CITY OF YaRRA

Health Status Report

The Health Status Report presents a range of information related to the health and wellbeing of Yarra residents. It is a companion document to the next Municipal Health and Wellbeing Plan and informs health planning priorities.

March 2013

City of Yarra, Municipality Map

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Preface

Health status may be measured by factors such as the prevalence of disease, the impact of disability, mortality, mental health and social wellbeing. These measures provide information about the health profile of a given population, including any inequities and suggest possible intervention opportunities.

This Health Status Report (the Report) presents a range of information pertinent to the health status of Yarra residents. The Report was compiled as part of the planning process to develop the Yarra Health Plan 2013-2017, and is a companion document to the Health Plan, informing health planning priorities.

The Report provides an update of the 2009-2013 Health Status Report and was compiled from a variety of data and statistical sources including Australian Bureau of Statistics (ABS) census data, Victorian Department of Health state and municipality level information.

Indicators of Health

Health status encompasses the variety of dimensions that are indicators of the state of health of individuals and populations, including summaries of the impact of disease and injury as well as social-determinants of health.

The World Health Organisation (WHO) describes the social determinants of health as being the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness.[1]

The social determinants of health can arise from the environment, the socio-economic living conditions, or behavioural or bio-medical circumstances that impact upon individual and population health.

Public Health

Local government is often thought of as the tier of government closest to the people. It provides a range of frontline services that underpin the management of our cities, contributes to the wellbeing of our communities through the provision of infrastructure and services, and undertakes important regulatory roles.[2]

Local government has a long history of having improved local environments through public health initiatives. The services that local Councils provide promote good public health. In the past 100 years, public health interventions have been responsible for achieving some of the most significant population health gains, such as improved water quality to prevent water-borne disease, water fluoridation to improve oral health, and immunisation to protect against infectious disease.[3] Councils determine service provision according to local needs and the requirements of state local government legislation.

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[1] Social Determinants of Health, WHO. Available at: http://www.who.int/social_determinants/en/

[2] Beer, A. & Prance, F. (2012). The Role of Local Government in Addressing Homelessness, University of Adelaide, Centre for Housing, Urban and Regional Planning.

[3] Local Government National Report, 2008-09, Australian Government Department of Regional Australia, Local Government, Arts and Sport

http://www.regional.gov.au/local/publications/reports/2008_2009/LGNR_2008-09.pdf

Health and Local Government Services

Health related services provided by local governments include:

- Community Services, including maternal and child health, child care, youth services, aged care and accommodation, refuge facilities, meals on wheels, counselling and welfare,
- Engineering Services, including public works design, construction and maintenance of roads, bridges, footpaths, drainage, cleaning, waste collection and management,
- Public Health Services, including water and food sampling, immunisation, toilets, noise control, meat inspection and animal control, and
- Recreation Facilities, including golf courses, swimming pools, sports courts, recreation centres and halls.

Health Status Indicators

Measuring the overall health of the local population involves the following indicators of health status:

- Wellbeing, including measures of physical, mental and social wellbeing;
- Health conditions, including measures of disease prevalence, disorder, injury or trauma or other health-related state,
- Human function, including indicators that measure alterations to body, structure or function (impairment), activity limitations and restrictions in participation, and
- Deaths, including indicators measuring mortality rates and life expectancy measures.

Health Determinant Indicators

The determinants of health can be organised under another series of indicators, these are:

- Health behaviours, including attitudes, beliefs, knowledge and behaviours such as patterns of eating, physical activity, smoking and alcohol consumption,
- Bio-medical factors, incorporating genetic-related susceptibility to disease and other factors such as blood pressure, cholesterol levels and body weight,
- Community and socio-economic factors including indicators such as social inclusion, support services and socio-economic factors such as housing, education, employment and income, and
- Environmental factors, including physical, chemical and biological factors, such as air, water, food and soil quality.

Structure of this Report

The information in this report is presented in sections as follows:

- Contextual Information
- Guiding Principles
- Yarra Social Characteristics
- Yarra Health Characteristics
- Yarra Services
  - characteristics for each service age group:
    - Children
    - Young People
    - Adults
    - Seniors

Context

Public health and wellbeing sits within the legislative and regulatory framework of the *Victorian Health and Wellbeing Act, 2008* (the Act).

Legislative and Policy Role of the State

In defining the role of the State, the Act recognises the social model of health and the social gradient in its objectives. S.4(1) of the Act explicitly recognises that health is not merely the absence of disease or infirmity and that intervention is necessary to reduce inequities[4].

Section *4 (1)*: The Parliament recognises that-

- the State has a significant role in promoting and protecting the public health and wellbeing of persons in Victoria;
- public health and wellbeing includes the absence of disease, illness, injury, disability or premature death and the collective state of public health and wellbeing; and
- public health interventions are one of the ways in which the public health and wellbeing can be improved and inequalities reduced.

Legislative and Policy Role of Council

The overriding function of Council under S.24 of the Act, is to seek to 'protect, improve and promote public health and wellbeing within the municipal district' by-

- creating an environment which supports the health of members of the local community and strengthens the capacity of the community and individuals to achieve better health;
- initiating, supporting and managing public health planning processes at the local government level;
- developing and implementing public health policies and programs within the municipal district;
- co-ordinating and providing immunisation services to children living or being educated within the municipal district; and
- ensuring that the municipal district is maintained in a clean and sanitary condition.

Further, S.26 directs Council to prepare a municipal public health and wellbeing plan (Health Plan) within the 12 months of the election of the new Council. The Health Plan must include the following:

- an examination of the data about health status and health determinants in the municipality,
- identification of goals and strategies based on available evidence, and
- provision for local community involvement in its processes.

Climate Change

Council is also required to include adaptation strategies that address the health impacts of climate change in accordance with the *Victorian Climate Change Act, 2010,* S.14, which forms part of the legislative framework within which both state and local government public health functions are required to operate.

[4] The medical model of health is an approach to pathology (ill health) that aims to find medical treatments for disease. The social model of health recognises that health is more than the absence of disease and encompasses the social and environmental impacts to health and wellbeing.

The many consequences of climate change that affect the natural environment have a resulting impact on health. The range of direct and indirect climate change impacts affect Victorian communities through severe weather events such as flooding, heatwaves, increased frequency and intensity of storms, as well as greater air pollution and higher urban temperatures, which pose the greatest threats.

These climatic changes also have the potential to impact health, disproportionally affecting the most vulnerable groups in the community such as the elderly and infirm, babies and infants, and people with existing health conditions. The direct effects of higher summer temperatures and heatwaves, increase the risk of respiratory problems, affect water quality, and produce higher levels of food and water borne disease.

Health Status Reporting

The health status information provided in this Report is used to inform development of the Health Plan and is an accompanying document to the Yarra Health Plan.

Reporting on health status provides a summary of:

- the impacts of disease and injury in Yarra and gives an overall indication of population health in the municipality; and
- identifies and presents data analysis of information pertinent to the health status of Yarra residents, based on the social, economic and environmental determinants of health.

Measuring Relative Disadvantage

The City of Yarra is home to a high proportion of residents living with socio-economic disadvantage, in what is otherwise a relatively affluent municipality. Council has acknowledged that Yarra has a pattern of health inequity in which people's health is profoundly affected by social inequality and is committed to increasing access to opportunities for all residents to improve their health and wellbeing[5].

Conceptualising levels of socio-economic disadvantage involves consideration of individual and community factors, such as:

- an individual's ability to participate fully in society, and
- the level of disadvantage relative to the wider community.[6]

To measure disadvantage the ABS uses a series of indices which, taken together, are known as the Socio-Economic Indexes for Areas (SEIFA).[7] The indices rank areas in Australia according to relative socio-economic advantage and disadvantage, based on information derived from Census data. SEIFA provides contextual information about the average level of socio-economic advantage and disadvantage of a given geographical area.

> *High levels of advantage are indicated by a high SEIFA score, and high levels of disadvantage are indicated by a low SEIFA score*.
>
> *ABS, SEIFA Indexes*

The City of Yarra scored 1019.5 on the 2006 SEIFA index, indicating a level of advantage higher than the national average of 1005.2. Each suburb has its own

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[5] *See Tackling disadvantage to improve health outcomes,* 3 Sep 2009. Available at: http://www.yarracity.vic.gov.au/News/News/media-releases-2009/tackling-disadvantage-to-improve-health-outcomes-/

[6] Townsend, P. (1979) Poverty in the United Kingdom, A Survey of Household Resources and Standards of Living, London

[7] SEIFA 2011 consisted of four indexes (initial analysis available Mar/Apr 2013)

rating and the suburbs where there are high levels of public housing tend to have a lower rating indicating the higher levels of disadvantage in those suburbs.

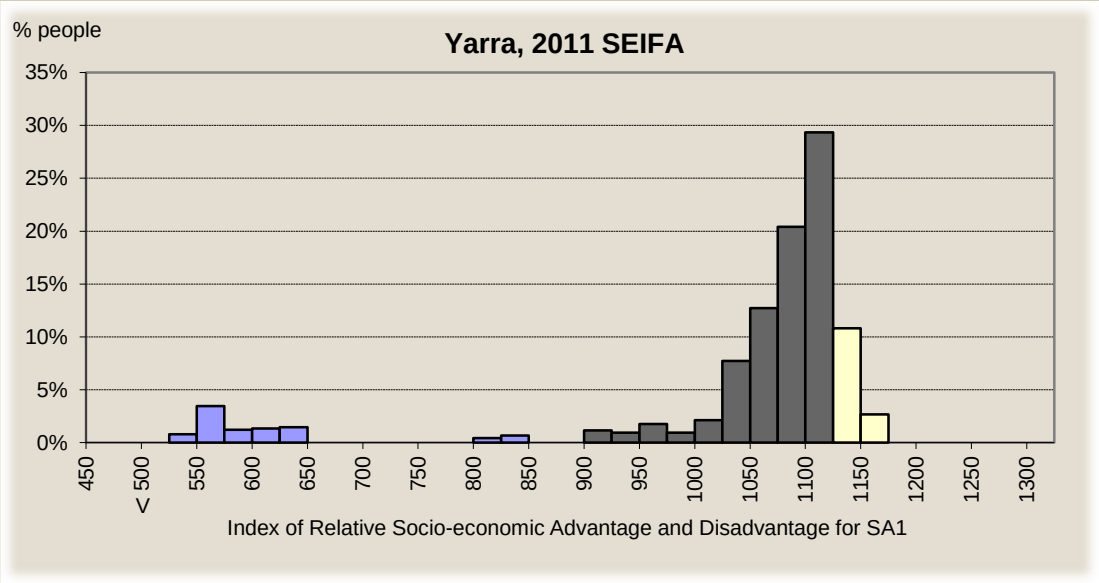
For example Richmond South had a high level of advantage and rated 1093.4 on the 2006 SEIFA Index. Collingwood however, where almost a quarter (24.1%) of residents rent social housing, rated 886.1 on the 2006 SEIFA Index reflecting the higher level of disadvantage in that suburb.

Socio-Economic Indexes for Areas (SEIFA) Ratings, Yarra Suburbs

City of Yarra profile and benchmark areas

Area	2006 Index	2011 Index
Collingwood	886.1	894.4
North Richmond	910.8	955.1
Fitzroy	960.0	948.8
Australia	1005.2	tbc
Victoria	1012.2	tbc
City of Yarra	1019.5	1019.1
Greater Melbourne	1022.9	tbc
Abbotsford	1039.5	1054.0
Fitzroy North	1049.3	1052.5
Carlton North - Princes Hill	1075.3	1081.5
Central Richmond	1084.1	1103.0
Clifton Hill	1084.8	1080.5
Fairfield – Alphington	1089.7	1088.5
Richmond South	1093.4	1115.2

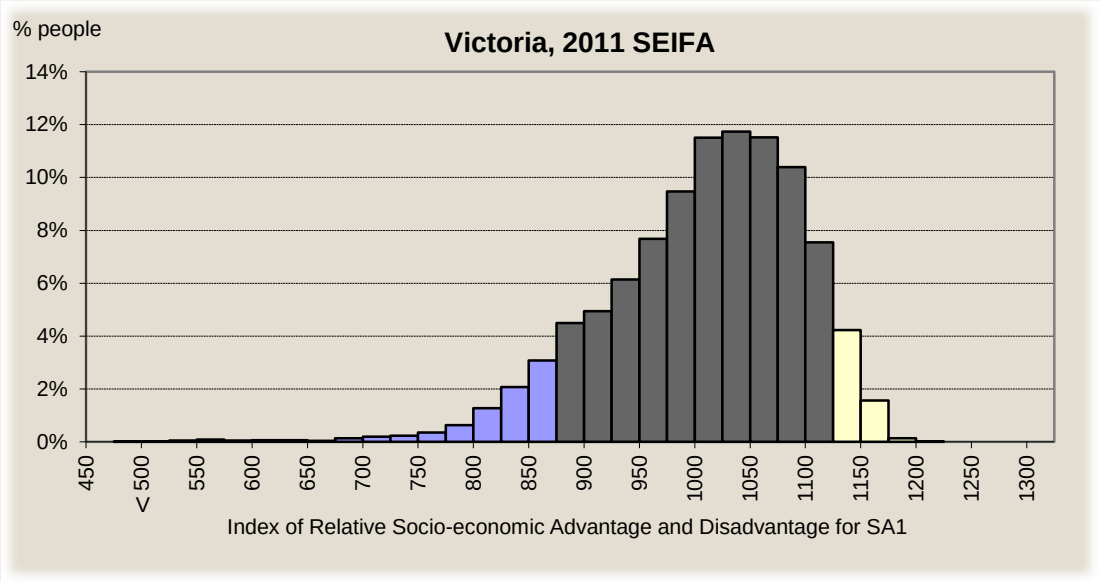
For the purpose of SEIFA, the ABS defines relative socio-economic advantage and disadvantage broadly in terms of *people's access to material and social resources, and their ability to participate in society.*



The chart above demonstrates the dispersal of advantage and disadvantage across the municipality, from the most disadvantaged (SEIFA 550-650), to the most advantaged (SEIFA 1050-1150).

Although the chart shows that the majority of residents are within the upper ratings, demonstrating high levels of advantage, it is concerning that there are many residents congregated at the level of greatest disadvantage. This demonstrates that, in comparison the Victoria state average, the level of disadvantaged residents in Yarra is greater.

The distribution for Victoria overall (below) is skewed more towards high levels of advantage with few in the lower rating levels. Comparing the two charts shows the high level of disadvantage that many residents of Yarra live with.



Measuring disadvantage becomes important for the health status of Yarra where extreme disadvantage sits alongside affluence and results in a social gradient. This includes vulnerable populations such as humanitarian refugees who may initially be housed in social housing within Yarra.

The Yarra Health Plan is sensitive to the needs of these vulnerable populations, appreciating that these groups may require extra reach, whilst at the same time seeking to improve the health status for all Yarra residents.

Glossary

ABS	Australian Bureau of Statistics (Commonwealth)
ACSC	Ambulatory Care Sensitive Conditions
AIHW	Australian Institute of Health and Welfare (Commonwealth)
AIST	Australian institute of Superannuation Trustees
AM	Avoidable Mortality
ASFR	Age Specific Fertility Rates
ATSI	Aboriginal and Torres Strait Islander
BMI	Body Mass Index
CIV	Community Indicators Victoria
COPD	Chronic Obstructive Pulmonary Disease
CVDs	Cardiovascular Diseases
DEECD	Department of Education and Early Childhood Development (Victoria)
DHS	Department of Human Services (Victoria)
DH	Department of Health (Victoria)
EGM	Electronic Gaming Machine (Pokies)
GP	General Practitioner
HACC	Home and Community Care Services
HILDA	Household, Income and Labour Dynamics in Australia Survey
IHD	Ischaemic Heart Disease
INMML	Inner North Melbourne Medicare Local
LEAP	Law Enforcement Assistance Program, Corporate Statistics Database Victoria Police
LGA	Local Government Authority[8]
MPHP	Municipal Public Health Plan
NCD	Non-communicable Disease
NGO	Non-Government Organisation
NHMRC	National Health and Medical Research Council
NRCH	North Richmond Community Health Limited
NMR	Northern Metropolitan Region
NWMR	North and West Metropolitan Region (Victoria, Department of Health)
NYCH	North Yarra Community Health
PCP	Primary Care Partnership
PHIDU	Public Health Information Development Unit, University of Adelaide
PTSD	Post Traumatic Stress Disorder

[8] In Victoria, there are 79 councils, representing around 5 million people. Local government is considered as the tier of government closest to the people.

SD	Statistical District
SEIFA	Socio-Economic Indexes for Areas
TFR	Total Fertility Rate
VCGLR	Victorian Commission for Gambling and Liquor Regulation
WHO	World Health Organisation

1. Executive Summary

1.1. The Social Determinants of Health

The World Health Organisation (WHO) describes the social determinants of health as the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness.[9] These circumstances are in turn shaped by the wider forces of economics, social policies, and politics. Social determinants of health recognise that the conditions in which we live, work, learn and play all heavily influence the health we can achieve.

Health inequities arise out of these social determinants and are avoidable inequalities in health between groups of people within countries and between countries. Such inequities arise from inequalities within societies. The social and economic conditions in which people find themselves affect their lives and determine the risk of illness, as well as the actions taken to prevent them becoming ill or treat illness when it occurs.

Determinants of health are factors that can have a positive and negative impact on health.

- *Negative determinants are risk factors.*
- *Positive determinants are protective factors*

WHO, 2005

Consideration of the social determinants of health enables Council to contemplate actions that would seek to address some of the avoidable inequalities in health between population groups in Yarra. For example by promoting healthy eating through the weekly Gleadell Street, Richmond fresh food market Council facilitates access to affordable nutritious fresh fruit and vegetables.[10]

1.2. National Health Priorities

The Australian Institute of Health and Welfare (AIHW) identified the need to tackle the burden of chronic disease currently caused by obesity, tobacco, and excessive consumption of alcohol.

Preventative measures are considered the most crucial means of reducing this burden and the following three priority areas for action were identified by the Commonwealth:

- reducing the growing epidemic of overweight and obese Australians,
- accelerating the decline in smoking, and
- addressing the health and social harms resulting from risky drinking.[11]

The Commonwealth recognised the need to make healthier choices easier choices, helping to reduce barriers and aid healthier choices. The aims of the Commonwealth strategy are to implement actions that help people maintain or achieve a healthy weight, prevent smoking and exposure to tobacco smoke, and limit intake of alcohol to safe levels.

These national priorities are also a concern for Council in its health planning. For example currently smokers in Yarra account for almost a fifth of people aged 18 years and over, and 16% of residents aged 18 years and over were at risk from short term harm from alcohol.[12]

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[9] http://www.who.int/social_determinants/en/

[10] http://www.yarracity.vic.gov.au/Events/Shopping-and-dining/markets/Gleadell-Street/

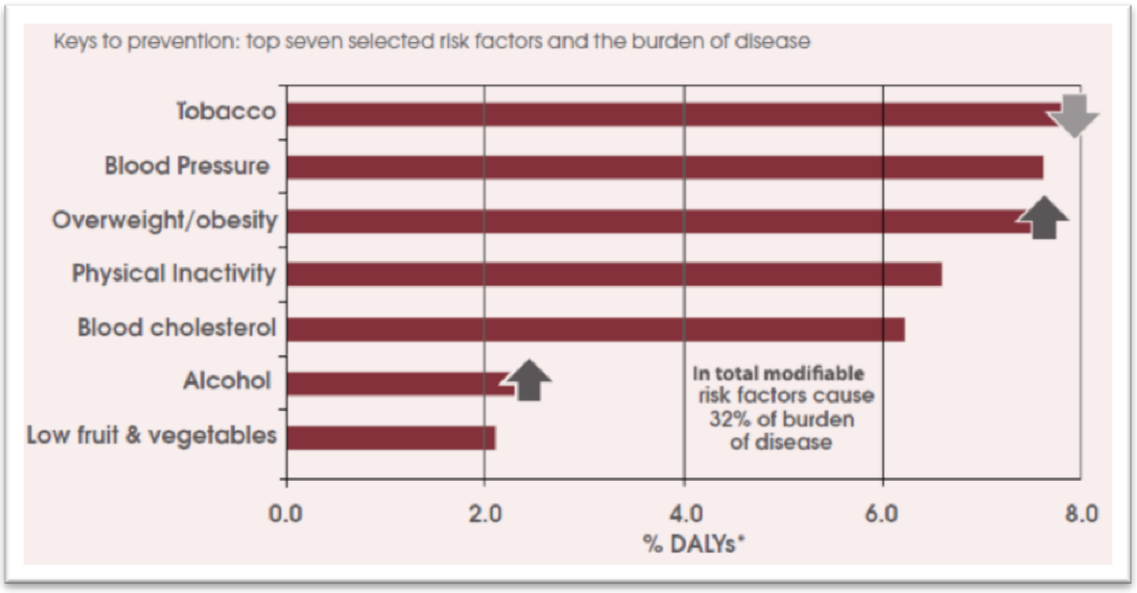
[11] The National Preventative Health Strategy, *Australia: The Healthiest Country by 2020*, the roadmap for action, 2009.

[12] Victorian Population Health Survey, 2008, Victorian Department of Health

Climate change was also recognised by the Commonwealth as an area of the utmost importance for health. There are many areas where improving health is entirely compatible with increased sustainability, such as in promoting walking and cycling as a means of transport.

The City of Yarra has an excellent structure to enable people to walk, with a predominantly grid street pattern, a high density of activity and numerous good local shopping strips. In 2005 Council endorsed the first Yarra Walking Strategy to recognise the importance of local government's role to encourage and increase walking.[13]

Figure 1 Top Seven Risk Factors Identified Nationally



Source: AIHW, 2009

1.3. Victoria Health Priorities

The *Victorian Public Health and Wellbeing Plan 2011–2015* (the Plan) was developed in accordance with the requirements of the *Victorian Public Health and Wellbeing Act 2008*, to identify public health priorities for Victoria.

The Plan focuses on prevention and identifies ways for partners within the state to work. This includes strengthening local government capacity to develop and implement public health and wellbeing plans. The priority issues identified for promoting the health of Victorians are in line with national priorities.

Table 1. Victorian Public Health and Wellbeing Plan Priorities 2011-2015

▪ **increasing healthy eating,**	▪ reducing misuse of alcohol and drugs,
▪ **increasing physical activity,**	▪ promoting sexual and reproductive health,
▪ **controlling tobacco use,**	▪ promoting mental health,
▪ **improving oral health,**	▪ preventing injury, and
▪ **preventing skin cancer.**	

[13] Encouraging and Increasing Walking Strategy, 2005. Available at: http://www.yarracity.vic.gov.au/Parking-roads-and-transport/Sustainable-transport/

1.4. Health and Wellbeing in Yarra

Health Planning for Yarra

The statutory role of Council in relation to public health matters, to 'protect, improve and promote public health and wellbeing within the municipal district', is reinforced under the terms of the *Victorian Public Health and Wellbeing Act, 2008,* s.24.

The Yarra Health Plan is a significant strategic document. It sets the health priorities for the municipality and informs Council actions that are designed to improve the health and wellbeing of residents. The previous Health Plan (2009-2013) was adopted by Yarra City Council in November 2009 and will be superseded in 2013.

The Health Status Report (the Report) draws on data from diverse sources to build a picture and gain understanding of health issues specific to Yarra. The sources include Commonwealth and State Government Departments, key health agency data and information gathered from local community consultations. Yarra faces many of the same burdens of chronic disease identified nationally and known to be caused by obesity, tobacco, and excessive consumption of alcohol.

Strategic Health Priorities

The health and wellbeing priorities, identified in the previous plan, remain highly relevant and important. Building upon previous work has been identified as important to maintain and further improve community health based on the four strategic priorities identified in 2009. These strategic health priorities remain important in driving health improvements in the community:

- healthier eating and a physically active community;
- reducing the harm from alcohol, tobacco and other drugs;
- improving mental health; and
- improving the health of Indigenous Australians.

In addition to identifying local health priorities, Council is concerned to ensure equitable outcomes in health and uphold principles of social inclusion.

- Equity relates to the risk that vulnerable population groups may be excluded from mainstream activities and experience barriers to full participation in community activities and health initiatives.
- Social inclusion principles demonstrate that good health both facilitates and is facilitated by social and economic participation. With good health people are able to grow, learn, share and enjoy life so that they can participate fully in society and the economy.[14]

The following groups have been identified as at risk of social exclusion and are priority populations for extra reach in Yarra:

- people living in long term disadvantage,
- Indigenous Australians,
- people living with a disability,
- people from diverse cultural backgrounds, and
- women.

[14] Sen, A 1985, Inequality *Re-examined.* Harvard University Press, Boston

1.5. A Snapshot of Yarra

The City of Yarra is one of Australia's smallest inner city municipalities, covering an area of 1,953 hectares (19.5 square kilometres), with a resident population of 79,015 and a population density of 35.3 persons per square hectare. The population is projected to increase at an average annual growth rate of 1.35%, reaching 91,627 in 2021, and 102,928 by 2031.

The municipality is bordered by the Cities of Moreland and Darebin to the north, Stonnington to the south, Melbourne to the west and Boroondarra to the east.

In 2011 Yarra was named Victorian Sustainable City of the Year in the Keep Australia Beautiful annual awards. Yarra was awarded top prize for a range of community-based initiatives and projects that promote sustainability, including winning the 'Community Action' category for the Yarra Neighbourhood Orchard program, which organises a monthly home produce swap for local gardeners.[15]

Significant parts of the municipality have been redeveloped and gentrified over the past 20-30 years, and this inner urban development has attracted many young, single, professional, tertiary educated, middle to high income residents. Indeed Yarra can lay claim to having one of the youngest age demographics of any Victorian municipality, with a predominance of 25-29 year olds, a trend which is projected to continue into the future. Currently this age group comprise 15.3% of the total population.

Yarra Resident Population

In 2011 the census population of Yarra was 74,092, adjusted to 79,015[16], living in 36,918 dwellings with an average household size of 2.1 persons.

The area with the largest population was Central Richmond (11,484 persons) and the smallest was Fairfield-Alphington (2,344 persons).

The median age for Yarra residents was 33 years. This is younger than the age profile for Greater Melbourne Statistical District (SD), 36 years but older than the Indigenous age profile for Yarra, which is 30 years.

The age profile for Yarra also differs when compared to Greater Melbourne SD which has a higher proportion of people in the younger age groups (under 15 years) as well as a higher proportion of people in the older age groups (65 years and over).[17]

The most populous age group in Yarra is 25-29 year olds, who comprise 15.3% of the resident population, or 11,337. This group is projected to increase to 12,495 by 2031.

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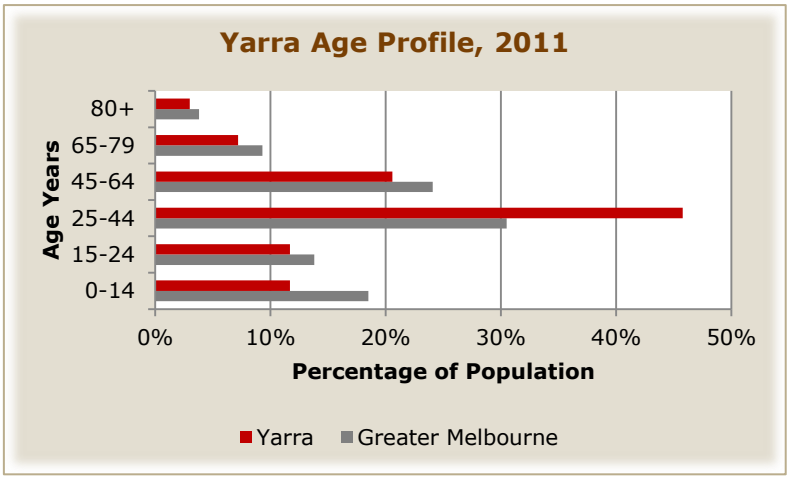
[15] 2011 Sustainable City of the Year http://www.sustainability.vic.gov.au/www/html/3195-kabv-winners--finalists.asp

[16] ABS, Estimated Residential Population (ERP), 2011 The ERP is the official ABS estimate of the Australian population, based on results of the Census, and compiled at 30 June of each Census year.

[17] For an age pyramid diagram which illustrates these differences please see Appendix C.



Almost a fifth of Yarra residents come from countries where English is not the first language.

Overall, 29.0% of residents were born overseas, and 19.2% were from a non-English speaking background, compared with 31.4% and 24.2% respectively for Greater Melbourne SD.

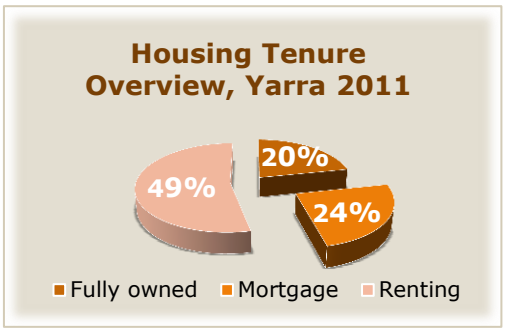
The largest non-English speaking country of birth was Vietnam, where 3.6% of the population, or 2,634 people, were born.

Yarra's population is expected to increase by 29%, to 102,928 by 2031.

Housing

Residential land in the inner city is at a premium and tends to influence the types of development and the types of households that move to Yarra and stay.

Large redevelopment sites (former industrial sites) are the major source of land for building additional housing in Yarra, and development on these sights tends towards medium to high density housing.



More people rent their homes in Yarra when compared to the Greater Melbourne SD. Almost half of the resident population (48.7%) are in rental property, compared with just over a quarter for Greater Melbourne (26.5%).

Levels of home ownership are low when compared with the Greater Melbourne SD. Almost a fifth of residents (19.8%) own their home outright, and 22.3% are paying a mortgage/housing loan. In the Greater Melbourne SD 31.5% own their home outright and 35.3% are paying a mortgage.

Yarra has the highest concentration of social housing as a percentage of total housing stock (14.7%) of any municipality in Victoria.[18] Overall 10.8% of Yarra households live in public housing, with 22.8% of households in North Richmond, 24.1% of households in Collingwood, and 17.7% of households in Fitzroy living in public housing.

Education and Employment

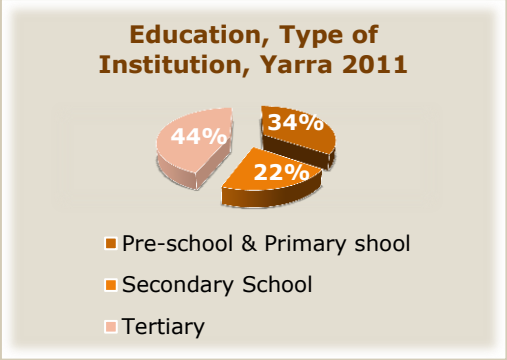
When compared to the Greater Melbourne SD, Yarra had a higher proportion of residents holding formal qualifications in 2011, that is to say bachelor or higher degrees, Advanced Diploma, and Diploma and Vocational qualifications.

[18] Housing and Community Building, Department of Human Services; preliminary population projections (household types) from Department of Planning and Community Development (2011, unpublished). Currency: 2011 Available:

http://docs.health.vic.gov.au/docs/doc/Yarra-(C)

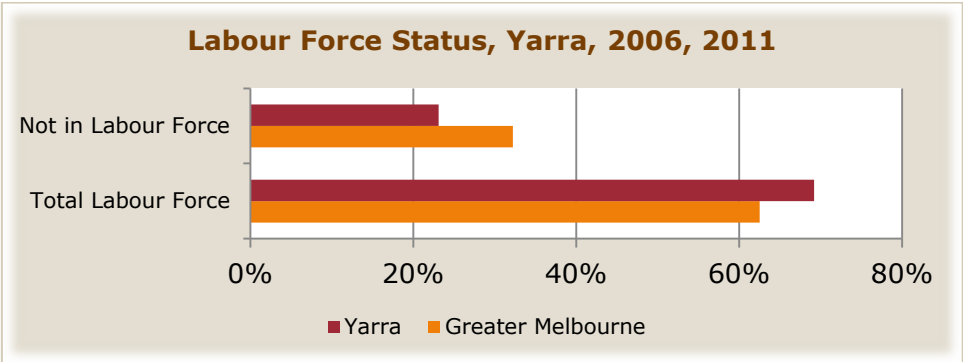
Almost 45% of Yarra residents held a bachelor or higher degree, compared to 23.6% for Greater Melbourne SD. While nearly 30% reported having no qualification, this compares favourably with Greater Melbourne SD where 42.4% have no qualification.

A high percentage reported completing schooling to Year 12 (71%), when compared to Greater Melbourne SD (54.6%).



The total labour force for Yarra (not based on residence but place of employment) is 66,792 people. Approximately 70% of the total Yarra resident population (45,198 persons) are in the labour force, with 12,912 in part-time employment, and 29,595 in full time employment.[19]

Analysis of the employment status (as a percentage of the labour force) in Yarra in 2011 compared to Greater Melbourne SD showed that there was a higher proportion in employment, and a lower proportion unemployed. Overall, 95.2% of the labour force was employed and 4.8% unemployed, compared with 94.5% and 5.5% respectively for Greater Melbourne SD.



Almost three quarters of the resident population did unpaid domestic work (74.1%), compared with 68.8% for Greater Melbourne SD. 34.2% of Yarra residents spent less than 5 hours, 27.8% between 5-14 hours, 7.5% between 15-29 hours and 4.6% of the population reported performing 30 hours or more of unpaid domestic work.

Affluent high income households co-exist with low income households in Yarra. While 30% of households earned $2,500 or more per week, 18.2% of households earned $600 or less per week.

There were 30,164 (70.1%) residents who travelled to work outside the municipality, while 58,172 (86%) people came into Yarra from outside the area for work.

Disability and Need for Assistance

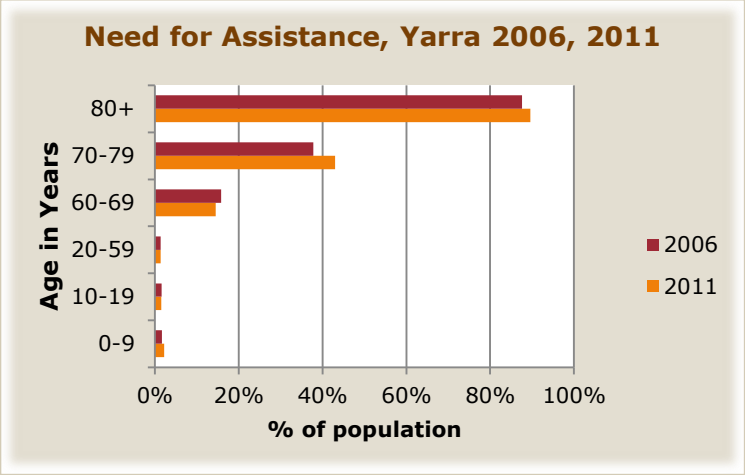
The disability statistics quoted relate directly to the need for assistance due to a severe or profound disability. This population is defined as people who need assistance in their day to day lives in relation to self-care, activity, or communication due to a disability, long-term health condition, or advanced age.

[19] The labour force comprises all persons aged 15 years and over who are either employed or available to work.

Overall 3.8% of the resident population reported needing assistance with core activities, compared with 4.5% for Greater Melbourne SD.

The total number of persons in Yarra requiring help in their day-to-day lives due to disability in 2011 was 2,791. This included 29 children aged 0-4 years, 42 children aged 5-9 years and 71 young people aged 10-19 years.

The need for assistance can grow progressively with age and more than half of residents aged 85 years and over required assistance with core activities (52.9%).



Unpaid assistance to a person with a disability in Yarra was provided mainly by women; 9.2% of carers were female, and 6.5% male.

This compares to 11% of females in NMR who provided unpaid assistance to a person with a disability, compared to 7.2% (30,491) of males.[20]

It is important to note however, that many people with a disability live independent and active lives, and may not consider themselves to be severely disabled, or in need of assistance. These people would be more likely to answer 'no' to the census question on which these statistics are based (as not requiring assistance). For this reason these statistics should be viewed only as an indication of statistics on people with a disability in Yarra.

1.6. Key Findings: Yarra's Health Status

Lifestyle Factors

Lifestyle factors are a major cause of the burden of disease that affects Yarra residents. According to the WHO behavioural risk factors are responsible for around 80% of heart disease throughout the world.

The most important behavioural risk factors include:

- unhealthy diet;
- physical inactivity;
- tobacco use; and/or
- harmful use of alcohol.

Lifestyle and behaviour risk factors contribute to overweight and obesity, the most common health consequences of which are heart disease and stroke, diabetes, musculoskeletal disorders (such as osteoarthritis), and some cancers.

Yarra Health Priorities

Patterns of disease and death in Yarra are wholly compatible with the behavioural risk factors that pose threats to health throughout the developed world. Yarra has a pattern of disease and death in which avoidable conditions, including heart disease, some cancers, diabetes and alcohol related conditions, play a major role in the health of the community.

[20] ABS, 2011 Census, Basic Community Profile, NMR totals compiled from each LGA source

The following are the health priorities that have been identified for Yarra. These priorities result from analysis of the information in this report, and are attributable to patterns of preventable non-communicable disease and avoidable mortality causes. The impact of the social determinants of health and the social gradient are directly relevant to these priorities.

Health Priorities for Yarra:

- to reduce the burden of non-communicable disease through promotion of healthy eating and physical activity;
- to address the high impact to health of alcohol, smoking and other drug use;
- to seek prevention and early intervention for better mental health outcomes;
- to provide extra reach for key risk groups experiencing health inequalities in Yarra, especially Humanitarian Refugees, Indigenous Australians and low-income groups.

Operating within the social model of health

Non-communicable diseases are largely preventable when effective interventions are employed to tackle the shared behavioural risk factors. Interventions at both the level of the individual and the level of the environment can work together to reduce prevalence.

By eliminating the major risks the WHO estimates that around three-quarters of heart disease, stroke and type 2-diabetes would be prevented, as well as 40% of cancers across the world.[21]

Individual decision-making is better supported where people have access to healthy lifestyle choices. Individual level behavioural characteristics and environments that are conducive to good health are equally important. Evidence shows that supportive environments and communities encourage healthier lifestyle choices and progress healthy food choices and physical activity at the individual level.

The health status information provided in this report is a comprehensive source of evidence on which to develop the Municipal Public Health Plan for the four year term of the current Council. The information aids the development of goals and strategies in health planning for Yarra.

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2. Guiding Principles

2.1. Planning for Public Health in Yarra

Local government in Australia has been at the forefront, championing and improving public health in local communities since the time of federation. The services provided by local government attain sanitary environments and promote good public health.

In the past 100 years, public health interventions have achieved significant health gains for local populations through activities that have improved water quality,

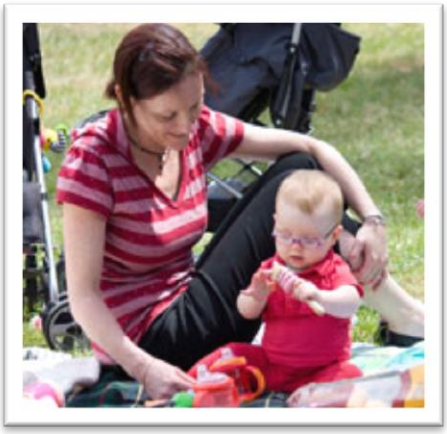
[21] WHO, 2011

prevented water-borne disease, improved oral health through water fluoridation, and protected against infectious disease through immunisation programs.[22]

Council services aim to improve the quality of life of residents by providing services that respond to local needs and are delivered to a high standard. This includes both universal services that are used by most community members (such as waste and recycling collection or footpath maintenance), and more specialised services which respond to specific needs (such as meals on wheels and child care).

Local government authorities (LGAs) also provide direct services that protect and enhance the health of local populations. For example services such as Maternal and Child Health, Food Services, Home and Community Care (HACC) Services and Respite Care are provided by Yarra City Council.

Service provision for local resident populations is determined by taking account of local needs, and responding to legislative requirements.



Health related services provided by LGAs include:

- Community Services; including maternal and child health, child care, youth services, aged care and accommodation, refuge facilities, meals on wheels, counselling and welfare;
- Engineering Services; including public works design, construction and maintenance of roads, bridges, footpaths, drainage, cleaning, waste collection and management;
- Public Health Services; including water and food sampling, immunisation, toilets, noise control, meat inspection and animal control; and
- Recreation Facilities; including golf courses, swimming pools, sports courts, recreation centres and halls.

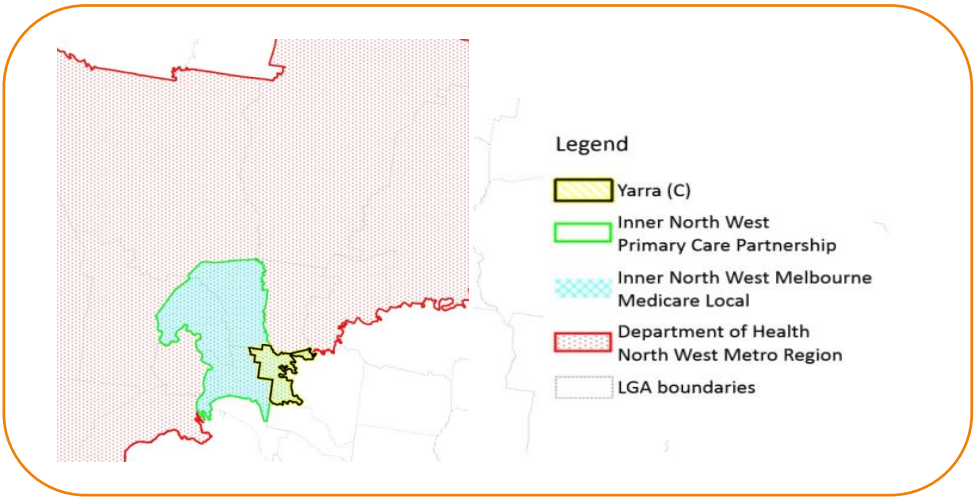
2.2. Regional Partnerships in Public Health

Health planning for the City of Yarra operates within a governance structure that includes commonwealth, state and local government configurations, arranged to coordinate primary health care and facilitate health care partnerships. These include:

- The Commonwealth Medicare Local Network,
- Victorian Government Department of Health Regions
- Victorian Government Primary Care Partnerships, and
- Yarra City Council:
  - Public Health and Community Services, and
  - The Health Plan Advisory Committee.

[22] 2008-09 Local Government National Report, Australian Government Department of Regional Australia, Local Government, Arts and Sport. Available:
http://www.regional.gov.au/local/publications/reports/2008_2009/LGNR_2008-09.pdf

Figure 2. Regional Health Care Partnerships



Medicare Local

The establishment of a nation-wide network of Medicare Locals was a key component of the Commonwealth's National Health Reforms, and the City of Yarra is served by the Inner North Melbourne Medicare Local (INMML).

Medicare Locals were established to coordinate primary health care delivery, tackle local health care needs and consider service gaps. They are accountable to local communities, making sure that services are effective and of high quality.

Medicare Locals support local clinicians and service providers to improve patient care. The INMML works with local health networks, including the Yarra City Council Health Plan Advisory Committee, NRCH, NYCH and other local health networks on care pathways, hospital avoidance programs and transitions out of hospital and/or to aged care.

Victorian Department of Health Services

The Victorian Department of Health delivers services through eight geographical regions, made up of three metropolitan and five rural regions.[23] Under the State Government structure, regions and area-based groups are the organising mechanism for integrated service delivery by public health services, including LGAs.

The City of Yarra sits within the North and West Metropolitan Region (NWMR), and within this broader region, the Inner North West area-based group. The latter area-group includes Yarra, Melbourne, Moonee Valley, and Moreland LGAs.[24]

Governance of the regional service model is accomplished through the Northern and Western Regional Management Forum (the Forum). Membership of the Forum includes the regional directors of state government departments, local Council CEOs and representatives from VicRoads, Growth Areas Authority, Police, State Emergency Service (SES), and Metropolitan Fire Brigade (MFB).

The Forum uses its strategic influence to strengthen the health service system by also engaging with stakeholders across and outside the health sector. It works to improve the health and wellbeing of the NWMR population, in seeking to address the social determinants of health through matters of transport, affordable housing, education and local employment.

The social determinants of health are addressed in the Forum's integrated framework for promoting health and wellbeing in the region, through the four priorities of the framework.[25] These are:

- Housing - affordable living and secure housing tenure
- Employment - local employment, particularly for young people
- Transport - access to public transport and healthy walkable communities
- Education - access to lifelong learning education for residents

Primary Care Partnerships

Primary Care Partnerships (PCPs) include a number of core members who work to improve access to services and continuity of care for people through improved service coordination, as well as chronic disease prevention, integrated health promotion, and partnership development. PCP members include hospitals, community health centres, LGAs, divisions of general practice, and other specialised agencies such as area mental health, drug treatment and disability services.

There are two community health centres in Yarra - North Richmond Community Health Limited (NRCH) and North Yarra Community Health (NYCH). These community health centres provide a wide range of services and activities that address both the causes and effects of ill health in the local community.

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[23] For details of all regions go to: http://www.health.vic.gov.au/regions/index.htm

[24] For full discussion of area-based groups go to:

http://www.health.vic.gov.au/regions/northwestern/whatwedo.htm

[25] Integrated Planning for Community Health and Wellbeing, Key priority areas for the North West Region, David Turnbull, CEO City of Whittlesea, 2012. Available:

http://docs.health.vic.gov.au/docs/doc/0F10715921E75D72CA257A7C0078FE20/$FILE/08City%20of%20Whittlesea%20-%20Integrated%20Planning%20Community%20Health%20and%20Wellbeing%20-%20Aug%202012.pdf

In 2010-11 NRCH received state government funding for redevelopment and to provide extended health services. This resulted in a new facility and the Centre now operates out of the new purpose built facility.

In addition to a range of activities for different ages and abilities, such as English Conversational Classes and Homework Support Groups, NRCH and NYCH provide the following health services for Yarra residents:

- Nursing And Allied Health Team - with emphasis on direct care and health promotion;
- Nutrition And Dietetics Services - to help people to achieve their health goals by learning about good nutrition and diet;
- Community Midwife Services - accredited Shared Maternity Care provider with the Royal Women's Hospital;
- Diabetes Education Services - to assist people with diabetes to successfully manage their condition;
- Community Nurse Clinical Nursing Services - including immunisation, health assessment and monitoring health promotion and disease prevention;
- Oral Health Program;
- Drug Safety Program - providing a range of services to people, their partners and families who are managing substance-related issues; and
- Counselling and Casework Services.

Yarra City Council actively supports the work of the community health centres and works, together with staff, to promote services and activities that foster resident health and wellbeing. These local area partnerships bring together a range of local primary care providers, including government, community organisations and not for profit agencies, to achieve positives outcomes for individuals and their families.

Yarra Health Plan Advisory Committee

Yarra City Council convenes the Health Plan Advisory Committee (the Committee) with representatives from State Government departments, INMML, Primary Care Partnerships and other local service providers who, together, oversee delivery of the Health Plan. The Advisory Committee is chaired by a Councillor and made up of a wide range of professionals from across Yarra's health and community sectors.

The Committee meets regularly throughout the year to oversee the objectives of the Health Plan and provide Council with progress reports.

The Committee's terms of reference include identifying data gaps and emerging health planning issues relevant to Yarra, as well as keeping Council abreast of health matters.

2.3. Determinants of Health

Determinants of health are factors that can have a positive and negative impact on health. Negative determinants are risk factors and positive determinants are protective factors.

The social determinants of health recognise that the conditions in which we live, work, learn and play all heavily influence the health we can achieve. The distribution of resources that affect health is socially determined; research has identified social factors at the root of health inequality. Thus health status is a matter of concern to policy makers in every sector, not solely those involved in health policy.

Indicators that measure the social determinants of health include:

- *the social gradient*
- *stress*
- *early life*
- *social exclusion*
- *work*
- *unemployment*
- *social support*
- *addiction*
- *food*
- *transport*

The Solid Facts, WHO, 2003

An independent Commission on Social Determinants of Health was convened by WHO, to link knowledge with action, in order that public policy takes account of the evidence on the social determinants of health, as well as interventions and policies to address them. The WHO advocates taking action on the social determinants of health as complimentary to the development of health systems, in order to produce greater equity.[26]

An example of health inequalities within Australia is evidenced by the gap in health status and life expectancy of Indigenous and non-Indigenous Australians. The life expectancy at birth for an Indigenous male was 59.4 years, and 64.8 years for an Indigenous female, for the period 1996-2001.[27]

In 2008-2010, life expectancy at birth for non-Indigenous Australians was 79.5 years for males and 84.0 years for females.[28] Average life expectancy in Yarra was slightly higher than the national average and on a par with the Victorian average: 79.6 years for males and 84.7 years for females. The Victorian average life expectancy was 80.3 years for males, and 84.4 years for females.

Health inequities arise out of the social determinants, as a result of inequitable social and economic conditions. These inequities determine the risk of illness, as well as ability to access resources to prevent illness or to enable access to treatment when necessary.

By giving due consideration to the social determinants of health Yarra City Council is able to address some of the avoidable inequalities in health between population groups in the municipality.

For example by promoting healthy eating through the weekly Gleadell Street, Richmond fresh food market Council facilitates access to affordable nutritious fresh fruit and vegetables.[29]

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[26] Marmot, M. (2005), Social Determinants of health inequalities, *Lancet*, Vol.365, pp.1099-1104

[27] Australian Institute of Health and Welfare (AIHW), http://aihw.gov.au/mortality-indigenous/

[28] ABS, Deaths Australia, Cat. 3302.0

[29] http://www.yarracity.vic.gov.au/Events/Shopping-and-dining/markets/Gleadell-Street/

Determinants of Health and the Social Gradient

The determinants of health most pertinent in Yarra have been identified as:

- long-term disadvantage (the social gradient);
- alcohol, tobacco and other drug use;
- stress, including anxiety, depression and lack of social support;
- social exclusion, including discrimination, and family and domestic violence;
- the impact of work, unemployment and job security on health; and
- the impact of climate change on health.[30]

The social gradient in health is a particular challenge. In countries where material deprivation is severe, the social gradient can result in mortality from absolute deprivation. In more affluent countries like Australia, where levels of material poverty are less, the focus of the social gradient switches to relative deprivation.

Relative deprivation relates to the broader areas of social functioning and meeting human needs. For example broader areas of social functioning include not only material or physical needs, but also capability, spiritual, or psychosocial needs which are all important to the gradient in health.[31]

The social gradient results in a health gradient which indicates the difference in health experiences between the top, middle and bottom of the socioeconomic hierarchy.[32] The health gradient approach relates to the health differences across the whole spectrum of the population, and acknowledges a systemically patterned gradient in health inequities.

Social Dimensions of Climate Change

A related emerging area is the inequitable distribution of the social and health impacts of climate change. Social impacts are likely to hit low income people hardest because they have less capacity to protect themselves, adapt or recuperate losses.[33]

The social dimensions of climate change relate to the interplay between climate as a phenomenon, and the role of people as agents of change as well as victims. In considering the social dimensions of climate change the WHO considers that people have a central role to play that is often not wholly appreciated.[34]

> *"Climate change will affect, in profoundly adverse ways, some of the most fundamental pre-requisites for good health: Clean air and water, Sufficient food, Adequate shelter, and Freedom from disease*
>
> *WHO, 2008*

In Australia this might relate to people as victims of severe weather events. The impacts of climate change will increasingly affect the daily lives of people everywhere in terms of employment and livelihoods, health, housing, water, food security and nutrition.

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[30] Yarra Municipal Public Health Plan 2009-2013

[31] Marmot, M.(2005) "Social determinants of health inequalities". The Lancet Vol.365: pp.1099–104

[32] Kelly et al, (2007) The Social Determinants of Health: Developing an Evidence Base for Political Action, Universidad del Desarrollo, Chile & National Institute for Health and Clinical Excellence, UK .

[33] Ibid

[34] The Social Dimensions of Climate Change, Discussion Paper, prepared by the United Nations Task Team on Social Dimensions of Climate Change, WHO, 2011. Available at http://www.who.int/globalchange/mediacentre/events/2011/social-dimensions-of-climate-change.pdf

The fact that health inequity is socially determined is one of the most important problems and challenges for public health policy. The Health Status Report provides a pragmatic approach to the health gradient, providing evidence that can determine effective solutions.

2.4. Natural Environment

Greenhouse gas pollution has changed the atmosphere of the earth and the effects of past human activity are affecting us now. Energy that was previously reflected away from earth is now trapped in the atmosphere and affecting the earth's climate. This trapped energy alters the balance of nature in ways that are not always predictable, and the impacts (direct and indirect) are expected to have major adverse effects on the environment, our society and our economy.

In decades to come Victoria can expect to experience increased temperatures, drier conditions, and more frequent extreme events such as extreme rainfall, bushfires and droughts. The future climate of Yarra is expected to be similar to the changes projected for the Port Phillip and Westernport region, with hotter and drier conditions and fewer rainy days.[35]

The social dimensions of climate change result in social and health impacts, and including these dimensions within climate policy is warranted on the following significant grounds:

- The social dimensions are recognised in existing climate agreements.
- Including social dimensions in climate policy helps to ensure respect for human rights; climate change and related response measures impact the fundamental security, lives, health and livelihoods of people, especially the most vulnerable.
- The effectiveness of climate change policies are enhanced when social dimensions (people's needs) are fully integrated. It is recognised that including social dimensions is essential if powerful and resource intensive first world societies are to change consumption habits and patterns.

- Climate change, sustainable development and human rights have complementary objectives and means of achievement, thus integrating social dimensions within climate policy has significant traction.[36]

Health Impacts of Climate Change

Recent data indicates that the global mean temperature has increased by between 0.2 and 0.6°C since the late 19th century, while Australian average temperatures have increased by 0.8°C.[37] Communities throughout the world face daunting challenges in seeking to mitigate and adapt to the effects of climate change.

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[35] Victorian Department of Sustainability and Environment (DSE) http://www.climatechange.vic.gov.au/regional-projections/port-philip-and-westernport

[36] The Social Dimensions of Climate Change, Discussion Paper, prepared by the United Nations Task Team on Social Dimensions of Climate Change, WHO, 2011.

[37] DSE, The Scientific Consensus. http://www.climatechange.vic.gov.au/what-is-climate-change/understanding-the-science

In decades to come the direct effects of climate change within Yarra are forecast to include more frequent and severe heatwaves, storms and drought. Health impacts include the potential for increased illness and deaths from heatwave.

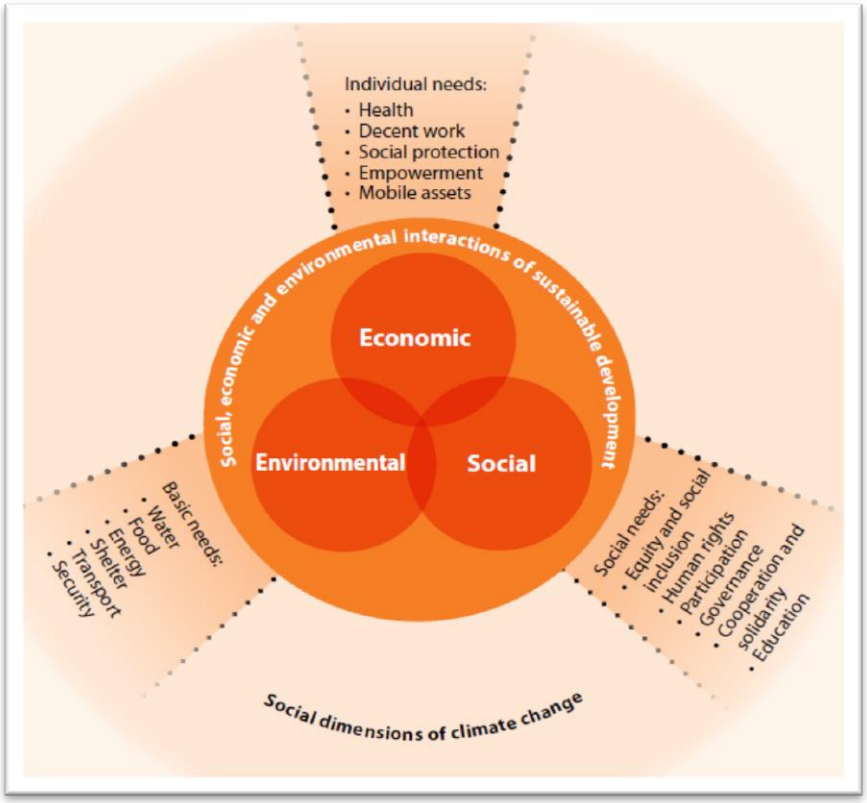
Yarra City Council works to mitigate the impacts of climate change and extreme weather within its role as a local government and with partners, for example through the Yarra Environment Strategy (2008) and the Yarra Heatwave Plan.

The effects of climate change deemed likely to impact health are:

- increased negative health consequences for vulnerable groups such as infants and the elderly,
- more frequent disruption to community services and public infrastructure,
- higher demand for emergency support, and
- increased extreme weather events, which result in higher demands for energy and increase health risk.

The Victorian bushfires of February 2009 were the second worst natural disaster in Australian history in terms of deaths caused. Fires starting on the state's hottest day on record, when the temperature soared to 46.4° C, flared across 14 different regions, destroying over 2,000 homes, killing 173 people, with leaving hundreds more in need of hospital care.

Figure 3. Sustainable Development & the Social Dimensions of Climate Change



Source: WHO, 2008

The heatwave also had significant health impacts beyond the fire zones. The smoke from the fires affected the quality of air in Yarra and carried airborne allergens that affected sufferers of asthma and other respiratory illnesses, resulting in increased presentations to hospital emergency departments. The sustained heat also brought

about a 62% increase in heat-related deaths compared to the same period in previous years.[38]

Heat waves tend to occur together with other potential health threats such air pollution, drought, changes in water quality, fires, and power failures.

Food Security

Food security is an indicator of the proportion of the population who are not able to maintain a well stocked pantry or fridge. These households are more likely to run out of food in the course of the year and lack the financial resources to buy more.

Food security includes both physical and economic access to food. Being able to maintain an adequate diet influences individual health. For example there are demonstrated links between unhealthy eating, being overweight or obese and chronic disease. However there are also many things that influence an individual's ability to access a healthy diet, such as individual tastes, financial resources and access to sufficient quantities of appropriate food.

The percentage of the population who experienced food insecurity in Yarra was 10%, compared to 6.3% in the Northern Metropolitan Region (NMR) and the Victorian State average of 6%.[39]

There are several key ways in which food security is being addressed in Yarra:

- Community Gardens – well established community gardens operate on public housing estates and in North Fitzroy.
- Café Meals Program – voucher system provides for meals at participating cafés.
- Nutrition Support Grants - funding cultural food programs in social settings.
- Meals and food vouchers – provided by a number of emergency relief organisations in Yarra.
- Council partnerships with community projects - such as the Yarra Community Food System (Cultivating Community).

[38] Monash Climate, Biodiversity and Health Program, Monash Sustainability Institute, Monash University. Accessed 25/10/2012 http://www.monash.edu/research/sustainability-institute/programs/health/cc-health.html

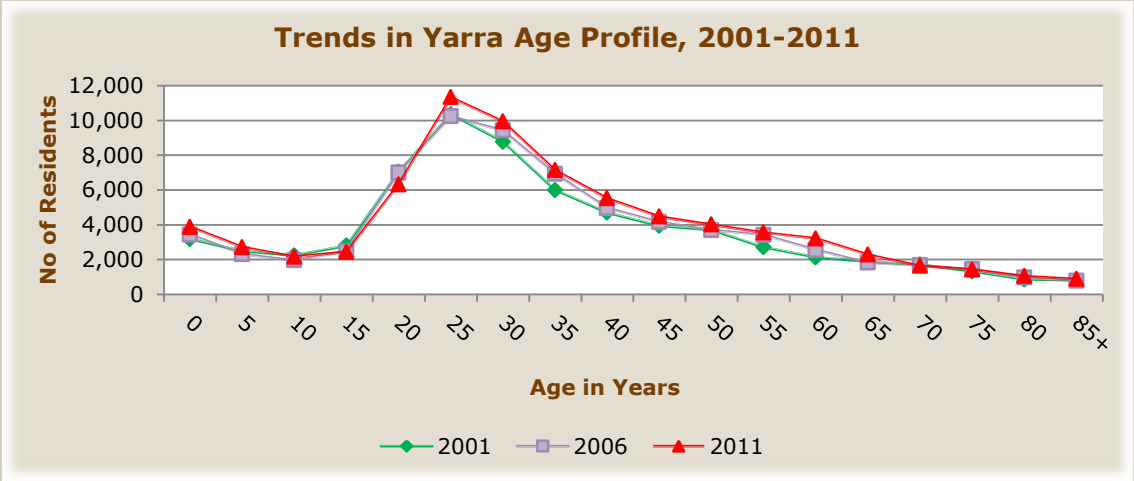
[39] Community Indicators Victoria, 2011. Available at: http://www.communityindicators.net.au/

3. Yarra Social Characteristics

Yarra is thought to be named from the Aboriginal words "Yarra Yarra", meaning ever flowing (river). The municipal boundary begins to the north-east of the Melbourne Central Business District and includes the suburbs of Abbotsford, Carlton North/Princes Hill, Richmond, Clifton Hill, Collingwood, Cremorne, Burnley, Fairfield, Alphington, Fitzroy, and Fitzroy North. It is bounded by the Cities of Darebin and Moreland to the north, Melbourne to the west, Boroondarra to the east and Stonnington to the south.

3.1. Resident Population

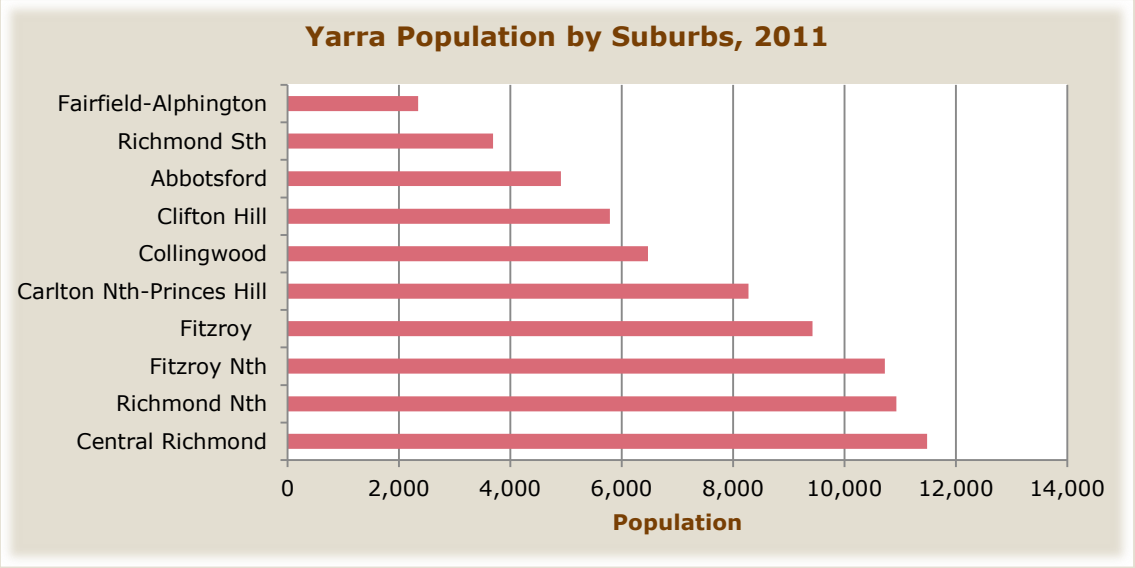
The total population of Yarra in 2011 was 74,092[40]. In each suburb the most populous age group was persons aged 25 to 34 years old. As a percentage of the total population, this age group comprised 28.7% of the Yarra population, which is a considerably higher proportion than Greater Melbourne SD (15.4% of the population).



The most populous suburbs in Yarra in 2011 were Central Richmond, 11,485 residents, Richmond North, 10,930 residents and Fitzroy North, 10,726.

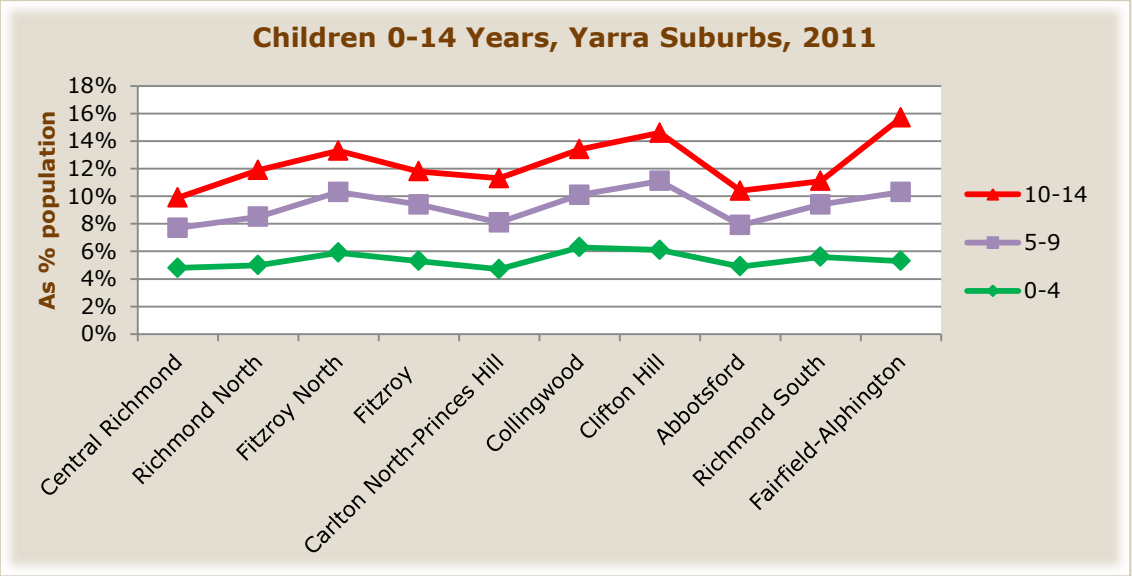
Despite the younger age demographic, Yarra, in common with other LGAs, has an ageing component to the resident population, although the proportion is small. When compared to Greater Melbourne SD, Yarra has both a smaller proportion of children and elderly residents. Generally speaking older age groups are under-represented in Yarra.

[40] All demographic figures are taken from the ABS, Census, 2011, unless otherwise stated.



In common with much of the developed world, Australia's population is ageing as a result of sustained low fertility and increased life expectancy.

The counter side of the ageing population profile is the proportionally fewer numbers of children (under 15 years of age) in the population.[41] In fact the overall proportion of Australia's population in the under-15's age range decreased from 21.8% to 18.8% between 1992 and 2012.[42]



Pre-schoolers and people at post-retirement age are under-represented in Yarra when compared to Greater Melbourne SD. Children aged 0-4 years comprised 5.2% of the population compared to 6.5% of the Greater Melbourne population.

In the under-14's age range 10-14 year olds was the most populous group of children, as a percentage of the child population, in each suburb, comprising 11.7% of the Yarra population overall. This is however considerably less when compared to the proportion in this age group for Greater Melbourne SD (18.5%)

Retirees and 'empty nesters' aged 60-69 comprise 5,501 persons; 7.4% of the population, compared to 9.0% of the Greater Melbourne SD.

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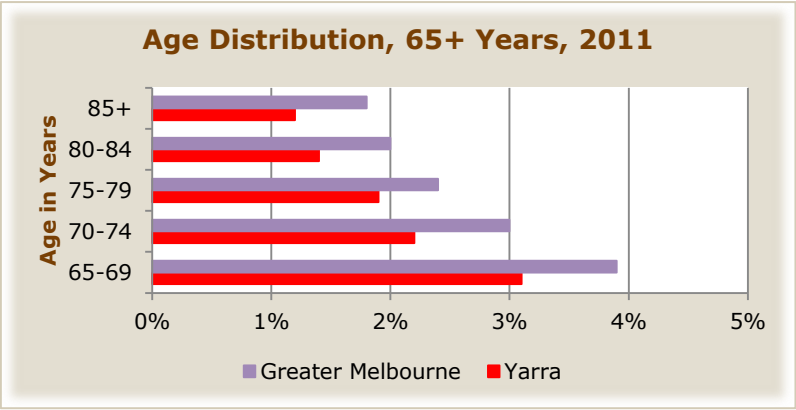
[41] ABS Cat. 3101.0 - Australian Demographic Statistics, Jun 2012

[42] Ibid

Seniors aged 70-84 years comprised 5.6% of the total Yarra population compared to 7.4% of the population of Greater Melbourne.

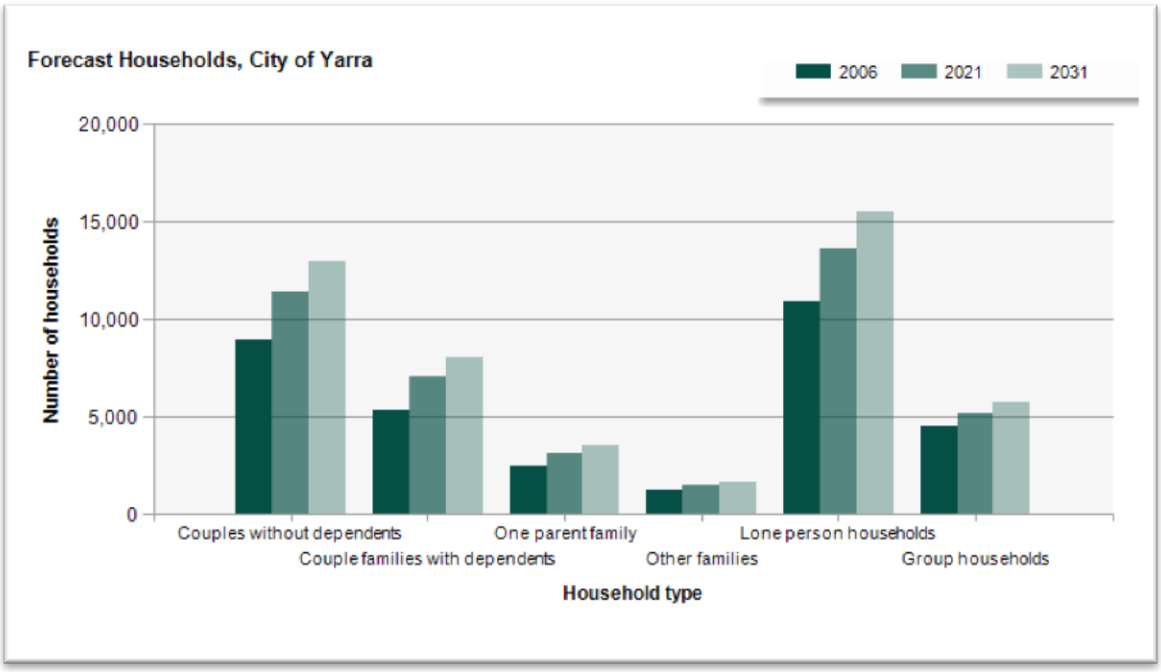


The elderly aged 85 and over comprised 891 persons and accounted for 1.2% of the Yarra resident population, compared to 1.8% of the Greater Melbourne population.

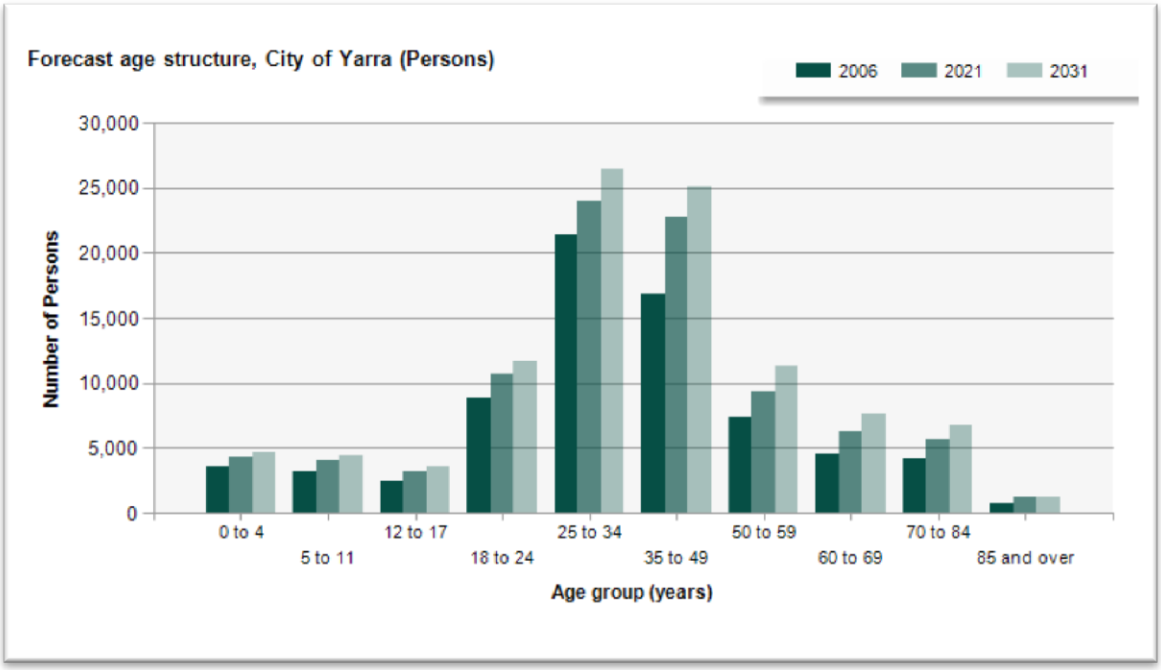
Altogether people aged 70 years and over comprised 6.7% of the Yarra population compared to 9.2% of the Greater Melbourne population.

Population Forecast

The population of Yarra is projected to increase from 79,015 to 102,928 by 2031, and the number of households from 33,523 to 47,454. The number of children aged 0-14 years is expected to rise from 8,771 to 10,714 by 2031 although as a proportion of the overall Yarra population this group is expected to drop off slightly from 11.8% in 2011 to 10.4% in 2031.



Housing affordability in the inner city is considered to be the major driver of this shift as some loss of young and established couples and families from Yarra is expected to occur. Inner city land values have increased considerably, which in turn influences the type of households able to move to and stay in the area. Considerations of price and dwelling size mean that many family households and lower income households move out of Yarra, particularly for owner-occupied housing.



However the close proximity of Yarra to the central city, the lifestyle and job opportunities, means that there is also much to attract residents. 25-34 year olds will continue to be the most populous age group to 2031. At the 2011 Census this group comprised 28.7% of the Yarra population and numbered 21,278 persons. By 2031 the population of 25-34 year olds is projected to be 40,093 persons.

On the whole however the structure of households in Yarra will remain much as they are now. By 2031 each type of household is expected to grow, particularly lone person households and couples without dependents.

The availability of both government and private rental housing, also means that Yarra will continue to gain migrants and other diverse population groups. This is discussed further in Section 3.3 Cultural Diversity.

Retirees and 'empty nesters' (60-69 year olds) will increase from 5,501 to 7,587 by 2031 but maintain their proportion, being 7.4% of the total Yarra population. Seniors aged 70 to 84 years will increase from 4,143 to 6,778 and the elderly, aged 85 years and over, will increase from 891 to 1,292 in number. As a proportion of the overall population persons aged 70 years and over are projected to increase from 6.8% to 7.9%.

3.2. Aboriginal and Torres Strait Islanders, Yarra

Council acknowledges the Wurundjeri community as the first owners of this country. Today, they are still the custodians of the cultural heritage of this land. Council also acknowledges the many other Aboriginal and Torres Strait Islander people who have lived, worked and contributed to the cultural heritage of Yarra. The Fitzroy Aboriginal Heritage Walking Tour was established to increase awareness of Yarra's Indigenous cultural heritage.

The Yarra Aboriginal Partnerships Plan 2011-2014 was adopted by Council in November 2010. The values underpinning the plan include reconciliation, social justice and respect, and it aims to strengthen partnerships between Council, the Aboriginal community, other levels of government and the local non-Indigenous community. The plan also identifies strategies to address disadvantage and social justice, and ways to work to eliminate racism.

Aboriginal Australians

Aboriginal and Torres Strait Islander (ATSI) peoples comprise 2.5% of the total Australian population.[43] Most of the population live in New South Wales (32% of the national total), Queensland (28%) and Western Australia (13%). The Victorian population constitutes almost 7% of the national ATSI total and less than 1% of the state ATSI total.

The Council of Australian Governments (COAG) developed a national approach in 2008, designed to close the gap between Indigenous and non-Indigenous Australians.[44] The national approach recognises the significant gaps in socio-economic status, and health and well-being between Aboriginal Australians and the general population.

COAG Closing the Gap Targets include:

- Closing the life expectancy gap within a generation (by 2031)
- Halving the gap in mortality rates for Indigenous children under five within a decade (by 2018)
- Halving the gap for Indigenous students in reading, writing and numeracy within a decade (by 2018)
- Halving the gap for Indigenous people aged 20–24 in Yr 12 attainment (by 2020)
- Halving the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade (by 2018)

Closing the Gap Prime Minister's Report 2013

Health planning for Indigenous populations in Yarra is consistent with the aims of the national approach, which are: to improve health, education and employment, and close the gap in Indigenous disadvantage.

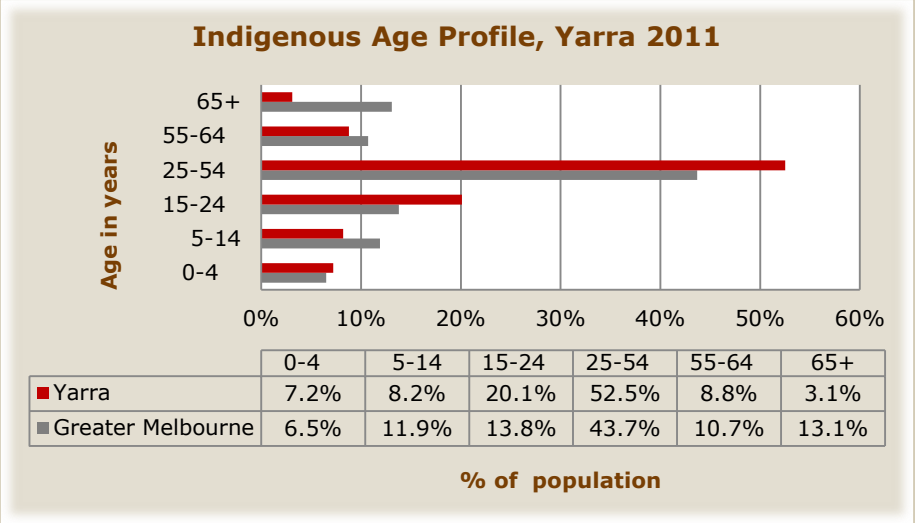
Social Characteristics

According to the 2011 Census there were 319 Aboriginal Australian residents in Yarra, with equal numbers of males and females. 16% of these were children aged 0 to 14 years and 3.1% were people aged 65 years and over.

The age profile for Aboriginal Australian residents was younger than the age profile for non-Aboriginal Australian residents. The median age of Aboriginal Australian residents was 30 years, compared to 33 years for non-Aboriginal Australian residents. The median age for non-Aboriginal Australian residents of Victoria and Australia is 37 years.

[43] ABS Census of Population and Housing 2011

[44] Closing the Gap Prime Minister's Report 2013, Ch.1, The Framework for Change. Available: https://www.fahcsia.gov.au/sites/default/files/documents/02_2013/00313-ctg-report_accessible11.pdf



	0-4	5-14	15-24	25-54	55-64	65+
Yarra	7.2%	8.2%	20.1%	52.5%	8.8%	3.1%
Greater Melbourne	6.5%	11.9%	13.8%	43.7%	10.7%	13.1%

10.35% of Aboriginal Australian Yarra residents were married, and 13.7% divorced or separated. The median age of married people was 48 years and the median age of people never married was 30 years.

Indigenous Language

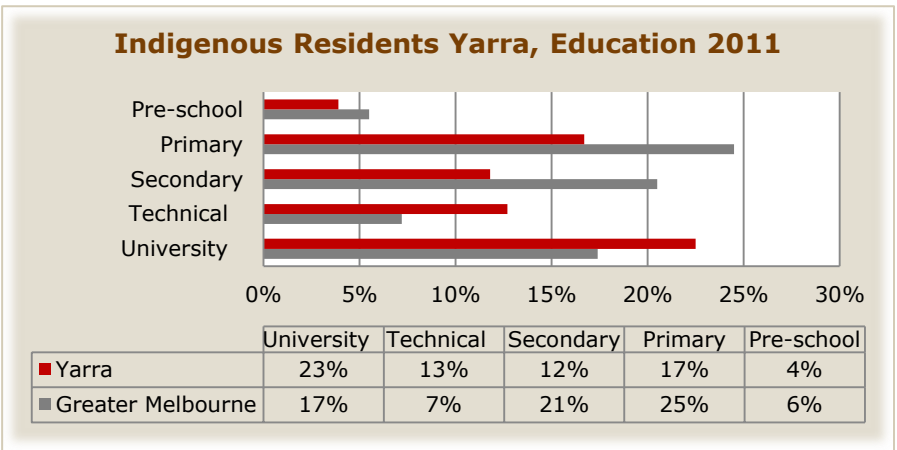
English was the predominant language spoken at home (89%) with Kriol (1.6%), Yorta Yorta (1.3%) and Other Australian Indigenous Languages nec[45] (1.3%).

Education

There were more Aboriginal Australian Yarra residents attending an educational institution when compared with the Greater Melbourne area, 32.1% and 30.8% respectively.

A higher percentage of the Indigenous Yarra population attended school when compared with Greater Melbourne. 16.7% attended primary school, 11.8% secondary school, 12.7% technical institution and 22.5 university.

Comparative figures for Greater Melbourne SD are 6% attended pre-school, 24.6% primary school, 20.5% secondary school, 7.2% technical institution and 17.4% attended university.



	University	Technical	Secondary	Primary	Pre-school
Yarra	23%	13%	12%	17%	4%
Greater Melbourne	17%	7%	21%	25%	6%

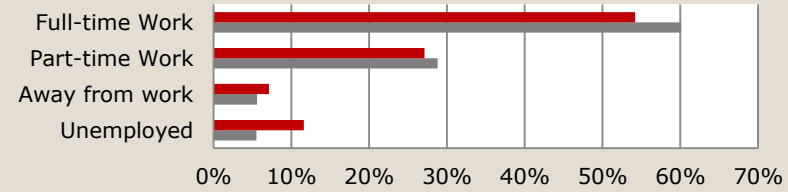
[45] nec – not elsewhere classified

Employment

Approximately half of the Aboriginal Australian population in Yarra reported being in the labour force in the week before Census night, with 54.2% of these in full time employment, 27% in part-time employment and 11.6% unemployed.

The age profile of the Aboriginal Australian workforce in Yarra is considerably younger when compared to the Greater Melbourne SD.

Indigenous Employment Status, Yarra 2011



	Unemployed	Away from work	Part-time Work	Full-time Work
Yarra	11.6%	7.1%	27.1%	54.2%
Greater Melbourne	5.5%	5.6%	28.8%	60.1%

Those Aboriginal Australian Yarra residents who reported being in full time employment were aged 32 years, compared to 40 years for Aboriginal Australians in the Greater Melbourne SD. Aboriginal Australian Yarra workers in part-time employment were aged 30 years, compared to 39 years for Aboriginal Australians in the Greater Melbourne SD.

A smaller proportion of Aboriginal Australian residents in Yarra, aged 15 years and over, reported being in the labour force; 81.3% compared to 88.9% for Greater Melbourne SD. However this discrepancy can be explained in part by the larger proportion of Indigenous Yarra residents, aged 15 years and over, in further education.

Of the percentage in the labour force:

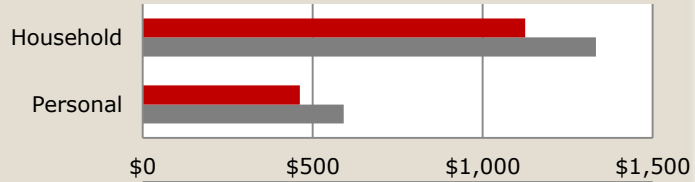
- a smaller proportion reported being in full time employment when compared to the Greater Melbourne area; 54.2% and 60.1% respectively, and
- a smaller proportion reported being in part-time employment, 27.1% and 28.8% respectively.

Household Income

Aboriginal Australian households in Yarra had lower median weekly personal income and household income when compared to the Greater Melbourne SD area for residents aged 15 years and over.

The median weekly personal income for Aboriginal Australian residents in Yarra was $462 and the median weekly household income was $1,125, compared to $591 and $1,333 for the Greater Melbourne SD.

Yarra Indigenous Residents, Median Weekly Income, 2011



	Personal	Household
Yarra	$462	$1,125
Greater Melbourne	$591	$1,333

The Health Gap

In Victoria Aboriginal Australians experience poorer health outcomes than non-Aboriginal Australians in almost every measure of health, which results in a significant gap in life expectancy.

Factors, such as dispossession, discrimination and past policy and practice, the impacts of the social determinants of health on Aboriginal Australians, and the results of socioeconomic status, such as housing, justice, employment, and education have all impacted upon the health and life expectancy gap of Aboriginal Australians.

The life expectancy for Aboriginal Australians is 67.2 years for males and 72.9 years for females compared with 78.7 years and 83.5 years for non-Aboriginal Australians respectively. This means that the life expectancy gap between Aboriginal and non-Aboriginal Australians is 11.5 years for men and 10.6 years for women.

Table 2. Leading causes of mortality and risk factors for Aboriginal Victorians

Leading causes of Aboriginal mortality rates*	Leading risk factors contributing to the health gap
▪ **circulatory disease;** ▪ **injury and poisoning;** ▪ **diabetes;** ▪ **respiratory disease; and** ▪ **cancer.**	▪ tobacco – 17% ▪ obesity – 16% ▪ physical inactivity – 12% ▪ high blood cholesterol – 7% ▪ high blood pressure – 6% ▪ low fruit and vegetable intake – 5% ▪ alcohol – 4%

*accounting for 71% of overall life-expectancy gap *Source: DH, 2011*

3.3. Cultural Diversity in Yarra

Almost a fifth of Yarra residents come from countries where English is not the first language, and almost a quarter speak a language other than English at home.

When compared with Greater Melbourne SD, Yarra has a larger proportion of people who spoke English only (66.3% and 69.3% respectively), and a smaller proportion of people who spoke a non-English language (29.1% and 23.3% respectively).

The major difference between the languages spoken at home for the population of Yarra and Greater Melbourne SD in 2011 was a larger percentage speaking Vietnamese at home (4.5% compared to 2.1%).

Between the census of 2006 and 2011, the number of Yarra residents born overseas increased by 2,343 (12.2%), and the number of people from a non-English speaking background increased by 809 (6%). In the same period the number of people who spoke a language other than English at home increased by 1,106 (6.8%).

New Arrivals

Yarra has a slightly higher proportion of people who arrived in Australia within the last 5 years (25%), when compared to the Greater Melbourne SD (23.2%). In 2010-2011 Yarra received 466.4 new settler arrivals from overseas per 100,000 population, under the permanent resident visa category. [46]

[46] Settlement Database, Department of Immigration and Citizenship (DIAC) and 2010 Estimated Resident Population, ABS, 2011.

Currently, 3500 to 4000 people enter Victoria each year under the Humanitarian Program for refugees and others in refugee-like situations.

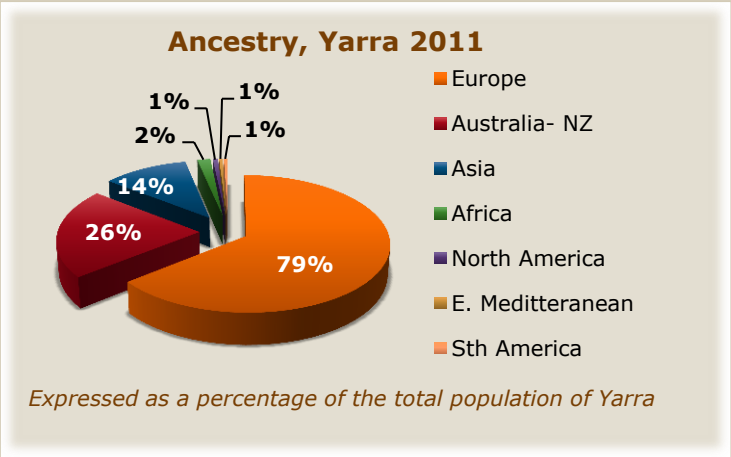
In 2010-11 Yarra received 3% of all Humanitarian visa arrivals.[47] This category arrives subject to Australia's response to global humanitarian situations and assessment of claims under the *1951 United Nations Convention relating to the Status of Refugees* and its *1967 Protocol (the Refugees Convention)*.

Yarra is deemed a suitable location due to its centrality and access to support services that meet the specific needs of these entrants. Many recent humanitarian arrivals are from the Horn of Africa (Eritrea, Sudan and Somalia).

Culture and Ethnicity

The ABS Census uses the category 'ancestry' to define the cultural association and ethnic background of individuals going back three generations. It is a good measure of the total size of cultural groups in Yarra regardless of where they were born or what language they speak.

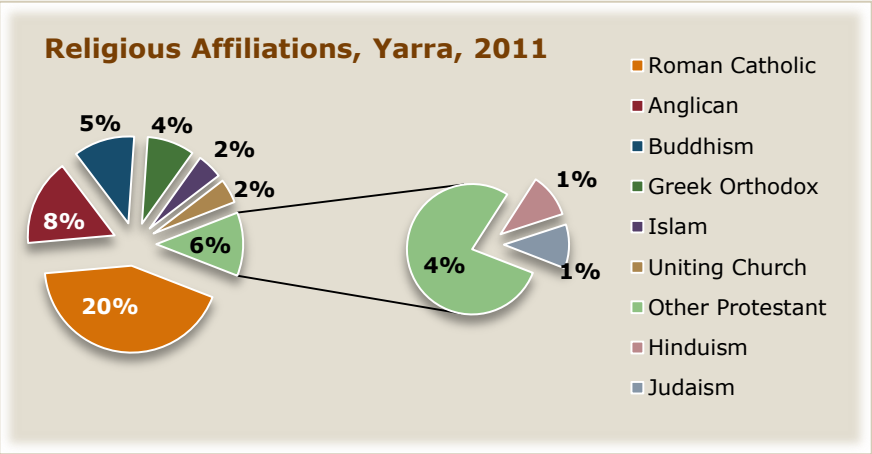
There is a large community of people with Vietnamese ancestry in Yarra (4.1% of the local population). The Greater Melbourne SD has 2.0% of people with Vietnamese ancestry.



The top five ancestries nominated by residents in Yarra were English (29.5%), Australian (24.8%), Irish (14.3%), Scottish (10.4%) and Italian (5.9%).

Population growth in Yarra between 2006 and 2011 contributed to cultural diversity in the municipality adding residents from Spanish and Arabic speaking backgrounds.

Emerging population groups in Yarra (less than 200 residents in each) include people from: Indonesia, Turkey, Singapore, Somalia, Croatia, Sri Lanka, Poland, Netherlands, Egypt, South Korea, Macedonia, Colombia, Eritrea, Spain, Chile, Taiwan, Malta, Iran and Lebanon.



Religion

When compared to Greater Melbourne SD, Yarra had a lower proportion of people who professed a religion and a higher proportion who stated they had no religion.

Overall, 47.8% of

[47] Ibid

the population nominated a religion, and 39.7% said they had no religion, compared with 67.6% and 23.5% respectively for Greater Melbourne SD.

The largest single religion in the City of Yarra was Western (Roman) Catholic, 19.9% of the population.

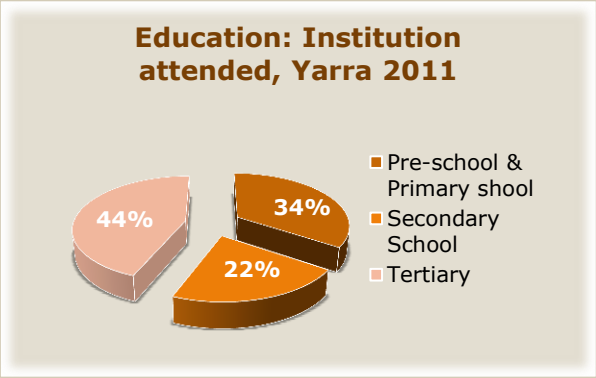
The major differences between the religious affiliation for the populations of Yarra and Greater Melbourne SD were:

- a larger percentage who nominated Buddhism, 5.3% compared to 4.0%;
- a smaller percentage who nominated Western (Roman) Catholic, 19.9% compared to 27.1%;
- a smaller percentage who nominated Anglican, (7.5% compared to 10.8%; and
- smaller percentage who nominated Islam, 2.2% compared to 3.6%.

3.4. Education

Between the Census of 2006 and 2011 the population aged 15 years and over increased by 4,762 people (6.9%). Just over a fifth (21%) of Yarra's population attended an educational institution in 2011.

When compared to Greater Melbourne SD there is a smaller proportion of the population attending an educational institution. This corresponds with the under-representation of families with children in Yarra when compared to the Greater Melbourne SD; 23.1% of households in Yarra have children compared with 44% for Greater Melbourne SD.



When compared to the Greater Melbourne SD, Yarra also had a lower proportion attending primary school (7.8% compared to 4.1%), and secondary school (6.3% compared to 2.9%).

However the higher proportion of young adults in Yarra is illustrated in numbers attending tertiary education. Yarra had a higher proportion engaged in tertiary level education (11.6%) when compared to Greater Melbourne SD (7.5%).

Yarra had a higher proportion of residents with formal qualifications when compared to the Greater Melbourne SD in 2011.

- 60.3% of Yarra residents held a Bachelor or higher degree, Advanced Diploma or Diploma, or Vocational qualifications, compared with 47.3% for Greater Melbourne SD; and
- a higher proportion of persons with Bachelor or Higher degrees, 44.7% compared to 23.6%;

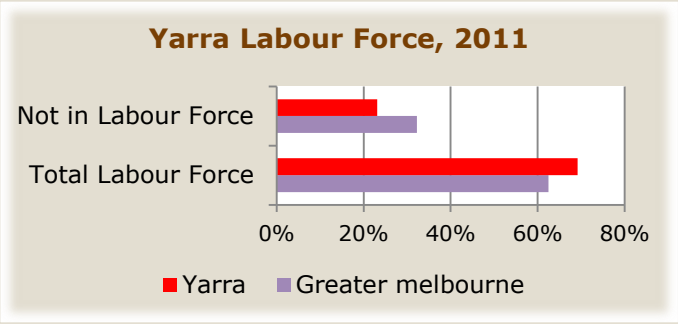
The major differences between qualifications held by the population of the City of Yarra and Greater Melbourne SD were:

- a smaller proportion of persons with no qualifications, 29.1% compared to 42.4%;
- a smaller proportion of persons with Vocational qualifications, 7.9% compared to 15.0%; and
- a smaller proportion of persons with Advanced Diploma or Diplomas, 7.6% compared to 8.8%.

3.5. Employment

The number of people in the Yarra labour force increased by 11.6% between the Census of 2006 and 2011. The size of Yarra's labour force in 2011 was 45,198 persons, of which 12,912 were employed part-time and 29,595 were full time workers.

Yarra's labour force comprised two-thirds of the population aged 15 years and over in 2011 (65.9%). 69% of the labour force worked full time and 30% part time.



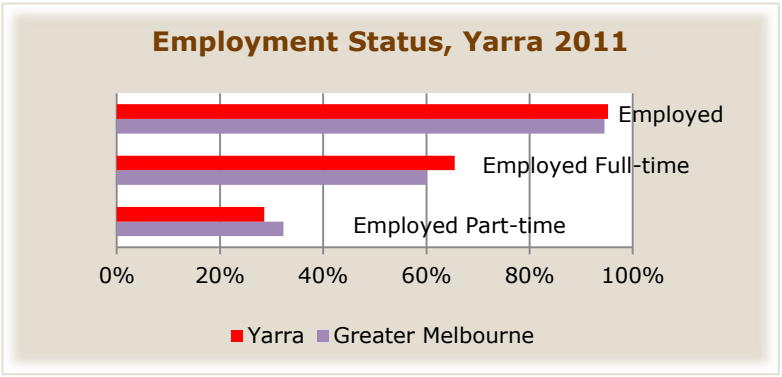
Yarra had a higher proportion of people aged 15 years and over in employment when compared to Greater Melbourne SD, (95.2% and 94.5% respectively) and a lower proportion unemployed (4.8% and 5.5% respectively).

Yarra residents worked mainly as Professionals (43.0%), Managers (15.4%) and Clerical and Administrative Workers (12.3%). These three occupations accounted for 70.7% of the employed resident population.

The proportion of Professionals and Managers was higher in Yarra than Greater Melbourne SD, where 24.1% were Professionals and 12.5% Managers.

There was a lower proportion of Clerical and Administrative Workers in Yarra (12.3%) than Greater Melbourne SD (15.3%).

There was also a smaller proportion of persons employed as Technicians and Trades Workers in Yarra, when compared to Greater Melbourne, 7.2% and 13.4% respectively, and, a smaller percentage of persons employed as Labourers, 3.5% and 8%, respectively).



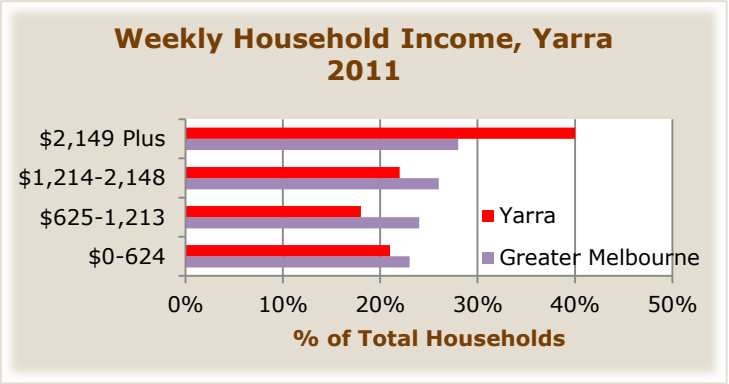
3.6. Income

The distribution of household earnings in Yarra shows great disparity between high and low income households. The predominantly professional capacity of the labour force in Yarra attracted higher average income when compared to the Greater Melbourne SD. Yarra had a larger proportion of high income households (earning $2,500 or more per week); 30% compared to 19.4% for Greater Melbourne SD.

However the proportion of lower income households (less than $600 per week) in Yarra is similar to that of Greater Melbourne, 18% and 19.2% respectively.

In terms of individual income, almost a quarter of Yarra residents (23% aged 15 years and over) earned $1,500 or more per week. The proportion of high income earners for Greater Melbourne SD was considerably less (12.9%).

Yarra also had a larger proportion of individual income earners who earned $2,000 per week or more (12.8%) when compared to Greater Melbourne SD (6.5%).



There is a substantial gap between the highest and lowest income earning groups in Yarra. Although Yarra had a smaller proportion of residents on low individual incomes (26.5% earning less than $400 per week) when compared to Greater Melbourne SD (35.8%), it means that a significant proportion of all Yarra residents are on low incomes facing financial disadvantage.

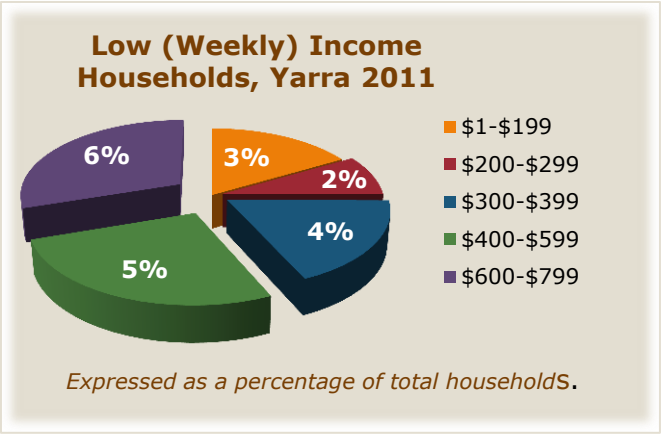
There is also a gendered nature to earning levels. The evidence shows that, on average, women earn only 83% of male earnings.[48]

In Yarra the distribution of people, aged 15 years and over, who earned more than $1,000 per week, was 45.7% female and 54.3% male.

There were more females in the low income category however than male. 26.5% of Yarra residents, aged 15 years and over, earned less than $400 per week, and of these, 58% were women and 42% men.

There were 2,508 lone parents in Yarra. 84.2% of lone parent families were headed by women, and 15.8% by men. The majority of lone parent families included children aged 15 years and under.

The percentage of low income /welfare dependant families with children in Yarra is 9.3%, which is similar to the Victorian state average of 9.0%.[49]



The Victorian Government Department of Human Services (DHS) 2011 Community Survey of public housing residents in Fitzroy and Richmond reported that households tended to be in the low-income bracket with 72.1% having an after tax income of $30,000 per annum or less.[50]

The DHS 2011 Community Survey showed that, of public housing residents in Fitzroy and Richmond:

- 11% reported earning an income through employment or self-employment,
- 17% reported no income,

[48] Sadiq, K (2010)

[49] DH, 2011

[50] DHS, December 2010

- 15% received the Centrelink Aged Pension,
- 13% received the Centrelink Newstart Allowance, and
- 11% received the Centrelink Disability Support Pension

3.7. Housing

Housing Types

There are a range of housing options for residents in Yarra, however as an inner city suburb, the main housing options tend to be medium to high density dwellings with separate dwellings on smaller blocks.

This includes Melbourne's original and oldest suburb, Fitzroy where housing density was required because of the limited supply of land within walking distance of facilities at the time it was established.[51]

In 2011, there were 7,579 separate houses in the area, 19,182 medium density dwellings, and 9,662 high density dwellings.

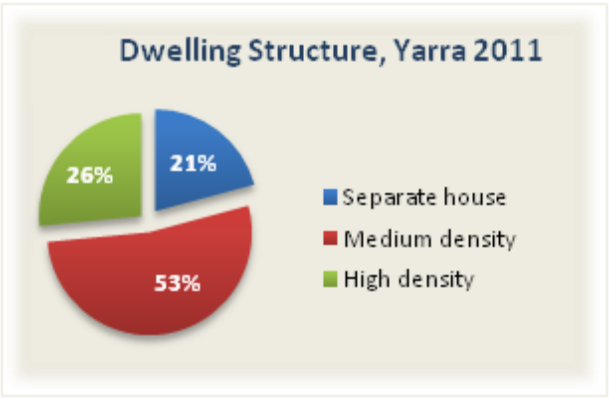
20.6% of all Yarra dwellings were separate houses, however the majority of dwellings were medium density (52.1%) and 26.2% high density dwellings, compared with 71.1%, 21.1%, and 7.2% in the Greater Melbourne SD respectively.

While the City has an above average proportion of flats and apartment, separate housing is still the main housing option, with 62% of all residents living in separate houses.

The median house price for all dwellings in Yarra was $705,000 (2011).[52] The median price for separate dwellings was $810,000 and for Apartments and Units, $511,750.

Housing Tenure

The percentage of rental housing that is affordable in Yarra is negligible, only 1.0% of housing stock is considered affordable. The average affordability indicator for the state of Victoria is 20.4%, making Yarra the 73rd least affordable LGA in Victoria.[53]



Housing costs in Yarra can be high, for both home buyers and private renters. As a percentage of income, mortgage repayments on all dwellings were 47% in Yarra compared to 32% for Greater Melbourne SD.

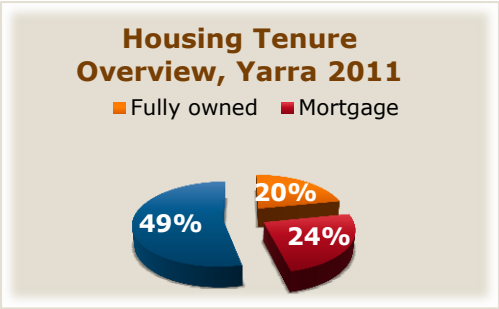
48.2% of Yarra households paid more than $2,352 a month in mortgage loan repayments, compared to 29.4% of households in Greater Melbourne SD.

[51] http://www.fitzroyhistorysociety.org.au/hist.php

[52] Data Source: Housing in Victoria Website, http://www.housinginvictoria.com.au

[53] DH, Yarra Profile 2011.

For home buyers mortgage costs are high and lower rates of home ownership in Yarra are reflected in the proportion of households who make home loan repayments.



- 31.2% of Yarra households paid up to $1,695 in monthly mortgage repayments, compared to 43.9% of households in Greater Melbourne SD.
- 20.6% of Yarra households paid $1,696-$2,351 in monthly mortgage repayments, compared to 26.7% of households in Greater Melbourne SD.

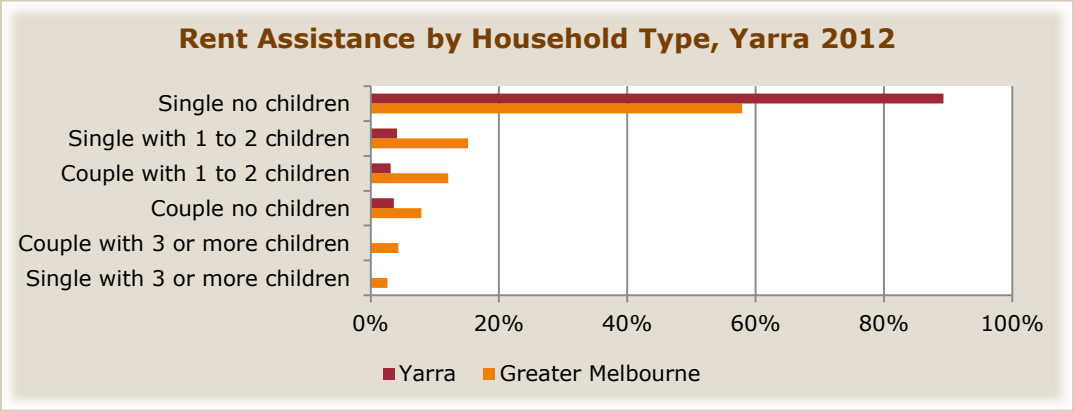
Residents who are renting also face high housing costs. The total number of households renting their dwelling in Yarra increased by 1,209 between 2006 and 2011. The most significant change during this period was in the highest rental quartile ($363 per week and over) which showed an increase of 874 households.

More than half of households renting privately in Yarra (51.8%) pay $363 and over in weekly rent, compared to 31.3% of households in Greater Melbourne SD.

Yarra has a high concentration of social housing as a percentage of total housing stock (14.7%).[54] Overall 10.8% of Yarra households live in public housing, with almost a quarter of (24.1%) of households in Collingwood, more than a fifth (22.8%) of households in North Richmond, and 17.7% of households in Fitzroy living in public housing.

Rent Assistance in Yarra

There are 19,773 persons in Yarra who are in receipt of Centrelink payment, and of these 4,162 receive rent assistance.[55]



The vast majority of those who receive rent assistance in Yarra are single person households (89.3%). This percentage is high when compared with Greater Melbourne SD (57.9%).

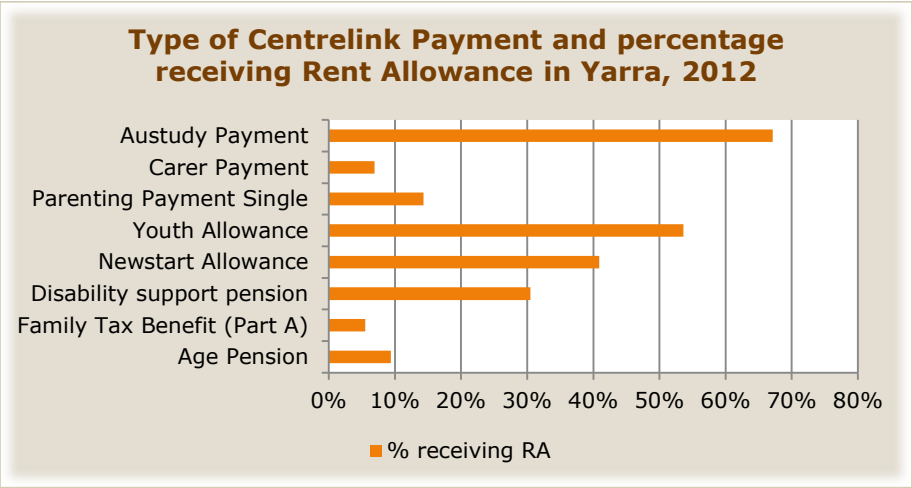
[54] Housing and Community Building, Department of Human Services; preliminary population projections (household types) from Department of Planning and Community Development (2011, unpublished). Currency: 2011 Available: http://docs.health.vic.gov.au/docs/doc/Yarra-(C)

[55] Centrelink payment and Rent Assistance information provided by Housing in Victoria website, hosted by Swinburne Institute for Social Research, June 2012. Available at:

http://www.housinginvictoria.com.au/Default.aspx

The majority of people, who receive both Centrelink payment and rent assistance in Yarra are young people and students.

- 67.1% of young people in receipt of Austudy in Yarra also receive rent assistance, and
- 53.6% of people who receive Youth Allowance in Yarra also receive rent assistance.



Other groups who receive both Centrelink payment and rent assistance in Yarra are as follows

- 10.9% of people on Newstart Allowance;[56]
- 30.5% of people in receipt of Disability Support Pension;
- 14.3% of people in receipt of the Single Parenting Payment; and
- 9.4% who receive the Age Pension, also receive rent assistance.

3.8. Community Health Impact

Social Engagement and Social Inclusion

Social inclusion is a multidimensional concept that recognises both individual agency and the importance of relationships. Social inclusion relates to the broader concept of prosperity or wellbeing, and is not solely based on financial capacity.

Principles for Social Inclusion:

To be socially included, people must be given the opportunity to:

- secure a job,
- access services,
- connect with family, friends, work, personal interests and local community,
- deal with personal crisis, and
- have their voice heard.

Australian Social Inclusion Board, 2008

There are different types and levels of social exclusion and people can move in and out of inclusion. Measuring social exclusion becomes important because being socially excluded has a social impact that affects health and wellbeing.

[56] Newstart eligibility: Adult jobseekers, aged 22 yrs and over

Social inclusion has different dimensions and these can be measured to indicate levels of inclusion and exclusion. For example while many people experience one dimension, others may experience a number of dimensions.

Dimensions of inclusion, such as lack of material resources, being unemployed, lack of education or skills, poor health or disability, can impact upon a person's ability to engage and be socially included. For example unemployment and financial stress can increase the risk of relationship breakdown, poor health or depression, further compounding disadvantage.

Levels of exclusion can be calculated by considering the dimensions together with the duration for each individual; whether they persist or are temporary.

Table 3. Poverty and Social Exclusion in Australia - Domains and Components

Domain	Components
Material resources	Household income; household net worth, household consumption expenditure, homelessness, financial hardship
Employment	Paid work; unpaid work
Education & skills	Basic skills (Literacy, numeracy); educational attainment; lifelong learning
Health & Disability	Physical health, Mental health, disability or long-term health condition
Social	Institutionalisation/separation from family; social support; participation in common social activities; internet access
Community	Access to transport; access to health, utilities and financial services; neighbourhood quality; voter enrolment; civic participation and voluntary activity/membership
Personal safety	Victim of crime, subjective safety; victim of discrimination

Pilot research, conducted in Melbourne, considered the persistence of exclusion, and the findings demonstrated that 20-30% of Australians aged 15 years and over experienced some form of exclusion ('marginal' exclusion at a given point in time), 4-6% were 'deeply excluded', and less than 1% per cent were 'very deeply excluded'.[57]

Taking the domains and components of social inclusion noted above, and applying these to Yarra results in the following indications:[58]

- High social engagement - almost 60% of Yarra residents reported membership of an organised community group, similar to the percentage for Victoria (almost 61%);
- High parental involvement with schools - when compared to the Victorian average 56.7% parents in Yarra were involved in schools, compared with 48.8% for Victoria;

[57] Smyth, P. (2010), *In or Out? Building an Inclusive Nation*. The Australian Collaboration and the Brotherhood of St Lawrence, Melbourne

[58] Community Indicators Victoria (CIV), 2011

- Facilities and services - 90.2% of residents believed there are good facilities and services in Yarra, compared with 85.2% for Victoria overall; and
- Elderly females are at risk of social exclusion – 1.7% of elderly residents (75 years and over) lived alone, and of these, almost 70% were female. Being elderly and living alone puts individuals at greater risk of social exclusion.

Socio-economic disadvantage is also a multidimensional concept, and has dimensions similar to those used to measure social inclusion. However, although there are commonalities in the demographic composition of the socially excluded and the income poor, there are also important differences. For example persons aged 65 years and over represent a much smaller share of the most 'excluded' group than they do of the 'poorest', and couple and single families with children represent a larger share of the excluded than they do of the poor.[59]

Role for Community Services

Research has indicated a strong role for community and support services in combating social exclusion. The Australian Social Inclusion Board found that although strong social networks, such as family and friends, are an important form of support and assistance, external support services also play an important part. External support from medical or counselling services, community services and the assistance of government welfare and intervention played a part in assisting people to overcome disadvantage or to protect them from its cumulative impacts.[60]

Social and economic disadvantage can cause individuals and families to be at risk simply due to the costs of maintaining a household. In an affluent municipality such as Yarra the residents most at risk of social exclusion are likely to be individuals and households on low income. People on low incomes must decide where to spend limited funds and this means the ability to access some health services and even healthy food is often constrained.

Yarra Priority Populations

The table following demonstrates the similarities between the priority populations identified in health planning for Yarra and certain demographic groups identified in recent analysis of the Household, Income and Labour Dynamics in Australia (HILDA) Survey.

Measuring the extent of poverty and social exclusion in Australia using this data found higher incidences of exclusion among certain demographic groups. The demographic groups identified from the HILDA data are represented in Yarra and were recognised in the previous Health Plan as needing extra reach. The table illustrates the similarities.[61]

Yarra City Council recognises the importance of continuity of support for families experiencing disadvantage, as a vital aspect of its service to the community, especially those most vulnerable citizens.

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[59] Scutella et al, 2009.

[60] Australian Social Inclusion Board, Breaking Cycles of Disadvantage (2011), Department of the Prime Minister and Cabinet, Canberra.

[61] Scutella et al, 2009.

Table 4. Yarra Priority Groups and HILDA Demographic Groups Comparison

Yarra Health Plan 2009-13 Priority Populations	Demographic Incidence of Exclusion (Scutella et al, 2009)
▪ **Indigenous Australians**	Indigenous Australians
▪ **Women**	Females experience higher rates of marginal exclusion than males, with roughly a third of females identified as marginally excluded.
▪ **People from diverse cultural backgrounds**	Persons born in non-English speaking countries.
▪ **People living in isolation or experiencing psychological distress**	Marginal exclusion rates for persons aged 65 years are between 40-50% higher, than for younger persons.
▪ **Single women and children**	Single parents have particularly high rates of marginal exclusion, with lone person families also prone to marginal exclusion.
▪ **People in socio-economic disadvantage**	Persons in rental accommodation, with those renting from state housing authorities the most prone to exclusion.
▪ **People living with a disability**	Persons with long-term health conditions.

Gambling and Electronic Gaming Machines

Gambling has the potential to impact significantly on the health and wellbeing of individuals, families and the broader community. The prevailing view in Australia is that problem gambling is not solely an individual problem but can emerge from a combination of factors related to the individual gambler and the wider gambling and social environment.

Through its social policy, the *Yarra Gaming Strategy, a wellbeing approach 2011-2015*, Council aims to minimise gambling harms in the Yarra community, advance community well-being, and advocate for change to other levels of government.

There are eight gaming venues in the municipality with a total of 308 licensed electronic gaming machines (EGMs). The largest venue is the Royal Oak in Richmond which has 80 EGMs. For the period July to December 2012 the total expenditure (losses) at this venue was $2,188,718.39.[62]

However expenditure/losses at the Tankerville Arms Hotel, which has 49 EGMS was greater, at $3,265,927.00. Overall expenditure/losses for all venues for the period July to December 2012 was $15,783,887.41, and for the twelve months July 2011 to June 2012 the total expenditure was $31,424,190.89.

Per head of adult population in Yarra EGM losses were $440 per adult, compared with $602 per head of adult population for Victoria.[63]

Family Violence and Sexual Violence

The terms 'family and domestic violence', and 'sexual violence' cover a wide range of abusive and controlling behaviours that aim to control others, and are among the

[62] Net EGM expenditure is the total amount lost by players.

[63] Data source: Victorian Commission for Gambling and Liquor Regulation (VCGLR). Accessed 4 Feb 2013:
http://www.vcgr.vic.gov.au/CA256F800017E8D4/research/FBC8F48D9A435C15CA2577810018863C?Open

most personal and intimate criminal acts. There is no one single, agreed definition for family, domestic and sexual violence, although there are many jurisdictional legal definitions.[64]

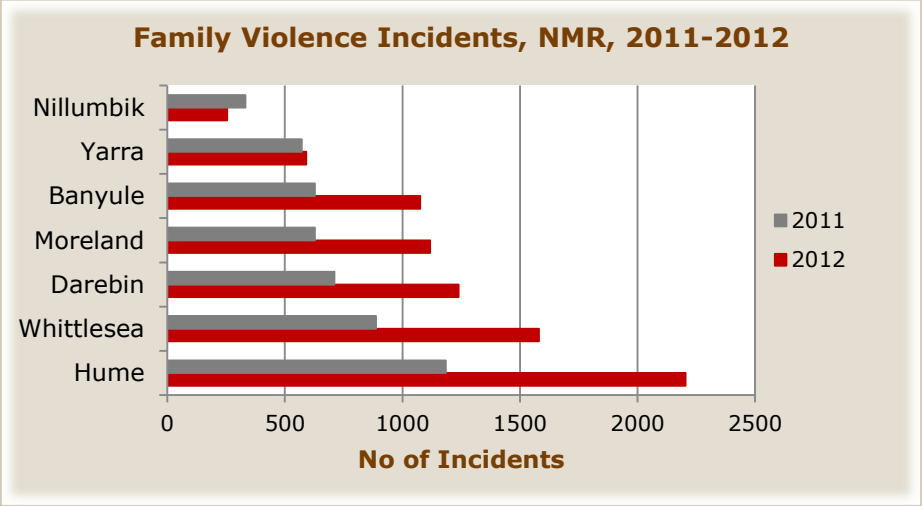
The impacts of family and domestic violence, and sexual violence reach deep into communities, directly and indirectly, through affected individuals and families. There are significant costs attached to family and domestic violence, and to sexual violence across different systems, which includes homelessness, child protection and health services and the justice system.

Family and Domestic Violence

In 2011 the number of family violence incidents reported to police, per 1,000 population, was 5.7 in Yarra.[65] This compared with 7.1 per 1,000 population in the NMR, and 7.4 per 1,000 population in Victoria for the same period.

In 2012 police attended 591 family and domestic violence incidents in Yarra, a rate of 7.5 per 1,000 compared to the Victorian rate of 9.1 per 1,000 population.

The number of incidents increased dramatically in NMR the following year, although the increase in Yarra was modest. In 2012 the total number of incidents recorded by police in the NMR was 8,063, an overall increase of 3,122 in the course of the year.



Source: Corporate Statistics, Victoria Police Law Enforcement Assistance Program (LEAP) Database.

Details of incidents of family violence reported in Yarra for 2012 were as follows:

- the total number of reported incidents was 591, compared with 571 the previous year;
- on average, eleven incidents of family and domestic violence are reported to police every week in Yarra;
- females (79%) are the majority of victims;
- males (75%) are the majority of perpetrators;
- 79% of victimised women were aged between 15 and 44 years; and
- children were present at 151 reported incidents of family violence, a rate of almost 2 (1.9) reported incidents per 1,000 population.[66]

[64] ABS, Defining the Data Challenge for Family, Domestic and Sexual Violence, 2013, Cat. 4529.0

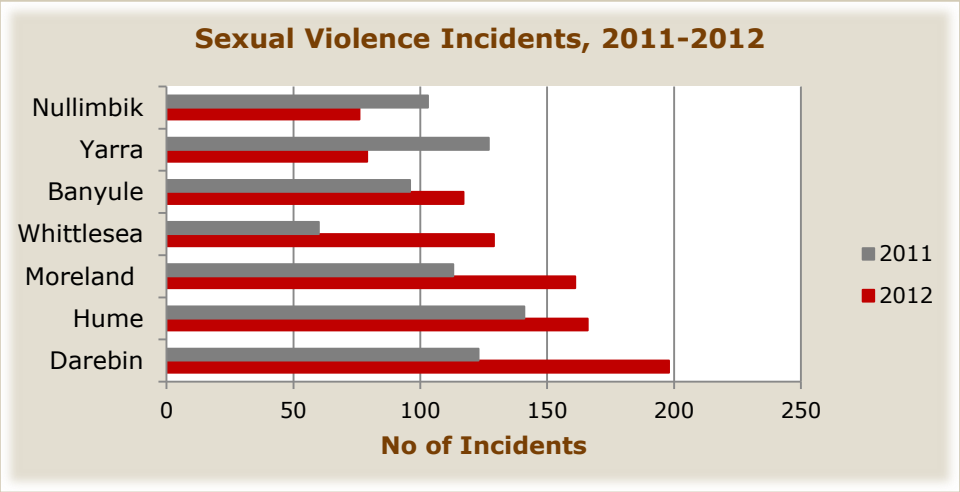
[65] Victoria Police, Law Enforcement Assistance Program 2011

[66] Victoria Police (2012) Family Incident Reports

Sexual Violence

Sexual violence can occur as an aspect of family violence or as a separate form of sexual assault such as rape and other forms of sexual assault. Sexual assault is a criminal offence. On average in the NMR, 24 sexual incident offences are recorded by police every week and the majority of victims are females. Sexual violence is predominantly perpetrated against young women and males comprise the majority of alleged offenders.

There were 50 rape offences recorded by police in Yarra in 2012, an increase on the previous period (2011) when there were 29 such offences recorded. There were 79 reports of other forms of sexual assault, making a total of 129 recorded incidents of sexual violence in Yarra in 2011-2012.



Source: Victoria Police LEAP Database

The equivalent rate of sexual assault in Yarra was 0.7 per 1,000 population for rape, compared to 0.4 per 1,000 for Victoria overall. Victims of sexual assault were overwhelmingly female; 92% of all offences recorded.[67]

The total number of recorded rape offences in NMR was 328, an increase of 27% on the previous year (259 recorded rape offences in 2011). The total number of recorded 'other' sexual assault offences in NMR was 924, an increase of 30% on the previous year (707 recorded 'other' sexual assault offences in 2011).

Community Safety

Perceptions of how safe their neighbourhood is, is closely related to people's overall level of satisfaction with their community.[68] Holding negative perceptions about their neighbourhood can lead to people being socially excluded because it can deter people from building and maintaining social networks in their local area, and from accessing local services and recreational facilities.

The evidence, related to perceived levels of safety rather than actual levels of crime, has been shown to influence activity levels within neighbourhoods.[69] For example parents who consider their neighbourhood to be unsafe are likely to put greater constraints on their child's activities.

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[67] Victoria Police Corporate Statistics LEAP database

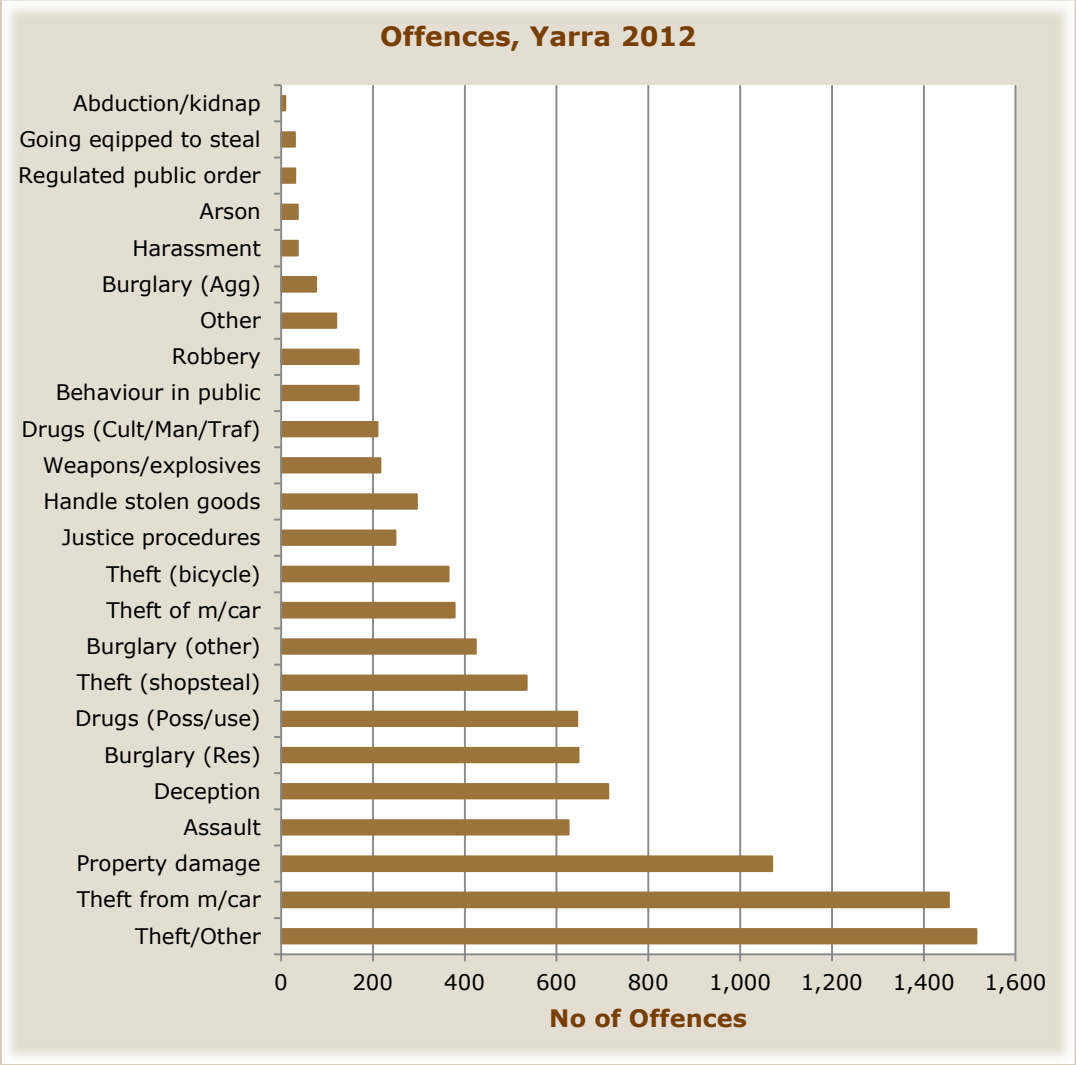
[68] Butterworth (2000), The relationship between the built environment and wellbeing: a literature review, VicHealth Promotion Foundation.

[69] Harrison RA, Gemmell I & Heller RF 2007, 'The population effect of crime and neighbourhood on physical activity: an analysis of 15,461 adults', *Journal of Epidemiology and Community Health*, vol 61, pp 34–9.

In Yarra, there were 1433 recorded crimes against the person per 10,000 population in 2012 compared to 1134 in the Northern & Western Metro Region (NWMR) and the Victorian state average of 984.[70]

There were 9,561 recorded crimes against property per 100,000 population in Yarra in 2012, compared to 6,317 in NMR and the Victorian State average of 4,797.

The following chart illustrates the type and number of offences committed in Yarra in 2012.



Source: Victoria Police Law Enforcement Assistance Program Database

Perceptions of Safety

Perceptions of Safety were measured in the 2011 VicHealth Indicators Survey. Respondents were asked to rate how safe they felt when walking alone in their local area during the day and at night. When walking alone in their local area during the day 93.1% of persons in Yarra felt safe or very safe, compared to 95.2% in the NMR and the Victorian State average of 97%.

Following on from this percieved levels of safety at night in Yarra are perhaps surprising. 73.8% of persons in Yarra stated that they felt safe or very safe when

[70] CIV, 2011
http://pdf.mediainsights.net.au/?url=http://www.communityindicators.net.au/wellbeing_reports/yarra

walking alone at night, compared to 65.2% in NMR and the Victorian State average of 70.3%.

However, further analysis demonstrates a gendered difference in people feeling safe when walking home alone at night. Over half of women (51.2%) felt unsafe walking home alone at night in Yarra compared to a fifth (20.7%) of men.

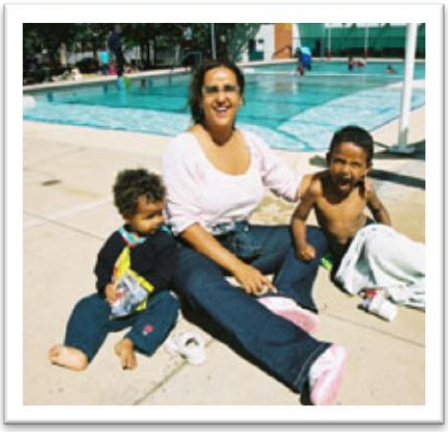
4. Yarra Health Characteristics

4.1. The Impacts of the Social Gradient

Council provides many of the local human services and facilities important to the community's health and wellbeing, including services such as early childhood health, education and development, support for young adults, and assistance for older residents to remain in their homes.

Yarra City Council has an important tradition of seeking to provide opportunities for citizens to participate equally in our society and achieving social justice outcomes for residents. The organisation works with the community sector and other levels of government to challenge discrimination and address disadvantage. This is accomplished by means of direct support through the Yarra Community Grants Program and through partnerships that support community projects, such as the Commonwealth's social inclusion agenda.[71]

Health Inequities



Social factors determine the health of individuals and of populations to a significant degree. This is illustrated by the social gradient, which describes the differences between, and within, countries that result from the social environment where people are born, live, grow, work and age. Health inequities result from the social gradient and are avoidable inequalities in health.[72]

The evidence demonstrates that low income and disadvantaged groups experience poorer health, have less access to services and die younger than the rich and powerful, in all societies.[73]

Speaking more broadly, people's health overall is improving, albeit at different rates, however inequities remain. This general relationship between social factors and health outcomes has been established, although the causal nature of the relationship is not yet well understood. However the evidence is good enough for effective action.

Further, the evidence shows that the factors which improve overall health have differential effects on the population, with more advantaged groups always benefiting disproportionately from the application of universal interventions. Sometimes there is a catching up effect, and the less well off make up ground later, however there is still a differential remaining.[74] This remaining health differential is the result of the social gradient and demonstrates the extra reach needed for low income and disadvantaged groups.

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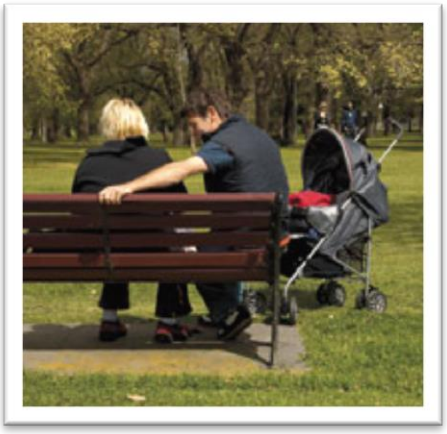
[71] Serving Yarra's Community, Yarra City Council http://www.yarracity.vic.gov.au/Your-Council/Council-Plan/Strategic-Objectives/Serving-Yarras-Community/

[72] Closing the gap in a generation. Health equity through action on the social determinants of health, 2008, Commission on Social Determinants of Health Final Report, the World Health Organization. Available at: http://whqlibdoc.who.int/hq/2008/WHO_IER_CSDH_08.1_eng.pdf

[73] Kelly at al, (2007) The Social Determinants of Health, Final Report to WHO

[74] Ibid

Avoidable Mortality and the Social Gradient



Rates of avoidable death (mortality) offer one way to gauge the social gradient. Socioeconomic status has been found to be an important determinant of avoidable mortality.

Consistent with the international literature, research conducted by the Public Health Branch of the Victorian Government Department of Human Services, found that persons residing in the most disadvantaged LGAs in Victoria experienced significantly higher rates of avoidable mortality than their counterparts in the least disadvantaged LGAs.

Interestingly only 25% of the difference in life expectancy was found to be related to poor diet, overcrowding and adverse health habits. The other 75% appeared to reflect relative poverty, or inequality. These local conclusions are consistent with the international work of organisations such as the WHO.

The ways in which inequality and the social gradient affect health and mortality is not fully understood but the difficulties associated with managing stress at lower socioeconomic levels has been proposed as a likely basis.[75] The combination of acute financial strains, disruption of social relationships and supports, with weak mechanisms and lack of resources for coping with stress have been shown to increase the risk of psychological dysfunction, and linked to reduced resilience to disease.[76]

4.2. Yarra Service Age Groups

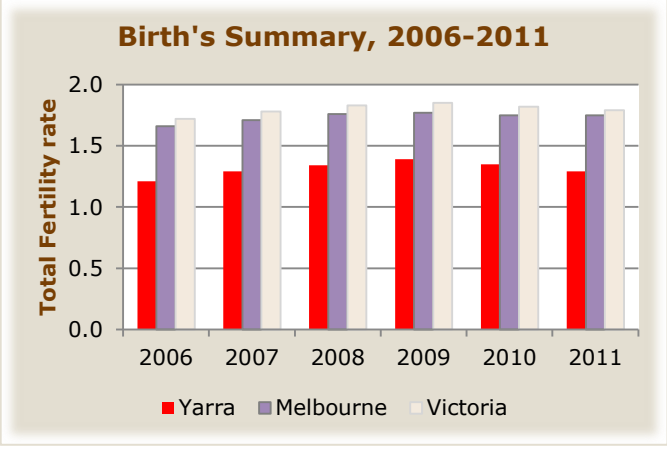
Yarra City Council's Maternal Child Health Service is a free service available for parents who live, work or study in Yarra. The service monitors the health and development of children from birth up until school age, and provides ongoing support and advice to parents.

The quality of care received in early childhood is extremely important as evidence shows that it strongly impacts upon intellectual, cognitive, social and behavioural development in children.

Births

The average number of births recorded in Yarra over the past six years has been 1,063 annually.

In 2011, a total of 1,030 births were recorded in Yarra. This compares with 968 in 2006; 1,093 in 2007 and 2008; 1,106 in 2009; and 1,088 in 2010.[77]



The percentage of low birth weight babies per 100 births

[75] Barondess, 2001.
[76] Ibid
[77] ABS, Cat.3301.0, Births, Australia, 2011.

was 5.9% for Yarra in 2011, compared to the Victorian state average of 6.6%.[78]

The proportion of infants fully breastfed at age three months in Yarra was over 70%, which is the second highest proportion in the state. The average for Victoria was 51%. Fully breastfed infants are those who receive breast milk as their main source of nourishment, and includes infants exclusively and predominantly breastfed.[79]

Fertility Rates

Since 1976, the total fertility rate (TFR) for Victoria and Australia as a whole has been below replacement level. The TFR represents the average number of babies that a woman can expect to bear during her lifetime, assuming current age-specific fertility rates (ASFRs) are experienced. This means that the average number of babies born, at current fertility rates, is not enough to replace the mother and her partner. The TFR required for replacement is currently considered to be around 2.1 babies per woman.[80]

The peak of the baby boom was in 1961 when the TFR reached 3.45 babies per woman in Victoria. However the TFR reached its lowest level in 2001, dropping to 1.61 babies per woman. In the last decade the TFR has slowly begun to rise in Victoria, increasing by 10%, from 1.63 in 1999 to 1.80 babies per woman in 2009.

The fertility rate in Yarra is 1.3.[81] This compares to the fertility rate of 1.9 in all LGAs comprising the NMR, except Moreland (0.8) and Yarra (1.3).

In 2011 in Australia the median age of first-time mothers was 28.9 years, 62% of whom were married at the time of giving birth. The median age of all mothers for births registered in 2011 was 30.6 years, while the median age of fathers was 33.0 years.

Immunisation Rates

The percentage of children in Yarra, who were fully immunised at age 24-27 months, was 91.4%. This compares favourably with the Victorian average of 93.1%. Yarra ranks 53 of 79 Councils in Victoria for the percentage of children fully immunised at age 24-27 months.[82]

Disability and People in Need of Assistance

In 2011, 4% of Yarra residents reported that they needed help in their day-to-day lives due to disability. 2.9% of persons needing assistance were people with severe and profound disability

The total number of persons needing assistance in Yarra was 2,791 and of these:

- 71 were children aged 0-9 years,
- 71 were aged 10-19 years,
- 744 were adults aged 20-59 years,
- 627 were aged 70-74 years, and
- 1,278 were elderly aged 75 years and over.

Seniors

[78] DH, 2011

[79] Breastfeeding has a range of positive effects on the survival, development and growth of babies. Antibodies present in breast milk can protect a baby from disease while its own immune system is developing (AIHW 2005).

[80] ABS, Cat.1367.2 State and regional Indicators, Victoria, Recent Fertility Trends in Victoria Dec2010

[81] ABS, National Regional Profile: Yarra 2011

[82] Australian Childhood immunisation register, Medicare Australian, Sep2011.

Yarra City Council provides Home & Community Care (HACC) services to residents, in partnership with the Victorian Government. Community based services are provided, such as home care, delivery of meals, home maintenance, service assessment, planned activity groups and flexible service responses.

The HACC program provides basic support and maintenance for people whose capacity for independent living may be at risk, or who may be at risk of premature or inappropriate admission to long-term residential care. The program offers a range of services that support people in their homes, including services to the frail aged, young people with disabilities and to carers.

Yarra provides HACC services to 160.6 persons per 1,000 target population aged 0-69 years, compared with 113.8 persons per 1,000 target population for Victoria. Council also provides HACC services to 209.1 persons per 1,000 population aged 70 years and over, compared with 215.1 for Victoria overall.

Aged care places in Yarra were as follows:

- 20.3 high care places per 1,000 eligible population;
- 43.4 low care places per 1,000 eligible population;

The availability of high care places in Yarra is below the Victorian average of 41.7 per eligible population.

4.3. Lifestyle and Environmental Factors

There is much that we as individuals can do to improve our own health and wellbeing, and that of our families' where we have caring responsibilities for others. However the environments and the social settings in which we live play a large part in either promoting or constraining our individual ability to make healthy lifestyle choices. For example, overweight and obesity are linked to more deaths globally than underweight, and the causes include a more sedentary lifestyle in the first world, coupled with increased intake of energy-dense foods.[83]

The National Preventative Health Taskforce uses the term 'obesogenic' to describe the combination of environments and diet.[84] Noting that the places where we live, learn, work and play are important influences on how (and how much) we move around, what we eat and drink, our social connections and sense of community belonging.

The indicators discussed below relate to burden of disease conditions that are largely preventable. Local government health planning, as set out in the Yarra Health Plan, seeks to create environments conducive for making healthy choices.

Healthy eating

Fruit and vegetable consumption is strongly linked to the prevention of chronic diseases, including coronary heart disease, hypertension, stroke and type 2 diabetes.[85]

Overweight and obesity can be wholly avoided where people have access to a healthy lifestyle. The Australian guidelines for fruit and vegetable consumption per person is four serves of vegetables for 12-18 year olds, and five serves for persons aged 19 plus. The recommended daily fruit intake is three serves for 12-18 year olds, and two serves for persons aged 19 plus.

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[83] WHO, Fact Sheet N° 311, Obesity and overweight, May 2012.

[84] Garrard, A (2009) Options Paper

[85] NHMRC, 2003

The percentage of persons in Yarra who indicated that they did not meet these guidelines was 44.7%.[86] This is slightly better than the Victorian percentage of 48.2%. More males than females failed to meet these dietary guidelines for fruit and vegetable consumption: 40.2% of females and 47% of males did not meet the recommended daily intake amounts.

More people die worldwide from being overweight than underweight.

The burden of disease risk increases significantly when overweight for the following conditions:

- *Diabetes burden, 44%;*
- *Ischaemic heart disease burden, 23%; and*
- *Certain cancers burden, 7-41%.*

Worldwide, obesity has almost doubled since 1980 and overweight and obesity have become the fifth leading risk for death throughout the world. The WHO defines overweight and obesity as abnormal or excessive fat accumulation that may impair health.[87]

The overall percentage of persons in Yarra categorised as overweight or obese in 2011 was 42.5%, compared to the overall percentage for Victoria which was 48.6%. The proportion of Victorians categorised as overweight was 38.1 per cent, and the proportion categorised as obese was 24.5%. As an overall percentage this means that 62.6% of Victorians are categorised as overweight or obese, which equates to around 2.4 million people aged 18-75 years.[88]

The prevalence of obesity in Victoria was 32.0%, which was higher in women than in men and increased with age group. In Yarra however more males than females were categorised overweight or obese in 2011. The overall percentage of females categorised as overweight or obese was 33% (40.3% for Victoria), and the overall percentage of males categorised as overweight or obese was 51.8% (57.2% for Victoria).

Food security

Healthy eating was identified as one of the strategic priorities of the Yarra Health Plan 2009-2013. Healthy eating, in the context of public health, is considered to be the consumption of a diet that provides sufficient energy and nutrition for desired daily activities and good health, but not so much as to result in overweight or obesity. The influences affecting peoples' diets and eating patterns include household income, level of ability or disability to be active and generally the different environments in which people live.

In terms of food insecurity, 10% of the population of Yarra reported food insecurity.[89] This indicator measured the percentage of people who ran out of food in the past twelve month period and did not have the financial resources to buy more. Self-reported food insecurity was higher for residents of Yarra than for Victoria overall (6.0%).

Australian and international literature suggest high rates of food insecurity in resettled refugee families.[90] Refugee families are also known to experience

[86] DH Victorian Population Health Survey, 2008

[87] WHO, Fact Sheet N° 311, Obesity and overweight, May 2012.

[88] DH Victorian Health Monitor Survey, 2012

[89] Community Indicators Victoria, 2011. Available at: http://www.communityindicators.net.au/

[90] DEECD, Victorian Child & Adolescent Monitoring System Refugee Status Report, 2011

difficulties in locating affordable supplies of traditional and fresh foods, and in adjusting to the timing of meals and school lunches. Although the current evidence does not suggest localised food insecurity in African–Australian families in Yarra, it is something to be aware of.

Physical Activity

Making physical activity the easiest choice for people helps to reduce health risks engendered by modern sedentary lifestyle. Almost a quarter of the Yarra residents surveyed in the Victorian Population Health Survey did not meet physical activity guidelines, 24.9%.[91] The Victorian average was 27.4%. Males and females were similar in not meeting physical activity guidelines, 24.3% and 23.5% respectively.

Smoking

The WHO reports that tobacco use kills nearly six million people a year worldwide. By 2020, this number is calculated to increase to 7.5 million, and account for 10% of all deaths.

The proportions of 15–17 year olds in Yarra who smoke (27.1%) and drink (66.6%) are among the highest recorded of any Victorian LGA.[92]

Almost a fifth (19.9%) of the population, aged 18 years and over, currently smoke. This level is comparable to the percentage for Victoria, 19.1%. However, there are more females 18 years and over than males who are current smokers in Yarra, 19.9% and 17.1% respectively.

The prevalence of daily smoking in the Victorian population aged 18-75 years was 13.9%, with an additional 4.0 per cent being occasional smokers. There was a higher prevalence of daily smokers in men compared with women. However, a similar proportion of women reported being occasional smokers (4.3 per cent), as did men (3.8 per cent). The prevalence of daily smokers decreased with age group in women, but not in men.[93]

4.4. Drug and Alcohol Use

Alcohol

Alcohol is the world's third largest risk factor for disease burden. The impact of alcohol consumption on disease and injury is largely determined by two dimensions; the volume of alcohol consumed and the pattern of drinking.[94] Patterns of consumption, such as binge drinking, create significant public health and safety problems, not just in Yarra, but in urban centres throughout the western world.

Alcohol was the most widely used drug by Victorians in 2007, particularly among males. Yarra residents were significantly more likely to have purchased alcohol in the previous week (48.2%), compared with the Victorian average (36.3%).[95]

The proportion of 15–17 year olds in Yarra who reported drinking alcohol in the last 30 days was 66.6%, one of the highest recorded of any Victorian LGA.[96]

Measures of risk of short-term harm indicated an increase in risky drinking patterns among Victorian adults compared with 2004 (8% weekly in 2007 vs. 6% in 2004; 20% monthly in 2007 vs. 18% in 2004). In 2009-10, direct measures of alcohol-related harm indicated that problematic alcohol consumption continued in Victoria.

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[91] Ibid

[92] D, 2011

[93] DH Victorian Health Monitor Survey, 2012

[94] WHO, Fact Sheet, Alcohol, Feb 2011

[95] DH Victorian Health Monitor Survey, 2012

[96] *Victorian Adolescent Health and Wellbeing Survey (HowRU?),* 2009, DEECD.

In 2010, the number of alcohol-related ambulance attendances in metropolitan Melbourne remained relatively stable, with only a small increase compared with the number in 2009. However ambulance attendances relating to alcohol continued to be highest in the inner city LGAs of Yarra, Melbourne, and Port Phillip.[97]

The percentage of persons at risk of short-term harm from alcohol consumption in Yarra was 16%, compared to 10.2% for Victoria. Yarra was ranked second highest LGA in Victoria for offences related to drug usage and possession, at 8.1 per 1,000 population, compared with 1.9 per 1,000 population for Victoria.[98]

Table 5. Ambulance attendances for non-fatal alcohol related incidents. 2007-2010

Year	Yarra	% of Melbourne Total
2007	331	5.4%
2008	344	5.4%
2009	316	5.1%
2010	353	5.5%

Source: Ambulance Victoria, analysis by Turning Point Alcohol and Drug Centre

There were 8.8 persons per 1,000 population who sought treatment for drug and alcohol interventions in Yarra, compared with 5.2 persons per 1,000 population for Victoria as a whole. This figure should be treated with caution however as there is a concentration of counselling and treatment services in Fitzroy around St Vincent's Hospital precinct.

Tranquilliser-Related Harm

Yarra was one of five LGAs in metropolitan Melbourne with the highest number of non-fatal benzodiazepine-related ambulance attendances in the period 2007 to 2010. There were 144 non-fatal benzodiazepine-related ambulance attendances in Yarra in 2010, 4.5% of the total related ambulance attendances for tranquilliser harm in Melbourne.

Heroin and Other Opioids

Heroin and other opioid use was in general decline in Victoria over the period 2007-2010. Population-based surveys continued to indicate a very low prevalence of opioid use among the Victorian general population in 2007. In Melbourne heroin remained the most commonly used opioid drug (in conjunction with cannabis) by people who regularly inject drugs, with an increase in the frequency of recent use and injection reported in 2010 compared with 2009.

In 2010, the number of non-fatal heroin overdoses attended by ambulance in metropolitan Melbourne decreased by 12% to 1,088 cases, with one-fifth of non-fatal overdoses continuing to occur in the City of Yarra (220 incidents).

The City of Yarra has consistently recorded the highest number of non-fatal heroin overdoses for the period 2007 to 2010. However the lowest recorded percentage, across the four years, was in 2010 when one-fifth (20%) of non-fatal heroin overdoses were attended by ambulance in Yarra.

In terms of offences for drug usage and possession Yarra recorded 8.4 offences per 1,000 population in 2011.[99] This compared with a rate of 1.9 per 1,000 population

[97] The Victorian Drug Statistics Handbook: Patterns of drug use and related harm in Victoria for the period July 2009 to June 2010, Victorian Government Publishing Service.

[98] Ibid

[99] DH, Yarra Profile, 2011

recorded for Victoria overall, making Yarra the second highest LGA for such offences.

4.5. Health and Wellbeing

Measures of health and wellbeing capture elements that relate to quality of life, including the impacts of disability and disease.[100] Wellbeing includes measures of physical, mental and social wellbeing. The broad scope of this dimension captures elements of the quality of life of individuals in the population, as well as the impact of disability and disease.

Non-Communicable Diseases

Non-communicable diseases (NCDs) are largely preventable by means of effective interventions that tackle shared risk factors, namely: tobacco use, unhealthy diet, physical inactivity and the harmful use of alcohol.

Most NCDs could be prevented by eliminating the major risks. The WHO estimates that if the major risk factors for chronic disease were eliminated, around three-quarters of heart disease, stroke and type 2-diabetes would be prevented, as well as 40% of cancer across the world.[101]

Being overweight or obese is a major risk factor for non-communicable diseases such as:

- *Cardiovascular diseases (incl. stroke)*
- *Diabetes*
- *Musculoskeletal disorders(esp. osteoarthritis)*
- *Some cancers*

WHO, 2011

Asthma

The percentage of persons reporting asthma in Yarra was 10.8%, compared to the Victorian percentage of 10.7%. The asthma admission rate ratio for Yarra was 1.07, compared with the admission rate for Victoria 1.00.

Diabetes

There are two types of diabetes:

- Type 1 is characterised by deficient insulin production, requires daily administration of insulin and is not preventable with current knowledge.
- Type 2 results from the body's ineffective use of insulin. It is largely the result of excess body weight and physical inactivity and comprises 90% of people around the world with diabetes.[102]

The percentage of persons reporting type-2 diabetes in Yarra was 3.75 compared to the Victorian percentage of 4.8%. The hospital admissions rate ratio for diabetes complications for Yarra was 0.91 per 1,000 persons, compared to 1.00 per 1,000 persons for Victoria overall.

The prevalence of diabetes was 4.6% for all Victorians in 2009-2010. A further 4.3% had impaired fasting glucose. The prevalence of type-1 and type-2 diabetes was 0.6% and 4.0%, respectively. The prevalence of diabetes was similar between men and women, and tended to increase with age.

The prevalence of known diabetes was 3.4%, which was higher than that of newly diagnosed diabetes, 1.2%. This would suggest that for every three diagnosed cases there is one undiagnosed case of diabetes in Victoria. Among those with known diabetes, 91.6% were receiving oral hypoglycaemic medications and/or insulin. Less than half (39.0%) of those with known diabetes were meeting the haemoglobin A1c target for diabetes control.

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[100] Sources for Burden of Disease: DH Yarra Profile, 2011 and DH Victorian Health Monitor Survey, 2012.

[101] WHO, 10 Facts on Non-communicable Diseases, 2011
http://www.who.int/features/factfiles/noncommunicable_diseases/en/index.html

[102] WHO Fact Sheet N° 312, Diabetes, Sept 2012

Cardiovascular disease

Cardiovascular diseases (CVDs) are the number one cause of death globally and include a group of disorders of the heart such as coronary heart disease, cerebrovascular disease, deep vein thrombosis and similar.[103]

The prevalence of self-reported CVD was 3.1% for Victorians aged 18-75 years in 2009-2010. The prevalence of CVD was higher in men than in women, and increased with age group. It was higher in rural areas compared with the metropolitan area, and higher in the physically inactive, the obese, in those with fair or poor health and higher in those with diabetes and the metabolic syndrome.

Heart disease and stroke can be prevented by maintaining a healthy body weight, choosing a diet rich in fruit and vegetables, and avoiding the harmful use of tobacco and alcohol.

Cancer

Cancer is a generic term for a large group of diseases that can affect any part of the body, a defining feature of which is the rapid creation of abnormal cells that grow beyond their usual boundaries.[104]

The cancer incidence rate per 100,000 population for Yarra was 397.3, compared with 511.4 for Victoria overall. The cancer incidence rate for females in Yarra was lower than that for males, with 359.1 females per 100,000 population and 436.6 males per 100,000 population. The equivalent rates for Victoria were 445.4 females per 100,000 population and 578.5 males per 100,000 population.

Screening programs are especially effective for frequent cancer types. The percentage of female Yarra residents who reported having participated in breast cancer screening was 54.3%, and 66.1% for cervical cancer screening.[105]

Mental Health

There were 13.3 persons per 1,000 population registered mental health clients in Yarra, compared with 10.9 persons per 1,000 population for Victoria as a whole.

General Health Care

There are 1.74 general practitioners (GPs) per 1,000 population in Yarra, compared with 1.11 per 1,000 population for Victoria as a whole. Yarra is well serviced in terms of general health care services, and ranked fifth LGA overall in terms of GP services in Victoria.

The number of GP attendances per 1,000 population in Yarra was similar to the number for Victoria as a whole; 5,283 and 5,391 respectively.

The division of GP attendances per 1,000 population for males and females was:

- Males, 4,706 GP attendances per 1,000 population (Victoria 4,573), and
- Females 5,850 GP attendances per 1,000 population (Victoria 6,197).

Dental Services

There are 0.28 dental service sites per 1,000 population in Yarra, compared with 0.17 for Victoria overall.

Pharmacies

Yarra has 0.29 pharmacies per 1,000 population, compared with 0.19 for Victoria overall.

Hospital Utilisation

[103] WHO, Fact Sheet N^{o} 317 Cardiovascular Diseases, Sept 2012

[104] WHO, Fact Sheet No 297, Cancer, Jan 2013

[105] Social Health Atlas of Victorian LGAs, 2011, PHIDU.

The main public hospital attended by residents of Yarra was St Vincent's Hospital. The following statistics relate to hospital admissions for Yarra.

Ambulatory Care Sensitive Conditions (ACSC):

- The overall ACSC admission rate for Yarra was 25.1 persons per 1,000 population, lower than the 32.6 persons per 1,000 population for Victoria as a whole.
- The acute admissions rate for Yarra was 11.1 persons per 1,000 population, slightly lower than the rate for Victoria, 13.0 per 1,000 population.
- The chronic admissions rate for Yarra was 13.6 persons per 1,000 population, well below the rate for Victoria, 19.4 per 1,000 population.
- The ACSC/vaccine preventable admissions rate for Yarra was higher than the Victorian rate at 0.83 persons per 1,000 population, compared to 0.72 persons per 1,000 for Victoria overall.
- The average length of stay for ACSC admissions in Yarra was 5.27 days, compared with 5.12 days for Victoria overall.
- Hospital inpatient separations (patients leaving hospital) were 357.5 per 1,000 population for Yarra, compared with 424.7 per 1,000 population for Victoria.
- The percentage of inpatient separations in private hospital was 39.0% for Yarra, compared with 36.7% for Victoria.
- The average length of stay for public hospital inpatients in Yarra was 3.41 days, compared with 3.11 days for Victoria overall.
- The average length of stay, total hospital inpatients, was 3 days in Yarra, compared with 2.88 days for Victoria overall.
- There were 237 emergency department presentations per 1,000 population for Yarra compared with 254.1 for Victoria overall.

Communicable Disease

Pertussis

Notifications of Pertussis (commonly called whooping cough) were 0.84 per 1,000 population for Yarra, compared with 1.25 per 1,000 population for Victoria.

Influenza

Notifications of influenza in Yarra were 0.39 per 1,000 population, compared with 0.36 per 1,000 population for Victoria.

Infectious Disease, Sexually Transmitted Disease

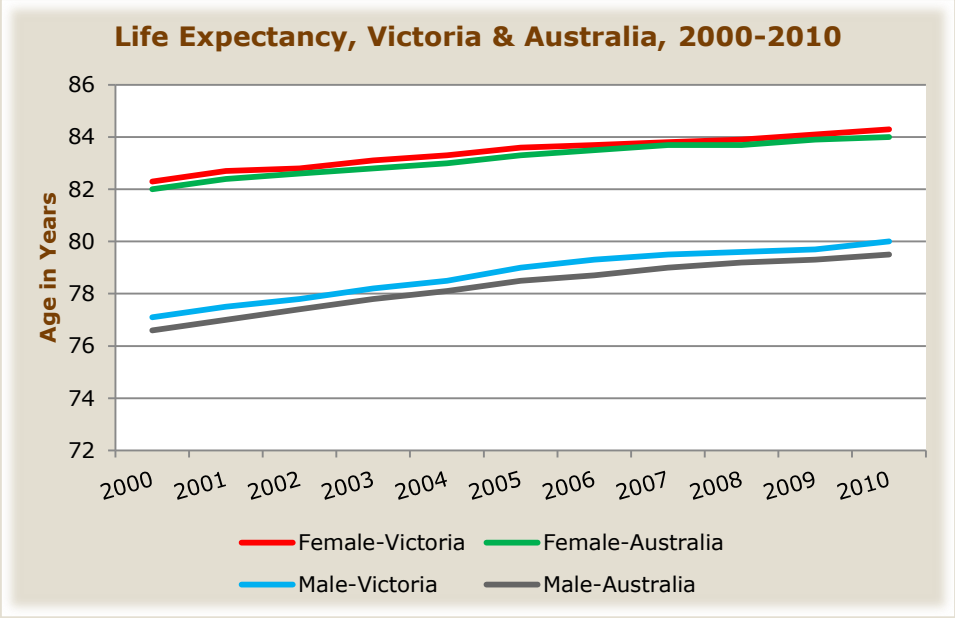
Chlamydia notifications are approximately twice the state average.[106] Notifications of Chlamydia were 5.71 per 1,000 population. The rate for Victoria was 2.88 per 1,000 population.

4.6. Life Expectancy

The combined life expectancy figure (males and females) for Australians is 81.4 years which is higher than the rate in the UK, Canada, New Zealand and the USA according to United Nations estimates.[107]

[106] Ibid

[107] ABS Cat. 3302.0 - Deaths, Australia, 2011



Taken as separate figures the life expectancy at birth for Australians was 79.5 years for males and 84.0 years for females in 2008-2010.[108] Life expectancy in Yarra was slightly higher than the national average at 79.6 years for males and 84.7 years for females.

Comparable average life expectancy figures for Victoria were 80.3 years for males, and 84.4 years for females.

Causes of Death

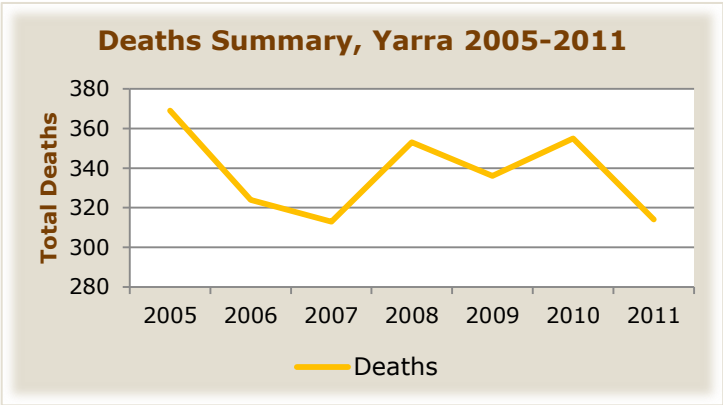
Deaths in Australia can be categorised as deaths that are certified by either a medical practitioner (doctor certified) or coroner.

Doctor certified deaths are due predominantly to natural causes, while coroner certified deaths include the majority of deaths by unknown and external causes.

Doctor certified deaths accounted for 88.5% of all deaths registered in 2011. The remainder were reported to, and certified by, a coroner.[109]

Avoidable Deaths

Avoidable mortality (AM) refers to deaths that are classed as 'avoidable', or have the 'potential' to be avoided. In most industrialised countries, including Australia, avoidable mortality rates have gradually fallen within recent decades, and at a faster rate than mortality from unavoidable causes.[110]



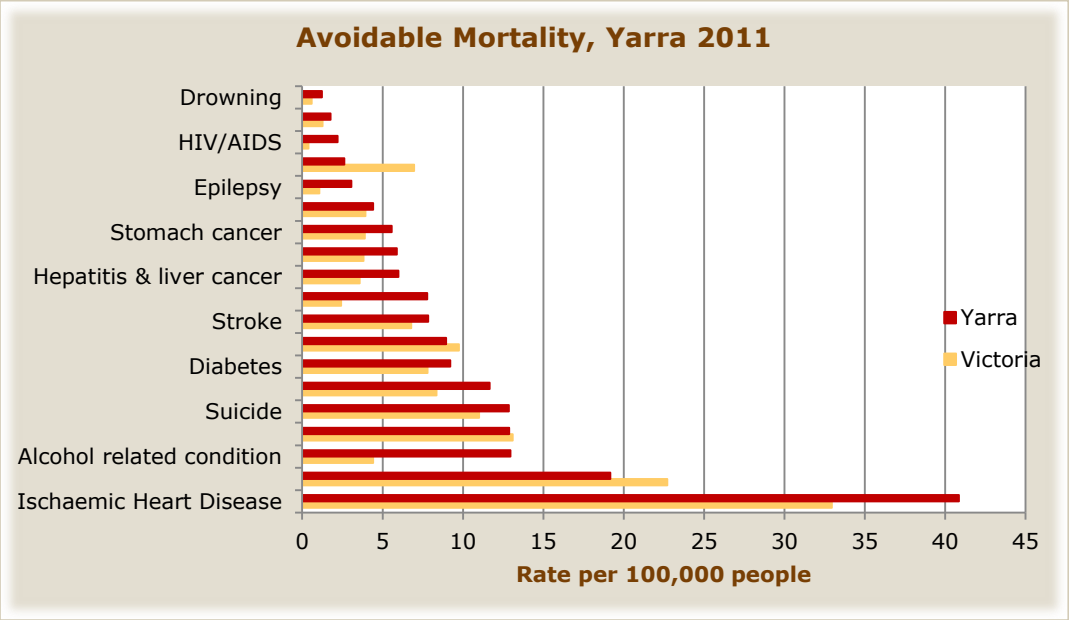
Avoidable mortality rates are useful, as a public health indicator, to track causes of avoidable death and measure the impact of prevention and

[108] Ibid

[109] ABS Cat. 3303.0.55.001 - Causes of Death, Australia: Doctor Certified Deaths, Summary Tables, 2011

[110] *Avoidable mortality in Victoria: trends between 1997 and 2003*, 2008, Health Intelligence Unit, Office of the Chief Health Officer, Public Health Branch, DHS, Melbourne.

management of chronic diseases.



The following statistics relate to avoidable deaths in Victoria between 1997 and 2003 in Victoria:[111]

- 87,521 people under the age of 75 years died, of which 63% were potentially avoidable.
- Avoidable deaths declined by 17% in absolute numbers and unavoidable deaths by approximately 7% in absolute numbers.
- The top ten causes of avoidable deaths in descending order were ischaemic heart disease (IHD), lung cancer, colorectal cancer, suicide, breast cancer, chronic obstructive pulmonary disease (COPD), stroke, diabetes, road traffic accidents, and poisoning.
- Cardiovascular disease (ischaemic heart disease and stroke) and cancer (lung, colorectal and breast) were responsible for more than 50 per cent of all avoidable deaths.

The following table provides a comparison of avoidable and unavoidable mortality rates in Yarra compared to Victoria overall.

Yarra rates highly on all measures of unavoidable and avoidable mortality. For a full explanation of the terms Primary AM, Secondary AM and Tertiary AM please refer to Appendix A.

Table 6. Avoidable Mortality Groups

	N° of deaths		Standardised Rate per 100,000 Persons	
	Yarra	Victoria	Yarra	Victoria
Unavoidable Mortality	287	22876	113.28	104.11
Total Avoidable Mortality	503	34599	193.44	157.17
Primary AM	279.05	18716.3	106.83	85.29

[111] Ibid

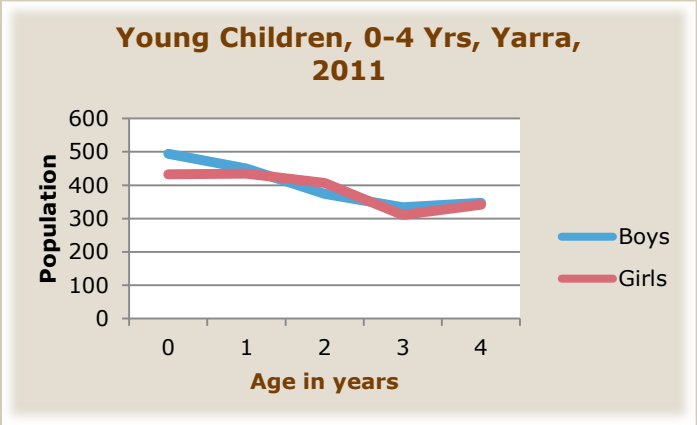
Secondary AM	117.35	8246.75	45.89	37.45
Tertiary AM	106.6	7635.95	40.71	34.43

Source: Burden of Disease, DHS, VHISS 2012, Melbourne

5. Children

5.1. Demographic Profile

In 2011 there were 3,881 children in Yarra aged 0-4 years. Children in this age group accounted for 5.2% of Yarra's total population. This is a smaller percentage for this age group when compared to the Victorian average, 6.5%.

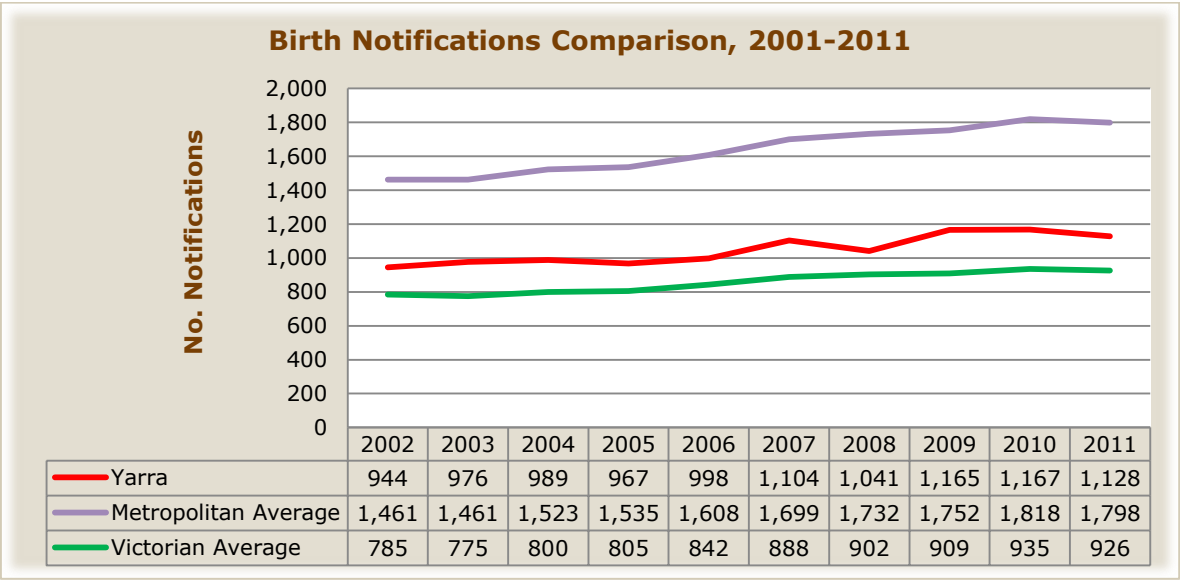


There has however been a slight increase in this population age group since 2006. The 2006 population was 3,440 and at the 2011 Census the population was 3,881, a population increase of 441 infants and children.

Births

In an average year there are around 1,000 babies born in Yarra.[112] The most recent peak in births occurred in the two years 2009-2010 when a total of 2,332 babies were born.

In the main the birth rate for Yarra remains fairly consistent. For example in 2001 there were 911 births recorded in Yarra and in 2011 there were 1,118, averaging an increase of 21 births per annum.



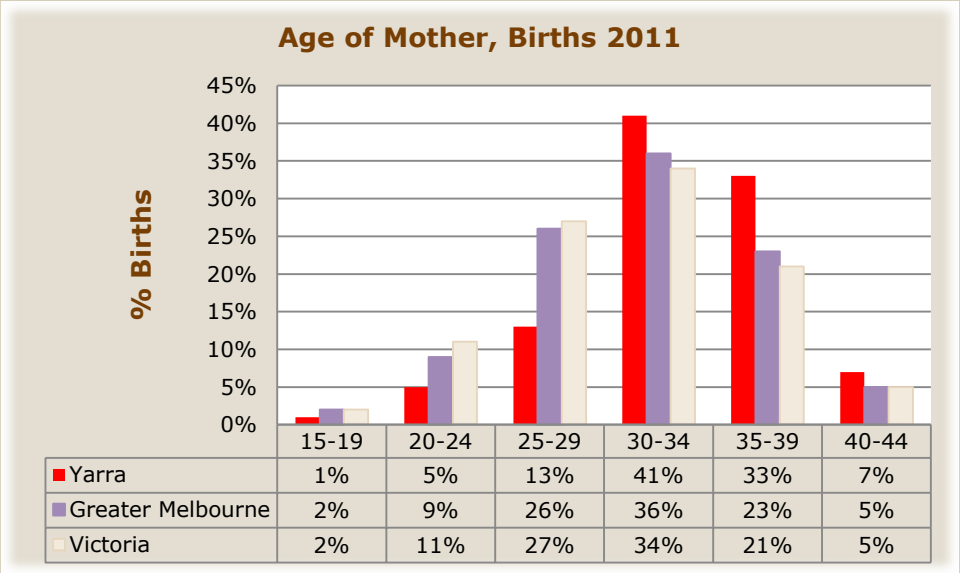
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Yarra	944	976	989	967	998	1,104	1,041	1,165	1,167	1,128
Metropolitan Average	1,461	1,461	1,523	1,535	1,608	1,699	1,732	1,752	1,818	1,798
Victorian Average	785	775	800	805	842	888	902	909	935	926

[112] Data: ABS Census 2011 with analysis by Public Health Information Development Unit (PHIDU), University of Adelaide, Social Health Atlas of Victorian Local Government Areas, 2011.

Maternal Characteristics

When compared to birth rates for Victoria, mothers in Yarra were slightly older than other Victorian mothers giving birth. The majority of births in Yarra were to women aged 30-40 years. These accounted for 74% of all births in Yarra. Births to women in this age group for Victoria account for 55% of births.

In the age range 35-39 years, the birth rate per 1,000 women of that age in Yarra was 92, compared to the Victorian rate of 74, and for mothers aged 40-44 years the birth rate for Yarra was 23, compared to 16 for Victoria.



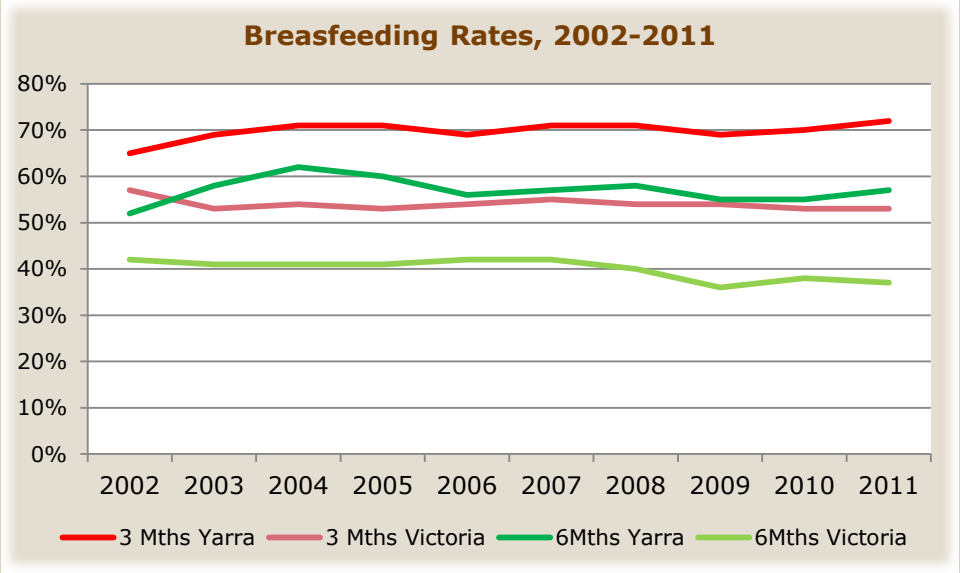
	15-19	20-24	25-29	30-34	35-39	40-44
Yarra	1%	5%	13%	41%	33%	7%
Greater Melbourne	2%	9%	26%	36%	23%	5%
Victoria	2%	11%	27%	34%	21%	5%

In Yarra one percent of births were attributable to women aged 15-19 years, 18% of births were to women aged 20-29 years and 7% to women aged 40-44 years.

The percentage of low birth weight babies (less than 2500 grams at birth) for Yarra was 5.9%, compared to 6.6% for Victoria.

Breastfeeding

Breastfeeding has been shown to be protective against a range of childhood conditions including asthma, gastrointestinal disorders, sudden infant death syndrome, and overall infant mortality.



Mothers in Yarra breastfed at higher rates than the state average at age 3 months and at age 6 months. 70% of Yarra mothers were still breastfeeding their babies at age 3 months in 2010, and 72% in 2011, compared with the Victorian average of 53% in both 2010 and 2011.

55% of babies were fully breastfed at 6 months in Yarra in 2010 and 57% in 2011, compared to the Victorian average of 38% in 2010 and 37% in 2011[113].

5.2. Health Profile

In Yarra the vast majority (94.3%) of parents of young children reported that their child was generally happy, played well with other children (88.0%) and slept well through the night (89.8%).[114]

Healthy Eating

According to the Victorian Child Health and Wellbeing Survey, 87.5% of children in Victoria, aged 4–12 years, met the minimum NHMRC daily recommended intake for fruit, however only 38.6% met the minimum daily recommended intake for vegetables.[115]

35.7% of children in this age range met minimum daily recommendations for both fruit and vegetable intake and 9.3% did not meet the minimum daily recommendations for either fruit or vegetables.

Most children under 12 years of age ate the recommended one serve of fruit per day. However only 28% of 12 years old met the fruit targets compared to more than 93% of children in the other age groups.

Asthma

In Yarra 12.5% of children aged 5-6 years were reported to have asthma. This was lower than the proportion of children aged 5-6 years reported to have asthma across NMR (13.2%) and Victoria (14.4%).

Written asthma action plans are an important component of asthma management. The proportion of children with a current asthma written action plan at school in Yarra was 39.1%, compared with 37.9% across the NMR and 39.9% across Victoria.[116]

There were 7.9 hospital separations per 1000 children aged 0-8 years for asthma in Yarra. This is less than the rate for NMR (8.7 per 1,000 children aged 0-8 years) and similar to the rate for asthma in Victoria (8.1 per 1,000 children aged 0-8 years).

Leading Causes of Hospitalisations

A range of factors can lead to hospitalisation of young children including injury, disease, congenital conditions and birth defects. Considering the leading causes of hospitalisation is important in monitoring changes or emerging risks for children. Such hospitalisation rates are often used as proxy indicators for the level of serious illness within the community.

The rate of hospitalisations for any cause for children aged 0-8 years in Yarra was 237.5 per 1000 children. This was greater than the rate of all hospital separations for children in this age-group across Victoria which was 231.2 per 1,000 children.

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[113] DEECD, 2010

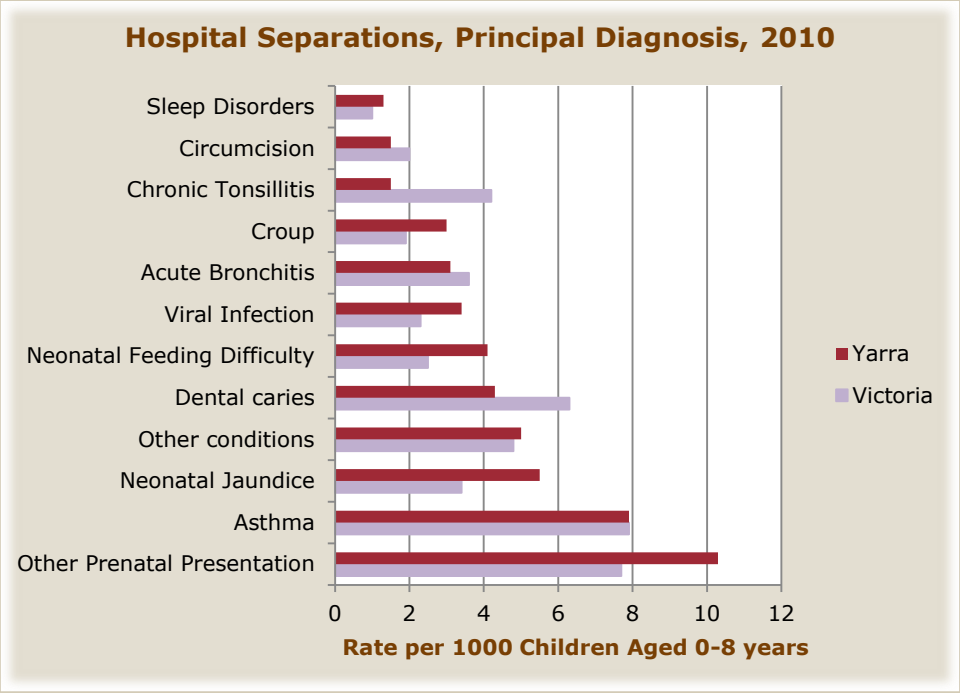
[114] Ibid

[115] Ibid

[116] DEECD Early Childhood Profile Yarra, 2010

The top three causes for hospital separation in children aged 0-8 years Yarra were:[117]

- Other prenatal presentation, 10.3 per 1,000 children;
- Asthma, rate of 7.9 per 1,000 children; and
- Sleep Disorders, rate of 7.1 per 1,000 children aged 0-8 years).



Forecast – Population of Children

Population projections show that the population of children in Yarra is expected to grow. However, in terms of the total population the proportion of children, as a percentage of population, is expected to fall.

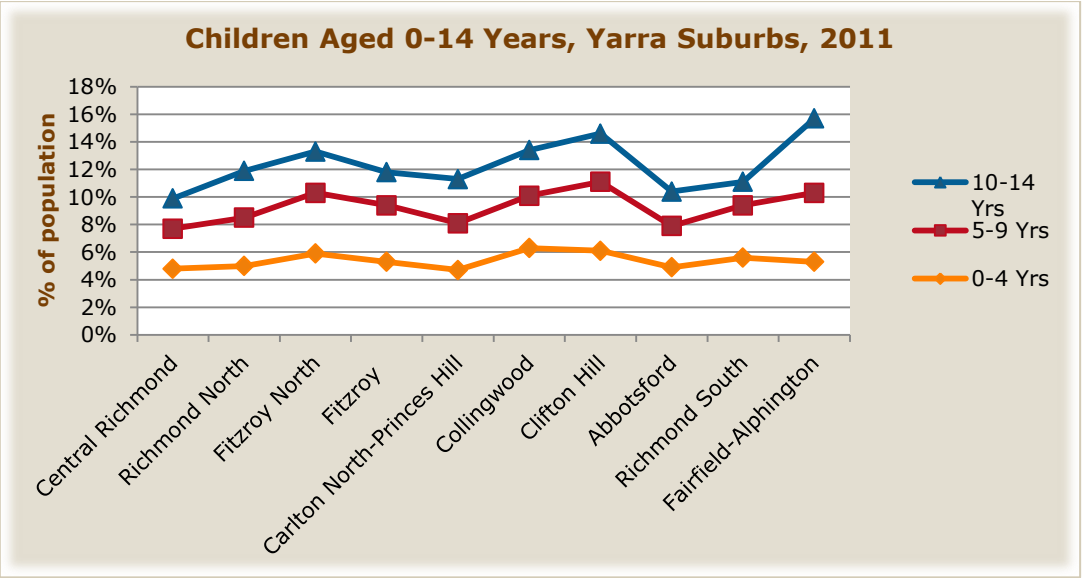
	2006		2011		2021		2031	
Age Group	No.	%	No.	%	No.	%	No.	%
0-4 Years	3,440	5.0%	3,881	5.2%	4,426	4.9%	4,714	4.6%
5-9 Years	2,315	3.3%	2,722	3.7%	3,132	3.4%	3,362	3.3%

[117] Ibid

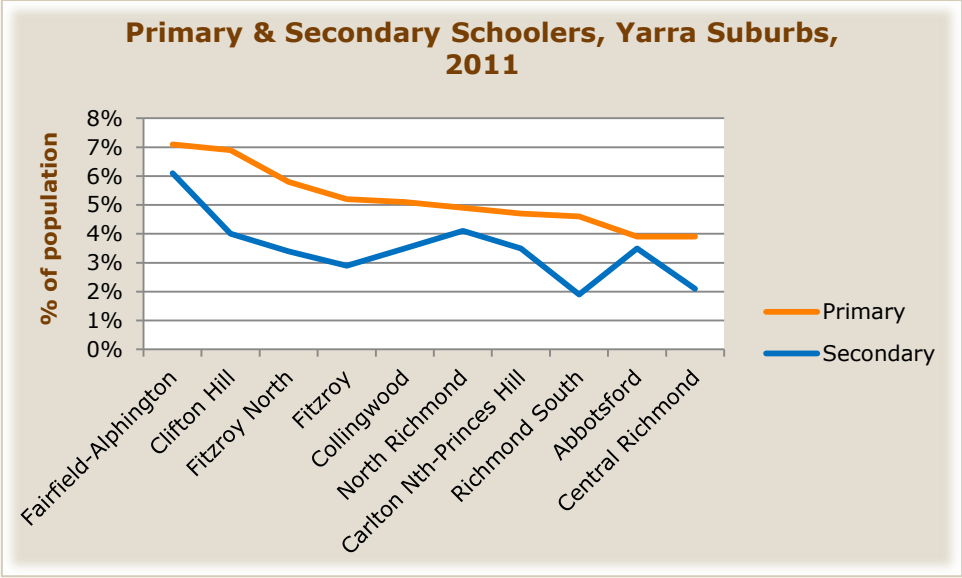
6. Young People

6.1. Demographic Profile

Children aged 5-14 years comprise 6.6% of the total population of Yarra, compared to 11.9% of the Greater Melbourne population. There are 4,890 children in Yarra in this age group.



Yarra has a smaller population of school age children when compared to the greater Melbourne SD. There were 3,685 primary school children, aged 5-11 years in Yarra in 2011, comprising 5% of the overall population, and 2,485 secondary school children, aged 12-17 years, comprising 3.4% of the population.



In comparison the Greater Melbourne population of primary age children was 8.4% of the overall population and secondary school aged children comprised 7.3% of the population.

Aboriginal Adolescents

10.0% of the Aboriginal Australian population in Yarra were adolescents. This percentage illustrates the younger age profile of Aboriginal Australians in Yarra as the Aboriginal Australian population, is 4.7% of the total population of Yarra overall.

Family Tenure

13.3% of couple families with adolescents in Yarra were renting their dwellings from a state housing authority; considerably higher than the percentage for couple families in Victoria with adolescents (1.4%).

The percentage for one parent families is higher still, with 47.8% of one parent families with adolescents in Yarra renting from a state housing authority; considerably higher than the state average (Victoria, 10.7%).[118]

Young People from a Refugee Background

Children and young people aged up to 19 years make up half of Humanitarian Refugee Program entrants. This represents a much higher proportion of young people than in the Victorian population as a whole, where young people aged up to 19 years make up 25% of the population. These families are more likely to live in metropolitan Melbourne than in rural or regional areas of Victoria.

The family circumstances for young people from a refugee background differ when compared with the Victorian population overall. Young people from a refugee background are more likely to live in poverty than their Victorian counterparts. Using half of the median income as a measure of relative poverty, 50.1% of children and young people of refugee backgrounds are living in poverty when compared to 14.3% of all Victorian young people.[119]

These young people are also more likely to live in a household with no car (17.0%) than Victorian young people overall (2.9%), and are less likely to live in a household connected to the internet (48%) than Victorian young people overall (77%). Living in a household that does not have internet connectivity can impact upon a child's education and access to information.

Cultural and Linguistic Diversity

There were 10.7% of couple families with adolescents in Yarra where neither parent was proficient in English. This is more than double the percentage of couple families in this category in NMR (3.7%) and more than four times higher than the percentage for Victoria overall (2.5%).

The mother was not proficient in English in 14.7% of couple families with adolescents in Yarra; more than double the percentage of couple families with adolescents in this category in NMR (7.1%) and more than triple that of the percentage of couple families with adolescents in this category across Victoria (4.4%).

There were 27.5% of one parent families with adolescents in Yarra, where the parent was not proficient in English. The percentage for NMR was 7.3%, and for Victoria overall 5.2% making the percentage high for Yarra in comparison.

Forecast-Population of Young People

The population of young people aged 15 years and under in Yarra is forecast to increase by 26.1% (2,079 persons) by 2021, representing a rise in the proportion of the population to 11.0%.

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[118] DEECD Adolescent Community Profile, Yarra, 2010.

[119] DEECD, Victorian Child & Adolescent Monitoring System Refugee Status report, 2011

	2006		2011		2021		2031	
Age Group	No.	%	No.	%	No.	%	No.	%
10-14 Years	1,962	2.8%	2,168	2.9%	2,495	2.7%	2,745	2.7%
15-19 Years	2,481	3.6%	2,448	3.3%	3,545	3.9%	3,859	3.8%

6.2. Health Profile

Healthy Eating

27.1% of Victorian 12–18 year olds met the NHMRC recommendations for fruit consumption, with females more likely to meet these. 57.3% met the recommendations for vegetable consumption, with little difference between females and males.

Almost a quarter of Victorian children (23.1%) aged 5-17 years were classed as overweight or obese in 2012.[120]

86.5% of adolescents in Yarra rated themselves as having 'good health'. This was lower than the proportion reported across NMR (87.7%) and across Victoria (89.2%).

Supports and Services

A range of preventive factors contributes to good dental health in childhood including water fluoridation, improved diet and oral hygiene, and regular brushing to promote good child dental health. The availability and affordability of dental health services may also influence the dental health of children.

81.3% of adolescents in Yarra felt that they could access dental health services if needed, compared to NMR (78.5%) and Victoria (78.3%).[121]

However, international literature suggests that dental issues are common in refugee children, with reports indicating that more than half have dental disease. Evidence collected by DEECD suggests that there may be problems with access to public dental care for refugee children and their families, although no local data on the prevalence of dental issues is identified.[122]

Health services have an important role to play in promoting young people's health and wellbeing and ensuring the best health outcomes. Access to high quality, affordable services can play a particularly important for young people from disadvantaged and at-risk groups.

63.1% of adolescents in Yarra felt that they could access mental health services if needed, compared to 68.9% for NMR and 70.4% across Victoria.[123]

In terms of ability to access general health services 77.0% of adolescents in Yarra felt that they could access physical health services if needed, compared to 81.0% for NMR and 79.4% for Victoria overall.

In terms of health related quality of life 77.8% of adolescents surveyed in Yarra were satisfied with the quality of their life. This compares favourably with NMR (77.0%) and Victoria overall (77.1%).[124]

Special Needs

[120] ABS, Australian Health Survey, 2011–12 — Victoria, Cat. 43640DO001. 20112012

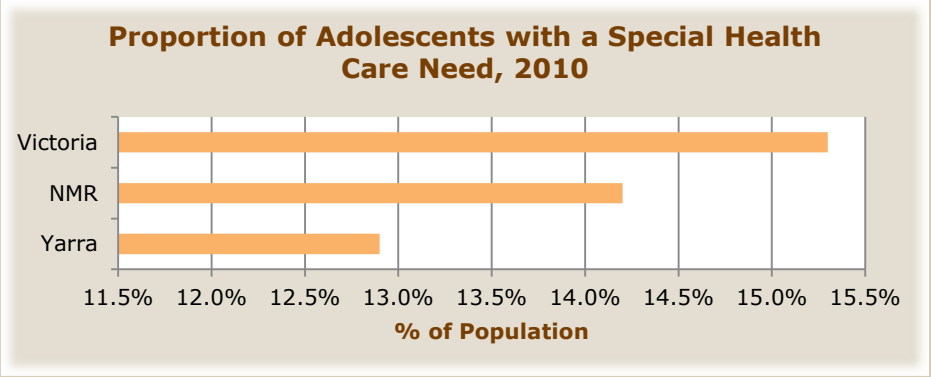
[121] DEECD Adolescent Community Profile, Yarra, 2010

[122] DEECD, Victorian Child & Adolescent Monitoring System Refugee Status report, 2011

[123] DEECD Adolescent Community Profile, Yarra, 2010.

[124] Ibid

A child with a special health care need is defined as having or being at risk of having a physical, developmental, behavioural, or emotional condition and requires health or related services of a type or amount beyond that required by children generally.



The proportion of adolescents enrolled in Years 7, 9 and 11 in Yarra with a special health care need was 12.9%, which was lower than the NMR or the proportion across Victoria.[125]

There were also 52 adolescents in Yarra who needed assistance with core activities, representing 1.6% of all adolescents in the area. This was similar to NMR (1.6%) and lower than Victorian percentage overall (1.8%).[126]

Asthma

Asthma is the most common long-term condition among Australian children, and the most common cause of hospitalisation in this age group. It is one of the ACSC where hospitalisation is considered avoidable.[127]

The proportion of adolescents enrolled in Years 7, 9 and 11 reported to have asthma in Yarra was 6.9%, lower than the proportion reported across the NMR (9.7%) and Victoria (11.6%); and of these 46.9% also had a written asthma plan. This was higher than the proportion reported across the NMR (29.5%) and across Victoria (32.0%).

Being exposed to heavy road traffic volumes has been linked to increased prevalence of respiratory symptoms. Studies indicate that children and young people living next to busy roads have an increased risk of suffering from respiratory disease.[128] An emerging concern is air quality related to climate change and the prevalence of air borne irritants during bush fire season.

29.5% of adolescents surveyed in Yarra reported living in a neighbourhood with heavy traffic. This was higher than NMR (19.7%) and Victoria overall (19.3%).[129]

Hospital Separations

Hospitalisation rates are often used as a proxy indicator for the level of serious illness within a community.[130] Hospital separation is a term used to measure discharge from the hospital.

The rate of hospital separations per 1,000 adolescents in Yarra has increased by an average rate of 4.4% per year, from 57.3 per 1,000 adolescents in 2005-2006 to

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[125] Ibid

[126] Ibid

[127] DEECD, 2007

[128] WHO, 2002

[129] DEECD, Adolescent Community Profile, Yarra, 2010.

[130] DHS, 2005

70.9 per 1,000 adolescents in 2009-2010. This compares with an average rate of 1.5% per year for Victoria overall, from 69.3 per 1,000 adolescents in 2005-2006 to 74.7 per 1,000 adolescents in 2009-2010.

Sexual Activity

More than half (53.2%) of all sexually active adolescents in Yarra do not practice safe sex by using a condom. [131] This proportion is the same for the NMR overall (53.2%) and compares to 41.9% for Victoria overall.

Also, more than half (54.7%) of sexually active adolescent females in Yarra do not use contraception. The proportions of sexually active adolescent females in NMR not using contraception ranged from 10.9% in Whittlesea to 38.5% in Moreland and 54.7% in Yarra, compared to 21.1% in Victoria overall.

Mental Health

Mental health problems are the leading contributor to burden of disease among young Australians with anxiety and depression being the specific leading cause in both males and females.[132] The consequences, if mental health problems are not resolved, mean that children may experience poorer quality of life, physical health problems, lowered academic attainment, risky behaviours, substance use, and suicidal ideation.

Yarra was ranked 1 out of 68 LGAs in terms of the psychiatric hospitalisation rate during 2009-2010. There were 22.6 psychiatric hospitalisations per 1,000 adolescents in Yarra. This is high when compared to NMR (6.8 per 1000 adolescents) and Victoria (6.7 per 1,000 adolescents).[133] The psychiatric hospitalisation rate in Yarra was higher than that across Victoria for the five years between 2004-2005 and 2008-2009.

One type of mental illness that affects young women more than young men is eating disorders. It is estimated that approximately one in every 100 Australian adolescent girls will develop anorexia nervosa and approximately five in 100 Australians develop bulimia.[134]

In Yarra 3.1% of female adolescents have been classified as having an eating disorder.[135] The rates of adolescents with eating disorders in NMR ranged from 1.2% in Hume to 4.5% in Nillumbik.

International data indicates that a proportion of refugees experience mental health problems, including Post Traumatic Stress Disorder (PTSD), depression and anxiety as a result of their refugee and post-migration experience. Although no Australian data on the prevalence of mental health problems in refugee young people have been identified it is worth bearing this in mind when considering the statistics quoted above.

Many young people who are refugees have experienced physical and psychological violence. Information from Victoria indicates that most have experienced a threat of harm to their family and half have undergone a dangerous flight leaving their home country.

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[131] DEECD, 2011

[132] Young Australians: their health and wellbeing 2011-2012, AIHW, Canberra.

[133] DH, 2010, Victorian Admitted Episodes Dataset (VAED),

[134] The better Health Channel, 2013, available: http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Eating_disorders

[135] DEECD, 2011

Around 40% were separated from their family at some point, more than a third have witnessed violence, around one-quarter have been under combat fire and one-quarter have experienced the disappearance of family members.

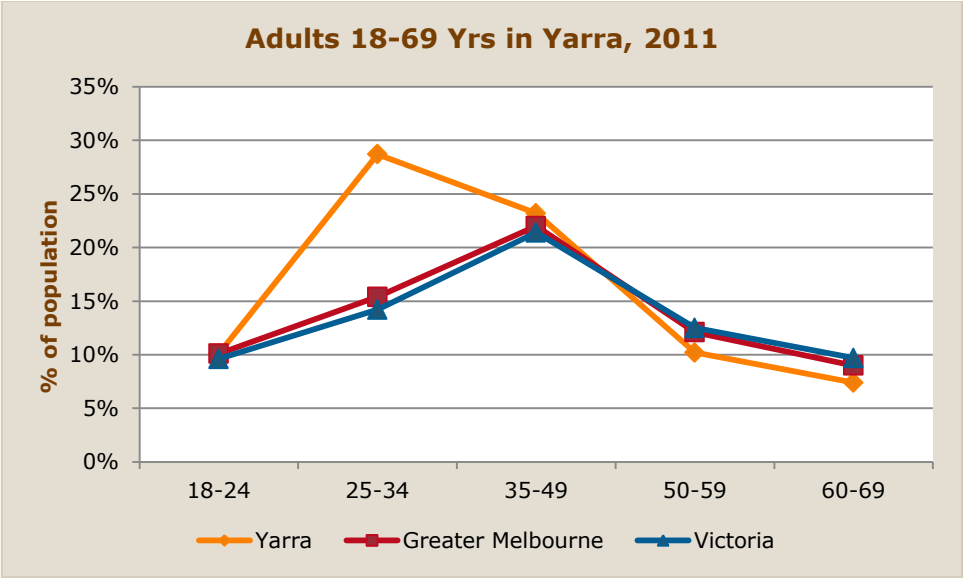
Although there is a recognised gap in adolescent-specific health services for young people who are refugees, North Yarra Specialist Clinic and North Yarra Community Health Centre provide support with refugee health nurses.

7. Adults

7.1. Demographic Profile

The median age for Yarra residents was 33 years. This is younger than the age profile for Greater Melbourne SD (36 years) but older than the age profile for Aboriginal Australians in Yarra (30 years).

The median age profile of Victorian adults is 37.4 years which is the third oldest in Australia following Tasmania (40.9 years) and South Australia (39.7 years).[136]



Forecast Population - Adults

The most populous forecast age group will be 25-29 year olds, with 11,999 persons, by 2021. This age group has consistently been the most populous age group in Yarra since 2006.

	2006		2011		2021		2031	
Age Group	No.	%	No.	%	No.	%	No.	%
20-29 Yrs	17,242	24.9%	17,668	23.8%	20,477	22.5%	22,439	22.0%
30-39 Yrs	16,365	23.6%	17,090	23.0%	20,817	22.8%	22,494	22.1%
40-49 Yrs	9,132	13.2%	10,010	13.5%	13,428	14.7%	15,653	15.4%
50-59 Yrs	7,117	10.2%	7,570	10.2%	9,111	10.0%	11,173	11.0%
60-69 Yrs	4,388	6.3%	5,501	7.4%	6,582	7.2%	7,371	7.2%

[136] ABS Cat. 3101.0 - Australian Demographic Statistics, Jun 2012

7.2. Health Profile

Lifestyle Behaviours

On self-reported wellbeing scores Yarra residents scores were consistent with Victorian averages. The average wellbeing score for Yarra was 77.8 out of 100, compared with the Victorian average of 77.5.[137]

> Societies that enable all citizens to play a full and useful role in the social, economic and cultural life of their society will be healthier than those where people face insecurity, exclusion and deprivation.
>
> *WHO, 2003*

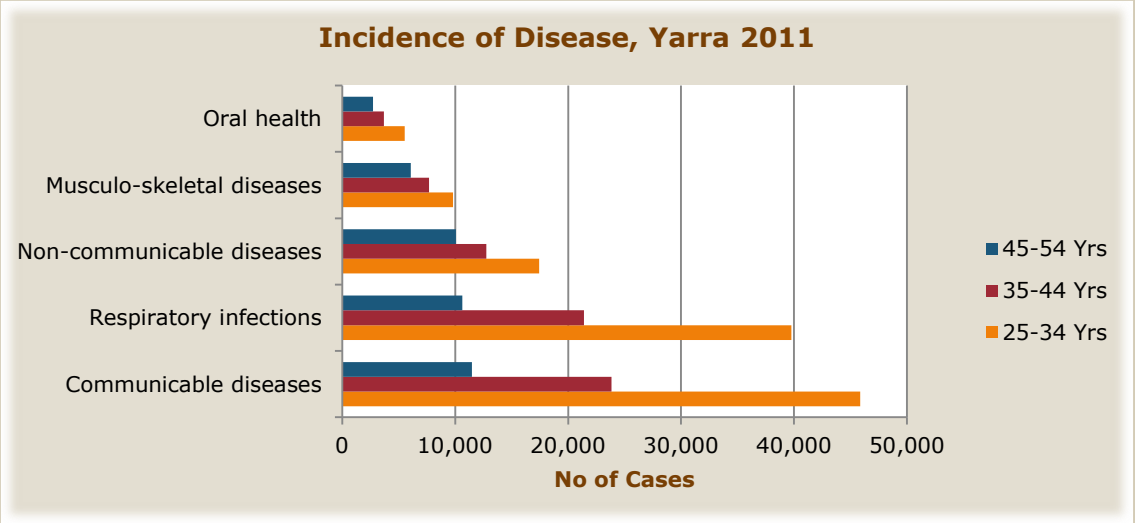
As discussed in the Executive Summary, the social determinants of health and the social gradient are important factors that affect health inequalities. Such factors are pertinent to Yarra where there is such diversity and high incomes households live alongside low income households.

Research has demonstrated that health inequalities follow from social and economic inequalities, although researchers tend to disagree about the pathways that lead from inequality to worse population health. The most consistent interpretation of all the evidence is that the main route hinges on the way inequality makes life more stressful.[138]

Chronic stress is known to affect the cardiovascular and immune systems and to lead to more rapid ageing. Inequality also increases status differences and status competition, making social relations more stressful.

In Yarra, as elsewhere in Australia, health status improves incrementally with each step up the social ladder of income, education or occupation. This 'social gradient' applies across the population and means that people on low incomes tend to suffer poorer health than those above them on the 'gradient'.[139]

Incidence of Disease



[137] VicHealth Indicators Survey, 2011

[138] Wilkinson RG, Pickett KE. Income inequality and population health: A review and explanation of the evidence. *Social Science and Medicine* 2006;62(7):1768-84.

[139] *Are we there yet: indicators of inequality in health*, (2008) Allen Consulting Group for DHS

The data suggests that the top five health issues for adults aged 25-54 years in Yarra were:[140]

- Communicable diseases (81,210 cases)
- Respiratory infections (71,807 cases)
- Non-communicable diseases (40,273 cases)
- Musculo-skeletal diseases (23,594 cases)
- Oral health (12,039 cases)

The following table provides greater detail of all disease and injury incidences for adult age groups in Yarra.

Yarra – Adults Incidence of Disease and Injury	Age in Years		
	25-34	35-44	45-54
Communicable diseases	45869	23845	11496
Respiratory infections	39753	21408	10646
Non-communicable diseases	17445	12765	10063
Musculo-skeletal diseases	9820	7696	6078
Oral health	5527	3679	2733
Dental caries	4868	2869	1901
Infectious diseases	4652	1810	633
Injuries	1475	687	397
Mental disorders	1453	774	454
Unintentional injuries	1280	610	367
Depression	934	586	383
Nutritional disorders	815	492	215
Maternal conditions	649	135	0
Falls	252	124	90
Genito-urinary disorders	249	196	194
Intentional injuries	195	77	30
Alcohol abuse/dependence	160	66	23
Road and traffic accidents	149	59	30
Digestive disorders	146	126	159
Infertility	105	46	13
Skin diseases	87	39	23
Suicide	87	40	18
Lower respiratory tract infections: pneumonia	78	42	42
Neurological and sense disorders	60	57	97
Generalised anxiety disorder	50	32	17
Borderline personality disorder	45	20	8
Malignant cancers	44	124	221
Hearing loss	33	38	65
Social phobia	29	7	0
Chronic respiratory diseases	29	13	12
Vision loss correctable by spectacles	23	14	18
Asthma	22	8	5
Yarra – Adults	Age in Years		

[140] Burden of Disease, DHS, VHISS 2012, Melbourne

Incidence of Disease and Injury	25-34	35-44	45-54
Bipolar disorder	16	0	0
Schizophrenia	12	0	0
Cardiovascular diseases	10	20	41
COPD (emphysema and chronic bronchitis)	7	0	7
Other endocrine and metabolic disorders	7	0	0
Diabetes mellitus	7	30	42
Heroin abuse/dependence	5	0	0
Diabetes mellitus-NIDDM	0	29	41
Ischaemic heart disease	0	12	29
Osteoarthritis	0	7	13
Miscellaneous conditions Chronic fatigue/SIDS	0	6	0
Stroke	0	0	5

Avoidable Deaths

Lifestyle factors bear heavily upon rates of avoidable mortality. Behavioural risk factors are responsible for approx. 80% of coronary and cerebrovascular heart disease.

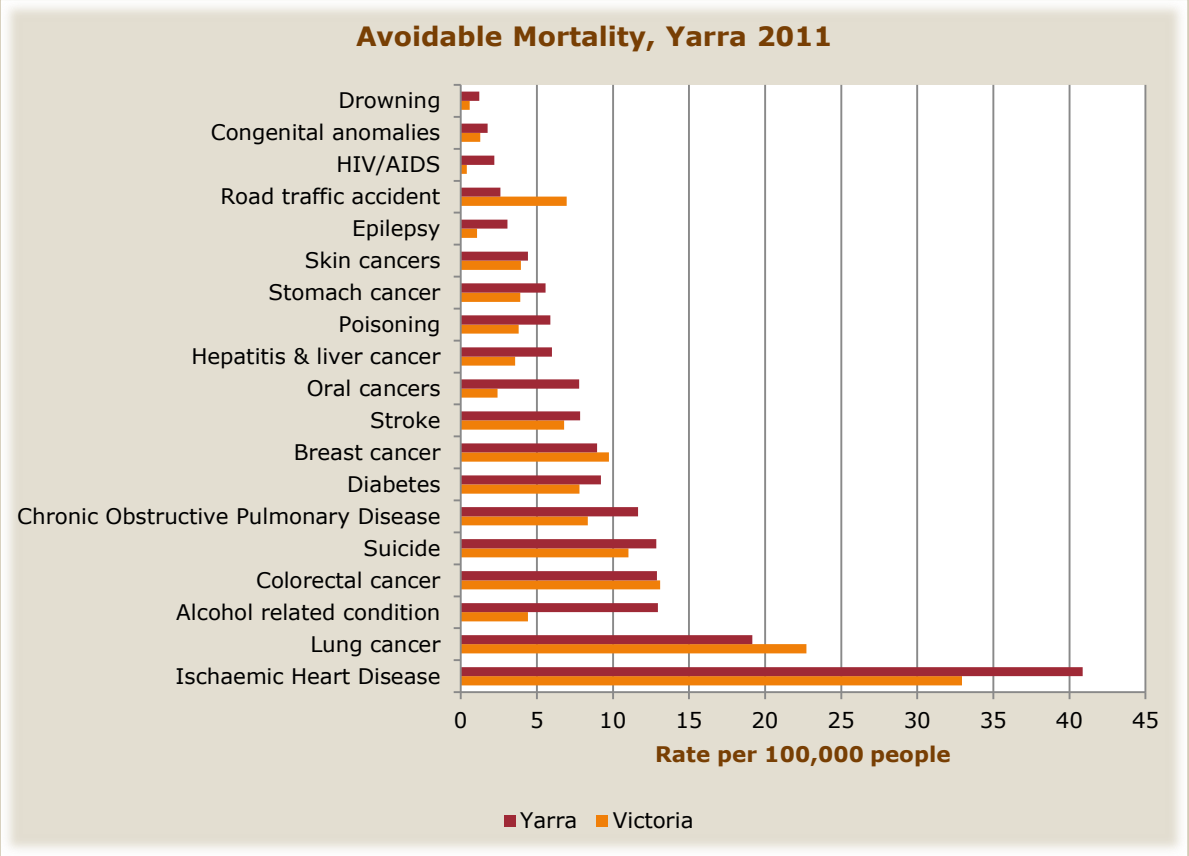
The most important behavioural risk factors include:

- Unhealthy diet
- Physical inactivity
- Tobacco use
- Harmful use of alcohol

The three highest causes of avoidable mortality in adults in Yarra are directly related to behavioural and lifestyle factors. These are heart disease, lung cancer, and alcohol related conditions.

AM Condition	Rate per 100,000 people	
	Yarra	Victoria
Ischaemic Heart Disease	40.86	32.94
Lung cancer	19.16	22.71
Alcohol related conditions	12.96	4.41

The table following provides greater detail of the burden of disease as it relates to avoidable mortality for Yarra.



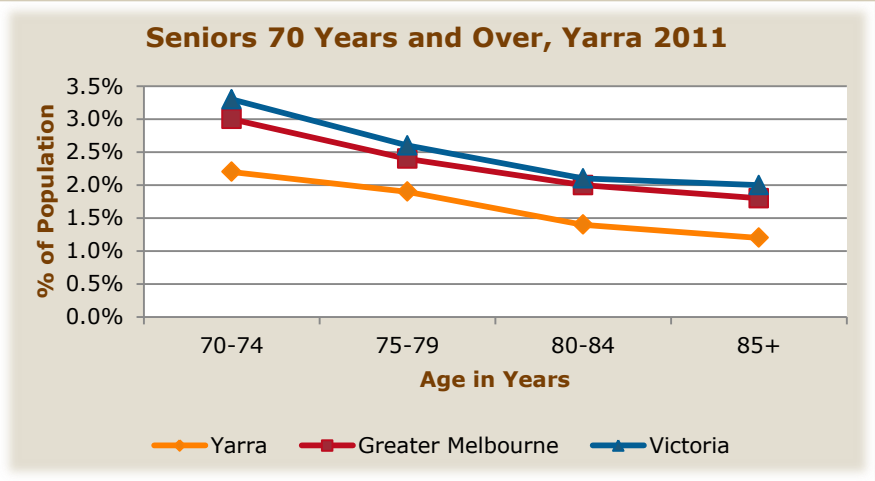
Source: Burden of Disease, DHS, VHISS 2012, Melbourne

8. Seniors

8.1. Demographic Profile

On a national scale the proportion of Australia's population aged 65 years and over increased from 11.5% to 14.2% in the ten years between 1992 and 2012. During the same period, the proportion of people aged 85 years and over in the population has more than doubled from 0.9% to 1.9%.[141]

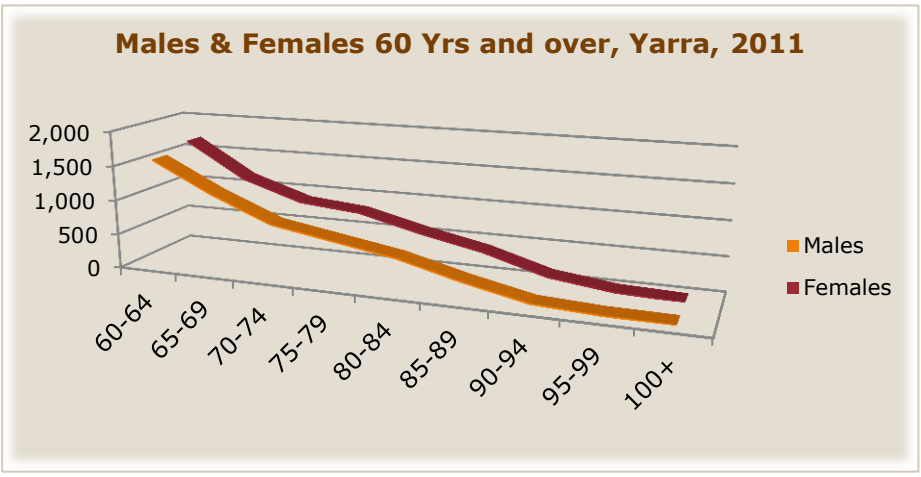
Due to the predominance of a younger overall demographic in Yarra however there are fewer seniors and they also comprise a smaller proportion of the population when compared to Greater Melbourne SD and Victoria.



Seniors comprised 9.8% of the population of Yarra in 2011. There were 7,419 seniors aged 65 years and over in Yarra, comprising 3,371 males and 4,048 females. This is a slight increase since 2006 when there were 6,721 seniors comprising 9.6% of the population. In comparison people aged 65 years and over comprise 13.1% of the Greater Melbourne population and 14.2% of the Victorian population overall.

There are 4 centenarians in Yarra and they are all male.

In most other senior age groups however females predominate.



Australian women aged over 65 years can expect to live a quarter of their lives beyond Age Pension entitlement of 67 years, yet they retire, on average with half the retirement savings of men.[9] This reflects the lower earnings of women on average over the lifecourse.

New research on retired women demonstrates that more than 50% live in households with an annual income of less than $30,000. Single, divorced and widowed women comprise one of the most disadvantaged groups in Australia.[142]

[141] ABS Cat. 3101.0 - Australian Demographic Statistics, Jun 2012

[142] Australian Institute of Superannuation Trustees (AIST), 2011

The Australian Institute of Superannuation Trustees (AIST) estimated that a seven year career break (usually to care for children) costs the average female about $70,000 in lost retirement savings.

Forecast Population - Seniors

The number of people aged 65 years and over is expected to increase by 3,164 (45.7%), and represent 11.1% of the population.

The age group which is forecast to have the largest proportional increase (relative to its population size) by 2021 is 65-69 year olds, who are forecast to increase by 55.8% to 2,997 persons.

	2006		2011		2021		2031	
Age Group	No.	%	No.	%	No.	%	No.	%
70-74 Yrs	1,682	2.4%	1,648	2.2%	2,707	3.0%	2,833	2.8%
75-79 Yrs	1,444	2.1%	1,434	1.9%	2,396	2.3%	1,471	2.0%
80-84 Yrs	976	1.4%	1,061	1.4%	1,705	1.7%	980	1.3%
85+ Yrs	786	1.1%	891	1.2%	1,292	1.3%	801	1.1%

8.2. Health Profile

Yarra City Council promotes healthy, active and socially supported life for older residents. Aged and Disability Services at Yarra carry out community development activities and plan services to ensure that older adults are socially included in community life.

Council provides a range of services to assist senior residents to live independently in their homes. These activities are carried out in partnership with community agencies such as neighbourhood houses, community health centres, seniors clubs and other community organisations.

Ageing and Disability

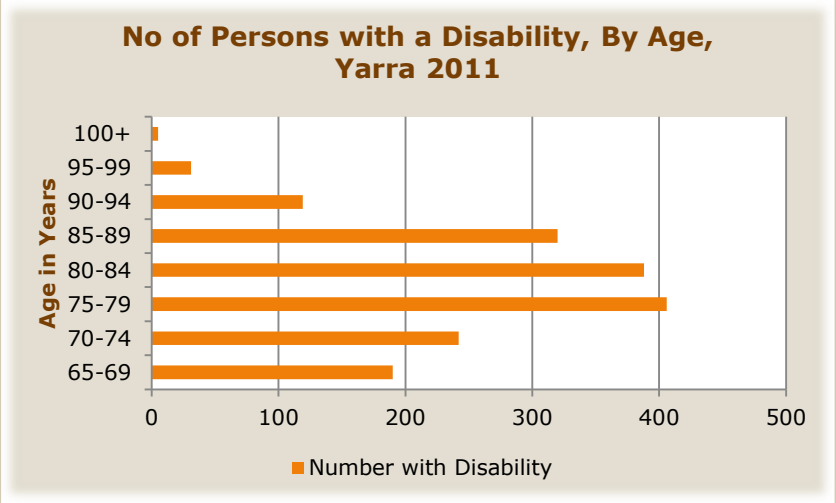
Disability is not an inevitable aspect of ageing, however the numbers of people with a disability tend to increase, as a proportion of the population, as they age.

Council provides support services to protect and enhance the health, well-being and independence of people with disabilities, with financial support from State and Federal Governments under the HACC program.

The incidence of a disability can impact upon the lifestyle of the whole family as responsibilities for care and support affect their lives also.

Unpaid domestic and caring work was performed by 87.9% of females, and 82.7% of males in Yarra.

Council recognises this burden on families and provides services to support carers, offering assistance to enable people with a disability to maintain their preferred lifestyle



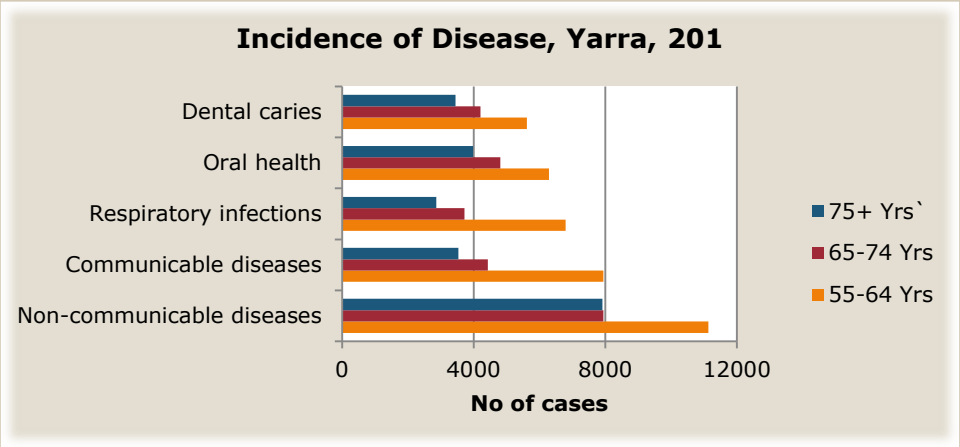
and independence.

There are 1,071 persons aged 60 years and over with a disability in Yarra, and the majority if those are aged 80 years and over. For example, of those residents aged 60-69 years, 9.0% of the population in that age group live with a disability, whereas 31.4% of 75-79 year old residents live with a disability. In the 85-89 year old age group, 54.4% of those residents live with a disability and 79.3% of frail aged residents (95-99 years) live with a disability.

Incidence of Disease

The data suggests that the top five health issues for seniors in Yarra are:

- Non-communicable diseases (26,981 cases)
- Communicable diseases (15,904 cases)
- Respiratory infections (13,373 cases)
- Oral health (15,080 cases)
- Dental caries (13,277 cases)



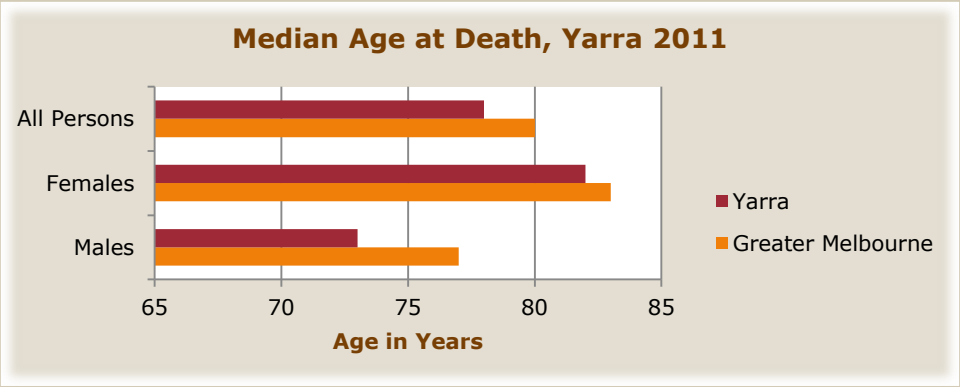
The table following provides information on the estimated burden of disease for seniors aged over 55 years and over in Yarra. Figures indicate the number of cases under each age group in terms of prevalence and include all disease areas.

Yarra – Seniors Incidence of Disease and Injury	Age in Years		
	55-64	65-74	75+
Non-communicable diseases	11130	7939	7912
Communicable, maternal, neonatal, nutritional	7944	4427	3533
Respiratory infections	6790	3724	2859
Oral health	6292	4810	3978
Dental caries	5618	4209	3450
Musculo-skeletal diseases	3794	2140	2820
Infectious diseases	1036	586	577
Injuries	268	253	369
Malignant cancers	268	323	314
Unintentional injuries	260	251	367
Mental disorders	227	61	20
Depression	200	51	14
Neurological and sense disorders	242	277	430
Hearing loss	185	158	115
Nutritional disorders	117	117	96

Digestive disorders	90	102	79
Genito-urinary disorders	72	51	44
Falls	73	80	184
Cardiovascular diseases	62	93	154
Ischaemic heart disease	42	57	93
Diabetes mellitus	41	35	20
Diabetes mellitus-NIDDM	41	34	20
Vision loss correctable by spectacles	29	38	83
Lower respiratory tract infections: pneumonia	29	23	57
Osteoarthritis	21	36	38
Chronic respiratory diseases	18	24	32
Benign prostatic hypertrophy	16	32	29
Road and traffic accidents	16	11	9
Skin diseases	15	14	10
Alcohol abuse/dependence	10	0	0
COPD (emphysema and chronic bronchitis)	10	15	24
Stroke	9	17	41
Asthma	9	9	7
Intentional injuries	8	0	0
Cancer breast	8	6	6
Cancer prostate	7	12	12
Cancer colon/rectum	6	11	14
Dementia	5	18	92
Cancer lung	0	8	9
Other endocrine and metabolic disorders	0	8	10
Parkinsons	0	0	6

Source: Burden of Disease, DHS, VHISS 2012, Melbourne

Median Age at Death



Source: PHIDU, Adelaide

The median age at which people die was 73 years for males and 82 years for females in Yarra, compared with Greater Melbourne SD, 77 years for males and 83 years for females.

9. Bibliography

Australian Bureau of Statistics, *Australian Demographic Statistics*, Jun 2012, Cat. 3101.0

Australian Bureau of Statistics, *Australian Health Survey,* 2011-2012, Cat. 4364.0.55.001

Australian Bureau of Statistics, Causes of Death, Australia: Doctor Certified Deaths, Summary Tables, 2011 Cat. 3303.0.55.001

Australian Bureau of Statistics, *Deaths, Australia,* 2011, Cat. 3302.0

Australian Bureau of Statistics, Defining the Data Challenge for Family, Domestic and Sexual Violence, 2013, Cat. 4529.0

Australian Bureau of Statistics, *State and Regional Indicators, Victoria*, December, 2010, Cat.1367.2

Australian Government Department for Families, Community Services and Indigenous (FaHCSIA) Closing the Gap: Prime Minister's Report 2013. Available: https://www.fahcsia.gov.au/sites/default/files/documents/02_2013/00313-ctg-report_accessible11.pdf

Australian Government Department of Regional Australia, Local Government, Arts and Sport, *Local Government National Report. 2008-09*. Available: http://www.regional.gov.au/local/publications/reports/2008_2009/LGNR_2008-09.pdf

Australian Government, Australian Institute of Health and Welfare (AIHW), *Indigenous Health Information*. Available: http://aihw.gov.au/mortality-indigenous/

Australian Government, Australian Institute of Health and Welfare, *Young Australians: their health and wellbeing* 2011-2012, Canberra

Australian Government Equal Opportunity for Women in the Workplace Agency (2012).
Available:http://www.wgea.gov.au/Information_Centres/Resource_Centre/Statistics/Gender_Pay_Gap_Fact_Sheet_May_2012.pdf

Australian Government, Medicare, Australian Childhood immunisation register, September 2011. Available: http://www.humanservices.gov.au/customer/services/medicare/australian-childhood-immunisation-register

Australian Government Preventative Health Taskforce, The National Preventative Health Strategy, *Australia: The Healthiest Country by 2020*, *the roadmap for action*, 2009. Available: http://www.preventativehealth.org.au/internet/preventativehealth/publishing.nsf/Content/AEC223A781D64FF0CA2575FD00075DD0/$File/nphs-overview.pdf

Australian Government Department of the Prime Minister and Cabinet, Australian Social Inclusion Board, *Breaking Cycles of Disadvantage*, 2011, Canberra

Australian Institute of Superannuation Trustees, 2011, *Super-Poor But Surviving*. Experiences of Australian Women in Retirement Report, Melbourne. Available: http://www.aist.asn.au/media/74552/2011_superpoor_but_surviving_web.pdf

Australian Social Inclusion Board, *Principles for Social Inclusion – everyone's job,* 2008. Available: http://www.socialinclusion.gov.au/sites/www.socialinclusion.gov.au/files/publications/pdf/social-inclusion-principles.pdf

Barondess, JA, 2001, Does Inequality Kill? Available at: www.project-syndicate.org/commentary/barondess1

Beer, A. & Prance, F. (2012). The Role of Local Government in Addressing Homelessness, University of Adelaide, Centre for Housing, Urban and Regional Planning, Adelaide.

Butterworth, I., (2000), The relationship between the built environment and wellbeing: a literature review, Prepared for the Victorian Health Promotion Foundation, Melbourne.

Garrad, A (2009) *Taking action on obesogenic environments: Building a culture of active, connected communities.* Options paper for the National Preventative Health Taskforce, Australian Government Department of Health and Ageing, Canberra.

Harrison RA, Gemmell I & Heller RF 2007, 'The population effect of crime and neighbourhood on physical activity: an analysis of 15,461 adults', Journal of Epidemiology and Community Health, vol 61, pp 34–9

Kelly et al, (2007) The Social Determinants *of Health: Developing an Evidence Base for Political Action*, Universidad del Desarrollo, Chile & National Institute for Health and Clinical Excellence, UK .

Killian, J., Matthews, S., & Lloyd, B. Turning Point Alcohol and Drug Centre, 2011, *The Victorian Drug Statistics Handbook: Patterns of drug use and related harm in Victoria for the period July 2009 to June 2010*, Victorian Government Publishing Service.

Marmot, M. (2005) Social determinants of health inequalities. *Lancet*, Vol.365, pp.1099-1104

Monash Sustainability Institute, Monash University, Monash, Climate, Biodiversity and Health Program. Information accessed 25/10/2012 http://www.monash.edu/research/sustainability-institute/programs/health/cc-health.html

Public Health Information Development Unit, University of Adelaide, *Social Health Atlas of Victorian LGAs*, 2011, Adelaide. Available: http://www.publichealth.gov.au/inequality-graphs/monitoring-inequality.html

Sadiq, K. (2010). *Equity for Taxpayers within Australia's Retirement Savings Regime: A Dissenting Opinion*. Pandora's Box (2010).

Scutella, R., Wilkins, R. & Kostenko, W. (2009) *Estimates of Poverty and Social Exclusion in Australia: A Multidimensional Approach*, Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.

Sen, A 1985*, Inequality Re-examined.* Harvard University Press, Boston

Smyth, P. (2010), *In or Out? Building an Inclusive Nation*. The Australian Collaboration and the Brotherhood of St Lawrence, Melbourne

The Allen Consulting Group, Are we there yet: indicators of inequality in health, 2008, Melbourne

The Better Health Channel, 2013, State Government of Victoria. Available at: http://www.betterhealth.vic.gov.au/

Townsend, P. (1979) Poverty in the United Kingdom, A Survey of Household Resources and Standards of Living, London

Turnbull, David (2012), Integrated Planning for Community Health and Wellbeing, Key priority areas for the North West Region, Available:

http://docs.health.vic.gov.au/docs/doc/0F10715921E75D72CA257A7C0078FE20/$FILE/08City%20of%20Whittlesea%20-%20Integrated%20Planning%20Community%20Health%20and%20Wellbeing%20-%20Aug%202012.pdf

Victorian Government Department of Education and Early Childhood Development , *Adolescent Community Profile*, Yarra, 2010.

Victorian Government Department of Education and Early Childhood Development, *Early Childhood Profile Yarra*, 2010, Melbourne

Victorian Government Department of Education and Early Childhood Development , *Victorian Adolescent Health and Wellbeing Survey (HowRU?),* 2009, Melbourne

Victorian Government Department of Education and Early Childhood Development, *Victorian Child & Adolescent Monitoring System, Refugee Status Report,* 2011, Melbourne

Victorian Government Department of Health, Closing the Health Gap in Victoria, Highlights 2009-2011, Melbourne

Victorian Government Department of Health, Victorian health Information Surveillance System , Melbourne. Available:

https://hns.dhs.vic.gov.au/3netapps/vhisspublicsite/ViewContent.aspx?TopicID=1&SubTopicID=2

Victorian Government Department of Health, Victorian Population Health Survey, Melbourne, 2008, Available: http://www.health.vic.gov.au/healthstatus/survey/vphs.htm

Victorian Government Department of Health, *Victorian Health Monitor Survey, 2012,* Melbourne.

Victorian Government Department of Health, *Yarra Profile*, 2011, Melbourne

Victorian Government Department of Human Services, *Avoidable mortality in Victoria: trends between 1997 and 2003*, 2008, Health Intelligence Unit, Office of the Chief Health Officer, Public Health Branch, DHS, Melbourne. Available at: http://docs.health.vic.gov.au/docs/doc/33F734A3C7ACFFBBCA2578860009333D/$FILE/avoid_mort_1997-2003.pdf

Victorian Government Department of Human Services and Department of Planning and Community Development, Housing and Community Building, Preliminary population projections (household types) 2011. Available: http://docs.health.vic.gov.au/docs/doc/Yarra-(C)

Wilkinson RG, Pickett KE. Income inequality and population health: A review and explanation of the evidence. *Social Science and Medicine* 2006;62(7):1768-84.

World Health Organisation, 2008, *Closing the gap in a generation. Health equity through action on the social determinants of health*, Commission on Social Determinants of Health Final Report. Available at:

http://whqlibdoc.who.int/hq/2008/WHO_IER_CSDH_08.1_eng.pdf

World Health Organisation, *Fact Sheet, Alcohol*, Feb 2011

World Health Organisation, Fact Sheet N° 311, Obesity and overweight, May 2012

World Health Organisation, *10 Facts on Non-communicable Diseases*, 2011. Available: http://www.who.int/features/factfiles/noncommunicable_diseases/en/index.html

World Health Organisation *Fact Sheet No 312, Diabetes*, Sept 2012

World Health Organisation, *Fact Sheet No 317 Cardiovascular Diseases*, Sept 2012

World Health Organisation, *Fact Sheet No 297, Cancer*, Jan 2013

World Health organisation, (2011) *The Social Dimensions of Climate Change*, Discussion Paper, prepared by the United Nations Task Team on Social Dimensions of Climate Change. Available at:

http://www.who.int/globalchange/mediacentre/events/2011/social-dimensions-of-climate-change.pdf

World Health Organisation, *The Social Determinants of Health*. Retrieved 22 January, 2013 http://www.who.int/fsocial_determinants/en/

10. Appendices

Appendix A
Primary, secondary and tertiary avoidable mortality

Avoidable mortality deaths are further partitioned into three categories, based on the weightings of Tobias & Jackson.[143]

The three categories were:[144]

Primary avoidable mortality (PAM). Conditions that are preventable by addressing the risk or protective factors, whether through individual behavior change (lifestyle modification) or population level intervention (public health policy). For example, deaths due to immunisation preventable diseases, burns, HIV/AIDS infection, Sudden Infant Death Syndrome (SIDS), lung cancer and drowning had a PAM weighting ≥0.5.

Secondary avoidable mortality (SAM). Conditions that respond to early detection and treatment, typically in a primary health care setting. For example, deaths due to cancers for which screening tests are available, conditions such as epilepsy and diabetes that can be well-managed, and newborn conditions such as congenital hypothyroidism, which are detectable at neonatal screening had a SAM weighting ≥0.5.

Tertiary avoidable mortality (TAM). Conditions whose case fatality rate can be significantly reduced by existing medical or surgical treatments typically, but not necessarily, in a hospital setting, even when the disease process is fully developed. For example; Hodgkin's disease, appendicitis, intestinal obstruction and hernia had a TAM weighting ≥0.5.

For example: cervical cancer received a weighting of 0.3 for PAM (preventable through modification of sexual behaviour and cessation of smoking), 0.5 for SAM (amenable to treatment through screening and early detection), and 0.2 for TAM (treatable by surgery and chemotherapy). It should be noted that some conditions cannot be partitioned, for example, appendicitis received a 1.0 weighting for TAM and 0.0 weightings for PAM and SAM.

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[143] Tobias, M & Jackson G, 2001, 'Avoidable mortality in New Zealand, 1981–97.' *Australian and New Zealand Journal of Public Health* 25, 12–20.

[144] Extract: *Avoidable mortality in Victoria: trends between 1997 and 2003*, 2008, Health Intelligence Unit, Office of the Chief Health Officer, Public Health Branch, DHS, Melbourne (p.3).

Appendix B
Causes of Death (Raw Data)

Cause of Death	Yarra		Greater Melbourne	
	Number	**Rate** per 100,000 pop.	Number	**Rate** per 100,000 pop.
Certain conditions originating in the perinatal period: Birth trauma	0	0.0	6	0.1
Certain conditions originating in the perinatal period: Conditions involving the integument and temperature regulation of fetus and newborn	0	0.0	1	0.0
Certain conditions originating in the perinatal period: Digestive system disorders of fetus and newborn	0	0.0	7	0.1
Certain conditions originating in the perinatal period: Disorders related to length of gestation and fetal growth	3	2.0	42	0.6
Certain conditions originating in the perinatal period: Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery	2	1.4	110	1.5
Certain conditions originating in the perinatal period: Haemorrhagic and haematological disorders of fetus and newborn	0	0.0	12	0.2
Certain conditions originating in the perinatal period: Infections specific to the perinatal period	0	0.0	9	0.1
Certain conditions originating in the perinatal period: Other disorders originating in the perinatal period	1	0.7	7	0.1
Certain conditions originating in the perinatal period: Respiratory and cardiovascular disorders specific to the perinatal period	0	0.0	31	0.4
Certain conditions originating in the perinatal period: Total	6	4.1	225	3.0
Certain infectious and parasitic diseases: Helminthiases	0	0.0	1	0.0
Certain infectious and parasitic diseases: Human immunodeficiency virus [HIV] disease	3	2.0	32	0.4
Certain infectious and parasitic diseases: Intestinal infectious diseases	0	0.0	30	0.4
Certain infectious and parasitic diseases: Mycoses	0	0.0	8	0.1
Certain infectious and parasitic diseases: Other bacterial diseases	6	4.1	385	5.1
Certain infectious and parasitic diseases: Other infectious diseases	0	0.0	5	0.1
Certain infectious and parasitic diseases: Other viral diseases	0	0.0	6	0.1
Certain infectious and parasitic diseases: Protozoal diseases	0	0.0	1	0.0
Certain infectious and parasitic diseases: Sequelae of infectious and parasitic diseases	4	2.7	59	0.8
Certain infectious and parasitic diseases: Tuberculosis	1	0.7	18	0.2
Certain infectious and parasitic diseases: Viral hepatitis	1	0.7	30	0.4
Certain infectious and parasitic diseases: Viral infections characterized by skin and mucous membrane lesions	0	0.0	12	0.2

Certain infectious and parasitic diseases: Viral infections of the central nervous system	0	0.0	15	0.2
Certain infectious and parasitic diseases: Total	15	10.2	602	8.0
Congenital malformations, deformations and chromosomal abnormalities: Chromosomal abnormalities, not elsewhere classified	2	1.4	46	0.6
Congenital malformations, deformations and chromosomal abnormalities: Congenital malformations and deformations of the musculoskeletal system	0	0.0	10	0.1
Congenital malformations, deformations and chromosomal abnormalities: Congenital malformations of the circulatory system	0	0.0	69	0.9
Congenital malformations, deformations and chromosomal abnormalities: Congenital malformations of the nervous system	0	0.0	28	0.4
Congenital malformations, deformations and chromosomal abnormalities: Congenital malformations of the respiratory system	0	0.0	10	0.1
Congenital malformations, deformations and chromosomal abnormalities: Congenital malformations of the urinary system	0	0.0	21	0.3
Congenital malformations, deformations and chromosomal abnormalities: Other congenital malformations	1	0.7	18	0.2
Congenital malformations, deformations and chromosomal abnormalities: Other congenital malformations of the digestive system	0	0.0	15	0.2
Congenital malformations, deformations and chromosomal abnormalities: Total	3	2.0	217	2.9
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism: Aplastic and other anaemias	0	0.0	58	0.8
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism: Certain disorders involving the immune mechanism	0	0.0	44	0.6
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism: Coagulation defects, purpura and other haemorrhagic conditions	1	0.7	38	0.5
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism: Haemolytic anaemias	0	0.0	9	0.1
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism: Nutritional anaemias	0	0.0	17	0.2
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism: Other diseases of blood and blood-forming organs	0	0.0	16	0.2
Diseases of the blood and blood-forming organs: Total	1	0.7	182	2.4
Diseases of the circulatory system: Acute rheumatic fever	0	0.0	2	0.0
Diseases of the circulatory system: Cerebrovascular diseases	56	38.1	3585	47.9
Diseases of the circulatory system: Chronic rheumatic heart diseases	3	2.0	84	1.1
Diseases of the circulatory system: Diseases of arteries, arterioles and capillaries	8	5.4	729	9.7
Diseases of the circulatory system: Diseases of veins, lymphatic vessels and lymph nodes, not elsewhere classified	3	2.0	76	1.0
Diseases of the circulatory system: Hypertensive diseases	6	4.1	423	5.6
Diseases of the circulatory system: Ischaemic heart diseases	103	70.1	7276	97.1
Diseases of the circulatory system: Other and unspecified disorders of the circulatory system	0	0.0	0	0.0
Diseases of the circulatory system: Other forms of heart disease	32	21.8	1979	26.4

Diseases of the circulatory system: Pulmonary heart disease and diseases of pulmonary circulation	2	1.4	154	2.1
Diseases of the circulatory system: Total	213	144.9	14308	191.0
Diseases of the digestive system: Diseases of appendix	0	0.0	5	0.1
Diseases of the digestive system: Diseases of liver	12	8.2	429	5.7
Diseases of the digestive system: Diseases of oesophagus, stomach and duodenum	3	2.0	225	3.0
Diseases of the digestive system: Diseases of oral cavity, salivary glands and jaws	0	0.0	4	0.1
Diseases of the digestive system: Diseases of peritoneum	2	1.4	32	0.4
Diseases of the digestive system: Disorders of gallbladder, biliary tract and pancreas	3	2.0	174	2.3
Diseases of the digestive system: Hernia	1	0.7	50	0.7
Diseases of the digestive system: Noninfective enteritis and colitis	0	0.0	70	0.9
Diseases of the digestive system: Other diseases of intestines	9	6.1	447	6.0
Diseases of the digestive system: Other diseases of the digestive system	1	0.7	96	1.3
Diseases of the digestive system: Total	31	21.1	1532	20.5
Diseases of the ear and mastoid process: Diseases of inner ear	0	0.0	1	0.0
Diseases of the ear and mastoid process: Diseases of middle ear and mastoid	0	0.0	1	0.0
Diseases of the ear and mastoid process: Total	0	0.0	2	0.0
Diseases of the genitourinary system: Diseases of male genital organs	0	0.0	25	0.3
Diseases of the genitourinary system: Glomerular diseases	2	1.4	36	0.5
Diseases of the genitourinary system: Inflammatory diseases of female pelvic organs	0	0.0	3	0.0
Diseases of the genitourinary system: Noninflammatory disorders of female genital tract	0	0.0	5	0.1
Diseases of the genitourinary system: Other diseases of urinary system	3	2.0	259	3.5
Diseases of the genitourinary system: Other disorders of kidney and ureter	0	0.0	15	0.2
Diseases of the genitourinary system: Renal failure	8	5.4	761	10.2
Diseases of the genitourinary system: Renal tubulo-interstitial diseases	2	1.4	37	0.5
Diseases of the genitourinary system: Urolithiasis	0	0.0	5	0.1
Diseases of the genitourinary system: Total	15	10.2	1146	15.3
Diseases of the musculoskeletal system and connective tissue: 0	0	0.0	81	1.1
Diseases of the musculoskeletal system and connective tissue: Arthrosis	1	0.7	30	0.4

Diseases of the musculoskeletal system and connective tissue: Chondropathies	0	0.0	2	0.0
Diseases of the musculoskeletal system and connective tissue: Deforming dorsopathies	0	0.0	11	0.1
Diseases of the musculoskeletal system and connective tissue: Disorders of bone density and structure	1	0.7	68	0.9
Diseases of the musculoskeletal system and connective tissue: Disorders of muscles	0	0.0	11	0.1
Diseases of the musculoskeletal system and connective tissue: Infectious arthropathies	0	0.0	14	0.2
Diseases of the musculoskeletal system and connective tissue: Inflammatory polyarthropathies	2	1.4	87	1.2
Diseases of the musculoskeletal system and connective tissue: Other dorsopathies	0	0.0	6	0.1
Diseases of the musculoskeletal system and connective tissue: Other joint disorders	0	0.0	3	0.0
Diseases of the musculoskeletal system and connective tissue: Other osteopathies	0	0.0	42	0.6
Diseases of the musculoskeletal system and connective tissue: Other soft tissue disorders	0	0.0	6	0.1
Diseases of the musculoskeletal system and connective tissue: Spondylopathies	0	0.0	15	0.2
Diseases of the musculoskeletal system: Total	4	2.7	376	5.0
Diseases of the Nervous System: Cerebral palsy and other paralytic syndromes	0	0.0	66	0.9
Diseases of the Nervous System: Demyelinating diseases of the central nervous system	1	0.7	57	0.8
Diseases of the Nervous System: Diseases of myoneural junction and muscle	0	0.0	38	0.5
Diseases of the Nervous System: Episodic and paroxysmal disorders	5	3.4	116	1.5
Diseases of the Nervous System: Extrapyramidal and movement disorders	8	5.4	435	5.8
Diseases of the Nervous System: Inflammatory diseases of the central nervous system	0	0.0	18	0.2
Diseases of the Nervous System: Nerve, nerve root and plexus disorders	0	0.0	3	0.0
Diseases of the Nervous System: Other degenerative diseases of the nervous system	10	6.8	655	8.7
Diseases of the Nervous System: Other disorders of the nervous system	1	0.7	73	1.0
Diseases of the Nervous System: Polyneuropathies and other disorders of the peripheral nervous system	1	0.7	8	0.1
Diseases of the Nervous System: Systemic atrophies primarily affecting the central nervous system	2	1.4	191	2.6
Diseases of the Nervous System: Total	28	19.0	1660	22.2
Diseases of the respiratory system: Acute upper respiratory infections	0	0.0	3	0.0
Diseases of the respiratory system: Chronic lower respiratory diseases	25	17.0	1792	23.9
Diseases of the respiratory system: Influenza and pneumonia	15	10.2	932	12.4
Diseases of the respiratory system: Lung diseases due to external agents	5	3.4	251	3.4

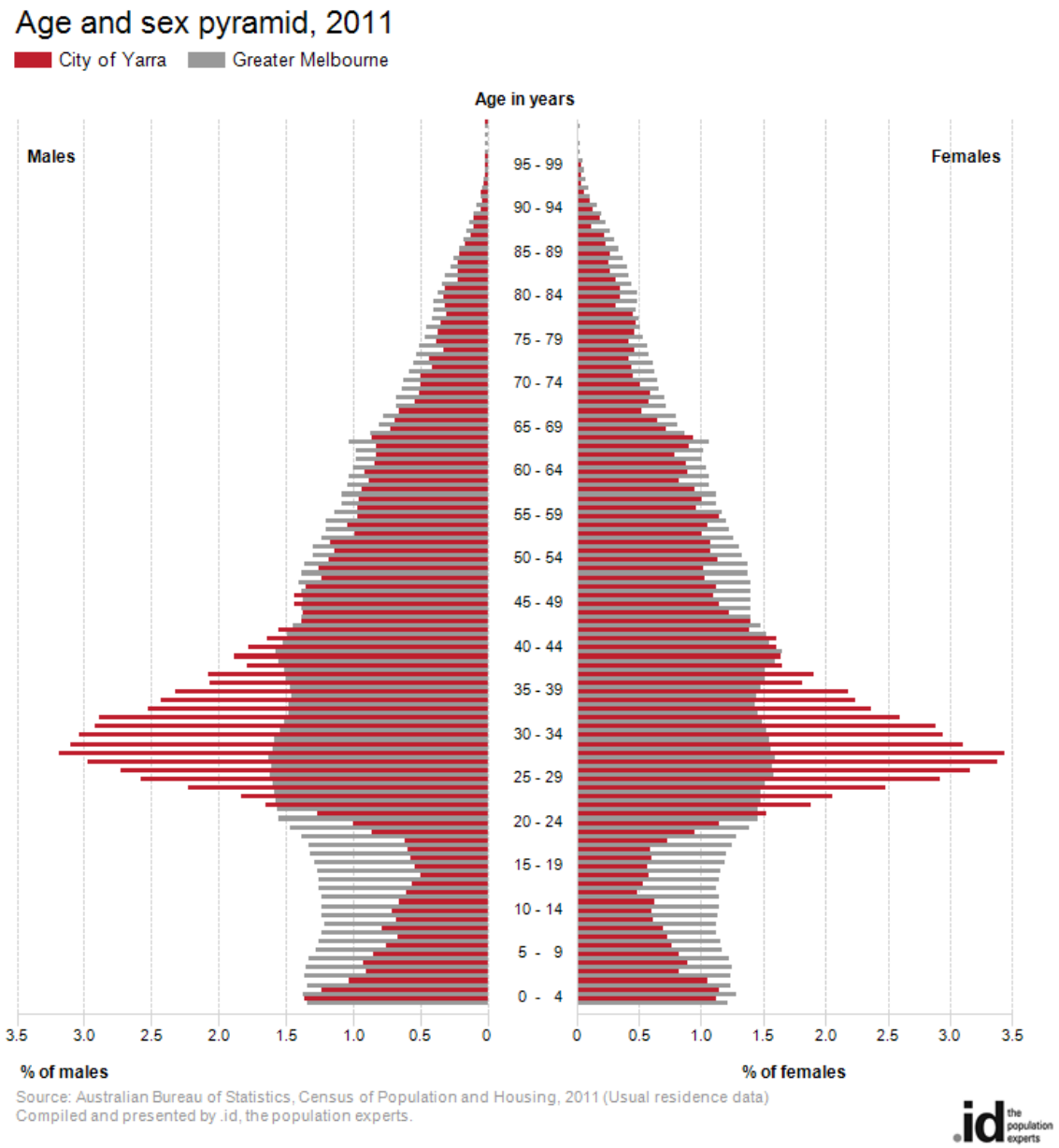
Diseases of the respiratory system: Other acute lower respiratory infections	1	0.7	19	0.3
Diseases of the respiratory system: Other diseases of pleura	1	0.7	19	0.3
Diseases of the respiratory system: Other diseases of the respiratory system	1	0.7	175	2.3
Diseases of the respiratory system: Other diseases of upper respiratory tract	0	0.0	13	0.2
Diseases of the respiratory system: Other respiratory diseases principally affecting the interstitium	1	0.7	249	3.3
Diseases of the respiratory system: Suppurative and necrotic conditions of lower respiratory tract	0	0.0	11	0.1
Diseases of the respiratory system: Total	49	33.3	3464	46.2
Diseases of the skin and subcutaneous tissue: Bullous disorders	0	0.0	8	0.1
Diseases of the skin and subcutaneous tissue: Dermatitis and eczema	0	0.0	1	0.0
Diseases of the skin and subcutaneous tissue: Infections of the skin and subcutaneous tissue	0	0.0	40	0.5
Diseases of the skin and subcutaneous tissue: Other disorders of the skin and subcutaneous tissue	2	1.4	50	0.7
Diseases of the skin and subcutaneous tissue: Papulosquamous disorders	0	0.0	1	0.0
Diseases of the skin and subcutaneous tissue: Urticaria and erythema	0	0.0	3	0.0
Diseases of the skin and subcutaneous tissue: Total	2	1.4	103	1.4
Endocrine, nutritional and metabolic diseases: Diabetes mellitus	21	14.3	1445	19.3
Endocrine, nutritional and metabolic diseases: Disorders of other endocrine glands	0	0.0	9	0.1
Endocrine, nutritional and metabolic diseases: Disorders of thyroid gland	0	0.0	44	0.6
Endocrine, nutritional and metabolic diseases: Malnutrition	2	1.4	23	0.3
Endocrine, nutritional and metabolic diseases: Metabolic disorders	3	2.0	446	6.0
Endocrine, nutritional and metabolic diseases: Obesity and other hyperalimentation	2	1.4	61	0.8
Endocrine, nutritional and metabolic diseases: Other disorders of glucose regulation and pancreatic internal secretion	0	0.0	5	0.1
Endocrine, nutritional and metabolic diseases: Other nutritional deficiencies	0	0.0	11	0.1
Endocrine, nutritional and metabolic diseases: Total	28	19.0	2044	27.3
External causes of morbidity and mortality: Accidental drowning and submersion	1	0.7	34	0.5
External causes of morbidity and mortality: Accidental exposure to other and unspecified factors	3	2.0	146	1.9
External causes of morbidity and mortality: Accidental poisoning by and exposure to noxious substances	9	6.1	271	3.6
External causes of morbidity and mortality: Air and space transport accidents	0	0.0	5	0.1
External causes of morbidity and mortality: Assault	0	0.0	45	0.6

External causes of morbidity and mortality: Bus occupant injured in transport accident	0	0.0	2	0.0
External causes of morbidity and mortality: Car occupant injured in transport accident	2	1.4	210	2.8
External causes of morbidity and mortality: Complications of medical and surgical care	1	0.7	111	1.5
External causes of morbidity and mortality: Contact with heat and hot substances	0	0.0	0	0.0
External causes of morbidity and mortality: Contact with venomous animals and plants	0	0.0	1	0.0
External causes of morbidity and mortality: Event of undetermined intent	1	0.7	59	0.8
External causes of morbidity and mortality: Exposure to animate mechanical forces	0	0.0	4	0.1
External causes of morbidity and mortality: Exposure to electric current, radiation and extreme ambient air temperature and pressure	0	0.0	2	0.0
External causes of morbidity and mortality: Exposure to forces of nature	0	0.0	7	0.1
External causes of morbidity and mortality: Exposure to inanimate mechanical forces	1	0.7	50	0.7
External causes of morbidity and mortality: Exposure to smoke, fire and flames	0	0.0	23	0.3
External causes of morbidity and mortality: Falls	10	6.8	606	8.1
External causes of morbidity and mortality: Intentional self-harm	11	7.5	623	8.3
External causes of morbidity and mortality: Legal intervention and operations of war	0	0.0	1	0.0
External causes of morbidity and mortality: Motorcycle rider injured in transport accident	2	1.4	70	0.9
External causes of morbidity and mortality: Occupant of heavy transport vehicle injured in transport accident	0	0.0	5	0.1
External causes of morbidity and mortality: Occupant of pick-up truck or van injured in transport accident	0	0.0	9	0.1
External causes of morbidity and mortality: Occupant of three-wheeled motor vehicle injured in transport accident	0	0.0	2	0.0
External causes of morbidity and mortality: Other accidental threats to breathing	0	0.0	97	1.3
External causes of morbidity and mortality: Other land transport accidents	1	0.7	21	0.3
External causes of morbidity and mortality: Overexertion, travel and privation	0	0.0	0	0.0
External causes of morbidity and mortality: Pedal cyclist injured in transport accident	0	0.0	14	0.2
External causes of morbidity and mortality: Pedestrian injured in transport accident	3	2.0	89	1.2
External causes of morbidity and mortality: Sequelae of external causes of morbidity and mortality	0	0.0	38	0.5
External causes of morbidity and mortality: Water transport accidents	0	0.0	2	0.0
External causes of morbidity and mortality: Total	45	30.6	2547	34.0
Mental and behavioural disorders: Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	0	0.0	1	0.0
Mental and behavioural disorders: Behavioural syndromes associated with physiological disturbances and physical factors	0	0.0	5	0.1

Mental and behavioural disorders: Disorders of psychological development	0	0.0	3	0.0
Mental and behavioural disorders: Mental and behavioural disorders due to psychoactive substance use	6	4.1	104	1.4
Mental and behavioural disorders: Mental retardation	0	0.0	7	0.1
Mental and behavioural disorders: Mood [affective] disorders	0	0.0	26	0.3
Mental and behavioural disorders: Neurotic, stress-related and somatoform disorders	0	0.0	2	0.0
Mental and behavioural disorders: Organic, including symptomatic, mental disorders	20	13.6	1418	18.9
Mental and behavioural disorders: Schizophrenia, schizotypal and delusional disorders	1	0.7	26	0.3
Mental and behavioural disorders: Total	27	18.4	1592	21.3
Neoplasms: Benign neoplasms	1	0.7	41	0.5
Neoplasms: Bone and articular cartilage	0	0.0	27	0.4
Neoplasms: Breast	11	7.5	949	12.7
Neoplasms: Digestive organs	63	42.9	3765	50.3
Neoplasms: Eye, brain and other parts of central nervous system	6	4.1	448	6.0
Neoplasms: Female genital organs	11	7.5	543	7.2
Neoplasms: In situ neoplasms	0	0.0	0	0.0
Neoplasms: Male genital organs	20	13.6	993	13.3
Neoplasms: Malignant neoplasms of ill-defined, secondary and unspecified sites	10	6.8	816	10.9
Neoplasms: Malignant neoplasms of independent (primary) multiple sites	2	1.4	162	2.2
Neoplasms: Malignant neoplasms, stated or presumed to be primary, of lymphoid, haematopoietic and related tissue	19	12.9	1342	17.9
Neoplasms: Mesothelial and soft tissue	5	3.4	239	3.2
Neoplasms: Neoplasm of Lip, oral cavity and pharynx	4	2.7	181	2.4
Neoplasms: Neoplasms of uncertain or unknown behaviour [see note before D37]	4	2.7	244	3.3
Neoplasms: Respiratory and intrathoracic organs	32	21.8	2233	29.8
Neoplasms: Skin	5	3.4	452	6.0
Neoplasms: Thyroid and other endocrine glands	0	0.0	51	0.7
Neoplasms: Urinary tract	9	6.1	616	8.2
Neoplasms: Total	202	137.4	13102	174.9
Pregnancy, childbirth and the puerperium: Complications predominantly related to the puerperium	0	0.0	1	0.0

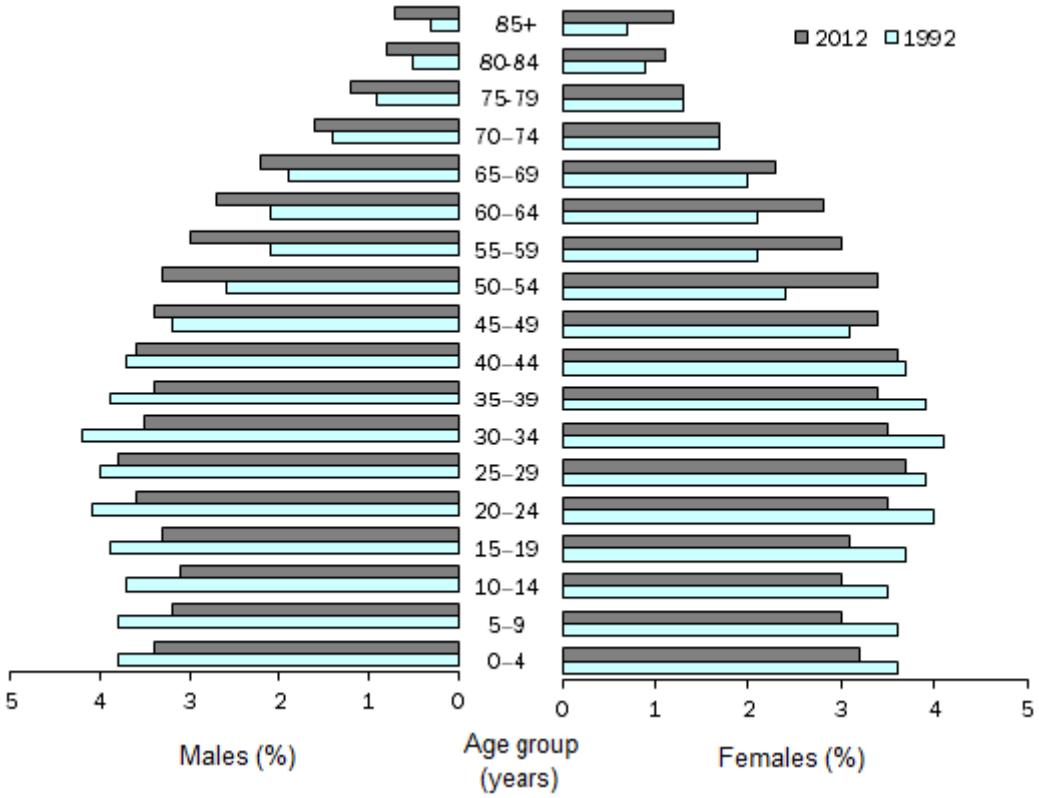
Pregnancy, childbirth and the puerperium: Maternal care related to the fetus and amniotic cavity and possible delivery problems	0	0.0	0	0.0
Pregnancy, childbirth and the puerperium: Other maternal disorders predominantly related to pregnancy	0	0.0	0	0.0
Pregnancy, childbirth and the puerperium: Total	0	0.0	1	0.0
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified: General symptoms and signs	4	2.7	43	0.6
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified: Ill-defined and unknown causes of mortality	9	6.1	217	2.9
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified: Symptoms and signs involving the circulatory and respiratory systems	0	0.0	2	0.0
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified: Symptoms and signs involving the digestive system and abdomen	0	0.0	4	0.1
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified: Symptoms and signs involving the urinary system	0	0.0	0	0.0
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified: Total	13	8.8	266	3.6
Grand Total	682	463.9	43,369	579.0

Appendix C
Age Pyramid Yarra



Appendix D
Age Pyramid Australia

Age and Sex Pyramid, 2012, Australia



Source: ABS, Cat. 3101.0 - Australian Demographic Statistics, Jun 2012