitehorse (C)	7.04%	7.38%	8.36%	7.31%	4.22%	3.63%	2.82%	1.09%	0.85%	0.80%	0.74%
Whittlesea (C)	6.89%	7.28%	7.36%	7.27%	5.33%	3.10%	1.96%	1.03%	0.77%	0.85%	0.54%
Yarra (C)	5.29%	11.86%	8.23%	9.28%	2.64%	2.32%	2.34%	0.82%	0.57%	0.62%	0.49%
Yarra Ranges (S)	9.44%	10.29%	8.87%	9.57%	4.30%	3.95%	3.15%	1.69%	0.95%	0.83%	0.57%
Total	**7.49%**	**8.38%**	**8.27%**	**8.02%**	**4.45%**	**3.48%**	**2.65%**	**1.21%**	**0.84%**	**0.83%**	**0.71%**

Source: Australian Bureau of Statistics.

*NOTE: Red coloured tiles represent LGAs where the reported values are above the NEPHU average. *Cancer – Including remission , Dementia: Including Alzheimer's, Diabetes: Excluding gestational diabetes , Heart disease: Including heart attack or angina , Lung condition: Including chronic obstructive pulmonary disease or emphysema , Mental health condition: Including depression or anxiety*

Mental wellbeing

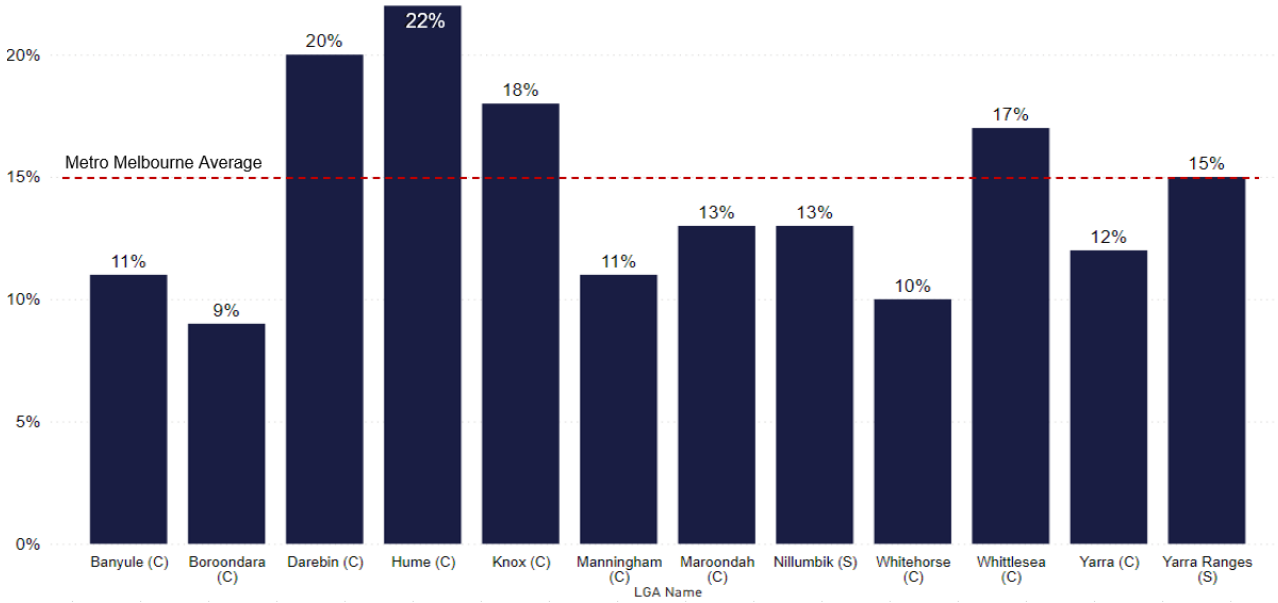
Mental health has been found to be the most common long-term health condition in the NEPHU region as stated in the previous section. However, NEPHU has a slightly lower proportion of high/very high levels of psychological distress compared to wider Victoria (14% vs 15%) (Appendices document, Section 4: Tables A13.1 and A13.2).

The LGAs with the highest proportion of high/very high levels of psychological distress in the NEPHU catchment are Hume (22%) and Darebin (20%), while the lowest proportions are in Boroondara (9%) and Whittlesea (10%) (Figure 24).

The LGAs with the highest proportion of seeking help for a mental health-related problem are the Darebin, Yarra and Yarra Ranges (25%) LGAs and the lowest proportions are in Manningham (11%) and Whitehorse (12%) (Table A27), though these LGAs have a low proportion of high/very high levels of psychological distress (Figure 23).

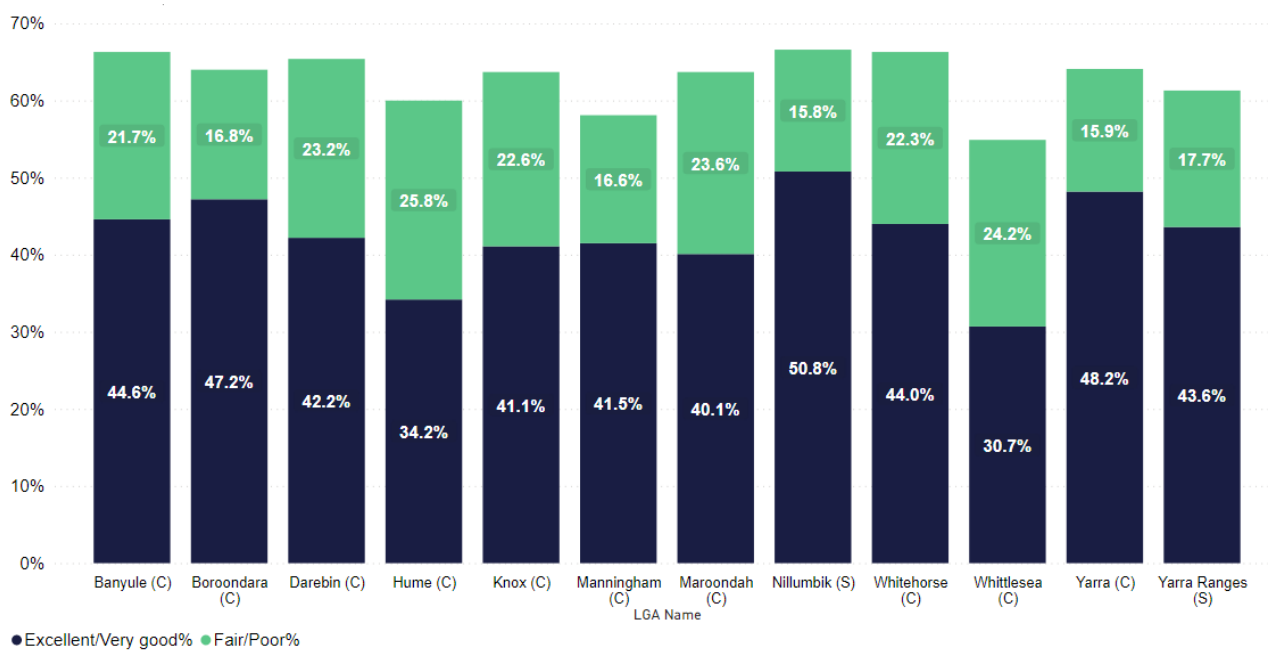
Furthermore, NEPHU has a slightly lower proportion of excellent/very good self-reported health status' than wider Victoria (42.4% vs 43.9%). The LGA with the highest proportion of excellent/very good self-reported health status is Nillumbik (50.8%) and the lowest proportion is Whittlesea (30.7%) (Figure 25). Conversely, the LGA with the highest proportion of fair/poor self-reported health status is Hume (25.8%) while the lowest proportion is Nillumbik (15.8%) (Figure 25) (Appendices document, Section 4: Tables A13.3 and A13.4).

Figure 24. Proportion of high/very high level of psychological distress by LGA



Source: Victorian Population Health Survey.

Figure 25. Proportion of self-reported health status by LGA



Source: Victorian Population Health Survey.

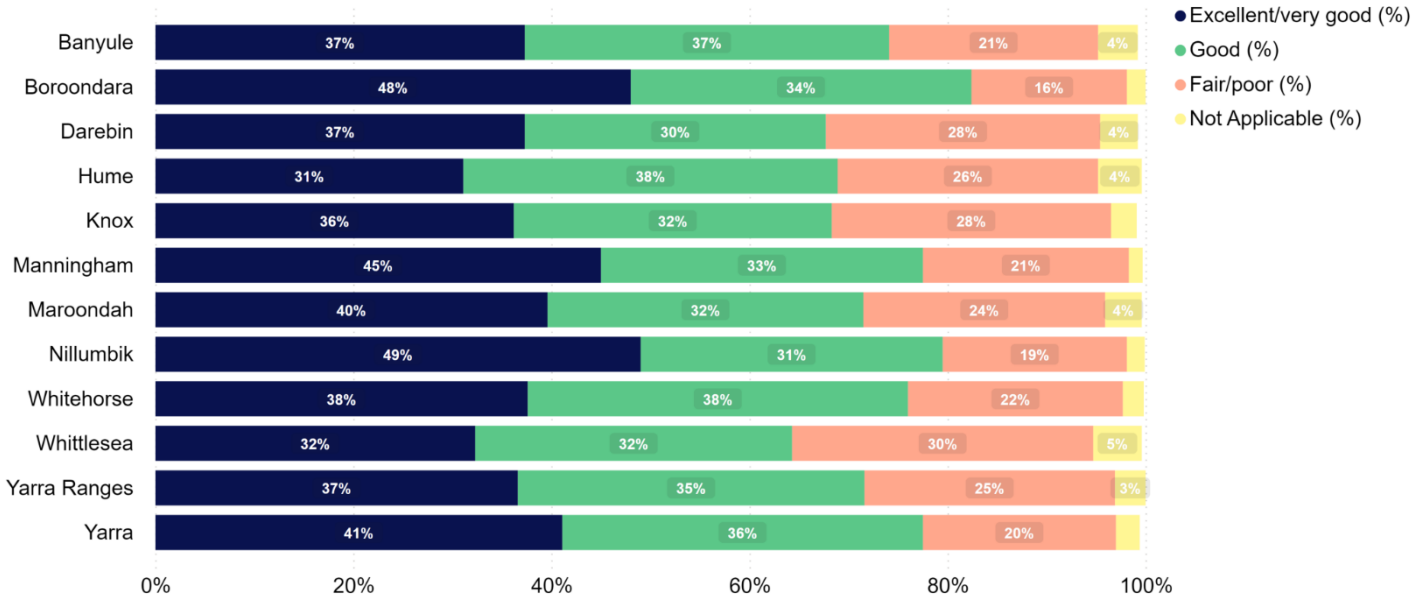
Oral health

NEPHU has a greater proportion of self-reported excellent/very good (38%) and fair/poor (25%) dental status than wider Victoria (37% and 24% respectively) (table A32).

The LGA with the largest proportion of self-reported excellent/very good dental status is Nillumbik (49%) and the lowest proportion is Hume (31%) (Figure 26). However, the LGA with the largest proportion of self-reported fair/poor dental status is the Whittlesea (30%) LGA and the lowest proportion is Boroondara (16%) (Figure 27).

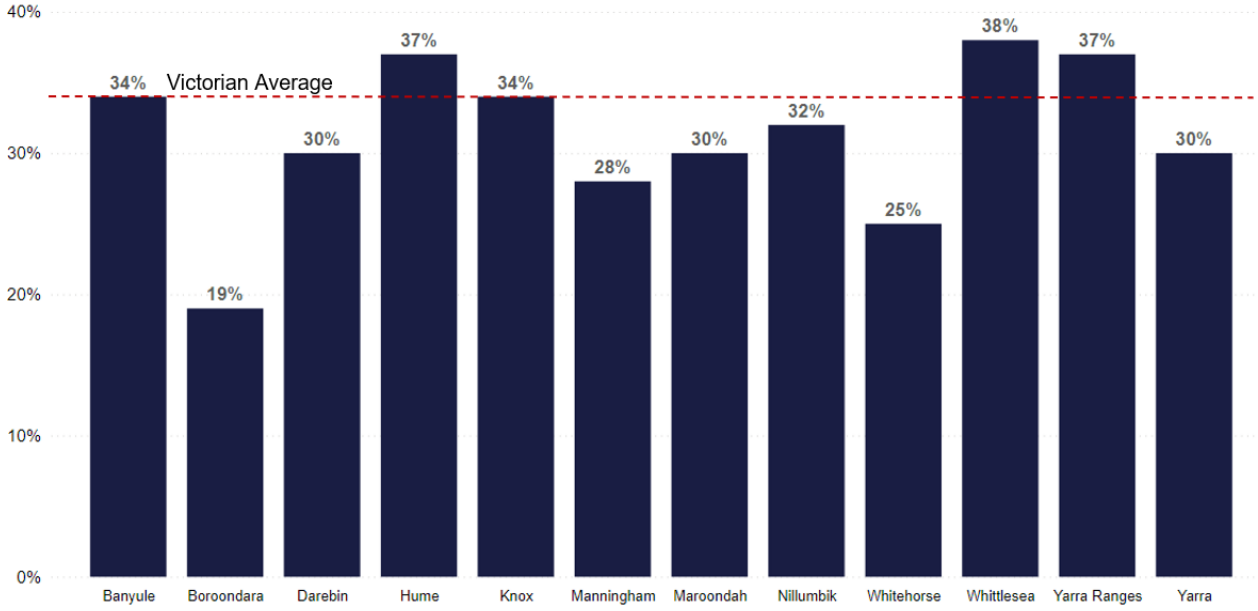
The Whittlesea LGA also has the largest proportion (38%) of avoiding/delaying visits to dental professionals due to cost and the lowest proportion is found in Boroondara (19%) (Figure 28) (Appendices document, Section 4: A14).

Figure 26. Proportion of excellent/very good self-reported dental health status by LGA



Source: Victorian Population Health Survey 2017.

Figure 27. Delayed visits to a dental professional due to cost by LGA



Source: Victorian Population Health Survey 2017.

4.6 Communicable diseases

Immunisation

According to the Australian government department of health, childhood immunisation coverage rates for 5-year-olds are targeted to be 95%.

In the NEPHU catchment, only 10 of the 16 ABS statistical area level 3 (SA3) areas were able to meet this 95% target. The areas who were not able to meet this target are Boroondara, Manningham (east and west), Tullamarine (Broadmeadows), Whitehorse – west and Yarra. However, the Tullamarine, Whitehorse – west and Yarra areas has a greater coverage than the Australian rates for 5-year-olds of 94.37%.

Focusing on all age group coverage rates, the highest proportion of fully vaccinated 12-<15-month children in the NEPHU catchment are in the Whitehorse – East and Whitehorse – West LGAs (96.7%), while the lowest proportion is in Tullamarine – Broadmeadows (92.3%) (Figure 28).

The highest proportion of fully vaccinated 24-<27-month children in the NEPHU catchment is in the Darebin - South LGA (95.5%) and the lowest proportion is in Tullamarine – Broadmeadows (90.1%) (Figure 28).

The highest proportion of fully vaccinated 60-<63-month children in the NEPHU catchment is in the Sunbury LGA (96.5%) and the lowest proportion is in the Manningham – West LGA (92.7%) (Figure 28). Manningham (east and west) and Boroondara have the lowest proportions of 5-year-olds vaccinated in the NEPHU region and therefore have not met the Australian government immunisation coverage target of 95% (Appendices document, Section 4: A15).

Figure 28. Proportion of children fully vaccinated by SA3

Source: Australian Immunisation Register, Department of Health

Note: The minimum of the y-axis starts at 90%. Data is reported at SA3 level.

Sexual health

The age standardised rate (ASR) of STIs in the NEPHU community were consistently lower than state ASRs (Appendices document, Section 4: A16).

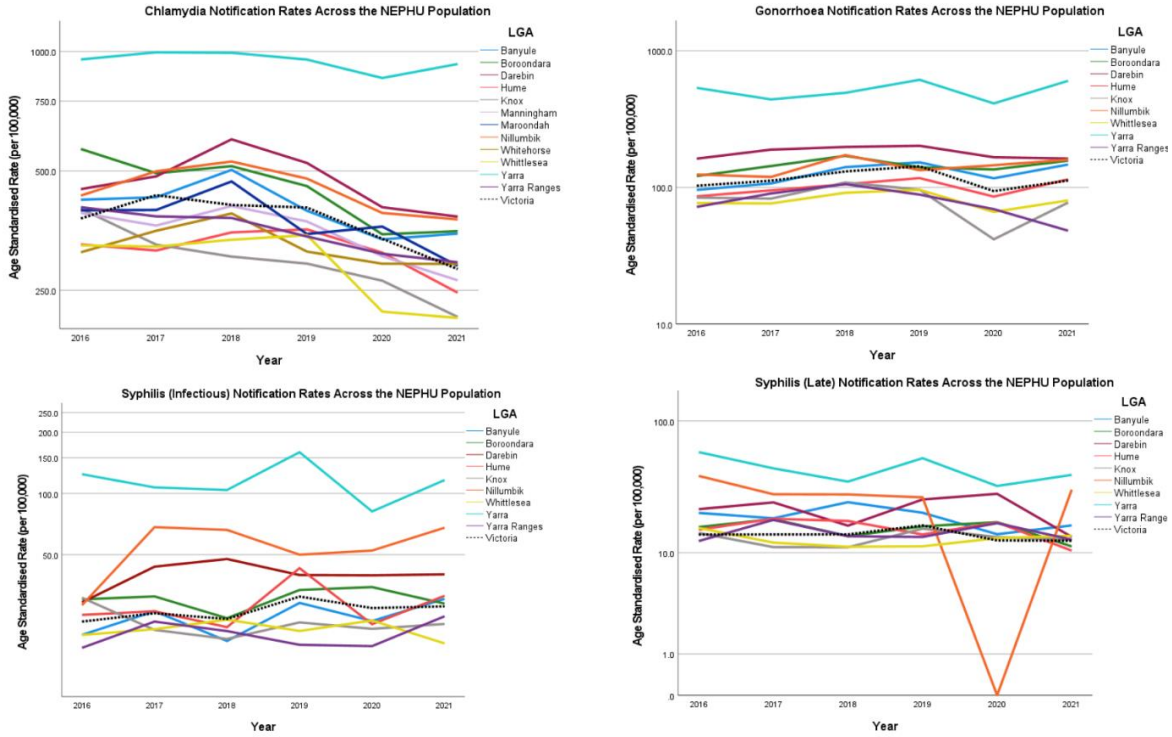
In line with the start of the COVID-19 pandemic, there was a decrease in the incidence and ASR of chlamydia, gonorrhoea and infectious syphilis in 2020. While the ASR of gonorrhoea and infectious syphilis increased again in 2021, the rate of chlamydia has continued to decline across the NEPHU population.

Yarra was found to have the largest burden of all four STIs in the NEPHU community, with the vast majority of cases found in males.

The results demonstrate marked differences of STI burden and demographic factors between the LGAs within the NEPHU community. The difference in STI burden between NEPHU and Victoria may represent either a true deficit in burden or a gap in testing.

The continued down-trending of chlamydia in 2021 in NEPHU LGAs may be as a result of changes to social behaviour during the pandemic or a gap in asymptomatic STI testing. The high burden of STIs in Yarra is likely being influenced by its large young population, community of men who have sex with men (MSM) and availability of specialised sexual health services.

Figure 29: Trends graphs showing comparison between STI rates in respective LGAs.



Source: Victorian Notifiable Disease Surveillance System, Victorian Department of Health
Note: Manningham, Maroondah and Whitehorse have been removed from the gonorrhoea, syphilis (infectious) and syphilis (late) graphs for clarity and readability

4.7 Injuries

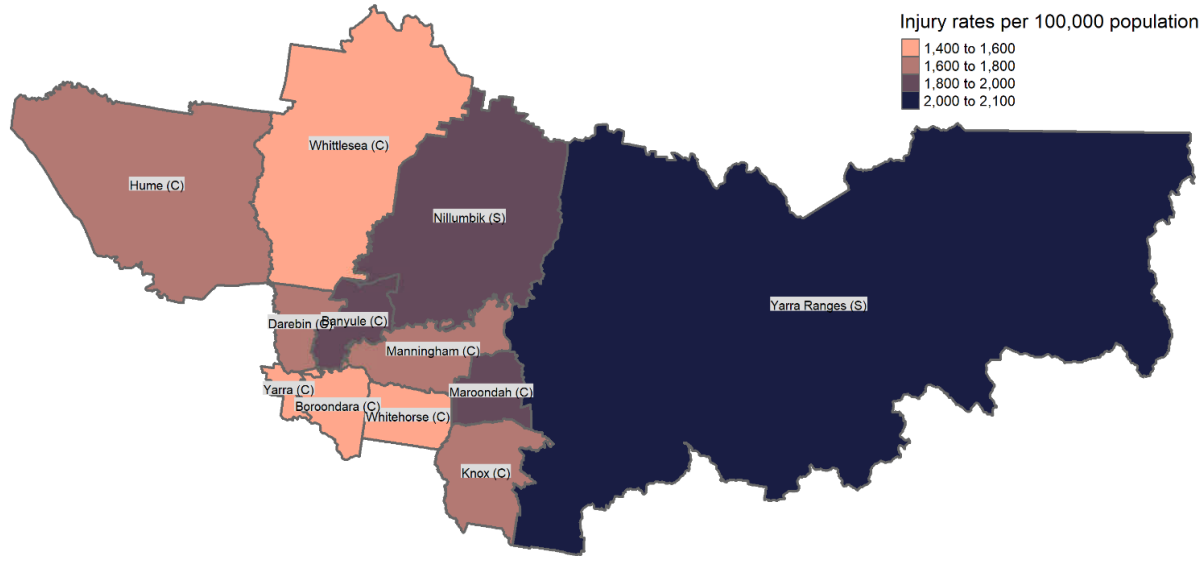
Unintentional injuries

Unintentional injury is harm to the physical body that can be caused by falls, cutting/piercing, transport, overexertion, burns, environmental/animals, machinery and other unintentional causes. These factors are integrated into Figure 30, derived from the Victoria Injury Atlas.

Injury rates in the NEPHU LGAs are shown in Figure 30. From this, it is demonstrated that the Yarra Ranges LGA has the highest rate of injury in the NEPHU region (2,000 to 2,100 per 100,000 population).

The Yarra Ranges LGA is the only LGA in the NEPHU region with this high rate, with Nillumbik, Banyule and Maroondah LGAs (1,800 to 2,000 per 100,000 population) having the next highest injury rate. Whereas the lowest rate of injury was found in the Whittlesea, Yarra, Boroondara and Whitehorse LGAs (1,400 to 1,600 per 100,000 population) (Appendices document, Section 4: A17).

Figure 30: Injury rates (per 100,000 population) by LGA



Source: Victoria Injury Atlas.

5. GAP ANALYSIS

This section relates to findings of Stage 1, Phase 3: Gap Analysis.

5.1. ABOUT THE GAP ANALYSIS

5.1.1. Purpose

The purpose of Phase 3, following generation of the Population Health profile, is to collate commentary on gaps identified through this work including elements where further understanding would be beneficial. This will help inform the selection of NEPHU's health promotion and prevention priorities for 2022 – 2023 and future work.

5.2. OBJECTIVES

Undertake a comparative assessment of the NEPHU Population Health Profile against the key thematic findings of the Review of the Current Health Promotion and Prevention Landscape (Phase 1) and the Listening Lab Program (Phase 2), which will identify any differences or inconsistencies between these, constituting a Gap Analysis.

5.3. METHOD

The data and findings across the three phases have been compared and analysis conducted to draw out and describe gaps identified.

This Gap Analysis provides a brief commentary on gaps emerging between and across Phases 1, 2 and 3. It also provides additional commentary on one of these gaps – health inequalities – outlining initial insights from Phase 3 and commenting on areas requiring further exploration.

5.4. FINDINGS

There is a high degree of alignment and mutual reinforcement across priorities when comparing information collected in the three phases of this work.

Key gaps emerging between and across Phases

Vaping

- In Phase 2, stakeholders reported that vaping is problem for their local communities. Data on vaping for the NEPHU region is currently lacking.

Sexual health

- In Phase 2 stakeholders raised concerns about access to sexual and reproductive health services. Phase 3 does not specifically look at access to SRH services and so does not shed further light on this issue.
- In Phase 2 stakeholders raised concerns about sexual and reproductive health issues for the community. While Phase 3 includes some sexual health data, the true burden of disease for sexually transmissible infections is likely unknown due to low testing rates in some geographic areas.

Children and youth

- The health and wellbeing needs of children and youth are not well captured across any of the Phases. Phase 3, in particular, draws on available data which largely focuses on the population aged 15 years and older.

Health inequalities

- In Phase 2 stakeholders frequently discussed the importance of taking an equity lens in health promotion and prevention work and of understanding and addressing the needs of priority populations. While Phase 3 begins to understand health and social inequalities across the NEPHU catchment, analyses are currently limited to describing data at LGA level. To fully understand inequalities across the catchment, analysis of suburb level data will be needed. In addition, examining health indicators for specific priority populations is likely to be required to fully understand and describe health inequalities.
- Data available in the NEPHU Population Health Data Profile allows a 'first look' at inequalities in modifiable risk factors across the NEPHU region at LGA level. As noted above, further detailed analysis will be required in future to fully understand inequalities across the region. The section that follows provides initial insights regarding inequalities at LGA level in modifiable risk factors that emerged through the Population Health Data Profile.

Key insights regarding inequalities in modifiable risk factors at LGA level across NEPHU region

Healthy eating

- In Phase 2, stakeholders commonly raised healthy eating as a key area of work for the catchment and noted the strong correlation to prevention of chronic disease as a key rationale for prioritizing this work, along with alignment with state policy and plans for organisations with a funding or legislative requirement to undertake health promotion and prevention work.
- In Phase 3, data from the Victorian Population Health Survey suggests some variation in the proportion of people who consume sugary drinks on a daily basis across LGAs in the NEPHU catchment (from 3% to 15%), with four LGAs reporting a higher proportion than the 9% of people across metropolitan Melbourne who consume sugary drinks daily, while eight LGAs reported a proportion at, or below this level. It should be noted that the most recently available data for this indicator is from 2017. New data collection is expected in 2023.
- Compliance with vegetable consumption guidelines is low across all LGAs, with variability between LGAs in consumption according to guidelines ranging from 2% to 8% across the catchment.

Physical activity

- Across all LGAs, between 37% and 52% of the population are not sufficiently physically active (based on guideline recommendations). Across the NEPHU population as a whole, 44% of people are not sufficiently physically active, which represents approximately 800,000 people.

Tobacco

- For LGAs across the catchment, the proportion of daily smokers ranges from 6.6% to 16.6%. When occasional smokers are combined with daily smokers, the proportion ranges from 8.2% to 21.4% in LGAs across the catchment. Given the burden of disease attributable to smoking, current differences are likely to magnify the future impact of inequalities in chronic disease in the future.
- Analyses of smoking prevalence within priority populations will be vital for understanding the profile of smoking behavior across the NEPHU catchment and for effectively targeting initiatives to reduce tobacco-related harm. Recent analyses by the Cancer Council (not publicly available at the current time) support this particularly in relation to understanding the prevalence of smoking within specific CALD groups.

Harmful alcohol use

- Data for the proportion of increased risk annually of injury from a single occasion of drinking is concerning across the catchment , with the proportion ranging from 33% to 53% of the population across LGAs. Similarly, the proportion of the population that is at increased risk of lifetime alcohol-related harm ranges from 48% to 70% across LGAs, placing some LGAs above and some below the Melbourne metro average (60%)

Bowel, breast and cervical screening	• There is some variation in the proportion of the population participating in bowel, breast and cervical screening across LGAs. When looking at screening participation across LGAs, the highest versus the lowest proportion for each of these screening types is: o Bowel screening: 52.5% vs 40.3% o Breast screening 53.5% vs 44% o Cervical cancer screening: 61.9% vs 43.3%.

5.5. CONCLUSION

There is a high degree of alignment and mutual reinforcement across priorities when comparing information collected in the three phases of this work.

There are a range of considerations highlighted that will feed into Phase 4 – the stakeholder workshop. Once priority areas are selected, further detailed information will be gathered to fill any gaps. This also reinforces that initiatives must be planned and developed with consideration to local areas, priority groups and communities with highest burden or risk, noting the inequalities highlighted.