Communities That Care®
Mandurah

Community Assessment 2018

(Report 3.1)

Prepared by:
Community Assessment work group,
CTC Mandurah community board

City of MANDURAH

SDERA
SCHOOL DRUG EDUCATION AND ROAD AWARE

Supported by South Metropolitan Health Service – Health Promotion

Communities that Care Mandurah - Community Assessment 2018 (Report 3.1)

Collated by South Metropolitan Health Service - Health Promotion, for Communities that Care Mandurah (CTC Mandurah).

Acknowledgements:

Acknowledgement of Country

The City of Mandurah acknowledges the Bindjareb people as traditional custodians of this land. We acknowledge and respect their continuing culture and the unique contribution they make to the life of this community.

CTC Community Board

South Metropolitan Health Service – Health Promotion
City of Mandurah
School Drug Education and Road Aware (SDERA)
Deakin University
Valued community members
Rotary Club of Mandurah City
Department of Education WA
Catholic Education WA
Palmerston Association Inc.
The Makers
Peel Youth Services
EdConnect Australia
Street Net Youth Service
Parenting Connection WA

CTC Key Leaders (Mandurah 'Group of Six')

City of Mandurah
WA Police
Department of Communities, Child Protection and Family Support
Department of Corrective Services
Department of Health
Department of Education
Mandurah Child and Adolescent Mental Health Service
PaRK Mental Health Service
WA Primary Health Alliance

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1.0 Executive Summary

Communities that Care Mandurah (CTC Mandurah) have developed this Community Assessment Report as part of a commitment to the Communities that Care framework, which has been adopted by the City of Mandurah and its many community partners. CTC Mandurah is committed to implementing local initiatives that are evidence-based and have the potential to increase the health and resilience of local young people in the Mandurah community.

Mission and Vision

Vision

Building connections to grow healthy, resilient communities.

Mission

CTC Mandurah will work collectively to build a healthy, resilient community using data to plan and deliver preventative evidence-based interventions.

Purpose

The Community Assessment Report analyses community data and details the CTC Mandurah Community Board's prioritisation of risk and protective factors which are predictive of health comprising factors and outcomes for young people in the Mandurah area. In relation to the CTC framework it represents Phase 3, "Develop a Profile". [1]

[1] http://www.communitiesthatcare.org.au/5-phases-ctc

CTC 5 phase diagram

The Phase 3 Community Profile includes two documents:

- Community Assessment - Report 3.1 (this document); and
- Community Resources Assessment - Report 3.2

This Community Assessment Report provides a summary of the analysis of the CTC Mandurah youth school surveys that were implemented in early-to-mid 2017, in three local schools. A broader (community-wide) data set is also provided through the provision of statistics by key partner organisations including health, mental health, education, child protection and police that is pertinent to the risk and protective factors for community health and wellbeing.

Finally the report presents recommendations to progress investigations into available resources to address the CTC Mandurah priorities. In essence, this report provides a data driven platform to stimulate and justify service provision via the recommendations that serve to effectively deliver healthier outcomes for young people and their families in the Mandurah community.

Priority risk and protective factors

The CTC Mandurah Community Board has prioritised the following risk factors requiring attention, in order to ensure better health and wellbeing for the young people of Mandurah.

The following risk factors were selected (in no particular order):

- Attitudes favourable to alcohol and other drug use;
- Community laws and norms favourable to alcohol and other drug use;
- Family management / Family conflict; and
- Low commitment to school.

The protective factor that has been identified is:

- Community opportunities and recognition for pro-social involvement.

These priority risk factors will be the next focus of the CTC Mandurah process, which is the development of the Community Resources Assessment Report. This next ancillary document will analyse the strengths and gaps in the community, in terms of these risk/protective factors, and strategically recommend evidence-based resources available to the Mandurah community.

The production of the Community Assessment Report (this document) and the Community Resources Assessment Report will constitute the completion of the Community Profile process and thereby complete CTC Phase 3.

2.0 Introduction

The CTC process leads communities through the steps required to implement and evaluate a planned increase in evidence-based services to promote healthy development, improve outcomes and reduce problem behaviours for local children and adolescents. The CTC Mandurah Community Board and Key Leaders group are a group of agencies, community organisations and individuals who are focussed on ensuring a healthy future for Mandurah's children and young people.

The local government area of Mandurah has been selected to participate in the CTC project, through a National Health and Medical Research Council grant. CTC Mandurah is supported by CTC Ltd. (Aust.) and the City of Mandurah has been appointed the auspice agency in partnership with the South Metropolitan Health Service – Health Promotion, School Drug Education and Road Aware (SDERA) and local stakeholders.

Organisational Structure

A CTC Mandurah Community Board was established in 2016, comprising of interested stakeholders and members of the community, to work with the key leaders to analyse the unique needs of the Mandurah community. The Community Board is a decision-making body representing a range of organisations, community members and young people, committed to fostering healthy development in children and young people. The board members formed the following working groups:

- School work group;
- Capacity building work group;
- Community assessment work group;
- Community resources work group; and
- Action Plan work group.

A CTC Mandurah Key Leaders group was also formed in 2016, with members of the existing network, Mandurah 'Group of Six', committing to the oversight of the CTC process in Mandurah and the support of the community board. CTC Mandurah Key Leaders include leadership representatives from Health, Mental Health, Education, Child Protection, Corrections, WA Police and Local Government formed the key leaders group and initiated community engagement to involve all sectors of the community in the strategy.

CTC Mandurah organisational chart

Key Accomplishments to date

Currently CTC Mandurah is finalising Phase 3 of the cycle. All milestones relating to Phase 1 and 2 have successfully been completed. This includes:

- Establishing a Community Coordinator role, to facilitate the CTC process in Mandurah.
- Formation of a Key Leaders group, including Mandurah Mayor and regional leaders from State Government agencies.
- Formation of a community board.
- Formation of work groups.
- CTC training and orientation for board members and key leaders, delivered by Deakin University.
- Engaging with secondary schools.
- Delivery of youth survey in 3 secondary schools for year 8 and 10 students.
- Delivery of Smart Generation (evidence-based alcohol program) to year 8 and 10 students in 3 schools.
- Delivery of Smart Generation - Supply monitoring of packaged liquor stores in Mandurah to reduce supply of alcohol to minors.
- Collection and analysis of relevant community-wide data.
- Received $10,000 through Alcohol Drug Foundation to establish a Local Drug Action Team and extend the Smart Generation program.

2.1 Communities that Care Process

Using prevention science as its base, the Communities that Care (CTC) model promotes healthy youth development, improves youth outcomes and reduces problem behaviours. The 5-phase CTC process uses an early intervention and prevention framework to guide

communities towards identifying and understanding their local needs, setting priorities, and implementing tested effective strategies to address those needs. [2]

The Communities that Care implementation phases are:

- **Phase 1 – Get Started**
  Communities prepare for action by working to identify and recruit relevant community stakeholders and key decision-makers to the CTC process.
- **Phase 2 – Get Organised**
  The Community Board, Key Leader Group and relevant governance structures are established to guide decision making and planning for the CTC effort in the community.
- **Phase 3 – Develop a Profile**
  A Community Profile Report is prepared using data gathered from the CTC Youth Survey, public data and assessments of existing community resources and strengths. The Community Board finalises priorities for action.
- **Phase 4 – Create a Plan**
  The Community Board develops a Community Action Plan to guide prevention work in the community. This plan outlines chosen evidence-based programs, and relevant outcomes, and allocates roles and responsibility for implementation.
- **Phase 5 – Implement and Evaluate**
  Implementation of the Community Action Plan begins, and the Community Board and Key Leader Groups ensure that evidence-based programs and strategies are implemented with fidelity and evaluated as planned.

2.2 Risk and Protective Factors Framework

The Communities that Care process creates awareness of the risk and protective factors impacting on the healthy development of children and adolescents. Throughout the process, communities target their prevention efforts to reduce risk factors and strengthen protective factors in the four domains of community, family, school and peer/individual.[3]

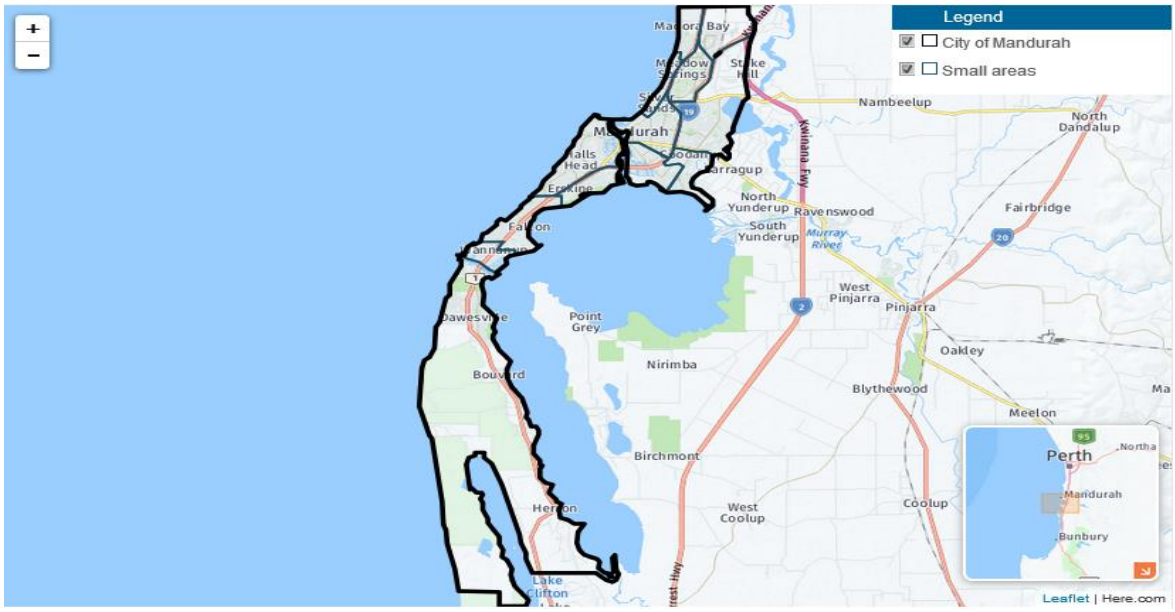
[2] http://www.communitiesthatcare.org.au/5-phases-ctc
[3] http://www.communitiesthatcare.org.au/how-it-works/risk-and-protective-factors

RISK FACTORS Risk factors increase the likelihood young people will develop health and social problems.	DOMAIN	PROTECTIVE FACTORS Protective factors help buffer young people with high levels of risk factors from developing health and social problems.
▪ Low community attachment ▪ Community disorganisation ▪ Community transitions and mobility ▪ Personal transitions and mobility ▪ Laws and norms favourable to drug use ▪ Perceived availability of drugs ▪ Economic disadvantage (not measured in youth survey)	COMMUNITY	▪ Opportunities for prosocial involvement in the community ▪ Recognition of prosocial involvement ▪ Exposure to evidence-based programs and strategies (some are measured in youth survey)
▪ Poor family management and discipline ▪ Family conflict ▪ A family history of antisocial behaviour ▪ Favourable parental attitudes to the problem behaviour	FAMILY	▪ Attachment and bonding to family ▪ Opportunities for prosocial involvement in the family ▪ Recognition of prosocial involvement
▪ Academic failure (low academic achievement) ▪ Low commitment to school ▪ Bullying	SCHOOL	▪ Opportunities for prosocial involvement in school ▪ Recognition of prosocial involvement
▪ Rebelliousness ▪ Early initiation of problem behaviour ▪ Impulsiveness ▪ Antisocial behaviour ▪ Favourable attitudes toward problem behaviour ▪ Interaction with friends involved in problem behaviour ▪ Sensation seeking ▪ Rewards for antisocial involvement	PEER / INDIVIDUAL	▪ Social skills ▪ Belief in the moral order ▪ Emotional control ▪ Interaction with prosocial peers

3.0 Demographic Profile

The City of Mandurah is one of Australia's fastest growing cities, covering an area of 174 square kilometres. Between 2011 and 2036, the population for the City of Mandurah is forecast to increase by 49,975 persons (68.06% growth), at an average annual change of 2.10%.[4]

[4] http://www.mandurah.wa.gov.au/city-and-council/City-Profiles/profile-of-mandurah



Source: Population and household forecasts, 2011 to 2036, prepared by id, the population experts, March 2015

3.1 Population

In 2016, there were 80,813 people in Mandurah (LGA). Of these 48.5% were male and 51.5% were female. Aboriginal and/or Torres Strait Islander people made up 2.1% of the population (Table 1). [5]

Table 1

People	Mandurah (C)	%	Western Australia	%	Australia	%
Male	39,188	48.5	1,238,419	50.0	11,546,638	49.3
Female	41,620	51.5	1,235,994	50.0	11,855,248	50.7
Aboriginal and/or Torres Strait Islander people	1,718	2.1	75,978	3.1	649,171	2.8

Source: 2016 Census, ABS – Usual residence on census night

The median age of people in Mandurah was 43 years. Children aged 0 - 14 years made up 18.0% of the population and people aged 65 years and over made up 22.7% of the population (Table 2). [6]

[5] http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA55110?opendocument
[6] http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA55110

Table 2

Age	Mandurah (C)	%	Western Australia	%	Australia	%
Median age years	43	--	36	--	38	--
0-4	4,669	5.8	161,727	6.5	1,464,779	6.3
5-9	5,099	6.3	164,153	6.6	1,502,646	6.4
10-14	4,791	5.9	150,806	6.1	1,397,183	6.0
15-19	4,849	6.0	149,997	6.1	1,421,595	6.1
20-24	4,340	5.4	160,332	6.5	1,566,793	6.7
25-29	4,207	5.2	184,908	7.5	1,664,602	7.1
35-39	4,348	5.4	173,041	7.0	1,561,679	6.7
40-44	4,933	6.1	171,996	7.0	1,583,257	6.8
45-49	5,173	6.4	172,520	7.0	1,581,455	6.8
50-54	5,270	6.5	162,438	6.6	1,523,551	6.5
55-59	5,075	6.3	149,899	6.1	1,454,332	6.2
60-64	5,151	6.4	132,145	5.3	1,299,397	5.6
65-69	5,496	6.8	116,755	4.7	1,188,999	5.1

Source: 2016 Census, ABS – Usual residence on census night

Mandurah (LGA)

People	**80,813**
Male	48.5%
Female	51.5%
Median age	43
Families	**22,213**
Average children per family	
for families with children	1.8
for all families	0.7

Aboriginal and/or Torres Strait Islander peoples

For the 2016 Census in Mandurah (LGA), there were 1,705 Aboriginal and/or Torres Strait Islander people. Of these, 49.0% were male and 51.0% were female. The median age was 20 years (Table 3.).[7]

Table 3

People	Mandurah (C)	%	Western Australia	%	Australia	%
Male	840	49.0	38,027	50.0	322,171	49.6
Female	875	51.0	37,959	50.0	326,996	50.4
Median age	20	--	23	--	23	--

Source: 2016 Census, ABS – Usual residence on census night – Aboriginal and/or Torres Strait Islander people.

[7] http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA55110

Of the Aboriginal and/or Torres Strait Islander people in Mandurah (LGA), 38.3% were children aged 0 to 14 years, 58.5% were aged 0 to 24 years and 4.1% were people aged 65 years and over (Table 4).[8]

Table 4

Age	Mandurah (C)	%	Western Australia	%	Australia	%
Median age	20	--	23	--	23	--
0-4 years	**234**	**13.6**	**8,409**	**11.1**	**73,265**	**11.3**
5-14 years	425	24.7	16,962	22.3	147,134	22.7
15-24 years	**347**	**20.2**	**14,074**	**18.5**	**123,719**	**19.1**
25-34 years	242	14.1	11,452	15.1	88,861	13.7
35-44 years	**140**	**8.1**	**8,860**	**11.7**	**72,394**	**11.2**
45-54 years	153	8.9	7,894	10.4	67,415	10.4
55-64 years	**109**	**6.3**	**5,136**	**6.8**	**45,433**	**7.0**
65 years and over	70	4.1	3,192	4.2	30,952	4.8

Source: 2016 Census, ABS – Usual residence on census night – Aboriginal and/or Torres Strait Islander people.

3.2 Socio-economics

The socio-economic indexes for areas (SEIFA) scores are made up of four indices which summarise a variety of social and economic variables such as income, educational

[8] http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/IQSLGA55110

attainment, employment and number of unskilled workers. SEIFA scores are based on a national average of 1000 and areas with the lowest scores are the most disadvantaged.

Based on 2011 Census data, the City of Mandurah had a SEIFA Index of Disadvantage score of 978, indicating relative disadvantage. Table 5 shows the SEIFA scores for each suburb in the City of Mandurah.[9]

Table 5: SEIFA Index of Disadvantage scores by suburb, City of Mandurah, 2011

Suburb	SEIFA score	Usual resident population
Barragup	1023	812
Bouvard	980	825
Clifton	N/A	N/A
Coodanup	852	3,529
Dawesville	1014	4,301
Dudley Park	966	5,766
Erskine	994	4,111
Falcon	974	4,665
Furnissdale	920	1,024
Greenfields	937	9,938
Halls Head	1035	13,056
Herron	1012	431
Lakelands	1042	2,927
Madora Bay	1058	1,724
Mandurah	859	7,325
Meadow Springs	1017	5,924
Parklands	1050	541
San Remo	1059	882
Silver Sands	989	1,241
Stake Hill	1077	495
Wannanup	1022	2,774

Source: ABS (2011). Socio-economic Indexes for Areas (SEIFA).
N/A = SEIFA data not available.

Note: SEIFA scores not available for 2016 Census data.

*Mandurah was recorded as the most disadvantaged Statistical Area Level 2 in the Greater Perth area.[10]

[9] http://www.abs.gov.au/ausstats/abs@.nsf/mf/2033.0.55.001
[10]http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001~2011~Media%20Release~2011%20Census%20(SEIFA)%20for%20Western%20Australia%20(Media%20Release)~9

Unemployment

The Peel region experiences unique pressures from both fast population growth and high unemployment. The regional blueprint by Peel Development Commission (2015) details an average rate of population growth almost double that of the rest of the state. In the 10 years to 2014 the population grew by 4.4% compared to the WA average of 2.6%.[11] Figures from mid-2016 showed Mandurah had the highest unemployment rate in the state at 9.3%.[12] This is over double the rate of inner Perth (4.3%) and higher than outback WA (7.4%).[13]

One in four households were receiving rent assistance from the Australian Government in 2014, which was the highest in Perth South Primary Health Network. [13]

In 2011 more than one in four (27.7%) families in Mandurah with children 15 years old or younger were single parented. This was the highest rate in the Primary Health Network.

It is estimated that there were 208 homeless people in Mandurah in 2011, one of the larger numbers estimated for Statistical Area Level 3's in the Perth South.

4.0 Communities that Care Youth Survey[14]

The CTC survey of young people in Mandurah involved an online (or in some cases paper-based) questionnaire assessing a wide range of risk and protective factors and other behavioural outcomes. The survey took students around 45 minutes to complete.

4.1 Survey Instrument

The youth survey is based on an Australian adaptation of the original *Communities that Care Youth Survey* developed in the United States. Adaptations were originally made to ensure the survey was culturally appropriate for young people in Australia, and to broaden the scope of behaviours assessed by including measures of depressive symptoms, victimisation, physical activity and healthy eating. Adaptations to the original survey were also made to ensure suitability for a wide age range, from Year 5 to Year 12 students.

[11] Peel Development Commission (2015), "Peel Regional Investment Blueprint", PDC, Mandurah
[12] See: http://www.perthnow.com.au/news/western-australia/fair-go-for-was-regions-jobs-in-mandurah-rarer-than-in-the-outback/news-story/b4a2becf12b647adfc4fddc4b5bc4822
[13] Public Health Information Development Unit. (2016). Social Atlas of Australia: Primary Health Networks. http//phidu.torres.edu.au/social-health-atlases/data

[14] Hall, J., Smith, R., & Toumbourou, J. (2017). 2017 Communities That Care Survey Report: Communities That Care Mandurah. Geelong: Deakin University.

This survey instrument measures a broad range of behavioural outcomes and risk and protective factors in four domains: Community, School, Family and Peer/Individual. Within these domains, there are approximately 30 scales with an average of 4 questions per scale.

Risk factors are factors that can predict negative behavioural and adverse outcomes, and protective factors are factors that can moderate and mediate risk factors for a range of adolescent health and behaviour problems. The following section details the risk and protective factors measured.

4.2 The Risk and Protective Framework

Risk factors are characteristics of school, community, and family environments; and characteristics of students and their peer groups; that are known to independently predict an increased likelihood of harmful drug use, crime, violent behaviours, school dropout, sexual risk-taking and mental health problems among youth.[15] For example, children who live in disorganised communities with high rates of crime and drug use are more likely to become involved in crime and drug use than are children who live in areas that have low rates of these problems.

Protective factors exert a positive influence and buffer against the negative influence of risk, thus reducing the likelihood that children and young people will develop health and social problems. Protective factors identified through research include strong bonding to family, school, community and peers, and healthy beliefs and clear standards for behaviour. For bonding to serve as a protective influence, it must occur through involvement with peers and adults who communicate healthy values and set clear standards for behaviour. According to the social development model[16] three conditions must be present in communities, neighbourhoods, schools, families and peer groups for young people to develop strong bonds to these social units:

- **Opportunities** for active contribution and involvement in these units;
- **Skills** to be successful in meeting the opportunities they encounter; and
- Consistent **Recognition** or reinforcement for their efforts and accomplishments.

Risk Factor Definitions

[15] www.rch.org.au/uploadedFiles/Main/.../Communities_That_Care_Youth_Survey.pdf
[16] www.wnyunited.org/uploads/2/6/3/2/26328288/risk_and_protective_factors.pdf

COMMUNITY DOMAIN	**Low neighbourhood attachment**	Neighbourhoods where residents report low levels of bonding to the neighbourhood have higher rates of juvenile crime, violence and drug use. *Example question: 'I'd like to get out of my neighbourhood.'*
	Community Disorganisation	Neighbourhoods with high population density, lack of natural Surveillance of public places, physical deterioration, and high rates of adult crime have higher rates of juvenile crime, violence and drug use. *Example question: 'How much do you agree with the following statements? There are fights in my neighbourhood.*
	Personal transitions & mobility	Young people without stability and strong personal relationships are more likely to use drugs and become involved in Anti-social behaviours. *Example question: 'Have you moved house in the past year (last 12 months)?'*
	Community laws/norms favourable to drug use	Communities where laws regulating alcohol and other drug use are poorly enforced have higher rates of youth alcohol and drug use, violence, and delinquency. Further, rates of youth alcohol and drug use and violence are higher in communities where adults believe it is normative or acceptable for minors to use alcohol or other drugs. *Example question: 'How wrong would most adults in your neighbourhood think it is for kids your age to drink alcohol?'*
	Perceived availability of drugs	The availability of cigarettes, alcohol, marijuana, and other illegal drugs is related to a higher risk of drug use and violence among adolescents. *Example question: 'How easy would it be for you to get marijuana?'*

FAMILY DOMAIN	**Poor family management**	Parents' use of inconsistent and/or unusually harsh or severe punishment with their children places the children at higher risk for substance use and other problem behaviours. *Example question: 'The rules in my family are clear.'*
	Family conflict	Children raised in families high in conflict are at risk for violence, delinquency, school dropout, teen pregnancy, and drug use. *Example question: 'We argue about the same things in my family over and over again.'*
	Parental attitudes favourable to drug use	In families where parents are tolerant of their children's alcohol or drug use, children are more likely to become drug abusers. The risk is further increased if parents involve children in their own drug or alcohol using behaviour; for example, by asking the child to light the parent's cigarette. *Example question: 'How wrong do your parents feel it would be for you to smoke cigarettes?'*

FAMILY DOMAIN	Parental attitudes favourable to Anti-social behaviour	In families where parents are tolerant of their children's misbehaviour, including violent and delinquent behaviour, children are more likely to become involved in violence and crime during adolescence. *Example question: 'How wrong do your parents feel it would be for you to pick a fight with someone?'*
SCHOOL DOMAIN	**Academic failure**	Beginning in the late primary school grades (grades 4-6), children who fall behind academically for any reason are at greater risk of drug abuse, school dropout, teenage pregnancy and violence. *Example question: 'Putting them altogether, what were your marks like last year?'*
	Low commitment to school	Factors such as not liking school, spending little time on homework, and perceiving coursework as irrelevant are predictive of drug use, violence, delinquency and school dropout. *Example question: 'Now, thinking back over the past year in school, how often did you try to do your best work in school?'*
PEER-INDIVIDUAL DOMAIN	**Favourable attitudes to drug use**	Youth who express positive attitudes toward drug use are at higher risk for subsequent drug use. *Example question: 'How wrong do you think it is for someone your age to use marijuana?'*
	Friends use of drugs	Young people who associate with peers who engage in alcohol or substance use are much more likely to engage in the same behaviour. *Example question: 'In the past year (12 months), have any of your four best friends use marijuana?'*

Protective Factor Definitions

COMMUNITY DOMAIN	**Community rewards for prosocial involvement**	Recognition for positive participation in community activities helps children bond to the community, thus lowering their risk for problem behaviours. *Example question: 'My neighbours notice when I am doing something well and let me know.'*
	Community opportunities for prosocial involvement	When opportunities for positive participation are available in a community, children are more likely to become bonded to the community. *Example question: 'Which of the following activities for people your age are available in your community? -sports teams, scouts/guides, youth groups, community service.'*

FAMILY DOMAIN	**Family attachment**	Young people who feel strongly bonded to their family are less likely to engage in substance use and other problem behaviours. *Example question: 'Do you feel very close to your mother?'*
	Family opportunities for prosocial involvement	Young people who have more opportunities to participate meaningfully in the responsibilities and activities of the family are more likely to develop strong bonds to the family. *Example question: 'My parents ask me what I think before most family decisions affecting me are made.'*
	Family rewards for prosocial involvement	When parents, siblings, and other family members praise, encourage, and recognise things done well by their child, children are more likely to develop strong bonds to the family. *Example question: 'How often do your parents tell you they're proud of you for something you've done?'*
SCHOOL DOMAIN	**School opportunities for prosocial involvement**	When young people are given more opportunities to participate meaningfully in the classroom and school, they are more likely to develop strong bonds of attachment and commitment to school. *Example question: 'In my school, students have lots of chances to help decide things like class activities and rules.'*
	School rewards for prosocial involvement	When young people are recognised for their contributions, efforts, and progress in school, they are more likely to develop strong bonds of attachment and commitment to school. *Example question: 'My teachers praise me when I work hard in school.'*
PEER-INDIVIDUAL DOMAIN	**Belief in the moral order**	Young people who have a belief in what is 'right' or 'wrong' are less likely to use drugs or engage in delinquent or other problem behaviours. *Example question: 'It is important to be honest with your parents, even if they become upset or you get punished.'*
	Interaction with pro-social peers	Young people who interact with other young people who display pro-social behaviour are less likely to engage in substance use and other problem behaviours. *Example question: 'Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have tried to do well in school?'*
	Stress/coping adaptive	When young people demonstrate positive coping strategies in stressful situations they are less likely to engage in substance use and other problem behaviours. *Example question: 'When I have a problem. I think about the best ways to handle the problem'*
	Emotional control	Young people who demonstrate emotional control are less likely to engage in substance use and problem behaviours and experience less depression. *Example question: 'I know how to calm down if I am feeling nervous'*

4.3 Method

The survey was carried out online or a paper-based version was used if access to computers was limited. It was conducted in students' normal class time, taking approximately 45 minutes to complete.

4.4 Validity

To ensure survey accuracy, respondents were eliminated if their surveys showed evidence that they had responded inaccurately or dishonestly. The criteria for elimination included reporting the use of a fictitious drug and self-reporting that responses had been dishonest.

4.5 Interpreting the data

A low proportion of students in Years 8 and 10 in the participating schools completed the survey. The estimates presented in the following results section should be interpreted with these differences in mind. Our comparison of the change in student behaviours and risk factors from Year 8 to 10 showed similar trends to other communities surveyed, and the Year 8 sample showed similar levels of risk factors when compared to a 2013 national survey. However, it remains possible that the Year 8 and 10 results may underestimate the true level of risk factors and health and social problems in Mandurah. Estimates from this student survey should be interpreted by comparing them against other available information.

4.6 Interpreting the results

Source of alcohol: Reported prevalence on this measure is based on only those students in the sample who reported they had consumed alcohol in the past year.

Risk and Protective factors: Each risk and protective factor item is developed based on a scale (a combination of questions asked in the student survey - averaging 4 questions per scale). Students are included in the 'total valid response' if they responded to a minimum number of questions that make up this scale (e.g. if students only respond to one of four questions that make up the scale they are not included in the total valid responses).

4.7 Comparative data

The comparative data presented in this report was collected as part of the 'Smart Generation' study conducted in 2013 across three Australian states: Victoria, Queensland and Western Australia. The study surveyed students in Year 8 in 31 Australian communities selected to represent the range of socioeconomic advantage and disadvantage in both metropolitan and non-metropolitan locations. The Smart Generation study used a version of the *Communities that Care Youth Survey* adapted for online use in Australia.

4.8 Survey Demographics

Mandurah Sample

The 2017 data presented for Mandurah is sampled from 3 schools. The total number of students surveyed is 245. The data was collected in Terms 1 and 2, 2017. All of the participating schools undertook the longitudinal version of the survey (branded the *Young People, Our Future* survey) which required active parental consent (opt-in). Recruitment using an active parental consent form can be challenging to achieve on a large scale. The parent consent form was an eleven page document and, for many parents, the time involved in completing the form is a deterrent to giving permission for participation in the survey. In some cases parent's own literacy challenges can be an obstacle to reading and comprehending this document. This needs to be considered when analysing the survey results, as the children in the survey room are those whose parents have taken an interest and signed a long and detailed document that the student has brought home from school.

Year 8 Demographics – Mandurah sample

Total number of participating schools = 3
Total number of students approached in Year 8 = 518
Number of students surveyed* = 167
Percentage of students surveyed = 32%
Non-participation: did not return consent form = 292; students absent = 47; non-consent =12
Ages ranged from 12 to 15 years.
Males 50%; Females 48%; identified as other 2%.
Number of students who showed evidence of being dishonest** = 1

Year 10 Demographics – Mandurah sample

Total number of participating schools = 3
Total number of students approached in Year 10 = 450
Number of students surveyed* = 78
Percentage of students surveyed = 17%
Non-participation: did not return consent form =325; students absent = 36; non-consent = 11
Ages ranged from 14 to 17 years.
Males 37%; Females 60%; identified as other 3%.
Number of students who showed evidence of being dishonest** = 0
*The main reason for non-participation was non-return of consent forms.
**This student was removed from the analysis.

Comparative sample

The 2013 comparative data is from a representative sample of Australian school students surveyed as part of the 'Smart Generation' Study in the three states of Victoria, Queensland and Western Australia. The sample included Year 8 students (n=3,613) and had high response rates.

5.0 Results from Youth Survey[17]

5.1 Behavioural Outcomes

Alcohol use

Adolescent alcohol use is highly prevalent in Australia, despite considerable evidence that adolescent alcohol use contributes significantly to societal suffering and burden. Patterns of alcohol use adopted in secondary school tend to strongly influence the likelihood of alcohol problems in adulthood.[18] Findings from a range of longitudinal studies have shown that the frequency of alcohol use in adolescence is strongly predicted by the age at which alcohol use is first initiated.[19] These findings emphasise the need to introduce alcohol prevention goals that include delaying the age that adolescents initiate alcohol consumption.
The Australian alcohol guidelines recommend that for people under the age of 18 years, not drinking alcohol is the safest option.[20]

Figures 1 & 3 show the prevalence of young people reporting substance use and the source of alcohol supply by year level in the Mandurah community in 2017. It can be noted from these figures that:

- Lifetime alcohol use is progressively higher from Year 8 to Year 10 (Y8-29%; Y10-33%);
- Recent alcohol use (past 30 days) is reported by 9% of Year 10 students;
- Lifetime cigarette use is reported by 5% of students in Year 8 and by 7% of Year 10 students;
- Lifetime solvent use is reported by 10% of students in Year 8 and by 3% of Year 10 students;
- Of the students who have consumed alcohol, the main supplier of alcohol is parents (Y8-17%; Y10-40%) and someone else giving/purchasing them alcohol (Y8-33%; Y10-35%).

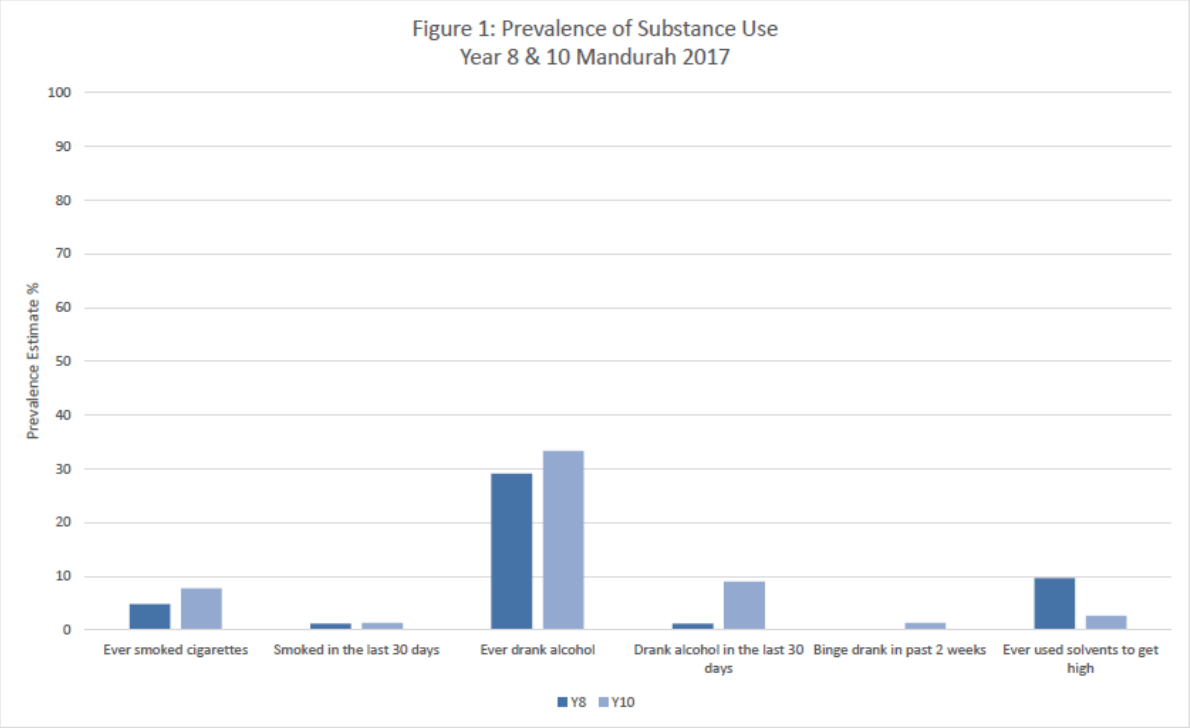
[17] Hall, J., Smith, R., & Toumbourou, J. (2017). 2017 Communities That Care Survey Report: Communities That Care Mandurah. Geelong: Deakin University.
[18] Loxley, W., Toumbourou, J., & Stockwell, T. (2004). The Prevention of Substance Use, Risk and Harm in Australia: A Review of the Evidence. : Canberra: Australian Government Department of Health and Ageing.
[19] Shortt, A. L., Hutchinson, D. M., Chapman, R., & Toumbourou, J. W. (2007). Family, school, peer and individual influences on early adolescent alcohol use: first-year impact of the Resilient Families programme. *Drug and alcohol review, 26*(6), 625-634.
[20] National Health Medical Research Council. (2009). *Australian guidelines to reduce health risks from drinking alcohol*: National Health and Medical Research Council.

Figures 2 & 4 compare the prevalence of substance use and source of alcohol supply for Mandurah Year 8 students in 2017 to those of Australian Year 8 students in 2013. Compared to Australian students, the Mandurah Year 8 students report:

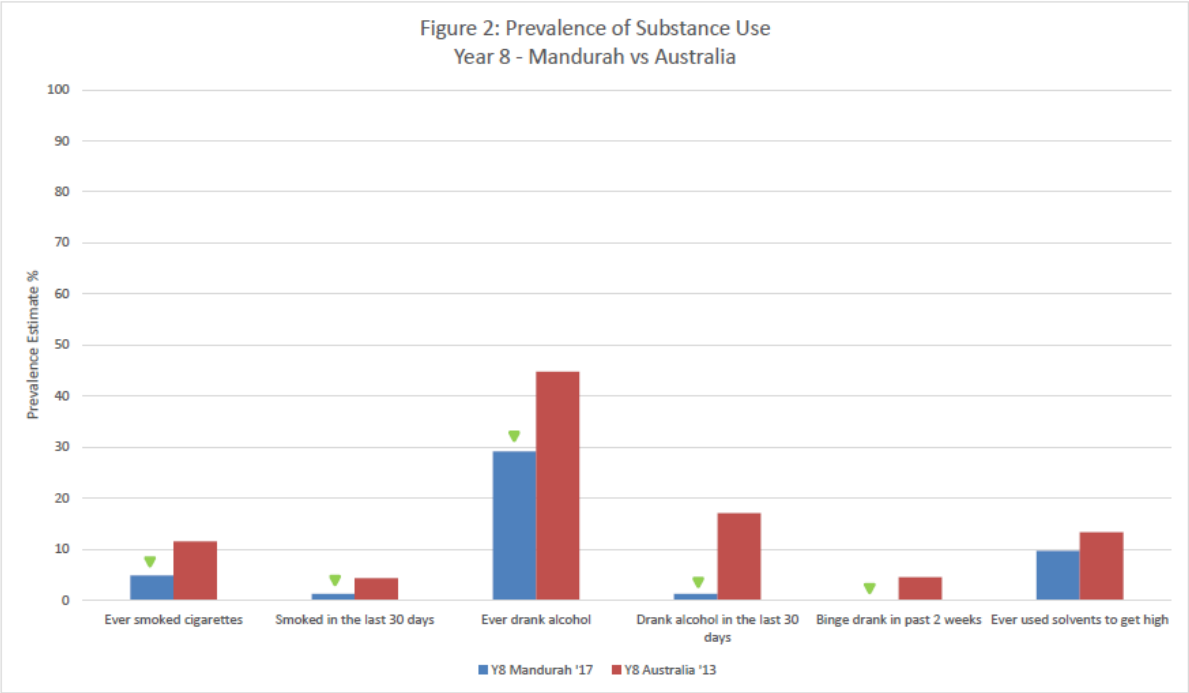
- Significantly lower rates of tobacco use, as follows:
  - Lifetime tobacco use (Mandurah-5% & Aus-12%);
  - Recent tobacco use (Mandurah-1% & Aus-4%);
- Significantly lower rates of alcohol use, as follows:
  - Lifetime alcohol use (Mandurah-29% & Aus-45%);
  - Recent alcohol use (Mandurah-1% & Aus-17%).

Although the Year 8 rate of alcohol use is lower than the national average, the figure of 29% students having drunk alcohol at an early age (13~14 years) is of concern, considering the many harms associated with adolescent alcohol use.

Prevalence of young people reporting substance use by year level, Mandurah study area in 2017.



Prevalence of substance use in Mandurah study area compared to Australian students, Year 8.



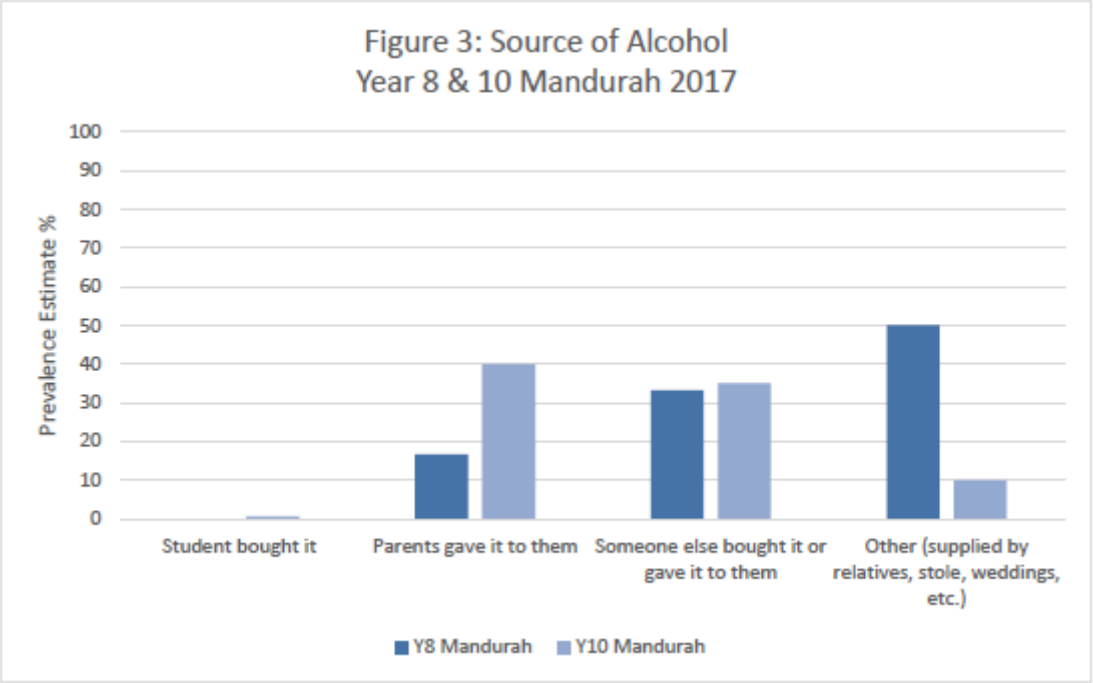
▼ Significantly lower than the Australian comparative

Source of Alcohol

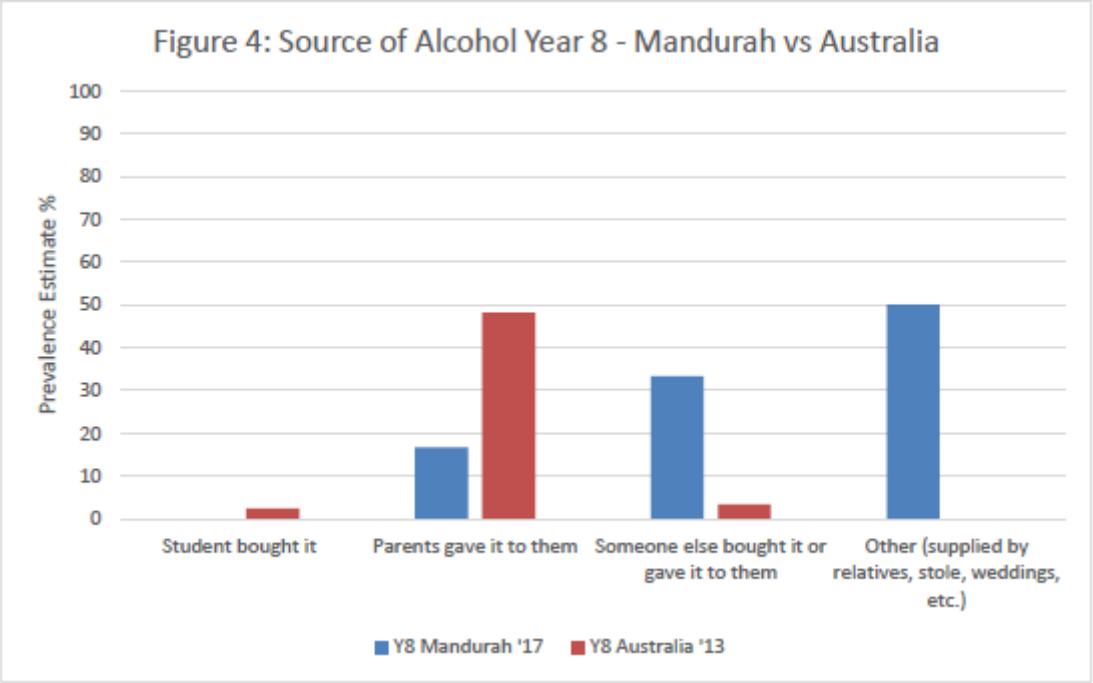
Student self-report data suggests adolescents access their alcohol through multiple sources. These sources can be further categorised into social supply or retail supply. Social supply refers to obtaining alcohol through secondary sources, such as parents or guardians, siblings, taking it from home, friends or getting someone else to purchase for them.[21] Retail supply refers to the purchase of alcohol from liquor outlets / licensed premises. Students who reported they had consumed alcohol in the past year were asked how they accessed their last drink. 40% of year 10 students who reported having drank alcohol in the past year said that their parents gave it to them.

[21] White, V., & Bariola, E. (2012). Australian secondary school students' use of tobacco, alcohol, and over-the counter and illicit substances in 2011 *Drug Strategy Branch Australian Government Department of Health and Ageing*

Source of alcohol by year level, Mandurah study area in 2017.



Source of alcohol in Mandurah study area compared to Australian students, Year 8, 2017.



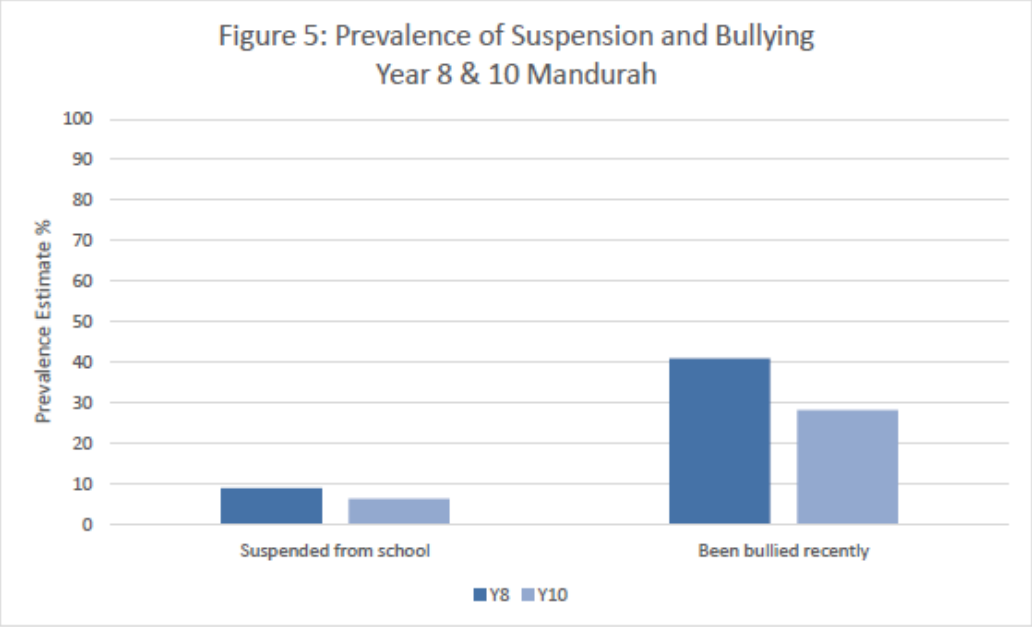
School suspension and bullying

According to the youth survey, students in Mandurah report the following antisocial behaviours and indicators: being suspended from school and bullying.

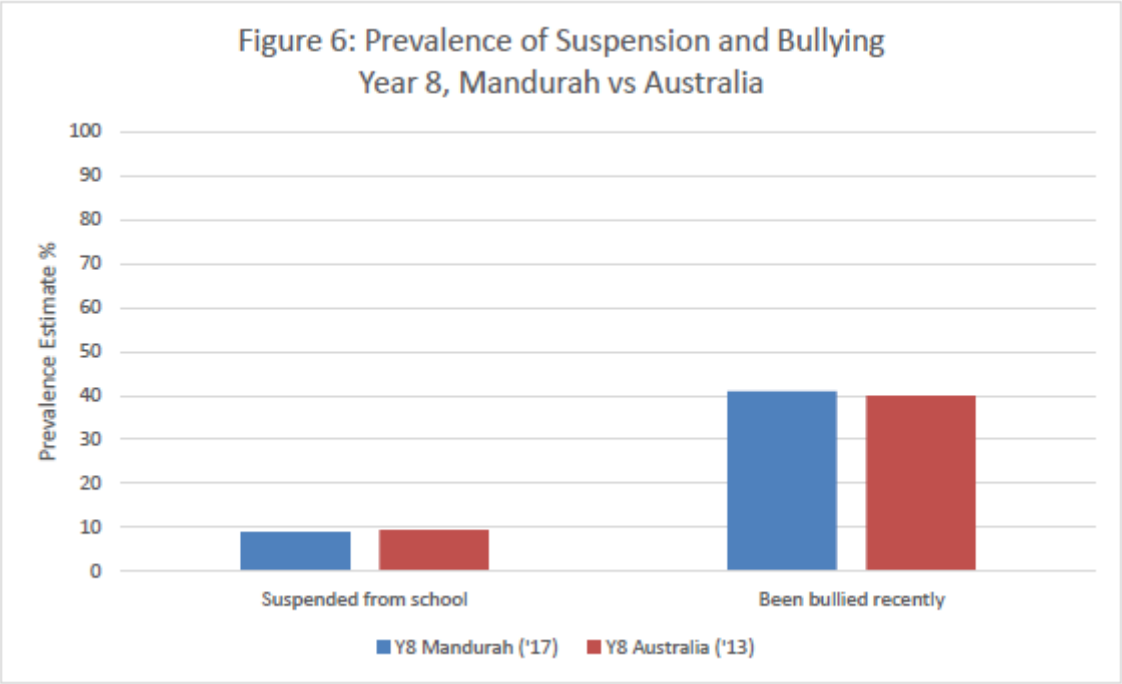
Figure 5 shows the prevalence estimates of the above listed measures for students in Mandurah by year level in 2017. From this figure it can be seen that:

- Student reports of being suspended from school are 9% in Year 8 and 6% in Year 10;
- Students in Year 8 report higher rates of being bullied recently compared to Year 10 students (Y8-41%; Y10-28%);
- Compared to Australian students, the Mandurah Year 8 students report comparable rates of suspension and bullying.

Prevalence of youth reporting school suspension and bullying, Mandurah study area in 2017.



Prevalence of young people reporting school suspension and bullying in Mandurah study area compared to Australian students, Year 8, 2017.



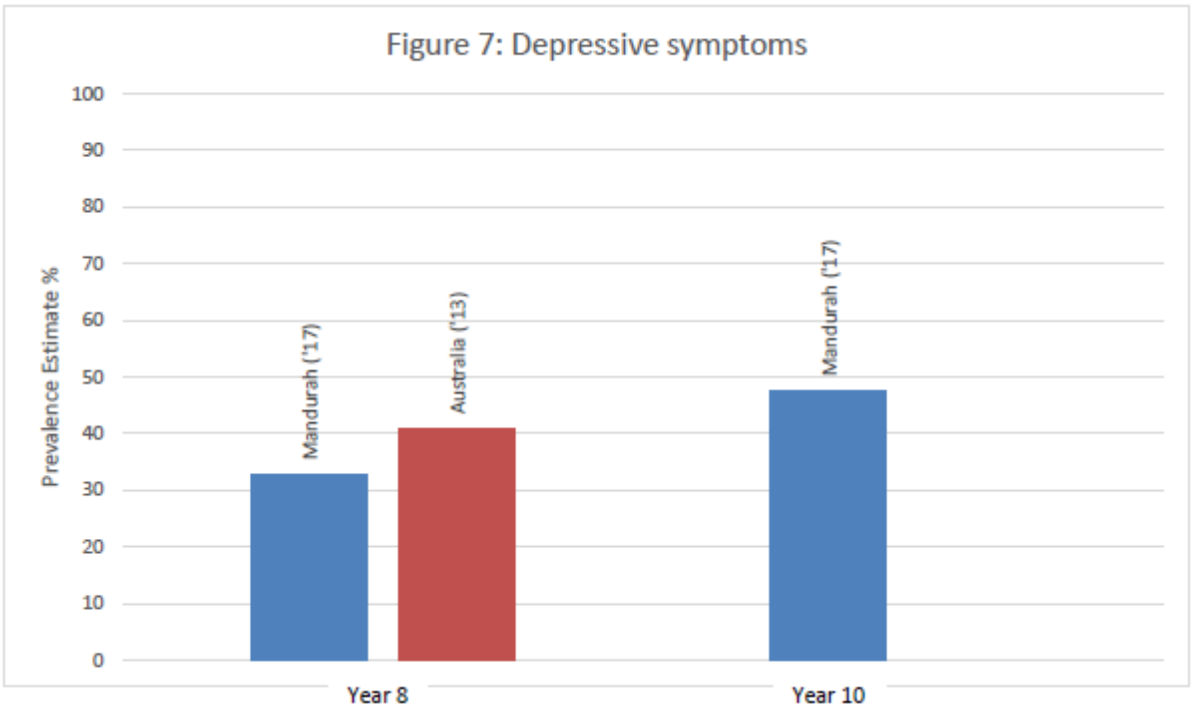
Depressive Symptomatology

The following section outlines student reports of depressive symptomology during the past month.

Figure 7 shows the proportion of young people reporting they are experiencing depressive symptomology by year level in Mandurah in 2017. These figures also show a comparison with Year 8 Australian students (2013). It can be noted from these figures that:

- Prevalence of depressive symptomology is high across all year levels (Y8-33% and Y10-48%);
- Year 8 Mandurah students report a comparable level of depressive symptoms with those of Year 8 Australian students (Mandurah-33% & Aus-41%).

Proportion of young people reporting they are experiencing depressive symptomology by year level in Mandurah in 2017.



5.2 Risk Factors

Risk factors are common and important factors that can predict behaviour and health outcomes. An increase in levels of risk factors in a young person's environment can be associated with an increase in adverse outcomes. Risk factors can occur within the community, family, school and peer/individual domains.

The following section outlines the prevalence of *Community*, *Family*, *School* and *Peer/Individual* risk factors.

Figures 8 – 10 show the prevalence of young people reporting risk factors by year level in the Mandurah community in 2017. It can be noted from these figures that:

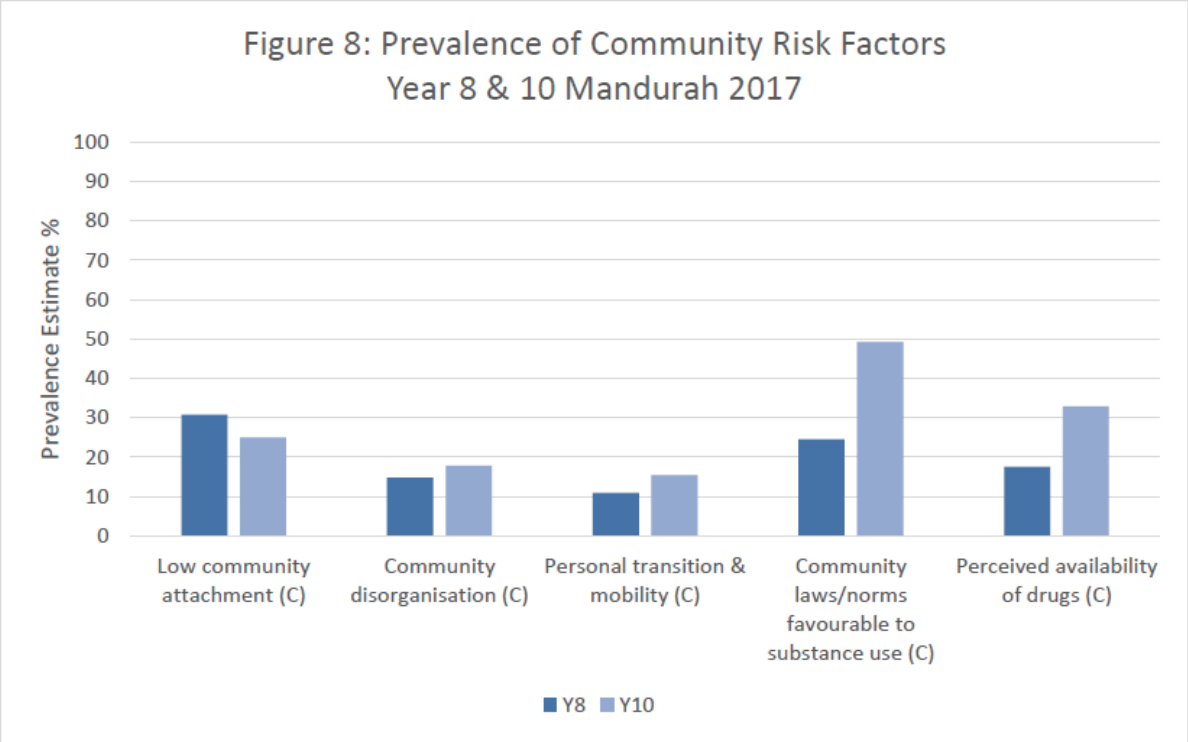
- The level of most risk factors is progressively higher from Year 8 to Year 10;
- More than a quarter of students report 'Low community attachment' (Y8-31%; Y10-25%);
- Students report a high increase in 'Community laws and norms favourable to substance use' and 'Perceived availability of drugs' from Year 8 to Year 10 as follows:
  - Community laws and norms favourable to substance use (Y8-25%; Y10-49%);
  - Perceived availability of drugs (Y8-18%; Y10-33%);
- 'Family conflict' is high in all year levels (range 37%-43%);

- School risk factors are high across all year levels, notably ‘Low commitment to school’ (Y8-60%; Y10-59%) and ‘School failure’ (Y8-24%; Y10-19%);
- There is a sharp increase in ‘Friends’ use of drugs’ (Y8-4%; Y10-20%).
- Poor family management is rated at 26% for year 8 students.

Figures 11 – 13 compare the prevalence of risk factors for Year 8 students in Mandurah in 2017 with those of Australian Year 8 students in 2013. Compared to Australian students, Mandurah Year 8 students report:

- A comparably high prevalence of most risk factors relative to the national average results;
- Significantly lower levels of ‘Community laws and norms favourable to substance use’ (Mandurah-25%; Aus-36%) and several peer/individual risk factors, as follows:
    - ‘Favourable attitudes towards drug use’ (Mandurah-16%; Aus-24%);
    - ‘Friends use of drugs’ (Mandurah-4%; Aus-17%);
    - ‘Sensation seeking’ (Mandurah-17%; Aus-25%).
- Year 8 results for the risk factor “Family conflict” is higher than the national average for that age group (Mandurah-43%; Aus-38%).

Prevalence of young people reporting risk factors by year level, Mandurah study area in 2017.



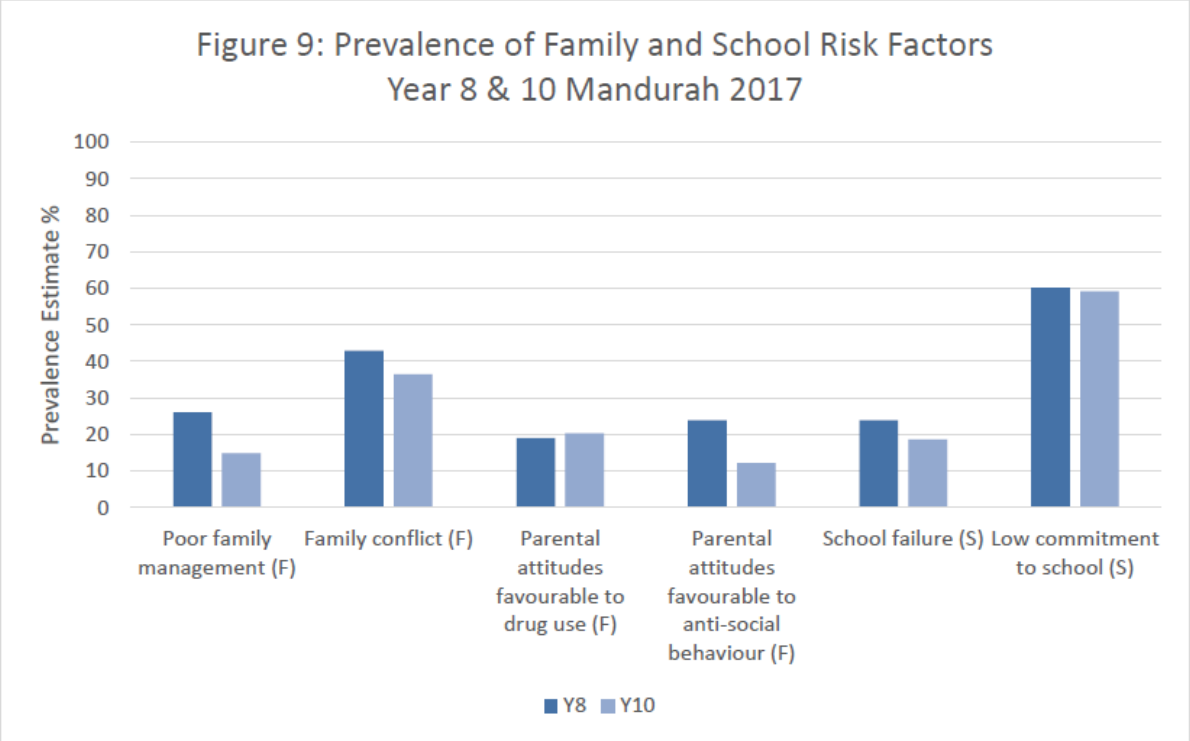


Figure 9: Prevalence of Family and School Risk Factors
Year 8 & 10 Mandurah 2017
Prevalence Estimate %
100
90
80
70
60
50
40
30
20
10
0
Poor family management (F)
Family conflict (F)
Parental attitudes favourable to drug use (F)
Parental attitudes favourable to anti-social behaviour (F)
School failure (S)
Low commitment to school (S)
Y8
Y10

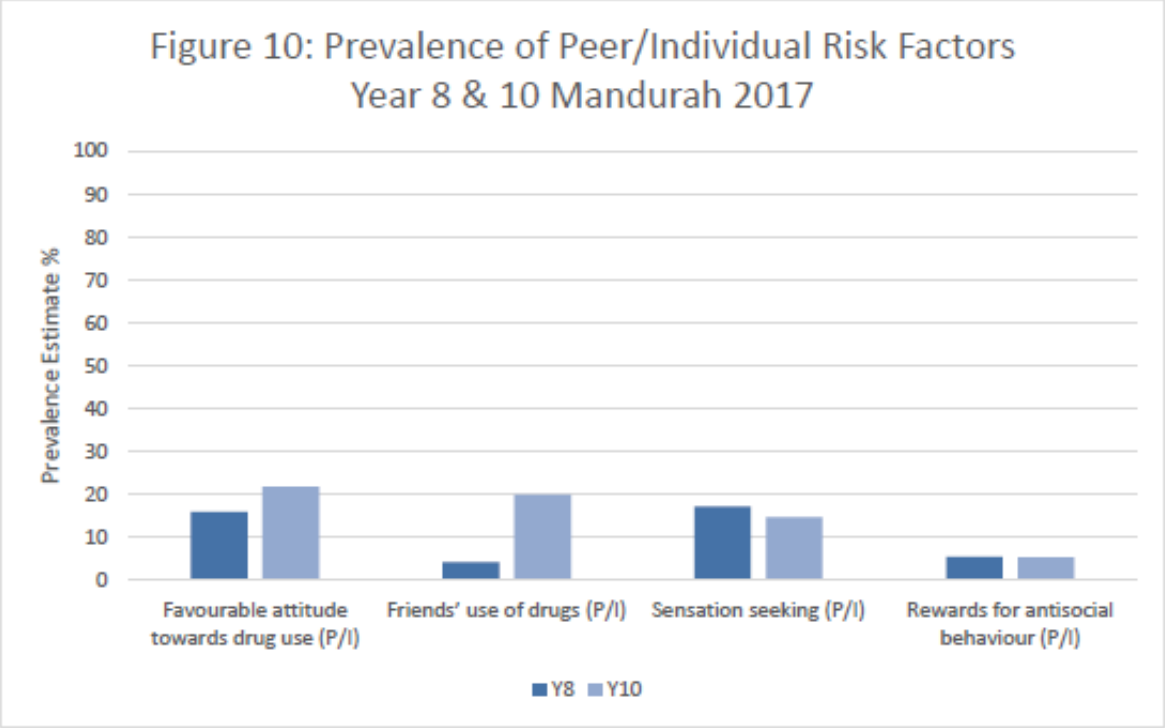
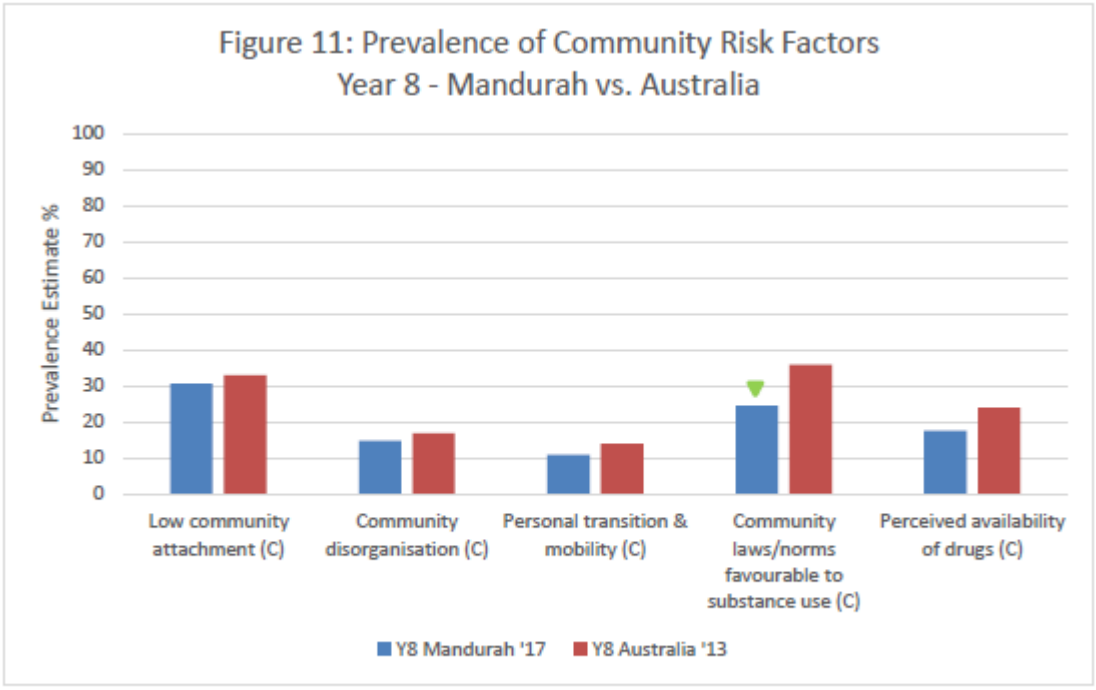
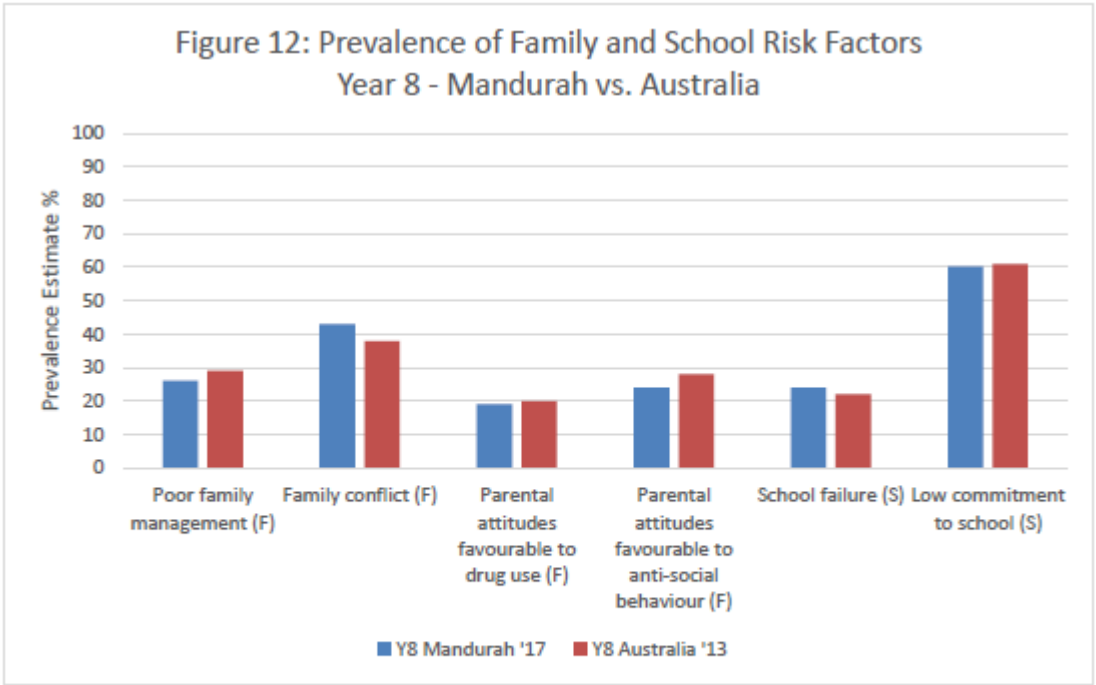


Figure 10: Prevalence of Peer/Individual Risk Factors
Year 8 & 10 Mandurah 2017
Prevalence Estimate %
100
90
80
70
60
50
40
30
20
10
0
Favourable attitude towards drug use (P/I)
Friends' use of drugs (P/I)
Sensation seeking (P/I)
Rewards for antisocial behaviour (P/I)
Y8
Y10

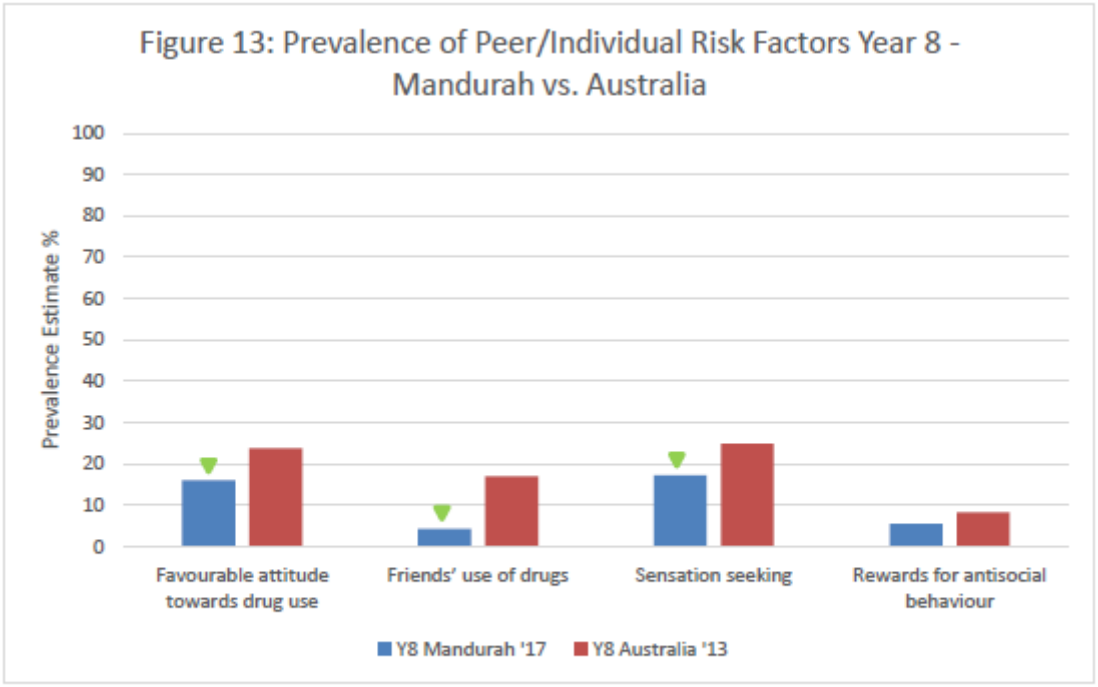
Prevalence of risk factors, Mandurah study area compared to Australian students, Year 8.





▼Significantly lower than the Australian comparative

Prevalence of risk factors, Mandurah study area compared to Australian students, Year 8.



▼Significantly lower than the Australian comparative

5.3 Protective Factors

Protective factors are key factors that can moderate or mediate potential risk factors. Similar to risk factors, an increase in levels of protective factors in a young person's environment can enhance protection against adverse outcomes. Protective factors can occur within the community, family, school and peer/individual domains.

The following section outlines the prevalence of *Community*, *Family*, *School* and *Peer/Individual* protective factors.

Figures 14 & 15 show the prevalence of young people reporting protective factors by year level in the Mandurah community in 2017. It can be noted from these figures that:

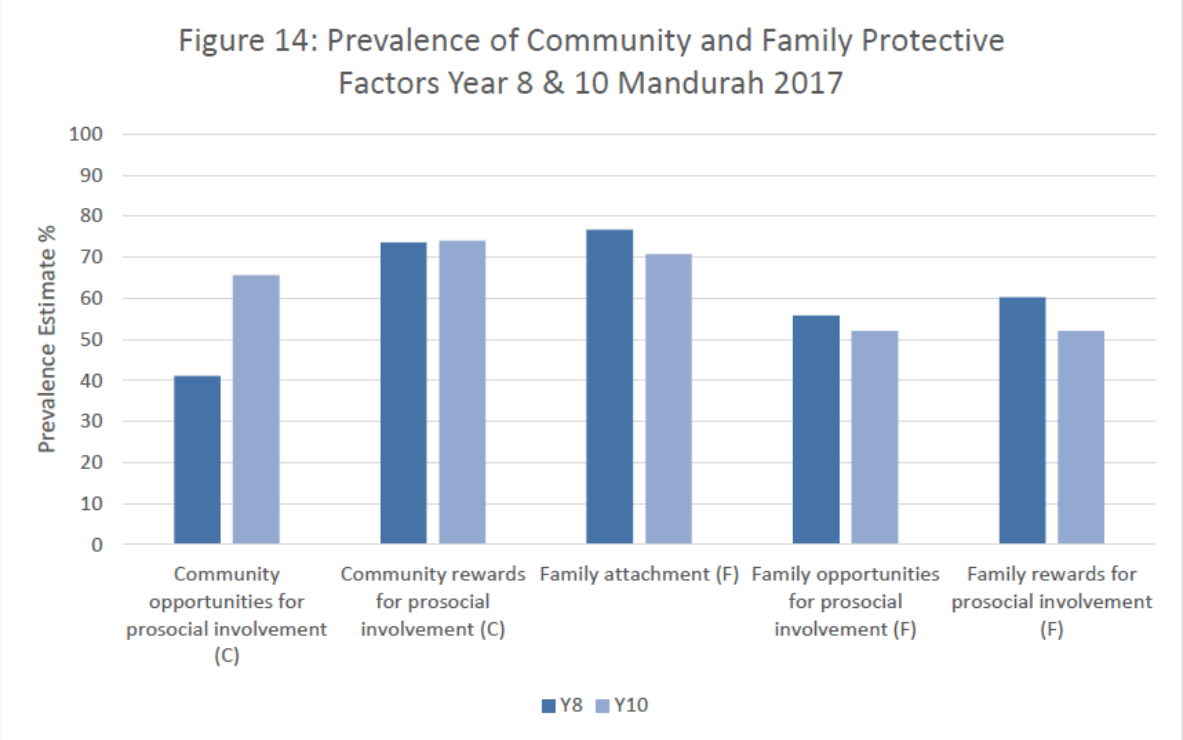
- In general, students in Mandurah report being moderately protected;
- The prevalence of most protective factors generally decrease from Year 8 to Year 10, particularly in all Family and School protective factors;
- Students report a decline in Family protective factors from Year 8 to Year 10, as follows:
  - Family attachment (Y8-77%; Y10-71%);
  - Family opportunities for prosocial involvement (Y8-56%; Y10-52%);
  - Family rewards for prosocial involvement (Y8-60%; Y10-52%);

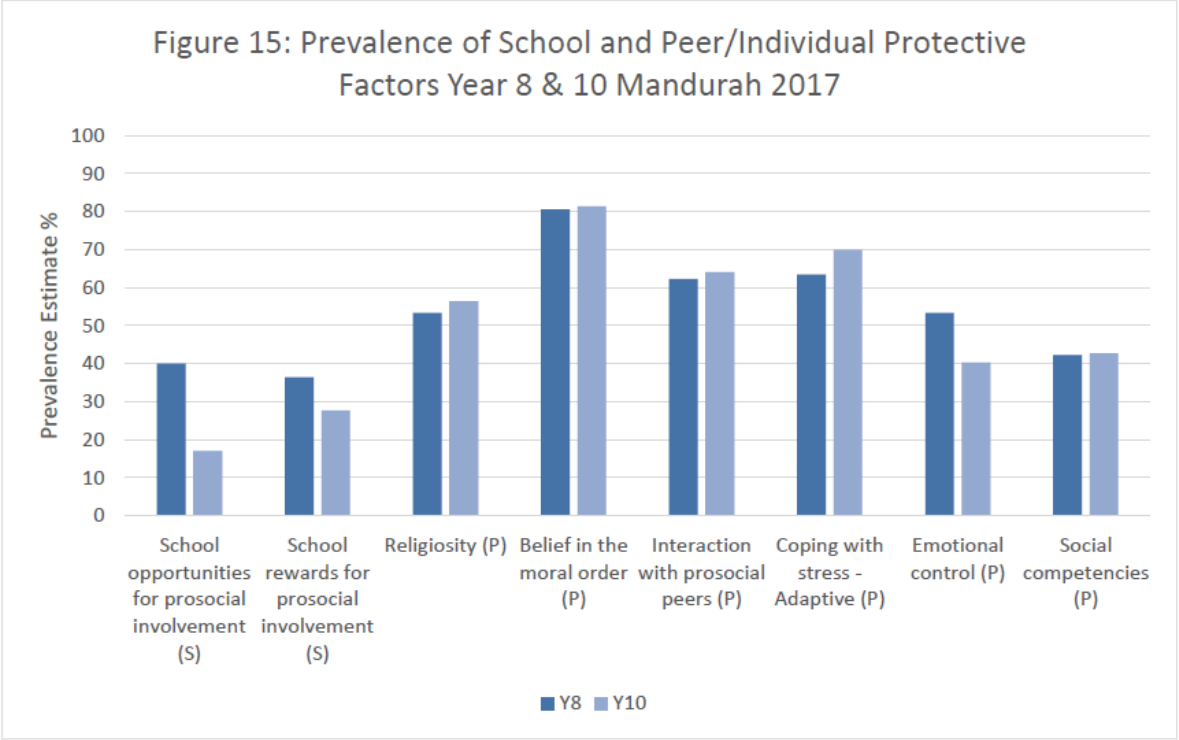
- Students report a decline in School protective factors from Year 8 to Year 10, as follows:
  - School opportunities for prosocial involvement (Y8-40%; Y10-17%);
  - School rewards for prosocial involvement (Y8-36%; Y10-28%);
- Students report an increase in 'Community opportunities for prosocial involvement' (Y8-41%; Y10-66%);
- Students report a comparable level of Peer/Individual protective factors from Year 8 to Year 10, however there is a notable decline in 'Emotional control' (Y8-53%; Y10-40%).

Figures 16 & 17 compare the prevalence of protective factors for Year 8 students in Mandurah in 2017 with those of Year 8 Australian students in 2013. Compared to Australian students, Year 8 Mandurah students report:

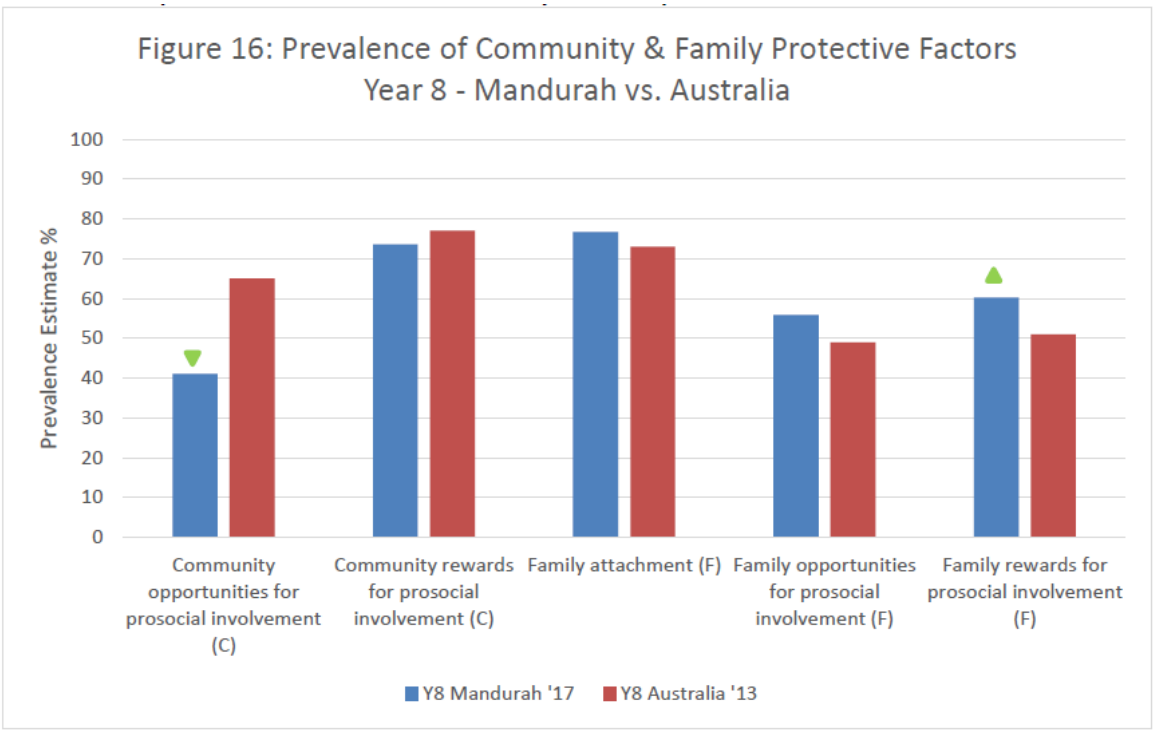
- Comparable levels of most protective factors;
- Significantly higher levels of the following protective factors:
  - Family rewards for prosocial involvement (Mandurah-60%; Aus-51%);
  - Belief in the moral order (Mandurah-81%; Aus-68%);
- Significantly lower levels of 'Community opportunities for prosocial involvement' (Mandurah 41%; Aus-66%). It is noted that, when the Community assessment work group completed a quick scan of the many community organisations, sporting clubs, service groups and youth groups in Mandurah, there was a great variety of programs, group activities, physical and social opportunities for children and young people across Mandurah. The lower survey result for this protective factor could potentially be due to a lack of awareness about these opportunities. Please see report 3.2 (Community Resources Assessment) for a list of community organisations/groups.
- Interestingly, the comparable levels of protective factors (when compared to the national average) such as 'coping with stress', 'emotional control' and 'social competencies', are in contrast to the high prevalence of developmental vulnerability in the emotional domain. (Please see section 6.1)

Prevalence of young people reporting protective factors by year level, Mandurah study area in 2017.

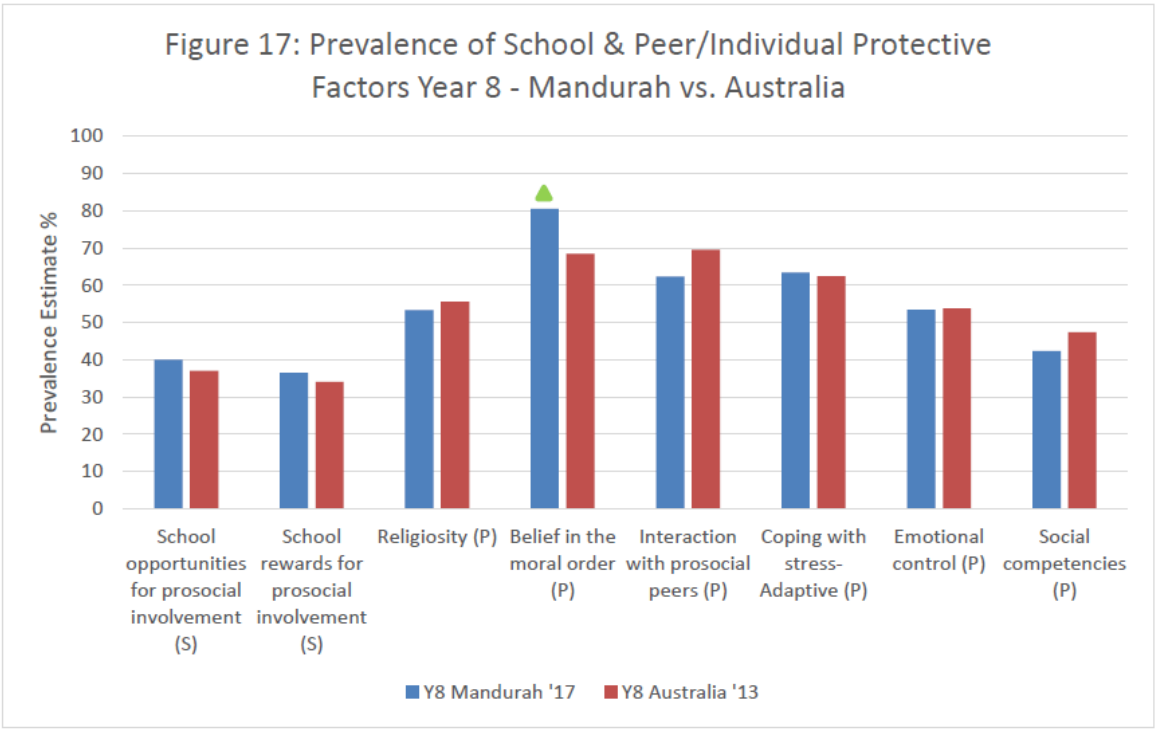




Prevalence of protective factors, Mandurah study area compared to Australian students, Year 8.



▲ Significantly higher than the Australian comparative
▼ Significantly lower than the Australian comparative



▲ Significantly higher than the Australian comparative

5.4 Diet and Exercise

The following section outlines the diet and exercise behaviours of youth in the Mandurah community.

Physical Activity and Sedentary Behaviour

Being physically active every day can have social, emotional, intellectual, and health benefits. Australia's Physical Activity and Sedentary Behaviour Guidelines for Young People[22] (13 – 17 year olds) recommend the following:

Physical Activity

- For health benefits, young people should accumulate at least 60 minutes of moderate to vigorous intensity physical activity every day, and include a variety of activities;
- On at least three days per week, young people should engage in activities that strengthen muscle and bone; and
- To achieve additional health benefits, young people should engage in more activity – up to several hours per day.

Sedentary Behaviour

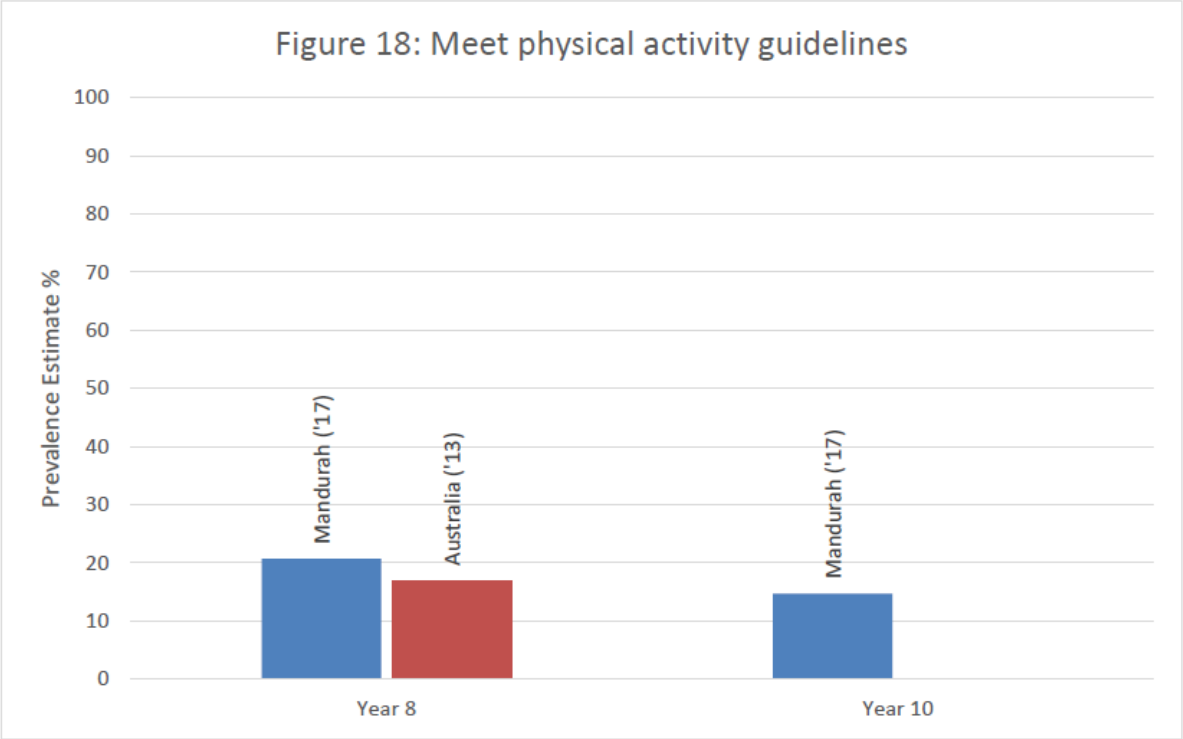
- To reduce health risks, young people should limit use of electronic media for entertainment (e.g. television, seated electronic games and computer use) to no more than two hours per day; and
- Break up long periods of sitting as often as possible.

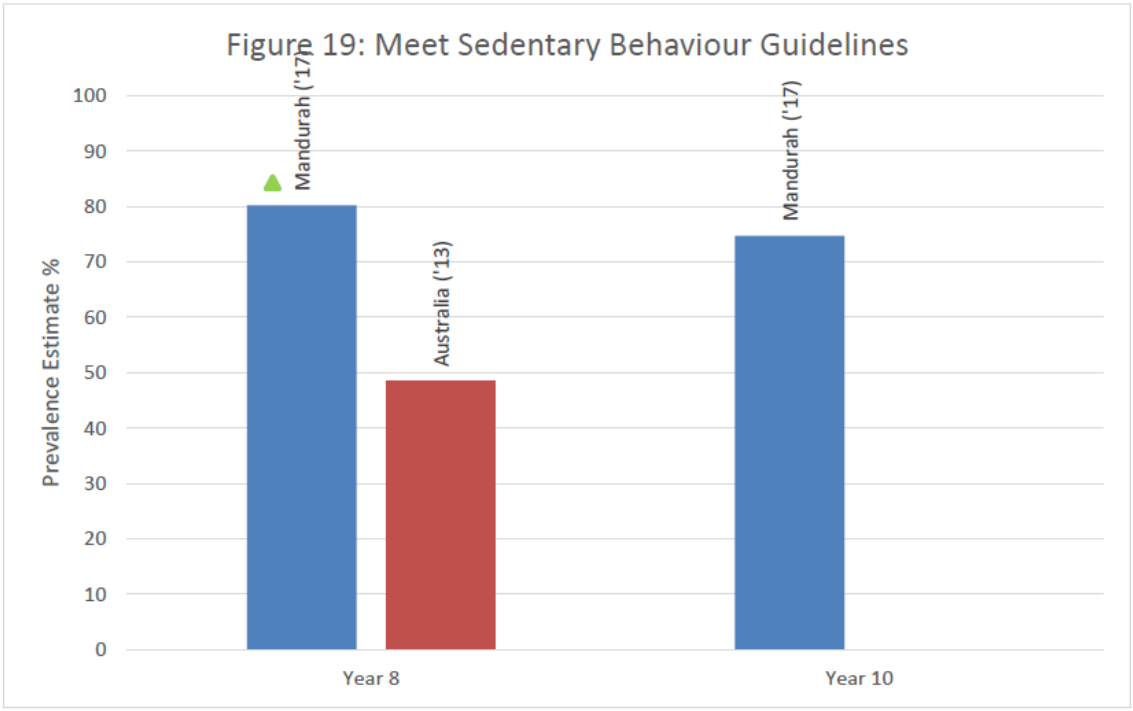
Figures 18 and 19 show the prevalence of young people meeting the Physical Activity and Sedentary Behaviour Guidelines by year level in the Mandurah community in 2017, including a comparison of Year 8 Australian students from 2013. It can be noted that:

- The proportion of students meeting the recommendation for physical activity decreases from Year 8 (21%) to Year 10 (15%);
- The proportion of students meeting the recommendation for sedentary behaviour decreases from Year 8 (80%) to Year 10 (75%);
- Compared to the Australia wide sample, Year 8 students report significantly higher levels of meeting the recommendations for sedentary behaviour (Mandurah-80%; Aus-48%).

Prevalence of students who meet the Physical Activity and Sedentary Behaviour Guidelines, Mandurah study area compared to Australian students.

[22] https://www.health.gov.au/...nsf/.../brochure%20PA%20Guidelines_A5_13-17yrs.PDF





▲ Significantly higher than the Australian comparative

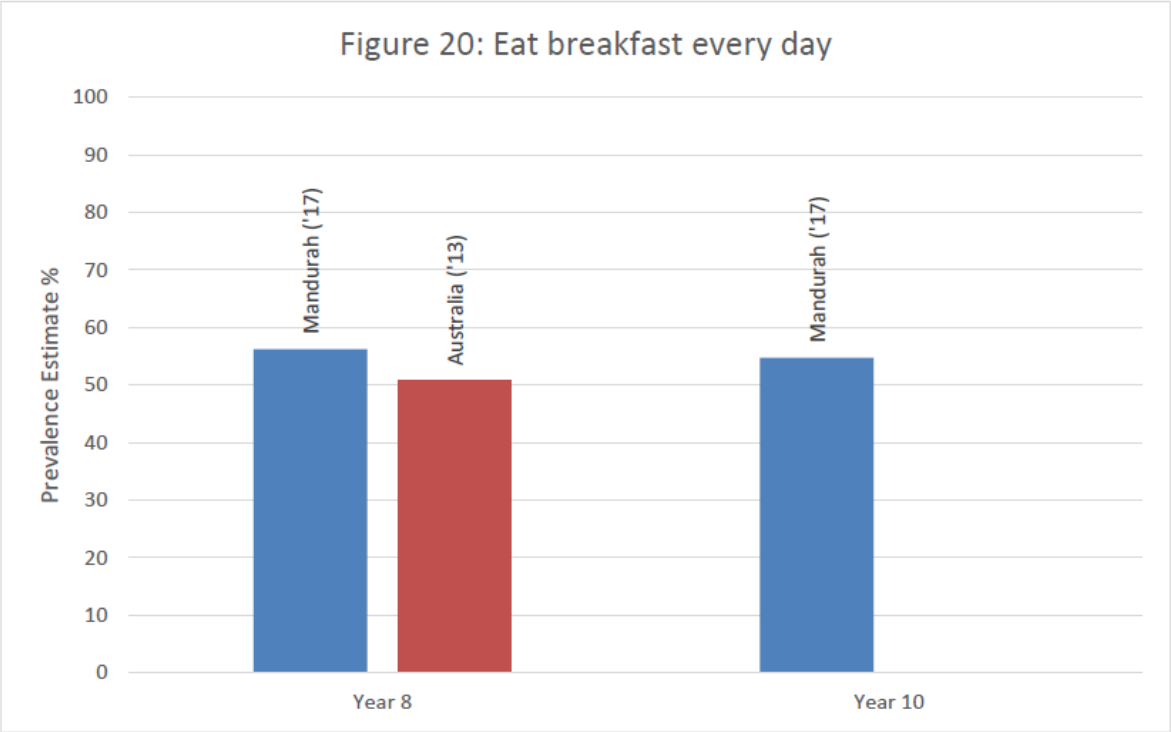
Fruit and Vegetable intake

The Australian Dietary Guidelines provide recommendations based on scientific evidence that aim to promote health and wellbeing, reduce the risk of diet-related conditions, and reduce the risk of chronic diseases. These guidelines for young people aged 9 to 18 years recommend a daily intake of 2 serves of fruit and 5 serves of vegetables/legumes/beans. Young people are also encouraged to enjoy a variety of foods from the other three food groups each day, and to eat a healthy breakfast every day. Foods high in kilojoules, saturated fat, added sugars, and added salt should be limited.

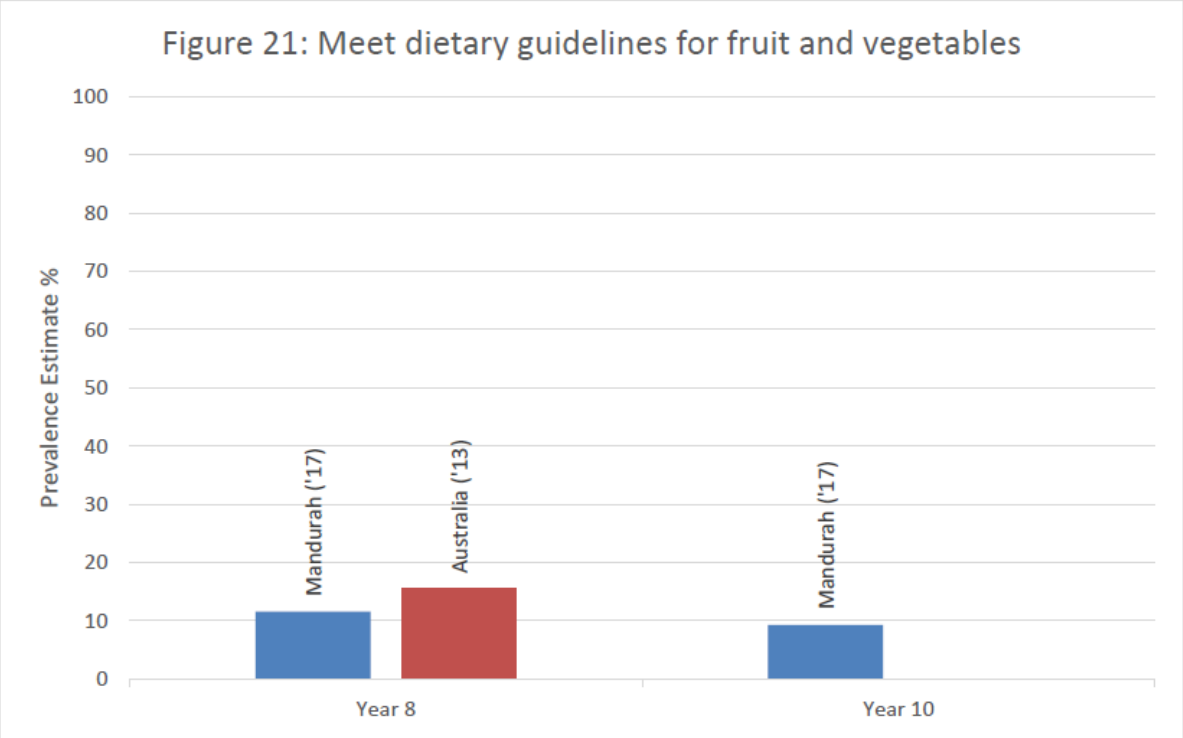
Figures 20 & 21 show the prevalence of young people eating breakfast before school and meeting the fruit and vegetable intake guidelines by year level in the Mandurah community, 2017. These figures also show a comparison with Year 8 Australian students, 2013. It can be noted from these figures that:

- Approximately half of students in Year 8 and 10 are eating breakfast before school (Year 8: 56%; Year 10: 55%); and
- Very few students are meeting the dietary guidelines for fruit and vegetable intake, with a slight decline from Year 8 to Year 10 (Year 8: 12%; Year 10: 9%).

Prevalence of young people eating breakfast before school, Mandurah study area compared to Australian students.



Prevalence of young people meeting the fruit and vegetable intake guidelines, Mandurah study area compared to Australian students.



6.0 Findings from Supplementary Public Data Search

A general search was undertaken for supplementary public data on the Mandurah Community to support the Communities that Care Youth Survey. Contributions were provided by the South Metropolitan Health Service (health data), and the Department of Education (suspension and attendance data), for the 19 government schools within the Mandurah Local Government Area. The data search and analysis has included data through the Australian Bureau of Statistics (ABS), the Australian Early Development Census (AEDC), Mandurah's Health and Wellbeing Profile, as well as data regarding mental health, youth suicide, alcohol harms and family and domestic violence.

6.1 Australian Early Development Census (AEDC)

AEDC is a population based measure of how children have developed by the time they start school. It looks at five areas of early childhood development domains: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, communication skills and general knowledge.[23] Table 6 describes each developmental domain.

Table 6: Descriptions of the AEDC developmental domains.

Domain	Icon	Domain description
Physical health and wellbeing		Children's physical readiness for the school day, physical independence and gross and fine motor skills.
Social competence		Children's overall social competence, responsibility and respect, approach to learning and readiness to explore new things.
Emotional maturity		Children's pro-social and helping behaviours and absence of anxious and fearful behaviour, aggressive behaviour and hyperactivity and inattention.
Language and cognitive skills (school-based)		Children's basic literacy, interest in literacy, numeracy and memory, advanced literacy and basic numeracy.
Communication skills and general knowledge		Children's communication skills and general knowledge based on broad developmental competencies and skills.

For each of the five AEDC domains, children receive a score between zero and ten, where zero is most developmentally vulnerable.

A series of cut-off scores were established for each of the five domains:

[23] https://www.education.gov.au/australian-early-development-census

- Children falling below the 10th percentile were categorised as ‘developmentally vulnerable’;
- Children falling between the 10th and 25th percentile were categorised as ‘developmentally at risk’;
- All other children were categorised as ‘developmentally on track’.

Mandurah Community

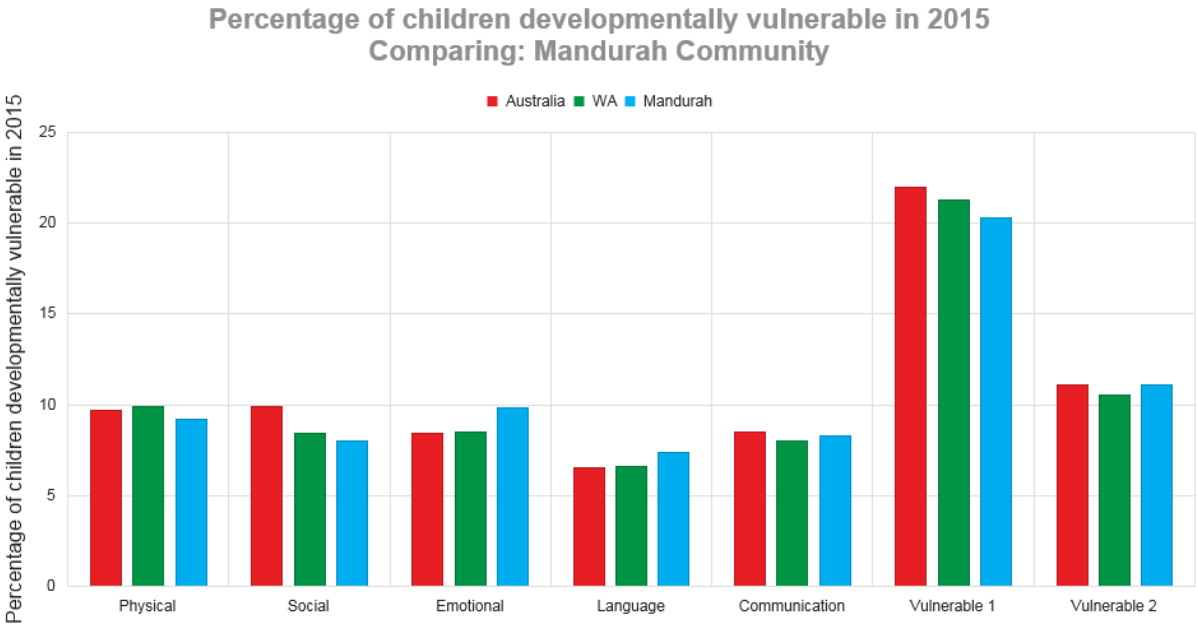
Figure 1 below reveals in 2015:

- 9.8 percent of 5 year old children in Mandurah were ***developmentally vulnerable in*** *the* ***emotional*** *domain* compared with 8.5 percent of Western Australian children of the same age;[24]

- 7.4 percent of 5 year old children in Mandurah were ***developmentally vulnerable in*** *the* ***language*** *domain* compared with 6.6 percent of Western Australian children of the same age;[24]

- 11.1 percent of 5 year old children in Mandurah were ***developmentally vulnerable on two or more domains*** compared with 10.5 percent of Western Australian children of the same age.[24]

Figure 1: Percentage of children developmentally vulnerable (below 10th percentile)



Note: AEDC community data for Mandurah matches the Mandurah LGA.

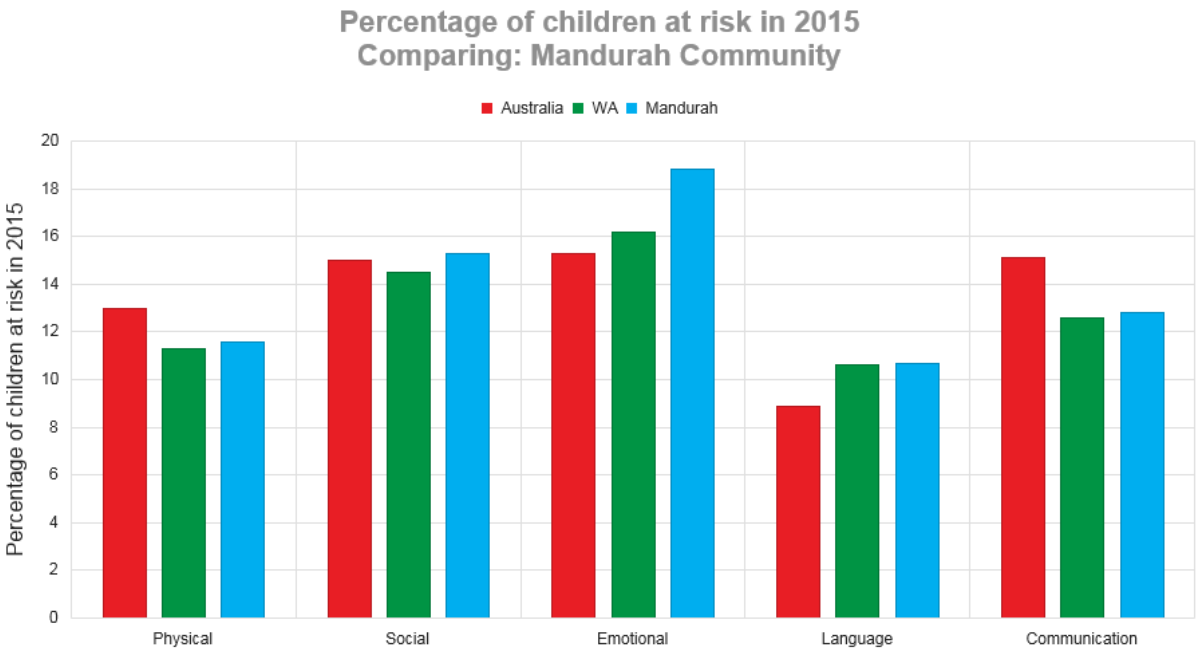
[24] https://www.aedc.gov.au/data/data-explorer

Figure 2 below reveals in 2015:

Results for each domain indicate a higher percentage of 5 year old children in Mandurah ***who were developmentally at risk,*** compared with Western Australian children of the same age.[25]

	Physical	Social	Emotional	Language	Communication
Mandurah	11.6%	15.3%	18.8%	10.7%	12.8%
Western Australia	11.3%	14.5%	16.2%	10.6%	12.6%
Australia	13.0%	15.0%	15.3%	8.9%	15.1%

Figure 2: Percentage of children developmentally at risk in 2015 (between the 10th and 25th percentile)



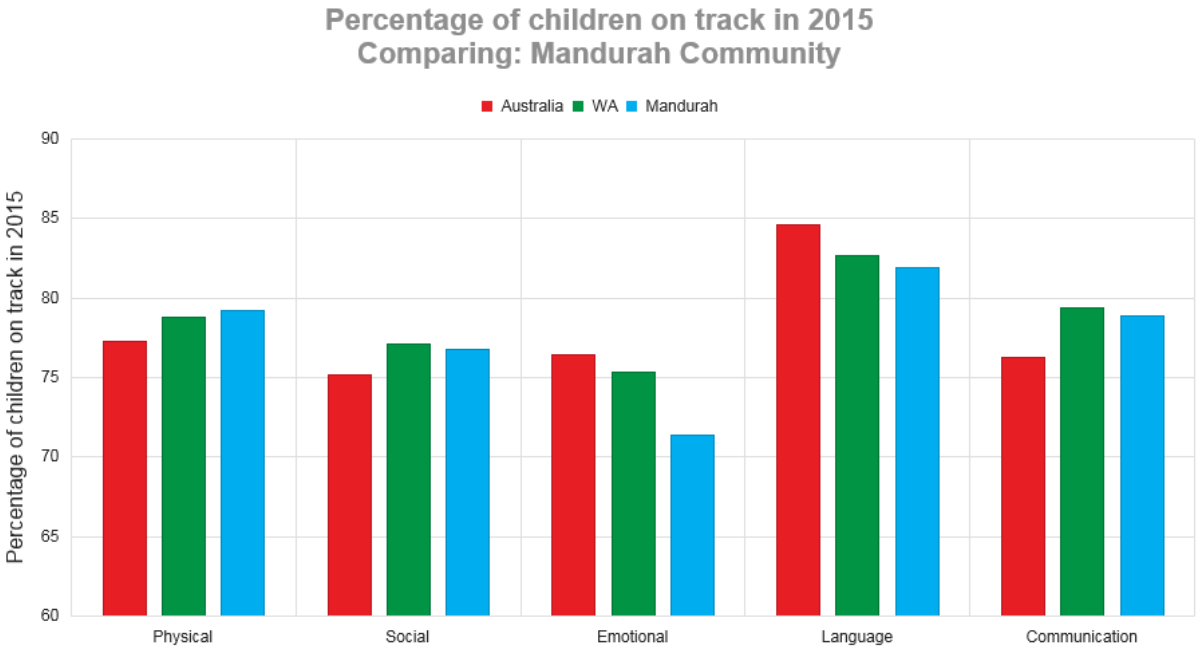
[25] https://www.aedc.gov.au/data/data-explorer

Figure 3 below reveals in 2015:

- The percentage of children in Mandurah who are 'developmentally on track' (above the 25th percentile) in the ***emotional domain*** is 5% less than the percentage of Australian children of the same age. (Mandurah 71.4% and Australia 76.4%).

	Physical	Social	Emotional	Language	Communication
Mandurah	79.2%	76.8%	71.4%	81.9%	78.9%
Western Australia	78.8%	77.1%	75.3%	82.7%	79.4%
Australia	77.3%	75.2%	76.4%	84.6%	76.3%

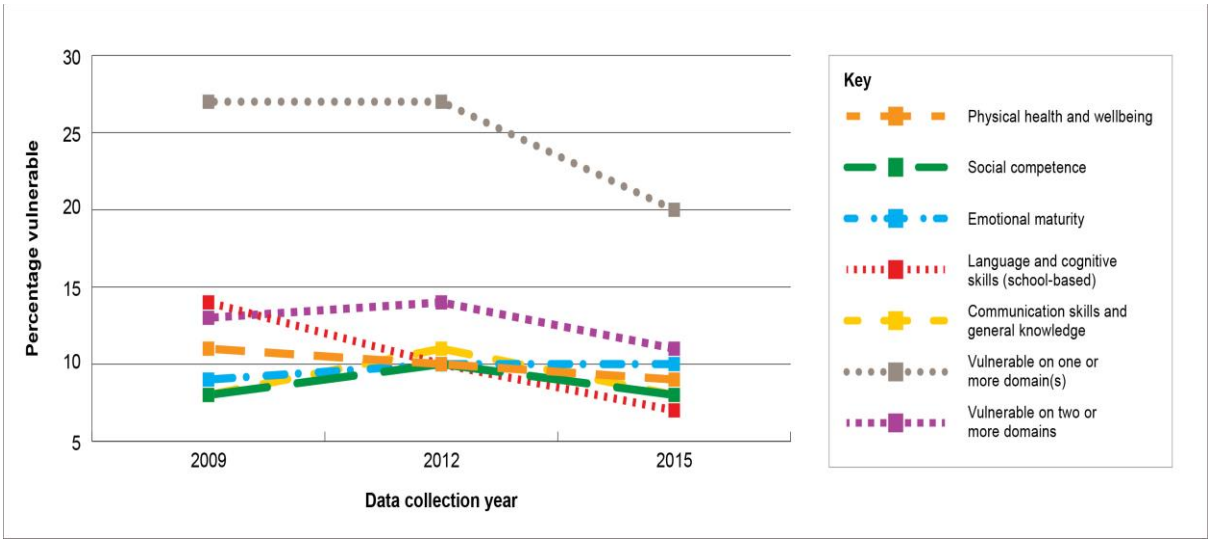
Figure 3: Percentage of children developmentally on track in 2015



The Australian Early Development Census is repeated every 3 years across Australia. Figure 4 below shows the emerging trends in developmental vulnerability for Mandurah, since the first census in 2009. Figure 4 reveals:

- A significant improving trend has developed in the ***language and cognitive skills*** domain, with a decrease (7 percentage points) in the percentage of children who are developmentally vulnerable.
- A significant trend has developed in the number of students who are ***developmentally vulnerable on one or more domains*** (6 percentage points).

Figure 4: Emerging trends in developmental vulnerability for Mandurah, showing change in percentage (2009 to 2015)[26]



6.2 Health and Wellbeing Profile

The Health and Wellbeing Profile 2017 provides an update on the self-reported measures of health and wellbeing in the City of Mandurah with data from the Western Australian Health and Wellbeing Surveillance System (HWSS). This information is based on responses from 378 adults within the City of Mandurah LGA (aged 16 years and older), who were surveyed over the period January 2014 to December 2015. The data collected is weighted to represent the age and sex distribution of the WA population using the 2014 Estimated Resident Population.

6.2.1 Chronic diseases

Many of the health conditions included in the HWSS are chronic diseases which usually have a number of contributing factors, develop gradually and have long lasting effects. Diseases such as cardiovascular disease, type 2 diabetes, respiratory diseases and some

[26] AEDC Community Profile 2015 – 5: Emerging trends in child development in this community – page 18

cancers contribute significantly to the burden of illness and injury in the community and there is potential to reduce their burden.[27] It is estimated that in WA in 2011, 435,000 years of healthy life were lost to premature death or living with a disability due to a chronic disease or injury. Injuries are also an important cause of death and disability and strategies to prevent chronic disease are often linked with injury prevention.

Table 7: Prevalence of physiological risk factors for adults (aged 16 years and over), City of Mandurah, LGA, Western Australia and South Metropolitan Health Region 2014–2015

Risk factors	Mandurah LGA		South Metropolitan
	Persons (%)	Estimated population	Persons (%)
Current high blood pressure (As a proportion of adults who reported having been measured).	26.2	17,362	15.9
Current high cholesterol (as above)	23.6	15,658	17.5
Overweight (BMI 25<30)	45.3	30,032	40.4
Obese (BMI 30+)	28.4	18,804	27.4
Risk condition			
Injury (in the last twelve months requiring treatment)	19.4	12,823	22.5

Source: Western Australian Health and Wellbeing Surveillance System, WA Department of Health: City of Mandurah self-reported measures of health and wellbeing for adults 2014–2015.

6.2.2 Lifestyle and physiological risk factors

There are many factors that can influence a person's health, including genetics, lifestyle, age, environmental and social factors. Many chronic diseases and injuries are associated with a common set of modifiable lifestyle risk factors which can have either a positive effect on health, such as a high consumption of fruit and vegetables, or a negative effect, such as smoking, alcohol use and physical inactivity. These lifestyle risk factors also impact on the physiological risk factors such as high cholesterol, high blood pressure, and becoming overweight, which are also related to chronic disease and are potentially modifiable.

27 Chronic Disease Prevention Directorate. Western Australian Health Promotion Strategic Framework 2017–2021. Perth: Department of Health, Western Australia; 2017.'

Table 8: Prevalence of lifestyle risk factors for adults (aged 16 years and over), City of Mandurah (LGA) and Western Australia 2014–2015

Behaviour / Risk factor	Mandurah LGA %	WA (%)
Currently smokes	12.9	12.4
Never smoked (or smoked less than <100 cigarettes)	52.8	60.7
Eats less than two serves of fruit daily	50.1	48.3
Eats less than five serves of vegetables daily	88.8	88.5
Eats meals from fast food outlets at least weekly	28.5	32.6
Risky/high risk drinking for long term harm (a)	29.0	27.8
Risky/high risk drinking for short term harm (b)	14.1	10.4
Completes less than 150 minutes of physical activity per week (adults plus 18 years).	40.8	35.9
(a) Drinks more than 2 standard drinks on any day. **(b) Drinks more than 4 standard drinks on any day.** **Any alcohol consumption by persons 16 or 17 is considered high risk.**		

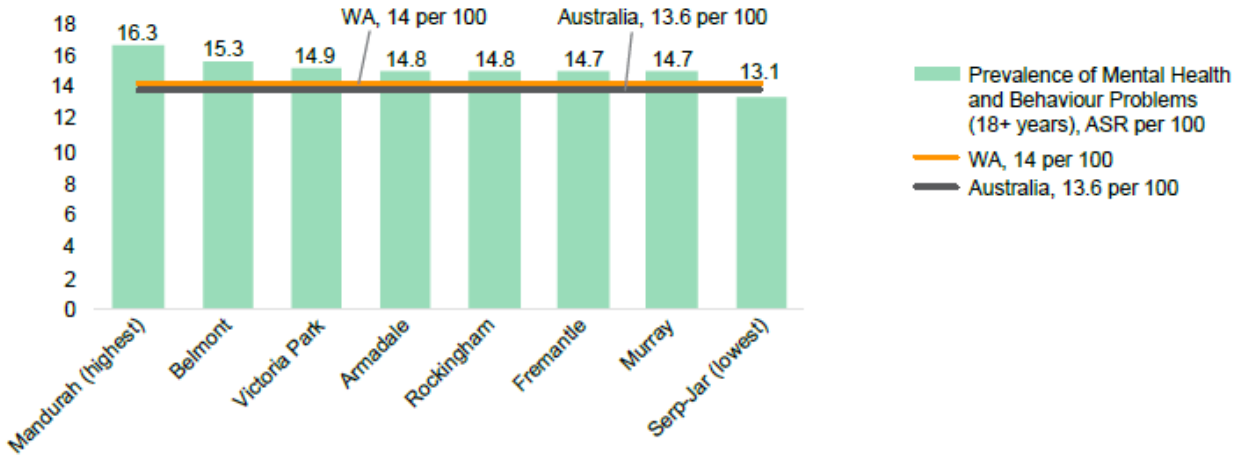
Source: Western Australian Health and Wellbeing Surveillance System, WA Department of Health: City of Mandurah self-reported measures of health and wellbeing for adults 2011–2015.

The Heart Foundation's Heart Maps show the rates of obesity in rural and regional WA are nearly double that in Inner Perth. The Wheatbelt (30.3%), Bunbury (29.5%) and Mandurah (28.5%) amongst the top three with the fastest growing waistlines. (Ref: www.heartfoundation.org.au/for-professionals/heart-maps/australian-heart-maps)

6.2.3 Mental Health

The prevalence of mental health and behaviour conditions (16.3%) and people in high or very high psychological distress (13.3%) were both higher in Mandurah (LGA) than the Primary Health Network, State and National averages. [28]

Figure 5: Age Standardised Rates of the highest prevalence of mental health and behavioural conditions in adults (18+ years), per 100 in South Perth by LGA 2011 – 2013



6.3 Alcohol related harm

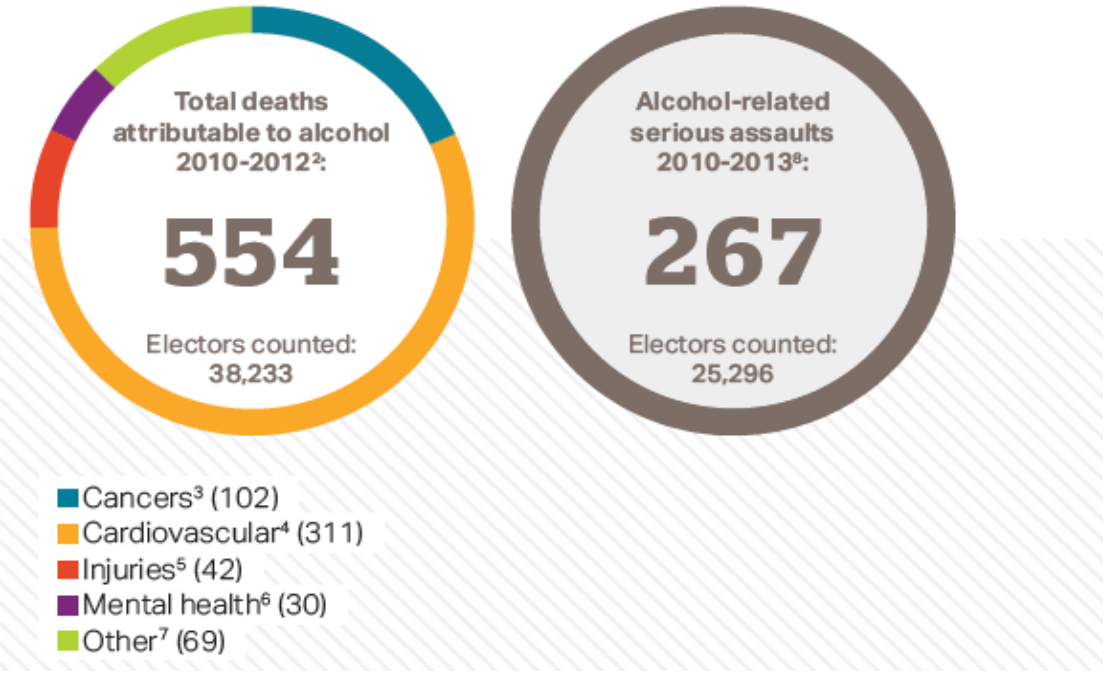
Harm from alcohol affects all WA communities and there are very high levels of community concern about the impacts of alcohol, particularly harms from alcohol among young people. Alcohol harms place major burdens on already stretched health services and police resources, as well as costs to individuals, families, communities and other areas of government. [29]

Harm from alcohol is preventable. A greater focus on evidence-based approaches to preventing harm from alcohol will make an important difference in reducing the extent of harm from alcohol in local communities.

[28] Public Health Information Development Unit. Social Health Atlas of Australia: Primary Health Network. Retrieved from http://www.phidu.torrens.edu.au/social-health-atlases/data

[29] Lensvelt, E., Stafford, J.,Daube, M., Chikritzhs, T. (2017). *Alcohol-related Harms in Western Australian Electoral Districts*. Perth: McCusker Centre for Action on Alcohol and Youth and National Drug Research Institute, Curtin University.

The estimated extent of specific harms from alcohol in the Mandurah electoral district:



Please note: statistics are for the Mandurah electoral district

1 The data presented correspond to the suburbs and postcodes within the electoral district. Some suburbs and postcodes may be split across multiple electoral districts. In these cases, data relating to each suburb and postcode were included in all relevant electoral districts.
2 The conditions may be partially or wholly attributable to alcohol.
3 'Cancers' include oropharyngeal cancer, oesophageal cancer, liver cancer, laryngeal cancer, female breast cancer, colon cancer and rectal cancer.
4 'Cardiovascular' conditions include hypertension, supraventricular cardiac dysrhythmias, haemorrhagic stroke, ischaemic stroke, unspecified stroke, ischaemic heart disease, heart failure and other heart conditions.
5 'Injuries' include road traffic injuries (pedestrians and non-pedestrians), falls, fire injuries, drowning, occupational machine injuries, assault and child abuse.
6 'Mental health' conditions include alcoholic psychosis, alcohol dependence, alcohol abuse and suicide.
7 The conditions included in the 'other' category are listed on page 3 of the full report 'Alcohol-related Harms in Western Australian Electoral Districts'.
8 Includes all serious assaults between 10pm and 6am for all ages and days of the week.

Alcohol related deaths

There were 148 alcohol-related deaths in the five-year period between 2011 and 2015 in the City of Mandurah (Table 9),[30] with a larger proportion of alcohol-related deaths among male residents compared to female residents.

[30] Department of Health, Epidemiology Branch. WA Hospital Mortality Database, 2011 - 2015

Table 9: Number of alcohol related deaths by year, age group and gender, City of Mandurah, 2011 - 2015

	Age group		Gender		Total
	Less than 18 years	18 years and above	Male	Female	
2011	<5	<32	21	10	31
2012	0	26	18	8	26
2013	0	23	<25	<5	23
2014	<5	<43	29	13	42
2015	0	26	18	9	26
Total	**<5**	**<149**	**<110**	**<45**	**148**

Note 1: Counts less than 5 have been suppressed in this report to protect privacy and data confidentiality. Other numbers have been suppressed to prevent back-calculations of small numbers.

Note 2: Rates are not provided for deaths data as the event numbers are low causing large confidence intervals around the rates, hence there is low confidence.

In the five-year period from 2011 to 2015, there is a higher proportion of chronic alcohol-related deaths (60.8%) compared with acute alcohol-related deaths (38.5%) in the City of Mandurah (Table 10).[31]

For broad categories of alcohol-related conditions, the top causes of alcohol-related deaths were cancers (30.4%), followed by self-inflicted injuries (13.5%) and alcoholic liver disease (10.1%).

Table 10: Number and percent of alcohol related deaths by broad categories of alcohol related conditions, City of Mandurah, 2011 – 2015

Broad category	No.	%
Chronic		
Alcoholic liver disease	15	10.1
Other digestive system diseases	13	8.8
Alcoholic mental and neurological disorders	<5	na

[31] Department of Health, Epidemiology Branch. WA Hospital Mortality Database, 2011 - 2015

Cancers	45	30.4
Stroke	<5	na
Other alcohol-related diseases	10	6.8
Acute		
Motor vehicle accident injuries	14	9.5
Falls	10	6.8
Self-inflicted injuries	20	13.5
Assaults / abuses	<5	na
Poisoning	7	4.7
Other alcohol-related injuries	<5	na
Subtotal - Chronic	**90**	**60.8**
Subtotal - Acute	**57**	**38.5**
Total	**148**	**100.0**

Note 1: The number of alcohol-related deaths by broad categories of alcohol-related conditions is grouped for the five years between 2011 and 2015 and not provided for individual years due to insufficient numbers.

Note 2: Counts less than 5 have been suppressed in this report to protect privacy and data confidentiality. Other numbers have been suppressed to prevent back-calculations of small numbers.

Incidence and costs by alcohol-attributable status

Alcohol was involved in 17.5% of fatalities, 11.8% of non-fatal hospitalisations, and 32% of emergency department presentations in Western Australia (Table 11). The overall cost of injuries involving alcohol was $1.9 billion.[32]

Aboriginal people had more than double the rate of fatal injuries and more than triple the rate of non-fatal hospitalisations compared to non-Aboriginal people. Compared with a share of 3.6% of the total population in WA, Aboriginal people accounted for 7.7% of total injury costs (pp 43). [32]

Table 11: Western Australia - Incidence and costs of injury by alcohol-attributable status, 2012

[32] Hendrie, Miller, Randall, Brameld & Moorin. (2012). Incidence and costs of injury in Western Australia 2012. Available from: http://ww2.health.wa.gov.au/~/media/Files/Corporate/Reports%20and%20publications/Cost-of-injury/Incidence-and-costs-of-injury-in-wa.ashx

Alcohol status	Incidence by severity and alcohol-attributable status								Total costs $m	Mean cost $
	Fatalities		Hospitalisations		ED presentations		Total			
	n	% alcohol	n	% alcohol	n	% alcohol	n	% alcohol		
Alcohol	245	17.5	5,911	11.8	56,057	32.0	62,213	27.4	1,946	31,282
Non-alcohol	1,155	82.5	44,217	88.2	119,120	68.0	164,492	72.6	7,649	46,501
Total	**1,400**	**100.0**	**50,128**	**100.0**	**175,177**	**100.0**	**226,705**	**100.0**	**9,595**	**42,322**

Compared to Western Australia, in the South Metropolitan Health Region, alcohol was involved in 17.3% of fatalities, 11.1% of non-fatal hospitalisations, and 32% of emergency department presentations in Western Australia (Table 12). [32]

Table 12: South Metropolitan Health Region - Incidence and costs of injury by alcohol-related status, 2012.

Alcohol-related status	Incidence by severity and alcohol-related status								Total costs $m	Mean cost $
	Fatalities		Hospitalisations		ED presentations		Total			
	n	% alcohol-related	n	% alcohol-related	n	% alcohol-related	n	% alcohol-related		
Alcohol	87	17.3	1,903	11.1	16,781	32.0	18,771	26.8	649	34,591
Non-alcohol	417	82.7	15,266	88.9	35,684	68.0	51,367	73.2	2641	51,385
Total	**504**	**100.0**	**17,169**	**100.0**	**52,465**	**100.0**	**70,138**	**100.0**	**3,290**	**46,914**

Alcohol trends in WA: Australian School Students' Alcohol and Drug Survey[33]

Every three years, school students in Western Australia are surveyed to find out about their drug use in the Australian School Students Alcohol and Drug Survey. Students are asked about alcohol, tobacco, other illicit and licit drug use, how much they use, how they use and their attitudes to alcohol and other drug use.

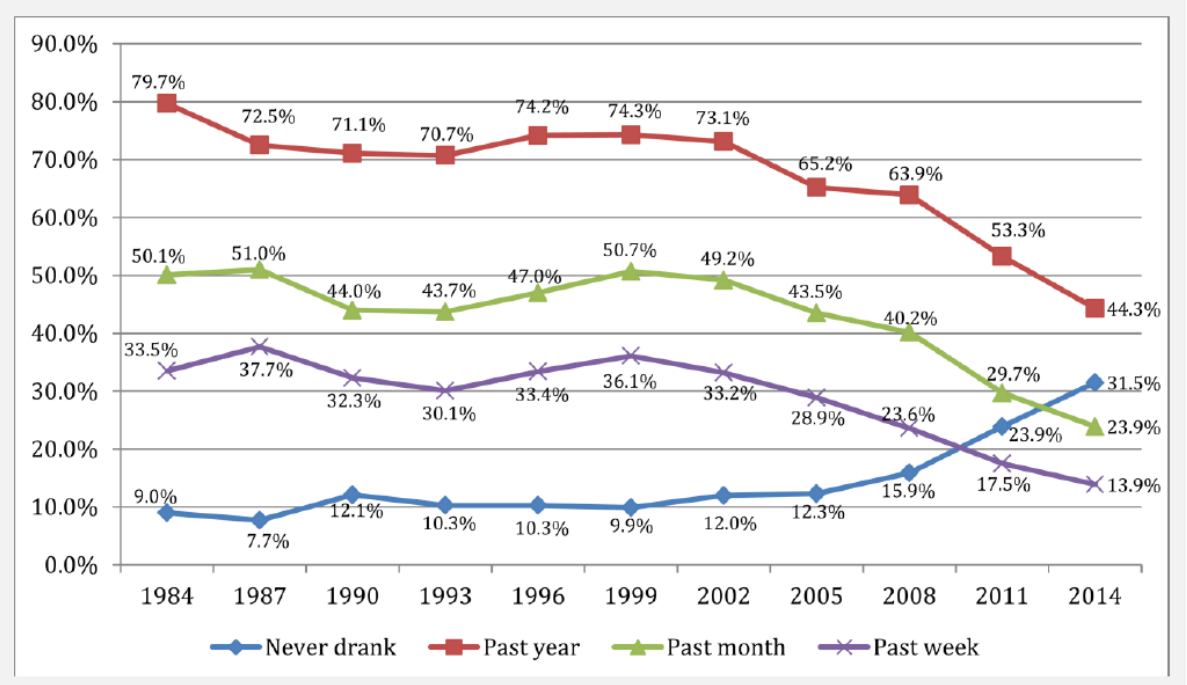
This survey has been collected since 1984, and the 2014 survey included 3,305 young people aged 12 to 17 years from 46 randomly selected government, Catholic and independent schools across the State.

[33] Mental Health Commission. Alcohol trends in Western Australia: Australian school students alcohol and drug survey. Government of Western Australia;2016

Students were asked if they had consumed alcohol and how recent their use was (Figure 6). Rates of use have declined over the past three decades, and the proportion of students reporting drinking in the past year has approximately halved (79.7% to 44.3%). The proportion of students reporting drinking in the past month dropped from 50.1% to 23.9% during the same period. The proportion of students reporting drinking in the past week dropped from 33.5% to 13.9%.

In the same time period, the proportion of students reporting they have never drank alcohol has more than tripled, increasing from 9.0% to 31.5%.

Figure 6: Prevalence and recency of alcohol use for students aged 12 to 17 years, 1984 to 2014

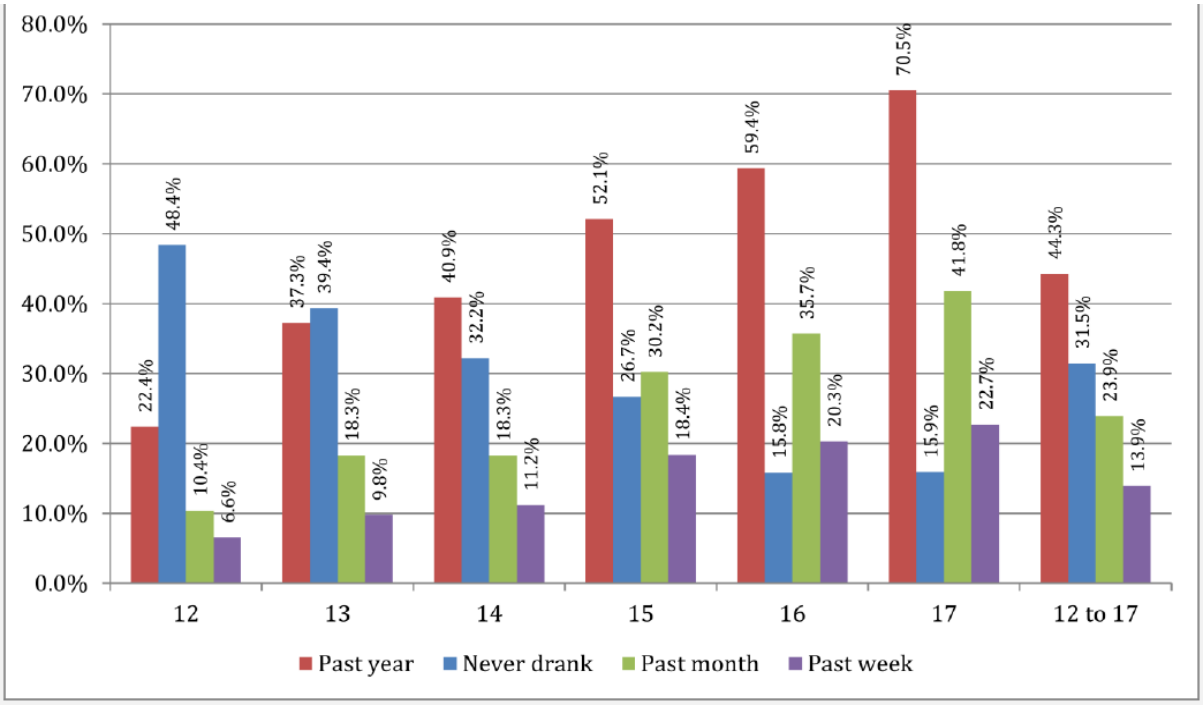


Alcohol use in 2014 is generally higher for males and older students

Figure 7 shows the proportion of students who report never drinking steadily decreases with increasing age (48.4% of 12 year old students vs. 15.9% of 17 year old students); with the prevalence of drinking increasing with age across each recency period. For example, the proportion of 17 year old students who report drinking in the past week (22.7%) is triple that of 12 year olds (6.6%).

For all male students (aged 12 to 17 years), 33.4% report never drinking, 45.1% drinking in the past year, 23.6% in the past month and 13.8% in the past week. For all female students, 29.5% report never drinking, 43.5% in the past year, 24.2% in the past month and 13.9% in past last week. Of those students who drank in the past week, boys drank more standard drinks on average (7.5) than girls.

Figure 7: Prevalence of alcohol use for students aged 12 to 17 years, 2014



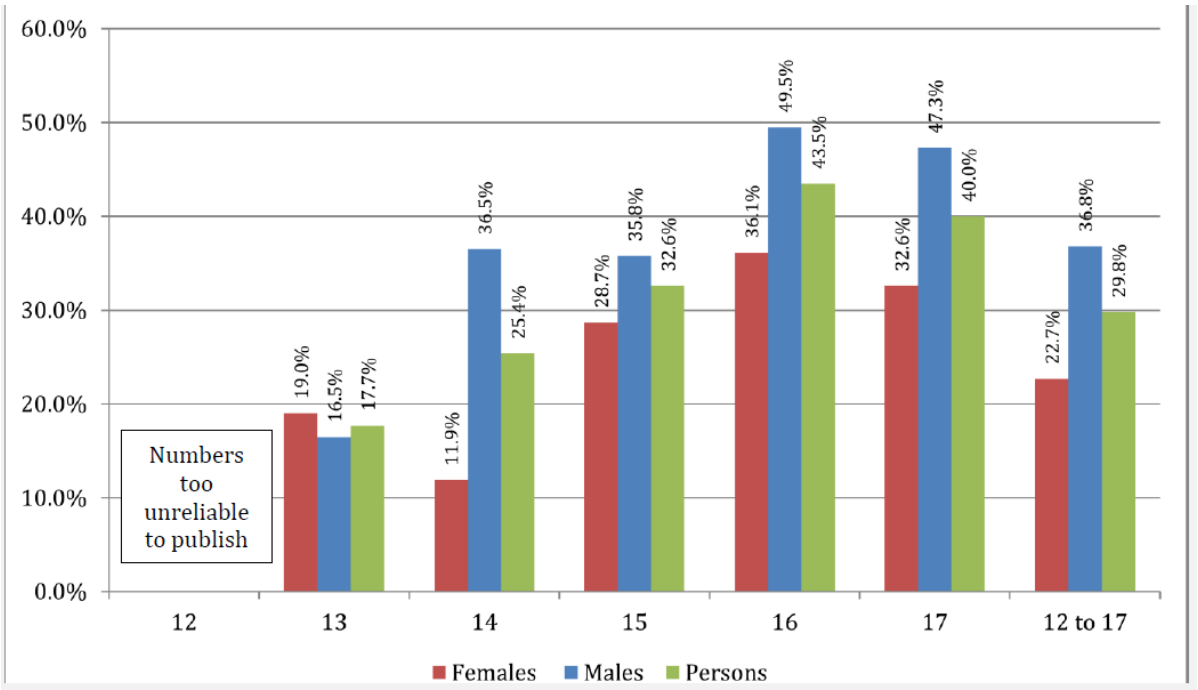
Risky drinking

Single occasion is the most common type of risky drinking for young people, as most students do not drink regularly. Only those who had used alcohol in the last week were asked about quantity consumed.

For adults, drinking at risk of single occasion harm (e.g. injury) is defined as having more than four standard drinks on any one day.
Note: single occasion risk in the following analysis is defined using adult guidelines, though not drinking is the safest option for young people.

Of those students who drank in the past week (13.9%), one in three (29.8%) drank at risk of single occasion harm (see Figure 8), although this was substantially reduced compared to 2011 (36.2%). For boys who drank in the past week (13.8%) more than one-third (36.8%) drank at a risky level. Of girls who drank in the past week (13.9%) almost one-quarter (22.7%) drank at risky levels.

Figure 8: Prevalence of single occasion risky drinking for students who drank in the last week by age and gender, 2014

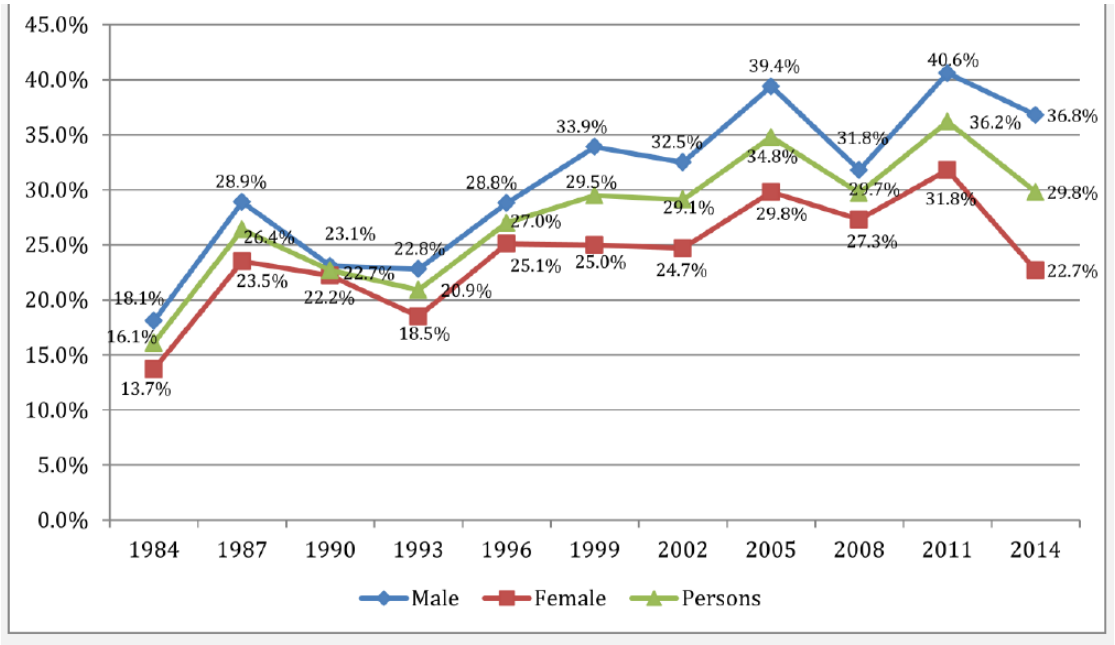


An upward trend in risky drinking but substantial reductions in 2011

As Figure 9 shows, there has been an increase in the proportion of students drinking at risky levels for single occasion harm from 1984 (16.1%) to 2014 (29.8%).

However, the proportion of students drinking at single occasion risk in 2014 (29.8%) was substantially lower than that reported in 2011 (36.2%).

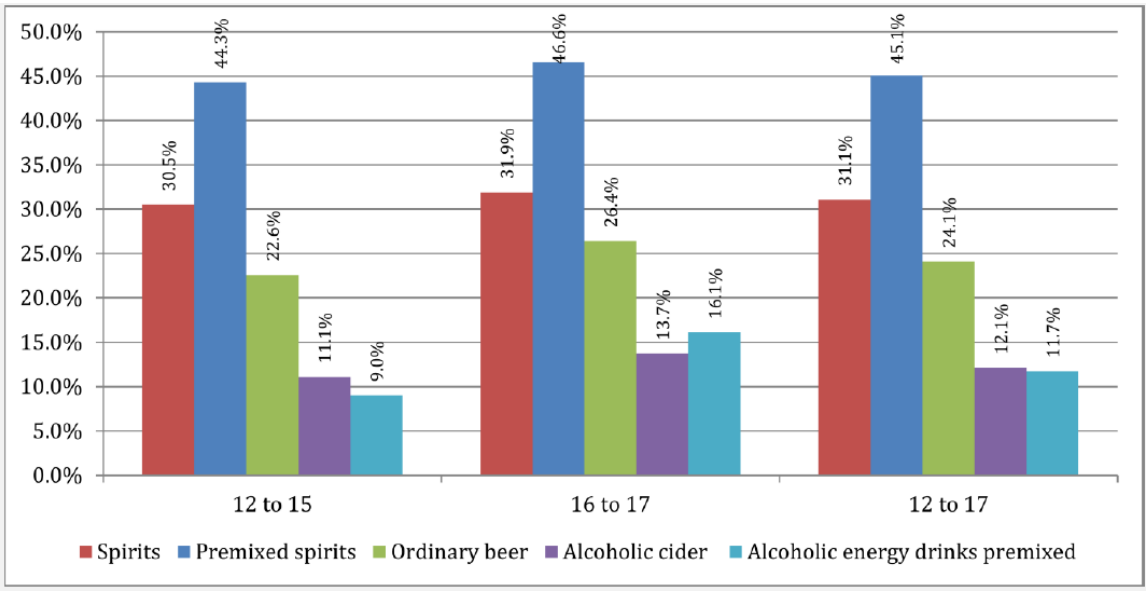
Figure 9: Trends in single occasion risky drinking for students aged 12 to 17 years who drank in the last week by gender, 1984 to 2014



Spirits and premixed spirits are preferred

Students who drank in the past week were asked what drink they usually have (but could select more than one). Figure 10 shows the top five responses based on 12 to 17 year old preferences. Most students usually drink premixed spirits (45.1%) and spirits (31.1%). Pre-mixed alcoholic energy drinks was a new response option in 2014, with 11.7% of students indicating they usually drink these beverages.

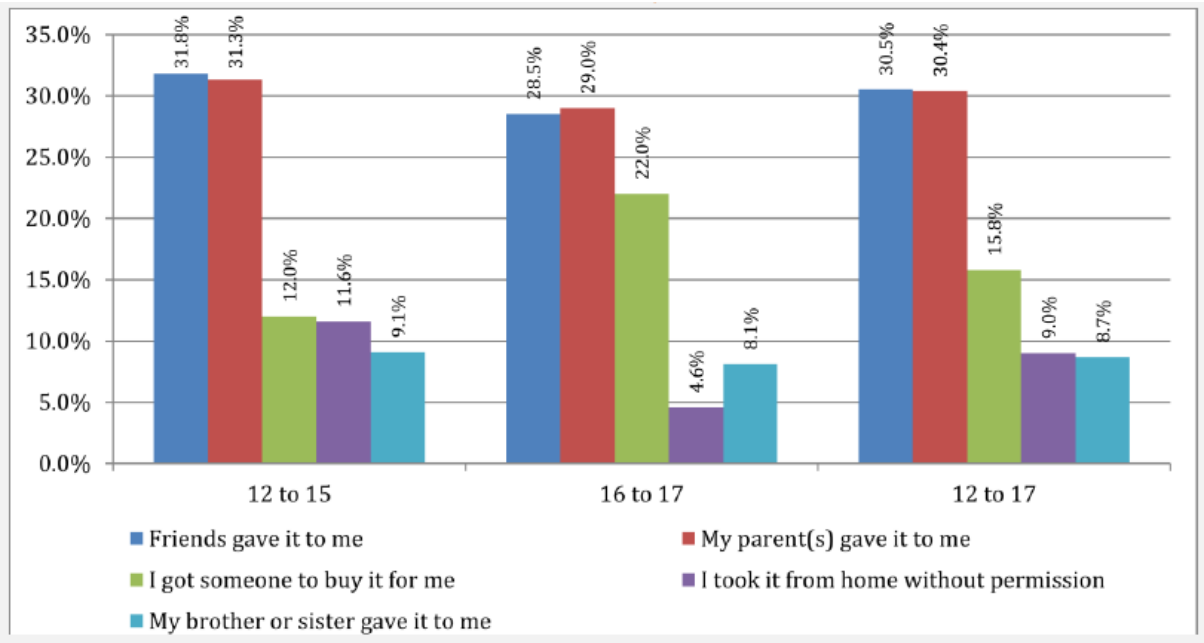
Figure 10: Top 5 usual alcoholic drinks (based on responses for 12 to 17 year olds) for students who drank in the last week, 2014.



Parents and friends are the most common source of alcohol

Students who drank in the past week were asked the source of their last alcoholic drink (but could select more than one). Figure 11 shows the top five responses based on 12 to 17 year old students. One in three sourced alcohol from their friends (30.5%) and parents (30.4%), and almost one in ten from a sibling (8.7%).

Figure 11: Source of alcohol for 12 to 17 year olds (who drank in the past week), 2014.



WA young people's drinking patterns

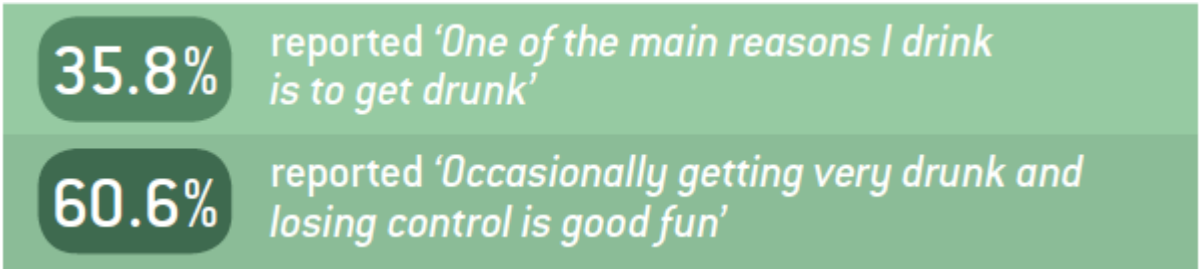
In summary:

- Of the WA students surveyed, aged 12 to 17 years, who drank in the past week (13.9%), 1 in 3 (29.8%) drank at a level that put them at risk of injury from a single drinking occasion in 2014.[34]
- Half of males (48.8%) and a third of females (34.8%) aged 16 to 17 years who drank alcohol in the past week drank at risk of injury from a single drinking occasion.[35]
- Of the WA students surveyed, aged 16 to 17 years, who drank alcohol in the past week, boys drank an average of 10 standard drinks; girls drank an average of 6 standard drinks.

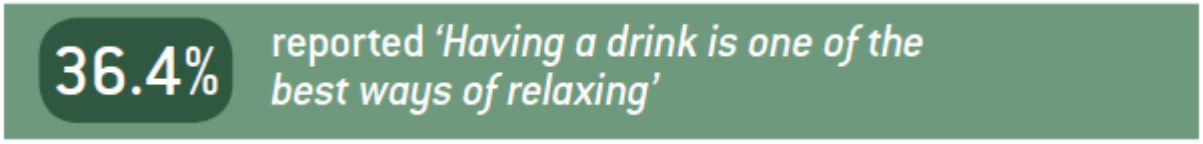
[34]Mental Health Commission. Alcohol trends in Western Australia: Australian school students alcohol and drug survey. Government of Western Australia; 2016.
[35] Bridle R. Request for statistics from the 2014 ASSAD survey - WA results [unpublished data]. Perth, WA: Mental Health Commission; Jun 9 2016.

The attitudes of many WA young people towards alcohol are of concern

Of 16 to 17 year old WA school students surveyed, who reported drinking in the past week:



Of all 16 to 17 year old WA school students surveyed:



School leavers' celebrations

Alcohol

Surveys were conducted with school leavers attending Schoolies celebrations at Rottnest Island in 2009 (Pre-Schoolies participants intended to and Post-Schoolies participants had attended, the 2009 Schoolies celebrations on Rottnest Island).[36]

Alcohol was used by the clear majority of leavers and mostly at risky levels, with more than half drinking at least 11 standard drinks a day.
The surveys found that 87% of drinkers were consuming at levels considered by the National Health and Medical Research Council (NHMRC) to put adults at risk of short term harm (more than 4 standard drinks in a single session).

87% of all surveyed leavers also reported at least one negative consequence that they attributed to alcohol or other drug use:

- 58% reported a blackout,
- 41% an accident or injury,
- 21% had sex they later regretted
- 14% had unprotected sex.

[36] Lam, T. (2013). *School leavers' celebrations: Parents can make a difference.* National Drug Research Institute, Curtin University, Perth, Western Australia. Available from: http://ndri.curtin.edu.au/research/leavers.

Only a minority of leavers reported using illicit drugs, and most used them with alcohol. This combination of alcohol and other drugs was associated with a greater risk of a range of negative consequences such as having an emotional outburst, being physically aggressive, and sexual or legal problems.

Alcohol supply

Leavers who obtained alcohol from their parents were likely to drink at risky levels.
Of the 25% of leavers who said their parents provided them with alcohol at the celebrations:

- 89% drank at levels considered risky for adults by the NHMRC.
- 65% reported they had sources other than their parents providing them with alcohol. Provision of alcohol by parents is likely to be topping up this situation.
- 45% spent more than $100 on alcohol and other drugs at Leavers.

Parental expectations

Young people who perceived their parents would approve of them consuming more than four standard drinks in a single sitting reported heavier alcohol use. That is, more lenient parental attitudes and behaviours may contribute to riskier use.[37]

Young people drank less at *Leavers* if they had discussed strategies with their parents about how to keep safe while drinking. Potential strategies include: never leave a friend alone while intoxicated; drink water while drinking alcohol; and know where to seek help if needed.
Some locations have organised activities – young people should be encouraged to participate in these as they often have support services where help can be sought.

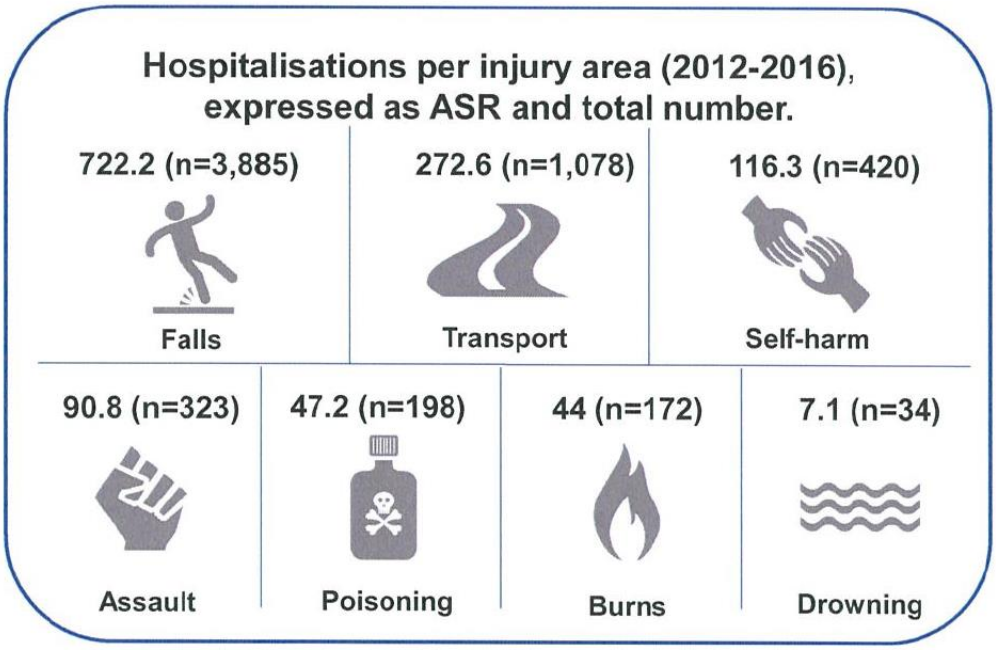
Caffeine

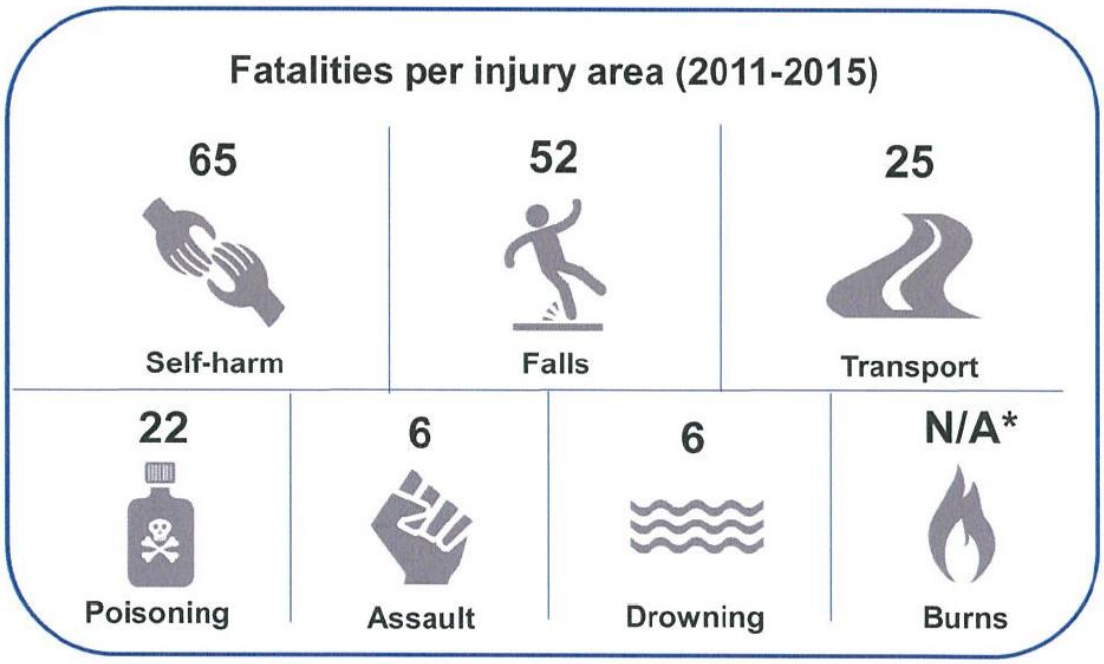
Alcohol and caffeine are both drugs.
Caffeine might be consumed in energy or soft drinks, coffee or pills. Leavers who used caffeine in combination with alcohol were at greater risk of reporting accidents or injuries, emotional outbursts, heated arguments and hangovers. Caffeine 'masks' the feeling of being drunk, and is associated with consumption of more alcohol and greater risky behaviour.

[37] Lam, T.(2013). *School leavers' celebrations: Parents can make a difference.* National Drug Research Institute, Curtin University, Perth, Western Australia. Available from: http://ndri.curtin.edu.au/research/leavers.

6.4 Hospitalisation and Fatalities

The following information has been provided through Know Injury, a Western Australian organisation working in the field of injury prevention. [38]





Notes:
*N/A indicates that the count has been suppressed due to privacy policies, or to withhold an unreliable rate derived from a low count.

ASR (age standardised rates) represents the rate of hospitalisations or fatalities per 100,000 person years.

Reference:
Data generated using Health Tracks Reporting, by the Epidemiology Branch, WA Department of Health in collaboration with the Corporate Research Centre for Spacial Information (CRC-SI). Injury by external causes. 2018.

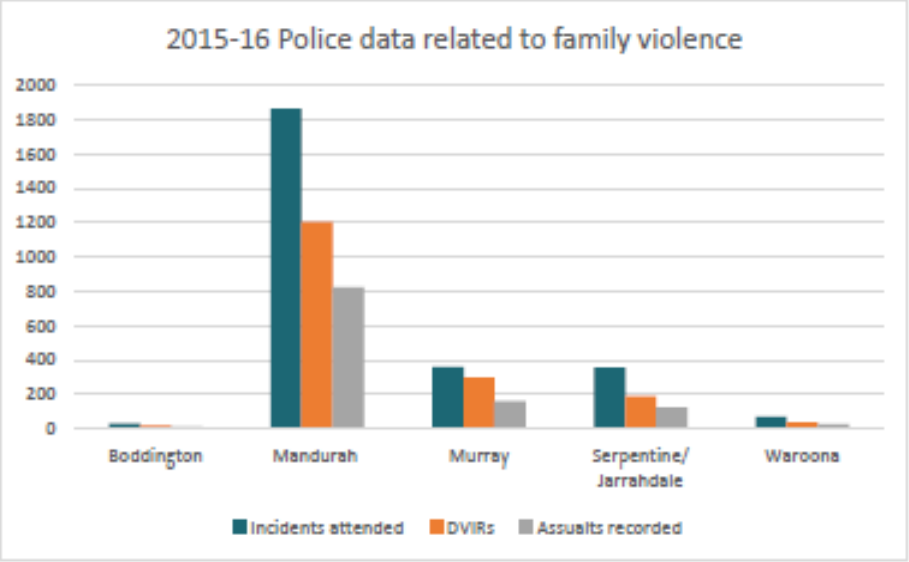
[38] https://knowinjury.org.au/campaign/

6.5 Family Violence

Across the South Metropolitan policing district, including Boddington, Mandurah, Murray, Serpentine, Jarrahdale and Waroona, Police attended 2,677 family violence incidents, made 1,745 Domestic Violence Incident Reports (DVIRs) and recorded 1,145 family violence assaults throughout 2015-2016. This data is represented in Table 12.[39]

In the same year, the WA Police data shows 21,162 instances of family violence in the whole of WA – making the Peel region responsible for 12.7% of family violence incidents in the state.[39]

Figure 12: 2015 – 2016 Police data by LGA



39 Watkins, Leah. (2016). Starfish Consulting. Research report of the Peel Says No to Violence project, June 2016

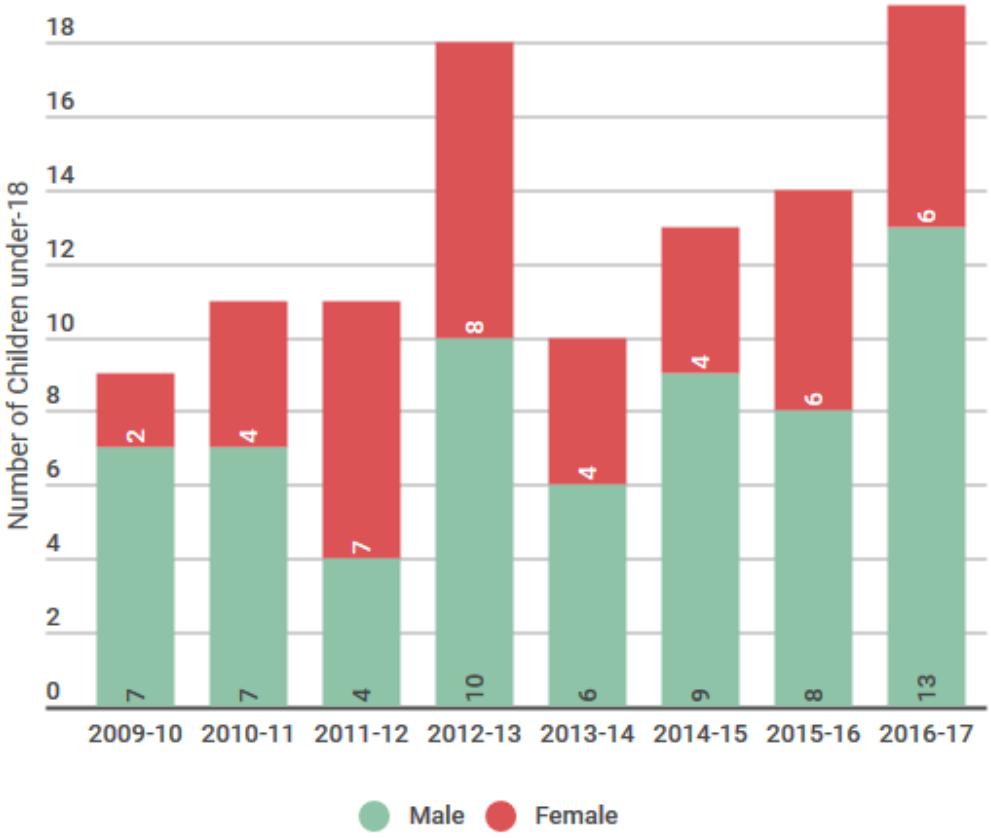
6.6 Youth Suicide in Western Australia

The WA Child Death Review states that, of the 237 child death notifications received by the state Ombudsman (related to children aged 13-17 years), in the period of end June 2019 to end June 2017:

- suicide was the most common circumstance of death for children aged 13 to 17 years (42%);
- followed by motor vehicle accidents (29%); and
- illness or medical condition (13%).[40]

In response to high youth suicide rates, Mandurah is part of a trial site for the National Suicide Prevention Trial, with a focus on the reduction of youth suicidality (16-25 years). The trial site is the 'Perth South Region' (Rockingham, Mandurah, Kwinana, Murray and Waroona) and the trial runs for 2 years, until 2019.

Figure 13: Number of Young People who Suicide, 2009 - 2017, Western Australia



Source: WA Ombudsman Annual Report 2017.

[40]http://www.ombudsman.wa.gov.au/Publications/AR1617/HTML/Annual_Report_201617_Child_Death_Review.htm

6.7 Education statistics

The following charts draw from data supplied by the Department of Education (WA). The data captures suspension and attendance rates for students from pre-primary to year-12, across all schools located in the City of Mandurah.

Figure 14 shows the number of suspensions and the number of students suspended. On average, 465 students are suspended each year, across Mandurah's primary and secondary schools.

Figure 14 - Number of students suspended, compared to number of suspensions

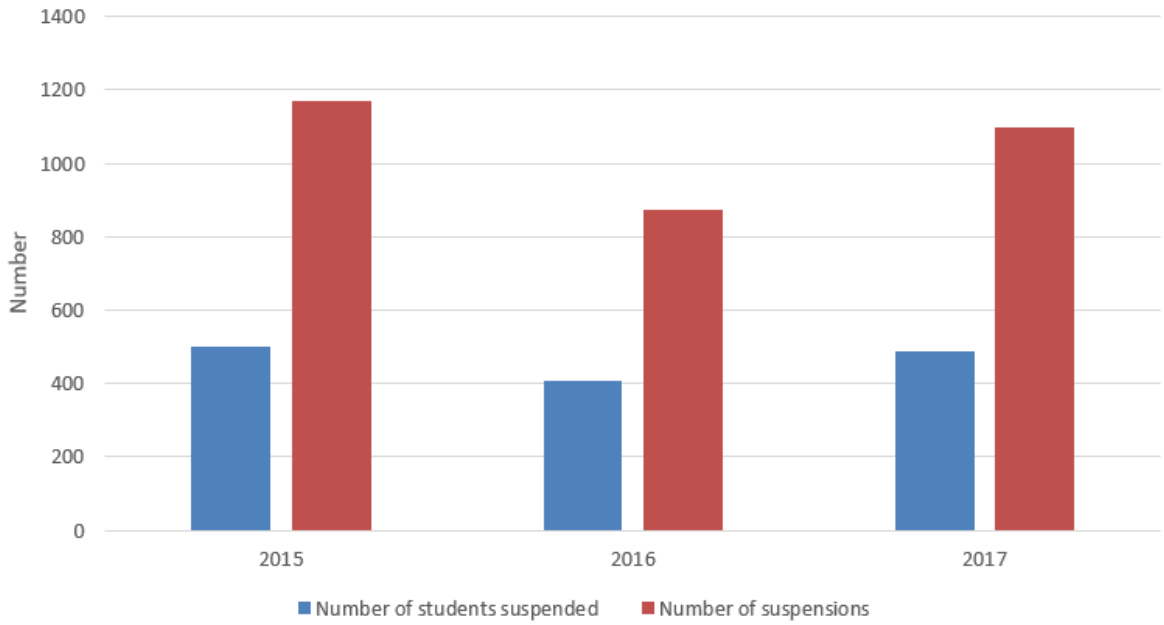
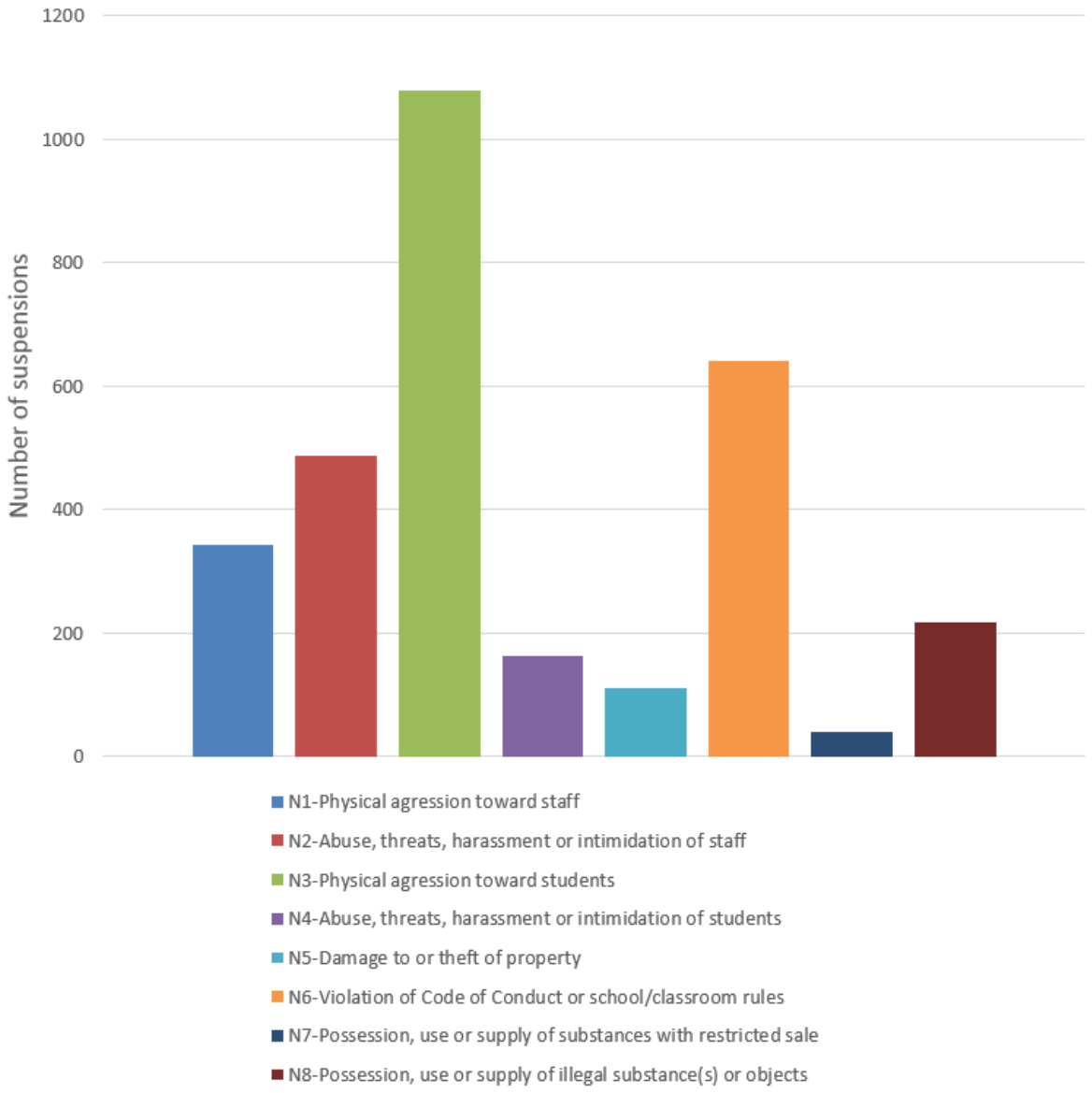


Figure 15 shows that 'Physical aggression toward students' is the highest recorded behaviour category for suspensions in schools across Mandurah, with 1079 suspensions related to this behaviour category in the 2015-2017 period. (Note that, prior to 2017, this category was recorded as 'Physical assault or intimidation of other students'.) Physical aggression and intimidation towards staff is also a frequently recorded reason for suspension, with a total of 832 suspensions across the categories 'Physical aggression toward staff' and 'Abuse, threats, harassment or intimidation of staff' during the given time period.

Figure 15 - Suspensions by behaviour category 2015 - 2017



Note that behaviour descriptions changed in 2017:

Behaviour Code	Old Behaviour Description 2008-2016	New Behaviour Description 2017
N1	Physical assault or intimidation of staff	Physical aggression toward staff
N2	Verbal abuse or harassment of staff	Abuse, threats, harassment or intimidation of staff
N3	Physical assault or intimidation of other students	Physical aggression toward students
N4	Verbal abuse or harassment of students	Abuse, threats, harassment or intimidation of students
N5	Wilful offence against property	Damage to or theft of property
N6	Violation of school Code of Conduct, behaviour management plan, classroom or school rules	Violation of Code of conduct or school/classroom rules
N7	Substance abuse	Possession, use or supply of substances with restricted sale

N8	Illegal substance offence	Possession, use or supply of illegal substance(s) or objects
N9	Negative behaviour - other	Negative behaviour - other

Figures 16, 17 and 18 shows the attendance categories and attendance rates for Mandurah schools. Students in regular attendance (attending greater than 90% of school days) make up 65% of the student population in Mandurah (across both primary and secondary, for the 2015-2017 period). See Figure 16. This means that 35% of students are classed as not being 'regular attenders' of school.

Putting this into perspective:

- For example, if a student is in the 'indicated risk' category (attending 80-90% of school days) for the duration of their school years, they will miss out on 1½ to 2½ years of schooling over their whole schooling life.

- For example, if a student is in the 'moderate risk' category (attending 60-80% of school days) for the duration of their school years, they will miss out on 2 ½ to 5 years of schooling over their whole schooling life.

Figure 16 - Student attendance categories 2015 - 2017

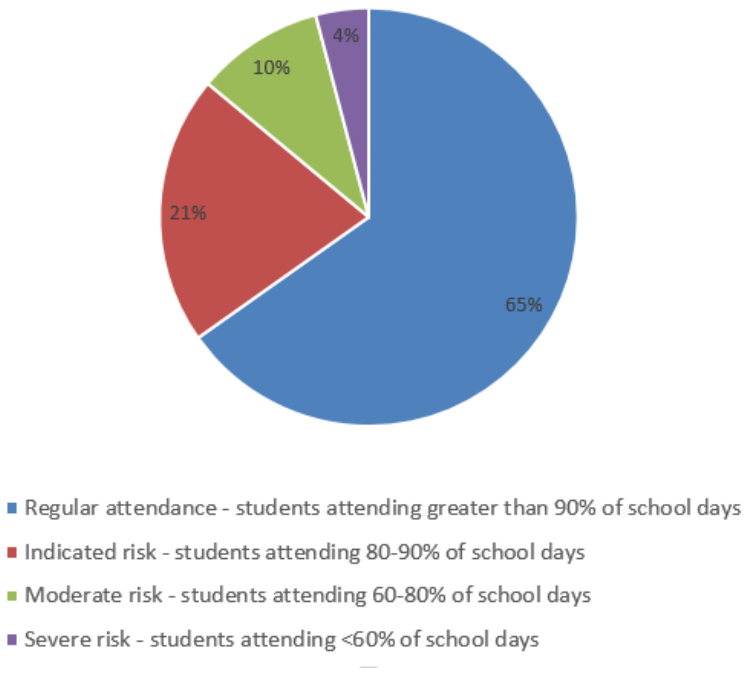


Figure 17 shows that in 2017, the percentage of students in Mandurah schools who are in the ‘regular attendance’ category decreases in the more senior years of schooling.

Figure 17 - Percentage of students in the 'regular attendance' category (attending 80-90% of school days), 2017

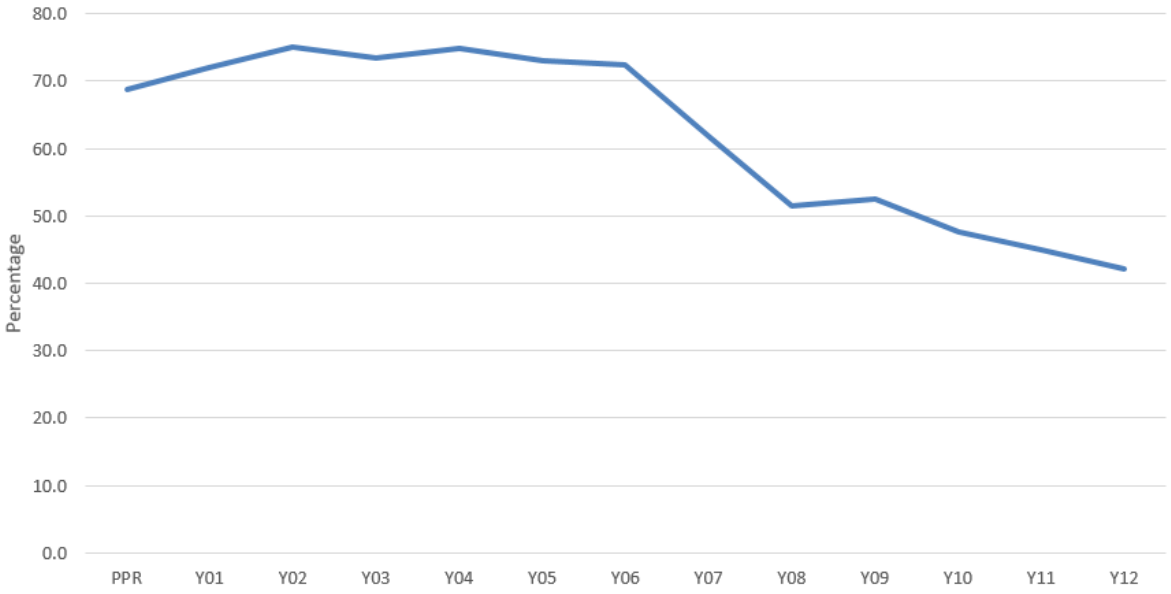
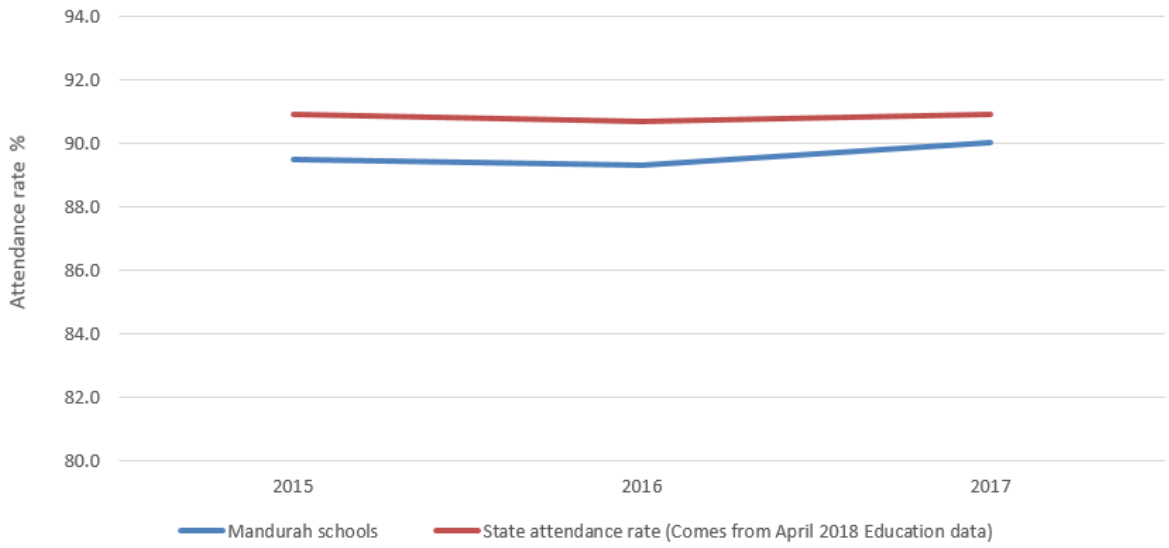


Figure 18 gives a comparison between Mandurah attendance statistics with the state averages. The statistics used for these attendance rates are not indicative of individual student attendance categories, but are an overall percentage of total absent half days divided by total available half days, across all Mandurah schools. In the past 3 years Mandurah attendance rates have registered consistently below the state averages.

The Department of Education (WA) measures attendance rates based on semester one attendance data, as per national standards. The scope is compulsory year groups pre-primary- year 12 (kindergarten data is excluded). Note that ‘truanting’ describes only those students who have not arrived at the school, or have left the school grounds, without authorisation or parental permission. As reported by schools, truanting comprises a very small percentage of total absences (1.0% in 2017).

Figure 18 - Attendance rates - Mandurah vs WA state average



7.0 Implications for Prevention Planning

Overall response rates for the CTC youth survey were low in Year 8 and 10 and so must be interpreted with caution. It is possible that the year 8 and 10 results may underestimate the true level of risk factors and problem behaviours in Mandurah. Estimates from the youth data should be interpreted by comparing them against other available information.

The Community Assessment work group used a number of techniques to develop recommendations from the survey results. To be able to make recommendations for specific intervention areas, comparisons have been made where available with representative data from Year 8 student samples across Australia in 2013. Comparing the levels of health and social problems between secondary school Year 8 and Year 10 students provided a mechanism for determining at what age-period prevention issues should be targeted. The wider community data search was thorough and has been carefully considered alongside the youth survey results, adding rigour to the process.

8.0 Conclusion

The CTC Mandurah Community Board and Key Leaders group are committed to the CTC Mandurah vision, “Building connections to grow healthy, resilient communities.” A truly collaborative process, this report is the result of dedicated input from community partners and the recommendations given in the next section will inform the future pathway for the CTC process in Mandurah.

Through a detailed analysis of the CTC youth surveys and a broader (community-wide) data search, a community profile is forming for Mandurah. The data analysis provided in this report has raised a number of strengths for the Mandurah community. Some of these strengths include:

- The family protective factors 'Family attachment' and 'Family opportunities/rewards for prosocial involvement' appear to have strong prevalence amongst year 8 students surveyed.
- The individual protective factor 'Belief in the moral order' appears to be prevalent amongst year 8 students surveyed.
- For school starters in Mandurah, the AEDC has indicated a higher percentage of children developmentally on track in the physical domain (when compared to both state and national averages).

The data analysis provided in this report has raised a number of concerns/challenges for the Mandurah community. Some of these challenges include:

- Adolescent alcohol use - with early age alcohol use reported by almost a third of students surveyed. Any alcohol consumption by persons under the age of 18 is considered high risk. The community wide data echoed this level of high risk, with a significantly higher level of adults drinking at risky or high risk levels, in comparison to the state average.
- Alcohol supply by parents – the common source of alcohol supply for year 10 students is from parents (40% of year 10 students who reported having drank alcohol in the past year said that their parents gave it to them).
- A high prevalence of the 'Low commitment to school' risk factor - across year 8 and 10 students surveyed, with over half the students reporting this risk factor.
- A significantly lower level of reported "Community opportunities for prosocial involvement' amongst year 8 students – the Mandurah statistic for this protective factor was 25% less than the national average. This could potentially be due to a low level of awareness amongst young people, about the opportunities in their community for volunteering and contributing.
- The data supplied through the AEDC and the Public Health Information Development Unit indicate areas for concern for mental health and wellbeing in Mandurah. As discussed in the report, Mandurah has a higher prevalence of developmental vulnerability in the emotional domain for school starters. The prevalence of mental health and behaviour conditions amongst adults is higher for the Mandurah LGA compared to state and national averages. (Mandurah-16.3%;

WA-14%). Interestingly, year 8 students in the youth survey reported comparable levels of the protective factors 'coping with stress', 'emotional control' and 'social competencies'.

- The rates of youth suicide in Western Australia are alarming, with suicide being the most common circumstance of death for children aged 13 to 17 years (42%).
- Physiological risk factors for adults are higher across Mandurah, when compared to state figures. This includes high blood pressure, high cholesterol and measurements of obesity.
- Police data regarding family violence incidents indicates that the Peel region is responsible for 12.7% of family violence incidents in the state of Western Australia.
- Physical activity and nutrition - Few students in the survey (only 20%) reported that they met the national guidelines for physical activity. Less than 15% of students have a healthy fruit and vegetable intake, relative to the national guidelines.

This phase of the CTC cycle, "Create a community profile", has been a detailed and rigorous process for the CTC Mandurah Community Board and the 'Community Assessment' and 'Community Resources' work groups in particular. It is hoped that this document, together with the Community Resource Assessment (Report 3.2), will be used as a valuable resource by the Mandurah community, not for profit organisations and government bodies.

9.0 Recommendations

Based on the CTC Youth Survey and CTC Mandurah Community Assessment, the CTC Mandurah Community Board recommends setting the following priority risk/protective factors:

- Attitudes favourable to alcohol and other drug use;
- Community laws and norms favourable to alcohol and other drug use;
- Family management / Family conflict; and
- Low commitment to school.
- Community opportunities and recognition for pro-social involvement.

Recommendation 1: Set risk factor targets to encourage lower levels of early age alcohol use; prioritise 'reduced favourable attitudes to alcohol/drug use' and 'Community norms and laws favourable to alcohol/drug use'.

Using alcohol at an early age contravenes the National Health and Medical Council guidelines as this behaviour is known to contribute to the development of heavy alcohol use and subsequent alcohol-related problems and disorders. The CTC Youth Survey reveals that early age alcohol use is common in early secondary school (29% of Year 8 students) and increases into later secondary school (33% of Year 10 students).

Starting to use alcohol in early high school reduces the likelihood of completing school. Longitudinal research has found that early initiation of alcohol use significantly reduces the likelihood of timely completion of high school by between 7% and 22%.[41] A study in Victoria showed that youth who regularly consume alcohol by age 14 are nearly half as likely to complete high school education, than those who do not regularly consume alcohol by 14 years old.[42]

The present report also reveals that although Year 8 students in Mandurah report a lower level of 'Community laws and norms favourable to drug use' than the national average (Mandurah-25%; Aus-35%), the risk doubles from Year 8 to Year 10 in Mandurah (Year 8-25%; Year 10- 49%).

Recommendation 2: Set risk factor targets to increase the effectiveness of parents and families; prioritise 'Family management/Family conflict' risk factors and a reduction in favourable family attitudes to substance use.

Poor family management and favourable family attitudes to substance use are risk factors for future substance abuse, behaviour problems and mental health problems. There are a range of interventions that can improve family management and reduce favourable family attitudes to substance use.

The attitudes and practices that parents and other adults hold toward child and adolescent alcohol use are amongst the major modifiable influences that affect the initial uptake of alcohol use. Health promotion and parent education programs focussed on parents and

[41] Koch, S.F. & McGeary, K.A (2005) The effect of youth alcohol initiation on high school Completion. *Economic Inquiry, 43*(4), 750-765.
[42] Kelly, A. B., Evans-Whipp, T. J., Smith, R., Chan, G. C. K., Toumbourou, J. W., Patton, G. C., Catalano, R. F. (2015). A longitudinal study of the association of adolescent polydrug use, alcohol use and high school non-completion. *Addiction*, n/a-n/a. doi: 10.1111/add.12829

families can reduce the access to alcohol at home, and increase family attachment and school engagement [43] and reduce problems such as alcohol misuse.[44]

With results of the community wide data analysis showing a high level of family and domestic violence in Mandurah, programs addressing the underlying causes of domestic violence are recommended, including programs that promote respectful relationships and discuss gender equity issues.[45] Programs for young people that provide skills and knowledge about what relationship violence looks like and how it can be prevented, are recommended. With an aim to reducing family violence, it is important for children to know how to identify and reject sexist and violence-supportive messages they encounter among peers, in popular culture or on social media.[45]

In terms of family management, consider programs aimed at helping parents develop knowledge, skills and support networks to promote child and adolescent health and wellbeing. This includes programs that look at building within-family connectedness (parent–child communication, conflict resolution, and problem-solving) and programs aimed at fostering more respectful and positive interactions within the family unit.

Recommendation 3: Set risk factor targets to improve school commitment.

The present findings confirm that 'low commitment to school' and 'school failure' are high. More than half of all Year 8 and 10 students report low commitment to school and more than 15% of Year 8 and Year 10 students report school failure.

School commitment (bonding or attachment to school) has been shown to protect students against a range of problems: including school non-completion, antisocial behaviour, drug abuse, teen pregnancy, violence, and alcohol abuse or dependence.[46] Research consistently shows that school non-completion leads to lower participation in paid work, fewer employment opportunities and lower engagement in further education.[47, 48 ,49.]

[43] Shortt, A. L., Hutchinson, D. M., Chapman, R., & Toumbourou, J. W. (2007). Family, school, peer and individual influences on early adolescent alcohol use: first-year impact of the Resilient Families programme. *Drug and alcohol review, 26*(6), 625-634.

[44] Toumbourou, J. W., Gregg, M., Shortt, A. L., Hutchinson, D. M., & Slaviero, T. M. (2013). Reduction of Adolescent Alcohol Use Through Family–School Intervention: A Randomized Trial. *Journal of adolescent health, 53*(6), 778-784.

[45] Our Watch, Australia's National Research Organisation for Women's Safety (ANROWS) and VicHealth (2015) Change the story: A shared framework for the primary prevention of violence against women and their children in Australia, Our Watch, Melbourne, Australia.

[46] Hawkins, J. D., Guo, J., Hill, K. G., Battin-Pearson, S., & Abbott, R. D. (2001). Long-term effects of the Seattle Social Development Intervention on school bonding trajectories. *Applied Developmental Science, 5*(4), 225-236.

[47] Lamb, S., Dwyer, P., & Wyn, J. (2000). Non-Completion of School in Australia: The Changing Patterns of Participation and Outcomes. Research Report.

[48] Australian Curriculum Assessment and Reporting Authority (ACARA). (2013). National Report on Schooling in Australia 2011. Sydney: ACARA.

As detailed in recommendation 1, a neglected factor that can undermine school achievement and engagement is early age alcohol use. Recent longitudinal research in Victoria has shown that adolescent alcohol users were 54% less likely to complete school than non-users.[50]

Recommendation 4: To promote positive youth development, prioritise the development and promotion of 'opportunities for prosocial involvement/recognition.'

The present findings show that compared to Australian students, Year 8 Mandurah students report significantly higher rates of the protective factors 'family rewards for prosocial behaviour' (Mandurah-60%; Aus-51%) and 'Belief in the moral order' (Mandurah-81%; Aus-68%).

Risk factors for Year 8 Mandurah students are similar to Australian students. This suggests that the lower rates of some health and social problems in Mandurah compared to Australia may be partly due to high protective factors. However, compared to Australian students, Year 8 Mandurah students report significantly lower rates of the protective factor 'Community opportunities for prosocial involvement' (Mandurah-41%; Aus-66%).

Longitudinal studies in Victoria reveal that positive young adult development is fostered by volunteering in the secondary school age period.[51,52] It is recommended that efforts be made to encourage school opportunities for students to volunteer and engage in the Communities that Care efforts. Where innovative positive youth development programs are developed, they should always be accompanied by evaluation.

10.0 Next Steps

CTC Mandurah will now proceed with the next step in the Communities that Care process, the Community Resources Assessment (Report 3.2), to identify existing resources in the

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[49] Organization for Economic Co-operation and Development (OECD). (2009). Education at a Glance 2009: OECD Indicators Retrieved 23 February 2015, from http://www.oecd.org/edu/skills-beyond-school/educationataglance2009oecdindicators.htm

[50] Kelly, A. B., Evans-Whipp, T. J., Smith, R., Chan, G. C. K., Toumbourou, J. W., Patton, G. C., Catalano, R. F. (2015). A longitudinal study of the association of adolescent polydrug use, alcohol use and high school non-completion. *Addiction*, n/a-n/a. doi: 10.1111/add.12829

[51] Hutchinson. D., Macdonald, J.A., Hallam, B., Leung, R.K., Toumbourou, J.W., McGee, R., Tooley, G., Hemphill, S.A., Skouteris, H., and Olsson, C.A. (2016). Care orientation in the teens as a predictor of young adult psychosocial adjustment. Journal of Happiness Studies. 17(5): 2051 - 2076. http://dx.doi.org/10.1007/s10902-015-9685-x.

[52] Moorfoot, N., Leung, R.K., Toumbourou, J.W., Catalano, R.F. (2015) The longitudinal effects of adolescent volunteering on secondary school completion and adult volunteering. International Journal of Developmental Science. 9(3/4), 115-123. http://dx.doi.org/10.3233/DEV-140148.

Mandurah community that have shown to effectively address the priorities outlined above. A gap analysis will assist in the selection of evidence based prevention programs.

The Phase 3 (Community Profile) includes two documents:

- Community Assessment - Report 3.1 (this document); and
- Community Resources Assessment - Report 3.2

On completion of these two documents, the CTC Mandurah Community Board will then be ready to undertake training and delivery of Phases 4 and 5; ‘Create a community action plan’ and ‘Implement and evaluate evidence based strategies and programs’.

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