



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

Understanding Public Health Nutrition Through Data

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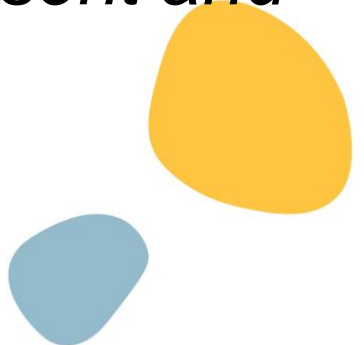


Acknowledgement of Country

The Department of Health acknowledges the Whadjuk people of the Noongar nation as the Traditional Owners of the land we work on.

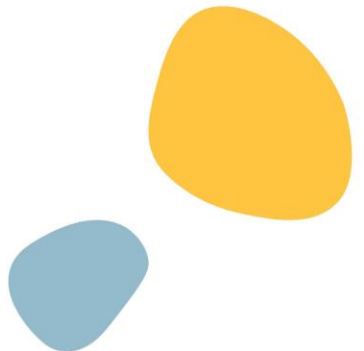
We extend this recognition to the Aboriginal people of the many traditional lands and language groups of Western Australia.

We value the wisdom of Aboriginal Elders both past and present and pay respect to Aboriginal communities of today.



Overview

- Epidemiology Directorate's role
- Outline the data sources we have access to
- Public Health Planning for local governments
- Other work that we are doing

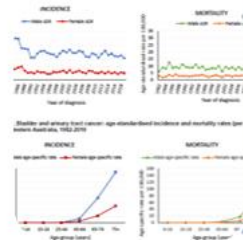


Epidemiology Directorate

Monitor, assess and report on the health of the WA population and identify areas of need.



Guide **policy development**, identify **emerging issues** and inform **service planning**.



Epidemiological analysis, reporting and advice



Spatial analysis and application development



Population health survey data collection and analysis

WA Health Data Collections

Hospital Morbidity

Emergency
Department

Mental Health
Information

Cancer Registry

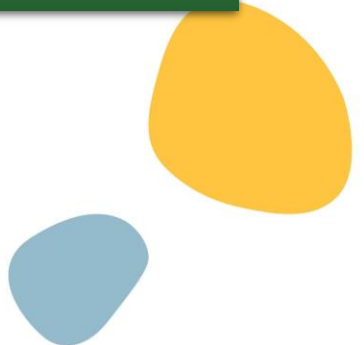
Midwives
Notification System

Notifiable Infectious
Diseases

Mortality
(cause of death)

Health & Wellbeing
Surveillance
System

WA Burden of Disease Study



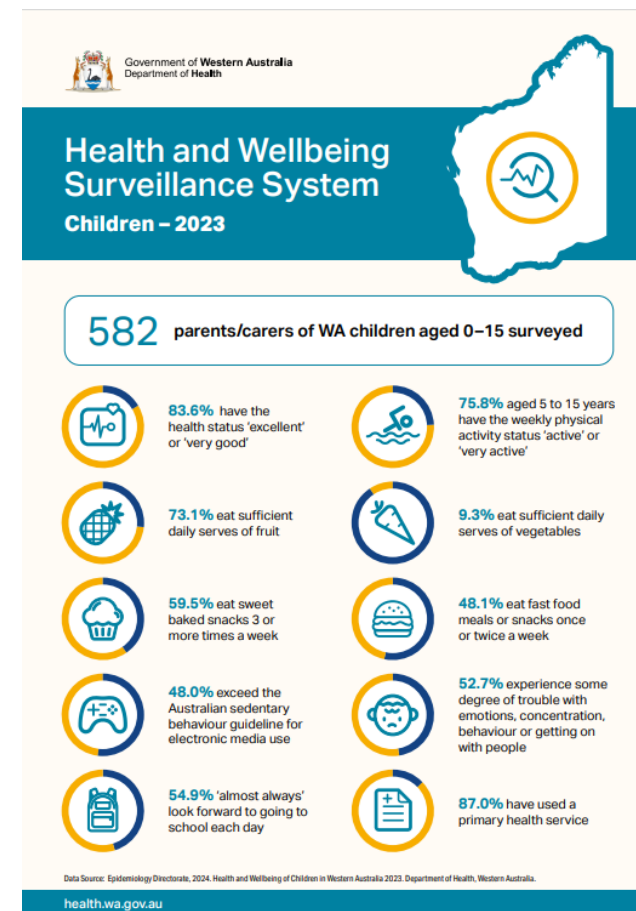
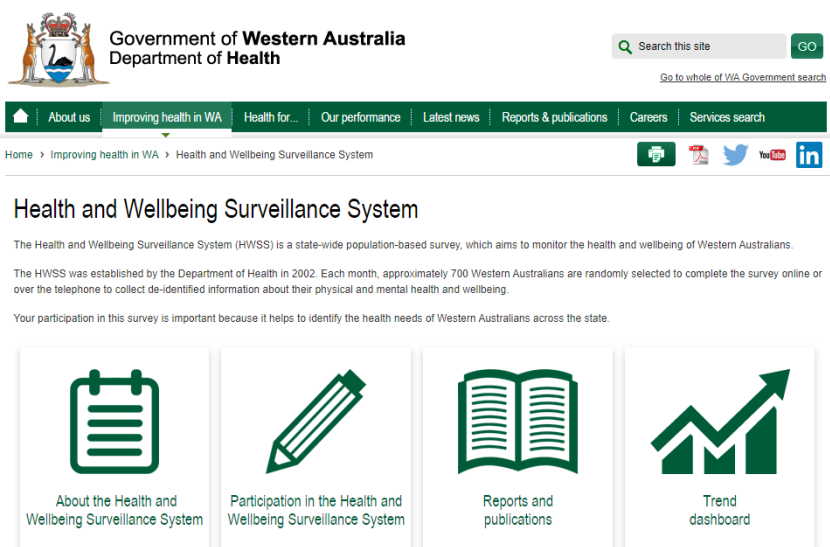
Health & Wellbeing Surveillance System



20+ Years of Data

State-Wide

Comprehensive Indicators



About Survey Data



HWSS data is taken from a survey, so the numbers presented are estimates



We weight the data by age, sex, country of birth, marital status, employment



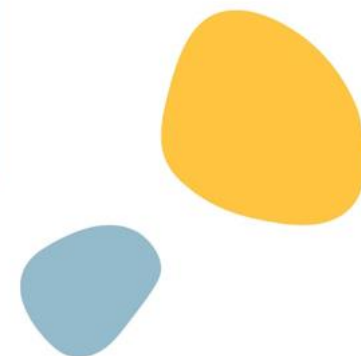
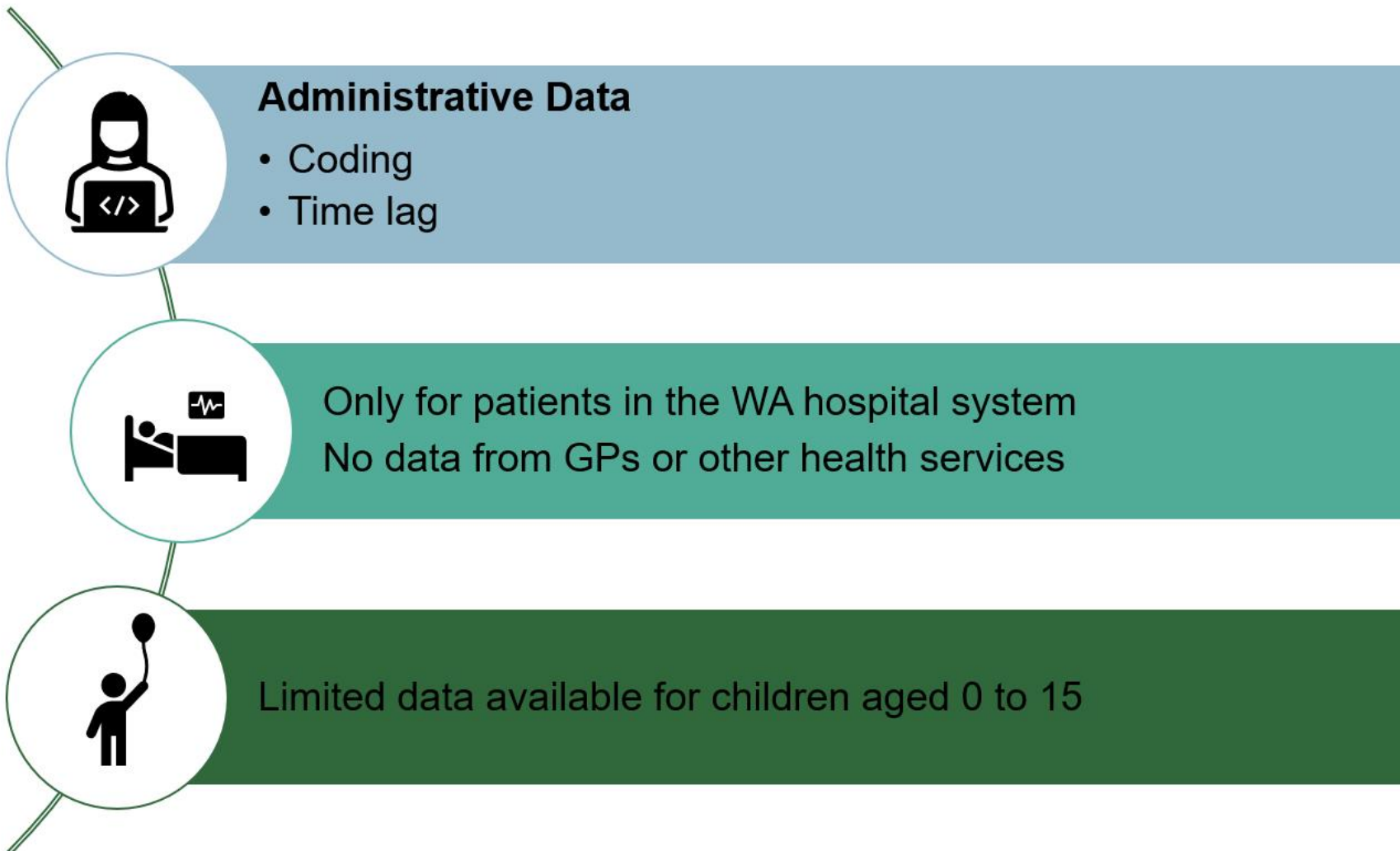
Report data for whole of state and health region annually



Recently published a power BI dashboard which shows data from 2002 onwards



Data Limitations



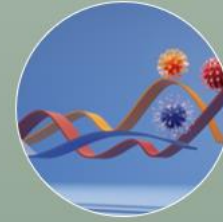
Data for smaller areas



We have previously been able to only prepare data for the larger local government areas



To produce small area estimates for those smaller LGA we are using a Bayesian modelling approach



This allows us to generate smoothed, robust estimates of health indicators for small areas

Data for Health Profiles



Demographic Profile



Tobacco Use and Harm



Nutrition



Illicit Drug-related Harm



Physical Activity



Alcohol-related Harm



Overweight and Obesity



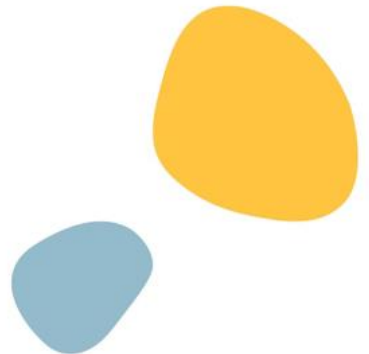
Injury-related Harm



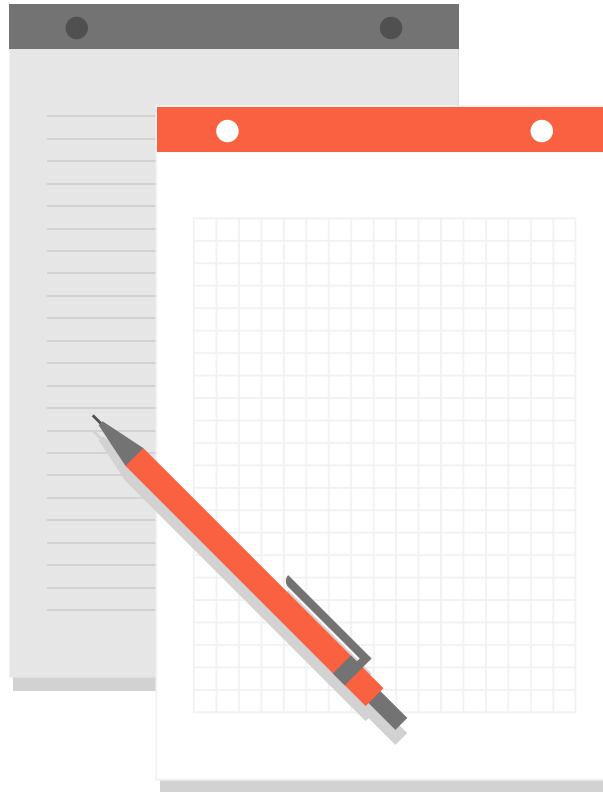
Mental Health



Notifiable Infectious Diseases



Public Health Planning for LGAs



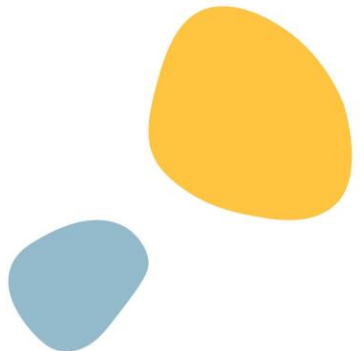
health.wa.gov.au

Under recent changes to the Public Health Act, all local governments are required to a public health plan

We have developed a set of indicators to give a snapshot of the health & wellbeing of people in the LGAs

Prepared profiles for all 137 LGAs in WA

These profiles are available for LGAs on request





Health and Wellbeing Shire of Boyup Brook 2011-2020



October 2024

Epidemiology Directorate, Public Health Division, Department of Health

Introduction

The Shire of Boyup Brook Health Profile 2011-2020 has been developed by the Department of Health, Western Australia (DOH WA), in collaboration with the Shire of Boyup Brook, to inform the development of a local public health plan as required by the Health Act 1911 (2019).

This health profile aims to provide an overview of the health of the Shire of Boyup Brook using the latest available data from the WA Health and Wellbeing Surveillance System (HWSS).

- Population
- Lifestyle-related risk factors (including nutrition, physical activity, tobacco use, alcohol use and injury)
- Alcohol, tobacco and illicit drug-attributable hospitalisations
- Injury-related hospitalisations and deaths
- Mental health conditions
- Notifiable infectious diseases

We'd like to emphasise that the data in this report are my smoothed estimates. Due to rounding, the sum of male and female percentages of the modelling methodology can be found in Epidemiology Directorate (2024b).

Methods

Data sources

WA Health and Wellbeing Surveillance System (HWSS)
The WA Health and Wellbeing Surveillance System (HWSS) is a population-based surveillance system that collects and analyses data on a range of health indicators. The main objectives of the HWSS are to monitor and support planning, implementation and evaluation of public health interventions.

The HWSS is designed to provide information at a population level. Information on a range of health indicators is collected and analysed, and is weighted to represent the age and sex of the population. The data are also adjusted for rural areas of WA. Data can be considered representative of smaller groups such as Aboriginal people and people of different backgrounds. Further details on the design and methods of the HWSS are available in the Epidemiology Directorate (2024b).

WA Hospital Morbidity Data Collection (HMDC)
The WA Hospital Morbidity Data Collection (HMDC) is a population-based surveillance system that collects and analyses data on hospital admissions and discharges. The HMDC provides the WA health system with information for planning and evaluation of health services. HMDC records all inpatient episodes of care from all public hospitals and private day surgeries in WA.

WA Cause of Death Unit Record File (COD URF)
The Cause of Death Unit Record File (COD URF) data is a population-based surveillance system that collects and analyses data on deaths. The COD URF provides the WA health system with information for planning and evaluation of health services. The death must be certified by either a medical practitioner or a coroner. The COD URF provides information on the vital measure of a population's health and provides information on population groups and over time. Examining death patterns, health status, evaluate health strategies, and guide planning.

Nutrition

Diet has an important effect on health and can influence the risk of disease, type 2 diabetes, stroke and some cancers. The Australian Diet recommended daily serves of fruit and vegetables for adults and children are as follows:

In 2020, Shire of Boyup Brook residents had 53.0% of population eating fruit daily, 10.5% eating the recommended five serves of vegetable daily and 8.3% ate fast food at least weekly.

Among males, 49.1% ate two serves of fruit daily, 7.88% ate five serves of vegetable daily and 7.9% ate fast food at least weekly. In comparison, among females 56.8% ate two serves of vegetable daily and 8.3% ate fast food at least once a week.

Figure 2. Prevalence (%) of those who eat recommended serves of fruit and above) and those eat meals from fast food outlets at least weekly (1 year or more) in the Shire of Boyup Brook, 2020

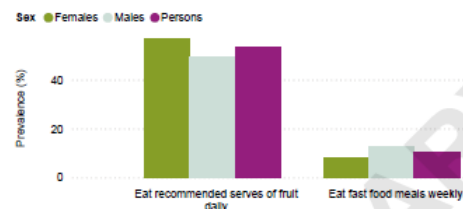


Table 3. Prevalence (%) of those who eat recommended serves of fruit and above) and those eat meals from fast food outlets at least weekly (1 year or more) in the Shire of Boyup Brook, 2020

Category	Prevalence (%)	Estimated number	RSE (%)	WA prevalence (%)
Eat fast food meals weekly				
Females	8.3	74.0	23.7	
Males	7.9	107.0	22.0	
Persons	10.4	181.0	22.6	
Eat recommended serves of fruit daily				
Females	56.8	497.0	4.2	
Males	49.1	414.0	5.0	
Persons	53.0	911.0	4.6	
Eat recommended serves of vegetables daily				
Females	13.1	114.0	14.0	
Males	7.9	66.0	14.8	
Persons	10.5	181.0	14.2	

Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA.

Tobacco smoking

Tobacco use

Tobacco smoking is the leading cause of preventable death and disease in Australia. Tobacco use, including past and current use and exposure to second-hand smoke, increases the risk of a number of health conditions, including cancer, respiratory diseases and cardiovascular disease (AIHW 2018).

Residents of Shire of Boyup Brook had a similar prevalence of current smoking compared to the WA State. In 2020, 12.5% of males aged 18 years and over reported currently smoking compared with 9.5% of females aged 18 years and over.

Figure 8. Prevalence (%) of current smoking by sex, Shire of Boyup Brook, 2020

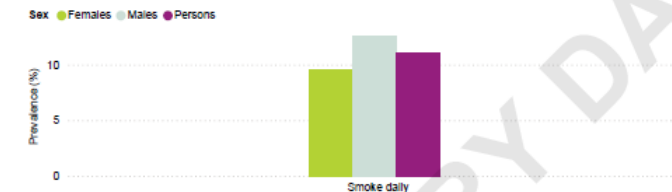
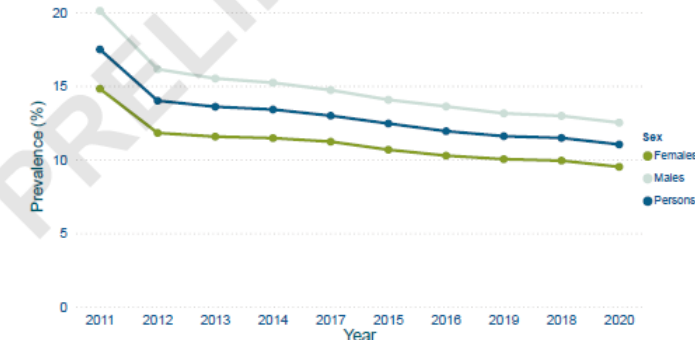


Table 6. Prevalence (%) of current smoking by sex, Shire of Boyup Brook, 2020

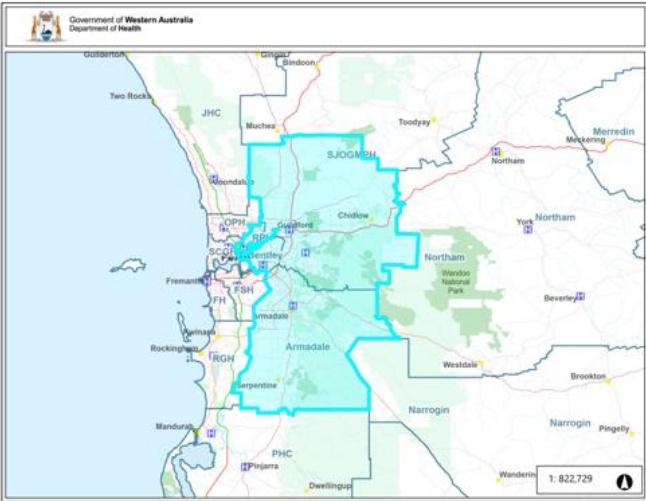
Category	Prevalence (%)	Estimated number	RSE (%)	WA prevalence (%)	Comparison to WA
Smoke daily					
Females	9.5	66.0	18.6	9.7	similar
Males	12.5	88.0	17.7	11.9	similar
Persons	11.0	155.0	18.0	10.7	similar

Figure 9. Prevalence (%) of current smoking, Shire of Boyup Brook, 2011-2020

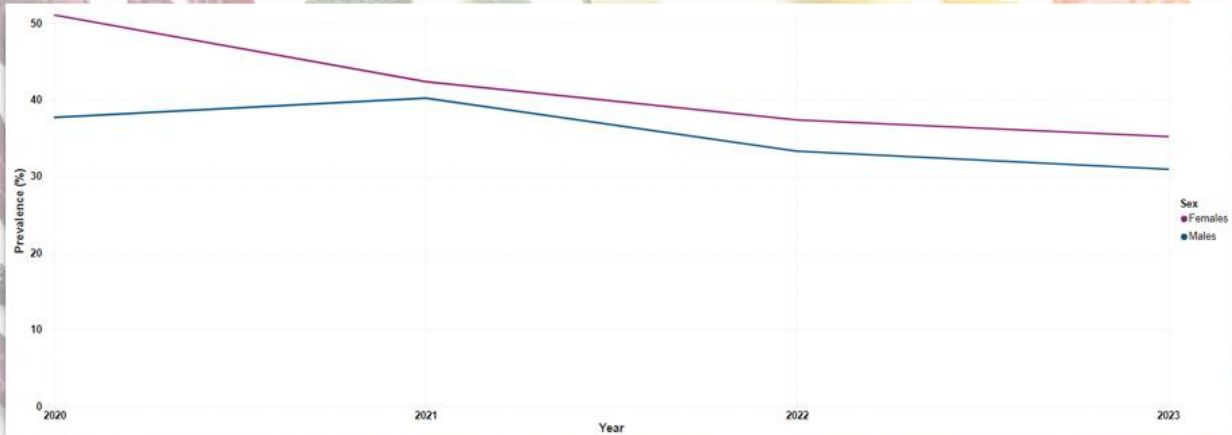


Source: WA Health and Wellbeing Surveillance System, Epidemiology Directorate, DOH WA.

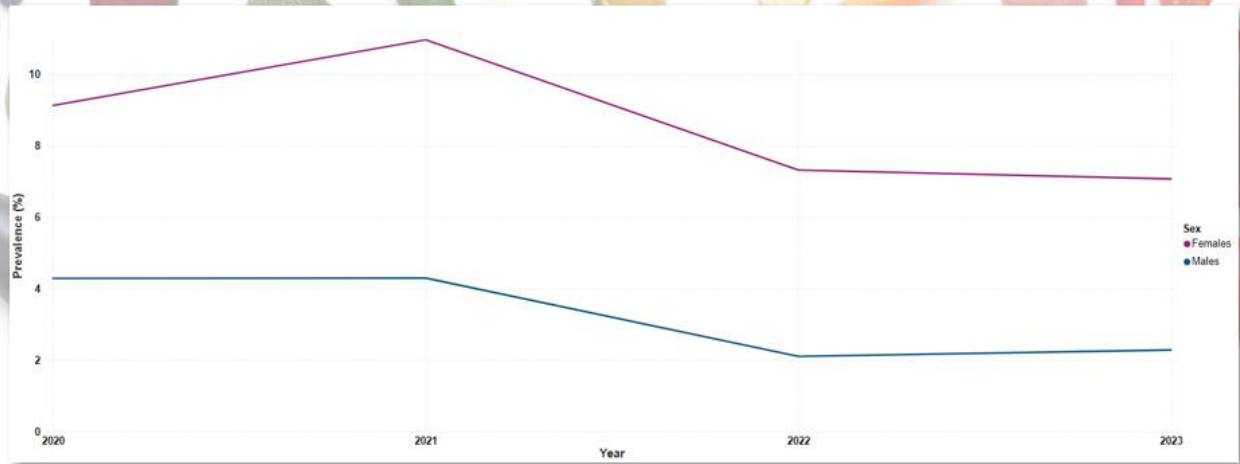
Intake of Fruits and Vegetables – East Metro



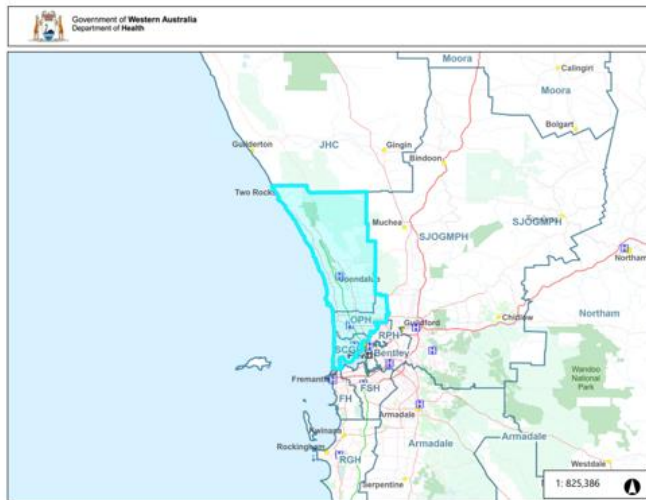
Prevalence of meeting fruit consumption by sex in 2020-23



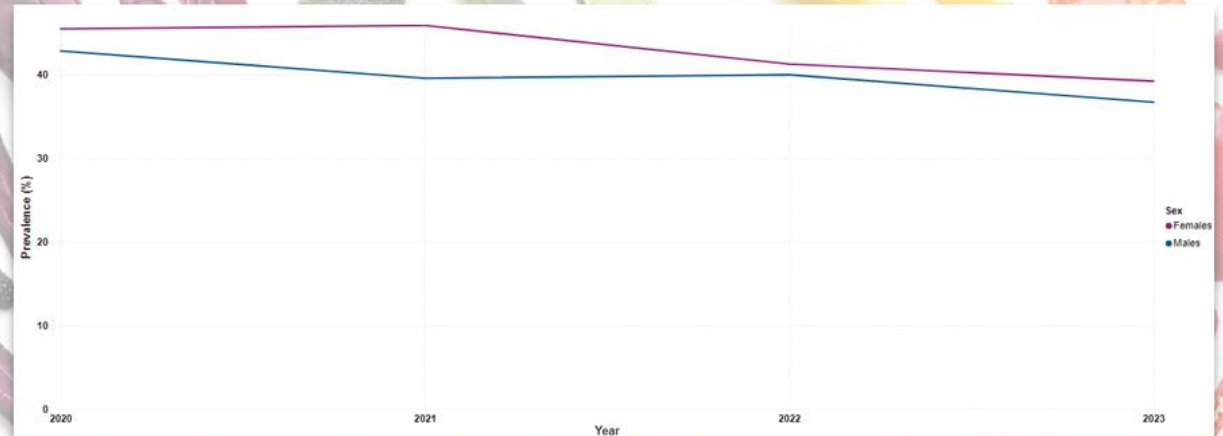
Prevalence of meeting veg consumption by sex in 2020-23



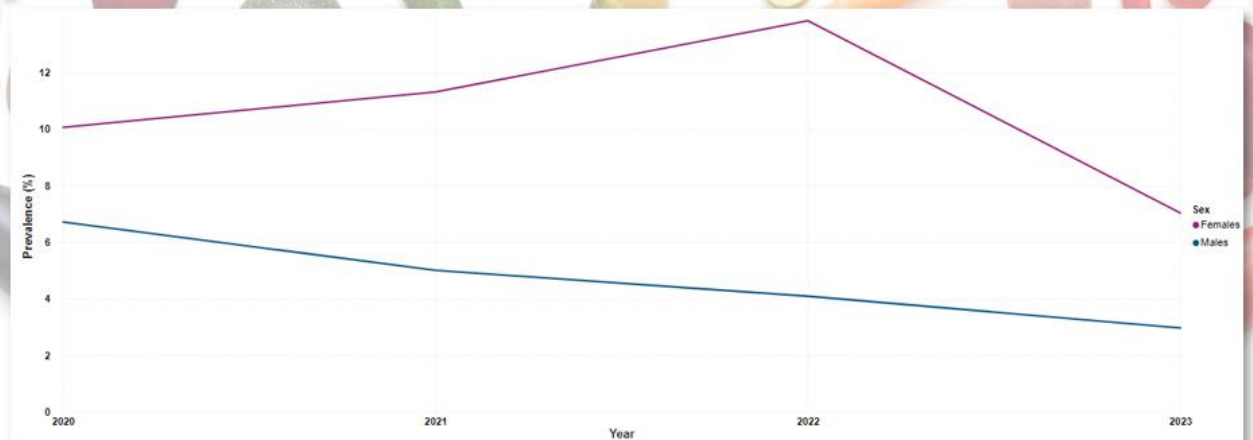
Intake of Fruits and Vegetables – North Metro



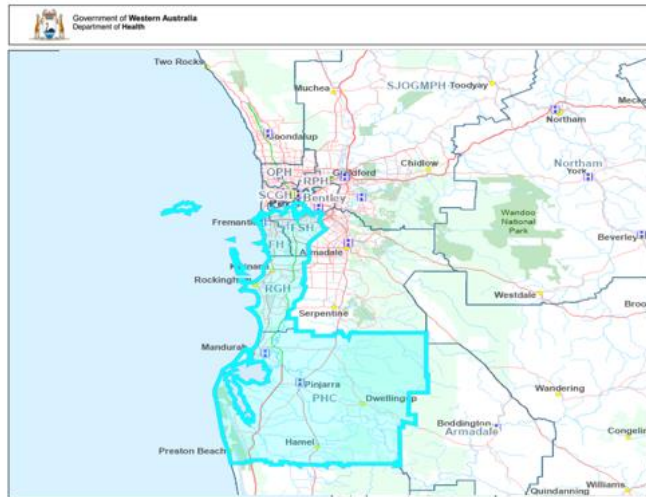
Prevalence of meeting fruit consumption by sex in 2020-23



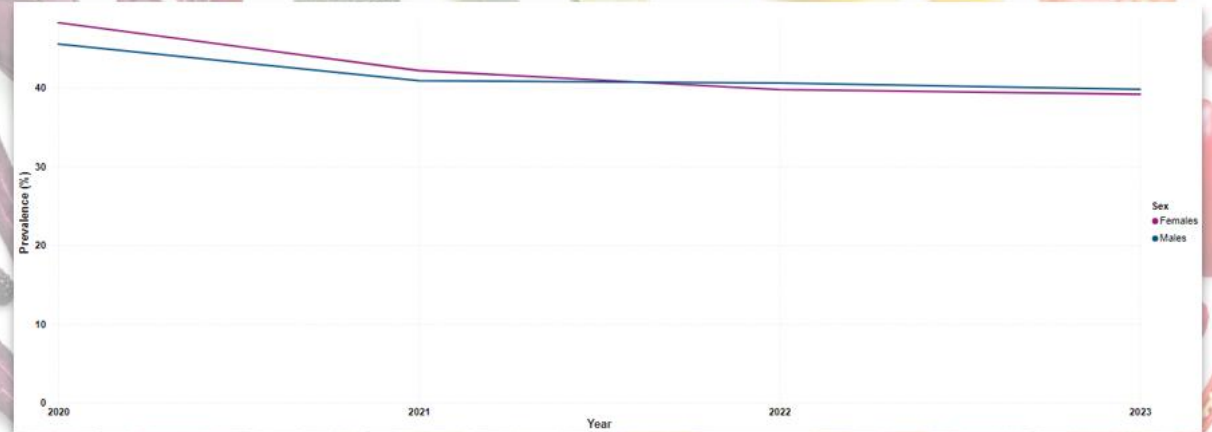
Prevalence of meeting veg consumption by sex in 2020-23



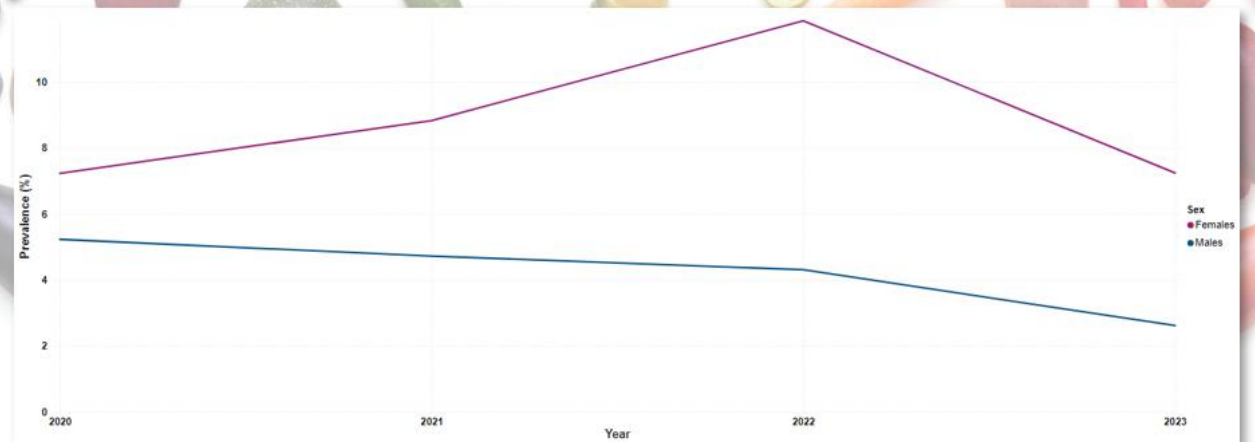
Intake of Fruits and Vegetables – South Metro



Prevalence of meeting fruit consumption by sex in 2020-23



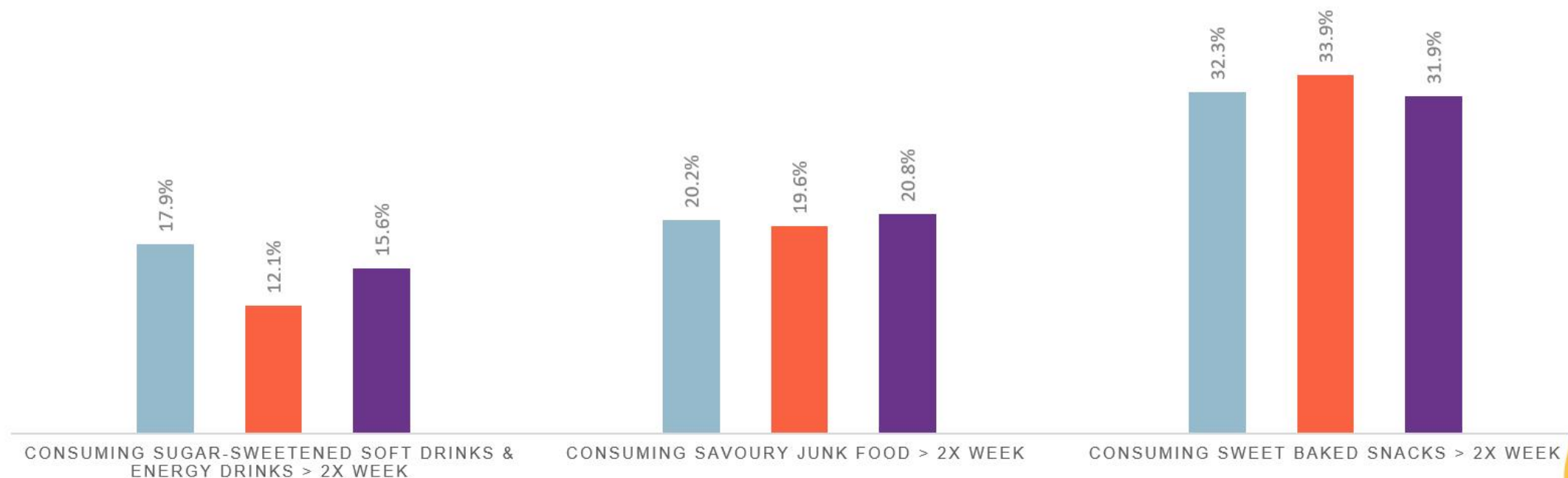
Prevalence of meeting veg consumption by sex in 2020-23



Discretionary Food Intake




DISCRETIONARY FOOD INDICATORS FOR HEALTH REGIONS IN 2023

■ East Metro ■ North Metro ■ South Metro



Food Security

Table 1. Prevalence of food insecurity in adults aged 18 years and over in 2023

Food Security Type		East Metro (%)	North Metro (%)	South Metro (%)
<i>High food security</i>		82.7	87.4	82.6
<i>Marginal food security</i>		6.3	5.7	7.0
<i>Low or very low food security</i>		11.0	6.9	10.4

HWSS Health Indicators

Overweight or Obese



75.9%

**High Blood Pressure
(Lifetime)**



31.0%

**High Blood Cholesterol
(Lifetime)**



37.4%

Percentage of WA Adults who self-reported these conditions in 2023 as part of HWSS

Food Insecurity Indicator

PREVALENCE OF FOOD INSECURITY IN ADULTS IN 2023



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- Requests:
- [Data request form](#)

