



Government of **Western Australia**
North Metropolitan Health Service
Mental Health, Public Health and Dental Services

North Metropolitan Local Government Network

Topic: North metropolitan demographic, social and health data: understanding the health and wellbeing of our population

Wednesday 19 October 2022

10am-11.30am



One team, many dreams.

Care / Respect / Innovation / Teamwork / Integrity



Acknowledgement to Country

I would like to acknowledge the Noongar people as the traditional owners and custodians of the land on which we are meeting and pay respect to Aboriginal and Torres Strait Islander elders, both past, present and emerging.

North Metropolitan Health Service recognises, respects and values Aboriginal and Torres Strait Islander culture as we walk a new path together.



Agenda

Item	Presenter	Time
Welcome & Introductions House-keeping	Assunta Di Francesco	10.00am -10.05am
Acknowledgement of Country	Assunta Di Francesco	10.05am -10.10am
Ice-breaker	Assunta Di Francesco Krista Coward	10.10am -10.30am
Meet the new Health Promotion Team	Krista Coward	10.30am -10.35am
NMHS data – understanding the health & wellbeing of our population	Tim Landrigan James Gibson	10.35am-11.25am
Evaluation		11.25am-11.30am
Close & next meeting: 2 Dec 2022 2.00pm-3.30pm	Assunta Di Francesco	11.30am



Ice-breaker

1. Name
2. Role
3. Local Government
4. One thing your local government does really well in promoting the health and wellbeing of its community



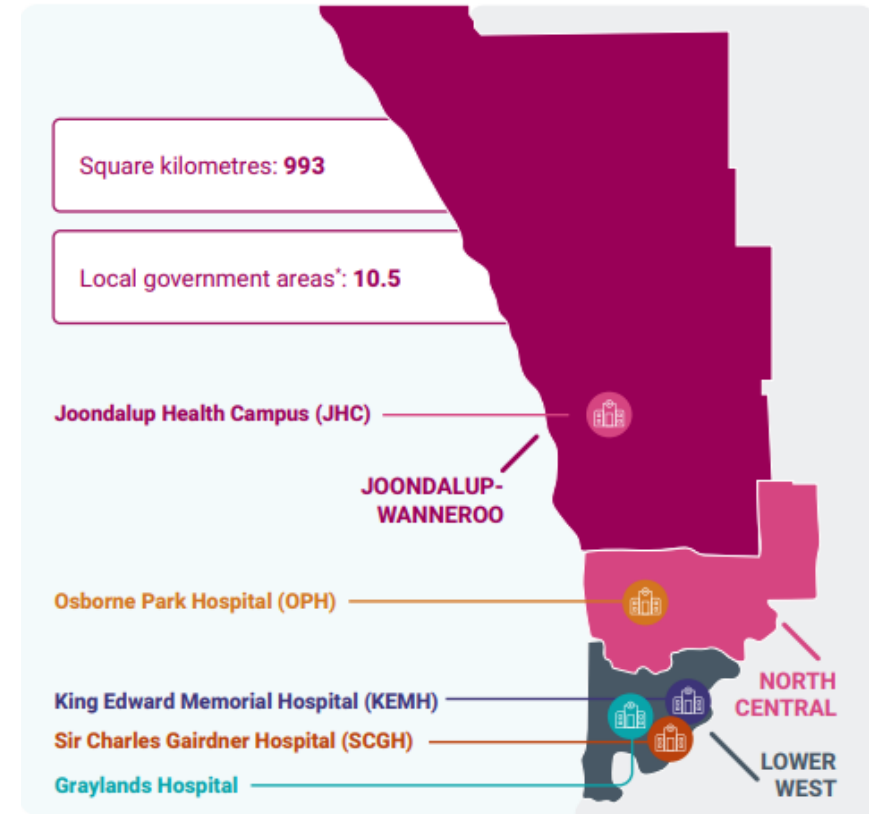
About us - NMHS Health Promotion

Work across the north metropolitan area

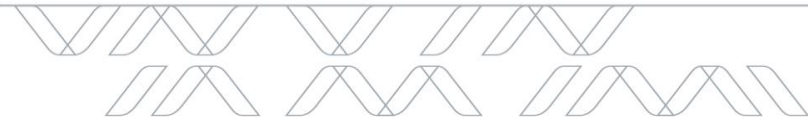
Partner with other agencies and community to support our population to experience the best possible health, wellbeing and quality of life

Focus on reducing the main lifestyle risk factors causing the greatest burden of disease:

- tobacco smoking
- poor diet
- overweight and obesity
- physical inactivity
- harmful levels of alcohol use
- injury



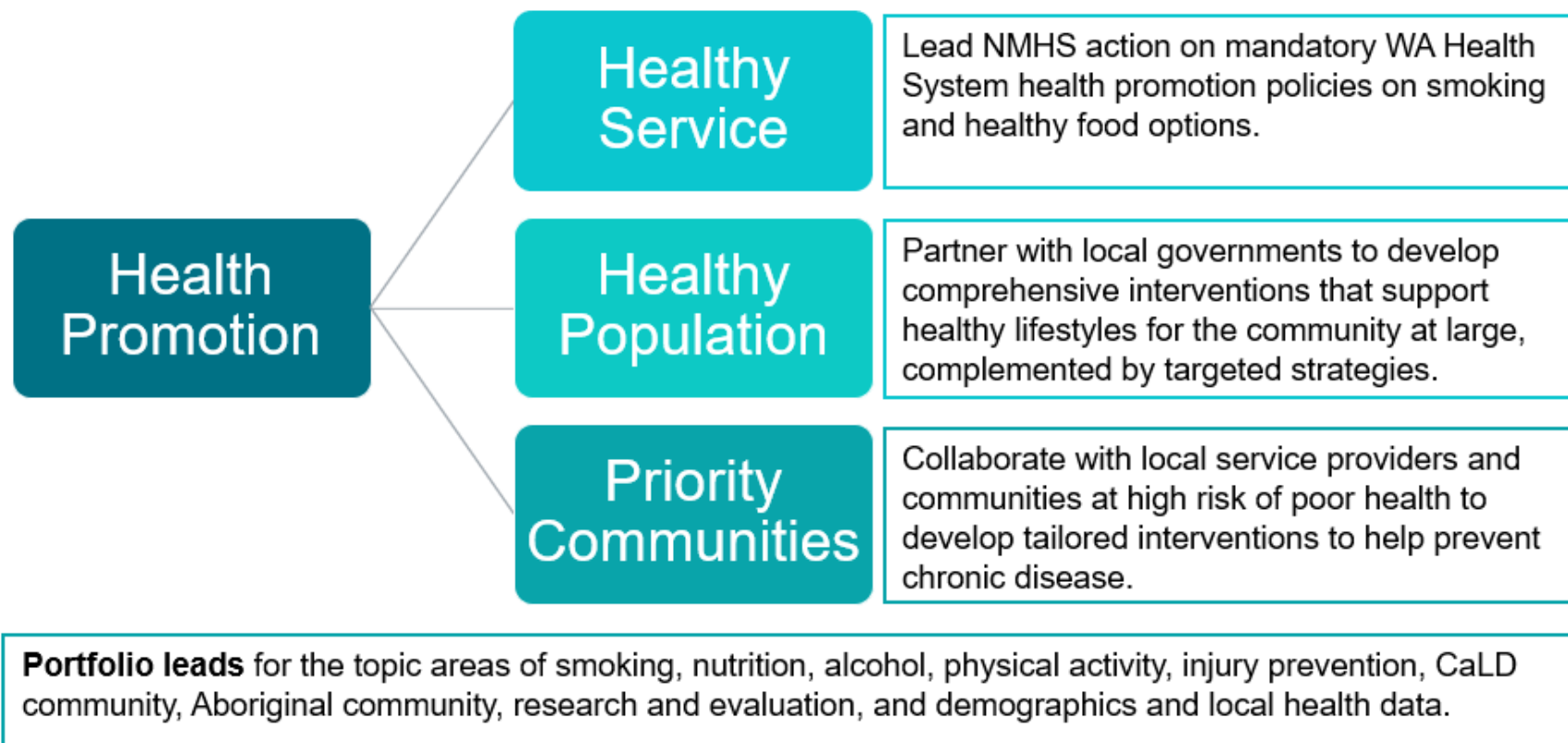
Total population: 736,907 people





Source: the Australian Institute of Health and Welfare

NMHS Health Promotion



Healthy Population Team

11 local government areas



Town of Cottesloe



Lower West Health District



Town of Cottesloe



TOWN OF
CLAREMONT
Est 1898



CITY OF
SUBIACO



TOWN OF
MOSMAN PARK



CITY OF VINCENT



Town of
Cambridge



City of Nedlands



SHIRE OF PEPPERMINT GROVE





Government of **Western Australia**
Department of **Health**

Population health data for Local Governments

Tim Landrigan, Manager Analysis

Epidemiology Directorate
Department of Health

health.wa.gov.au

Acknowledgement of country

- May I first acknowledge the Wadjuk people of the Noongar nation, the traditional custodians of this land who are resilient in their custodianship
- Let us celebrate their culture today and every day, and note how privileged we are to share this country
- I pay my respects to elders: past, present and emerging

Outline

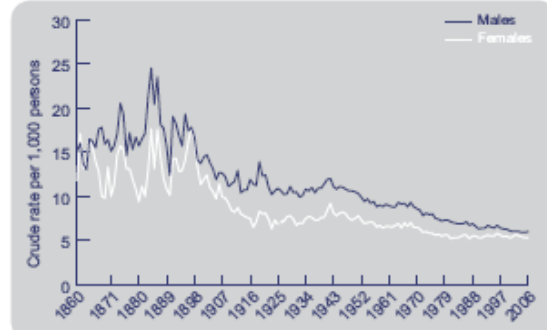
- Epidemiology Directorate
- Demographic data for each LGA including SES, age comparisons, Aboriginal statistics
- Data interpretation and limitations.
- Smoking, Nutrition, Alcohol, Physical Activity and Injury (SNAPI) risk factor data for each LGA.

Epidemiology Directorate

- **Monitor, assess and report on** the health of the WA population and identify areas of need.
- Guide **policy development**; identify **emerging issues**; inform **service planning**.

Epidemiological & Statistical Analysis

Figure 1: Crude mortality rate per 1,000 persons, WA, 1860–2006

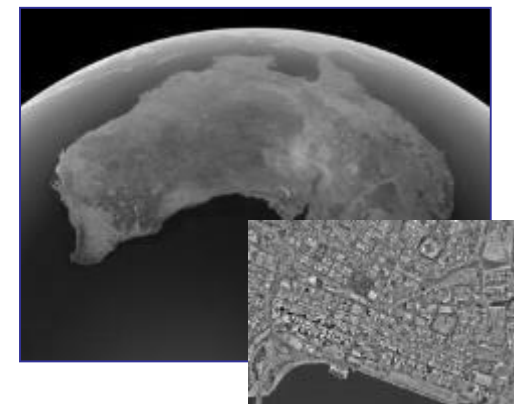


Notes: (a) Excludes deaths of defence personnel from September 1939 to June 1947.
Source: ABS Data Cubes Cat No. 3105.0.65.001.

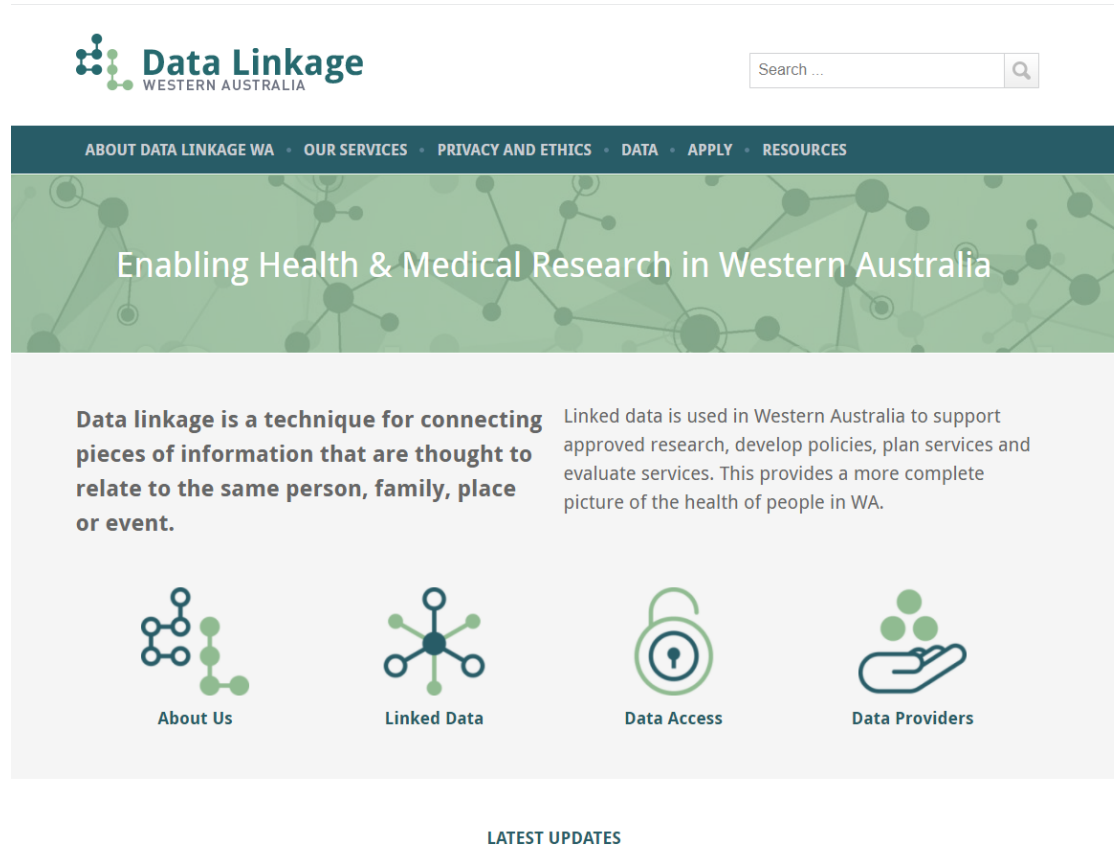
Health Survey Data Collection



Spatial Data, Analysis & Applications



Key data sources



<https://www.datalinkage-wa.org.au/>

- Hospital Morbidity Data Collection
- Emergency Department Data Collection
- Mental Health Information Data Collection
- WA Cancer Registry
- Midwives Notification System
- WA Notifiable Infectious Disease Database
- WA Mortality Register
- Health & Wellbeing Surveillance System

WA Department of Health Health and Wellbeing Surveillance System



General Health

- Disability
- Overall health status



Health service utilisation

- Primary
- Hospital
- Dental
- Allied
- Mental health
- Alternative
- Vaccination



Lifestyle risk factors

- Smoking
- Sun protection
- Physical activity
- Sleep
- Alcohol
- Fruit & veg
- Fast food
- Food security



Mental wellbeing

- Major life events
- Social support
- Suicidal ideation
- Psychological distress
- Social and emotional wellbeing
- Mental health conditions



Chronic conditions

- Cancer
- Heart disease
- Asthma
- Injury
- Stroke
- Osteoporosis
- Arthritis
- Diabetes



Child development

- Bullying
- Breastfeeding
- School connectedness



Physiological risk factors

- Cholesterol
- Blood pressure
- Body weight



Socio-demographics

- Income
- Welfare
- Living arrangements
- Education
- Family structure
- Employment
- Country of birth

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

Areas covered

- The North Metro local governments include:
 - the Cities of Joondalup, Nedlands, Stirling, Subiaco, Vincent and Wanneroo
 - the Towns of Cambridge, Claremont, Cottesloe and Mosman Park;
 - and the Shire of Peppermint Grove.



Population



Map of 2016 SEIFA by SA1 Joondalup (C)

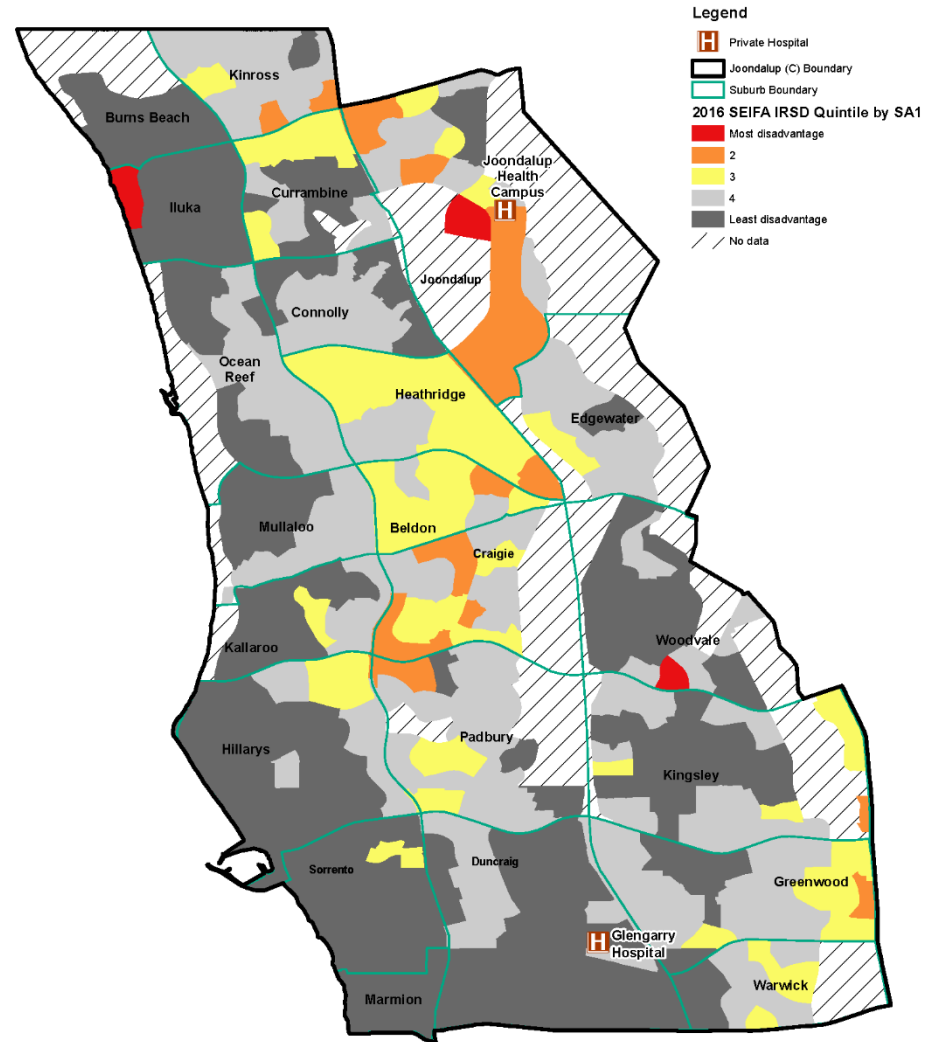


Figure 1. Population by age group (years) and sex, City of Joondalup, 2020

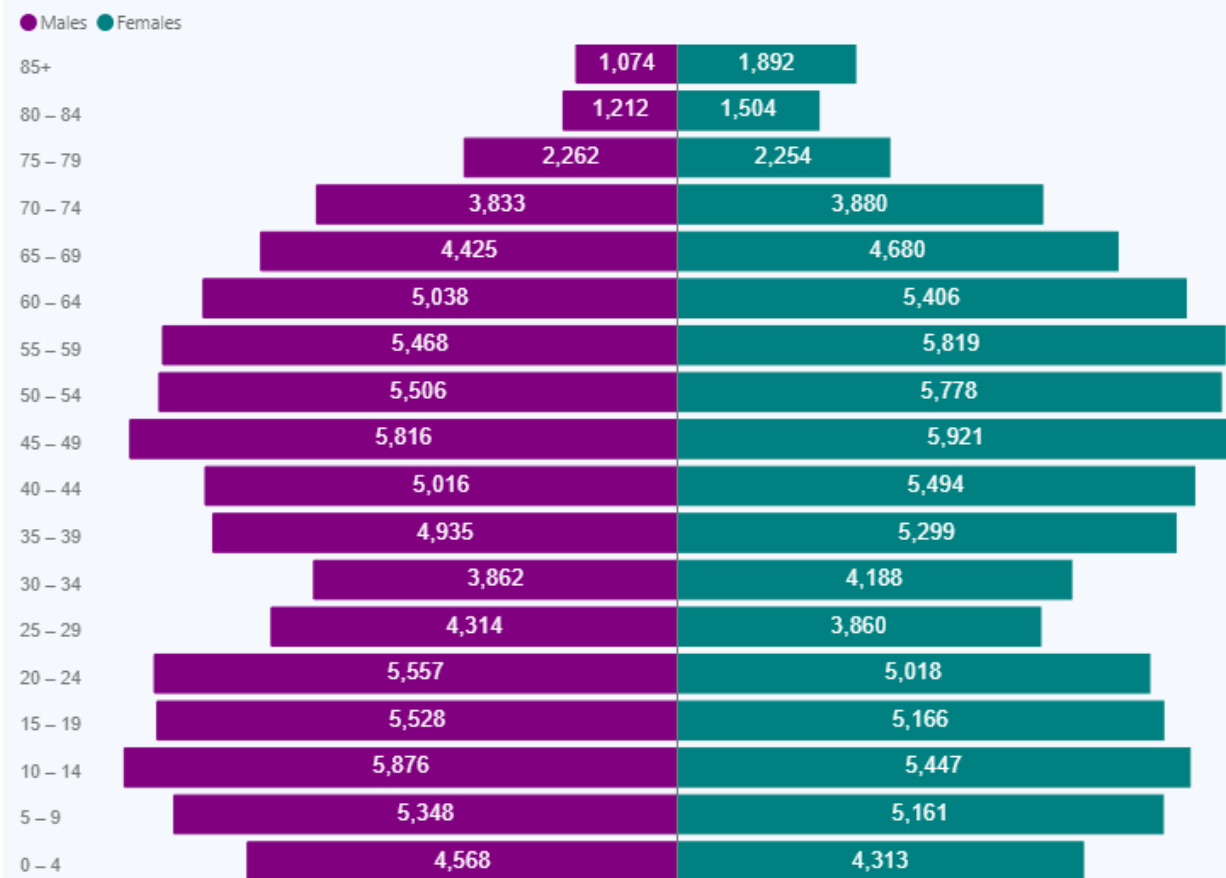


Table 2. Selected population measures, City of Joondalup, 2016

Measure	Number	Percentage
Aboriginal persons	1,001	0.6
Families with annual income < \$20,800	1,052	2.4
Persons born overseas	58,441	37.8
Persons who are unemployed	5,813	6.9
Persons who do not speak English at home	16,886	10.9

Map of 2016 SEIFA by SA1 Nedlands (C)

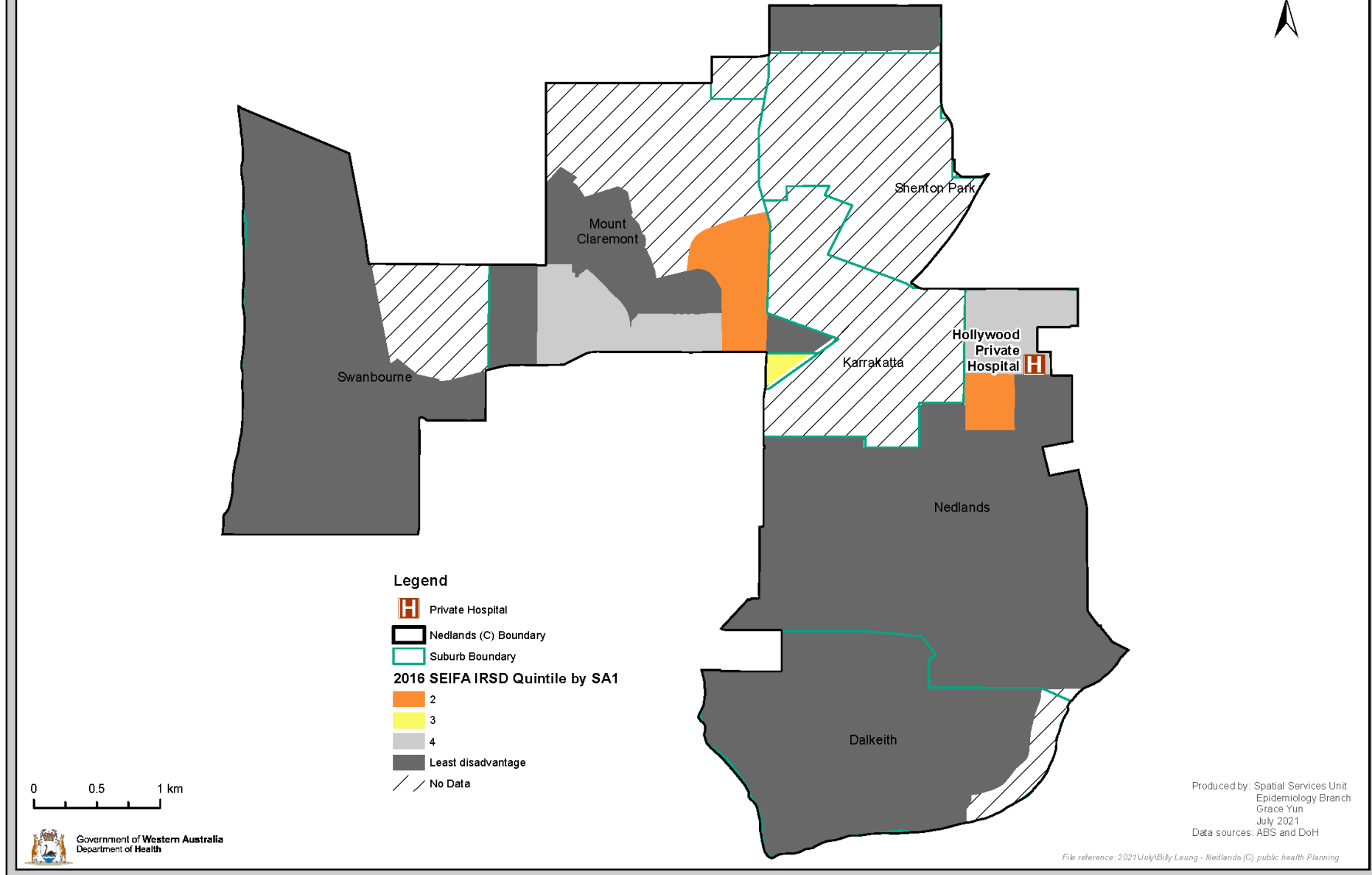


Figure 1. Population by age group (years) and sex, City of Nedlands, 2020



Table 2. Selected population measures, City of Nedlands, 2016

Measure	Number	Percentage
Aboriginal persons	62	0.3
Families with annual income < \$20,800	125	2.3
Persons born overseas	6,711	31.8
Persons who are unemployed	556	5.4
Persons who do not speak English at home	3,184	15.1

Map of 2016 SEIFA by SA1 Stirling (C)

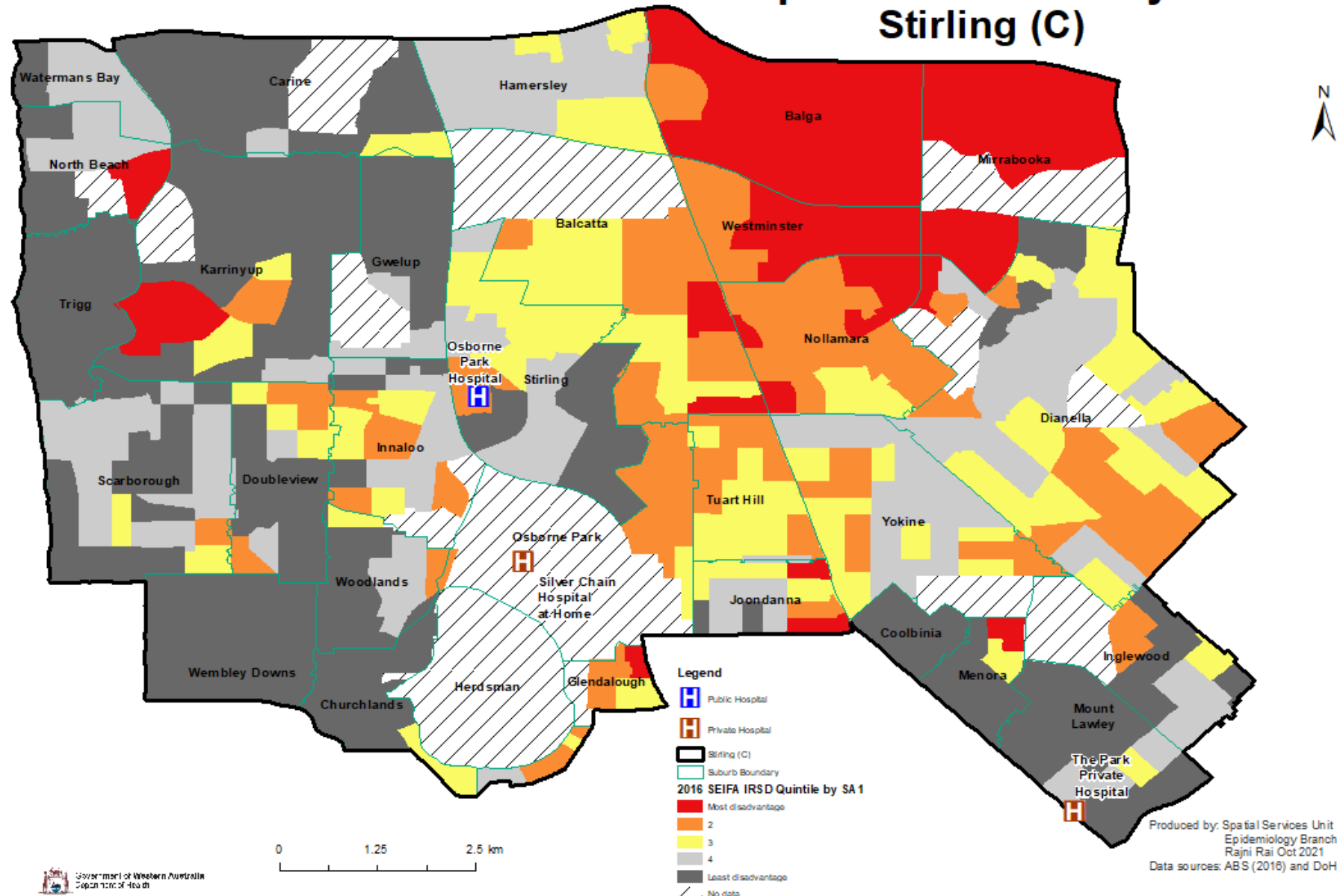


Figure 1. Population by age group (years) and sex, City of Stirling, 2020



Table 2. Selected population measures, City of Stirling, 2016

Measure	Number	Percentage
Aboriginal persons	2,227	1.1
Families with annual income < \$20,800	1,856	3.4
Persons born overseas	79,361	37.8
Persons who are unemployed	8,126	7.3
Persons who do not speak English at home	57,372	27.3

Map of 2016 SEIFA by SA1 Subiaco (C)

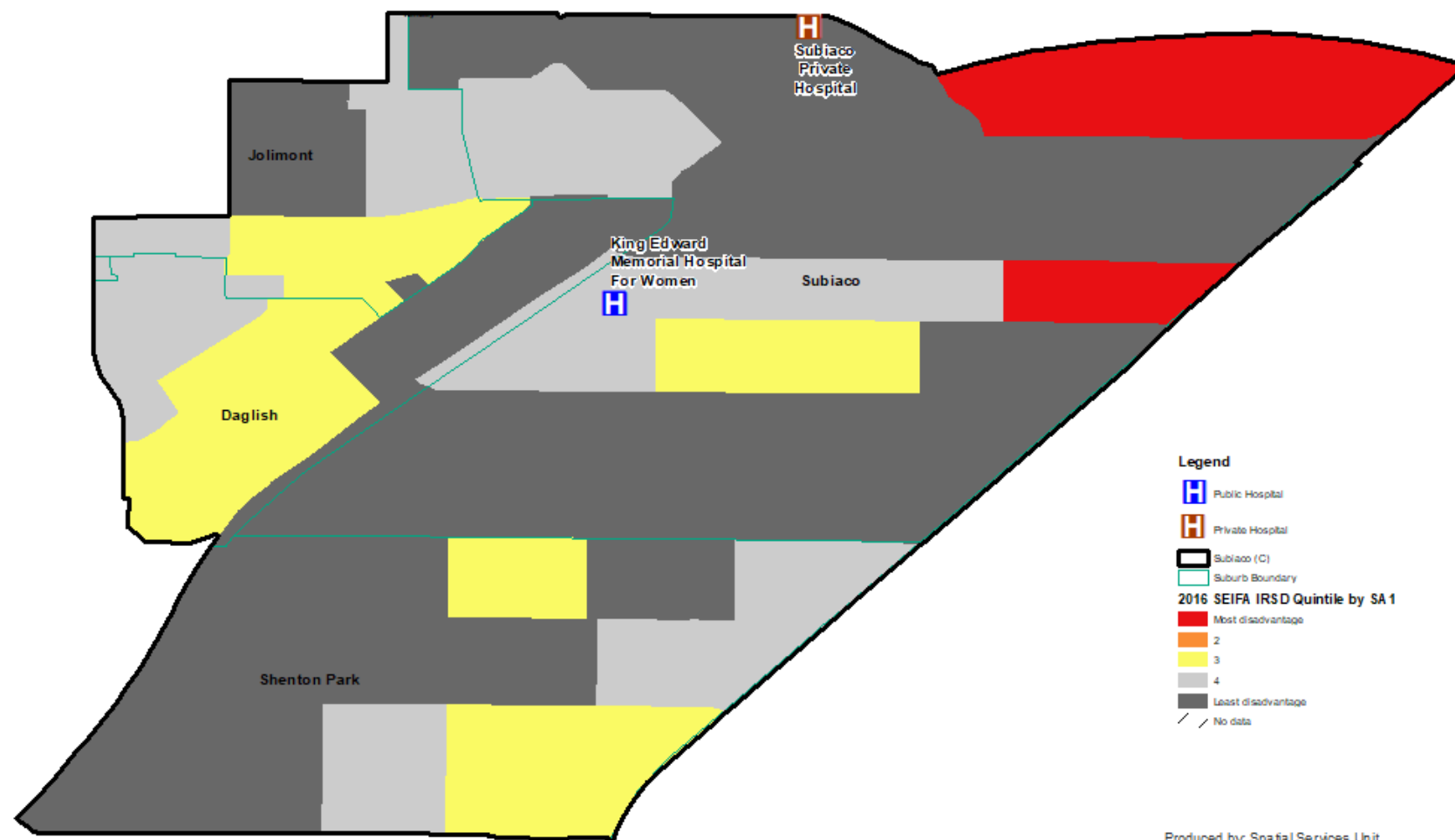


Figure 1. Population by age group (years) and sex, City of Subiaco, 2020

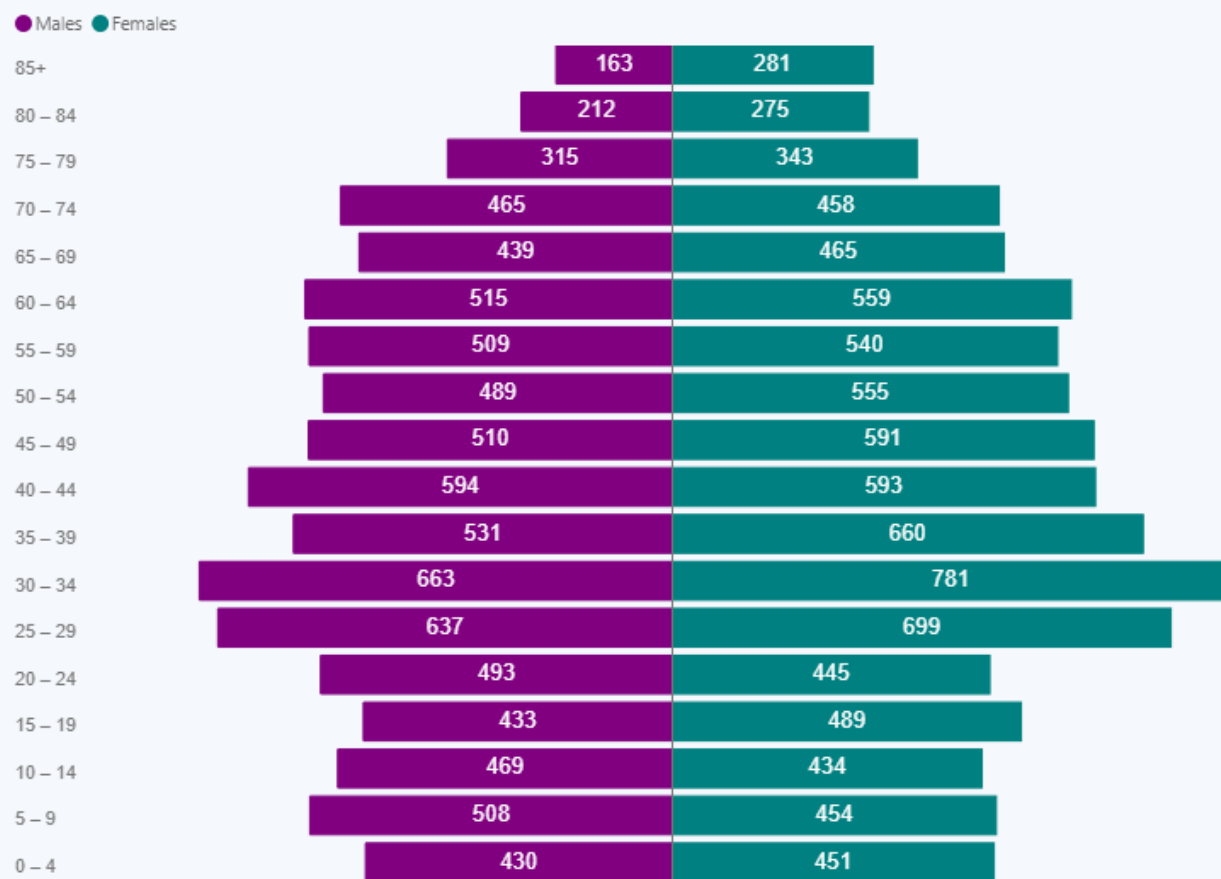


Table 2. Selected population measures, City of Subiaco, 2016

Measure	Number	Percentage
Aboriginal persons	138	0.7
Families with annual income < \$20,800	149	3.3
Persons born overseas	7,745	40.0
Persons who are unemployed	774	7.8
Persons who do not speak English at home	4,337	22.4

Map of 2016 SEIFA by SA1 Vincent (C)

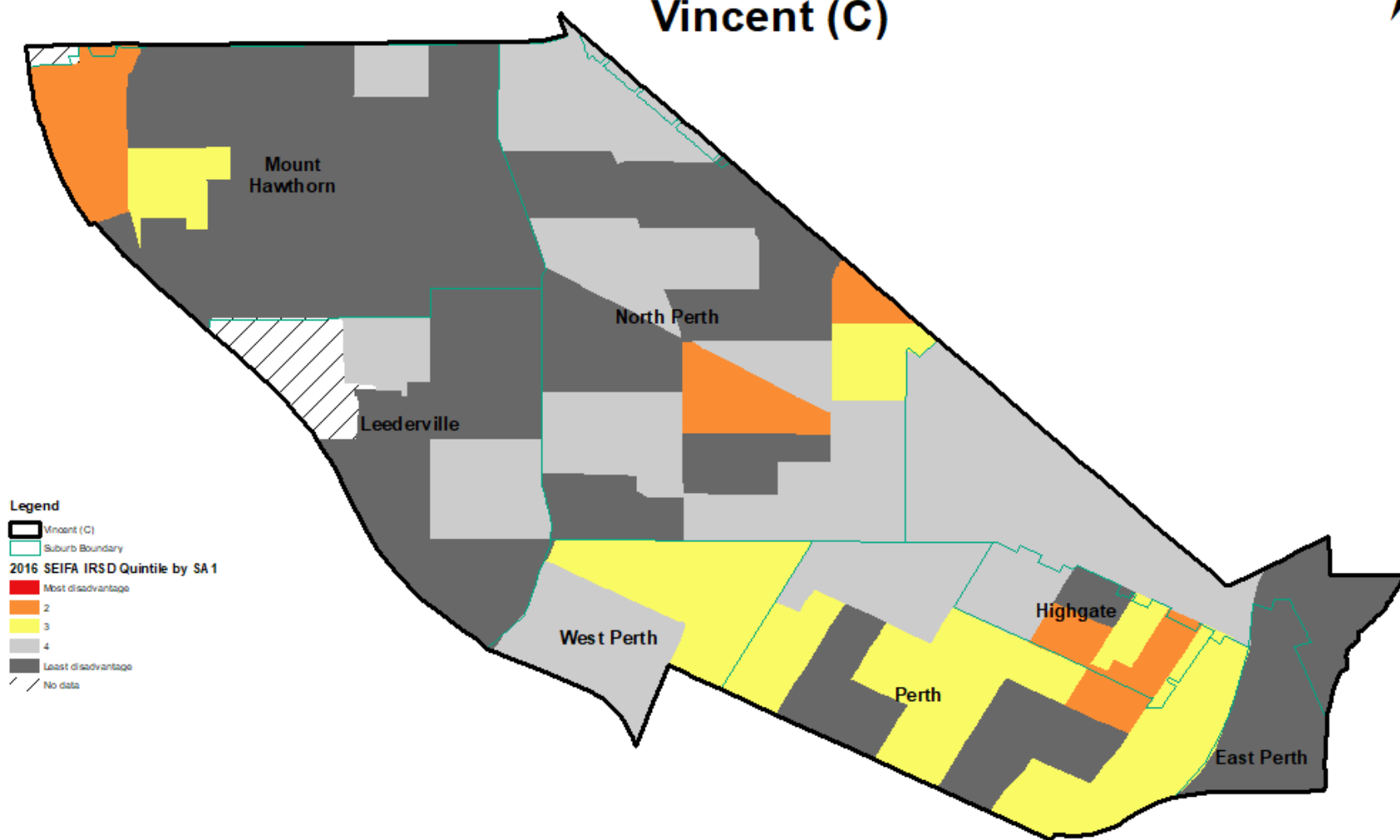


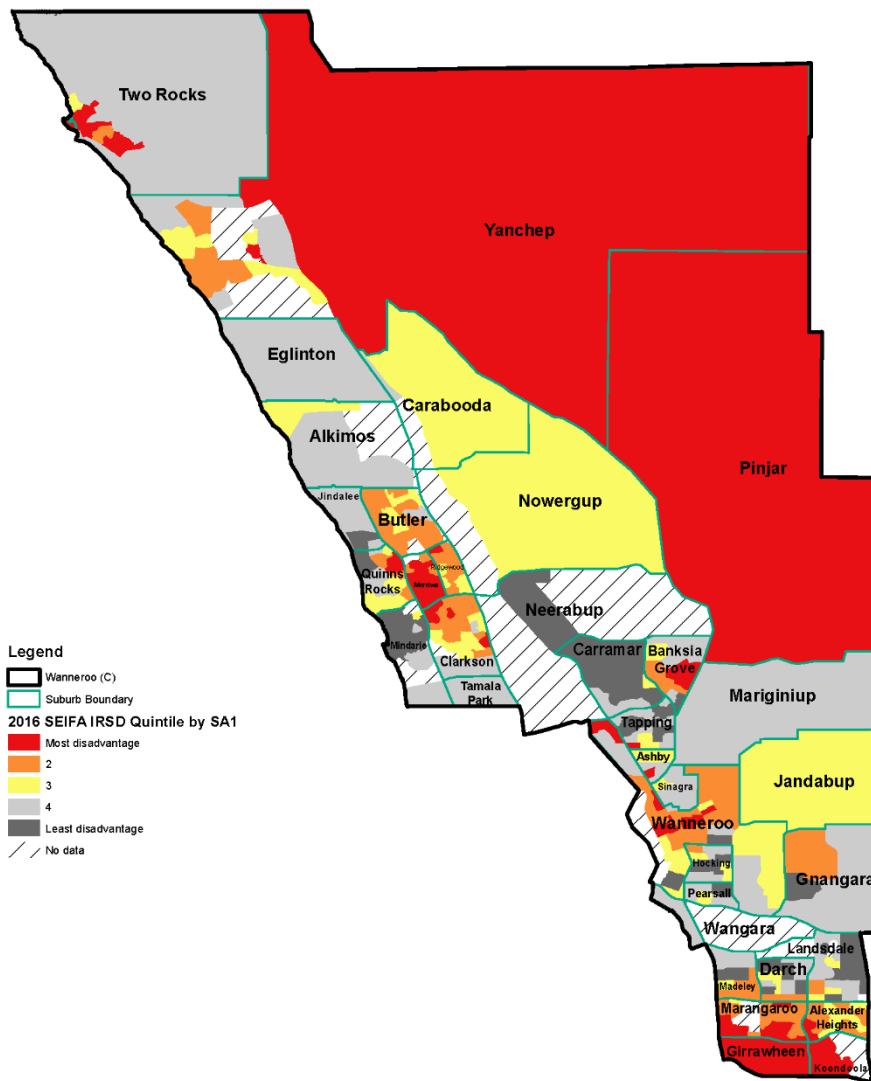
Figure 1. Population by age group (years) and sex, City of Vincent, 2020



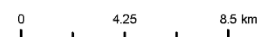
Table 2. Selected population measures, City of Vincent, 2016

Measure	Number	Percentage
Aboriginal persons	233	0.7
Families with annual income < \$20,800	206	2.6
Persons born overseas	11,651	34.6
Persons who are unemployed	1,218	6.1
Persons who do not speak English at home	7,353	21.8

Map of 2016 SEIFA by SA1 Wanneroo (C)



- Legend**
- Wanneroo (C)
 - Suburb Boundary
 - 2016 SEIFA IRSD Quintile by SA1
 - Most disadvantage
 - 2
 - 3
 - 4
 - Least disadvantage
 - No data



Produced by: Spatial Services Unit
Epidemiology Branch,
Rajni Rai
October 2021
Data sources: ABS and DoH

Figure 1. Population by age group (years) and sex, City of Wanneroo, 2020

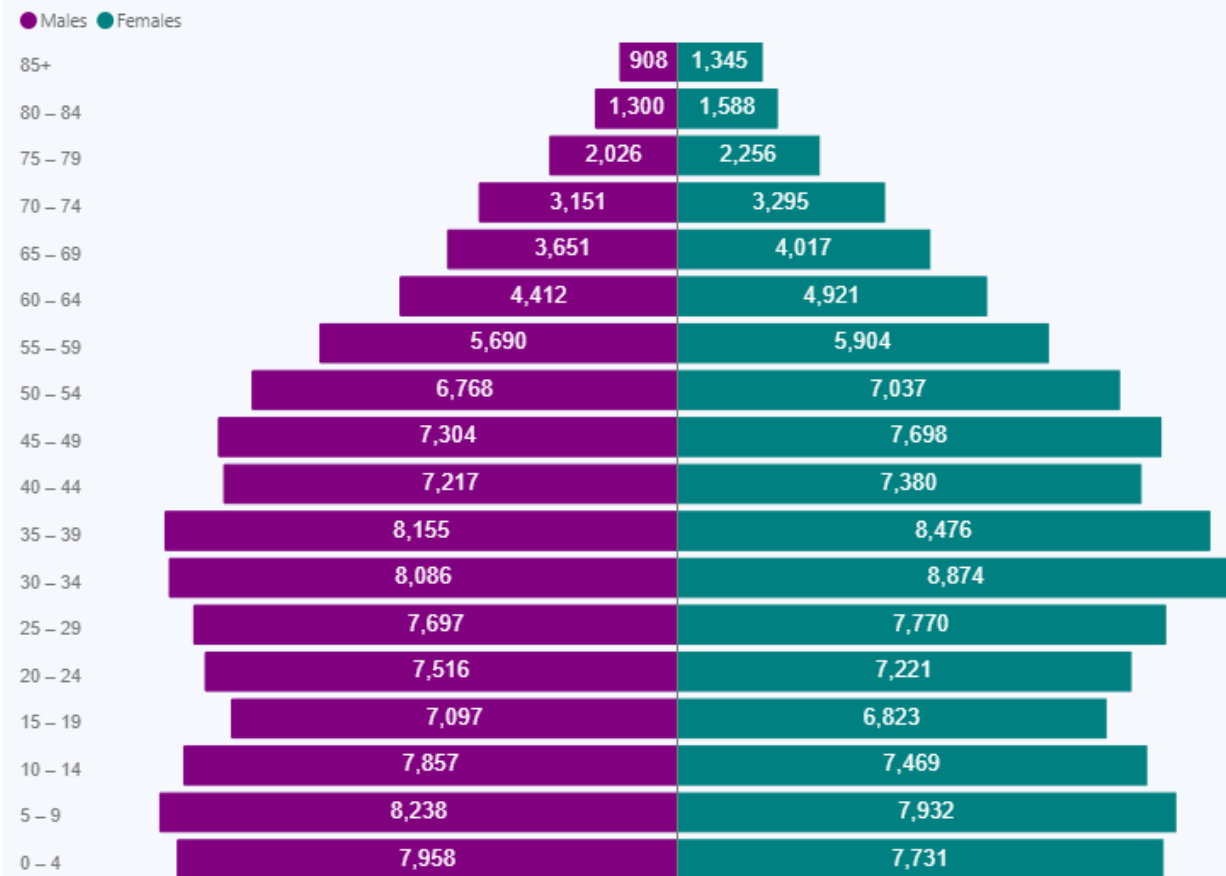
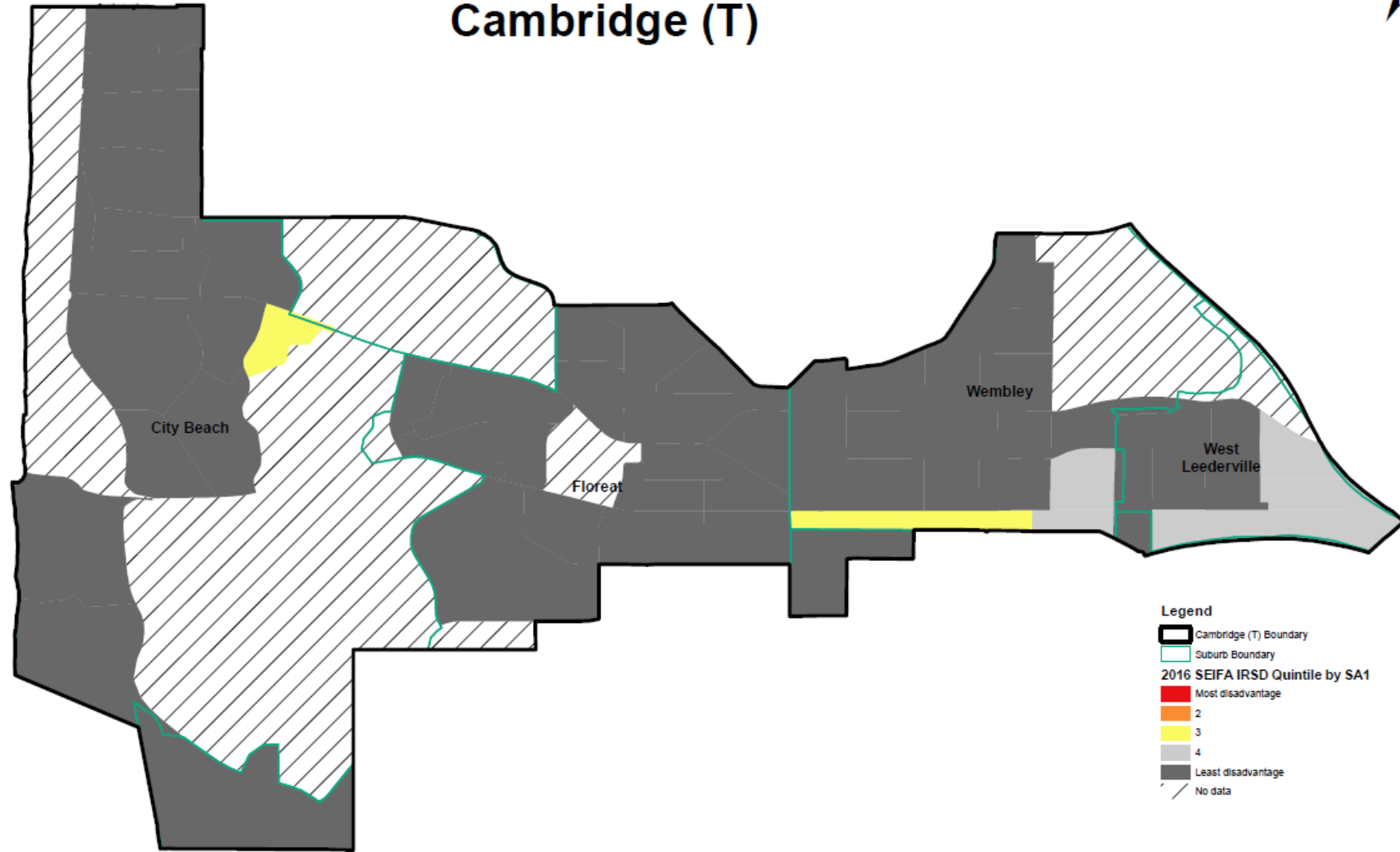


Table 2. Selected population measures, City of Wanneroo, 2016

Measure	Number	Percentage
Aboriginal persons	2,706	1.4
Families with annual income < \$20,800	1,796	3.5
Persons born overseas	77,127	41.0
Persons who are unemployed	8,285	8.5
Persons who do not speak English at home	38,255	20.3

Map of 2016 SEIFA by SA1 Cambridge (T)



Legend

Cambridge (T) Boundary

Suburb Boundary

2016 SEIFA IRSD Quintile by SA1

Most disadvantage

2

3

4

Least disadvantage

No data

0 0.75 1.5 km

Figure 1. Population by age group (years) and sex, Town of Cambridge, 2020












Table 2. Selected population measures, Town of Cambridge, 2016

Measure	Number	Percentage
Aboriginal persons	72	0.3
Families with annual income < \$20,800	147	2.1
Persons born overseas	7,819	29.2
Persons who are unemployed	725	5.3
Persons who do not speak English at home	3,707	13.8

Map of 2016 SEIFA by SA1 Claremont (T)

Legend

-  Private Hospital
-  Claremont (T) Boundary
-  Suburb Boundary
- 2016 SEIFA IRSD Quintile by SA1**
-  Most disadvantage
-  2
-  3
-  4
-  Least disadvantage
-  No data

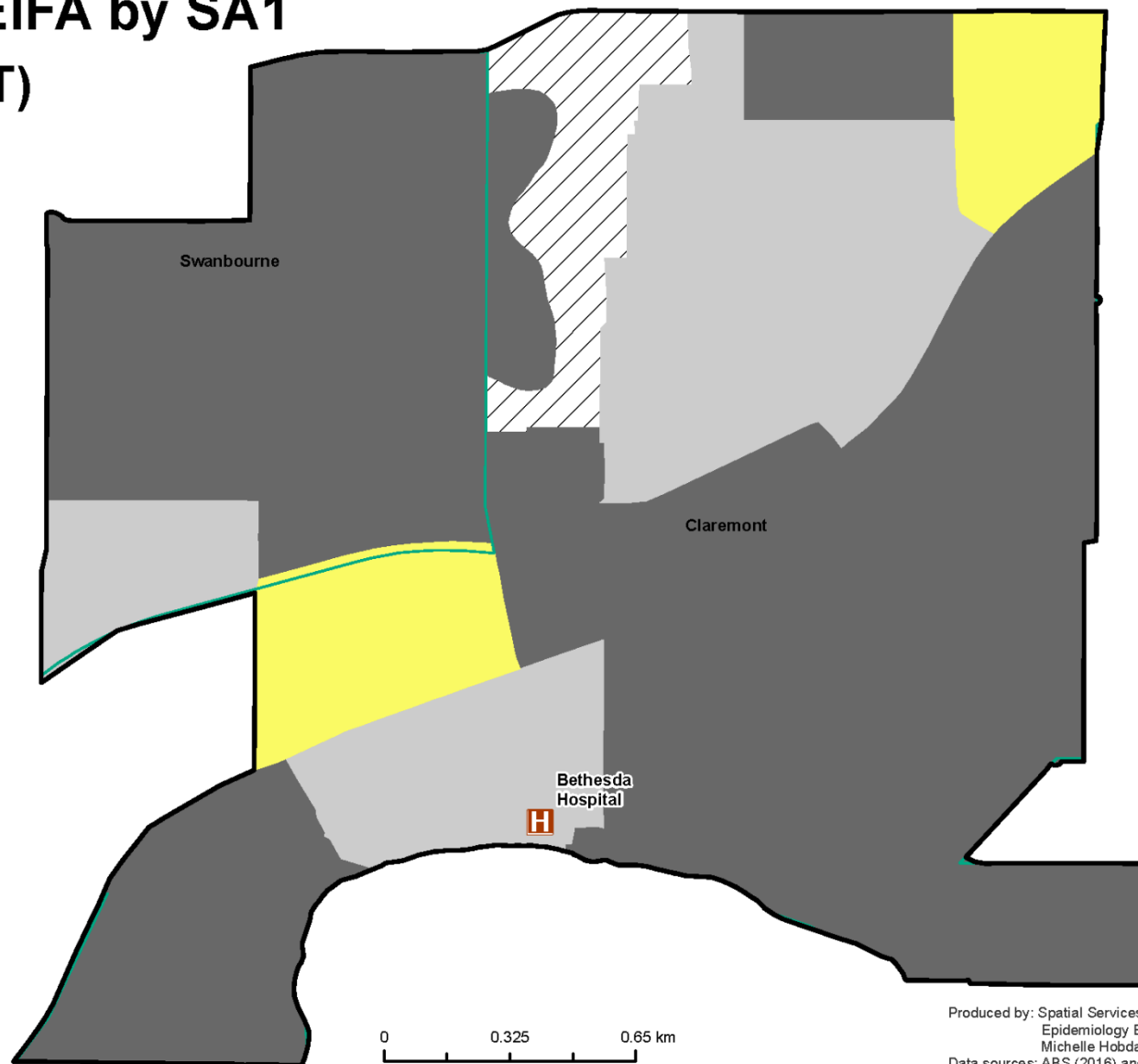


Figure 1. Population by age group (years) and sex, Town of Claremont, 2020

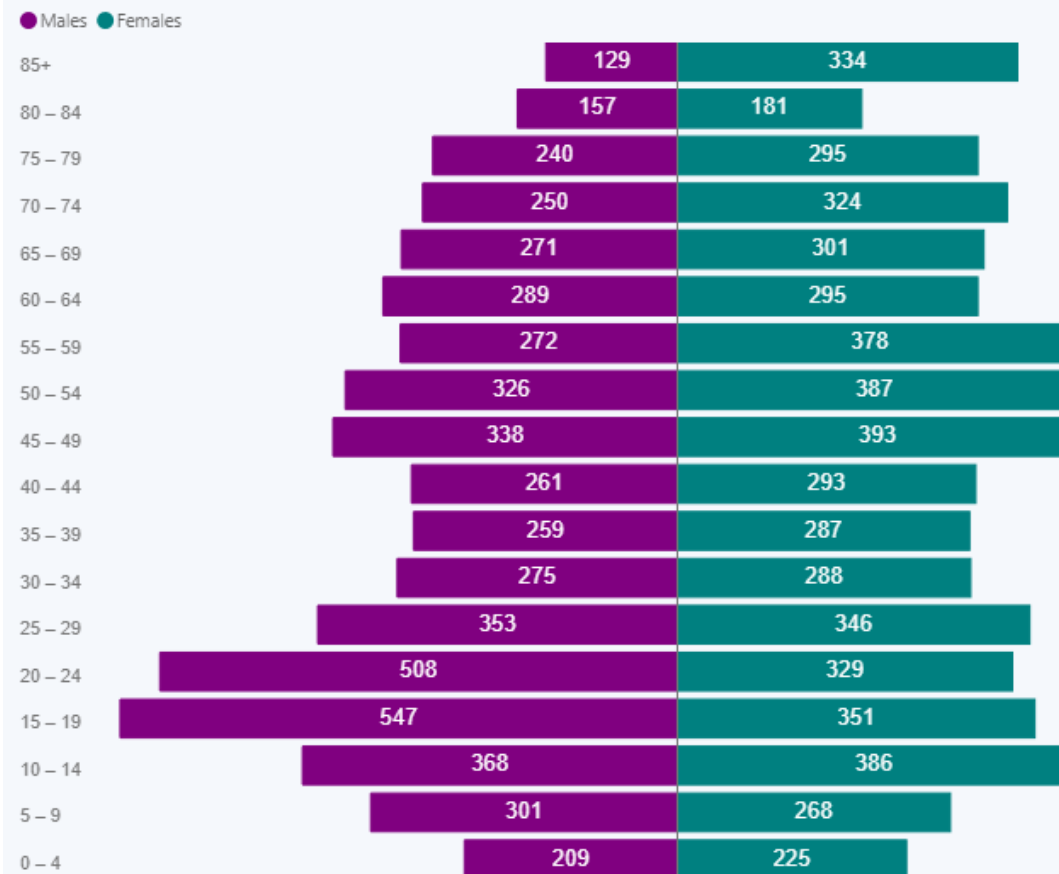
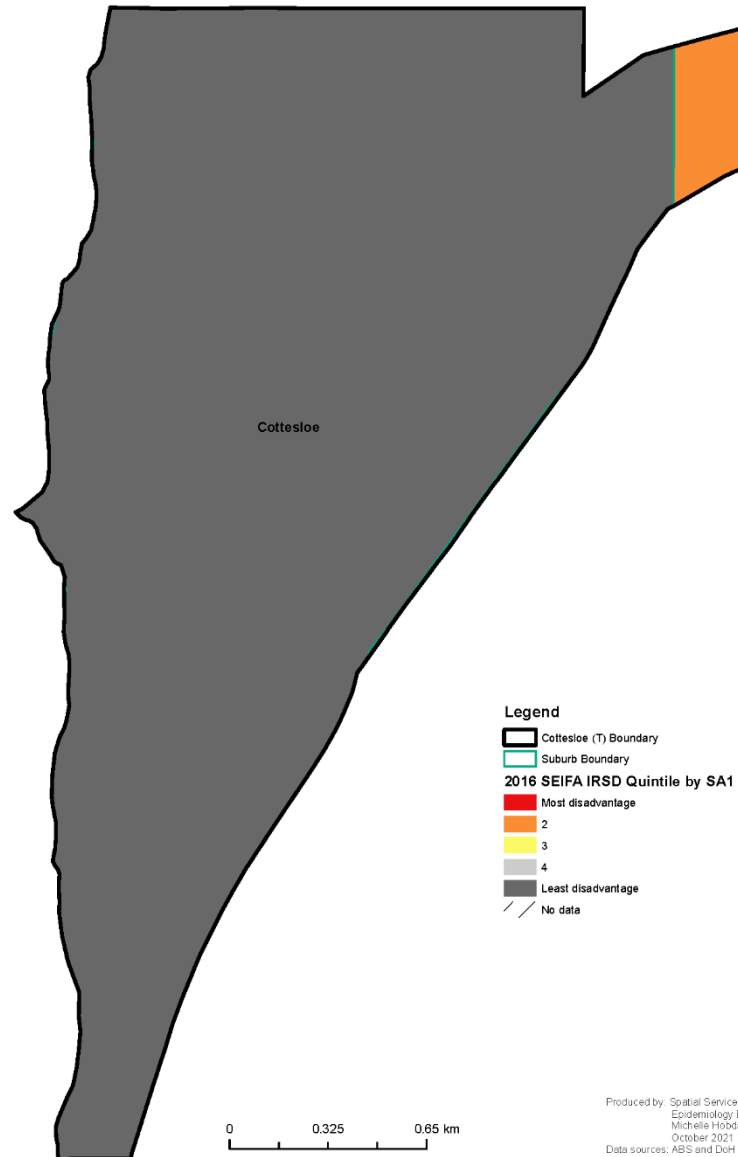


Table 2. Selected population measures, Town of Claremont, 2016

Measure	Number	Percentage
Aboriginal persons	65	0.6
Families with annual income < \$20,800	65	2.6
Persons born overseas	2,988	29.7
Persons who are unemployed	257	5.5
Persons who do not speak English at home	1,241	12.3

Map of 2016 SEIFA by SA1 Cottesloe (T)



Legend

- Cottesloe (T) Boundary
- Suburb Boundary

2016 SEIFA IRSD Quintile by SA1

- Most disadvantage
- 2
- 3
- 4
- Least disadvantage
- No data

Figure 1. Population by age group (years) and sex, Town of Cottesloe, 2020



Table 2. Selected population measures, Town of Cottesloe, 2016

Measure	Number	Percentage
Aboriginal persons	31	0.4
Families with annual income < \$20,800	45	2.3
Persons born overseas	1,901	25.0
Persons who are unemployed	189	4.9
Persons who do not speak English at home	523	6.9

Map of 2016 SEIFA by SA1 Mosman Park (T)

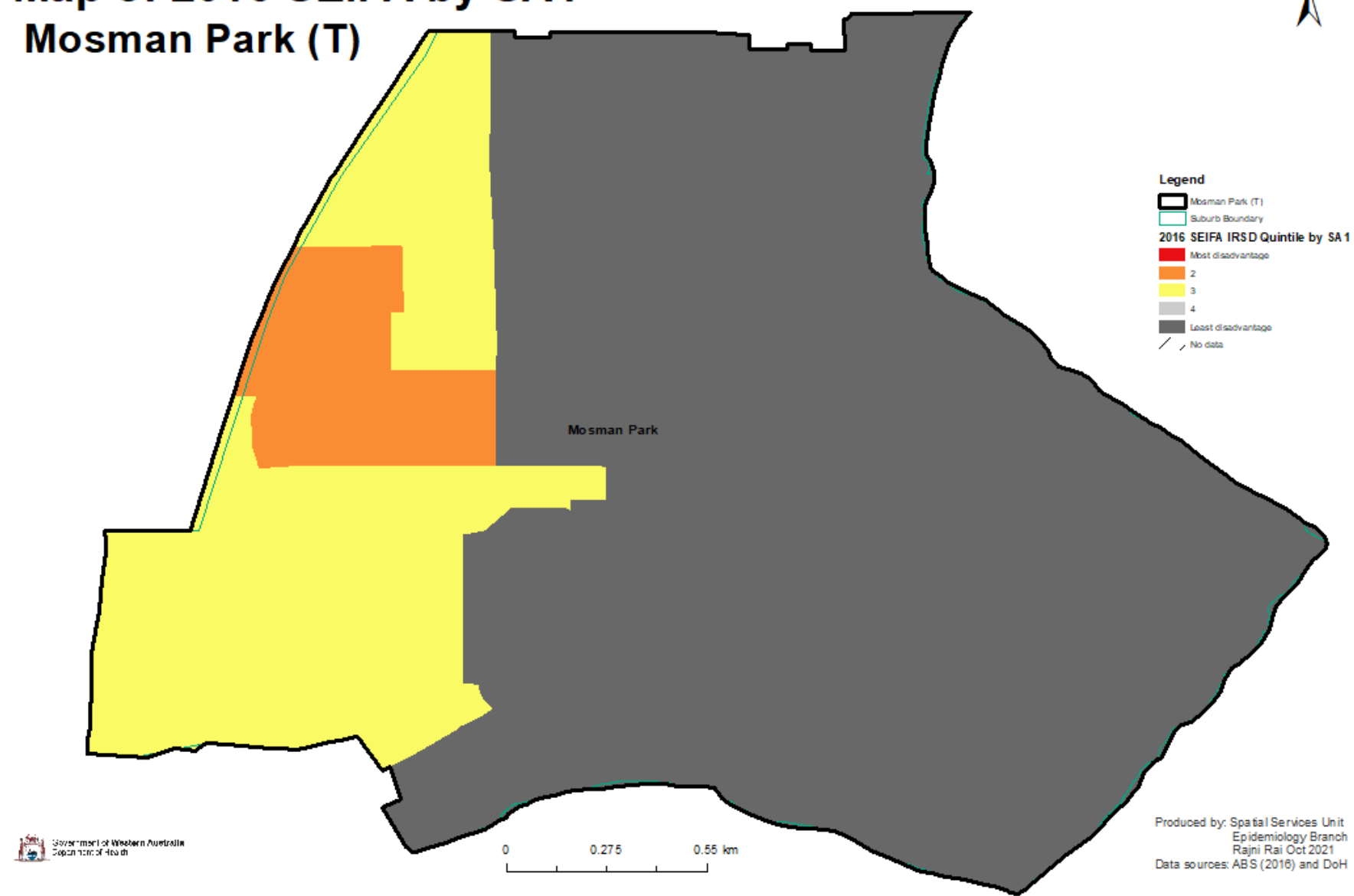


Figure 1. Population by age group (years) and sex, Town of Mosman Park, 2020

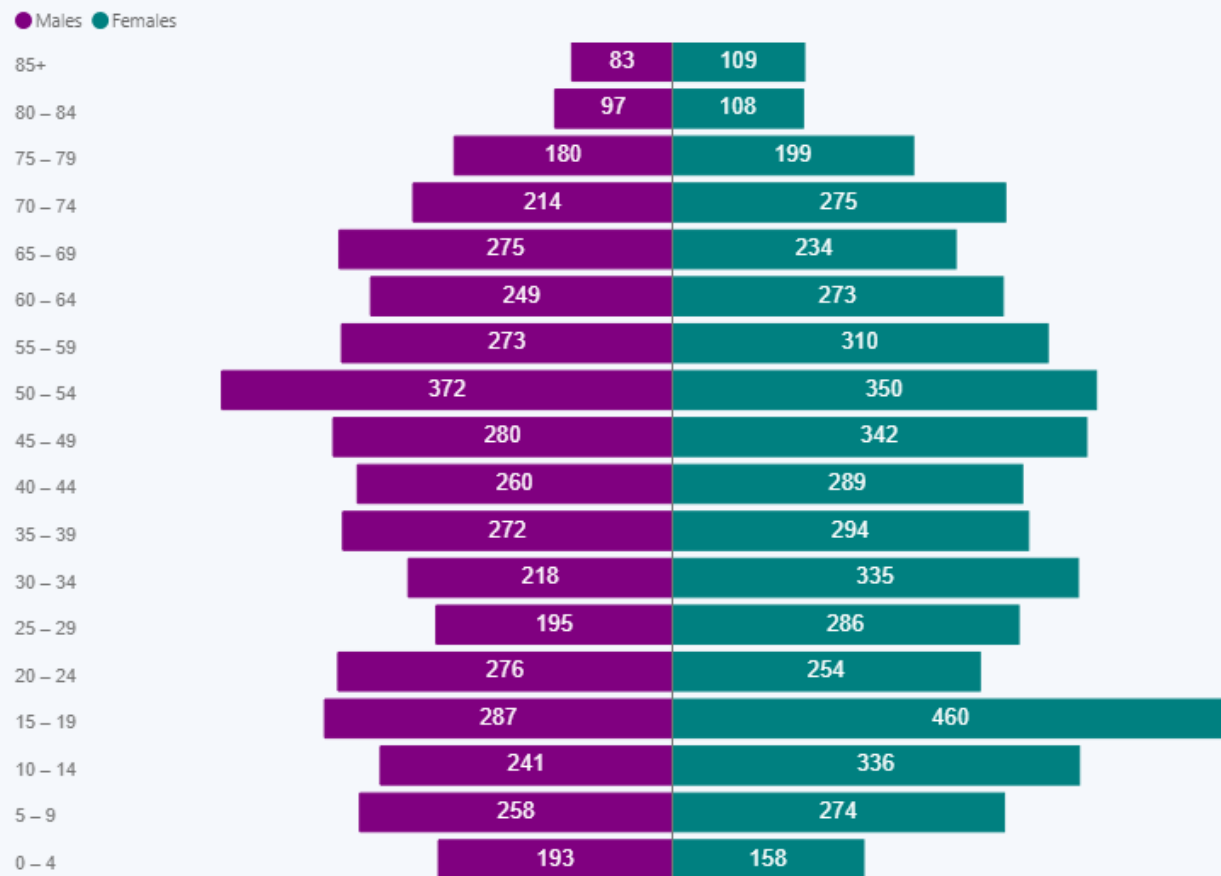


Table 2. Selected population measures, Town of Mosman Park, 2016

Measure	Number	Percentage
Aboriginal persons	73	0.8
Families with annual income < \$20,800	63	2.9
Persons born overseas	2,799	32.0
Persons who are unemployed	266	6.1
Persons who do not speak English at home	1,185	13.5

Map of 2016 SEIFA by SA1 Peppermint Grove (S)

Legend

- Peppermint Grove (S)
- Suburb Boundary
- 2016 SEIFA IRSD Quintile by SA1
 - Most disadvantage
 - 2
 - 3
 - 4
 - Least disadvantage
 - No data



Government of Western Australia
Department of Health

0 0.125 0.25 km

Produced by: Spatial Services Unit
Epidemiology Branch
Rajni Rai Oct 2021
Data sources: ABS (2016) and DoH

Figure 1. Population by age group (years) and sex, Shire of Peppermint Grove, 2020

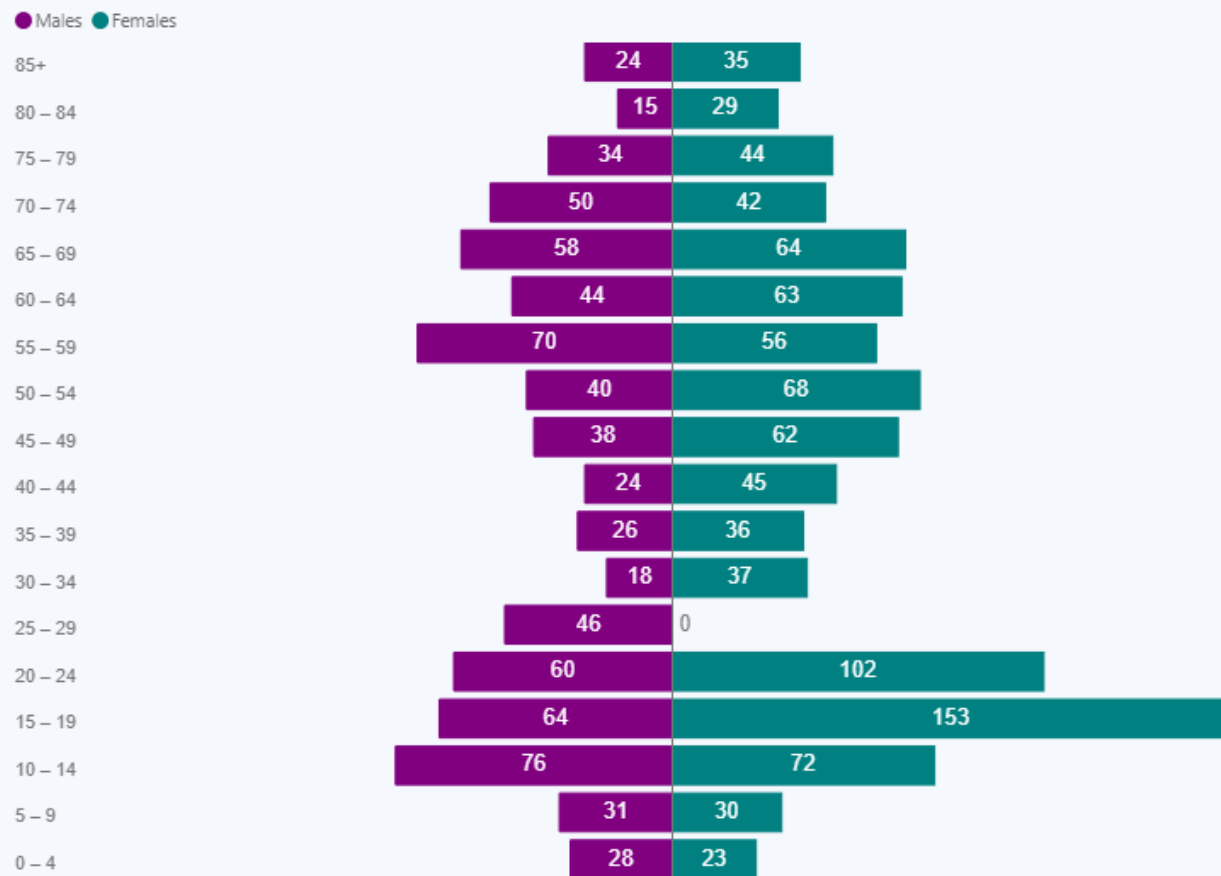


Table 2. Selected population measures, Shire of Peppermint Grove, 2016

Measure	Number	Percentage
Aboriginal persons	28	1.7
Families with annual income < \$20,800	10	2.6
Persons born overseas	424	25.9
Persons who are unemployed	25	3.5
Persons who do not speak English at home	151	9.2

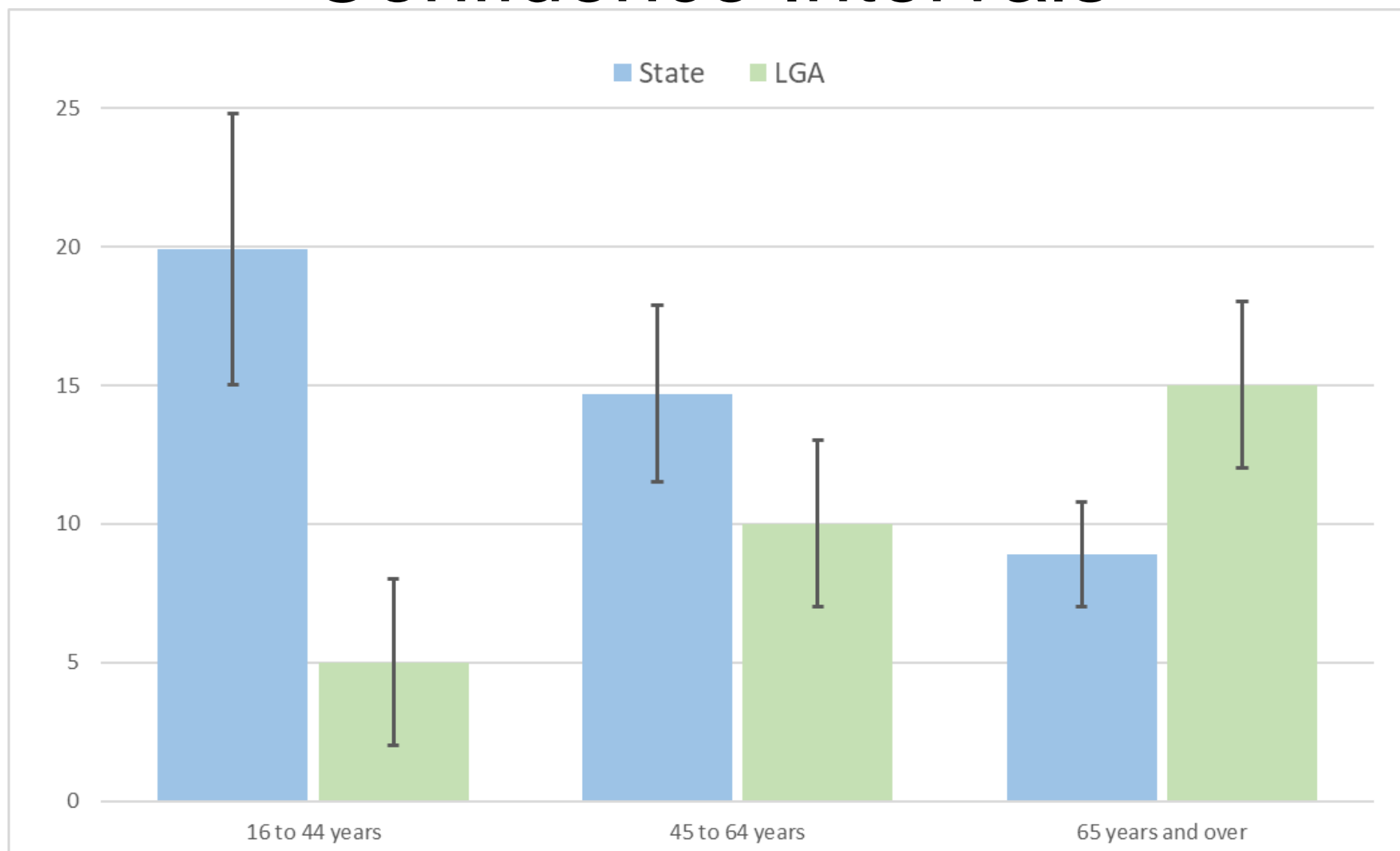
Data

- These data are risk factors from HWSS
- We can also provide data on hospitalisations and deaths to show outcomes
- Survey data has limitations as it is a sample
- Even the administrative data has limitations

A bit about survey data

- HWSS data is taken from the survey, so the numbers presented are estimates
- We weight the data by age, sex and area to make it representative
- For us to provide reliable estimates, we like to have at least 200 people in the sample
- A 95% confidence interval means we are 95 percent confident that the true population value of an estimate is between those two values

Confidence Intervals

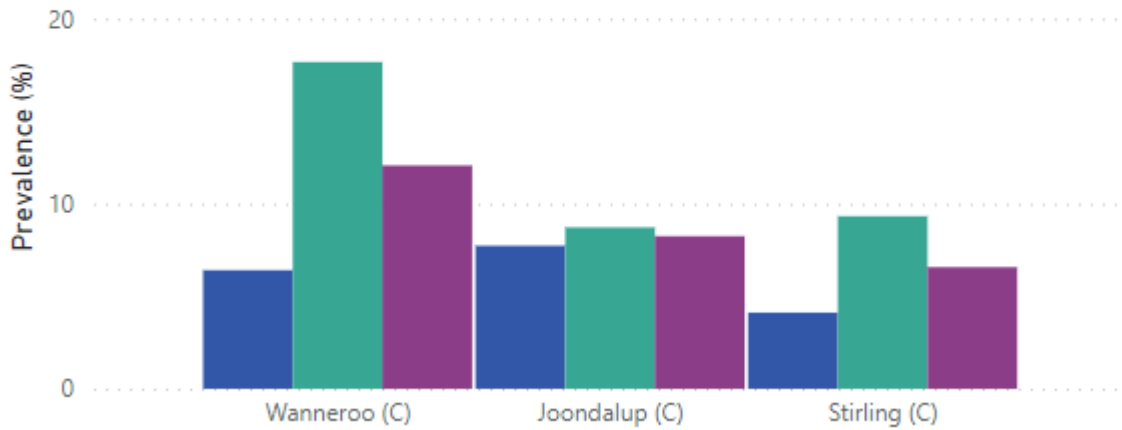


Smoking



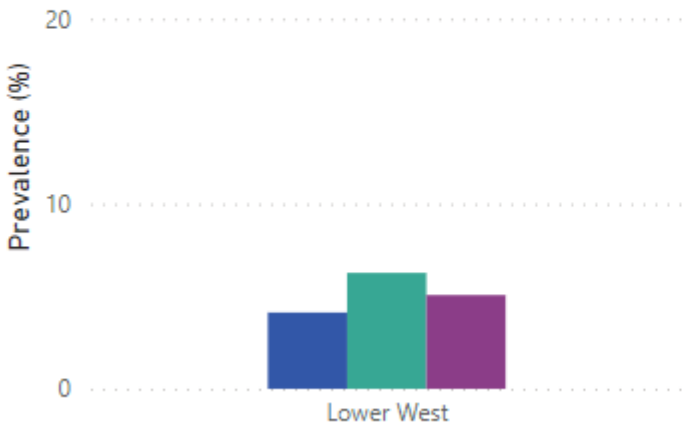
Local Government Area

Sex ● Females ● Males ● Persons



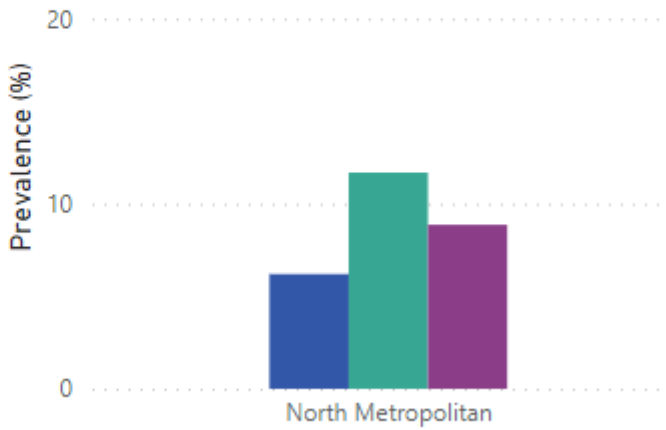
Health District

Sex ● Females ● Males ● Persons



Health Service

Sex ● Females ● Males ● Persons



Measure

Prevalence of adults who currently smoke



Name	%	LCL	UCL	Compare to State
Joondalup (C)				
Females	7.73	3.31	12.15	Similar
Males	8.72	4.44	13.00	Similar
Persons	8.25	5.18	11.32	Similar
Stirling (C)				
Females	4.12	2.16	6.07	Lower
Males	9.33	5.45	13.21	Similar
Persons	6.57	4.46	8.69	Lower
Wanneroo (C)				
Females	6.41	3.56	9.26	Similar
Males	17.66	10.31	25.01	Similar
Persons	12.07	8.03	16.11	Similar

Name	%	LCL	UCL	Compare to State
Lower West				
Females	4.12	0.41	7.84	Similar
Males	6.27	1.40	11.13	Similar
Persons	5.06	2.07	8.05	Lower

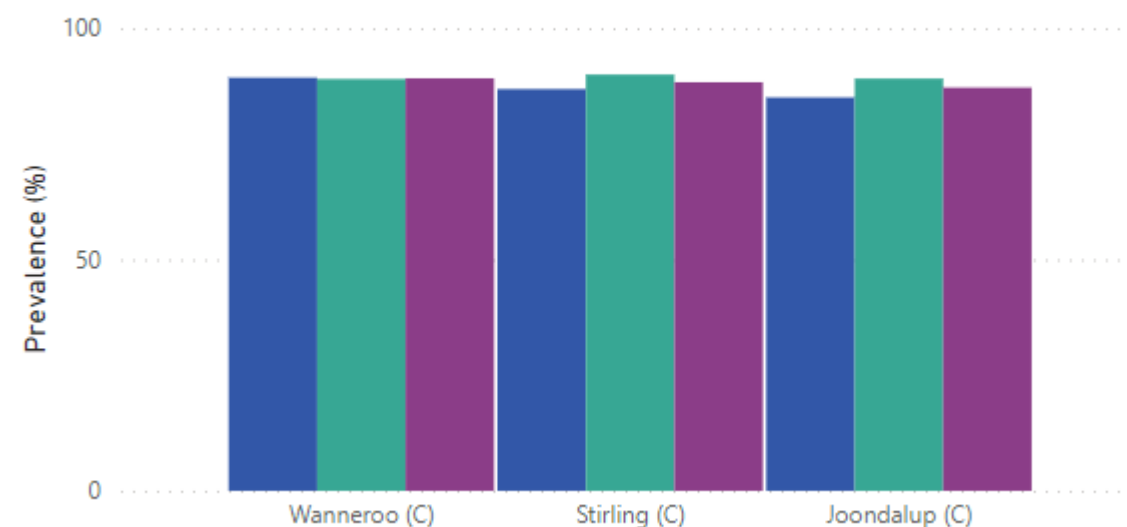
Name	%	LCL	UCL	Compare to State
North Metropolitan				
Females	6.20	4.48	7.92	Similar
Males	11.68	8.78	14.59	Similar
Persons	8.86	7.18	10.54	Similar

Nutrition



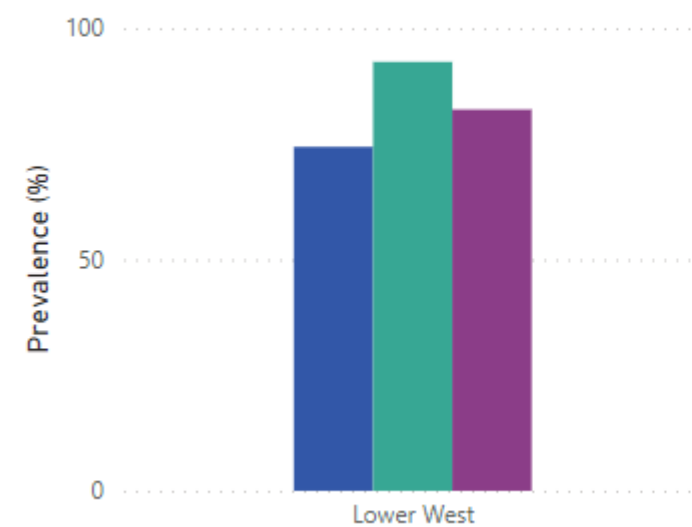
Local Government Area

Sex ● Females ● Males ● Persons



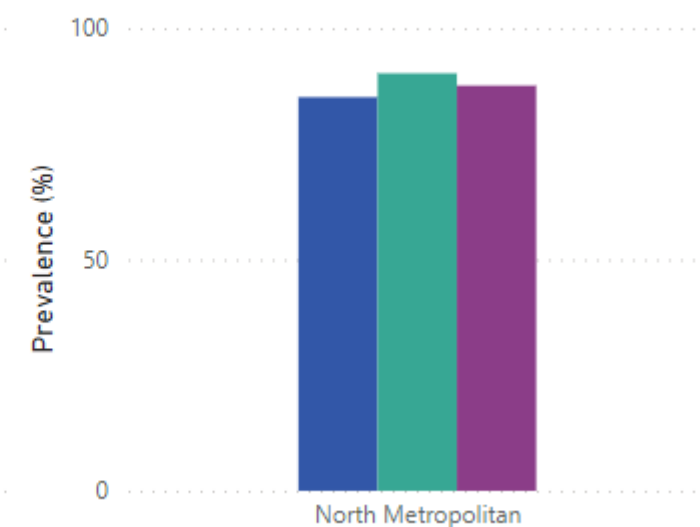
Health District

Sex ● Females ● Males ● Persons



Health Service

Sex ● Females ● Males ● Persons



Measure

Prevalence of adults who eat less than five serves of vegetables daily



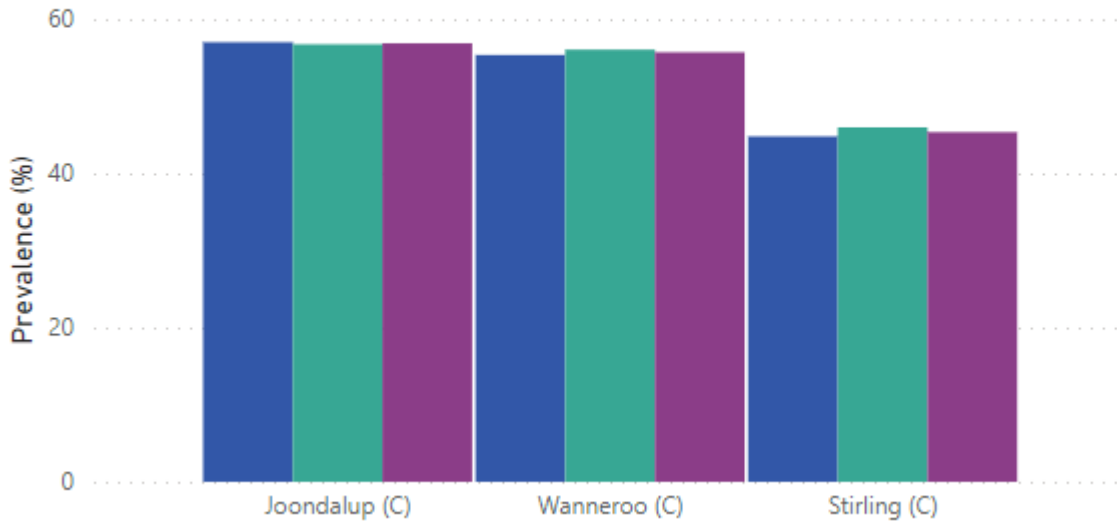
Name	%	LCL	UCL	Compare to State
Joondalup (C)				
Females	85.03	79.92	90.15	Similar
Males	89.11	83.53	94.70	Similar
Persons	87.16	83.36	90.97	Similar
Stirling (C)				
Females	86.85	82.19	91.50	Similar
Males	89.98	85.17	94.78	Similar
Persons	88.32	84.98	91.66	Similar
Wanneroo (C)				
Females	89.31	85.04	93.59	Similar
Males	89.03	83.61	94.45	Similar
Persons	89.17	85.71	92.63	Similar

Name	%	LCL	UCL	Compare to State
Lower West				
Females	74.36	64.59	84.12	Lower
Males	92.73	88.81	96.64	Similar
Persons	82.42	76.25	88.59	Lower

Name	%	LCL	UCL	Compare to State
North Metropolitan				
Females	85.10	82.19	88.01	Similar
Males	90.25	87.65	92.84	Similar
Persons	87.59	85.63	89.56	Similar

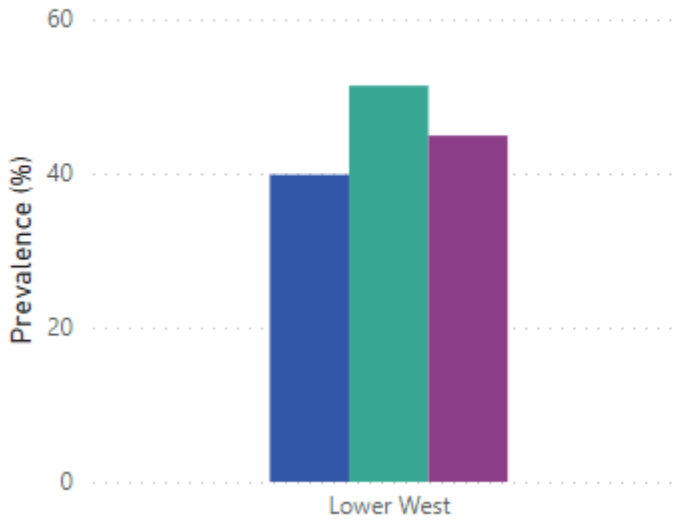
Local Government Area

Sex ● Females ● Males ● Persons



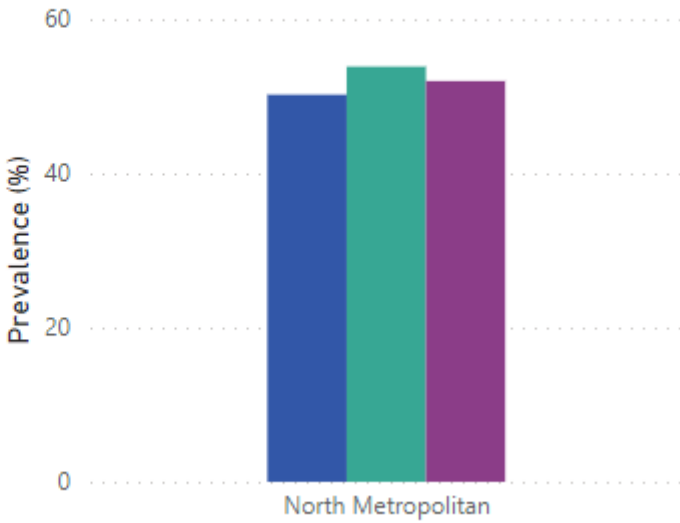
Health District

Sex ● Females ● Males ● Persons



Health Service

Sex ● Females ● Males ● Persons



Measure

Prevalence of adults who eat less than two serves of fruit daily

Name	%	LCL	UCL	Compare to State
Joondalup (C)				
Females	57.01	49.92	64.11	Similar
Males	56.75	48.04	65.46	Similar
Persons	56.88	51.20	62.55	Similar
Stirling (C)				
Females	44.80	37.30	52.31	Similar
Males	45.98	38.15	53.80	Lower
Persons	45.35	39.94	50.77	Lower
Wanneroo (C)				
Females	55.36	47.88	62.84	Similar
Males	56.06	46.27	65.84	Similar
Persons	55.71	49.55	61.87	Similar

Name	%	LCL	UCL	Compare to State
Lower West				
Females	39.83	31.23	48.44	Similar
Males	51.38	42.12	60.64	Similar
Persons	44.90	38.46	51.34	Lower

Name	%	LCL	UCL	Compare to State
North Metropolitan				
Females	50.21	46.34	54.09	Similar
Males	53.86	49.36	58.35	Similar
Persons	51.98	49.03	54.93	Similar

Alcohol

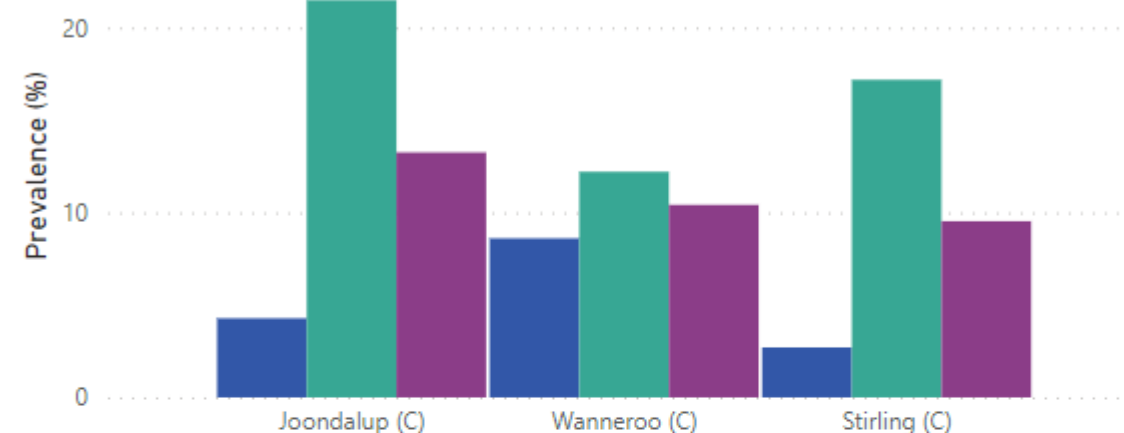


Alcohol Guidelines

- New NHMRC guidelines introduced in [2020](#)
 - No more than 10 standard drinks per week
 - AND
 - No more than 4 standard drinks on any one day
- We are currently reporting on old guidelines (2009)
 - More than 2 standard drinks per day – long-term harm
 - More than 4 standard drinks on any single occasion – short-term harm
- Transitioning to new guidelines as we collect data from the beginning of 2022

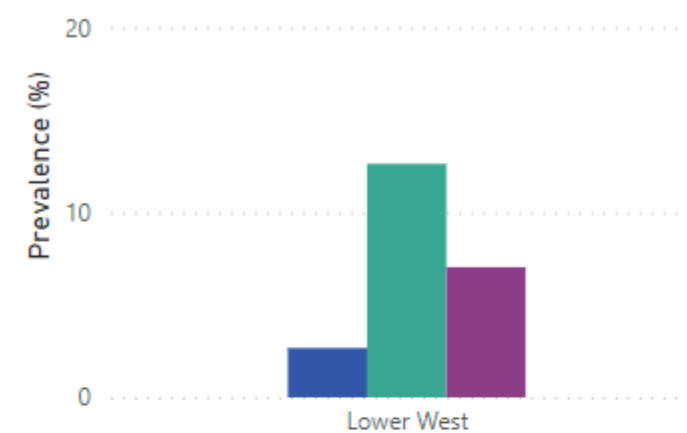
Local Government Area

Sex ● Females ● Males ● Persons



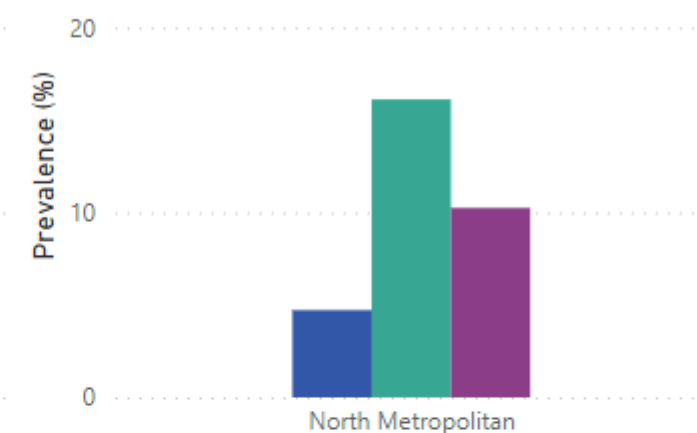
Health District

Sex ● Females ● Males ● Persons



Health Service

Sex ● Females ● Males ● Persons



Measure

Prevalence of adults that drink at levels that increase the risk of short-term harm

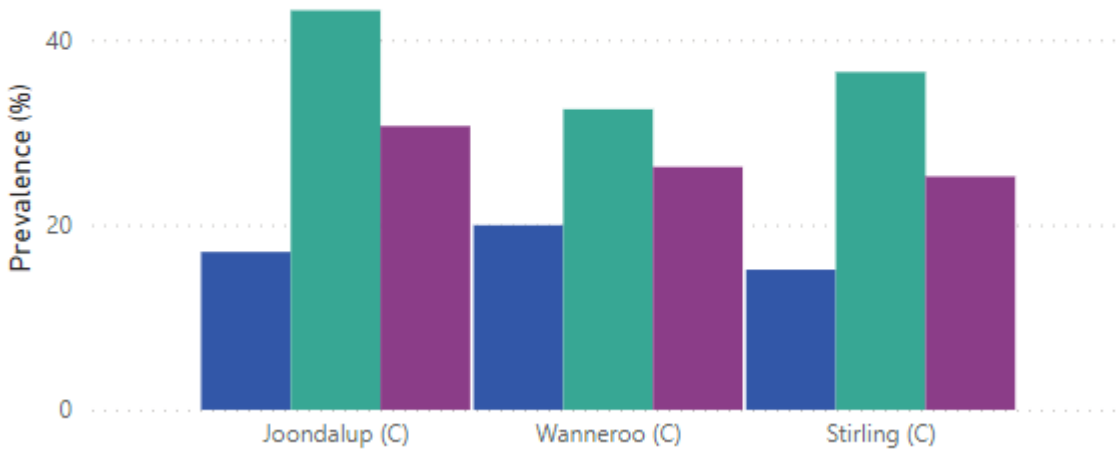
Name	%	LCL	UCL	Compare to State
Joondalup (C)				
Females	4.28	1.03	7.52	Similar
Males	21.50	11.88	31.12	Similar
Persons	13.25	7.63	18.87	Similar
Stirling (C)				
Females	2.70	0.50	4.90	Similar
Males	17.18	9.87	24.49	Similar
Persons	9.53	5.68	13.38	Similar
Wanneroo (C)				
Females	8.60	3.00	14.21	Similar
Males	12.20	6.62	17.79	Similar
Persons	10.41	6.48	14.34	Similar

Name	%	LCL	UCL	Compare to State
Lower West				
Females	2.67	0.30	5.04	Similar
Males	12.63	4.79	20.47	Similar
Persons	7.04	3.20	10.89	Similar

Name	%	LCL	UCL	Compare to State
North Metropolitan				
Females	4.72	2.85	6.59	Similar
Males	16.12	12.16	20.07	Similar
Persons	10.25	8.04	12.46	Similar

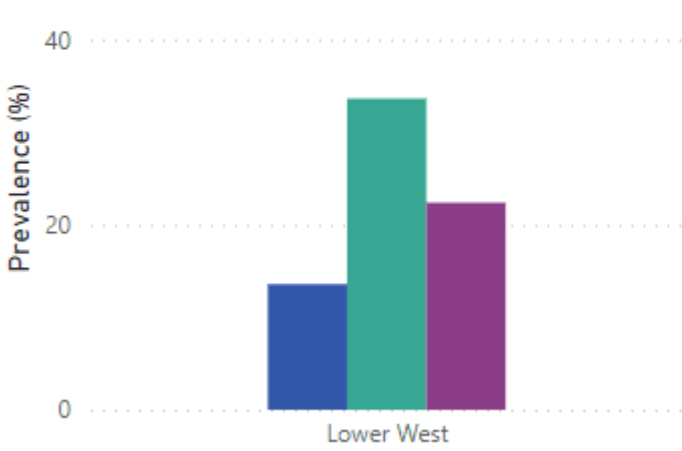
Local Government Area

Sex ● Females ● Males ● Persons



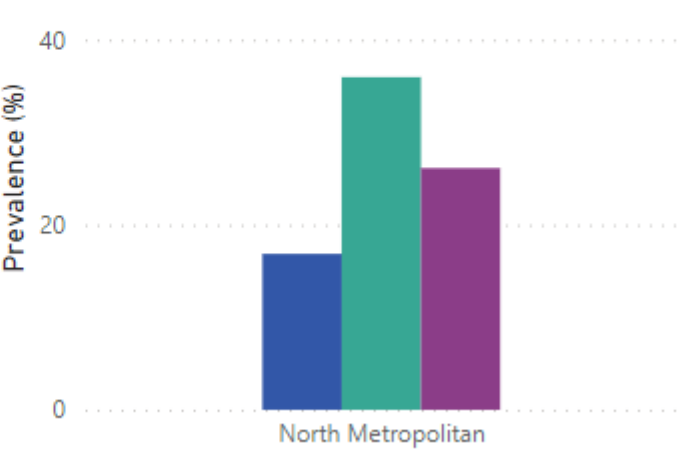
Health District

Sex ● Females ● Males ● Persons



Health Service

Sex ● Females ● Males ● Persons



Measure

Prevalence of adults that drink at levels that increase the risk of long-term harm

Name	%	LCL	UCL	Compare to State
Joondalup (C)				
Females	17.06	10.59	23.53	Similar
Males	43.18	33.94	52.42	Similar
Persons	30.67	24.47	36.86	Similar
Stirling (C)				
Females	15.15	8.16	22.14	Similar
Males	36.50	28.49	44.52	Similar
Persons	25.22	19.84	30.60	Similar
Wanneroo (C)				
Females	19.95	13.10	26.80	Similar
Males	32.49	23.48	41.51	Similar
Persons	26.25	20.59	31.92	Similar

Name	%	LCL	UCL	Compare to State
Lower West				
Females	13.58	6.21	20.94	Similar
Males	33.65	24.75	42.55	Similar
Persons	22.39	16.64	28.14	Similar

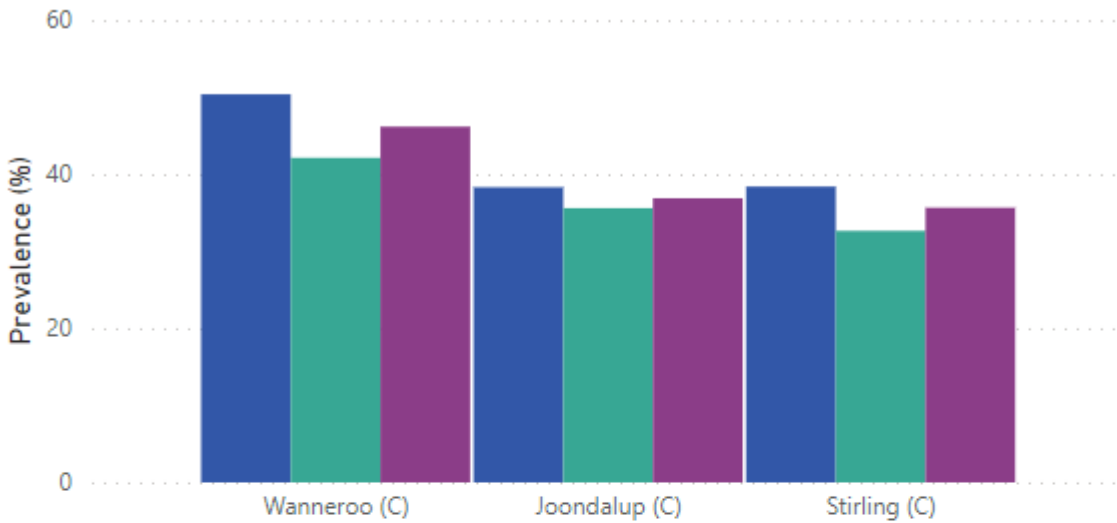
Name	%	LCL	UCL	Compare to State
North Metropolitan				
Females	16.86	13.41	20.30	Similar
Males	35.96	31.44	40.48	Similar
Persons	26.12	23.24	29.01	Similar



Physical Activity

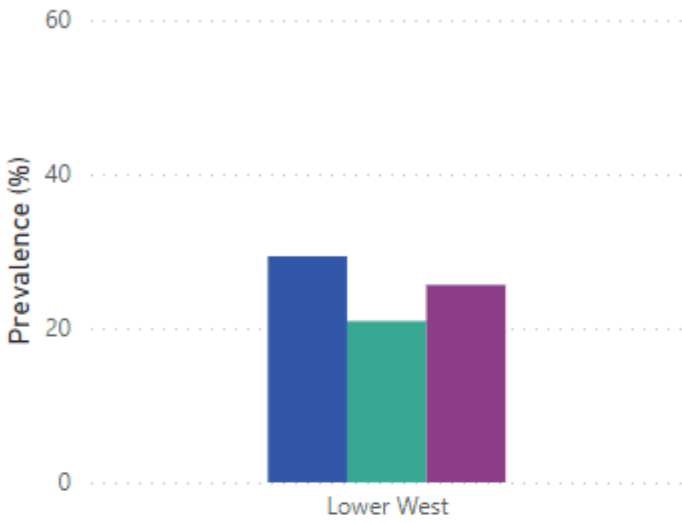
Local Government Area

Sex Females Males Persons



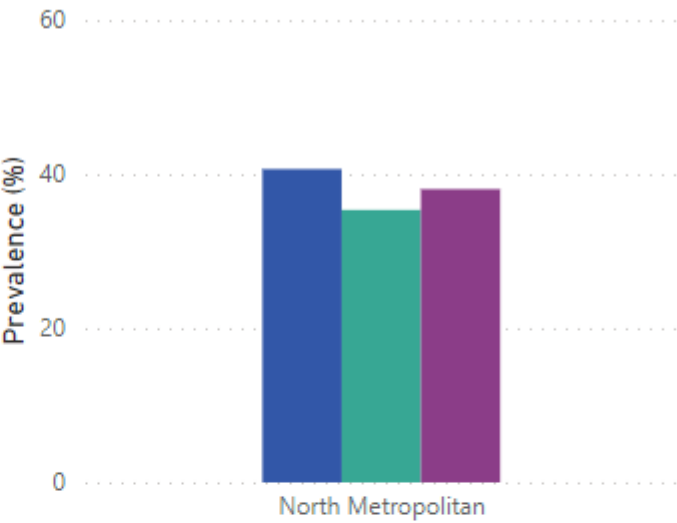
Health District

Sex Females Males Persons



Health Service

Sex Females Males Persons



Measure

Prevalence of adults who complete less than 150 minutes of physical activity per week

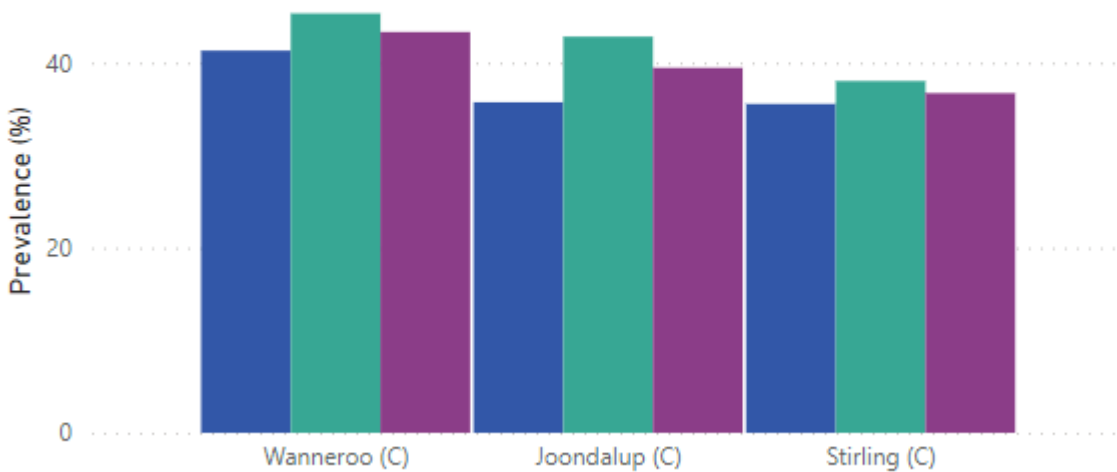
Name	%	LCL	UCL	Compare to State
Joondalup (C)				
Females	38.31	30.98	45.64	Similar
Males	35.60	27.32	43.88	Similar
Persons	36.88	31.29	42.47	Similar
Stirling (C)				
Females	38.39	31.23	45.56	Similar
Males	32.65	25.48	39.82	Similar
Persons	35.66	30.58	40.73	Similar
Wanneroo (C)				
Females	50.37	42.56	58.19	Similar
Males	42.13	32.40	51.85	Similar
Persons	46.17	39.89	52.46	Similar

Name	%	LCL	UCL	Compare to State
Lower West				
Females	29.35	21.14	37.56	Lower
Males	20.93	14.46	27.40	Lower
Persons	25.62	20.17	31.08	Lower

Name	%	LCL	UCL	Compare to State
North Metropolitan				
Females	40.67	36.85	44.49	Similar
Males	35.36	31.06	39.67	Similar
Persons	38.06	35.19	40.94	Similar

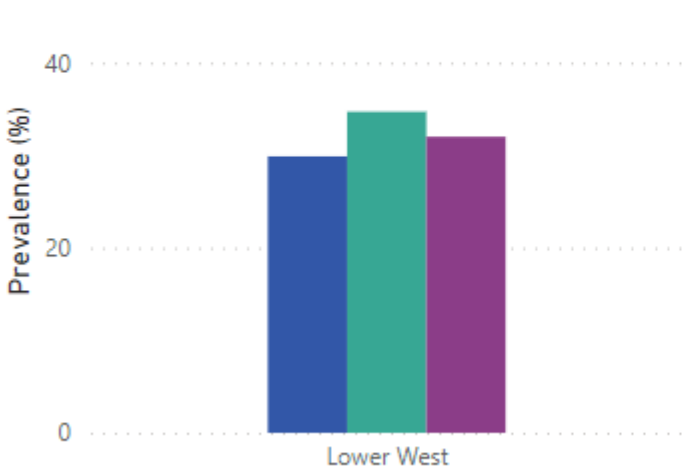
Local Government Area

Sex Females Males Persons



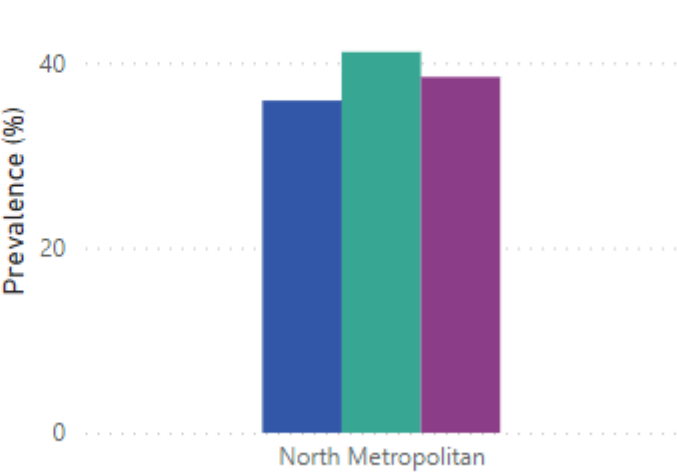
Health District

Sex Females Males Persons



Health Service

Sex Females Males Persons



Measure

Prevalence of adults who spend more than 21 hours in screen-based sedentary leisure time activities

Name	%	LCL	UCL	Compare to State
Joondalup (C)				
Females	35.73	29.04	42.42	Similar
Males	42.82	34.33	51.31	Similar
Persons	39.45	33.98	44.93	Similar
Stirling (C)				
Females	35.55	28.97	42.13	Similar
Males	38.03	30.72	45.33	Similar
Persons	36.71	31.81	41.62	Similar
Wanneroo (C)				
Females	41.31	33.86	48.76	Similar
Males	45.33	35.64	55.02	Similar
Persons	43.32	37.20	49.45	Similar

Name	%	LCL	UCL	Compare to State
Lower West				
Females	29.88	23.36	36.40	Lower
Males	34.71	26.50	42.92	Similar
Persons	32.00	26.81	37.19	Lower

Name	%	LCL	UCL	Compare to State
North Metropolitan				
Females	35.91	32.46	39.36	Similar
Males	41.17	36.81	45.52	Similar
Persons	38.46	35.69	41.23	Similar



Injury

Local Government Area

Sex ● Females ● Males ● Persons

30

Prevalence (%)

20

10

0

Stirling (C)

Joondalup (C)

Wanneroo (C)

Health District

Sex ● Females ● Males ● Persons

30

Prevalence (%)

20

10

0

Lower West

Health Service

Sex ● Females ● Males ● Persons

30

Prevalence (%)

20

10

0

North Metropolitan

Measure

Prevalence of injury in the past 12 months that required treatment from a health professional

Name	%	LCL	UCL	Compare to State
Joondalup (C)				
Females	15.13	10.34	19.92	Similar
Males	23.71	15.51	31.90	Similar
Persons	19.61	14.67	24.55	Similar
Stirling (C)				
Females	22.19	15.05	29.33	Similar
Males	20.92	14.58	27.26	Similar
Persons	21.59	16.77	26.41	Similar
Wanneroo (C)				
Females	14.29	9.82	18.76	Similar
Males	19.50	12.45	26.55	Similar
Persons	16.92	12.72	21.12	Similar

Name	%	LCL	UCL	Compare to State
Lower West				
Females	26.06	17.22	34.90	Similar
Males	17.71	11.04	24.39	Similar
Persons	22.40	16.53	28.26	Similar

Name	%	LCL	UCL	Compare to State
North Metropolitan				
Females	18.72	15.53	21.91	Similar
Males	21.85	18.05	25.64	Similar
Persons	20.24	17.77	22.71	Similar

Thank you

Key contact:

Healthy Population

Assunta Di Francesco

Acting Health Promotion Coordinator

Ph: 08 9380 7711

Email: assunta.difrancesco@health.wa.gov.au