



Government of Western Australia  
Department of Health

# Health and wellbeing of children in Western Australia 2020



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# Contents

Executive summary	3
1. Introduction	6
2. Methodology	7
2.1 Mode of administration and sampling	7
2.2 Weighting the data	7
2.3 Review of survey collection methodology	8
2.4 Response rates	8
3. How estimates are reported	9
3.1 Percentage and prevalence	9
3.2 Confidence intervals	10
3.3 Using this report	10
4. Comparisons	11
5. Demographics	13
6. General health	17
6.1 Self-reported health status	17
6.2 Disability	19
7. Chronic health conditions	23
7.1 Type 1 diabetes	23
7.2 Asthma	23
7.3 Injury	26
8. Lifestyle behaviours	30
8.1 Breastfeeding	30
8.2 Nutrition	31
8.2.1 Fruit and Vegetables	31
8.2.2 Milk	35
8.3 Discretionary foods	36
8.3.1 Fast Food	37
8.3.2 Potato chips	38
8.3.3 Sweet snacks	39
8.3.4 Salty snacks	39
8.3.5 Sugar sweetened soft drinks and energy drinks	40

8.3.6 Processed meats	41
8.4 Physical activity and sedentary behaviour	41
8.4.1 Physical activity	41
8.4.2 Sedentary recreational screen time	45
8.5 Body mass index	47
8.6 Smoking in the home	50
8.7 Sun protection	50
8.8 Sleep	53
9. Health service utilisation	56
10. Mental wellbeing	62
10.1 Trouble with emotions or behaviour	62
10.2 Treatment for emotional or mental health condition	65
10.3 Bullying	66
11. School connectedness	69
12. Family functioning	73
13. Respondent for child	82
13.1 General health	82
13.2 Mental health	82
13.3 Lack of control	83
13.4 Partner of Respondent for Child	86
14. References	87

# Executive summary

The Health and Wellbeing Surveillance System is a continuous data collection that was initiated in 2002 to monitor the health status of the general population. In 2020, a total of 490 parents/carers of children aged 0 to 15 years were randomly sampled and completed a computer assisted telephone interview between January and December, with an average participation rate of over 90 per cent. The sample was then weighted to reflect the Western Australian child population.

This report describes the findings from the 2020 Health and Wellbeing Surveillance System and provides the health sector and general public with important information about various aspects of the health and wellbeing of Western Australian children at the population level. Some key estimates from the 2020 report include:

## General health:

- Very good or excellent health was reported for 86.6% of children aged 0 to 15 years by their parents/carers.

## Chronic health conditions:

- Approximately one in nine children have had asthma at some point in their lifetime (11.5%).
- An estimated 110,184 children (20.3%) experienced an injury in the past 12 months that required treatment from a health professional.

## Lifestyle and physiological risk factors:

- An estimated 90.0% of WA children aged 0 to 4 years received some breast milk in their lifetime.
- Children aged 9 to 15 years were significantly less likely to eat sufficient daily serves of fruit than children aged 2 to 3 years and 4 to 8 years (60.2% compared with 93.1% and 100.0%).
- The amount of fruit and vegetables reported to be consumed by children has remained stable at 2 serves between 2002 and 2020.
- Nearly two-thirds (63.5%) of children aged 2 to 15 years usually consumed full fat or whole milk.
- The proportion of children who never or rarely consumed meals from fast food restaurants was similar in 2009 (21.2%) and 2020 (24.5%).
- Almost nine in ten children (88.4%) aged 1 to 4 years never or rarely consumed soft drinks. Children aged 5 to 9 years were more likely to never or rarely consume soft drinks compared with children aged 10 to 15 years (64.8% compared with 43.1%).
- Almost one in three (31.7%) children aged 5 to 15 years were completing sufficient levels of physical activity for good health.
- An estimated one in four (25.4%) children aged 5 to 15 years were either overweight or obese.

- The prevalence of overweight and obesity as measured by Body Mass Index has remained relatively stable between 2004 (26.1%) and 2019 (25.4%).
- The prevalence of children living in a smoke free home has increased significantly from 2002 (90.5%) to 2020 (99.8%).
- Children aged 10 to 15 years were less likely to always be checked by a parent/carer that they are adequately protected before going out into the sunlight compared with children aged 0 to 4 years (46.5% compared with 84.4%).

### **Emotional health and wellbeing:**

- The prevalence of children ever treated for an emotional or mental health problem in 2020 (13.2%) was significantly higher than in 2002 (3.0%).
- Approximately one-third (32.2%) of children had been bullied in the past 12 months.

### **Health service utilisation:**

- In the past 12 months, approximately 85.5% of children aged 0 to 15 years had used a primary health service, 62.5% a dental health service, 30.4% an allied health service, and 28.5% a hospital-based service.
- Less than one in ten (8.6%) children aged 0 to 15 years had used a mental health service, and less than one in twenty (3.8%) had used an alternative health service.

### **School connectedness:**

- The prevalence of children reported by their parent/carer to be doing very well in their overall school performance has decreased significantly between 2002 (52.7%) and 2020 (38.6%).
- The prevalence of children reported by their parent/carer to almost always look forward to school was higher in girls than boys (76.7% compared with 59.6%).

### **Family functioning:**

- Approximately one in six children (16.6%) lived in a family with poor family functioning.

# Introduction and methodology



# 1. Introduction

The WA Health and Wellbeing Surveillance System (HWSS) is a continuous data collection system developed to monitor the health and wellbeing of Western Australians. The HWSS began in March 2002 and is run on a continual basis, where around 6,000 people throughout Western Australia (WA) are interviewed each year. As at December 2020 approximately 18,000 interviews have been conducted with parents/carers of WA children aged 0 to 15 years. This report presents the information collected for 490 children during 2020, as well as trends over time.

Information from the survey is used to monitor the health status of Western Australian children, to inform health education programs, to evaluate interventions and programs, to inform health research, to support health policy development, to identify and monitor emerging trends and to support health service planning and development. Parents/carers are asked questions on a range of topics related to their child's health and wellbeing. These topics include chronic health conditions, lifestyle risk factors, health service utilisation, mental health, school and family functioning, protective factors and socio-demographics. Questions about health and wellbeing are also asked of the respondent as well as about the respondent's partner.

The questions included in the HWSS for children are selected to provide information about state or national indicators of health and wellbeing, and to provide information about areas of health, lifestyle and demography that are not available elsewhere and are necessary to understand the dynamics of healthy behaviours and outcomes. The development of these questions was guided by the Telethon Kids Institute. A current copy of the questionnaire is available on the WA Department of Health website:

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

An important feature of this surveillance system is that it is population based, meaning that it is designed to examine trends at the population level. Although major socio-demographic group estimates are possible, it is not the purpose of the system to investigate smaller subgroups. Therefore, the information provided in this report is representative of WA children by age group and sex, but it is unlikely to be reliably representative of small or specific groups within the population, such as Aboriginal people, culturally and linguistically diverse (CALD) populations, those who are homeless or those without telephones. People requiring information about Aboriginal health are recommended to consult the most recent results of the National Aboriginal and Torres Strait Islander Social Survey, which are more representative of the Aboriginal and Torres Strait Islander population.<sup>1</sup>

The HWSS has been approved by the WA Department of Health's Human Research Ethics Committee (RGS0000002698).



## 2. Methodology

### 2.1 Mode of administration and sampling

The HWSS is conducted as a Computer Assisted Telephone Interview (CATI). Households are selected from the 2013 electronic White Pages® by a stratified random process. Rural and remote areas of WA were over-sampled relative to their populations within WA to provide enough interviews to enable reliable and robust estimates to be made for these locations.

An approach letter was sent to selected households informing them that their household had been selected to participate. The approach letter explained the purpose of the survey, gave the time within which they could expect to be contacted by the data collection agency and explained that one person from the household will be selected to participate. A specially prepared brochure was included with the letter, which explained more about the HWSS and provided contact numbers for respondents to call for further information. The Survey Research Centre at Edith Cowan University conducted the survey on behalf of the WA Department of Health.

All information provided in this report is based on self-reported data collected from the child's parent/carer. Testing has shown that the responses to the questions in the survey are reliable but in a very few cases, may not be completely accurate. For example, parents/carers are unlikely to know the exact amount of physical exercise their child does, but test-retest information shows that the estimates given are consistent over time. This means that although the estimates of things like physical activity and weight will vary from the 'true' estimate, changes in estimates over time are meaningful and reliable. This identification of patterns over time is the basis of a monitoring and surveillance system.

### 2.2 Weighting and presentation of the data

One of the most important features of a report describing the health and wellbeing of any population is the ability to make comparisons. To do this, data must be weighted to the population that is being described, which in this case is the population of WA children aged 0 to 15 years.

The HWSS data are weighted to compensate for the over-sampling in the rural and remote areas of WA and then also weighted to the most recent Estimated Resident Population (ERP) for the year of the survey. For 2020, this was the 2019 ERP released by the Australian Bureau of Statistics (ABS) in August 2020, where the total child population aged 0 to 15 years in WA for was 543,090.<sup>2</sup> Weighting of data can result in rounding discrepancies so in some cases totals may not add up to exactly 100 per cent. While the information collected on children has been weighted to the age and sex distribution of the Western Australian child population, data relating to the parent/carer and partner have not been weighted.

The data presented in this report are for the period January 2020 to December 2020. Responses such as "Don't know" and "refused" were not included in the analysis unless otherwise specified.

A full explanation of the current methodology can be found in the paper titled, 'WA Health and Wellbeing Surveillance System, Technical Paper Series No 1: Design and Methodology, 2018', which is available on the WA Department of Health website:

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

## 2.3 Review of survey collection methodology

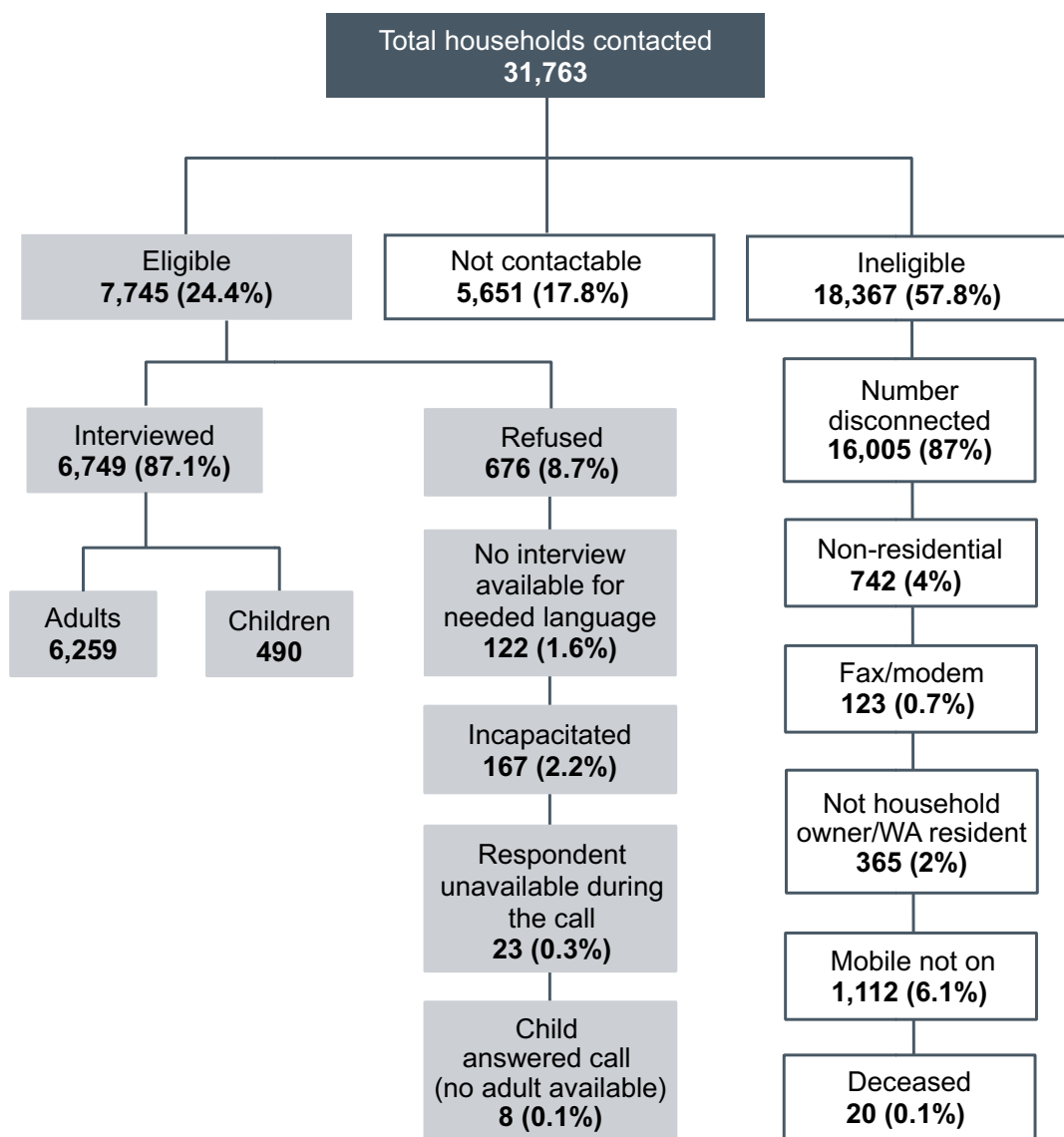
As part of continuous improvement of the program, a review of the HWSS sample frame and mode of collection was conducted in 2020. This review identified the need for an updated to the sample frame, respondent options for the mode of completion and a review of the content of the survey. The need for an updated sample frame is urgent due to the increase in the number of mobile-only households in WA and underrepresentation of younger age groups in the current sample frame. Several trials were conducted alongside the usual data collection to test the feasibility of the following:

- several new sample frame data sources including the existing Electronic White Pages, the WA Electoral Roll and a third-party consumer database
- providing respondents with options to complete the survey in multiple modes, including via CATI or online
- the use of QR codes to navigate to the online survey using a phone or tablet
- updates to the weighting methodology to ensure the estimates are representative of the WA population.

Analysis of the results of the sample frame, survey mode and weighting trials are currently underway. Details of any methodological updates will be noted in subsequent reports and technical papers. Implementation of the findings from the review of the survey content will be in consultation with the key stakeholders.

## 2.4 Response rates

A total of 31,763 households were selected from the 2013 electronic White Pages and contacted by ECU Survey Research Centre, over half were ineligible (57.8%) and one quarter were eligible (24.4%). Out of 7,745 eligible households, 6,749 telephone interviews were conducted resulting in an overall participation rate of 87.1%. The participation rate is the number of contacted households who agreed to take part in an interview, divided by the number of contacted households minus the number of refusals. A high participation rate indicates a positive attitude and willingness of the Western Australian community to participate in the HWSS. The full breakdown of the reasons for refusal and ineligibility are presented in **Figure 1**. The data presented in this report are for 490 Western Australian children aged 0 to 15 years.



**Figure 1: Flowchart of the responses to the HWSS telephone survey, 2020**

## 3. How estimates are reported

### 3.1 Percentage and prevalence

The information in this report is presented either as a percentage of the child population who have a particular risk factor or demographic characteristic, or as the prevalence of a particular health condition within the child population. Prevalence refers to the number or proportion of individuals in a community who exhibit a given condition or characteristic and is usually expressed as a percentage. Prevalence is distinct from incidence. Prevalence is concerned with all individuals with a given condition or characteristic regardless of when it began. Incidence on the other hand refers only to new cases of a condition or characteristic during a specified time interval. Surveys generally do not collect or report on incidence of disease.

There are three main types of prevalence that are typically reported. Lifetime prevalence represents the proportion of the population that have ever had a condition, period prevalence represents the proportion of the population who have a condition within a specified period of time (e.g. twelve months), and point prevalence represents the proportion of the population who have a condition at the time of the survey. In this report, most of the prevalence estimates presented are period prevalence. In some cases, such as with asthma, both lifetime and period prevalence are reported. This is because a person may have had asthma at some point in their life but not have experienced it recently.

### 3.2 Confidence intervals

Survey results are estimates of 'true' population values and will always contain some error because they are based on a sample of the population and not the entire population. Therefore, each table presents both a prevalence estimate for a given condition or characteristic as well as a 95 per cent confidence interval for that estimate.

The 95 per cent confidence interval is the range within which the true estimate would lie 95 out of 100 times. The wider the confidence interval is around an estimate, the less precise the estimate is and therefore more caution should be applied with using it.

One way to compare two prevalence estimates is to assess whether the difference between them is statistically significant. Statistical significance is a statement about the likelihood of a finding being due to chance. Confidence intervals can be used to determine statistical significance. Overlapping confidence intervals indicate that there is probably no meaningful difference in the estimates being compared. If the confidence intervals do not overlap, then the estimates are considered significantly different.

Further information on how to determine whether a difference is statistically significant can be found on the WA Department of Health website:

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

Along with helping to determine statistically significant differences, confidence intervals can also be used as a measure of the level of stability around an estimate. The level of stability around an estimate can also be guided by the relative standard error (RSE). The RSE is a measure of the extent to which the survey estimate is likely to be different from the actual population result.

For example, in this report wide confidence intervals and high RSEs can be present for breastfeeding in children 0 to 4 years, as there are fewer responses for children in this age group. It is also possible to see wide confidence intervals and high RSEs for some variables that have multiple response options (4 or more); for example, self-reported level of physical activity and fast food intake.

Therefore, throughout this report, estimates with RSEs between 25 per cent and 50 per cent have been annotated by an asterisk and should be used with caution. Estimates with RSEs above 50 per cent are considered too unreliable for general use and have been withheld.

### 3.3 Using this report

This report has been generated to be a reference document and therefore contains little interpretative text. The confidence intervals should be used to determine statistical significance if no text has been provided. If more detailed information is required or interpretation needed, please contact the Health Survey Unit, Epidemiology Directorate, WA Department of Health at [DOH.HWSS@health.wa.gov.au](mailto:DOH.HWSS@health.wa.gov.au).

## 4. Comparisons

One of the strengths of the HWSS is its ability to show changes over time. Therefore, the trends over time for selected major health conditions and risk factors have been provided. The prevalence or proportion of children who reported a selected condition/risk factor of interest has been derived for each year from 2002 to 2020, where available.

To ensure that any changes over time in prevalence estimates were not the result of changes in the age and sex distribution of the population, all years were standardised by weighting them to the 2011 Estimated Resident Population. The data used for comparisons over time is weighted to the 2011 ERP because it represents an approximate mid-point of the years for which estimates are provided.

Comparison over time data are weighted to the 2011 ERP, while the 2020 data are weighted to the 2019 ERP. As a result, the 2020 estimates presented in trend tables may differ slightly from 2020 estimates presented in point prevalence tables due to weighting the data to the different populations. Small changes in estimates from those presented in previous reports may also occur due to weighting the data to more recent population estimates.

# Demographics



## 5. Demographics



In 2020, health and wellbeing data were collected for 490 Western Australian children aged 0 to 15 years. The demographic characteristics of the child sample who participated in the HWSS in 2020 are shown in **Table 1**. The table shows the unweighted number in the sample for each group and the weighted prevalence expressed as a percentage.

Of the 490 children included in this report:

- There were slightly more males (51.3%) than females (48.7%)
- The majority (95.1%) were born in Australia
- 25 were identified as being Aboriginal or Torres Strait Islander
- The relationship of the respondent to the child was most commonly (69.3%) the mother.

**Table 1: Demographic characteristics of the child, HWSS 2020**

Characteristic	Unweighted Sample (n)	Estimated Per Cent (%)
<b>Age</b>		
0 to 4 years	43	31.8
5 to 9 years	127	31.9
10 to 15 years	320	36.4
<b>Sex</b>		
Boys	249	51.3
Girls	241	48.7
<b>Australian born</b>		
Yes	459	95.1
No	31	4.9
<b>Aboriginal or Torres Strait Islander</b>		
Yes	25	5.4*
No	464	94.6
<b>Relationship of respondent to child</b>		
Mother	340	69.3
Father	113	23.8
Other	37	7.0

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The characteristics of the household where the child lives and the weighted estimated per cent of the population are shown in **Table 2**.

**Table 2: Characteristics of the household where the child lives, HWSS 2020**

Characteristic	Unweighted Sample (n)	Estimated Per Cent (%)
<b>Current living arrangement</b>		
Family with a child or children living with biological or adoptive parents	397	81.7
Step or blended family	15	2.2*
Sole parent family	37	7.3*
Other family structure	40	8.9
<b>Household income</b>		
Under \$20,000	N/A	N/A
\$20,000 to \$40,000	21	5.4*
\$40,000 to \$60,000	31	4.7
\$60,000 to \$80,000	35	8.9*
\$80,000 to \$100,000	70	18.5
\$100,000 to \$160,000	143	35.3
More than \$160,000	111	25.5
<b>Household spending</b>		
Spend more money than earn/get	8	1.1*
Have just enough money to get by	61	11.8
Spend left over money	21	4.5*
Save a bit every now and then	141	31.1
Save some regularly	192	39.4
Save a lot	56	12.1
<b>Area of residence</b>		
Metropolitan	203	78.7
Rural	70	6.1
Remote	217	15.2
<b>SEIFA classification of social disadvantage</b>		
SEIFA Quintile 1 (Most disadvantaged)	78	12.4
SEIFA Quintile 2	144	21.3
SEIFA Quintile 3	122	22
SEIFA Quintile 4	99	23.9
SEIFA Quintile 5 (Most advantaged)	47	20.4
<b>Accessibility/Remoteness Index of Australia</b>		
Inner Regional	114	12
Major Cities	184	72.5
Outer Regional	116	8.4
Remote	49	4.8
Very Remote	27	2.2
<b>Have private health insurance</b>		
Yes	119	26.2
No	365	73.8

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use



The demographic characteristics of the respondent for the child, with unweighted percentages, are shown in **Table 3**.

**Table 3: Demographic characteristics of respondent for child, HWSS 2020**

Characteristic	Unweighted Sample (n)	Unweighted Per Cent (%)
<b>Australian born</b>		
Yes	372	76.1
No	117	23.9
<b>Aboriginal or Torres Strait Islander</b>		
Yes	14	2.9
No	476	97.1
<b>Highest level of education</b>		
Less than Year 10	2	0.4
Year 10 or Year 11	34	7.0
Year 12	49	10.0
TAFE/ Trade Qualification	247	50.5
Tertiary degree or equivalent	157	32.1
<b>Employment status</b>		
Employed	385	78.7
Unemployed	15	3.1
Home duties	63	12.9
Retired	15	3.1
Unable to work	6	1.2
Student	1	0.2
Other	4	0.8
<b>Possess a government health care card</b>		
Yes	73	13.4
No	66	13.5
<b>Share home with a partner</b>		
Yes	424	87.1
No	63	12.9

General health



## 6. General health



Self-ratings of health are used internationally, with poor health ratings associated with increased mortality and psychological distress, and lower physical functioning compared with excellent or very good ratings.<sup>3</sup> This section will focus on the following general health issues:

- Self-reported health status
- Disability

### 6.1 Self-reported health status

Parents/carers were asked to rate their child's general health. The population prevalence of parent/carer-reported child health status is shown in **Table 4**.

- Most children aged 0 to 15 years were reported to be in excellent or very good health.
- Parent/carer-reported general health was similar among children from different age groups and among boys and girls.

Approximately seven out of eight (86.6%) parents/carers reported their child's current health status as 'excellent' or 'very good'.

**Table 4: Parent/carer-reported child health status, 0 to 15 years, HWSS 2020**

	Excellent		Very Good		Good		Fair/Poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
0 to 4 yrs	46.7	(24.5 – 68.8)	43.5*	(20.4 – 66.6)	N/A	(N/A – N/A)	N/A	(N/A – N/A)
5 to 9 yrs	58.8	(47.6 – 70.0)	24.8	(14.9 – 34.6)	14.2*	(6.9 – 21.4)	N/A	(N/A – N/A)
10 to 15 yrs	62.3	(55.1 – 69.6)	24.0	(17.9 – 30.1)	10.6	(5.6 – 15.5)	3.1*	(0.8 – 5.4)
<b>Sex</b>								
Boys	53.9	(41.2 – 66.6)	31.5	(17.9 – 45.1)	12.6*	(6.0 – 19.3)	2.0*	(0.1 – 3.9)
Girls	58.7	(47.1 – 70.3)	29.3	(17.8 – 40.8)	10.3*	(4.5 – 16.0)	1.7*	(0.0 – 3.4)
<b>Children</b>	<b>56.2</b>	<b>(47.6 – 64.9)</b>	<b>30.4</b>	<b>(21.5 – 39.4)</b>	<b>11.5</b>	<b>(7.0 – 15.9)</b>	<b>1.9*</b>	<b>(0.6 – 3.1)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The annual prevalence estimates of health status since 2004 are shown in **Table 5**.

The question on health status was not asked prior to 2004. Estimates for 2020 were similar to those for 2004.

**Table 5: Prevalence of children by parent/carer-reported child health status, 0 to 15 years, HWSS 2004–20**

	Excellent		Very Good		Good		Fair/Poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>2004</b>	54.9	(49.6 – 60.3)	30.2	(25.3 – 35.1)	11.7	(8.1 – 15.2)	3.2*	(1.1 – 5.3)
<b>2005</b>	55.7	(51.9 – 59.4)	32.5	(28.9 – 36.0)	8.9	(6.9 – 10.9)	3.0	(1.6 – 4.4)
<b>2006</b>	60.7	(57.3 – 64.2)	28.5	(25.4 – 31.6)	8.2	(6.2 – 10.2)	2.6	(1.3 – 3.8)
<b>2007</b>	58.3	(53.3 – 63.2)	30.1	(25.5 – 34.7)	10.1	(7.2 – 13.1)	1.5*	(0.4 – 2.6)
<b>2008</b>	60.3	(55.8 – 64.9)	26.7	(22.6 – 30.8)	10.6	(7.8 – 13.3)	2.4*	(1.0 – 3.8)
<b>2009</b>	57.6	(54.6 – 60.6)	29.4	(26.7 – 32.1)	11.2	(9.1 – 13.2)	1.8	(1.2 – 2.4)
<b>2010</b>	58.5	(54.3 – 62.7)	29.9	(26.0 – 33.8)	9.6	(7.1 – 12.1)	2.0*	(1.0 – 3.0)
<b>2011</b>	60.4	(55.6 – 65.2)	25.3	(21.0 – 29.6)	10.5	(7.4 – 13.6)	3.8*	(1.7 – 5.9)
<b>2012</b>	58.5	(54.2 – 62.8)	26.7	(22.9 – 30.5)	12.0	(9.1 – 14.9)	2.7	(1.4 – 4.1)
<b>2013</b>	57.5	(52.5 – 62.5)	29.7	(25.1 – 34.3)	10.8	(7.8 – 13.8)	2.0*	(0.9 – 3.2)
<b>2014</b>	58.2	(52.9 – 63.4)	30.4	(25.4 – 35.4)	8.3	(5.5 – 11.1)	3.2*	(1.3 – 5.0)
<b>2015</b>	58.4	(53.6 – 63.1)	28.9	(24.6 – 33.2)	10.3	(7.2 – 13.3)	2.5*	(1.3 – 3.7)
<b>2016</b>	59.2	(54.5 – 63.8)	28.4	(24.1 – 32.7)	9.3	(6.5 – 12.1)	3.1*	(1.5 – 4.8)
<b>2017</b>	58.1	(52.8 – 63.4)	26.8	(22.2 – 31.4)	11.9	(7.9 – 15.8)	3.2*	(1.6 – 4.8)
<b>2018</b>	61.3	(55.3 – 67.3)	25.3	(20.2 – 30.3)	10.2	(6.9 – 13.5)	3.2*	(0.8 – 5.6)
<b>2019</b>	58.4	(51.5 – 65.2)	24.9	(19.8 – 30.0)	14.8	(8.7 – 20.9)	1.9*	(0.6 – 3.2)
<b>2020</b>	56.3	(47.8 – 64.8)	30.3	(21.6 – 39.1)	11.5	(7.2 – 15.9)	1.9*	(0.6 – 3.1)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

## 6.2 Disability



Disability in childhood that results in limitation, restriction or impairment in everyday activities can be experienced in a number of different ways including intellectual, sensory/speech, psychosocial, physical and physical limitations. The impacts of disability on a child's communication, mobility, education and social engagement, as well as the impact on families and carers, can be significant.<sup>4</sup> Parents/carers were asked whether their child has a disability that impacts the family.

Approximately 7.4% of parents/carers responded that they have a child with a disability that impacts their family.

The population prevalence of children with a disability that impacts the family was similar among children aged 5 to 9 years and 10 to 15 years, and among boys and girls (**Table 6**).

**Table 6: Prevalence of children with a disability that impacts the family, 0 to 15 years, HWSS 2020**

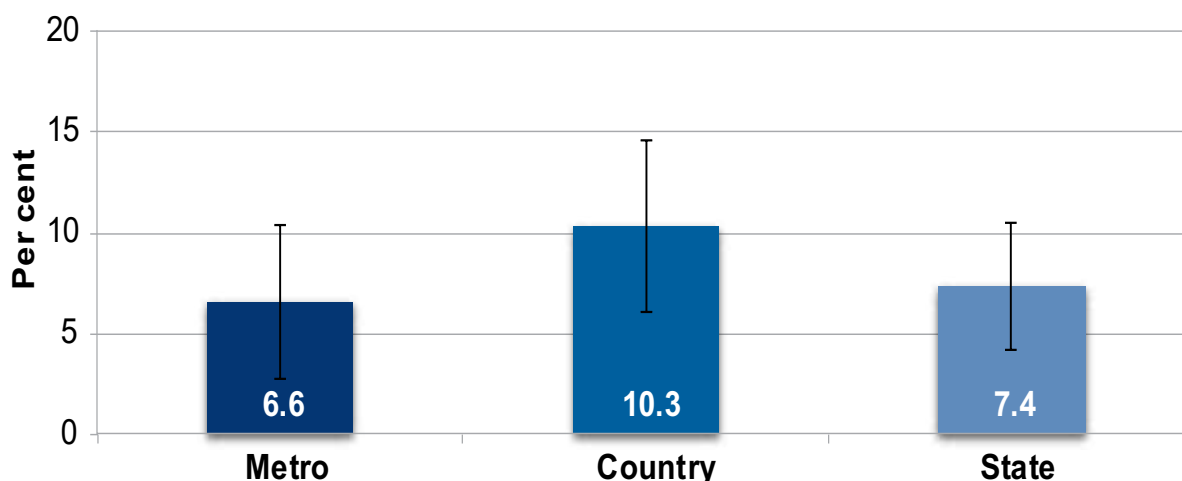
Children with a disability that impacts the family		
	%	95% CI
<b>Age Group</b>		
0 to 4 yrs	N/A	(N/A – N/A)
5 to 9 yrs	9.6*	(2.6 – 16.6)
10 to 15 yrs	11.2	(5.9 – 16.4)
<b>Sex</b>		
Boys	8.2*	(4.1 – 12.3)
Girls	6.5*	(1.5 – 11.4)
<b>Children</b>	<b>7.4</b>	<b>(4.2 – 10.5)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

**Figure 2** shows the prevalence of disability among children by geographic area of residence. The prevalence of disability that impacts the family was similar among children living in metro and country areas.

**Figure 2: Prevalence of children with a disability that impacts the family, by geographic area in WA, 0 to 15 years, HWSS 2020**



The annual prevalence estimates of disability are shown in **Table 7**. The estimate for 2020 was similar to that for 2002.

**Table 7: Prevalence of children with a disability that impacts the family, 0 to 15 years, HWSS 2002–20**

	Children with a disability that impacts the family	
	%	95% CI
2002	9.4	(7.3 – 11.5)
2003	10.0	(8.0 – 12.1)
2004	13.0	(9.5 – 16.6)
2005	9.2	(7.0 – 11.4)
2006	8.9	(6.8 – 11.0)
2007	7.8	(5.3 – 10.4)
2008	7.0	(4.7 – 9.3)
2009	6.6	(5.4 – 7.8)
2010	8.1	(5.8 – 10.3)
2011	8.4	(5.5 – 11.4)
2012	8.9	(6.6 – 11.2)
2013	10.0	(7.0 – 13.0)
2014	8.0	(5.2 – 10.9)
2015	8.4	(5.9 – 10.9)
2016	9.1	(6.4 – 11.7)
2017	10.2	(7.4 – 13.0)
2018	10.7	(7.2 – 14.1)
2019	11.7*	(5.9 – 17.4)
2020	7.4	(4.3 – 10.5)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Parents/carers were asked who the principal carer of the child with the disability was. In 2020, most children with a disability were cared for by their mother (75%). Parents/carers who reported that their child had a disability that impacts the family were asked to rate the extent of the impact. The annual estimates over time are shown in **Table 8**. Estimates for 2020 were similar to those for 2002.

**Table 8: Prevalence of children by the extent of the impact their disability puts on the family, 0 to 15 years, HWSS 2002–20**

	Not much of an impact at all			Some impact			A fairly big impact			A big impact			A very big impact				
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI
<b>2002</b>	23.3	(14.0 – 32.6)		30.5	(19.9 – 41.1)		30.5	(18.4 – 42.5)		9.4*	(1.7 – 17.1)		6.3*	(1.5 – 11.1)			
<b>2003</b>	17.9	(9.5 – 26.3)		39.9	(29.3 – 50.6)		33.1	(22.7 – 43.5)		6.1*	(1.1 – 11.2)		N/A	(N/A – N/A)			
<b>2004</b>	11.1*	(3.6 – 18.6)		34.7	(20.4 – 49.0)		29.7	(16.4 – 42.9)		12.4*	(1.6 – 23.1)		12.2*	(1.6 – 22.8)			
<b>2005</b>	22.7*	(12.1 – 33.4)		34.6	(22.8 – 46.4)		20.9	(10.7 – 31.2)		18.7*	(8.3 – 29.1)		3.0*	(0.7 – 5.3)			
<b>2006</b>	26.1*	(13.8 – 38.4)		31.2	(18.6 – 43.8)		25.0*	(12.4 – 37.5)		8.0*	(2.4 – 13.5)		9.8*	(1.2 – 18.4)			
<b>2007</b>	7.8*	(0.7 – 14.8)		34.5	(18.7 – 50.3)		26.5*	(11.5 – 41.6)		28.4*	(10.4 – 46.4)		2.8*	(0.3 – 5.3)			
<b>2008</b>	28.8*	(11.2 – 46.3)		24.6*	(10.3 – 38.9)		34.5	(17.9 – 51.1)		7.9*	(0.6 – 15.1)		4.2*	(0.4 – 7.9)			
<b>2009</b>	18.5*	(8.9 – 28.1)		50.9	(41.3 – 60.4)		19.6	(13.2 – 26.1)		3.6*	(1.0 – 6.3)		7.4*	(3.2 – 11.5)			
<b>2010</b>	14.3*	(5.6 – 23.0)		51.8	(37.0 – 66.6)		25.1*	(12.3 – 37.9)		3.8*	(0.2 – 7.3)		N/A	(N/A – N/A)			
<b>2011</b>	16.5*	(3.6 – 29.5)		24.4*	(7.9 – 40.9)		21.7*	(6.0 – 37.5)		21.4*	(4.9 – 37.9)		15.9*	(0.8 – 31.0)			
<b>2012</b>	14.4*	(5.3 – 23.6)		43.2	(30.0 – 56.4)		27.5	(14.3 – 40.6)		9.3*	(2.2 – 16.3)		N/A	(N/A – N/A)			
<b>2013</b>	9.3*	(2.7 – 16.0)		44.7	(28.4 – 60.9)		25.3*	(8.0 – 42.6)		11.2*	(2.7 – 19.8)		9.5*	(1.5 – 17.5)			
<b>2014</b>	17.1*	(3.2 – 30.9)		38.4	(19.8 – 57.0)		26.4*	(9.8 – 43.0)		N/A	(N/A – N/A)		N/A	(N/A – N/A)			
<b>2015</b>	13.9*	(2.7 – 25.1)		38.0	(22.8 – 53.1)		12.7*	(3.3 – 22.0)		25.3*	(8.8 – 41.8)		10.2*	(2.0 – 18.3)			
<b>2016</b>	10.7*	(3.1 – 18.4)		38.3	(23.2 – 53.4)		36.2	(20.9 – 51.5)		N/A	(N/A – N/A)		8.9*	(0.4 – 17.5)			
<b>2017</b>	20.9*	(8.5 – 33.3)		34.8	(21.4 – 48.2)		30.7	(16.7 – 44.8)		8.4*	(1.9 – 14.9)		N/A	(N/A – N/A)			
<b>2018</b>	9.9*	(1.5 – 18.4)		23.0*	(9.3 – 36.6)		28.6*	(14.1 – 43.1)		25.2*	(6.6 – 43.7)		13.3*	(3.9 – 22.8)			
<b>2019</b>	N/A	(N/A – N/A)		34.0*	(9.7 – 58.3)		10.6*	(2.0 – 19.2)		N/A	(N/A – N/A)		N/A	(N/A – N/A)			
<b>2020</b>	N/A	(N/A – N/A)		40.4*	(18.3 – 62.5)		9.5*	(2.2 – 16.8)		28.4*	(8.5 – 48.3)		N/A	(N/A – N/A)			

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

# Chronic health conditions





## 7. Chronic health conditions

Chronic health conditions refer to common persistent health problems that require long term management and can cause a significant burden to children and their families<sup>5</sup>. The chronic conditions in children collected by the HWSS were chosen due to these impacts and the potential to reduce their burden. In the HWSS, chronic conditions were determined by asking parents/carers whether or not a doctor had ever diagnosed their child with a number of common health conditions. This section will focus on the following chronic conditions:

- Type 1 diabetes
- Asthma
- Injury

### 7.1 Type 1 diabetes

Diabetes is a condition where the body is unable to maintain normal blood glucose levels, due to poor insulin production or insulin resistance. Type 1 diabetes is the most common form of diabetes found in children and is a lifelong autoimmune disease whereby the body attacks and destroys the pancreatic cells responsible for producing insulin. Type 1 diabetes contributes significantly to childhood chronic disease burden, requiring careful management of blood sugar levels through diet, physical activity and insulin treatment.<sup>6</sup>



Parents/carers have been asked each year since 2002 whether their child has been diagnosed with type 1 diabetes. In 2020, too few respondents indicated that their child had been diagnosed with type 1 diabetes to calculate reliable population estimates.

Low prevalence rates of type 1 diabetes have also been reported by the National Diabetes Services Scheme (NDSS), with only 0.2% of children aged 0 to 19 years in Western Australia recorded as having type 1 diabetes in the NDSS Registration Database in July 2021.<sup>7</sup>

### 7.2 Asthma

Asthma is a common chronic lung condition defined clinically by chronic inflammation of the airways and can cause severe respiratory symptoms (e.g. wheezing, coughing, chest tightness and difficulty breathing). Environmental factors (especially tobacco smoke), infection, physical activity and genetics can trigger an asthmatic episode. While asthma can be managed with preventive and episodic treatment, it can have a significant impact on the physical and emotional wellbeing of children and their families. Asthma is one of the most common chronic conditions among children, affecting approximately 10% of the Australian child population (0 to 14 years) based on the 2017–18 National Health Survey.<sup>5</sup>



Parents/carers were asked whether a doctor had ever told them that their child had asthma (lifetime prevalence) and whether their child had symptoms or had taken treatment for asthma during the past 12 months.

Approximately 11.5% of WA children have experienced asthma in their lifetime, and in 2020 8.5% of WA children had a current diagnosis of asthma.

The WA prevalence of childhood asthma is shown in **Table 9**. Estimates for the lifetime prevalence and 12-month period prevalence of asthma were similar among children aged 5 to 9 years and 10 to 15 years, and among boys and girls.

**Table 9: Prevalence of children with asthma, 0 to 15 years, HWSS 2020**

Age Group	Lifetime (a)		Period (b)	
	%	95% CI	%	95% CI
0 to 4 yrs	N/A	(N/A – N/A)	N/A	(N/A – N/A)
5 to 9 yrs	13.3*	(6.0 – 20.6)	12.7*	(5.4 – 20.0)
10 to 15 yrs	17.4	(11.9 – 22.9)	9.8	(5.5 – 14.1)
<b>Sex</b>				
Boys	10.0	(5.4 – 14.6)	7.6*	(3.5 – 11.7)
Girls	13.1	(7.0 – 19.3)	9.5	(3.9 – 15.2)
<b>Children</b>	<b>11.5</b>	<b>(7.7 – 15.3)</b>	<b>8.5</b>	<b>(5.1 – 12.0)</b>

(a) Children whose parent/carer reported they had been told by a doctor or nurse that the child had asthma (ever).

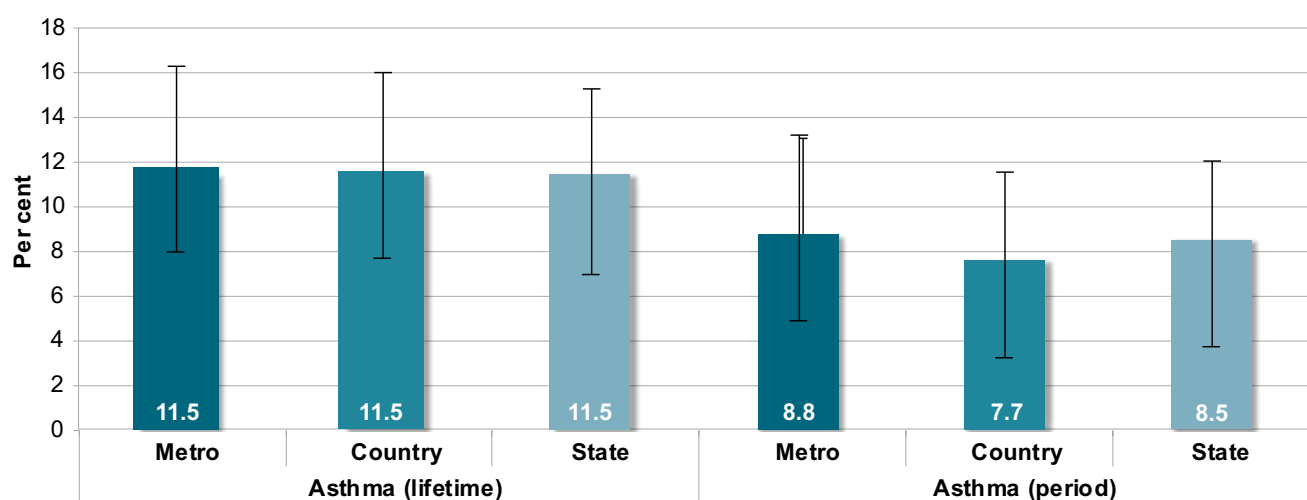
(b) Children whose parent/carer reported the child has had symptoms of, or treatment for, asthma in the last 12 months.

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

**Figure 3** shows the prevalence of asthma among children by geographic area of residence. Estimates for the lifetime prevalence and 12-month period prevalence of asthma were similar for WA children living in metro and country areas.

**Figure 3: Prevalence of children with asthma, by geographic area, 0 to 15 years, HWSS 2020**



The annual prevalence estimates of childhood asthma are shown in **Table 10** and **Figure 4**. The lifetime prevalence and 12-month period prevalence of asthma estimates for 2020 were similar to those for 2005.

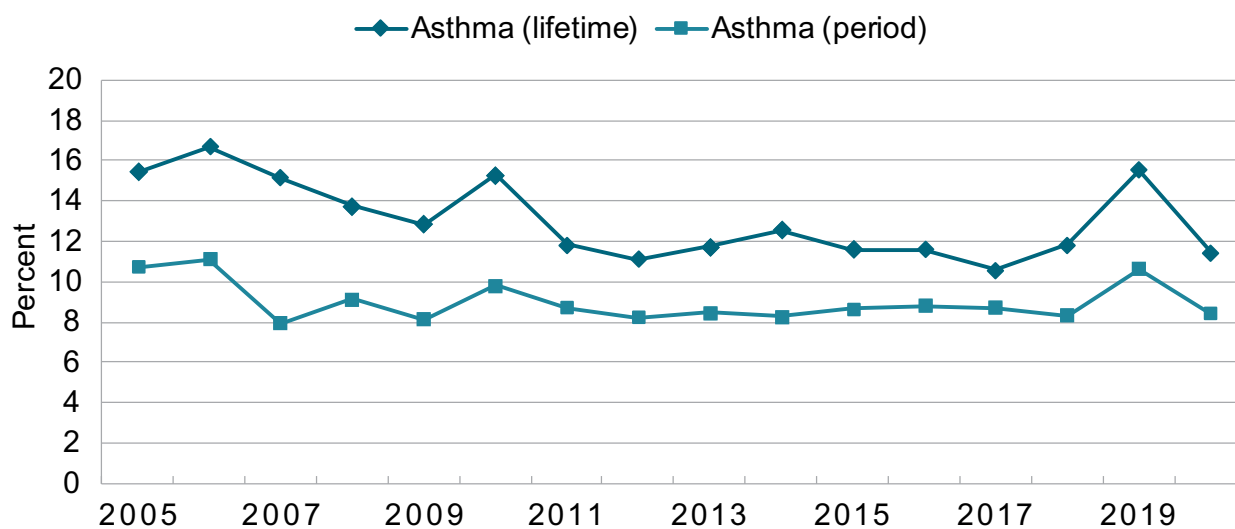
**Table 10: Prevalence of children with asthma, 0 to 15 years, HWSS 2005–20**

	Lifetime (a)		Period (b)	
	%	95% CI	%	95% CI
2005	15.4	(12.7 – 18.2)	10.7	(8.4 – 13.1)
2006	16.7	(14.1 – 19.3)	11.1	(8.9 – 13.4)
2007	15.2	(11.7 – 18.7)	7.9	(5.5 – 10.4)
2008	13.7	(10.5 – 17.0)	9.1	(6.3 – 12.0)
2009	12.8	(11.1 – 14.6)	8.1	(6.6 – 9.6)
2010	15.3	(12.3 – 18.3)	9.8	(7.3 – 12.3)
2011	11.8	(8.7 – 14.9)	8.7	(5.9 – 11.5)
2012	11.1	(8.5 – 13.7)	8.2	(5.9 – 10.6)
2013	11.7	(8.9 – 14.5)	8.5	(6.1 – 10.9)
2014	12.6	(9.4 – 15.8)	8.3	(5.6 – 10.9)
2015	11.6	(8.6 – 14.5)	8.7	(6.1 – 11.3)
2016	11.6	(8.5 – 14.7)	8.8	(6.0 – 11.7)
2017	10.6	(7.9 – 13.3)	8.7	(6.2 – 11.3)
2018	11.8	(8.5 – 15.2)	8.3	(5.4 – 11.3)
2019	15.5	(11.5 – 19.5)	10.6	(7.2 – 14.1)
2020	11.5	(7.7 – 15.2)	8.4	(5.0 – 11.8)

(a) Children whose parent/carer reported they had been told by a doctor or nurse that the child had asthma (ever).

(b) Children whose parent/carer reported the child has had symptoms of, or treatment for, asthma in the last 12 months.

**Figure 4: Prevalence of children with asthma, 0 to 15 years, HWSS 2005–20**



## 7.3 Injury

Injury is a leading and often preventable cause of hospitalisation and death in Australia.<sup>8</sup> Parents/carers were asked whether their child had an injury in the past 12 months that required treatment from a health professional (Table 11).

It is estimated that 110,184 children aged 0 to 15 years (20.3%) had sustained an injury in the past 12 months that required treatment from a health professional.



Approximately one in five children in Western Australia had sustained an injury in the past 12 months.

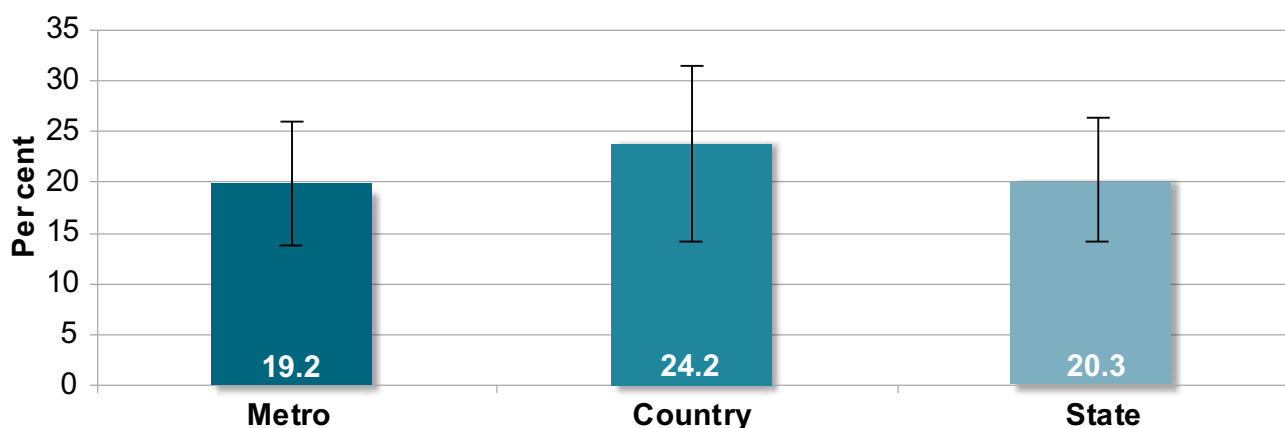
**Table 11: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, 0 to 15 years, HWSS 2020**

	Children with injuries	
	%	95% CI
<b>Age Group</b>		
0 to 4 yrs	N/A	(N/A – N/A)
5 to 9 yrs	19.6	(10.9 – 28.2)
10 to 15 yrs	28.5	(21.8 – 35.2)
<b>Sex</b>		
Boys	23.6	(15.7 – 31.4)
Girls	16.8*	(8.5 – 25.2)
<b>Children</b>	<b>20.3</b>	<b>(14.7 – 25.9)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Figure 5 shows the proportion of children who had an injury in the past 12 months that required treatment by a health professional, by location of residence. The proportion of children injured in the past 12 months that required treatment from a health professional was similar in metro and country areas.

**Figure 5: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, by location, 0 to 15 years, HWSS 2020**

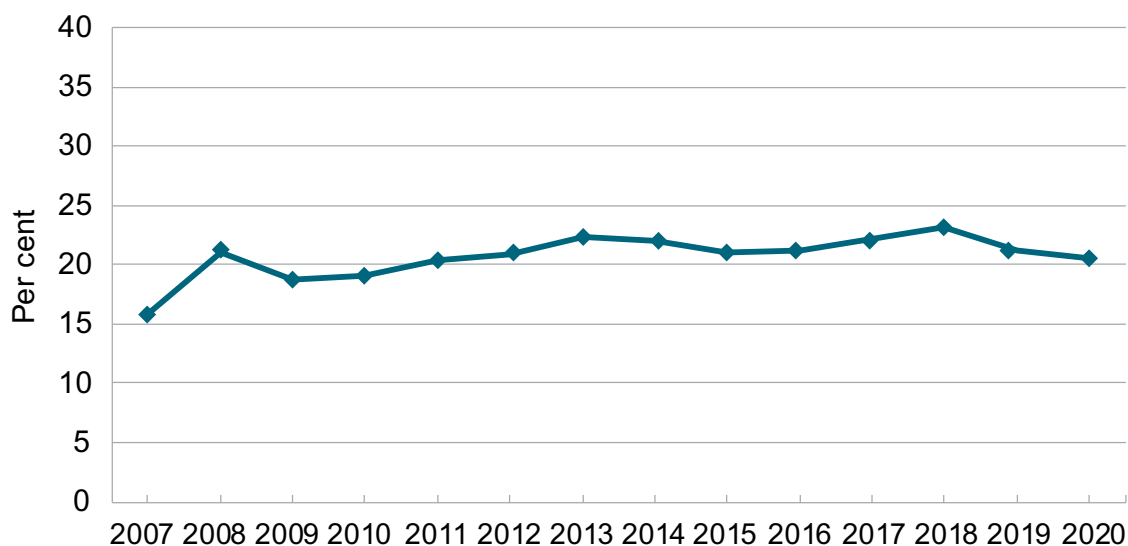


The annual prevalence estimates for WA children aged 0 to 15 years sustaining injuries requiring treatment from a health professional in the past 12 months are shown in **Table 12** and **Figure 6**. In 2020, the proportion of children aged 0 to 15 years who sustained an injury in the past 12 months was similar to 2007.

**Table 12: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, 0 to 15 years, HWSS 2007–20**

Children with injuries		
	%	95% CI
2007	15.9	(11.3 – 21.8)
2008	21.1	(17.1 – 20.4)
2009	18.8	(16.5 – 25.0)
2010	19.1	(15.6 – 21.0)
2011	20.3	(16.5 – 84.4)
2012	20.9	(17.3 – 83.5)
2013	22.4	(18.2 – 26.5)
2014	22.0	(17.7 – 81.8)
2015	21.1	(17.3 – 26.2)
2016	21.2	(17.4 – 24.8)
2017	22.1	(17.7 – 82.6)
2018	23.2	(17.8 – 26.5)
2019	21.2	(16.3 – 82.2)
2020	20.5	(14.9 – 26.0)

**Figure 6: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, 0 to 15 years, HWSS 2007–20**



The mean number of injuries that required treatment from a health professional in the past 12 months is shown in **Table 13** and is reported to two decimal places given their small size. It is possible to have a mean number of injuries that is less than one as the majority of children do not experience any injury in the previous year. The mean number of injuries for children aged 0 to 15 years in 2020 was 0.29.

The mean number of injuries that required treatment from a health professional in the past 12 months was similar among age groups and among boys and girls.

**Table 13: Mean number of injuries requiring treatment from a health professional, 0 to 15 years, HWSS 2020**

	Number of injuries	
	mean	95% CI
<b>Age Group</b>		
0 to 4 yrs	0.14*	(0.01 – 0.27)
5 to 9 yrs	0.26*	(0.13 – 0.40)
10 to 15 yrs	0.44	(0.31 – 0.56)
<b>Sex</b>		
Boys	0.37	(0.23 – 0.50)
Girls	0.21	(0.11 – 0.30)
<b>Children</b>	0.29	(0.21 – 0.37)

\* Mean estimate has an RSE between 25%-50% and should be used with caution.

The mean number of injuries that required treatment from a health professional in the past 12 months since 2007 is shown in **Table 14**. The mean number of injuries for children aged 0 to 15 years that required treatment from a health professional is similar in 2020 compared with 2007.

**Table 14: Mean number of injuries, 0 to 15 years, HWSS 2007–20**

	Number of injuries	
	mean	95% CI
2007	0.24	(0.18 – 0.29)
2008	0.30	(0.23 – 0.37)
2009	0.25	(0.22 – 0.29)
2010	0.28	(0.21 – 0.34)
2011	0.34	(0.26 – 0.42)
2012	0.34	(0.26 – 0.42)
2013	0.34	(0.26 – 0.42)
2014	0.40	(0.23 – 0.57)
2015	0.33	(0.25 – 0.41)
2016	0.31	(0.25 – 0.38)
2017	0.32	(0.25 – 0.39)
2018	0.32	(0.24 – 0.39)
2019	0.33	(0.24 – 0.42)
2020	0.29	(0.21 – 0.37)

Lifestyle  
behaviours



# 8. Lifestyle behaviours

There are many important influences including biological, social, community and family factors that can impact upon childhood development and behaviours into adulthood.<sup>6</sup> These factors may have a positive effect on health (such as being breastfed or having a high consumption of fruit and vegetables), or a negative effect (such as physical inactivity, being exposed to cigarette smoke or unprotected exposure to the sun).<sup>9</sup> These modifiable lifestyle behaviours are also associated with the onset of some physiological risk factors such as overweight and obesity, or chronic conditions such as asthma or some cancers. This section will focus on the following lifestyle behaviours:

- Breastfeeding
- Nutrition, including discretionary foods
- Physical activity and sedentary behaviour
- Sleep.

## 8.1 Breastfeeding

Breastfeeding is an important contributor to infant health, as it promotes the survival, growth, development and health of infants and young children. It helps protect against many conditions, including diarrhoea, respiratory and ear infections as well as obesity and chronic diseases later in life. Australia's national infant feeding guidelines recommend exclusive breastfeeding for infants until six months with the introduction of solid food at around six months and continued breastfeeding until at least twelve months.<sup>10</sup>



In 2011, national breastfeeding indicators were developed to assist with the reporting of breastfeeding prevalence in Australia and meeting the national infant feeding recommendation around exclusive breastfeeding.<sup>11</sup> A total of six indicators were agreed upon, three of which are reported on in this report. Reporting of the selected indicators uses the same age breakdowns as those used in the AIHW national infant feeding survey, where possible.<sup>12</sup>

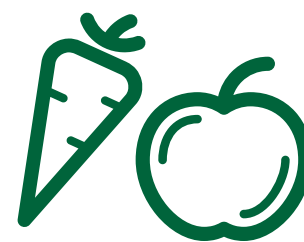
Parents/carers are asked if their child was breastfed, and if so, how long their child received breast milk for, as well as at what age they introduced water, infant formula, liquids other than water and formula, and foods other than liquids. Due to the increased risk of recall bias for parents/carers answering questions on early childhood events on behalf of older children, questions were only asked of parents/carers with children aged less than 5 years at the time of the interview in 2020.

In 2020, there were fewer than 40 respondents with children in this age group who could provide information on breastfeeding. These small numbers result in unreliable estimates on the prevalence of exclusive and predominant breastfeeding in the first 6 months of life as is usually reported in this yearly publication. As such the individual prevalence estimates by month of age for exclusive and predominant breastfeeding are not reported for 2020. Overall, for children aged 0 to 4 years, parents or carers reported that 90% had received some breast-milk in their lifetime.



## 8.2 Nutrition

### 8.2.1 Fruit and Vegetables



Healthy eating in childhood is critical for children’s physical and mental development; it prevents overweight and obesity, promotes quality of life and can also prevent against infection.<sup>6</sup> Choosing healthy foods for infants and young children is important, because food preferences are established early in life. Unhealthy eating in childhood can increase the risk of developing chronic diseases in later life, including coronary heart disease, type 2 diabetes, musculoskeletal disorders, stroke, and some cancers<sup>13</sup> as well as protecting against premature death in adulthood.<sup>6</sup>

The National Health and Medical Research Council 2013 Australian Dietary Guidelines are presented in **Table 15**.<sup>14</sup> Parents/carers were asked to report how many serves of fruit their child usually eats each day, where a serve of fruit is equal to one medium piece, two small pieces or a cup of diced fruit. They were also asked to report how many serves of vegetables their child usually eats each day, where a serve of vegetables is equal to half a cup of cooked vegetables or one cup of salad. As the consumption of half serves is not captured in the questions currently asked in the HWSS, for the purposes of reporting, the recommended number of serves are rounded down to the nearest whole number. The values reported by parents/carers on their child’s usual fruit and vegetable consumption were then compared against the NHMRC Guidelines.

**Table 15: NHMRC 2013 Australian Dietary Guidelines for fruit and vegetable daily consumption and HWSS reporting definitions, children 2 to 15 years**

	Minimum recommended serves of fruit per day	Minimum recommended serves of vegetables per day		Minimum serves of fruit and vegetables per day for HWSS reporting	
	Children	Girls	Boys	Fruit	Vegetables
2 to 3 years	1	2.5	2.5	1	2
4 to 8 years	1.5	4.5	4.5	1	4
9 to 11 years	2	5	5	2	5
12 to 15 years	2	5	5.5	2	5

**Table 16** shows the prevalence of children aged 2 to 15 years, by the number of serves of fruit they usually eat daily. In 2020, over two-thirds of children aged 2 to 15 years (69.8%) were eating two or more serves of fruit daily. The prevalence of eating two or more serves of fruit daily was similar among age groups and among boys and girls.

Approximately two-thirds of children of Western Australia consume two or more serves of fruit every day.

**Table 16: Prevalence of children by number of serves of fruit consumed daily, 2 to 15 years, HWSS 2020**

	Doesn't eat fruit/eats less than one serve of fruit daily		Eats one serve of fruit daily		Eats two or more serves of fruit daily	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
2 to 3 yrs	0.0	(0.0 – 0.0)	N/A	(N/A – N/A)	94.2	(85.5 – 100.0)
4 to 8 yrs	N/A	(N/A – N/A)	12.8*	(5.0 – 20.5)	80.4	(69.5 – 91.2)
9 to 15 yrs	7.1*	(3.5 – 10.7)	32.7	(25.4 – 40.0)	60.2	(52.7 – 67.7)
<b>Sex</b>						
Boys	7.2*	(2.7 – 11.8)	22.8	(15.2 – 30.4)	69.9	(61.3 – 78.5)
Girls	N/A	(N/A – N/A)	24.3	(16.3 – 32.4)	69.7	(60.5 – 79.0)
<b>Children</b>	<b>6.6*</b>	<b>(2.9 – 10.4)</b>	<b>23.6</b>	<b>(18.0 – 29.1)</b>	<b>69.8</b>	<b>(63.5 – 76.1)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.  
 N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

**Table 17** shows the prevalence of children 2 to 15 years, by the reported number of serves of vegetables they usually eat daily. In 2020, 21.9% of children aged 2 to 15 years were eating one serve of vegetables daily and 35.9% were eating two serves of vegetables daily. The prevalence of daily number of serves of vegetables consumed was similar among age groups and among boys and girls.

**Table 17: Prevalence of children by number of serves of vegetables consumed daily, 2 to 15 years, HWSS 2020**

	Doesn't eat vegetables/eats less than one serve of vegetables daily		Eats one serve of vegetables daily		Eats two serves of vegetables daily		Eats three serves of vegetables daily	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
2 to 3 yrs	N/A	(N/A – N/A)	64.4	(N/A – N/A)	N/A	(N/A – N/A)	N/A	(N/A – N/A)
4 to 8 yrs	N/A	(N/A – N/A)	16.2*	(7.2 – 25.2)	41.0	(25.7 – 56.3)	20.2	(10.2 – 30.2)
9 to 15 yrs	6.2*	(2.2 – 10.2)	21.2	(15.1 – 27.3)	35.0	(27.7 – 42.3)	21.0	(14.8 – 27.3)
<b>Sex</b>								
Boys	7.1*	(2.3 – 11.9)	19.2	(12.0 – 26.3)	37.0	(25.9 – 48.2)	21.8	(14.7 – 29.0)
Girls	N/A	(N/A – N/A)	24.7	(15.8 – 33.6)	34.7	(25.4 – 44.1)	18.3	(10.5 – 26.1)
<b>Children</b>	<b>4.5*</b>	<b>(1.9 – 7.1)</b>	<b>21.9</b>	<b>(16.2 – 27.6)</b>	<b>35.9</b>	<b>(28.6 – 43.2)</b>	<b>20.1</b>	<b>(14.8 – 25.4)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.  
 N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The prevalence of children aged 2 to 15 years meeting the 2013 guidelines for fruit and vegetable consumption is shown in **Table 18**. For children aged 2 to 15 years, 75% ate sufficient daily serves of fruit, while only 12.2% ate sufficient daily serves of vegetables, for their age and sex. Children aged 9 to 15 years were significantly less likely to

While three in four children consume sufficient serves of fruit daily, only one in ten children consumes sufficient serves of vegetables every day.

eat sufficient daily serves of fruit than children aged 2 to 3 years and 4 to 8 years (60.2% compared with 100% and 93.1%).

**Table 18: Prevalence of children eating sufficient serves of fruit and/or vegetables, 2 to 15 years, HWSS 2020**

	Eats sufficient daily serves of fruit for age and sex <sup>^</sup>		Eats sufficient daily serves of vegetables for age and sex <sup>^</sup>	
	%	95% CI	%	95% CI
<b>Age Group</b>				
2 to 3 yrs	100.0	(100.0 – 100.0)	31.8	(6.9 – 56.8)
4 to 8 yrs	93.1	(84.8 – 100.0)	20.4	(6.7 – 34.1)
9 to 15 yrs	60.2	(52.7 – 67.7)	4.6	(2.1 – 7.2)
<b>Sex</b>				
Boys	74.9	(67.0 – 82.8)	7.8	(3.4 – 12.2)
Girls	75.0	(66.4 – 83.7)	16.8	(6.4 – 27.2)
<b>Children</b>	75.0	(69.1 – 80.8)	12.2	(6.4 – 18.0)

<sup>^</sup> For reporting purposes guidelines that include half serves have been rounded down to the nearest whole number.

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

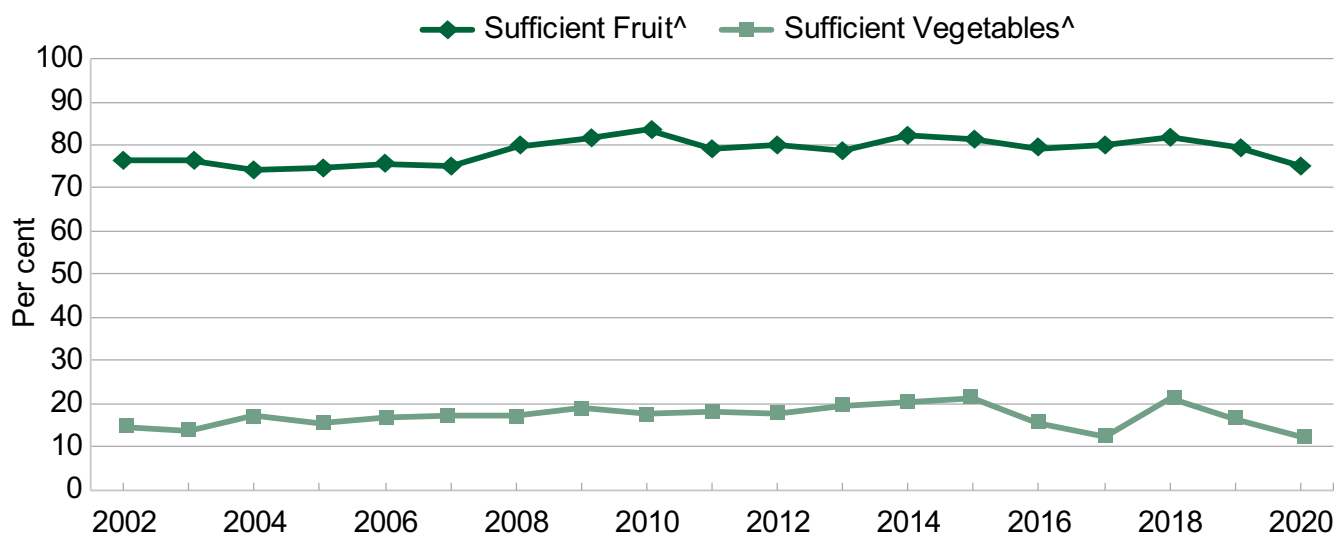
The annual prevalence of children aged 2 to 15 years consuming sufficient daily serves of fruit and vegetables based on the 2013 Australian Dietary Guidelines are shown in **Table 19** and **Figure 7**.

**Table 19: Prevalence of children eating sufficient serves of fruit and/or vegetables, 2 to 15 years, HWSS 2020**

	Eats sufficient daily serves of fruit for age and sex <sup>^</sup>		Eats sufficient daily serves of vegetables for age and sex <sup>^</sup>	
	%	95% CI	%	95% CI
<b>2002</b>	76.5	(73.4 – 79.6)	14.3	(11.5 – 17.2)
<b>2003</b>	76.4	(73.5 – 79.4)	13.6	(11.1 – 16.0)
<b>2004</b>	74.2	(69.4 – 79.1)	17.0	(12.4 – 21.7)
<b>2005</b>	74.8	(71.2 – 78.3)	15.6	(12.8 – 18.4)
<b>2006</b>	75.7	(72.7 – 78.7)	16.5	(13.6 – 19.5)
<b>2007</b>	75.2	(70.7 – 79.7)	17.2	(13.2 – 21.2)
<b>2008</b>	79.5	(75.9 – 83.1)	17.0	(12.9 – 21.2)
<b>2009</b>	81.2	(79.2 – 83.2)	18.9	(16.1 – 21.6)
<b>2010</b>	83.3	(80.4 – 86.3)	17.7	(14.2 – 21.1)
<b>2011</b>	79.0	(75.1 – 83.0)	17.9	(14.0 – 21.8)
<b>2012</b>	80.1	(76.6 – 83.6)	17.8	(14.0 – 21.6)
<b>2013</b>	78.5	(74.7 – 82.4)	19.2	(14.8 – 23.6)
<b>2014</b>	82.4	(78.7 – 86.0)	20.2	(15.5 – 24.9)
<b>2015</b>	81.2	(77.6 – 84.9)	21.0	(16.5 – 25.6)
<b>2016</b>	79.0	(75.1 – 82.9)	15.6	(11.9 – 19.4)
<b>2017</b>	79.8	(76.2 – 83.5)	12.4	(8.8 – 16.0)
<b>2018</b>	81.8	(77.9 – 85.7)	21.3	(14.8 – 27.8)
<b>2019</b>	79.4	(74.5 – 84.2)	16.4	(9.7 – 23.1)
<b>2020</b>	75.0	(69.4 – 80.7)	12.4	(6.7 – 18.1)

<sup>^</sup> For reporting purposes, guidelines that include half serves have been rounded down to the nearest whole number.

**Figure 7: Prevalence of children eating sufficient serves of fruit and vegetables, 2013**  
**Australian Dietary Guidelines for fruit and vegetable consumption, 2 to 15 years,**  
**HWSS 2002–20**



^ For reporting purposes, guidelines that include half serves have been rounded down to the nearest whole number.

The annual mean serves of fruit and vegetables eaten daily by children aged 2 to 15 years is shown in **Table 20** and are reported to two decimal places given their small size. The mean number of serves of fruit and vegetables consumed daily by children aged 2 to 15 years is similar in 2020 compared with 2002.

**Table 20: Mean daily fruit and vegetable serves, 2 to 15 years, HWSS 2002–20**

	Fruit		Vegetables	
	mean	95% CI	mean	95% CI
2002	1.98	(1.88 – 2.07)	2.10	(1.98 – 2.21)
2003	1.99	(1.90 – 2.07)	2.02	(1.93 – 2.11)
2004	1.88	(1.75 – 2.00)	2.12	(1.97 – 2.26)
2005	1.91	(1.82 – 2.00)	2.31	(2.21 – 2.41)
2006	1.95	(1.85 – 2.04)	2.17	(2.07 – 2.27)
2007	1.99	(1.86 – 2.12)	2.22	(2.09 – 2.36)
2008	2.02	(1.92 – 2.12)	2.21	(2.09 – 2.34)
2009	2.11	(2.04 – 2.17)	2.35	(2.27 – 2.42)
2010	2.10	(2.00 – 2.19)	2.30	(2.19 – 2.41)
2011	1.94	(1.84 – 2.04)	2.39	(2.25 – 2.53)
2012	2.02	(1.92 – 2.12)	2.25	(2.14 – 2.35)
2013	1.98	(1.87 – 2.09)	2.24	(2.12 – 2.37)
2014	2.06	(1.94 – 2.18)	2.29	(2.16 – 2.42)
2015	2.08	(1.97 – 2.19)	2.38	(2.24 – 2.52)
2016	2.00	(1.90 – 2.11)	2.19	(2.06 – 2.31)
2017	1.94	(1.83 – 2.04)	2.07	(1.96 – 2.18)
2018	2.03	(1.91 – 2.14)	2.23	(2.09 – 2.38)
2019	2.00	(1.82 – 2.17)	2.18	(2.02 – 2.33)
2020	2.03	(1.89 – 2.17)	2.32	(2.15 – 2.50)

## 8.2.2 Milk



Milk is an importance source of nutrition for children as it contains calcium as well as other vitamins and minerals essential for growth and development. The 2013 NHMRC Australian Dietary Guidelines recommend children aged 2 years and over should consume mostly fat reduced varieties of milk to limit their intake of saturated fat over time.<sup>15</sup>

Parents/carers of children aged 2 years and over were asked what type of milk their child usually consumes. In 2020, almost two-thirds (63.5%) of children aged 2 to 15 years usually consumed full fat or whole milk.

Estimates for the type of milk usually consumed by children were similar among boys and girls, while the proportion of full fat milk consumed by children aged 10 to 15 years was significantly lower compared with children aged 5 to 9 years (55.1% compared with 73.2%) (Table 21).

Approximately 55.1% of children aged 10-15 years consumed full fat milk, compared with 73.2% of children aged 5 to 9 years.

**Table 21: Prevalence of children by type of milk usually consumed, 2 to 15 years, HWSS 2020**

	Full fat/whole milk		Low/reduced fat/skim milk		Other milk		Don't use milk	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
2 to 4 yrs	63.1*	(30.0 – 96.2)	N/A	(N/A – N/A)	N/A	(N/A – N/A)	N/A	(N/A – N/A)
5 to 9 yrs	73.2	(62.9 – 83.6)	15.9*	(7.3 – 24.4)	N/A	(N/A – N/A)	9.0*	(2.1 – 16.0)
10 to 15 yrs	55.1	(47.6 – 62.6)	29.8	(23.1 – 36.5)	7.1*	(3.0 – 11.2)	8.0*	(3.4 – 12.7)
<b>Sex</b>								
Boys	60.9	(49.8 – 71.9)	23.2	(15.5 – 31.0)	3.5*	(0.6 – 6.3)	12.4*	(0.5 – 24.4)
Girls	66.2	(57.2 – 75.2)	19.3	(12.6 – 26.0)	5.2*	(1.6 – 8.8)	9.3*	(3.5 – 15.2)
<b>Children</b>	<b>63.5</b>	<b>(56.2 – 70.8)</b>	<b>21.3</b>	<b>(16.1 – 26.4)</b>	<b>4.3*</b>	<b>(2.0 – 6.6)</b>	<b>10.9*</b>	<b>(4.1 – 17.7)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

Annual prevalence estimates for the type of milk usually consumed are shown in **Table 22**. The proportion of children aged 2 to 15 years consuming full fat/whole milk is similar in 2002 compared with 2020.

**Table 22: Prevalence of children by type of milk usually consumed, 2 to 15 years, HWSS 2002–20**

	Full fat /whole milk		Low/reduced fat/skim milk		Other milk		Don't use milk	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2002	69.7	(66.1 – 73.2)	28.7	(25.2 – 32.1)	N/A	(N/A – N/A)	1.5*	(0.6 – 2.3)
2003	69.6	(66.3 – 72.9)	29.8	(26.5 – 33.1)	0.4*	(0.0 – 0.8)	0.2*	(0.0 – 0.5)
2004	72.9	(68.1 – 77.7)	22.5	(18.1 – 27.0)	1.9*	(0.5 – 3.4)	2.7*	(0.9 – 4.4)
2005	62.9	(59.0 – 66.7)	33.7	(30.0 – 37.5)	1.1*	(0.3 – 2.0)	2.2*	(1.1 – 3.3)
2006	60.6	(56.4 – 64.9)	36.3	(32.1 – 40.4)	1.2*	(0.4 – 2.1)	1.9*	(0.6 – 3.2)
2007	64.1	(59.1 – 69.0)	33.1	(28.3 – 37.9)	1.4*	(0.1 – 2.8)	1.4*	(0.5 – 2.3)
2008	65.1	(60.5 – 69.8)	31.7	(27.2 – 36.1)	1.3*	(0.0 – 2.5)	1.9*	(0.3 – 3.5)
2009	60.1	(57.1 – 63.0)	35.7	(32.9 – 38.5)	2.2	(1.2 – 3.3)	2.0	(1.4 – 2.6)
2010	56.8	(52.3 – 61.3)	39.1	(34.7 – 43.4)	1.6*	(0.4 – 2.8)	2.5*	(1.1 – 3.9)
2011	56.9	(51.9 – 62.0)	37.5	(32.6 – 42.4)	3.6*	(1.4 – 5.9)	1.9*	(0.5 – 3.3)
2012	55.5	(51.0 – 60.1)	39.1	(34.7 – 43.5)	2.1*	(0.9 – 3.3)	3.2*	(1.5 – 4.9)
2013	57.7	(52.7 – 62.7)	37.3	(32.5 – 42.1)	1.4*	(0.2 – 2.7)	3.6*	(1.7 – 5.5)
2014	52.8	(47.4 – 58.2)	40.2	(34.9 – 45.5)	4.3*	(1.9 – 6.6)	2.7*	(1.0 – 4.3)
2015	56.3	(51.3 – 61.3)	36.0	(31.2 – 40.9)	4.3	(2.2 – 6.3)	3.4*	(1.6 – 5.2)
2016	62.4	(57.6 – 67.1)	31.4	(26.9 – 35.8)	3.6*	(1.6 – 5.6)	2.6*	(1.0 – 4.2)
2017	66.7	(61.9 – 71.4)	27.0	(22.6 – 31.4)	3.4*	(1.7 – 5.2)	3.0*	(1.2 – 4.7)
2018	57.2	(50.7 – 63.7)	32.7	(26.5 – 38.9)	4.3*	(2.0 – 6.5)	5.8	(3.0 – 8.6)
2019	72.9	(67.3 – 78.5)	17.6	(13.4 – 21.7)	2.1*	(0.5 – 3.7)	7.4*	(3.5 – 11.3)
2020	63.4	(56.3 – 70.5)	21.4	(16.4 – 26.4)	4.4*	(2.1 – 6.7)	10.8*	(4.2 – 17.3)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

### 8.3 Discretionary foods

In 2020, new questions relating to the child's consumption of discretionary foods were added to the HWSS. The discretionary foods included:

- Fast food (burgers, pizza, chicken or chips from fast food outlets)
- Potato chips (hot chips, french-fries, wedges, hash browns or fried potatoes)
- Sweet snacks (cakes, biscuits, doughnuts, muffins, pastries or muesli bars)
- Salty snacks (potato crisps or corn chips, crackers or pretzels)
- Sugar sweetened drinks (sugar sweetened soft drinks, energy or sports drinks, or cordial)
- Processed meats (sausages, sausage-rolls, bacon, ham, salami or other cold meats).

### 8.3.1 Fast Food

Parents/carers were asked how many times per day, per week, or per month on average their child ate fast food meals, such as burgers, pizza, chicken or chips from fast food outlets. The prevalence of children by how often they eat fast food meals per week is shown in **Table 23**.



In 2020, it was estimated that almost a quarter of children aged 1 to 15 years (24.4%) never or rarely consumed meals from fast food outlets. The estimated prevalence of fast food consumption was similar among different age groups and among boys and girls.

Approximately two in five of children in Western Australia consume fast food once or twice a week.

**Table 23: Prevalence of children by consumption of meals from fast food outlets per week, 1 to 15 years, HWSS 2020**

	Never or rarely		Less than once a week		Once or twice a week		Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
1 to 4 yrs	33.0*	(9.7 – 56.3)	31.8*	(8.0 – 55.7)	34.8*	(8.4 – 61.2)	N/A	(N/A – N/A)
5 to 9 yrs	24.8	(13.8 – 35.7)	33.9	(23.2 – 44.6)	40.2	(28.9 – 51.5)	N/A	(N/A – N/A)
10 to 15 yrs	18.5	(12.7 – 24.3)	33.0	(26.1 – 40.0)	42.8	(35.3 – 50.4)	5.6*	(1.5 – 9.8)
<b>Sex</b>								
Boys	20.7*	(9.6 – 31.8)	33.2	(21.9 – 44.6)	41.6	(29.8 – 53.4)	4.4*	(0.9 – 8.0)
Girls	28.0	(18.1 – 38.0)	32.8	(22.6 – 43.0)	38.1	(26.4 – 49.9)	N/A	(N/A – N/A)
<b>Children</b>	24.4	(17.0 – 31.8)	33.0	(25.4 – 40.7)	39.9	(31.6 – 48.1)	2.7*	(0.8 – 4.6)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The annual prevalence estimates for the number of times children consume fast food per week for 2002 to 2020 are shown in **Table 24**. The proportion of children who never or rarely consume meals from fast food restaurants was similar in 2009 (21.2%) and 2020 (24.5%).

**Table 24: Prevalence of children by consumption of meals from fast food outlets per week, 1 to 15 years, HWSS 2002–20**

	Never or rarely		Less than once a week		Once or twice a week		Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2009	21.2	(18.3 – 24.0)	36.1	(33.1 – 39.1)	40.8	(37.9 – 43.7)	2.0*	(1.0 – 3.0)
2010	18.4	(15.1 – 21.6)	40.7	(36.3 – 45.0)	38.3	(34.0 – 42.5)	2.7	(1.4 – 4.0)
2011	23.5	(19.1 – 28.0)	35.9	(31.1 – 40.7)	38.6	(33.8 – 43.4)	2.0*	(0.5 – 3.5)
2012	23.1	(19.3 – 26.9)	36.7	(32.5 – 41.0)	37.9	(33.5 – 42.3)	2.3*	(0.9 – 3.6)
2013	23.6	(18.8 – 28.4)	32.8	(28.2 – 37.4)	40.8	(35.8 – 45.8)	2.8*	(0.9 – 4.8)
2014	25.0	(20.5 – 29.5)	43.5	(38.1 – 48.9)	30.0	(25.2 – 34.7)	1.5*	(0.3 – 2.7)
2015	24.5	(20.3 – 28.7)	41.4	(36.4 – 46.3)	33.1	(28.6 – 37.7)	1.0*	(0.3 – 1.6)
2016	29.5	(25.0 – 34.0)	36.0	(31.3 – 40.7)	33.0	(28.5 – 37.5)	1.4*	(0.3 – 2.5)
2017	28.5	(23.8 – 33.3)	34.7	(29.5 – 40.0)	33.8	(29.1 – 38.5)	2.9*	(0.9 – 5.0)
2018	27.8	(21.3 – 34.2)	33.2	(26.9 – 39.4)	37.5	(31.6 – 43.3)	N/A	(N/A – N/A)
2019	36.1	(29.1 – 43.1)	30.5	(23.7 – 37.3)	32.6	(26.4 – 38.9)	N/A	(N/A – N/A)
2020	24.5	(17.3 – 31.7)	33.3	(25.8 – 40.7)	39.5	(31.4 – 47.6)	2.7*	(0.8 – 4.6)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

### 8.3.2 Potato chips

Parents/carers were asked how often on average their child ate hot chips, french-fries, wedges, hash browns or fried potatoes. The prevalence of children by how often they eat chips per week is shown in **Table 25**.

In 2020, an estimated one in five children aged 1 to 15 years (19.8%) never or rarely ate potato chips. The estimated prevalence of the frequency of eating chips per week was similar among different age groups and among boys and girls.



Approximately two in five children in Western Australia consume potato chips once or twice a week.

**Table 25: Prevalence of children by consumption of hot chips, french-fries, wedges, hash browns or fried potatoes per week, 1 to 15 yrs, HWSS 2020**

	Never or rarely		Less than once a week		Once or twice a week		Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
1 to 4 yrs	29.2*	(6.2 – 52.2)	N/A	(N/A – N/A)	42.0*	(16.0 – 67.9)	N/A	(N/A – N/A)
5 to 9 yrs	19.5*	(9.1 – 29.9)	35.0	(24.4 – 45.7)	40.6	(29.2 – 51.9)	4.9*	(0.7 – 9.1)
10 to 15 yrs	14.0	(8.8 – 19.2)	28.9	(22.2 – 35.6)	46.4	(38.8 – 54.0)	10.7*	(5.6 – 15.8)
<b>Sex</b>								
Boys	15.5*	(4.5 – 26.5)	29.9	(18.7 – 41.0)	46.1	(34.2 – 58.0)	8.6*	(3.9 – 13.2)
Girls	24.1	(14.5 – 33.7)	29.3	(19.3 – 39.3)	40.4	(28.8 – 52.0)	6.2*	(1.4 – 11.0)
<b>Children</b>	<b>19.8</b>	<b>(12.6 – 27.0)</b>	<b>29.6</b>	<b>(22.1 – 37.1)</b>	<b>43.3</b>	<b>(35.0 – 51.5)</b>	<b>7.4</b>	<b>(4.0 – 10.7)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.



### 8.3.3 Sweet snacks



Parents/carers were asked how often their child ate cakes, biscuits, doughnuts, muffins, pastries or muesli bars. The prevalence of children by how often they eat sweet snacks per week is shown in **Table 26**.

In 2020, it was estimated that 19.8% of children aged 1 to 15 years never or rarely ate sweet snacks. The estimated prevalence of eating sweet snacks was similar among different age groups and among boys and girls.

More than 55% of children aged 1 to 15 years in Western Australia consume sweet snacks three or more times per week.

**Table 26: Prevalence of children by consumption of sweet cakes, biscuits, doughnuts, muffins, pastries or muesli bars per week, 1 to 15 years, HWSS 2020**

Age Group	Never or rarely		Less than once a week		Once or twice a week		Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
1 to 4 yrs	25.4*	(2.4 – 48.5)	N/A	(N/A – N/A)	N/A	(N/A – N/A)	53.7	(27.6 – 79.8)
5 to 9 yrs	15.7*	(5.8 – 25.7)	9.4*	(2.6 – 16.3)	20.7	(11.9 – 29.5)	54.2	(42.5 – 65.8)
10 to 15 yrs	9.1	(4.9 – 13.3)	5.7*	(2.2 – 9.2)	26.9	(19.9 – 33.9)	58.3	(50.7 – 65.8)
<b>Sex</b>								
Boys	8.0*	(3.0 – 13.1)	29.9	(N/A – N/A)	19.9	(12.8 – 27.0)	61.1	(49.5 – 72.8)
Girls	23.1*	(10.7 – 35.6)	6.3*	(2.3 – 10.2)	20.4	(12.6 – 28.3)	50.2	(38.7 – 61.7)
<b>Children</b>	19.8	(8.4 – 22.7)	8.6*	(2.7 – 14.5)	20.2	(14.9 – 25.4)	55.7	(47.3 – 64.0)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

### 8.3.4 Salty snacks



Parents/carers were asked how often their child ate salty snacks like potato crisps or corn chips, crackers or pretzels. The prevalence of children by how frequently they eat salty snacks per week is shown in **Table 27**.

In 2020, it was estimated that almost a quarter of children aged 1 to 15 years (23.0%) never or rarely consumed salty snacks. The estimated prevalence of eating salty snacks was similar among different age groups and among boys and girls.

More than 30% of children aged 1 to 15 years in Western Australia consume salty snacks three or more times per week.

**Table 27: Prevalence of children by consumption of snacks per week, 1 to 15 years, HWSS 2020**

	Never or rarely		Less than once a week		Once or twice a week		Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
1 to 4 yrs	41.3*	(15.1 – 67.5)	N/A	(N/A – N/A)	26.5*	(4.2 – 48.9)	16.7*	(0.3 – 33.0)
5 to 9 yrs	18.3*	(8.6 – 27.9)	8.6*	(3.2 – 14.0)	34.5	(23.8 – 45.3)	38.6	(27.2 – 50.0)
10 to 15 yrs	15.5	(10.1 – 21.0)	18.7	(12.7 – 24.8)	32.8	(25.7 – 39.8)	33.0	(25.8 – 40.2)
<b>Sex</b>								
Boys	17.9*	(7.1 – 28.8)	17.5*	(6.7 – 28.3)	35.5	(24.1 – 47.0)	29.0	(20.0 – 38.1)
Girls	28.2	(15.8 – 40.5)	11.3	(6.3 – 16.2)	28.0	(18.8 – 37.2)	32.6	(22.1 – 43.1)
<b>Children</b>	<b>23.0</b>	<b>(14.7 – 31.4)</b>	<b>14.4</b>	<b>(8.3 – 20.5)</b>	<b>31.8</b>	<b>(24.4 – 39.2)</b>	<b>30.8</b>	<b>(23.8 – 37.8)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.  
 N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

### 8.3.5 Sugar sweetened soft drinks and energy drinks

Parents/carers were asked how many times per day, per week, or per month on average their child drank sugar sweetened soft drinks, energy or sports drinks, or cordial. The prevalence of children by how often they drink sugar sweetened soft drinks per week is shown in **Table 28**.



In 2020, it was estimated that almost two-thirds of children aged 1 to 15 years (62.2%) never or rarely consumed soft drinks, whereas fewer than one in ten (8.8%) children aged 1 to 15 years consumed soft drinks three or more times per week. Children were less likely to never or rarely consume soft drinks with increasing age.

Boys are more likely to consume sugar sweetened soft drinks three or more times per week (13.3%) compared with girls (4.3%).

**Table 28: Prevalence of children by consumption of sugar sweetened soft drinks per week, 1 to 15 years, HWSS 2020**

	Never or rarely		Less than once a week		Once or twice a week		Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
1 to 4 yrs	88.4	(77.5 – 99.2)	N/A	(N/A – N/A)	N/A	(N/A – N/A)	N/A	(N/A – N/A)
5 to 9 yrs	64.8	(54.2 – 75.4)	10.5*	(4.0 – 17.0)	21.0	(12.0 – 30.0)	3.7*	(0.4 – 7.0)
10 to 15 yrs	43.1	(35.7 – 50.5)	18.0	(11.8 – 24.2)	22.7	(16.2 – 29.2)	16.2	(10.4 – 22.1)
<b>Sex</b>								
Boys	54.9	(43.6 – 66.3)	10.3	(5.3 – 15.2)	21.5	(13.7 – 29.4)	13.3	(7.5 – 19.1)
Girls	69.5	(60.5 – 78.4)	12.5	(6.8 – 18.2)	13.7	(7.5 – 19.9)	4.3*	(1.5 – 7.1)
<b>Children</b>	<b>62.2</b>	<b>(55.0 – 69.4)</b>	<b>11.4</b>	<b>(7.6 – 15.2)</b>	<b>17.6</b>	<b>(12.6 – 22.6)</b>	<b>8.8</b>	<b>(5.6 – 12.0)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.  
 N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use

### 8.3.6 Processed meats

Parents/carers were asked how many times per day, per week, or per month on average their child ate processed meat products such as sausages, sausage-rolls, bacon, ham, salami or other cold meats. The prevalence of children by how often they eat processed meats per week is shown in **Table 29**.



In 2020, it was estimated that one in five children (20.5%) aged 1 to 15 years never or rarely consumed processed meats. Children aged 1 to 4 years were less likely to consume processed meats three or more times per week compared with children aged 5 to 9 years and 10 to 15 years (12.1% compared with 33.4% and 35%).

Nearly one in three (28.6%) children in Western Australia consume processed meats three more times a week.

The estimated prevalence of eating processed meats was similar among boys and girls.

**Table 29: Prevalence of children by consumption of processed meats per week, 1 to 15 years, HWSS 2020**

	Never or rarely		Less than once a week		Once or twice a week		Three or more times a week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
1 to 4 yrs	40.5*	(14.5 – 66.6)	N/A	(N/A – N/A)	46.2*	(19.9 – 72.5)	12.1*	(2.9 – 21.4)
5 to 9 yrs	13.5*	(5.5 – 21.6)	N/A	(N/A – N/A)	50.3	(38.7 – 61.9)	33.4	(22.7 – 44.1)
10 to 15 yrs	13.8	(8.3 – 19.3)	8.1	(4.2 – 11.9)	43.2	(35.8 – 50.6)	35.0	(27.5 – 42.4)
<b>Sex</b>								
Boys	18.9*	(5.3 – 32.5)	2.8*	(0.6 – 4.9)	42.0	(30.3 – 53.8)	36.3	(26.1 – 46.4)
Girls	22.1	(12.7 – 31.5)	6.2*	(2.7 – 9.7)	50.8	(39.4 – 62.3)	20.9	(13.5 – 28.4)
<b>Children</b>	20.5	(12.3 – 28.7)	4.5	(2.4 – 6.5)	46.4	(38.1 – 54.8)	28.6	(22.4 – 34.9)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

## 8.4 Physical activity and sedentary behaviour

Physical activity is important for children’s health as it influences growth and development, improves mental health and reduces the risk of overweight and obesity and developing chronic health conditions later in life.<sup>16-18</sup>

### 8.4.1 Physical activity

Parents/carers were asked to rate their child’s weekly physical activity level, as shown in **Table 30**.

It is estimated that almost one in twenty (4.6%) children were not very active/not at all active each week.

The prevalence of parent rated weekly physical activity levels in children were similar among age groups and among boys and girls.



Less than half (42.7%) of children aged 5 to 15 years in Western Australia were reported by their parents to be very physically active each week.

**Table 30: Prevalence of children by parent/carer-rated physical activity level, 5 to 15 years, HWSS 2020**

	Very active		Active		Moderately active		Not very active /Not at all active	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
5 to 9 yrs	50.0	(38.4 – 61.6)	32.0	(21.0 – 43.0)	16.3*	(7.1 – 25.5)	N/A	(N/A – N/A)
10 to 15 yrs	36.3	(29.0 – 43.6)	29.4	(22.5 – 36.3)	27.2	(20.3 – 34.1)	7.1*	(3.6 – 10.6)
<b>Sex</b>								
Boys	49.9	(40.8 – 58.9)	25.7	(18.0 – 33.5)	20.2	(13.3 – 27.0)	4.2*	(1.1 – 7.4)
Girls	35.2	(25.8 – 44.5)	35.7	(25.8 – 45.6)	24.1	(15.0 – 33.2)	5.0*	(1.9 – 8.0)
<b>Children</b>	<b>42.7</b>	<b>(36.0 – 49.3)</b>	<b>30.6</b>	<b>(24.3 – 37.0)</b>	<b>22.1</b>	<b>(16.4 – 27.8)</b>	<b>4.6</b>	<b>(2.4 – 6.8)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

Estimates for parent/carer-rated physical activity levels for 2020 were similar to 2005 (Table 31).

**Table 31: Prevalence of children by parent/carer rated physical activity level, 5 to 15 years, HWSS 2005–20**

	Very active		Active		Moderately active		Not very active/Not at all	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>2005</b>	48.8	(44.2 – 53.3)	28.9	(24.8 – 32.9)	17.1	(13.5 – 20.6)	5.3	(3.3 – 7.3)
<b>2006</b>	50.3	(46.1 – 54.5)	28.9	(25.2 – 32.6)	18.4	(15.3 – 21.5)	2.4	(1.3 – 3.5)
<b>2007</b>	51.4	(45.6 – 57.3)	26.1	(21.1 – 31.1)	19.2	(14.6 – 23.7)	3.3*	(1.3 – 5.4)
<b>2008</b>	53.3	(47.9 – 58.8)	26.9	(22.1 – 31.7)	14.6	(10.8 – 18.3)	5.2	(3.0 – 7.4)
<b>2009</b>	47.7	(45.2 – 50.2)	33.0	(30.6 – 35.4)	15.3	(13.5 – 17.1)	4.0	(3.1 – 4.9)
<b>2010</b>	51.7	(46.7 – 56.7)	29.3	(24.7 – 33.8)	13.9	(10.5 – 17.2)	5.1	(2.9 – 7.4)
<b>2011</b>	52.1	(46.5 – 57.8)	28.5	(23.3 – 33.7)	17.2	(12.9 – 21.5)	2.2*	(0.7 – 3.6)
<b>2012</b>	49.6	(44.6 – 54.7)	30.2	(25.6 – 34.8)	14.7	(11.1 – 18.2)	5.5	(3.2 – 7.8)
<b>2013</b>	46.1	(40.9 – 51.4)	30.5	(25.5 – 35.5)	20.0	(15.8 – 24.3)	3.3*	(1.5 – 5.2)
<b>2014</b>	47.8	(42.0 – 53.6)	28.8	(23.6 – 34.0)	17.5	(12.7 – 22.2)	5.9	(3.3 – 8.5)
<b>2015</b>	50.4	(45.0 – 55.8)	27.3	(22.4 – 32.2)	17.3	(13.4 – 21.2)	5.0*	(2.4 – 7.6)
<b>2016</b>	53.1	(47.9 – 58.3)	26.3	(21.8 – 30.9)	16.7	(13.0 – 20.3)	3.9	(2.0 – 5.8)
<b>2017</b>	55.0	(50.0 – 60.0)	22.1	(18.1 – 26.1)	16.5	(12.9 – 20.2)	6.4	(4.0 – 8.7)
<b>2018</b>	49.2	(43.3 – 55.2)	28.5	(23.0 – 33.9)	17.9	(13.5 – 22.4)	4.4	(2.3 – 6.5)
<b>2019</b>	52.3	(46.1 – 58.5)	28.6	(23.2 – 34.0)	15.5	(10.9 – 20.1)	3.6	(1.9 – 5.2)
<b>2020</b>	42.6	(36.2 – 49.0)	30.5	(24.4 – 36.6)	22.2	(16.7 – 27.7)	4.7	(2.5 – 6.9)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Children aged between 5 and 15 years are required to complete at least 60 minutes of moderate to vigorous physical activity each day to achieve good health, based on the 2019 Australian 24-Hour Movement Guidelines for Children and Young People.<sup>17</sup>

The HWSS reports against physical activity levels using a two-step question that asks parents/carers to report separately on the amount of vigorous and moderate activity that

the child completed in the past week. Completing sufficient levels of physical activity is then defined as being physically active for seven or more sessions a week where each session lasted 60 minutes or more.

The estimates of weekly physical activity for children 5 to 15 years are shown in **Table 32**. Overall, 31.7% of children aged 5 to 15 years completed sufficient amounts of physical activity. Children aged 10 to 15 years were less likely to be sufficiently active compared with children aged 5 to 9 years (22.8% compared with 41.7%). Estimates for the prevalence of children who are sufficiently active was similar among boys and girls.

Approximately two in three (68.3%) children in Western Australia are insufficiently physically active each week.

**Table 32: Prevalence of children by physical activity completed weekly, 5 to 15 years, HWSS 2020**

	No sessions of physical activity per week		Physically active 1 to 6 sessions per week		Physically active 7 or more sessions per week but less than 60 mins a session		Physically active 7 or more sessions per week and at least 60 mins a session	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
5 to 9 yrs	N/A	(N/A – N/A)	21.7	(12.8 – 30.5)	33.3	(22.3 – 44.3)	41.7	(30.1 – 53.2)
10 to 15 yrs	10.5	(5.9 – 15.2)	49.5	(41.8 – 57.2)	17.2	(11.6 – 22.8)	22.8	(16.7 – 28.9)
<b>Sex</b>								
Boys	5.1*	(1.5 – 8.6)	35.2	(26.6 – 43.8)	21.4	(14.0 – 28.7)	38.4	(29.4 – 47.4)
Girls	9.3*	(3.2 – 15.4)	37.6	(28.1 – 47.0)	28.4	(18.7 – 38.2)	24.7	(15.3 – 34.1)
<b>Children</b>	7.1*	(3.6 – 10.6)	36.3	(30.0 – 42.7)	24.8	(18.7 – 30.9)	31.7	(25.2 – 38.3)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

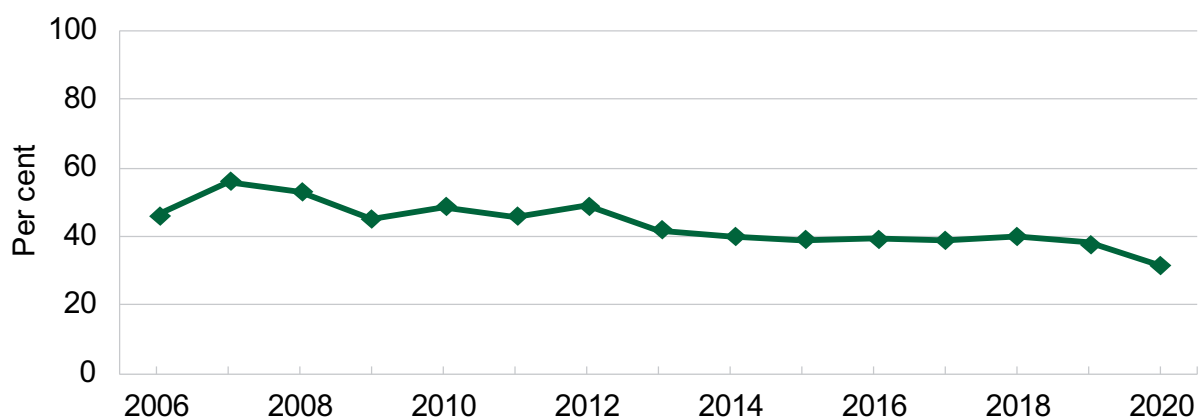
The annual prevalence estimates of weekly physical activity are shown in **Table 33** and **Figure 8**. The proportion of children completing sufficient levels of physical activity in 2020 was lower compared with 2006 to 2012.

**Table 33: Prevalence of children by physical activity completed weekly, 5 to 15 years, HWSS 2006–20**

	No sessions of physical activity per week		Physically active 1 to 6 sessions per week		Physically active 7 or more sessions per week but less than 60 mins a session		Physically active 7 or more sessions per week and at least 60 mins a session	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2006	2.2	(1.2 – 3.2)	31.1	(27.2 – 35.0)	20.5	(17.1 – 24.0)	46.1	(41.9 – 50.4)
2007	2.6*	(1.0 – 4.3)	26.5	(21.4 – 31.7)	14.9	(10.9 – 18.9)	55.9	(50.0 – 61.8)
2008	3.3*	(1.4 – 5.2)	28.6	(23.4 – 33.8)	15.3	(11.4 – 19.2)	52.8	(47.1 – 58.5)
2009	4.0	(3.0 – 4.9)	36.4	(34.0 – 38.8)	14.4	(12.6 – 16.2)	45.2	(42.7 – 47.7)
2010	3.3	(1.8 – 4.9)	32.5	(27.8 – 37.3)	15.6	(12.0 – 19.2)	48.5	(43.4 – 53.6)
2011	4.1*	(1.2 – 6.9)	32.0	(26.7 – 37.4)	18.4	(14.0 – 22.7)	45.5	(39.9 – 51.2)
2012	4.6	(2.4 – 6.9)	31.9	(27.3 – 36.5)	14.5	(10.9 – 18.2)	48.9	(43.8 – 54.0)
2013	6.2	(3.4 – 8.9)	34.8	(29.8 – 39.9)	17.6	(13.4 – 21.8)	41.4	(36.1 – 46.7)
2014	5.6*	(2.7 – 8.5)	35.9	(30.3 – 41.4)	18.5	(14.0 – 23.0)	40.0	(34.3 – 45.8)
2015	3.6	(1.9 – 5.3)	35.5	(30.2 – 40.8)	22.4	(17.6 – 27.1)	38.5	(33.2 – 43.9)
2016	3.8	(2.0 – 5.7)	35.7	(30.6 – 40.8)	20.9	(16.6 – 25.3)	39.6	(34.4 – 44.8)
2017	4.3	(2.4 – 6.2)	41.6	(36.6 – 46.7)	15.1	(11.5 – 18.6)	39.0	(34.0 – 44.0)
2018	9.8	(6.2 – 13.5)	31.9	(26.5 – 37.3)	18.5	(13.9 – 23.2)	39.7	(33.7 – 45.7)
2019	7.1	(4.1 – 10.1)	34.0	(28.0 – 39.9)	20.5	(15.3 – 25.7)	38.5	(32.2 – 44.8)
2020	7.2	(3.8 – 10.6)	36.8	(30.6 – 43.0)	24.6	(18.7 – 30.4)	31.5	(25.2 – 37.7)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

**Figure 8: Prevalence of children completing sufficient weekly physical activity, 5 to 15 years, HWSS 2006–20**



The annual estimates for mean minutes spent in physical activity per week, for children 5 to 15 years, are shown in **Table 34**. Compared to 2007 to 2013, mean time spent in physical activity per week was lower in 2020.

**Table 34: Mean time (minutes) spent in physical activity per week, 5 to 15 years, HWSS 2006–20**

	Minutes	
	mean	95% CI
2006	501.8	(466.4 – 537.2)
2007	595.0	(535.5 – 654.5)
2008	584.5	(528.7 – 640.3)
2009	558.7	(536.2 – 581.3)
2010	520.4	(475.7 – 565.2)
2011	532.9	(484.3 – 581.5)
2012	565.8	(514.2 – 617.5)
2013	514.5	(472.3 – 556.7)
2014	496.1	(441.1 – 551.2)
2015	477.0	(430.1 – 523.9)
2016	463.1	(428.4 – 497.8)
2017	474.4	(432.5 – 516.3)
2018	502.9	(447.9 – 557.8)
2019	485.2	(432.4 – 538.0)
2020	415.8	(363.4 – 468.3)

### 8.4.2 Sedentary recreational screen time

The Australian 24-Hour Movement Guidelines for Children and Young People recommends the maximum amount of time children aged 0 to 17 years should spend in sedentary recreational screen time (for example television, seated electronic games and computer use).<sup>17</sup> The guidelines recommend no use of electronic media for children younger than 2 years of age, less than one hour of use daily for children aged 2 years to under 5 years of age and no more than 2 hours of use daily for children aged 5 to 17 years of age.



The proportion of children aged 0 to 15 years who met the guidelines for their specific age group is shown in **Table 35**. Children aged from 2 up to 5 years were significantly more likely to exceed daily recreational time screen usage guidelines compared with children aged 5 to under 15 years (86.4% compared with 33.2%). The prevalence of children who met the guidelines was similar among boys and girls.

Just over half of children (55.9%) in Western Australia meet the guidelines for electronic media use.

**Table 35: Prevalence of children meeting the Australian sedentary behaviour guidelines for electronic media use, 0 to 15 years, HWSS 2020**

	Does not meet guidelines for electronic media use		Meets guidelines for electronic media use	
	%	95% CI	%	95% CI
<b>Age Group</b>				
0 to < 2 yrs	52.3*	(21.9 – 82.8)	47.7*	(17.2 – 78.1)
2 to <5 yrs	86.4	(73.0 – 99.8)	N/A	(N/A – N/A)
5 to 15 yrs	33.2	(26.6 – 39.8)	66.8	(60.2 – 73.4)
<b>Sex</b>				
Boys	44.5	(31.7 – 57.4)	55.5	(42.6 – 68.3)
Girls	43.7	(31.7 – 55.6)	56.3	(44.4 – 68.3)
<b>Children</b>	44.1	(35.3 – 52.9)	55.9	(47.1 – 64.7)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

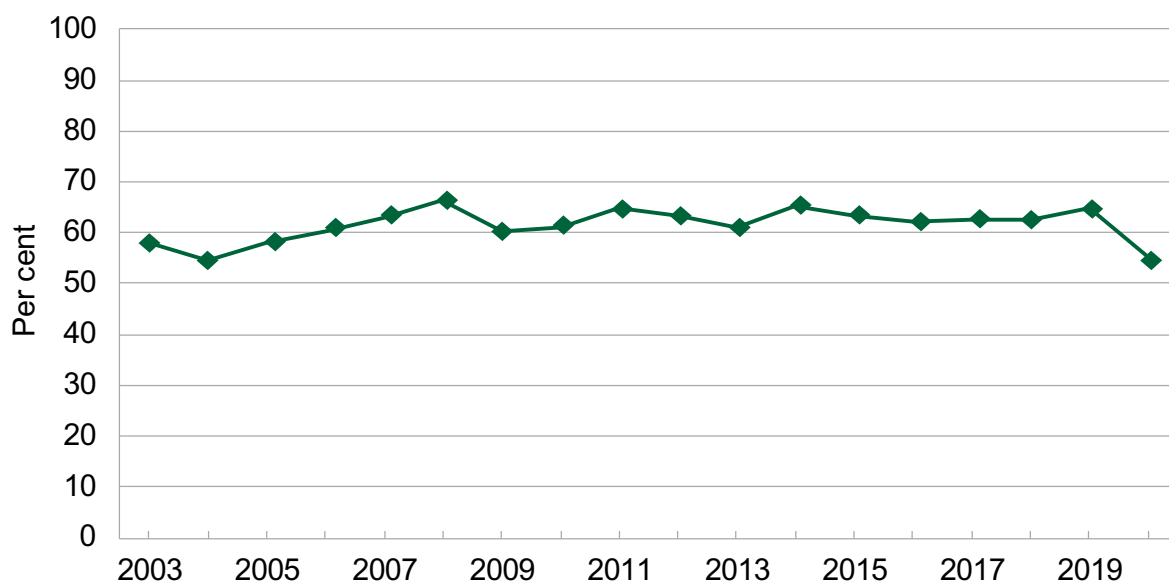
The annual estimates of the proportion of children meeting the Australian sedentary behaviour guidelines for sedentary recreational screen time are shown in **Table 36** and **Figure 9**. The proportion of children meeting the Australian sedentary behaviour guidelines for sedentary recreational screen time was similar in 2020 and 2003.

**Table 36: Prevalence of children meeting the Australian sedentary behaviour guidelines for electronic media use, 0 to 15 years, HWSS 2003–20**

	Does not meet guidelines for electronic media use		Meets guidelines for electronic media use	
	%	95% CI	%	95% CI
<b>2003</b>	57.9	(54.5 – 61.4)	42.1	(38.6 – 45.5)
<b>2004</b>	54.5	(49.1 – 59.9)	45.5	(40.1 – 50.9)
<b>2005</b>	57.9	(54.2 – 61.7)	42.1	(38.3 – 45.8)
<b>2006</b>	60.3	(56.8 – 63.7)	39.7	(36.3 – 43.2)
<b>2007</b>	63.1	(58.1 – 68.0)	36.9	(32.0 – 41.9)
<b>2008</b>	66.4	(61.8 – 70.9)	33.6	(29.1 – 38.2)
<b>2009</b>	60.3	(57.1 – 63.4)	39.7	(36.6 – 42.9)
<b>2010</b>	61.1	(56.9 – 65.3)	38.9	(34.7 – 43.1)
<b>2011</b>	64.8	(59.9 – 69.6)	35.2	(30.4 – 40.1)
<b>2012</b>	63.5	(59.2 – 67.8)	36.5	(32.2 – 40.8)
<b>2013</b>	61.0	(56.0 – 66.0)	39.0	(34.0 – 44.0)
<b>2014</b>	65.2	(60.1 – 70.4)	34.8	(29.6 – 39.9)
<b>2015</b>	63.2	(58.5 – 67.8)	36.8	(32.2 – 41.5)
<b>2016</b>	62.2	(57.5 – 67.0)	37.8	(33.0 – 42.5)
<b>2017</b>	62.6	(57.2 – 68.0)	37.4	(32.0 – 42.8)
<b>2018</b>	62.6	(55.8 – 69.4)	37.4	(30.6 – 44.2)
<b>2019</b>	65.0	(58.1 – 72.0)	35.0	(28.0 – 41.9)
<b>2020</b>	55.5	(46.9 – 64.1)	44.5	(35.9 – 53.1)

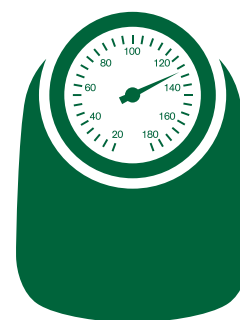


**Figure 9: Prevalence of children meeting the Australian sedentary behaviour guidelines for electronic media use, 0 to 15 years, HWSS 2003–20**



## 8.5 Body mass index

Children who are obese are likely to continue to be obese into and during adulthood and are more likely to develop cardiovascular disease, insulin resistance and type 2 diabetes, osteoarthritis and some cancers.<sup>19</sup> Childhood overweight and obesity are of public health concern as they are largely preventable through healthy food choices, regular physical activity and supportive environments.<sup>19</sup>



Parents/carers were asked to provide their child’s height without shoes and weight without clothes or shoes. A Body Mass Index (BMI) was derived from these figures by dividing weight in kilograms by height in metres squared.

One in four (25.4%) Western Australian children were overweight or obese in 2020.

Age and sex specific BMI categories were then used to classify children into not overweight or obese, overweight, and obese,<sup>20</sup> as shown in **Table 37**. Outliers and biologically implausible values were removed in the derivation of these categories.<sup>21</sup>

In 2020, it is estimated that three in four (74.7%) children aged 5 to 15 years were not classed as overweight or obese. The prevalence of overweight or obese was similar among ages and among boys and girls.

**Table 37: Prevalence of children by body mass index categories, 5 to 15 years, HWSS 2020**

	Not overweight or obese		Overweight		Obese	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
5 to 9 yrs	72.8	(62.2 – 83.5)	13.6*	(5.8 – 21.5)	13.6*	(5.3 – 21.8)
10 to 15 yrs	76.1	(69.9 – 82.3)	18.0	(12.4 – 23.6)	5.9*	(2.8 – 9.0)
<b>Sex</b>						
Boys	69.3	(60.7 – 78.0)	17.6	(10.7 – 24.4)	13.1*	(6.5 – 19.7)
Girls	80.3	(72.7 – 87.8)	14.5	(8.1 – 20.9)	5.3*	(0.7 – 9.8)
<b>Children</b>	<b>74.7</b>	<b>(68.8 – 80.5)</b>	<b>16.1</b>	<b>(11.4 – 20.8)</b>	<b>9.3</b>	<b>(5.2 – 13.4)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The annual prevalence estimates for body mass index categories is shown in **Table 38** and **Figure 10**. Estimates in 2020 were similar to those in 2004.

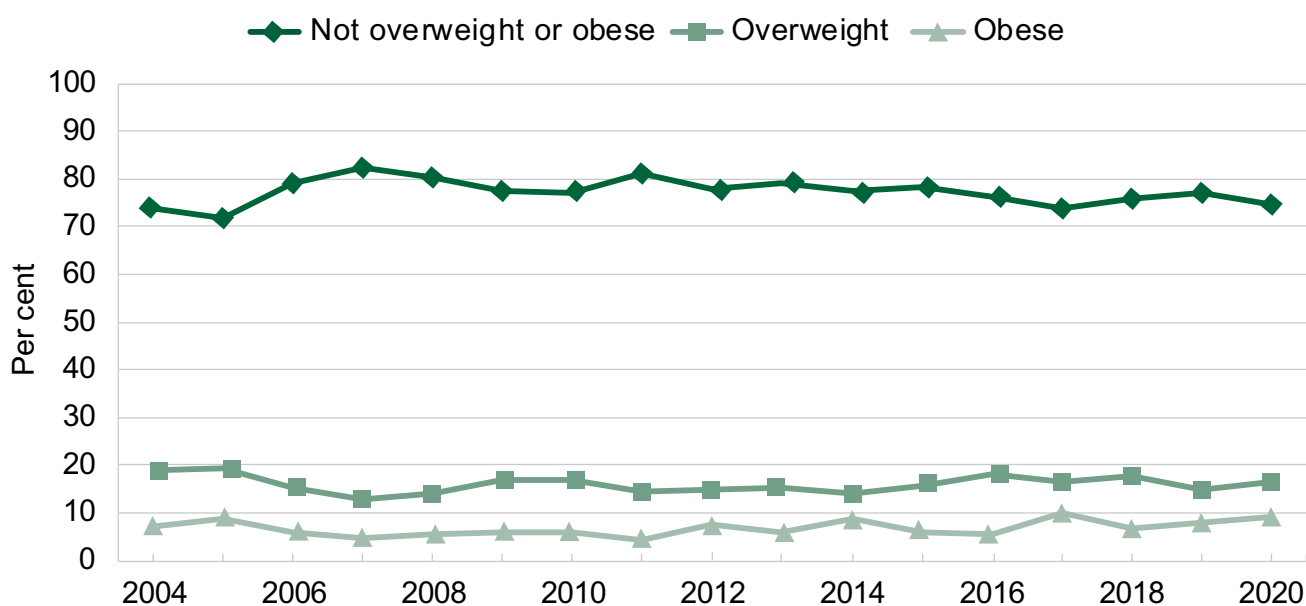
**Table 38: Prevalence of children by body mass index categories, 5 to 15 years, HWSS 2004–20**

	Not overweight or obese		Overweight		Obese	
	%	95% CI	%	95% CI	%	95% CI
<b>2004</b>	73.9	(66.9 – 80.9)	19.1	(12.9 – 25.4)	7.0*	(2.9 – 11.0)
<b>2005</b>	71.7	(66.4 – 77.0)	19.5	(14.9 – 24.0)	8.9	(5.3 – 12.4)
<b>2006</b>	79.0	(74.9 – 83.2)	15.1	(11.4 – 18.8)	5.8	(3.5 – 8.1)
<b>2007</b>	82.5	(77.2 – 87.8)	12.9	(8.2 – 17.6)	4.6*	(1.8 – 7.4)
<b>2008</b>	80.3	(75.5 – 85.2)	14.0	(9.7 – 18.2)	5.7	(3.0 – 8.4)
<b>2009</b>	77.3	(75.1 – 79.5)	16.9	(14.9 – 18.8)	5.8	(4.6 – 7.0)
<b>2010</b>	77.0	(72.5 – 81.5)	17.0	(13.0 – 21.1)	6.0	(3.6 – 8.3)
<b>2011</b>	81.2	(76.8 – 85.7)	14.5	(10.6 – 18.4)	4.2*	(1.8 – 6.7)
<b>2012</b>	77.9	(73.6 – 82.2)	14.7	(11.2 – 18.2)	7.4	(4.5 – 10.3)
<b>2013</b>	78.9	(74.4 – 83.5)	15.1	(11.1 – 19.1)	6.0	(3.4 – 8.5)
<b>2014</b>	77.4	(72.4 – 82.3)	13.9	(9.9 – 17.9)	8.7	(5.3 – 12.2)
<b>2015</b>	78.4	(73.8 – 82.9)	15.6	(11.5 – 19.8)	6.0	(3.7 – 8.4)
<b>2016</b>	76.3	(71.8 – 80.9)	18.2	(14.1 – 22.4)	5.4	(3.3 – 7.6)
<b>2017</b>	73.7	(69.0 – 78.5)	16.4	(12.3 – 20.4)	9.9	(6.6 – 13.2)
<b>2018</b>	75.7	(70.6 – 80.7)	17.6	(13.2 – 22.1)	6.7	(3.9 – 9.6)
<b>2019</b>	77.2	(72.1 – 82.3)	14.8	(10.7 – 18.9)	8.0	(4.5 – 11.5)
<b>2020</b>	74.6	(69.0 – 80.3)	16.3	(11.7 – 20.9)	9.1	(5.2 – 12.9)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Figure 10: Prevalence of children by body mass index categories, 5 to 15 years, HWSS 2004–20

**Figure 10: Prevalence of children by body mass index categories, 5 to 15 years, HWSS 2004–20**



Parents/carers were asked for their perceptions of their child’s weight (**Table 39**). Perceptions of weight have been reported against BMI-based weight categories derived from parent/carer-reported height and weight for the children.<sup>20</sup> For children aged 5 to 15 years with a BMI that classified them as overweight or obese, almost two-thirds (64.3%) had parents/carers who perceived their child’s weight to be normal.

**Table 39: Prevalence of children by parent/carer-perceived body weight, by Body Mass Index classification, 5 to 15 years, HWSS 2020**

Body mass index classification	Parent/carer perception of child’s body weight					
	Underweight		Normal weight		Overweight or very overweight	
	%	95% CI	%	95% CI	%	95% CI
Underweight	13.0*	(0.0 – 26.2)	87.0	(73.8 – 100.0)	0.0	(0.0 – 0.0)
Normal weight	6.8*	(3.4 – 10.2)	91.4	(87.5 – 95.3)	N/A	(N/A – N/A)
Overweight or obese	N/A	(N/A – N/A)	64.3	(52.2 – 76.4)	31.5	(20.1 – 42.9)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

Parents/carers were then asked about their intentions to change their child’s weight (**Table 40**). Intentions to change weight have been reported against BMI calculations based on parent/carer-reported height and weight for the child. Almost one in four (23.7%) children classified as overweight or obese based on BMI had parents/carers who were intending to help them lose weight. Conversely, over half (58.9%) of children classified as overweight or obese based on BMI had parents/carers who did not intend to change their child’s weight.

**Table 40: Prevalence of children by parent/carer intentions regarding the child's weight, by Body Mass Index classification, 5 to 15 years, HWSS 2020**

Body mass index classification	Lose weight		Gain weight		Stay the same weight		I am not trying to do anything about my child's weight	
	95% CI	%	95% CI	%	95% CI	%	95% CI	%
Underweight	0.0	(0.0 – 0.0)	N/A	(N/A – N/A)	N/A	(N/A – N/A)	92.7	(85.2 – 100.0)
Normal weight	2.7*	(0.4 – 4.9)	4.1*	(0.6 – 7.5)	12.0	(7.1 – 17.0)	81.2	(75.0 – 87.5)
Overweight or obese	23.7	(13.3 – 34.1)	N/A	(N/A – N/A)	15.0*	(5.1 – 24.9)	58.9	(46.0 – 71.8)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

## 8.6 Smoking in the home

The negative health effects of second-hand smoke on children are well documented. Second hand smoke is associated with numerous health conditions, such as respiratory infections, middle ear infections, more frequent colds and onset and severity of asthma. In addition, children in households with a smoker are more likely to smoke themselves in the future.<sup>6</sup>



The annual estimates of smoking within the home are shown in **Table 41**. The prevalence of children living in a smoke-free home has increased significantly from 2002 (90.5%) to 2020 (99.8%).

Since 2015, over 99% of Western Australian children are reported to live in smoke free homes.

**Table 41: Prevalence of smoke free homes, 0 to 15 years, HWSS 2002–20**

	The home is smoke free	
	%	95% CI
2002	90.5	(88.5 – 92.4)
2003	93.7	(92.2 – 95.1)
2004	91.2	(88.5 – 93.9)
2005	93.6	(91.8 – 95.4)
2006	96.5	(95.3 – 97.7)
2007	95.7	(93.9 – 97.5)
2008	96.5	(94.8 – 98.1)
2009	98.1	(97.5 – 98.6)
2010	98.2	(97.2 – 99.3)
2011	97.7	(96.2 – 99.1)
2012	97.8	(96.3 – 99.4)
2013	98.1	(96.7 – 99.4)
2014	98.9	(98.1 – 99.7)
2015	99.1	(98.3 – 99.9)
2016	99.5	(99.0 – 100.0)
2017	99.3	(98.7 – 99.9)
2018	99.7	(99.3 – 100.0)
2019	99.6	(99.1 – 100.0)
2020	99.8	(99.6 – 100.0)

## 8.7 Sun protection

Almost all skin cancers are preventable if people protect themselves from the sun. Childhood sun exposure is particularly important in determining melanoma risk.<sup>22</sup>



**Table 42** shows the mean number of times children were sunburnt in the past 12 months. Children aged 5 to 9 years had on average been sunburnt 1.5 times in the past 12 months. Children aged 10 to 15 years had on average been sunburnt 2.5 times in the past 12 months. These averages were significantly higher when compared with children aged 0 to 4 years.

Children aged 10 to 15 years were reported to have been sunburnt 2.5 times in the past 12 months.

**Table 42: Mean number of times sunburnt in past 12 months, 0 to 15 years, HWSS 2020**

	Number of times sunburnt	
	mean	95% CI
<b>Age Group</b>		
0 to 4 yrs	0.2*	(0.0 – 0.4)
5 to 9 yrs	1.5	(1.0 – 2.0)
10 to 15 yrs	2.5	(1.8 – 3.1)
<b>Sex</b>		
Boys	1.7	(1.1 – 2.3)
Girls	1.1	(0.8 – 1.5)
<b>Children</b>	1.4	(1.1 – 1.8)

\* Estimate has an RSE between 25%-50% and should be used with caution.

Annual estimates for the mean number of times sunburnt in the past 12 months are shown in **Table 43**. Estimates were similar between 2020 and 2002.

**Table 43: Mean times sunburnt in the past 12 months, 0 to 15 years, HWSS 2002–20**

	Number of times sunburnt	
	mean	95% CI
2002	1.6	(1.3 – 1.9)
2003	1.4	(1.3 – 1.6)
2004	1.6	(1.4 – 1.9)
2005	1.3	(1.1 – 1.4)
2006	1.6	(1.3 – 1.7)
2007	1.5	(1.3 – 1.7)
2008	1.3	(1.2 – 1.5)
2009	1.1	(1.0 – 1.2)
2010	1.4	(1.2 – 1.5)
2011	1.5	(1.3 – 1.7)
2012	1.2	(1.1 – 1.3)
2013	1.5	(1.3 – 1.6)
2014	1.5	(1.3 – 1.7)
2015	1.5	(1.2 – 1.7)
2016	1.5	(1.2 – 1.8)
2017	1.7	(1.4 – 1.9)
2018	1.4	(1.2 – 1.6)
2019	1.5	(1.2 – 1.7)
2020	1.4	(1.1 – 1.8)

**Table 44** shows the prevalence of children by how often parents/carers checked to see whether their child was adequately protected before going out into the sunlight (i.e. wearing a hat, using sunscreen and keeping covered).

In 2020, children aged 10 to 15 years were less likely to always be checked by a parent/carer if they were adequately protected before going out into the sunlight compared with children aged 0 to 4 years (46.5% compared with 84.4%).

Children aged 10 to 15 years are checked by their parent/carer for adequate sun protection less frequently than younger children

**Table 44: Prevalence of children by how often parent/carer checks they are adequately protected before going out into the sunlight, 0 to 15 years, HWSS 2020**

	Always		Most of the time		Sometimes		Rarely/Never	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
0 to 4 yrs	84.4	(67.8 – 100.0)	N/A	(N/A – N/A)	N/A	(N/A – N/A)	0.0	(0.0 – 0.0)
5 to 9 yrs	62.9	(52.1 – 73.7)	31.8	(21.7 – 41.9)	5.3*	(0.1 – 10.5)	0.0	(0.0 – 0.0)
10 to 15 yrs	46.5	(39.0 – 54.1)	40.2	(32.7 – 47.6)	10.1	(5.2 – 15.1)	3.1*	(0.5 – 5.8)
<b>Sex</b>								
Boys	60.3	(48.6 – 71.9)	31.3	(20.4 – 42.2)	6.7*	(2.6 – 10.9)	1.7*	(0.1 – 3.4)
Girls	67.2	(57.9 – 76.4)	27.7	(19.2 – 36.1)	4.6*	(1.3 – 8.0)	N/A	(N/A – N/A)
<b>Children</b>	63.6	(56.1 – 71.1)	29.5	(22.5 – 36.5)	5.7	(3.0 – 8.4)	1.2*	(0.2 – 2.1)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

Annual prevalence estimates for children checked by parents/carers to ensure they are adequately protected before going out into the sun are shown in **Table 45** and **Figure 11**. Estimates in 2020 were similar to those in 2002.

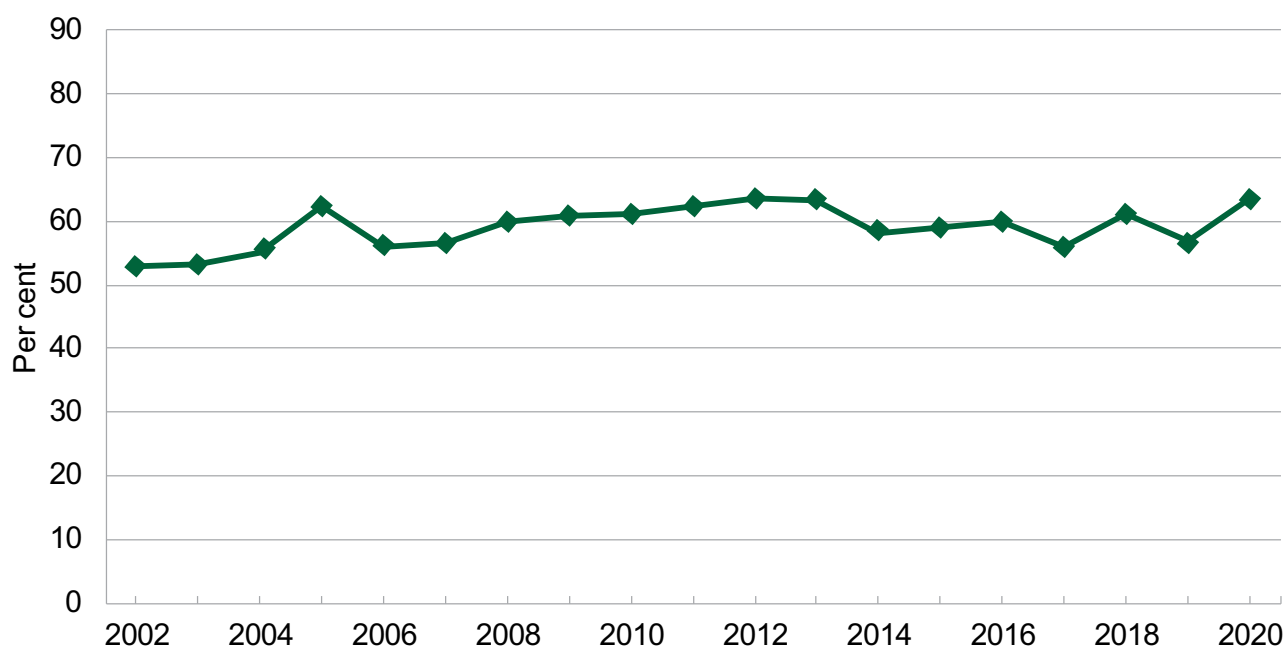
**Table 45: Prevalence of children by how often parent/carer checks they are adequately protected before going into the sunlight, 0 to 15 years, HWSS 2002–20**

	Always		Most of the time		Sometimes		Rarely/Never	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>2002</b>	52.9	(49.1 – 56.7)	41.8	(38.1 – 45.6)	4.2	(2.8 – 5.5)	1.1*	(0.4 – 1.8)
<b>2003</b>	53.3	(49.9 – 56.8)	40.8	(37.3 – 44.2)	4.4	(3.2 – 5.6)	1.5*	(0.6 – 2.4)
<b>2004</b>	55.2	(49.8 – 60.5)	38.0	(32.7 – 43.2)	6.1	(3.4 – 8.7)	N/A	(N/A – N/A)
<b>2005</b>	62.5	(58.8 – 66.1)	30.9	(27.4 – 34.3)	5.6	(3.8 – 7.3)	1.1*	(0.4 – 1.7)
<b>2006</b>	55.9	(52.3 – 59.4)	36.8	(33.4 – 40.2)	5.5	(3.8 – 7.2)	1.9*	(0.8 – 2.9)
<b>2007</b>	56.5	(51.5 – 61.6)	35.0	(30.1 – 39.9)	7.0	(4.3 – 9.6)	1.5*	(0.5 – 2.5)
<b>2008</b>	59.9	(55.3 – 64.6)	32.2	(27.8 – 36.7)	6.3	(4.2 – 8.5)	1.5*	(0.4 – 2.6)
<b>2009</b>	61.0	(58.1 – 63.9)	31.8	(29.1 – 34.5)	5.0	(3.6 – 6.5)	2.1	(1.3 – 3.0)
<b>2010</b>	61.3	(57.1 – 65.4)	31.9	(27.9 – 35.8)	5.3	(3.4 – 7.2)	1.5*	(0.6 – 2.5)
<b>2011</b>	62.5	(57.8 – 67.2)	32.0	(27.4 – 36.6)	4.5	(2.6 – 6.4)	1.0*	(0.2 – 1.8)
<b>2012</b>	63.7	(59.5 – 67.9)	28.6	(24.7 – 32.5)	5.4	(3.6 – 7.2)	2.3*	(0.9 – 3.7)
<b>2013</b>	63.2	(58.6 – 67.9)	31.9	(27.4 – 36.4)	3.6	(2.1 – 5.2)	1.2*	(0.1 – 2.3)
<b>2014</b>	58.0	(52.8 – 63.2)	36.1	(31.0 – 41.2)	4.8	(2.8 – 6.7)	1.2*	(0.1 – 2.2)
<b>2015</b>	59.1	(54.4 – 63.9)	35.0	(30.5 – 39.6)	4.2	(2.6 – 5.8)	1.6*	(0.1 – 3.1)
<b>2016</b>	60.0	(55.5 – 64.6)	35.3	(30.9 – 39.7)	4.0	(2.3 – 5.6)	0.7*	(0.2 – 1.1)
<b>2017</b>	55.9	(50.6 – 61.1)	37.3	(32.2 – 42.3)	5.6*	(2.6 – 8.6)	1.3*	(0.3 – 2.2)
<b>2018</b>	61.1	(55.2 – 67.0)	30.2	(24.9 – 35.5)	7.0*	(4.3 – 9.8)	1.7*	(0.4 – 3.0)
<b>2019</b>	56.9	(50.0 – 63.9)	38.2	(31.4 – 45.0)	3.9*	(1.3 – 6.5)	1.0*	(0.2 – 1.8)
<b>2020</b>	63.5	(56.1 – 70.9)	29.6	(22.7 – 36.4)	1.3	(3.1 – 8.4)	1.2*	(0.2 – 2.2)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

**Figure 11: Prevalence of children who are always checked to be adequately protected before going out into the sunlight, 0 to 15 years, HWSS 2002–20**



## 8.8 Sleep

Sleep is one of the most important requirements in early childhood development stimulating growth, proper brain development, memory, alertness and strengthening the immune system. The amount of sleep required for children varies from 8 to 17 hours depending on age and individual requirements.<sup>23</sup> In general, children require the most sleep as infants, and less sleep as they get older. See **Table 46** for the recommended sleep duration for children 0-17 years by age as per the US based National Sleep Foundation.<sup>23</sup>



**Table 46: Recommended sleep duration by age for children**

	Recommended Sleep Duration
<1 year	14 to 17 hours
1-2 years	11 to 14 hours
3-5 years	10 to 13 hours
6-13 years	9 to 11 hours
14-17 years	8 to 10 hours

The estimated prevalence of children who are reported to meet the recommended number of hours of sleep is shown in **Table 47**. In 2020, only 42.3% of children aged 0 to 4 years were sleeping the recommended number of hours per night. Over 90% of children aged 5 to 9 years, and 73.2% of children aged 10 to 15 years were sleeping the recommended number of hours per night. The prevalence of adequate sleep duration was similar among boys and girls.

One in three Western Australian children were estimated to not sleep for the recommended duration each night.



**Table 47: Prevalence of children meeting the recommended sleep duration, 0 to 15 years, HWSS 2020**

	Meets recommended sleep duration	
	%	95% CI
<b>Age Group</b>		
0 to 4 yrs	42.3	(20.3 – 64.3)
5 to 9 yrs	90.2	(83.8 – 96.6)
10 to 15 yrs	73.2	(66.7 – 79.8)
<b>Sex</b>		
Boys	67.8	(55.6 – 80.1)
Girls	69.7	(56.8 – 82.6)
<b>Children</b>	<b>68.8</b>	<b>(59.9 – 77.7)</b>

The mean number of hours of sleep reported for children is shown in **Table 48**. In 2020, children aged 0 to 15 years slept an average of 10.0 hours. Children aged 10 to 15 years slept for a shorter mean duration than children aged 5 to 9 years and children aged 0 to 4 years (9.1 hours compared with 10.0 hours and 10.9 hours). The mean number of hours of sleep was similar among boys and girls.

Children in Western Australia are reported by their parent/carer to sleep for an average of 10 hours per night.

**Table 48: Mean hours spent sleeping on a usual night, 0 to 15 years, HWSS 2020**

	Number of hours spent sleeping	
	%	95% CI
<b>Age Group</b>		
0 to 4 yrs	10.9	(9.9 – 11.9)
5 to 9 yrs	10.0	(9.8 – 10.3)
10 to 15 yrs	9.1	(8.9 – 9.3)
<b>Sex</b>		
Boys	9.9	(9.6 – 10.2)
Girls	10.1	(9.4 – 10.8)
<b>Children</b>	<b>10.0</b>	<b>(9.6 – 10.4)</b>

# Health service utilisation



## 9. Health service utilisation



Health services provide care to patients and the general population and are delivered in many different forms, including GP, dental, mental and alternative health services.<sup>13</sup> Parents/carers were asked whether their child had used a number of common health services within the past 12 months.

Health service usage varied depending on the type of health service. Most children (85.5%) aged 0 to 15 years had used a primary health service, approximately 28.5% had used a hospital-based health service and 30.4% had used an allied health service. Nearly two-thirds (62.5%) had also used a dental health service within the past 12 months. It is estimated that 8.6% had used a mental health service and 3.8% had used an alternative health service.

As seen in **Table 49**, children aged 10 to 15 years were significantly less likely than children aged 0 to 4 years to use primary health services (78.0% compared with 94.5%). Usage across all other health service types included in the survey was similar among age groups and among boys and girls.

The estimated prevalence of children accessing mental health services has increased from 3.5% in 2005 to 8.6% in 2020.

The annual prevalence estimates for health service usage are displayed in **Table 50**. The prevalence of mental health service usage was higher in 2020 than in 2005 and subsequent years up to 2012. Health service usage in 2020 was similar to 2005 across all other types of health services included in the survey.

The mean number of visits to each health service is shown in **Table 51**. The mean number of health service visits was similar among all age groups and among boys and girls across all types of health services included in the survey.

The annual mean numbers of visits to each health service are shown in **Table 52**. The mean number of health service visits in 2020 was similar to 2005 across all types of health services included in the survey.

**Table 49: Proportion of children utilising health services in the past 12 months, 0 to 15 years, HWSS 2020**

	Primary (a)		Hospital based (b)		Allied (c)		Dental		Mental (d)		Alternative (e)	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>												
0 to 4 yrs	94.5	(89.4 – 99.5)	35.0*	(14.4 – 55.7)	N/A	(N/A – N/A)	11.7	(0.0 – 23.8)	N/A	(N/A – N/A)	N/A	(N/A – N/A)
5 to 9 yrs	85.1	(75.8 – 94.4)	24.8	(15.4 – 34.2)	39.5	(27.9 – 51.1)	86.0	(79.1 – 92.9)	6.9*	(0.7 – 13.1)	3.9*	(0.6 – 7.2)
10 to 15 yrs	78.0	(71.5 – 84.4)	25.9	(19.2 – 32.7)	43.9	(36.3 – 51.4)	86.4	(81.5 – 91.3)	17.0	(11.1 – 22.8)	5.7*	(2.2 – 9.3)
<b>Sex</b>												
Boys	86.2	(80.1 – 92.3)	33.1	(21.4 – 44.7)	31.9	(22.4 – 41.4)	59.0	(45.1 – 72.8)	8.4*	(4.1 – 12.8)	3.3*	(0.8 – 5.8)
Girls	84.8	(78.2 – 91.4)	23.7	(14.3 – 33.0)	29.0	(19.7 – 38.3)	66.2	(53.6 – 78.8)	8.8	(4.0 – 13.6)	4.2*	(1.5 – 7.0)
<b>Children</b>	85.5	(81.0 – 90.0)	28.5	(20.9 – 36.1)	30.4	(23.7 – 37.1)	62.5	(53.0 – 72.0)	8.6	(5.4 – 11.8)	3.8*	(1.9 – 5.6)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

- (a) e.g. medical specialist, general practitioner, community health centre, community or district nurses.
- (b) e.g. overnight stay, emergency department or outpatients.
- (c) e.g. optician, physiotherapist, chiropractor, podiatrist, dietician, nutritionist, occupational therapist, diabetes/other health educator.
- (d) e.g. psychiatrist, psychologist or counsellor.
- (e) e.g. acupuncturist, naturopath, homeopath or any other alternative health service.

**Table 50: Proportion of children utilising health services in the past 12 months, 0 to 15 years, HWSS 2005–20**

	Primary (a)		Hospital based (b)		Allied (c)		Dental		Mental (d)		Alternative (e)	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>2005</b>	82.4	(79.5 – 85.3)	24.4	(21.2 – 27.5)	22.2	(19.1 – 25.4)	59.3	(55.6 – 63.1)	3.5	(2.1 – 4.8)	3.6	(2.3 – 4.9)
<b>2006</b>	79.6	(76.4 – 82.8)	23.9	(20.5 – 27.3)	24.8	(21.4 – 28.2)	57.9	(53.8 – 61.9)	2.6	(1.6 – 3.7)	3.0	(1.8 – 4.2)
<b>2007</b>	82.6	(79.0 – 86.2)	25.2	(20.9 – 29.6)	24.6	(20.4 – 28.8)	55.5	(50.4 – 61.9)	3.6	(2.0 – 5.2)	4.5	(2.7 – 6.3)
<b>2008</b>	80.4	(76.7 – 84.1)	23.2	(19.2 – 27.2)	23.4	(19.5 – 27.4)	57.4	(52.6 – 62.2)	3.4	(1.9 – 5.0)	3.4	(1.8 – 5.0)
<b>2009</b>	79.0	(76.7 – 81.3)	27.0	(24.2 – 29.9)	23.4	(21.0 – 25.8)	58.1	(54.8 – 61.4)	3.3	(2.6 – 4.1)	3.4	(2.6 – 4.2)
<b>2010</b>	84.5	(81.4 – 87.5)	27.3	(23.4 – 31.2)	25.2	(21.6 – 28.9)	58.0	(53.8 – 62.3)	2.8	(1.7 – 3.9)	3.7	(2.2 – 5.3)
<b>2011</b>	82.8	(79.4 – 86.2)	23.6	(19.5 – 27.6)	24.4	(20.4 – 28.5)	58.4	(53.5 – 63.3)	2.0*	(0.8 – 3.3)	3.7*	(1.8 – 5.5)
<b>2012</b>	81.6	(78.2 – 85.0)	25.0	(21.2 – 28.8)	30.4	(26.4 – 34.4)	58.4	(54.0 – 62.9)	3.9	(2.4 – 5.5)	3.5	(2.1 – 4.9)
<b>2013</b>	78.5	(74.5 – 82.4)	25.1	(20.8 – 29.3)	26.9	(22.6 – 31.2)	60.3	(55.0 – 65.5)	4.3	(2.5 – 6.1)	2.6	(1.4 – 3.8)
<b>2014</b>	82.6	(78.8 – 86.4)	20.2	(16.1 – 24.3)	30.1	(25.4 – 34.8)	59.9	(54.5 – 65.2)	6.5	(4.0 – 9.0)	4.4	(2.3 – 6.5)
<b>2015</b>	83.3	(79.9 – 86.6)	27.9	(23.6 – 32.2)	32.1	(27.6 – 36.5)	63.3	(58.5 – 68.1)	6.1	(3.8 – 8.4)	5.6	(3.2 – 8.0)
<b>2016</b>	84.1	(80.7 – 87.5)	27.0	(22.7 – 31.2)	32.5	(28.2 – 36.8)	64.3	(59.5 – 69.1)	6.3	(4.1 – 8.6)	3.0	(1.6 – 4.5)
<b>2017</b>	85.1	(81.9 – 88.2)	26.3	(21.5 – 31.1)	27.2	(23.0 – 31.4)	64.2	(58.6 – 69.7)	5.5	(3.8 – 7.3)	3.0*	(1.5 – 4.5)
<b>2018</b>	84.7	(80.5 – 88.9)	27.8	(21.9 – 33.7)	32.9	(27.3 – 38.4)	61.4	(54.4 – 68.3)	8.4	(5.4 – 11.4)	3.0	(1.6 – 4.3)
<b>2019</b>	87.5	(83.9 – 91.1)	27.4	(20.9 – 34.0)	33.9	(27.7 – 40.2)	70.0	(63.1 – 77.0)	12.2	(6.3 – 18.1)	3.5	(1.4 – 5.6)
<b>2020</b>	85.2	(80.8 – 89.6)	28.7	(21.3 – 36.2)	30.1	(23.7 – 36.6)	62.1	(52.8 – 71.4)	8.6	(5.5 – 11.8)	3.9	(2.0 – 5.7)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

(a) e.g. medical specialist, general practitioner, community health centre, community or district nurses.

(b) e.g. overnight stay, emergency department or outpatients.

(c) e.g. optician, physiotherapist, chiropractor, podiatrist, dietician, nutritionist, occupational therapist, diabetes/other health educator.

(d) e.g. psychiatrist, psychologist or counsellor.

(e) e.g. acupuncturist, naturopath, homeopath or any other alternative health service.

**Table 51: Mean number of visits to health services in the past 12 months, 0 to 15 years, HWSS 2020**

	Primary (a)		Hospital based (b)		Allied (c)		Dental		Mental (d)		Alternative (e)	
	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI
<b>Age Group</b>												
0 to 4 yrs	3.29	(2.6 – 4.0)	0.50*	(0.1 – 0.9)	N/A	(N/A – N/A)	N/A	(N/A – N/A)	N/A	(N/A – N/A)	N/A	(N/A – N/A)
5 to 9 yrs	2.85	(2.2 – 3.5)	0.42	(0.2 – 0.6)	3.42*	(0.91 – 5.93)	1.28	(0.9 – 5.9)	N/A	(N/A – N/A)	N/A	(N/A – N/A)
10 to 15 yrs	2.68	(2.3 – 3.1)	0.57	(0.3 – 0.8)	1.97	(1.30 – 2.64)	1.83	(1.3 – 2.6)	0.93	(0.5 – 1.3)	0.11*	(0.0 – 0.2)
<b>Sex</b>												
Boys	2.83	(2.4 – 3.2)	0.61	(0.4 – 0.9)	1.36	(0.73 – 1.98)	1.06	(0.7 – 2.0)	0.52*	(0.1 – 0.9)	0.05*	(0.0 – 0.1)
Girls	3.04	(2.5 – 3.6)	0.38	(0.2 – 0.6)	2.40*	(0.73 – 4.08)	1.20	(0.7 – 4.1)	0.46*	(0.2 – 0.8)	0.11*	(0.0 – 0.2)
<b>Children</b>	2.93	(2.6 – 3.3)	0.50	(0.3 – 0.7)	1.87	(0.98 – 2.75)	0.62	(1.0 – 2.7)	0.49*	(0.2 – 0.7)	0.08*	(0.0 – 0.1)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

(a) e.g. medical specialist, general practitioner, community health centre, community or district nurses.

(b) e.g. overnight stay, emergency department or outpatients.

(c) e.g. optician, physiotherapist, chiropractor, podiatrist, dietician, nutritionist, occupational therapist, diabetes/other health educator.

(d) e.g. psychiatrist, psychologist or counsellor.

(e) e.g. acupuncturist, naturopath, homeopath or any other alternative health service.

**Table 52: Mean number of visits to health services in the past 12 months, 0 to 15 years, HWSS 2005–20**

	Primary (a)		Hospital based (b)		Allied (c)		Dental		Mental (d)		Alternative (e)	
	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI	mean	95% CI
<b>2005</b>	3.30	(2.9 – 3.7)	0.44	(0.4 – 0.5)	1.06	(0.8 – 1.4)	1.17	(1.0 – 1.3)	0.24*	(0.1 – 0.4)	0.10	(0.1 – 0.1)
<b>2006</b>	3.44	(3.0 – 3.9)	0.43	(0.3 – 0.5)	1.36	(1.0 – 1.7)	1.12	(1.0 – 1.3)	0.17*	(0.0 – 0.3)	0.08*	(0.0 – 0.1)
<b>2007</b>	2.97	(2.6 – 3.3)	0.40	(0.3 – 0.5)	1.63*	(0.8 – 2.4)	1.09	(0.9 – 1.2)	0.17*	(0.1 – 0.3)	0.31*	(0.0 – 0.6)
<b>2008</b>	3.07	(2.7 – 3.4)	0.39	(0.3 – 0.5)	0.95	(0.7 – 1.2)	1.01	(0.9 – 1.1)	0.43*	(0.0 – 0.8)	0.10*	(0.0 – 0.2)
<b>2009</b>	2.90	(2.7 – 3.1)	0.47	(0.4 – 0.5)	0.91	(0.8 – 1.1)	1.11	(1.0 – 1.2)	0.15	(0.1 – 0.2)	0.10	(0.1 – 0.1)
<b>2010</b>	3.29	(3.0 – 3.6)	0.44	(0.4 – 0.5)	1.27	(0.8 – 1.7)	1.10	(1.0 – 1.2)	0.16*	(0.1 – 0.3)	0.11*	(0.0 – 0.2)
<b>2011</b>	3.14	(2.8 – 3.5)	0.47	(0.3 – 0.7)	1.52	(0.9 – 2.2)	1.07	(0.9 – 1.2)	0.07*	(0.0 – 0.1)	0.14*	(0.1 – 0.2)
<b>2012</b>	3.30	(2.9 – 3.7)	0.40	(0.3 – 0.5)	1.51	(1.1 – 1.9)	1.11	(1.0 – 1.2)	0.28*	(0.1 – 0.4)	0.09	(0.1 – 0.1)
<b>2013</b>	3.15	(2.7 – 3.6)	0.41	(0.3 – 0.5)	1.47	(0.8 – 2.1)	1.16	(1.0 – 1.3)	0.25	(0.1 – 0.4)	0.08*	(0.0 – 0.1)
<b>2014</b>	3.01	(2.6 – 3.4)	0.40	(0.3 – 0.5)	1.67	(1.0 – 2.4)	1.21	(1.0 – 1.4)	0.33*	(0.2 – 0.5)	N/A	(N/A – N/A)
<b>2015</b>	3.78	(3.2 – 4.4)	0.56	(0.4 – 0.7)	2.35	(1.3 – 3.4)	1.19	(1.0 – 1.4)	0.49*	(0.2 – 0.8)	N/A	(N/A – N/A)
<b>2016</b>	3.77	(3.3 – 4.3)	0.57	(0.3 – 0.8)	1.67	(0.9 – 2.5)	1.22	(1.1 – 1.4)	0.44*	(0.2 – 0.7)	0.13*	(0.0 – 0.2)
<b>2017</b>	3.77	(3.1 – 4.4)	0.58	(0.4 – 0.8)	1.85*	(0.7 – 3.0)	1.23	(1.1 – 1.4)	0.47*	(0.2 – 0.8)	0.17*	(0.0 – 0.3)
<b>2018</b>	3.18	(2.7 – 3.7)	0.49	(0.3 – 0.6)	1.62*	(1.1 – 2.1)	1.11	(0.9 – 1.3)	0.66*	(0.3 – 1.0)	0.07*	(0.0 – 0.1)
<b>2019</b>	3.50	(3.0 – 4.0)	0.44	(0.3 – 0.6)	2.49*	(0.8 – 4.1)	1.27	(1.1 – 1.4)	0.57	(0.3 – 0.8)	0.10*	(0.0 – 0.2)
<b>2020</b>	2.91	(2.6 – 3.2)	0.50	(0.4 – 0.7)	1.84	(1.0 – 2.7)	1.13	(0.9 – 1.3)	0.49*	(0.2 – 0.7)	0.08*	(0.0 – 0.1)

\* Mean estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

(a) e.g. medical specialist, general practitioner, community health centre, community or district nurses.

(b) e.g. overnight stay, accident and emergency department or outpatients.

(c) e.g. optician, physiotherapist, chiropractor, podiatrist, dietician, nutritionist, occupational therapist, diabetes/other health educator.

(d) e.g. psychiatrist, psychologist or counsellor.

(e) e.g. acupuncturist, naturopath, homeopath or any other alternative health service.

Mental  
wellbeing





# 10. Mental wellbeing

Positive mental wellbeing is essential for the ability of children to thrive and develop, cope with the normal stresses of life and realise their abilities in their progression towards adolescence and into adulthood. Poor mental health may have a substantial impact on child development and wellbeing, with evidence that poor mental wellbeing in childhood can predict the diagnosis of a mental health condition in adolescence and adult life.<sup>5</sup>

## 10.1 Trouble with emotions or behaviour

Parents/carers were asked whether their child has trouble with emotions, concentration, behaviour or getting on with people. Trouble with emotions may refer to anxiety or depressive disorders, while trouble with concentration, behaviour or getting on with people may refer to children with conditions such as Attention Deficit Hyperactivity Disorder (ADHD) or other conduct disorders. The HWSS does not ask questions on the diagnosis of specific mental health conditions in children.



The prevalence of children who were reported by their parent/carer to experience trouble with emotions or behaviour are shown in **Table 53**. Parent/carers of children aged 1 to 4 were more likely to report no trouble with emotions, concentration, behaviour or getting on with people compared with parents/carers of children aged 5 to years and children aged 10 to 15 years (89.4% compared with 57.0% and 60.3%).

One in three children are reported to experience some trouble with emotions, concentration, behaviour or getting on with people.

**Table 53: Prevalence of children by overall trouble with emotions, concentration, behaviour or getting on with people, 1 to 15 years, HWSS 2020**

	None		Only a little		Quite a lot		Very much	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
1 to 4 yrs	89.4	(77.6 – 100.0)	N/A	(N/A – N/A)	N/A	(N/A – N/A)	0.0	(0.0 – 0.0)
5 to 9 yrs	57.0	(45.5 – 68.6)	31.2	(20.7 – 41.8)	9.6*	(2.4 – 16.8)	N/A	(N/A – N/A)
10 to 15 yrs	60.3	(52.9 – 67.8)	25.6	(19.2 – 32.0)	8.1*	(4.1 – 12.0)	6.0*	(1.6 – 10.4)
<b>Sex</b>								
Boys	67.1	(57.6 – 76.6)	21.4	(13.8 – 29.0)	8.8*	(4.1 – 13.4)	N/A	(N/A – N/A)
Girls	66.1	(56.0 – 76.1)	25.4	(16.5 – 34.3)	5.0*	(0.7 – 9.4)	N/A	(N/A – N/A)
<b>Children</b>	67.1	(61.3 – 73.0)	23.8	(18.6 – 29.0)	6.1	(3.6 – 8.6)	3.0*	(1.1 – 4.8)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The annual prevalence estimates for children aged 1 to 15 years who have trouble with emotions, concentration, behaviour or getting on with people are shown in **Table 54**. The estimates for 2020 were similar to the estimates for 2002.

**Table 54: Prevalence of children by overall trouble with emotions, concentration, behaviour or getting on with people, 1 to 15 years, HWSS 2002–20**

	None		Only a little		Quite a lot		Very much	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2002	71.3	(67.9 – 74.7)	23.0	(19.9 – 26.1)	5.0	(3.3 – 6.7)	0.8*	(0.3 – 1.3)
2003	68.3	(65.0 – 71.5)	24.7	(21.6 – 27.7)	5.7	(4.2 – 7.3)	1.3*	(0.6 – 2.0)
2004	62.1	(56.8 – 67.4)	28.1	(23.2 – 32.9)	7.9	(5.0 – 10.9)	1.9*	(0.3 – 3.5)
2005	66.0	(62.4 – 69.7)	26.8	(23.4 – 30.3)	6.4	(4.5 – 8.3)	0.7*	(0.1 – 1.3)
2006	69.1	(65.8 – 72.5)	23.6	(20.6 – 26.6)	5.9	(4.2 – 7.7)	1.3*	(0.5 – 2.2)
2007	71.8	(67.3 – 76.2)	22.3	(18.1 – 26.4)	4.8	(2.9 – 6.6)	1.2*	(0.3 – 2.0)
2008	68.1	(63.6 – 72.6)	24.4	(20.2 – 28.6)	6.1	(4.0 – 8.2)	1.5*	(0.4 – 2.5)
2009	74.0	(71.6 – 76.5)	20.2	(17.9 – 22.4)	4.3	(3.4 – 5.1)	1.5	(0.9 – 2.2)
2010	71.6	(67.7 – 75.5)	22.5	(18.9 – 26.2)	5.1	(3.2 – 7.0)	0.8*	(0.2 – 1.3)
2011	71.8	(67.3 – 76.4)	23.0	(18.9 – 27.2)	4.4*	(2.0 – 6.7)	N/A	(N/A – N/A)
2012	68.9	(64.7 – 73.0)	25.0	(21.1 – 28.8)	5.3	(3.3 – 7.3)	0.9*	(0.1 – 1.6)
2013	72.4	(68.0 – 76.9)	18.8	(15.1 – 22.6)	7.5	(4.6 – 10.4)	1.3*	(0.3 – 2.2)
2014	65.5	(60.4 – 70.7)	25.7	(21.0 – 30.5)	7.4	(4.5 – 10.3)	1.4*	(0.3 – 2.4)
2015	70.2	(65.7 – 74.8)	23.1	(18.9 – 27.3)	4.1	(2.4 – 5.8)	2.6*	(0.8 – 4.4)
2016	69.3	(64.9 – 73.8)	22.5	(18.5 – 26.6)	6.0	(3.7 – 8.2)	2.2*	(0.9 – 3.5)
2017	71.9	(67.4 – 76.3)	20.5	(16.8 – 24.2)	6.7	(3.9 – 9.6)	0.9*	(0.2 – 1.7)
2018	69.1	(63.5 – 74.7)	21.7	(16.7 – 26.7)	6.5	(3.8 – 9.3)	2.6*	(1.2 – 4.0)
2019	65.8	(59.1 – 72.6)	22.3	(17.1 – 27.5)	8.7*	(3.6 – 13.9)	3.2*	(0.4 – 5.9)
2020	66.9	(60.1 – 73.6)	23.2	(17.5 – 28.9)	6.8	(3.8 – 9.9)	3.1*	(1.0 – 5.3)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

Parents/carers who reported that their child has any trouble with emotions, concentration, behaviour or getting on with people were then asked whether they thought their child needs special help for these troubles (**Table 55**).

It is estimated that 40.6% of children aged to 15 years needed special help for difficulties relating to emotions, concentration, behaviour or getting on with other people.

The estimated proportion of children in need of special help for difficulties relating to emotions, concentration, behaviour or getting on with other people was similar among age groups and among boys and girls.

Two in five children were reported to receive special help for trouble with emotions, concentration, behaviour or getting on with people.

**Table 55: Prevalence of children who are reported by their parent/carer to need special help for an emotional, concentration or behavioural problem, 1 to 15 years, HWSS 2020**

Need special help for an emotional, concentration or behavioural problem		
	%	95% CI
<b>Age Group</b>		
1 to 4 yrs	N/A	(N/A – N/A)
5 to 9 yrs	41.9	(23.7 – 60.2)
10 to 15 yrs	44.8	(32.5 – 57.1)
<b>Sex</b>		
Boys	48.6	(34.7 – 62.6)
Girls	32.4	(16.6 – 48.3)
<b>Children</b>	40.6	(29.9 – 51.3)

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The annual prevalence of children estimated to need special help for emotional problems, concentration, behaviour or getting on with other people is shown in **Table 56**. The prevalence of children regarded by their parent/carer as needing special help was significantly higher in 2020 (40.5%) when compared with 2002 (20.6%).

**Table 56: Prevalence of children who are reported by their parent/carer to need special help for an emotional, concentration or behavioural problem, 1 to 15 years, HWSS 2002–20**

Need special help for an emotional, concentration or behavioural problem		
	%	95% CI
<b>2002</b>	20.6	(14.5 – 26.7)
<b>2003</b>	20.3	(15.5 – 25.1)
<b>2004</b>	23.3	(15.9 – 30.8)
<b>2005</b>	21.0	(15.5 – 26.5)
<b>2006</b>	26.2	(20.4 – 32.0)
<b>2007</b>	26.4	(18.3 – 34.5)
<b>2008</b>	26.0	(19.0 – 33.0)
<b>2009</b>	25.7	(21.5 – 29.9)
<b>2010</b>	23.2	(16.3 – 30.1)
<b>2011</b>	21.4	(13.0 – 29.9)
<b>2012</b>	25.2	(18.1 – 32.2)
<b>2013</b>	34.2	(24.8 – 43.7)
<b>2014</b>	32.8	(23.7 – 41.9)
<b>2015</b>	28.0	(19.9 – 36.1)
<b>2016</b>	35.2	(26.9 – 43.5)
<b>2017</b>	32.8	(24.3 – 41.2)
<b>2018</b>	37.3	(27.4 – 47.1)
<b>2019</b>	44.0	(31.0 – 56.9)
<b>2020</b>	40.5	(30.2 – 50.9)

## 10.2 Treatment for emotional or mental health condition



**Table 57** shows the prevalence of children who have ever been treated for an emotional or mental health condition, as reported by a parent/carer.

It is estimated that 13.2% of children aged 1 to 15 years received treatment for an emotional or mental health condition. The prevalence of treatment for an emotional or mental health condition was similar among age groups and among boys and girls.

Approximately one in eight children are reported to receive treatment for an emotional or mental health condition.

**Table 57: Prevalence of children ever treated for an emotional or mental health condition, 1 to 15 years, HWSS 2020**

	Ever treated for an emotional or mental health condition	
	%	95% CI
<b>Age Group</b>		
1 to 4 yrs	N/A	(N/A – N/A)
5 to 9 yrs	11.4*	(3.6 – 19.2)
10 to 15 yrs	23.2	(16.8 – 29.6)
<b>Sex</b>		
Boys	13.9	(8.0 – 19.7)
Girls	12.5	(6.6 – 18.5)
<b>Children</b>	13.2	(9.0 – 17.4)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The annual prevalence of children ever treated for an emotional or mental health condition is shown in **Table 58**. The prevalence of children ever treated for an emotional or mental health condition in 2020 was significantly higher than in 2002 (13.2% compared with 3.0%).

**Table 58: Prevalence of children ever treated for an emotional or mental health condition, 1 to 15 years, HWSS 2002–20**

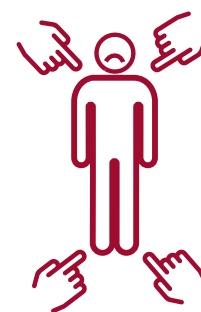
	Ever treated for an emotional or mental health condition	
	%	95% CI
2002	3.0	(1.9 – 4.1)
2003	4.5	(2.8 – 6.3)
2004	5.3*	(1.3 – 9.3)
2005	5.3	(3.7 – 6.9)
2006	6.5	(4.9 – 8.2)
2007	5.0	(2.8 – 7.3)
2008	5.8	(3.8 – 7.7)
2009	4.9	(4.0 – 5.8)
2010	4.5	(3.0 – 6.1)
2011	4.1	(2.3 – 5.9)
2012	6.0	(4.0 – 7.9)
2013	7.9	(5.4 – 10.5)
2014	6.0	(3.7 – 8.3)
2015	7.0	(4.6 – 9.4)
2016	8.1	(5.8 – 10.5)
2017	8.3	(6.0 – 10.5)
2018	10.8	(7.3 – 14.3)
2019	12.6	(8.3 – 16.9)
2020	13.2	(9.1 – 17.2)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

### 10.3 Bullying

Bullying can have serious consequences for both children who are repeatedly bullied and for those bullying others. Children who have been the victim of bullying can experience problems with their physical and psychological health, education and social development and may suffer from loss of self-esteem, depression or absenteeism.<sup>24</sup> It may also affect the family. In the HWSS, bullying is defined as ‘when someone is picked on, hit, kicked, threatened or ignored by other children’.

Parents/carers were asked whether their child had been bullied in the past 12 months and whether their child had bullied other children in the past 12 months. As shown in **Table 59**, nearly one-third (32.2%) of children had been bullied in the past 12 months and 8.7% were estimated to have bullied. The prevalence of children who had been bullied, were similar among age groups and among boys and girls.



Approximately one in three Western Australian children are reported to have been bullied in the past 12 months.

**Table 59: Prevalence of children who have bullied and/or have been bullied in the past 12 months, 5 to 15 years, HWSS 2020**

	Been bullied in past 12 months		Has bullied in past 12 months		Has both bullied and been bullied in past 12 months	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
5 to 9 yrs	29.2	(19.0 – 39.4)	9.4*	(3.0 – 15.8)	7.0*	(1.9 – 12.1)
10 to 15 yrs	32.5	(25.4 – 39.6)	8.1*	(3.6 – 12.6)	6.2*	(2.2 – 10.3)
<b>Sex</b>						
Boys	33.6	(25.0 – 42.2)	11.0*	(4.8 – 17.1)	8.1*	(2.9 – 13.2)
Girls	28.1	(19.6 – 36.5)	6.2*	(1.9 – 10.6)	5.1*	(1.3 – 8.8)
<b>Children</b>	<b>32.2</b>	<b>(26.5 – 37.9)</b>	<b>8.7</b>	<b>(4.9 – 12.5)</b>	<b>6.4</b>	<b>(3.6 – 9.2)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The annual prevalence of bullying is shown in **Table 60**. The prevalence of being bullied or bullying others in the past 12 months in 2020 is similar to 2002.

**Table 60: Prevalence of children who have bullied and/or have been bullied in the past 12 months, 5 to 15 years, HWSS 2002–20**

	Been bullied in past 12 months		Has bullied in past 12 months		Has both bullied and been bullied in past 12 months	
	%	95% CI	%	95% CI	%	95% CI
<b>2002</b>	39.9	(35.6 – 44.1)	13.1	(10.1 – 16.0)	8.8	(6.4 – 11.2)
<b>2003</b>	35.4	(31.5 – 39.2)	12.7	(10.0 – 15.5)	10.0	(7.4 – 12.5)
<b>2004</b>	38.3	(32.4 – 44.2)	17.4	(12.5 – 22.4)	13.4	(9.1 – 17.8)
<b>2005</b>	36.9	(32.6 – 41.2)	10.5	(7.8 – 13.2)	8.5	(6.0 – 11.0)
<b>2006</b>	35.9	(32.0 – 39.9)	12.1	(9.4 – 14.7)	8.8	(6.5 – 11.0)
<b>2007</b>	38.0	(32.4 – 43.7)	13.7	(9.8 – 17.6)	9.4	(6.3 – 12.6)
<b>2008</b>	37.3	(32.1 – 42.5)	13.8	(10.3 – 17.3)	10.6	(7.5 – 13.7)
<b>2009</b>	33.6	(31.2 – 35.9)	10.0	(8.4 – 11.6)	6.8	(5.4 – 8.1)
<b>2010</b>	34.7	(30.1 – 39.3)	10.7	(7.8 – 13.5)	8.6	(6.0 – 11.2)
<b>2011</b>	31.1	(25.8 – 36.3)	8.6	(5.2 – 12.0)	7.7	(4.4 – 11.0)
<b>2012</b>	35.6	(30.8 – 40.5)	8.8	(6.0 – 11.5)	6.8	(4.3 – 9.2)
<b>2013</b>	36.1	(30.9 – 41.2)	7.1	(4.7 – 9.5)	5.6	(3.5 – 7.8)
<b>2014</b>	33.8	(28.3 – 39.3)	5.9	(3.3 – 8.4)	5.1*	(2.6 – 7.6)
<b>2015</b>	29.0	(24.2 – 33.9)	8.0	(5.0 – 11.0)	6.1	(3.4 – 8.9)
<b>2016</b>	31.9	(26.9 – 36.8)	5.4	(3.1 – 7.8)	4.1*	(2.0 – 6.2)
<b>2017</b>	35.8	(30.9 – 40.8)	6.8	(4.3 – 9.2)	5.6	(3.2 – 7.9)
<b>2018</b>	33.5	(27.9 – 39.2)	4.9	(2.6 – 7.1)	4.0*	(2.0 – 6.0)
<b>2019</b>	31.6	(26.0 – 37.2)	7.6	(4.5 – 10.7)	5.6	(3.0 – 8.3)
<b>2020</b>	31.0	(25.2 – 36.9)	8.7	(5.0 – 12.4)	7.1	(3.8 – 10.5)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

School  
connectedness



# 11. School connectedness

A positive school environment can act as a protective factor that reduces the likelihood of mental health problems and can mitigate the potentially negative effects of risk factors.<sup>25</sup>

Parents/carers were asked to rate how well their child was doing in school overall, based on their school work and school reports. An estimated 38.3% of children were doing very well at school and over a quarter (27.6%) were doing well (**Table 61**). Estimates relating to school performance were similar among ages and among boys and girls.



Approximately two in three Western Australian children aged 5 to 15 years are reported to be doing well or very well in school.

**Table 61: Prevalence of children by parent/carer reported overall school performance, 5 to 15 years, HWSS 2020**

	Very well		Well		Average		Poor or very poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
5 to 9 yrs	34.5	(23.8 – 45.2)	35.3	(24.0 – 46.6)	25.6	(14.9 – 36.2)	4.7*	(0.1 – 9.2)
10 to 15 yrs	41.6	(34.1 – 49.2)	20.9	(14.9 – 26.9)	27.2	(20.5 – 33.9)	10.3	(5.4 – 15.3)
<b>Sex</b>								
Boys	32.3	(23.9 – 40.6)	25.2	(17.2 – 33.2)	33.1	(24.4 – 41.8)	9.4*	(4.2 – 14.7)
Girls	44.6	(34.7 – 54.5)	30.1	(20.4 – 39.7)	19.5	(11.1 – 28.0)	5.9*	(1.5 – 10.2)
<b>Children</b>	<b>38.3</b>	<b>(31.9 – 44.8)</b>	<b>27.6</b>	<b>(21.3 – 33.9)</b>	<b>26.4</b>	<b>(20.3 – 32.5)</b>	<b>7.7</b>	<b>(4.3 – 11.1)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The annual prevalence estimates of how well children were doing in school, as perceived by their parents/carers, are shown in **Table 62** and **Figure 12**. The prevalence of children whose parent/carer reported their overall school performance as very well, has decreased significantly between 2002 and 2020 (52.7% compared with 38.6%).

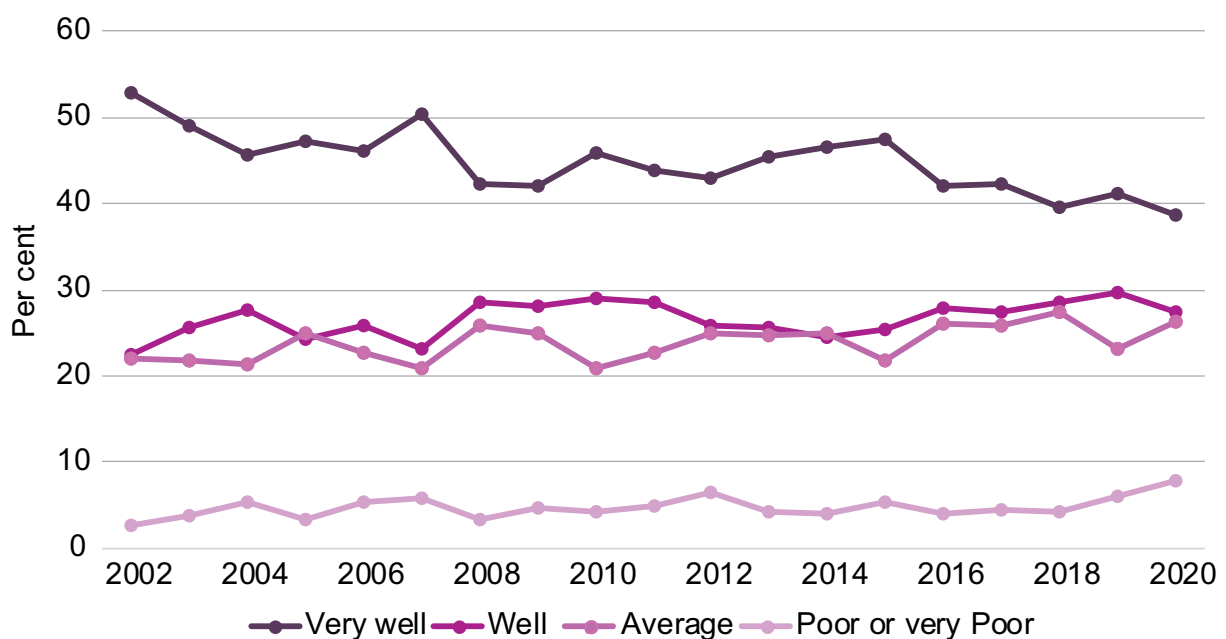


**Table 62: Prevalence of children by parent/carer reported overall school performance, 5 to 15 years, HWSS 2002–20**

	Very well		Well		Average		Poor or very poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2002	52.7	(48.4 – 57.1)	22.4	(18.8 – 26.0)	22.1	(18.5 – 25.6)	2.8	(1.6 – 4.0)
2003	49.0	(44.9 – 53.0)	25.6	(21.9 – 29.3)	21.7	(18.5 – 25.0)	3.7	(2.2 – 5.3)
2004	45.7	(39.5 – 51.9)	27.5	(22.0 – 33.1)	21.3	(16.3 – 26.3)	5.4*	(2.3 – 8.5)
2005	47.3	(42.8 – 51.9)	24.4	(20.6 – 28.2)	24.9	(21.0 – 28.8)	3.4	(1.8 – 5.1)
2006	46.0	(41.8 – 50.2)	25.9	(22.3 – 29.6)	22.8	(19.2 – 26.4)	5.3	(3.5 – 7.1)
2007	50.3	(44.4 – 56.1)	23.1	(18.0 – 28.2)	20.8	(16.1 – 25.6)	5.8	(3.2 – 8.3)
2008	42.2	(36.7 – 47.7)	28.6	(23.6 – 33.6)	25.9	(21.3 – 30.5)	3.4*	(1.5 – 5.2)
2009	42.1	(39.6 – 44.6)	28.1	(25.9 – 30.4)	25.0	(22.9 – 27.2)	4.7	(3.7 – 5.8)
2010	45.9	(40.8 – 50.9)	29.0	(24.4 – 33.5)	20.9	(16.9 – 24.8)	4.3	(2.5 – 6.2)
2011	43.8	(38.2 – 49.5)	28.5	(23.4 – 33.7)	22.8	(18.2 – 27.3)	4.9*	(2.3 – 7.5)
2012	42.9	(37.9 – 47.9)	25.8	(21.4 – 30.1)	24.9	(20.4 – 29.3)	6.5	(4.0 – 8.9)
2013	45.5	(40.2 – 50.8)	25.6	(21.0 – 30.3)	24.7	(20.1 – 29.3)	4.2*	(2.1 – 6.2)
2014	46.6	(40.7 – 52.4)	24.5	(19.6 – 29.4)	24.9	(19.9 – 29.9)	4.0*	(2.0 – 6.1)
2015	47.5	(42.0 – 52.9)	25.4	(20.8 – 29.9)	21.8	(17.5 – 26.2)	5.3	(2.8 – 7.8)
2016	42.1	(36.9 – 47.3)	27.9	(23.2 – 32.6)	26.0	(21.2 – 30.7)	4.0	(2.2 – 5.9)
2017	42.3	(37.2 – 47.4)	27.4	(22.9 – 31.9)	25.8	(21.3 – 30.3)	4.5*	(2.3 – 6.7)
2018	39.7	(33.9 – 45.4)	28.6	(23.3 – 33.9)	27.4*	(21.9 – 33.0)	4.3	(2.5 – 6.1)
2019	41.1	(34.9 – 47.4)	29.6	(23.9 – 35.4)	23.1	(17.8 – 28.4)	6.1	(3.4 – 8.9)
2020	38.6	(32.3 – 44.9)	27.3	(21.3 – 33.4)	26.3	(20.4 – 32.1)	7.8	(4.4 – 11.2)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

**Figure 12: Prevalence of children by parent/carer reported overall school performance, 5 to 15 years, HWSS 2002–20**



Parents/carers were asked to rate how often their child looks forward to going to school each day (Table 63). Two-thirds (67.8%) of children almost always looked forward to going to school each day. Girls (76.7%) were more likely than boys (59.6%) to almost always look

forward to going to school each day. Estimates relating to how frequently children look forward to school were similar among boys and girls. The annual prevalence estimates of how frequently children look forward to going to school are shown in **Table 64**. The prevalence of how frequently children looked forward to going to school in 2020 is similar to 2002.

Over 75% of girls aged 5 to 15 years almost always look forward to going to school each day, compared to less than 60% of boys.

**Table 63: Prevalence of children by frequency of looking forward to going to school each day, 5 to 15 years, HWSS 2020**

	Almost never or rarely		Sometimes		Often		Almost always	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
5 to 9 yrs	N/A	(N/A – N/A)	N/A	(N/A – N/A)	15.7*	(8.0 – 23.5)	76.8	(67.4 – 86.3)
10 to 15 yrs	6.1*	(3.0 – 9.1)	12.0	(6.9 – 17.1)	21.8	(15.6 – 28.1)	60.1	(52.7 – 67.5)
<b>Sex</b>								
Boys	5.0*	(1.3 – 8.8)	9.9*	(4.9 – 14.9)	25.5	(17.7 – 33.4)	59.6	(50.8 – 68.3)
Girls	6.8*	(1.5 – 12.1)	4.5*	(1.2 – 7.7)	12.0	(6.7 – 17.3)	76.7	(68.9 – 84.4)
<b>Children</b>	5.9*	(2.7 – 9.1)	7.3	(4.2 – 10.3)	19.0	(14.0 – 24.0)	67.8	(61.8 – 73.9)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

**Table 64: Prevalence of children by frequency of looking forward to going to school each day, 5 to 15 years, HWSS 2002–20**

	Almost never or rarely		Sometimes		Often		Almost always	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>2002</b>	3.6	(2.0 – 5.1)	9.9	(7.2 – 12.5)	13.8	(10.9 – 16.7)	72.7	(68.9 – 76.6)
<b>2003</b>	5.4	(3.6 – 7.2)	9.1	(6.9 – 11.3)	15.5	(12.5 – 18.5)	70.0	(66.3 – 73.7)
<b>2004</b>	2.4*	(0.8 – 4.0)	11.5	(7.3 – 15.7)	13.5	(9.5 – 17.6)	72.5	(67.0 – 78.0)
<b>2005</b>	2.0*	(0.9 – 3.1)	10.2	(7.1 – 13.4)	16.3	(13.1 – 19.5)	71.5	(67.3 – 75.6)
<b>2006</b>	5.8	(3.9 – 7.8)	7.9	(5.7 – 10.1)	16.1	(13.0 – 19.2)	70.2	(66.4 – 74.1)
<b>2007</b>	4.2*	(2.0 – 6.4)	6.5	(3.6 – 9.4)	16.1	(12.0 – 20.3)	73.2	(68.1 – 78.2)
<b>2008</b>	5.5	(3.4 – 7.6)	11.0	(7.5 – 14.5)	13.6	(9.9 – 17.3)	69.9	(64.9 – 74.8)
<b>2009</b>	5.4	(4.3 – 6.6)	8.4	(7.1 – 9.8)	19.1	(17.2 – 21.1)	67.0	(64.6 – 69.3)
<b>2010</b>	3.6*	(1.8 – 5.5)	10.5	(7.4 – 13.6)	16.3	(12.8 – 19.8)	69.6	(65.1 – 74.1)
<b>2011</b>	3.3*	(1.6 – 5.1)	10.4	(7.3 – 13.6)	19.7	(15.1 – 24.4)	66.5	(61.2 – 71.8)
<b>2012</b>	6.1	(3.9 – 8.2)	7.8	(5.2 – 10.3)	16.6	(12.7 – 20.6)	69.5	(64.9 – 74.2)
<b>2013</b>	6.7	(4.2 – 9.1)	9.2	(6.0 – 12.3)	18.1	(14.0 – 22.2)	66.0	(61.0 – 71.1)
<b>2014</b>	2.5*	(1.0 – 4.1)	8.5	(5.5 – 11.5)	14.6	(10.8 – 18.5)	74.3	(69.5 – 79.2)
<b>2015</b>	5.2	(2.9 – 7.5)	7.6	(4.8 – 10.4)	20.6	(16.1 – 25.1)	66.6	(61.4 – 71.7)
<b>2016</b>	3.3*	(1.6 – 5.1)	10.7	(7.1 – 14.3)	13.1	(9.9 – 16.3)	72.8	(68.2 – 77.5)
<b>2017</b>	3.5	(1.8 – 5.2)	10.9	(7.8 – 14.0)	17.6	(13.8 – 21.4)	68.0	(63.3 – 72.7)
<b>2018</b>	6.6	(3.8 – 9.4)	9.6	(6.6 – 12.7)	20.9	(15.7 – 26.1)	62.9	(57.1 – 68.7)
<b>2019</b>	5.0*	(2.4 – 7.5)	9.0	(5.9 – 12.1)	20.0	(15.3 – 24.7)	66.0	(60.3 – 71.7)
<b>2020</b>	5.8*	(2.8 – 8.9)	7.5	(4.4 – 10.5)	19.1	(14.3 – 24.0)	67.6	(61.7 – 73.4)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

Family  
functioning



## 12. Family functioning



How well a family functions affects the health and wellbeing of children within the family. Family functioning affects many aspects of family life, including the degree of agreement on decisions, acceptance of individuals, the ability to solve day-to-day problems and communication.<sup>26</sup>

The questions used in the HWSS are taken from the McMaster Family Functioning Scale of 12 questions.<sup>27</sup> Four questions were identified as sufficient to assess family functioning within a population<sup>1a</sup>. The questions are stated in the negative and reverse scored to assess overall family functioning. The first question is about the family not usually getting along (**Table 65**). Approximately two in three (67.7%) children were estimated to live in a family where it was strongly disagreed that the family does not usually get on well together. The estimates of whether the family does not usually get on well together were similar among age groups and among boys and girls.

**Table 65: Prevalence of children by whether their family usually does not get on well together, 0 to 15 years, HWSS 2020**

	Strongly agree or agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
0 to 4 yrs	N/A	(N/A – N/A)	21.1*	(3.1 – 39.1)	78.0	(59.9 – 96.1)
5 to 9 yrs	N/A	(N/A – N/A)	31.0	(19.7 – 42.2)	66.3	(54.7 – 77.9)
10 to 15 yrs	4.1*	(0.5 – 7.6)	35.6	(28.3 – 43.0)	60.3	(52.8 – 67.9)
<b>Sex</b>						
Boys	N/A	(N/A – N/A)	30.9	(19.9 – 42.0)	67.5	(56.3 – 78.6)
Girls	N/A	(N/A – N/A)	28.2	(18.6 – 37.8)	68.0	(58.0 – 78.1)
<b>Children</b>	2.6*	(0.4 – 4.9)	29.6	(22.3 – 37.0)	67.7	(60.2 – 75.3)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The annual prevalence estimates of family not usually getting along are shown in **Table 66**. Estimates relating to the family not getting on well together were similar in 2020 compared with 2002.

<sup>1a</sup> The analysis of the McMaster instrument was undertaken by Professor Stephen Zubrick of the Telethon Kids Institute, whom the authors gratefully acknowledge.

**Table 66: Prevalence of children by whether their family usually does not get on well together, 0 to 15 years, HWSS 2002–20**

	Strongly agree or agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
2002	3.2	(1.9 – 4.6)	30.2	(26.8 – 33.6)	66.6	(63.1 – 70.1)
2003	2.2	(1.4 – 3.1)	35.4	(32.1 – 38.7)	62.4	(59.0 – 65.7)
2004	4.2*	(2.1 – 6.3)	35.5	(30.4 – 40.7)	60.3	(55.0 – 65.5)
2005	1.6*	(0.6 – 2.6)	33.6	(30.1 – 37.2)	64.8	(61.1 – 68.4)
2006	2.1	(1.1 – 3.1)	35.8	(32.4 – 39.2)	62.1	(58.7 – 65.6)
2007	3.5	(1.9 – 5.1)	28.2	(23.6 – 32.8)	68.3	(63.6 – 73.0)
2008	3.1*	(1.4 – 4.7)	34.6	(30.1 – 39.1)	62.3	(57.7 – 66.9)
2009	2.8	(1.9 – 3.8)	30.9	(28.3 – 33.5)	66.3	(63.6 – 69.0)
2010	3.1	(1.8 – 4.5)	26.7	(22.9 – 30.5)	70.2	(66.3 – 74.0)
2011	4.2*	(2.0 – 6.4)	31.7	(27.1 – 36.3)	64.1	(59.3 – 68.9)
2012	3.4	(1.8 – 5.0)	33.1	(28.9 – 37.3)	63.5	(59.2 – 67.8)
2013	3.8	(2.0 – 5.5)	30.3	(25.7 – 34.8)	66.0	(61.3 – 70.7)
2014	3.3*	(1.2 – 5.3)	28.1	(23.2 – 33.0)	68.6	(63.6 – 73.7)
2015	2.6*	(1.3 – 4.0)	22.1	(18.0 – 26.3)	75.2	(71.0 – 79.5)
2016	2.6*	(0.8 – 4.3)	24.9	(20.8 – 29.0)	72.6	(68.3 – 76.8)
2017	2.6*	(1.3 – 4.0)	29.1	(24.2 – 34.0)	68.2	(63.3 – 73.2)
2018	1.6*	(0.3 – 2.9)	29.4	(23.2 – 35.5)	69.0	(62.9 – 75.2)
2019	4.9*	(1.3 – 8.5)	24.4	(18.6 – 30.1)	70.7	(64.4 – 77.1)
2020	2.6*	(0.5 – 4.8)	29.5	(22.3 – 36.6)	67.9	(60.5 – 75.2)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The second question asked parents/carers whether planning family activities is usually difficult (**Table 67**). Approximately one in five (20.5%) children was estimated to live in a family where it was strongly agreed or agreed that planning family activities was usually difficult. The estimates of whether planning family activities was usually difficult were similar among age groups and among boys and girls.

**Table 67: Prevalence of children by whether planning family activities is usually difficult, 0 to 15 years, HWSS 2020**

	Strongly agree or agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
0 to 4 yrs	19.4*	(1.8 – 37.0)	28.7*	(7.8 – 49.7)	51.9	(28.9 – 74.9)
5 to 9 yrs	18.0*	(9.1 – 26.8)	43.2	(31.4 – 54.9)	38.8	(28.0 – 49.7)
10 to 15 yrs	23.7	(17.3 – 30.2)	38.0	(30.6 – 45.4)	38.2	(30.9 – 45.6)
<b>Sex</b>						
Boys	20.8*	(10.5 – 31.2)	39.5	(27.1 – 51.9)	39.7	(27.8 – 51.6)
Girls	20.2	(12.1 – 28.3)	33.9	(23.8 – 44.0)	45.9	(34.0 – 57.8)
<b>Children</b>	20.5	(13.9 – 27.2)	36.8	(28.7 – 44.9)	42.7	(34.1 – 51.2)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The annual prevalence estimates of whether planning family activities is usually difficult is shown in **Table 68**. Estimates relating to whether planning family activities is usually difficult were similar in 2020 compared with 2002.

**Table 68: Prevalence of children by whether planning family activities is usually difficult, 0 to 15 years, HWSS 2002–20**

	Strongly agree or agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
2002	19.4	(16.7 – 22.5)	40.6	(37.0 – 44.3)	39.9	(36.2 – 43.6)
2003	19.5	(16.7 – 22.2)	45.3	(41.8 – 48.8)	35.3	(31.9 – 38.6)
2004	21.6	(17.1 – 26.0)	44.0	(38.7 – 49.3)	34.5	(29.4 – 39.6)
2005	16.3	(13.5 – 19.1)	46.4	(42.7 – 50.2)	37.3	(33.6 – 40.9)
2006	19.9	(17.1 – 22.6)	45.3	(41.7 – 48.8)	34.9	(31.5 – 38.3)
2007	16.9	(13.2 – 20.6)	41.4	(36.4 – 46.3)	41.7	(36.7 – 46.8)
2008	22.1	(18.1 – 26.0)	43.8	(39.0 – 48.5)	34.1	(29.6 – 38.7)
2009	14.9	(12.8 – 17.0)	43.1	(40.1 – 46.1)	42.0	(38.9 – 45.1)
2010	16.2	(13.1 – 19.4)	40.0	(35.8 – 44.2)	43.8	(39.5 – 48.0)
2011	16.1	(12.4 – 19.8)	40.5	(35.7 – 45.2)	43.4	(38.6 – 48.2)
2012	19.7	(16.0 – 23.3)	40.0	(35.7 – 44.3)	40.4	(36.1 – 44.7)
2013	17.8	(13.9 – 21.7)	35.4	(30.7 – 40.2)	46.7	(41.6 – 51.9)
2014	12.0	(8.7 – 15.4)	39.4	(34.2 – 44.7)	48.5	(43.2 – 53.8)
2015	13.2	(9.9 – 16.6)	38.0	(33.3 – 42.7)	48.8	(43.9 – 53.7)
2016	15.3	(12.0 – 18.7)	41.6	(36.9 – 46.3)	43.1	(38.4 – 47.8)
2017	20.2	(15.9 – 24.6)	38.7	(33.4 – 44.0)	41.1	(35.9 – 46.2)
2018	17.5	(13.2 – 21.8)	35.3	(29.2 – 41.4)	47.2	(40.7 – 53.7)
2019	19.6	(13.3 – 26.0)	32.6	(26.2 – 39.0)	47.8	(40.8 – 54.8)
2020	20.6	(14.1 – 27.1)	36.7	(28.7 – 44.6)	42.7	(34.3 – 51.1)

The third question asked parents/carers whether their family usually avoid discussing their fears and concerns openly with each other (**Table 69**). Almost one in twenty (6.1%) children was estimated to live in a family where the family usually avoided discussing fears and concerns openly with each other. Estimates relating to whether the family usually avoided discussing their fears and concerns openly with each other were similar among age groups and among boys and girls.

**Table 69: Prevalence of children by whether their family usually avoid discussing fears and concerns openly with each other, 0 to 15 years, HWSS 2020**

	Strongly agree or agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
0 to 4 yrs	N/A	(N/A – N/A)	31.6*	(10.3 – 52.9)	65.3	(43.7 – 86.9)
5 to 9 yrs	6.1*	(0.5 – 11.7)	48.7	(37.1 – 60.3)	45.2	(33.9 – 56.5)
10 to 15 yrs	8.7	(4.0 – 13.3)	39.9	(32.4 – 47.4)	51.4	(43.8 – 59.0)
<b>Sex</b>						
Boys	7.9*	(3.1 – 12.7)	38.5	(26.1 – 50.8)	53.6	(41.2 – 66.1)
Girls	N/A	(N/A – N/A)	41.9	(30.9 – 53.0)	53.9	(42.5 – 65.2)
<b>Children</b>	6.1*	(2.9 – 9.3)	40.1	(31.9 – 48.4)	53.7	(45.3 – 62.2)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The annual estimates of whether families avoid discussing fears and concerns openly with each other are shown in **Table 70**. The estimate relating to whether families avoided discussing fears and concerns openly with each other were similar in 2020 compared with 2002.

**Table 70: Prevalence of children by whether their family usually avoid discussing fears and concerns openly with each other, 0 to 15 years, HWSS 2002–20**

	Strongly agree or agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
<b>2002</b>	10.3	(8.1 – 12.5)	43.5	(39.7 – 47.2)	46.3	(42.5 – 50.0)
<b>2003</b>	9.3	(7.2 – 11.5)	45.0	(41.5 – 47.2)	45.7	(42.2 – 49.2)
<b>2004</b>	11.3	(7.7 – 14.8)	50.9	(45.5 – 56.2)	37.9	(32.7 – 43.1)
<b>2005</b>	6.3	(4.6 – 8.0)	47.6	(43.8 – 51.4)	46.1	(42.3 – 49.9)
<b>2006</b>	5.8	(4.3 – 7.4)	51.0	(47.5 – 54.5)	43.2	(39.6 – 46.7)
<b>2007</b>	9.9	(6.7 – 13.1)	36.8	(32.0 – 41.6)	53.3	(48.3 – 58.3)
<b>2008</b>	9.4	(6.6 – 12.2)	45.3	(40.5 – 50.1)	45.3	(40.5 – 50.0)
<b>2009</b>	6.7	(5.3 – 8.2)	47.8	(44.7 – 50.9)	45.5	(42.4 – 48.5)
<b>2010</b>	6.7	(4.5 – 8.8)	43.0	(38.7 – 47.2)	50.4	(46.1 – 54.7)
<b>2011</b>	6.0	(3.8 – 8.2)	42.5	(37.8 – 47.3)	51.4	(46.6 – 56.3)
<b>2012</b>	7.6	(5.0 – 10.3)	42.2	(37.9 – 46.6)	50.1	(45.7 – 54.5)
<b>2013</b>	11.0	(7.9 – 14.0)	39.5	(34.6 – 44.3)	49.6	(44.7 – 54.5)
<b>2014</b>	5.2	(2.9 – 7.4)	42.8	(37.5 – 48.1)	52.1	(46.7 – 57.4)
<b>2015</b>	5.7	(3.7 – 7.7)	37.4	(32.7 – 42.1)	56.9	(52.1 – 61.7)
<b>2016</b>	6.2	(3.8 – 8.7)	44.7	(40.0 – 49.4)	49.1	(44.4 – 53.8)
<b>2017</b>	8.1	(4.5 – 11.7)	39.3	(34.1 – 44.5)	52.6	(47.2 – 57.9)
<b>2018</b>	4.9*	(2.2 – 7.7)	39.0	(33.0 – 45.0)	56.1	(49.8 – 62.3)
<b>2019</b>	9.5*	(4.5 – 14.4)	38.8	(31.9 – 45.7)	51.8	(44.7 – 58.8)
<b>2020</b>	6.0*	(2.9 – 9.1)	40.0	(32.0 – 48.1)	53.9	(45.7 – 62.2)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

The fourth question asked parents/carers whether making decisions is usually a problem in the family because they misunderstand each other (**Table 71**). Less than one in ten (7.4%) children were estimated to live in a family where making decisions within the family is usually a problem because they misunderstand each other.

**Table 71: Prevalence of children by whether making decisions within their family is usually a problem because they misunderstand each other, 0 to 15 years, HWSS 2020**

	Strongly agree or agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
0 to 4 yrs	N/A	(N/A – N/A)	31.4*	(10.2 – 52.7)	63.5	(41.9 – 85.2)
5 to 9 yrs	6.2*	(1.7 – 10.7)	45.7	(34.0 – 57.3)	48.2	(36.6 – 59.7)
10 to 15 yrs	10.4	(5.8 – 15.1)	45.7	(38.1 – 53.3)	43.9	(36.4 – 51.3)
<b>Sex</b>						
Boys	7.6*	(3.5 – 11.8)	40.0	(27.6 – 52.4)	52.4	(39.9 – 64.8)
Girls	7.1*	(2.5 – 11.8)	42.6	(31.7 – 53.5)	50.3	(38.7 – 61.9)
<b>Children</b>	7.4	(4.3 – 10.5)	41.3	(33.0 – 49.5)	51.4	(42.9 – 59.9)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

The annual estimates of whether making decisions is usually a problem is shown in **Table 72**. The estimate relating to whether making decisions within families is usually a problem due to misunderstanding in 2020 was similar when compared with 2002.



**Table 72: Prevalence of children by whether making decisions within their family is usually a problem because they misunderstand each other, 0 to 15 years, HWSS 2002–20**

	Strongly agree or agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
2002	10.0	(7.6 – 12.4)	45.5	(41.7 – 49.2)	44.5	(40.8 – 48.3)
2003	9.5	(7.5 – 11.5)	50.4	(46.9 – 53.9)	40.2	(36.7 – 43.6)
2004	12.0	(8.4 – 15.5)	54.6	(49.2 – 59.9)	33.5	(28.5 – 38.5)
2005	9.1	(7.1 – 11.2)	52.1	(48.4 – 55.9)	38.7	(35.1 – 42.4)
2006	10.2	(8.1 – 12.2)	51.9	(48.4 – 55.4)	37.9	(34.5 – 41.4)
2007	8.9	(6.3 – 11.5)	46.3	(41.2 – 51.3)	44.9	(39.8 – 50.0)
2008	10.1	(7.3 – 12.8)	51.4	(46.7 – 56.2)	38.5	(33.9 – 43.1)
2009	7.5	(6.1 – 8.9)	49.1	(46.0 – 52.1)	43.4	(40.3 – 46.5)
2010	7.1	(5.0 – 9.3)	47.0	(42.7 – 51.2)	45.9	(41.6 – 50.2)
2011	6.5	(4.1 – 8.9)	45.3	(40.4 – 50.1)	48.2	(43.3 – 53.1)
2012	8.4	(6.0 – 10.8)	45.5	(41.1 – 49.8)	46.1	(41.8 – 50.5)
2013	8.2	(5.5 – 11.0)	46.9	(42.0 – 51.9)	44.8	(40.0 – 49.7)
2014	6.3	(3.6 – 9.0)	44.8	(39.4 – 50.1)	48.9	(43.6 – 54.3)
2015	6.2	(4.2 – 8.3)	43.8	(39.0 – 48.7)	50.0	(45.1 – 54.8)
2016	7.9	(5.2 – 10.7)	48.4	(43.6 – 53.1)	43.7	(39.0 – 48.4)
2017	6.5	(4.1 – 8.9)	44.9	(39.5 – 50.2)	48.6	(43.3 – 53.9)
2018	5.4	(3.4 – 7.5)	40.8	(34.7 – 46.9)	40.8	(34.7 – 46.9)
2019	9.1	(4.7 – 13.6)	48.5	(41.4 – 55.5)	42.4	(35.6 – 49.2)
2020	7.5	(4.5 – 10.6)	41.3	(33.2 – 49.4)	51.2	(42.8 – 59.5)

The four questions were reverse-scored and added together to get an indication of the level of functioning within families. A total score of 2.25 or less is defined as poor family functioning. The cut-off score was provided by Professor Zubrick of the Telethon Kids Institute, as part of his work on reducing the McMaster Family Functioning Scale for use in a population-based child health survey. The results are shown in **Table 73**. The estimated prevalence of poor family functioning was similar among age groups and between boys and girls.

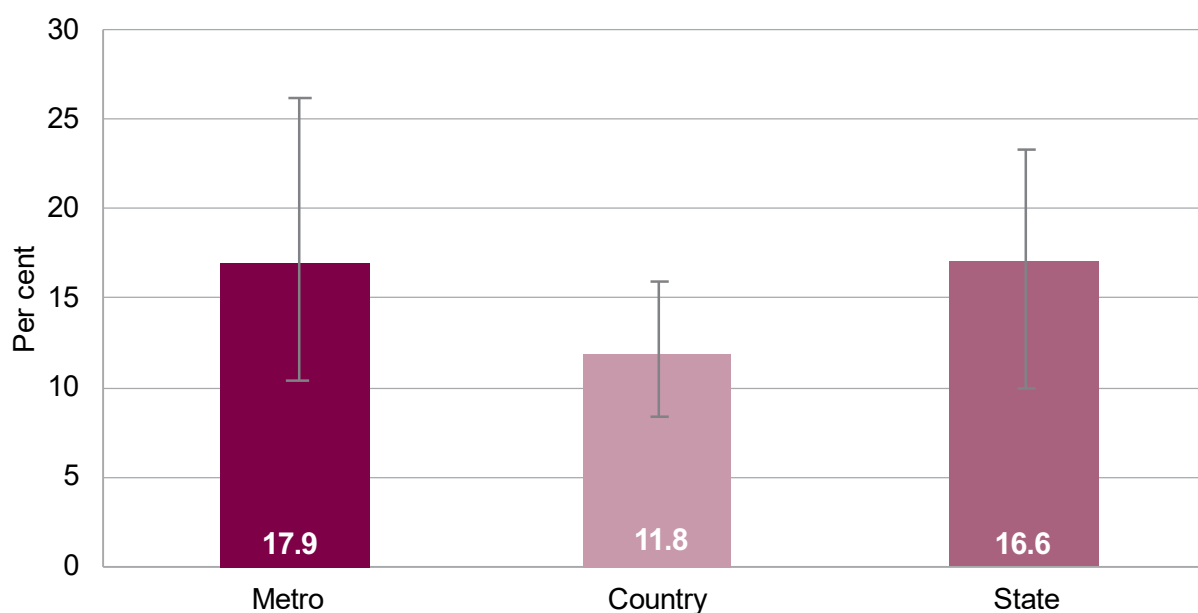
**Table 73: Prevalence of children with poor family functioning, 0 to 15 years, HWSS 2020**

	Poor family functioning	
	%	95% CI
<b>Age Group</b>		
0 to 4 yrs	18.2*	(0.4 – 36.0)
5 to 9 yrs	12.0*	(4.2 – 19.7)
10 to 15 yrs	19.3	(13.1 – 25.6)
<b>Sex</b>		
Boys	17.7	(7.6 – 27.8)
Girls	15.5	(7.6 – 23.4)
<b>Children</b>	16.6	(10.1 – 23.1)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

**Figure 13** shows the prevalence of children with poor family functioning scores by geographic area of residence. Estimates were similar among metro and country areas.

**Figure 13: Prevalence of children with poor family functioning, by geographic area, 0 to 15 years, HWSS 2020**



The annual prevalence estimates of poor family functioning are shown in **Table 74**. The prevalence of children in households considered to have poor family functioning in 2020 was similar to 2002.

**Table 74: Prevalence of children with poor family functioning, 0 to 15 years, HWSS 2002–20**

	Poor family functioning	
	%	95% CI
2002	15.3	(12.6 – 17.9)
2003	14.4	(11.9 – 16.8)
2004	19.6	(15.2 – 24.0)
2005	12.5	(10.2 – 14.8)
2006	15.6	(13.1 – 18.1)
2007	14.5	(10.9 – 18.1)
2008	15.7	(12.4 – 19.1)
2009	11.4	(9.7 – 13.1)
2010	11.2	(8.6 – 13.9)
2011	11.3	(8.2 – 14.5)
2012	13.9	(10.6 – 17.2)
2013	15.9	(12.4 – 19.5)
2014	8.2	(5.4 – 11.1)
2015	8.7	(6.0 – 11.3)
2016	11.3	(8.2 – 14.4)
2017	14.9	(10.8 – 19.0)
2018	11.3	(7.9 – 14.7)
2019	14.5	(8.9 – 20.1)
2020	16.5	(10.2 – 22.9)

Respondent  
for child



# 13. Respondent for child



As well as information regarding the child; demographic, social and psychosocial information about the parent/carer responding on behalf of the child is also collected. The information relating to the children has been weighted to the age and sex distribution of Western Australia’s child population. However, data relating to the respondent for the child has not been weighted given these estimates are not meant to be reflective of the child population. The demographic characteristics of respondents are presented in **Table 4**.

## 13.1 General health



Self-ratings of health are used internationally, with poor health ratings associated with increased mortality, high levels of psychological distress and lower physical functioning, compared with excellent or very good ratings.<sup>3</sup>

**Table 75** shows the respondents’ self-reported general health status. Self-reported general health status was similar among parents/carers of children of different age groups and similar among parents/carers of boy and girls.

**Table 75: General health status of respondent, HWSS 2020**

	Excellent		Very Good		Good		Fair/Poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Child’s age group</b>								
0 to 4 yrs	23.3*	(10.6 – 35.9)	27.9	(14.5 – 41.4)	34.9	(20.6 – 49.2)	14.0*	(3.6 – 24.3)
5 to 9 yrs	27.6	(19.8 – 35.4)	34.6	(26.3 – 43.0)	26.0	(18.3 – 33.6)	11.8	(6.2 – 17.4)
10 to 15 yrs	19.8	(15.4 – 24.2)	35.5	(30.3 – 40.8)	32.1	(26.9 – 37.2)	12.6	(8.9 – 16.2)
<b>Child’s sex</b>								
Boys	22.6	(17.4 – 27.8)	34.7	(28.7 – 40.6)	31.0	(25.3 – 36.8)	11.7	(7.7 – 15.7)
Girls	21.7	(16.4 – 26.9)	34.6	(28.5 – 40.6)	30.4	(24.6 – 36.3)	13.3	(9.0 – 17.6)
<b>Persons</b>	22.1	(18.4 – 25.8)	34.6	(30.4 – 38.9)	30.7	(26.6 – 34.8)	12.5	(9.6 – 15.4)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

## 13.2 Mental health

Mental health conditions encompass a wide range of conditions that vary widely in severity and duration. Mental health conditions are associated with higher rates of death, poorer physical health and increased exposure to health risk factors.<sup>13</sup>

Respondents were asked whether a doctor had diagnosed them with depression, anxiety, stress or any other mental health problem during the past 12 months and whether they were currently receiving treatment for such a problem. The prevalence of mental health conditions is shown in **Table 76**.

**Table 76: Mental health of respondent, HWSS 2020**

	Respondent mental health condition in the past 12 months (a)		Respondent currently receiving treatment (b)	
	%	95% CI	%	95% CI
<b>Child's age group</b>				
0 to 4 yrs	18.6*	(6.9 – 30.3)	11.6*	(2.0 – 21.2)
5 to 9 yrs	21.4	(14.2 – 28.6)	15.9	(9.5 – 22.3)
10 to 15 yrs	17.9	(13.7 – 22.2)	15.7	(11.7 – 19.7)
<b>Child's sex</b>				
Boys	20.1	(15.1 – 25.1)	16.1	(11.5 – 20.6)
Girls	17.6	(12.8 – 22.5)	14.6	(10.1 – 19.1)
<b>Persons</b>	<b>18.9</b>	<b>(15.4 – 22.4)</b>	<b>15.4</b>	<b>(12.2 – 18.6)</b>

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

(a) In the past 12 months told by a doctor they had depression, anxiety, stress or any other mental health problem.

(b) Currently receiving treatment for a mental health problem ever diagnosed.

Approximately one in five (18.9%) respondents reported being diagnosed with depression, anxiety, stress or another mental health condition in the past 12 months. Approximately one in seven (15.4%) respondents were currently receiving treatment. The prevalence of respondents receiving treatment was similar among age groups and between parents/carers of boys and girls.

### 13.3 Lack of control

Perceptions of control relates to an individual's belief as to whether outcomes are determined by external events outside their control or by their own actions.<sup>28</sup> Feelings of lack of control are associated with poorer health outcomes and an increased risk of mortality.<sup>29</sup>

Respondents were asked to rate how often during the past four weeks they felt a lack of control over their life in general (**Table 77**), their personal life (**Table 78**) and their health (**Table 79**).

People who often or always report feeling a lack of control over aspects of life are also those who report poorer mental and physical health. Less than half (44.4%) of respondents reported never feeling lack of control over life in general, while around one quarter (27.2%) felt a lack of control over life in general rarely and approximately one in five (21.9%) felt a lack of control over life in general sometimes. Over half of respondents reported never feeling a lack of control over personal life or their health (55.7% and 57.8%, respectively)

Estimates for lack of control over life in general, lack of control over personal life, and lack of control over health were similar among respondents who were parents/carers of children of different age groups and who were parents/carers of boys and girls.

**Table 77: Lack of control over life in general during past four weeks, respondent, HWSS 2020**

	Never		Rarely		Sometimes		Often		Always	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Child's age group</b>										
0 to 4 yrs	44.2	(29.3 – 59.1)	25.6*	(12.5 – 38.7)	25.6*	(12.5 – 38.7)	N/A	(N/A – N/A)	0.0	(0.0 – 0.0)
5 to 9 yrs	44.9	(36.2 – 53.6)	26.0	(18.3 – 33.6)	23.6	(16.2 – 31.0)	3.9*	(0.5 – 7.3)	N/A	(N/A – N/A)
10 to 15 yrs	44.2	(38.7 – 49.7)	27.9	(23.0 – 32.8)	20.7	(16.2 – 25.2)	4.4*	(2.1 – 6.6)	2.8*	(1.0 – 4.6)
<b>Child's sex</b>										
Boys	45.0	(38.8 – 51.2)	27.3	(21.8 – 32.9)	22.5	(17.3 – 27.7)	3.2*	(1.0 – 5.4)	2.0*	(0.3 – 3.8)
Girls	43.8	(37.5 – 50.0)	27.1	(21.4 – 32.7)	21.3	(16.1 – 26.4)	5.4*	(2.5 – 8.3)	2.5*	(1.0 – 4.6)
<b>Persons</b>	44.4	(40.0 – 48.8)	27.2	(23.2 – 31.2)	21.9	(18.2 – 25.6)	4.3	(2.5 – 6.1)	2.2*	(0.9 – 3.6)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

**Table 78: Lack of control over personal life during past four weeks, respondent, HWSS 2020**

	Never		Rarely		Sometimes		Often		Always	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Child's age group</b>										
0 to 4 yrs	60.5	(45.8 – 75.1)	23.3*	(10.6 – 35.9)	11.6*	(2.0 – 21.2)	N/A	(N/A – N/A)	0.0	(0.0 – 0.0)
5 to 9 yrs	56.7	(48.0 – 65.3)	24.4	(16.9 – 31.9)	14.2	(8.1 – 20.3)	3.1*	(0.1 – 6.2)	N/A	(N/A – N/A)
10 to 15 yrs	54.7	(49.2 – 60.2)	20.1	(15.7 – 24.5)	20.1	(15.7 – 24.5)	3.1*	(1.2 – 5.1)	1.9*	(0.4 – 3.4)
<b>Child's sex</b>										
Boys	53.6	(47.4 – 59.9)	21.0	(15.9 – 26.1)	21.4	(16.3 – 26.5)	2.8*	(0.8 – 4.9)	N/A	(N/A – N/A)
Girls	57.9	(51.6 – 64.2)	22.1	(16.8 – 27.3)	14.2	(9.7 – 18.6)	3.8*	(1.3 – 6.2)	2.1*	(0.3 – 3.9)
<b>Persons</b>	55.7	(51.3 – 60.2)	21.5	(17.9 – 25.2)	17.8	(14.4 – 21.2)	3.3	(1.7 – 4.9)	1.6*	(0.5 – 2.8)

\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.

**Table 79: Lack of control over health during past four weeks, respondent, HWSS 2020**

	Never		Rarely		Sometimes		Often		Always	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Child's age group</b>										
0 to 4 yrs	52.4	(37.2 – 67.5)	23.8*	(10.9 – 36.7)	19.0*	(7.1 – 31.0)	N/A	(N/A – N/A)	0.0	(0.0 – 0.0)
5 to 9 yrs	56.7	(48.0 – 65.3)	20.5	(13.4 – 27.5)	15.0	(8.7 – 21.2)	5.5*	(1.5 – 9.5)	N/A	(N/A – N/A)
10 to 15 yrs	58.9	(53.5 – 64.4)	18.2	(13.9 – 22.4)	15.0	(11.1 – 19.0)	3.8*	(1.7 – 5.9)	4.1*	(1.9 – 6.3)
<b>Child's sex</b>										
Boys	50.4	(44.5 – 56.2)	54.3	(44.1 – 64.4)	50.7	(39.3 – 62.0)	47.6	(26.2 – 69.1)	43.8*	(43.8 – 68.1)
Girls	49.6	(43.8 – 55.5)	45.7	(35.6 – 55.9)	49.3	(38.0 – 60.7)	52.4	(30.9 – 73.8)	56.3*	(31.9 – 80.6)
<b>Persons</b>	<b>57.8</b>	<b>(53.4 – 62.2)</b>	<b>19.3</b>	<b>(15.8 – 22.8)</b>	<b>15.4</b>	<b>(12.2 – 18.6)</b>	<b>4.3</b>	<b>(2.5 – 6.1)</b>	<b>3.3</b>	<b>(1.7 – 4.9)</b>

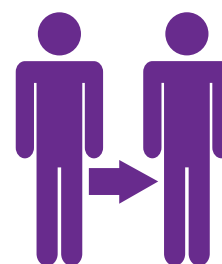
\* Prevalence estimate has an RSE between 25%-50% and should be used with caution.

N/A Prevalence estimate has an RSE greater than 50% and is considered too unreliable for general use.



## 13.4 Partner of Respondent for Child

The demographic characteristics of the child respondent's partner and unweighted proportions are shown below in **Table 80**. Of this sample, 6 respondents identified their partner as Aboriginal or Torres Strait Islander.



**Table 80: Demographics of respondent's partner, HWSS 2020**

Characteristic	Unweighted Sample (n)	Unweighted Per Cent (%)
<b>Australian born</b>		
Yes	316	74.5
No	108	25.5
<b>Highest level of education</b>		
Less than Year 10	3	0.7
Year 10 or Year 11	34	8.1
Year 12	44	10.4
TAFE/ Trade Qualification	217	51.4
Tertiary degree or equivalent	124	29.4
<b>Employment status</b>		
Employed	380	89.8
Unemployed	7	1.7
Home duties	24	5.7
Retired	7	1.7
Unable to work	5	1.2
Student	0	0.0
Other	1	0.2

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## List of tables

Table 1: Demographic characteristics of the child, HWSS 2020	13
Table 2: Characteristics of the household where the child lives, HWSS 2020	14
Table 3: Demographic characteristics of respondent for child, HWSS 2020	15
Table 4: Parent/carer-reported child health status, 0 to 15 years, HWSS 2020	17
Table 5: Prevalence of children by parent/carer-reported child health status, 0 to 15 years, HWSS 2004–20	18
Table 6: Prevalence of children with a visibility that impacts the family, 0 to 15 years, HWSS 2020	19
Table 7: Prevalence of children with a disability that impacts the family, 0 to 15 years, HWSS 2002–20	20
Table 8: Prevalence of children by the extent of the impact their disability puts on the family, 0 to 15 years, HWSS 2002–20	21
Table 9: Prevalence of children with asthma, 0 to 15 years, HWSS 2020	24
Table 10: Prevalence of children with asthma, 0 to 15 years, HWSS 2005–20	25
Table 11: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, 0 to 15 years, HWSS 2020	26
Table 12: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, 0 to 15 years, HWSS 2007–20	27
Table 13: Mean number of injuries requiring treatment from a health professional, 0 to 15 years, HWSS 2020	28
Table 14: Mean number of injuries, 0 to 15 years, HWSS 2007–20	28
Table 15: NHMRC 2013 Australian Dietary Guidelines for fruit and vegetable daily consumption and HWSS reporting definitions, children 2 to 15 years	31
Table 16: Prevalence of children by number of serves of fruit consumed daily, 2 to 15 years, HWSS 2020	32
Table 17: Prevalence of children by number of serves of vegetables consumed daily, 2 to 15 years, HWSS 2020	32
Table 18: Prevalence of children eating sufficient serves of fruit and/or vegetables, 2 to 15 years, HWSS 2020	33
Table 19: Prevalence of children eating sufficient serves of fruit and/or vegetables, 2 to 15 years, HWSS 2020	33
Table 20: Mean daily fruit and vegetable serves, 2 to 15 years, HWSS 2002–20	34
Table 21: Prevalence of children by type of milk usually consumed, 2 to 15 years, HWSS 2020	35

Table 22: Prevalence of children by type of milk usually consumed, 2 to 15 years, HWSS 2002–20	36
Table 23: Prevalence of children by consumption of meals from fast food outlets per week, 1 to 15 years, HWSS 2020	37
Table 24: Prevalence of children by consumption of meals from fast food outlets per week, 1 to 15 years, HWSS 2002–20	38
Table 25: Prevalence of children by consumption of hot chips, french-fries, wedges, hash browns or fried potatoes per week, 1 to 15 yrs, HWSS 2020	38
Table 26: Prevalence of children by consumption of sweet cakes, biscuits, doughnuts, muffins, pastries or muesli bars per week, 1 to 15 years, HWSS 2020	39
Table 27: Prevalence of children by consumption of snacks per week, 1 to 15 years, HWSS 2020	40
Table 28: Prevalence of children by consumption of sugar sweetened soft drinks per week, 1 to 15 years, HWSS 2020	40
Table 29: Prevalence of children by consumption of processed meats per week, 1 to 15 years, HWSS 2020	41
Table 30: Prevalence of children by parent/carer-rated physical activity level, 5 to 15 years, HWSS 2020	42
Table 31: Prevalence of children by parent/carer rated physical activity level, 5 to 15 years, HWSS 2005–20	42
Table 32: Prevalence of children by physical activity completed weekly, 5 to 15 years, HWSS 2020	43
Table 33: Prevalence of children by physical activity completed weekly, 5 to 15 years, HWSS 2006–20	44
Table 34: Mean time (minutes) spent in physical activity per week, 5 to 15 years, HWSS 2006–20	45
Table 35: Prevalence of children meeting the Australian sedentary behaviour guidelines for electronic media use, 0 to 15 years, HWSS 2020	46
Table 36: Prevalence of children meeting the Australian sedentary behaviour guidelines for electronic media use, 0 to 15 years, HWSS 2003–20	46
Table 37: Prevalence of children by body mass index categories, 5 to 15 years, HWSS 2020	47
Table 38: Prevalence of children by body mass index categories, 5 to 15 years, HWSS 2004–20	48
Table 39: Prevalence of children by parent/carer-perceived body weight, by Body Mass Index classification, 5 to 15 years, HWSS 2020	49

Table 40: Prevalence of children by parent/carer intentions regarding the child's weight, by Body Mass Index classification, 5 to 15 years, HWSS 2020	49
Table 41: Prevalence of smoke free homes, 0 to 15 years, HWSS 2002–20	50
Table 42: Mean number of times sunburnt in past 12 months, 0 to 15 years, HWSS 2020	51
Table 43: Mean times sunburnt in the past 12 months, 0 to 15 years, HWSS 2002–20	51
Table 44: Prevalence of children by how often parent/carer checks they are adequately protected before going out into the sunlight, 0 to 15 years, HWSS 2020	52
Table 45: Prevalence of children by how often parent/carer checks they are adequately protected before going into the sunlight, 0 to 15 years, HWSS 2002–20	52
Table 46: Recommended sleep duration by age for children	53
Table 47: Prevalence of children meeting the recommended sleep duration, 0 to 15 years, HWSS 2020	54
Table 48: Mean hours spent sleeping on a usual night, 0 to 15 years, HWSS 2020	54
Table 49: Proportion of children utilising health services in the past 12 months, 0 to 15 years, HWSS 2020	57
Table 50: Proportion of children utilising health services in the past 12 months, 0 to 15 years, HWSS 2005–20	58
Table 51: Mean number of visits to health services in the past 12 months, 0 to 15 years, HWSS 2020	59
Table 52: Mean number of visits to health services in the past 12 months, 0 to 15 years, HWSS 2005–20	60
Table 53: Prevalence of children by overall trouble with emotions, concentration, behaviour or getting on with people, 1 to 15 years, HWSS 2020	62
Table 54: Prevalence of children by overall trouble with emotions, concentration, behaviour or getting on with people, 1 to 15 years, HWSS 2002–20	63
Table 55: Prevalence of children who are reported by their parent/carer to need special help for an emotional, concentration or behavioural problem, 1 to 15 years, HWSS 2020	64
Table 56: Prevalence of children who are reported by their parent/carer to need special help for an emotional, concentration or behavioural problem, 1 to 15 years, HWSS 2002–20	64
Table 57: Prevalence of children ever treated for an emotional or mental health condition, 1 to 15 years, HWSS 2020	65
Table 58: Prevalence of children ever treated for an emotional or mental health condition, 1 to 15 years, HWSS 2002–20	66

Table 59: Prevalence of children who have bullied and/or have been bullied in the past 12 months, 5 to 15 years, HWSS 2020	67
Table 60: Prevalence of children who have bullied and/or have been bullied in the past 12 months, 5 to 15 years, HWSS 2002–20	67
Table 61: Prevalence of children by parent/carer reported overall school performance, 5 to 15 years, HWSS 2020	69
Table 62: Prevalence of children by parent/carer reported overall school performance, 5 to 15 years, HWSS 2002–20	70
Table 63: Prevalence of children by frequency of looking forward to going to school each day, 5 to 15 years, HWSS 2020	71
Table 64: Prevalence of children by frequency of looking forward to going to school each day, 5 to 15 years, HWSS 2002–20	71
Table 65: Prevalence of children by whether their family usually does not get on well together, 0 to 15 years, HWSS 2020	73
Table 66: Prevalence of children by whether their family usually does not get on well together, 0 to 15 years, HWSS 2002–20	74
Table 67: Prevalence of children by whether planning family activities is usually difficult, 0 to 15 years, HWSS 2020	74
Table 68: Prevalence of children by whether planning family activities is usually difficult, 0 to 15 years, HWSS 2002–20	75
Table 69: Prevalence of children by whether their family usually avoid discussing fears and concerns openly with each other, 0 to 15 years, HWSS 2020	76
Table 70: Prevalence of children by whether their family usually avoid discussing fears and concerns openly with each other, 0 to 15 years, HWSS 2002–20	76
Table 71: Prevalence of children by whether making decisions within their family is usually a problem because they misunderstand each other, 0 to 15 years, HWSS 2020	77
Table 72: Prevalence of children by whether making decisions within their family is usually a problem because they misunderstand each other, 0 to 15 years, HWSS 2002–20	78
Table 73: Prevalence of children with poor family functioning, 0 to 15 years, HWSS 2020	78
Table 74: Prevalence of children with poor family functioning, 0 to 15 years, HWSS 2002–20	80
Table 75: General health status of respondent, HWSS 2020	82
Table 76: Mental health of respondent, HWSS 2020	83



Table 77: Lack of control over life in general during past four weeks, respondent, HWSS 2020	84
Table 78: Lack of control over personal life during past four weeks, respondent, HWSS 2020	84
Table 79: Lack of control over health during past four weeks, respondent, HWSS 2020	85
Table 80: Demographics of respondent's partner, HWSS 2020	86

## List of figures

Figure 1: Flowchart of the responses to the HWSS telephone survey, 2020	9
Figure 2: Prevalence of children with a disability that impacts the family, by geographic area in WA, 0 to 15 years, HWSS 2020	19
Figure 3: Prevalence of children with asthma, by geographic area, 0 to 15 years, HWSS 2020	24
Figure 4: Prevalence of children with asthma, 0 to 15 years, HWSS 2005–20	25
Figure 5: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, by location, 0 to 15 years, HWSS 2020	26
Figure 6: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, 0 to 15 years, HWSS 2007–20	27
Figure 7: Prevalence of children eating sufficient serves of fruit and vegetables, 2013 Australian Dietary Guidelines for fruit and vegetable consumption, 2 to 15 years, HWSS 2002–20	34
Figure 8: Prevalence of children completing sufficient weekly physical activity, 5 to 15 years, HWSS 2006–20	44
Figure 9: Prevalence of children meeting the Australian sedentary behaviour guidelines for electronic media use, 0 to 15 years, HWSS 2003–20	46
Figure 10: Prevalence of children by body mass index categories, 5 to 15 years, HWSS 2004–20	48
Figure 11: Prevalence of children who are always checked to be adequately protected before going out into the sunlight, 0 to 15 years, HWSS 2002–20	53
Figure 12: Prevalence of children by parent/carer reported overall school performance, 5 to 15 years, HWSS 2002–20	70
Figure 13: Prevalence of children with poor family functioning, by geographic area, 0 to 15 years, HWSS 2020	79

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