



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

# Health and Wellbeing of Children in Western Australia 2016, Overview and Trends

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## **Suggested citation**

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## **EXECUTIVE SUMMARY**

The Health and Wellbeing Surveillance System is a continuous data collection which was initiated in 2002 to monitor the health status of the general population. In 2016, over 800 parents/carers of children aged 0 to 15 years were randomly sampled and completed a computer assisted telephone interview between January and December, reflecting an average participation rate of just over 90 per cent. The sample was then weighted to reflect the Western Australian child population.

This report describes the findings from the 2016 Health and Wellbeing Surveillance System and provides the health sector as well as the general public with important information about a number of aspects of health and wellbeing relevant to the Western Australian child population.

Some key findings from the 2016 report include:

### **General health:**

- Very good or excellent health was reported for 87.6 per cent of children aged 0 to 15 years by their parents/carers.

### **Chronic health conditions:**

- With a prevalence of 21.0 per cent, it is estimated that 110,530 children experienced an injury in the last 12 months which required treatment from a health professional.

### **Child Development:**

- Of children aged 0 to 4 years, 91.2 per cent have received some breast-milk in their lifetime.

### **Lifestyle and physiological risk factors:**

- The prevalence of children aged 5 to 15 years completing sufficient levels of physical activity for good health (39.6%) was the second lowest recorded since it was first measured in 2006.
- Children aged 5 to 15 years (76.7%) were significantly more likely to meet the daily leisure time screen usage guidelines compared with children aged 2 to less than 5 years (30.1%) and children less than 2 years (50.4%).

- Children aged 10 to 15 years (47.1%) were significantly less likely to always be checked by a parent/guardian that they are adequately protected before going out into the sunlight compared with children aged 0 to 4 years (75.7%).
- The prevalence of children living in a smoke free home has increased significantly from 2002 (90.5%) to 2016 (99.5%).
- The prevalence of children with neither parent smoking during pregnancy has increased significantly from 2005 (66.1%) to 2016 (82.6%).
- The prevalence of children who never eat meals from fast food restaurants has increased significantly from 2002 (16.2%) to 2016 (29.5%).

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

- The prevalence of children regarded by their parent/ carer as needing special help for an emotional, concentration or behavioural problem in 2016 (35.2%) was the highest recorded and significantly different to 2002 (20.6%).
- The prevalence of children ever treated for an emotional or mental health problem in 2016 (8.1%) was the highest recorded and significantly different to 2002 (3.0%).
- Almost one-third of children were bullied in the past 12 months.
- Almost one in six (16.9%) children had a parent/carer who reported having been diagnosed with a mental health problem in the last 12 months and one in eight (13.0%) children had a parent/carer who was currently receiving treatment for such a problem.

## 1. INTRODUCTION

The WA Health and Wellbeing Surveillance System (HWSS) is a continuous data collection system, which was developed to monitor the health and wellbeing of Western Australians. On average, 600 people throughout Western Australia (WA) are interviewed each month. The HWSS began in March 2002 and as at December 2016 over 108,000 interviews have been conducted. Of these, almost 15,500 were conducted with parents/carers of children under the age of 16 years. This report presents the information collected on children during 2016.

Parents/carers are asked questions on a range of indicators related to their child's health and wellbeing. Topics include chronic health conditions, lifestyle risk factors, school and friendships, protective factors and socio-demographics. Questions about health and wellbeing are also asked of the respondent for the child (usually the mother) and about the partner of the respondent.

The questions that are included on the HWSS for children were selected to provide information about State or National indicators of health and wellbeing, or 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 were guided by the Telethon Kids Institute (formerly known as The Telethon Institute of Child Health Research). A copy of the questionnaire is available on the intranet at: [intranet.health.wa.gov.au/epidemiology/resources/index.cfm](http://intranet.health.wa.gov.au/epidemiology/resources/index.cfm)

Non WA Department of Health employees are asked to contact the Health Survey Unit, Epidemiology Branch, WA Department of Health for a copy of the questionnaire ([epi@health.wa.gov.au](mailto:epi@health.wa.gov.au)).

Information from the survey is used to monitor the health status of Western Australian children, to inform health education programs, to evaluate interventions, to inform health policy development, to identify and monitor emerging trends and to evaluate new national public health initiatives.

All the 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 they give are consistent over time. This means that although the estimates of things like physical activity and weight will probably not be the 'true' estimate, they can be used to show patterns of change over time. The identification of patterns over time is the basis of a monitoring and surveillance system.

Another feature of a surveillance system is that it is population based. That is, it is designed to examine trends at the population level, and, although major socio-demographic group estimates are possible, it is not the purpose of the system. Therefore, the information provided in this report is representative of WA children as a whole, but it is unlikely to be representative of minority groups within the population such as Aboriginal children and children living in homes without telephones. For information on Aboriginal child health please see the reports and tables generated from the 2012-13 Australian Aboriginal and Torres Strait Islander Health Survey ,<sup>1</sup> or the 2014-15 National Aboriginal and Torres Strait Islander Social Survey.<sup>2</sup>



## **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 White Pages® by a stratified random process. An approach letter is sent to selected households informing them that their household has been selected to participate. The approach letter explains the purpose of the survey, gives the time within which they can expect to be contacted by the data collection agency and explains that one person from the household will be selected to participate. A specially prepared brochure is included in the letter, which explains more about the HWSS and provides contact numbers for people to call for further information.

Rural and remote areas of WA are over-sampled relative to their populations within WA to provide enough interviews to enable reliable and robust estimates to be made for these areas.

### **2.2 Weighting 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. In order to do this, data must be weighted to the population that is being described, which in this case is the population of WA children under the age of 16 years.

The HWSS data are weighted to compensate for the over-sampling in the rural and remote areas of WA and then adjusted to the 2015 Estimated Resident Population (ERP)<sup>3</sup>. As the information collected on children has been weighted to the age by sex distribution of the children in the Western Australian population, the information about the parent/ carer respondent to the survey has not been weighted.

### **2.3 Response rates**

A very important part of any survey is the response rate, as low response rates may produce estimates that are not representative of the population or that are unreliable or biased. Each year since the HWSS began adjusted response rates of over 80 per cent have been

attained. The response rate for each month of 2016 is shown in Table 1 and the consistency is comparable to previous years. The numbers refer to the entire sample for the HWSS, that is, it includes calls to adults and children. It is not possible to extract the information for children only but the consistency of the response rates over the year provides an excellent basis for assuming a high overall response rate within age groups.

**Table 1: Response rates for 2016, by month**

Month	Sample Frame	Out of Scope (a)	Eligible Sample	No answer after 10 attempts	Eligible Contacts (b)	Refusals	Interviews	Raw Response Rate	Adjusted Response Rate (c)	Participation Rate (d)
Jan	1371	486	885	143	742	77	622	70.3	83.8	89.0
Feb	1490	531	959	182	777	78	663	69.1	85.3	89.5
Mar	1280	487	793	141	652	66	542	68.3	83.1	89.1
Apr	1278	433	845	198	647	81	530	62.7	81.9	86.7
May	1278	499	779	155	624	39	550	70.6	88.1	93.4
Jun	1281	459	822	164	658	49	553	67.3	84.0	91.9
Jul	1278	459	819	159	660	47	576	70.3	87.3	94.0
Aug	1401	567	834	179	655	68	542	65.0	82.7	88.9
Sep	1504	609	895	176	719	75	597	66.7	83.0	88.8
Oct	1504	631	873	164	709	60	597	68.4	84.2	90.9
Nov	1501	628	873	200	673	38	599	68.6	89.0	94.0
Dec	750	278	472	94	378	32	311	65.9	82.3	90.7
<b>Total</b>	<b>15916</b>	<b>6067</b>	<b>9849</b>	<b>1955</b>	<b>7894</b>	<b>710</b>	<b>6682</b>	<b>67.8</b>	<b>84.6</b>	<b>90.4</b>

a) Non-operational, business or dedicated fax numbers. All other numbers were considered to be part of the eligible sample, which forms the denominator for the Raw Response Rate.

b) If the telephone is answered, the number is part of the eligible contacts. This forms the denominator of the Adjusted Response Rate.

c) The Adjusted Response rate is the number of people interviewed divided by the Eligible Contacts (b)

d) The Participation Rate is the number of people interviewed divided by the number of people interviewed plus the number of refusals.

A full explanation of the methodology can be found in the paper titled WA Health and Wellbeing Surveillance System (WAHWSS), Design and Methodology, Technical Paper No 1. September 2011 – Version 2. This document is available both on the Epidemiology Website on the Department of Health Intranet and the Department of Health internet at the following web addresses:

<http://ww2.health.wa.gov.au/~media/Files/Corporate/Reports%20and%20publications/Population%20surveys/2003-Technical-paper-no1-Design-and-Methodology.ashx>

## **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/demographic characteristic or as the prevalence of a particular health condition within the child population. Prevalence is the description of the number or proportion of children in a community with a given condition and is usually expressed as a percentage. Prevalence is distinct from incidence, which is a measure of the number of new cases of a condition. Prevalence includes all affected individuals, regardless of the date of contraction, whereas incidence only involves individuals who have newly contracted the disease during a specified time interval. Surveys generally do not collect or report 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. With some conditions, such as asthma, both lifetime and point prevalence are reported. This is because a person may have had asthma at some point in their life but not have it currently.

### **3.4 Confidence intervals**

Survey results are estimates of population values and will always contain some error because they are based on samples and not the entire population. Therefore, each table presents the best estimate of the prevalence of a condition or the estimate of the proportion of the population with a particular characteristic along with the 95 per cent confidence interval around that estimate. The 95 per cent confidence interval is the range of likely values within which the true estimate would lie 95 out of 100 times.

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 findings being due to chance. Confidence intervals can be used to determine statistical

significance. Overlapping confidence intervals indicate that there is probably no difference in the estimates being compared. If the confidence intervals do not overlap, then the estimates are considered to be significantly different. Along with determining statistically significant differences confidence intervals can also be used to determine the level of stability around an estimate.

Further information on how to determine whether or not a difference is statistically significant can be found at:

[http://ww2.health.wa.gov.au/~media/Files/Corporate/Reports%20and%20publications/Population%20surveys/2003-Confidence\\_intervals\\_How\\_they\\_work.ashx](http://ww2.health.wa.gov.au/~media/Files/Corporate/Reports%20and%20publications/Population%20surveys/2003-Confidence_intervals_How_they_work.ashx)

Along with determining statistically significant differences, confidence intervals can also be used to determine the level of stability around an estimate. The wider the confidence interval is around an estimate the less precise that estimate is and the more caution that should be applied when using it.

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. Estimates with RSEs above 25 per cent are considered unreliable for general use. Therefore, throughout this report, estimates 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 have been withheld.

In this report wide confidence intervals and high RSEs can be present for variables with multiple response categories, such as the burden that disability causes to a family and for variables with few respondents, such as the impact that alcohol has in a child's household.

### **3.5 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 Branch (WA Department of Health) at [epi@health.wa.gov.au](mailto:epi@health.wa.gov.au).

## **4. COMPARISONS**

### **4.1 Prevalence over time**

One of the strengths of the HWSS is its ability to show changes over time. Therefore, trends for selected major health conditions and risk factors are provided.

The prevalence or proportion of children who reported a selected condition/risk factor of interest was derived for each year from 2002 to 2016 where available. Some conditions, such as respiratory problems other than asthma have only been reported in the HWSS since 2007 therefore historical data is only available from then.

To ensure that any changes over time in prevalence estimates were not a 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. As estimates in the historical tables are weighted to the 2011 Estimated Resident Population, and 2016 data is weighted to the 2015 Estimated Resident Population, some estimates for 2016 may differ slightly between tables due to standardising to different populations.

Small changes in estimates from those presented in previous reports may occur due to the standardisation of the estimates using updated population estimates.

### **4.2 Socio-Economic Indexes for Areas**

The HWSS collects information on where the survey respondent lives. This allows comparisons to be made between the health characteristics of people living in less advantaged areas with those in more disadvantaged areas, using indexes developed by the Australian Bureau of Statistics.

Socio-Economic Indexes for Areas (SEIFA) are a group of measures that rank areas across Australia based on their level of socio-economic advantage or disadvantage. This is broadly defined in terms of people's access to material and social resources, and their ability to participate in society. These measures are developed every five years based on information collected during the Census. The latest available SEIFA are from the 2011 Census.<sup>4</sup>

In this report when the acronym SEIFA is used it is referring to the Index of Relative Socio-economic Disadvantage (IRSD).<sup>5</sup> This is the index most frequently used for analysis of health characteristics. The IRSD ranks areas in terms of relative socio-economic

disadvantage. A score is derived for individual suburbs/ localities in Western Australia by summarising characteristics of the population including low income, low educational attainment, high unemployment and jobs in relatively unskilled occupations.<sup>5</sup> A complex statistical calculation is used to determine the score for each suburb/ locality. A technical explanation of the calculation process can be found on the ABS website:

[http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/22CEDA8038AF7A0DCA257B3B00116E34/\\$File/2033.0.55.001%20seifa%202011%20technical%20paper.pdf](http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/22CEDA8038AF7A0DCA257B3B00116E34/$File/2033.0.55.001%20seifa%202011%20technical%20paper.pdf)

Areas are then grouped into quintiles from most disadvantaged (quintile 1), low scores, through to least disadvantaged (quintile 5), high scores. SEIFA quintiles are based on IRSD at statistical area 2 (SA2) level.

#### **4.3 Accessibility/ Remoteness Index of Australia**

Having location information for survey respondents allows health behaviours and conditions to be analysed by remoteness.

The Accessibility/ Remoteness Index of Australia (ARIA) was created to define remoteness using road distances to selected Service Centres. There are five different Service Centre sizes that a locality's road distances are measured to. The five measurements are then each standardised to a ratio. These five ratios are then added together and a score derived between 0 and 15 is derived. A score of 0 indicates high accessibility and 15 indicated high remoteness.<sup>6</sup>

In this report ARIA+ is used and the categories presented are Major Cities, Inner Regional, Outer Regional, Remote and Very Remote. More information on how ARIA is calculated can be found on the Australian Population and Migration Research Centre at the University of Adelaide: [http://www.adelaide.edu.au/apmrc/research/projects/category/about\\_aria.html](http://www.adelaide.edu.au/apmrc/research/projects/category/about_aria.html)

## 5. DEMOGRAPHICS

The demographic characteristics of the child sample who participated in the HWSS in 2016 are shown in Table 2. The table shows the unweighted number in the sample for each group and the weighted prevalence expressed as a per cent.

**Table 2: Demographic characteristics of the child, HWSS 2016**

Characteristic	Unweighted Sample (n)	Estimated Per Cent (%)
<b>Age</b>		
0 to 4 years	169	32.8
5 to 9 years	255	31.9
10 to 15 years	393	35.3
<b>Gender</b>		
Boys	429	51.1
Girls	388	48.9
<b>Australian born</b>		
Yes	735	89.4
No	81	10.6
<b>Aboriginal or Torres Strait Islander</b>		
Yes	32	2.7 *
No	784	97.3
<b>Relationship of respondent to child</b>		
Mother	591	73.3
Father	203	24.6
Other	23	2.1 *

\* Prevalence estimate has a 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 3.

**Table 3: Characteristics of the household where the child lives, HWSS 2016**

	Unweighted Sample (n)	Estimated Per Cent (%)
<b>Current living arrangement</b>		
Family with a child or children living with biological or adoptive parents	718	91.3
Step or blended family	16	0.9 *
Sole parent family	55	5.1
Other family structure	27	2.7
<b>Household income</b>		
Under \$20,000	15	1.2 *
\$20,000 to \$40,000	36	4.2 *
\$40,000 to \$60,000	53	4.1
\$60,000 to \$80,000	91	9.8
\$80,000 to \$100,000	133	20.1
\$100,000 to \$120,000	113	17.0
\$120,000 to \$140,000	83	14.3
More than \$140,000	211	29.4
<b>Household spending</b>		
Spend more money than earn/get	20	2.9 *
Have just enough money to get by	106	13.7
Spend left over money	43	5.3
Save a bit every now and then	271	34.9
Save some regularly	295	35.6
Save a lot	75	7.7
<b>Area of residence</b>		
Metropolitan	347	77.8
Rural	318	15.5
Remote	152	6.7
<b>SEIFA classification of social disadvantage</b>		
SEIFA Quintile 1 (Most disadvantaged)	126	11.4
SEIFA Quintile 2	216	16.5
SEIFA Quintile 3	184	20.5
SEIFA Quintile 4	182	27.8
SEIFA Quintile 5 (Most advantaged)	108	23.9
<b>Accessibility/Remoteness Index of Australia</b>		
Inner Regional	152	11.4
Major Cities	327	16.5
Outer Regional	173	20.5
Remote	106	27.8
Very Remote	59	23.9
<b>Have private health insurance</b>		
Yes	626	81.1
No	184	18.9

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



The demographic characteristics of the respondent for the child, with unweighted per cents, are shown in Table 4.

**Table 4: Demographic characteristics of respondent for child, HWSS 2016**

Characteristic	Unweighted Sample (n)	Unweighted Per Cent (%)
<b>Australian born</b>		
Yes	574	70.3
No	243	29.7
<b>Aboriginal or Torres Strait Islander</b>		
Yes	18	2.2
No	799	97.8
<b>Highest level of education</b>		
Less than Year 10	8	1.0
Year 10 or Year 11	60	7.4
Year 12	79	9.7
TAFE/ Trade Qualification	367	45.0
Tertiary degree or equivalent	302	37.0
<b>Employment status</b>		
Employed	616	75.4
Unemployed	12	1.5
Home duties	153	18.7
Retired	14	1.7
Unable to work	10	1.2
Student	8	1.0
Other	4	0.5
<b>Possess a government health care card</b>		
Yes	108	13.3
No	707	86.8
<b>Share home with a partner</b>		
Yes	740	90.7
No	76	9.3

## 6. GENERAL HEALTH

### 6.1 Self-reported general health

Self-ratings of health are used internationally, with poor health ratings associated with increased mortality and psychological distress, and lower physical functioning.<sup>7</sup>

Parents/carers were asked to rate their child's general health. The population prevalence of parent-reported child health status is shown in Table 5.

**Table 5: Prevalence of children by parent/ carer reported child health status, 0 to 15 years, HWSS 2016**

	Excellent		Very Good		Good		Fair/Poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
0 to 4 yrs	59.6	( 49.8 - 69.3 )	25.4	( 17.0 - 33.8 )	10.9 *	( 4.2 - 17.7 )	4.1 *	( 0.2 - 8.1 )
5 to 9 yrs	60.5	( 52.3 - 68.7 )	28.5	( 20.8 - 36.2 )	8.1 *	( 3.8 - 12.3 )	3.0 *	( 0.3 - 5.6 )
10 to 15 yrs	57.5	( 50.8 - 64.3 )	31.2	( 24.7 - 37.8 )	8.8	( 5.3 - 12.3 )	2.4 *	( 0.6 - 4.3 )
<b>Gender</b>								
Boys	55.7	( 48.8 - 62.5 )	29.8	( 23.4 - 36.2 )	12.0	( 7.6 - 16.4 )	2.5 *	( 0.1 - 4.8 )
Girls	62.8	( 56.2 - 69.3 )	27.0	( 21.1 - 32.9 )	6.4 *	( 2.7 - 10.0 )	3.9 *	( 1.4 - 6.3 )
<b>Children</b>	<b>59.1</b>	<b>( 54.4 - 63.9 )</b>	<b>28.5</b>	<b>( 24.1 - 32.8 )</b>	<b>9.3</b>	<b>( 6.4 - 12.1 )</b>	<b>3.2 *</b>	<b>( 1.5 - 4.8 )</b>

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

The annual prevalence estimates of health status since 2004 are shown in Table 6. This question was not asked prior to 2004. In all years, over 85 per cent of children were reported having very good or excellent health.

**Table 6: Prevalence of children by parent/ carer reported child health status, 0 to 15 years, HWSS 2004–16**

	Excellent		Very Good		Good		Fair/Poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2004	54.9	( 49.6 - 60.3 )	30.2	( 25.3 - 35.1 )	11.7	( 8.1 - 15.2 )	3.2 *	( 1.1 - 5.3 )
2005	55.7	( 51.9 - 59.4 )	32.5	( 28.9 - 36.0 )	8.9	( 6.9 - 10.9 )	3.0	( 1.6 - 4.4 )
2006	60.7	( 57.3 - 64.2 )	28.5	( 25.4 - 31.6 )	8.2	( 6.2 - 10.2 )	2.6	( 1.3 - 3.8 )
2007	58.3	( 53.3 - 63.2 )	30.1	( 25.5 - 34.7 )	10.1	( 7.2 - 13.1 )	1.5 *	( 0.4 - 2.6 )
2008	60.3	( 55.8 - 64.9 )	26.7	( 22.6 - 30.8 )	10.6	( 7.8 - 13.3 )	2.4 *	( 1.0 - 3.8 )
2009	57.6	( 54.6 - 60.6 )	29.4	( 26.7 - 32.1 )	11.2	( 9.1 - 13.2 )	1.8	( 1.2 - 2.4 )
2010	58.5	( 54.3 - 62.7 )	29.9	( 26.0 - 33.8 )	9.6	( 7.1 - 12.1 )	2.0 *	( 1.0 - 3.0 )
2011	60.4	( 55.6 - 65.2 )	25.3	( 21.0 - 29.6 )	10.5	( 7.4 - 13.6 )	3.8 *	( 1.7 - 5.9 )
2012	58.5	( 54.2 - 62.8 )	26.7	( 22.9 - 30.5 )	12.0	( 9.1 - 14.9 )	2.7	( 1.4 - 4.1 )
2013	57.5	( 52.5 - 62.5 )	29.7	( 25.1 - 34.3 )	10.8	( 7.8 - 13.8 )	2.0 *	( 0.9 - 3.2 )
2014	58.2	( 52.9 - 63.4 )	30.4	( 25.4 - 35.4 )	8.3	( 5.5 - 11.1 )	3.2 *	( 1.3 - 5.0 )
2015	58.4	( 53.6 - 63.1 )	28.9	( 24.6 - 33.2 )	10.3	( 7.2 - 13.3 )	2.5 *	( 1.3 - 3.7 )
2016	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>Average</b>	<b>58.1</b>	<b>( 56.9 - 59.2 )</b>	<b>29.3</b>	<b>( 28.3 - 30.4 )</b>	<b>10.1</b>	<b>( 9.4 - 10.7 )</b>	<b>2.6</b>	<b>( 2.2 - 2.9 )</b>

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

## 6.2 Disability

Disability may be experienced in terms of impairments of body functions and structures, activity limitations or participation restrictions.<sup>8</sup> Parents/carers were asked whether their child has a disability, long-term illness or pain that puts a burden on the family. The population prevalence of children with a disability, long-term illness or pain that puts a burden on the family is shown in Table 7.

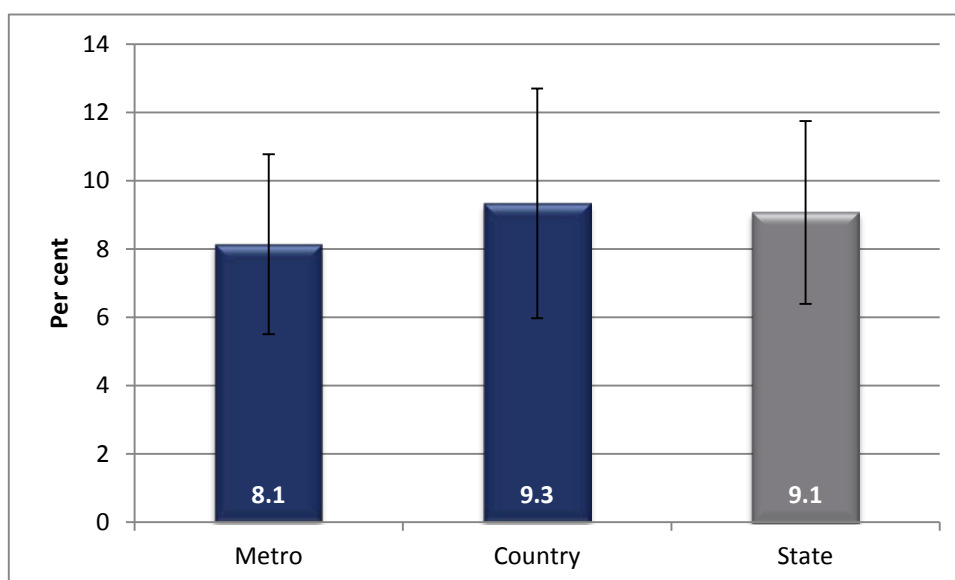
**Table 7: Prevalence of children with a disability, long-term illness or pain that puts a burden on the family, 0 to 15 years, HWSS 2016**

	<b>%</b>	<b>95% CI</b>
<b>Age Group</b>		
0 to 4 yrs	6.3 *	( 1.6 - 11.0 )
5 to 9 yrs	10.1 *	( 4.9 - 15.4 )
10 to 15 yrs	10.7	( 6.7 - 14.6 )
<b>Gender</b>		
Boys	11.1	( 6.8 - 15.4 )
Girls	6.9	( 3.8 - 10.0 )
<b>Children</b>	<b>9.1</b>	<b>( 6.4 - 11.7 )</b>

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

Figure 1 shows the prevalence of disability among children by geographic area of residence.

**Figure 1: Prevalence of children with a disability, long-term illness or pain that puts a burden on the family, by geographic area in WA, 0 to 15 years, HWSS 2016**



The annual prevalence estimates of disability are shown in Table 8.

**Table 8: Prevalence of children with a disability, long-term illness or pain that puts a burden on the family, 0 to 15 years, HWSS 2002–16**

	<b>%</b>	<b>95% CI</b>
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 )
<b>Average</b>	<b>8.6</b>	<b>( 8.0 - 9.2 )</b>

Parents/carers were asked who the principal carer of the child with the disability, long-term illness or pain was. In 2016 the majority of children were cared for by their mother (73.0%).

Parents/carers who reported that their child had a disability, long-term illness or pain that puts a burden on the family were asked to rate the extent of the burden. The annual estimates over time are shown in Table 9.

**Table 9: Prevalence of children by the extent of burden their disability, long-term illness or pain puts on the family, 0 to 15 years, HWSS 2002–16**

	Not much		A little		Fairly big		Big		Very big	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2002	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 )
2003	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 )
2004	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 )
2005	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 )
2006	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 )
2007	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 )
2008	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 )
2009	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 )
2010	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 )
2011	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 )
2012	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 )
2013	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 )
2014	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 )
2015	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 )
2016	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>Average</b>	17.2	( 14.6 - 19.8 )	39.2	( 35.8 - 42.6 )	25.6	( 22.5 - 28.7 )	10.8	( 8.6 - 13.1 )	7.1	( 5.4 - 8.9 )

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

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

## **7. CHRONIC CONDITIONS**

Chronic health conditions refer to long-term conditions (lasting more than six months) that can have a significant impact on a person's life. The chronic conditions collected by the HWSS were chosen due to their health impact both personally and on families and the potential to reduce their burden.<sup>9,10</sup> 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.

### **7.1 Attention deficit hyperactivity disorder**

Attention deficit hyperactivity disorder (ADHD) is a behavioural disorder that affects young children. Children with ADHD have three main problems: inattention, impulsivity and overactivity.<sup>11, 12</sup>

Parents/carers have been asked each year since 2003 whether their child has been diagnosed with ADHD. In 2016 3.3 per cent of children aged 2 years and over had been diagnosed with ADHD, with boys comprising over four-fifths (85.4%) of those diagnosed.

### **7.2 Developmental problems**

Parents/carers were asked whether or not a doctor had ever diagnosed their child with a problem with coordination, clumsiness, deformity, stiffness or developmental delay. The prevalence of developmental problems is shown in Table 10.

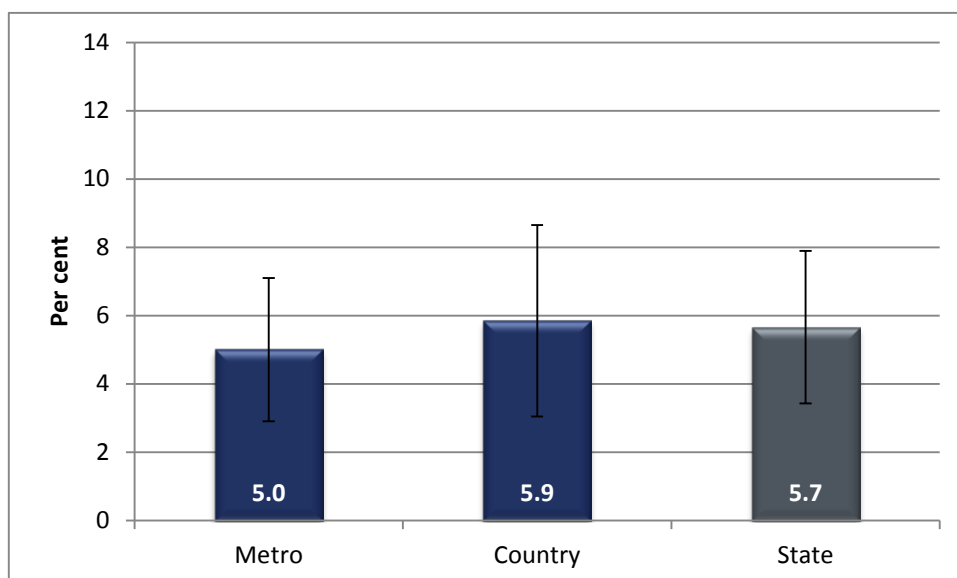
**Table 10: Prevalence of children with developmental problems, 0 to 15 years, HWSS 2016**

	<b>%</b>	<b>95% CI</b>
<b>Age Group</b>		
0 to 4 yrs	4.8 *	( 0.7 - 8.9 )
5 to 9 yrs	7.0 *	( 2.5 - 11.6 )
10 to 15 yrs	5.2 *	( 2.3 - 8.1 )
<b>Gender</b>		
Boys	8.3	( 4.5 - 12.2 )
Girls	2.9 *	( 0.8 - 5.0 )
<b>Children</b>	<b>5.7</b>	<b>( 3.4 - 7.9 )</b>

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

In 2016 approximately one in every eighteen children (5.7%) has been diagnosed with a developmental problem. Figure 2 shows the prevalence of developmental problems among children by geographic area of residence. The annual prevalence estimates of developmental problems are shown in Table 11, with the 2016 prevalence the lowest recorded since 2002.

**Figure 2: Prevalence of children with developmental problems, by geographic area, 0 to 15 years, HWSS 2016**





**Table 11: Prevalence of children with developmental problems, 0 to 15 years, HWSS 2002–16**

	%	95% CI
2002	7.4	( 5.6 - 9.2 )
2003	8.3	( 6.5 - 10.1 )
2004	8.6	( 5.7 - 11.5 )
2005	6.7	( 4.7 - 8.7 )
2006	6.2	( 4.5 - 8.0 )
2007	6.3	( 3.9 - 8.7 )
2008	7.0	( 4.6 - 9.4 )
2009	5.9	( 4.7 - 7.1 )
2010	5.8	( 3.7 - 7.8 )
2011	6.1	( 3.7 - 8.4 )
2012	7.5	( 5.1 - 9.9 )
2013	8.7	( 5.7 - 11.7 )
2014	6.3	( 3.9 - 8.7 )
2015	7.0	( 4.6 - 9.3 )
2016	5.6	( 3.4 - 7.8 )
<b>Average</b>	<b>6.7</b>	<b>( 6.2 - 7.2 )</b>

### **7.3 Type 1 diabetes**

Diabetes is a condition where the body is unable to maintain normal blood glucose levels. Diabetes contributes significantly to ill health, disability and premature death in Australia, however death is extremely rare among children.<sup>13</sup>

Parents/carers have been asked each year since 2002 whether their child has been diagnosed with type 1 diabetes. In 2016 only two respondents indicated that their child had been diagnosed with type 1 diabetes. Therefore population estimates were unable to be calculated.

Low prevalence rates of type 1 diabetes have also been reported by the Australian Bureau of Statistics, with 0.2 per cent of 0 to 14 year olds in Australia reported as having type 1 diabetes in the 2014-15 National Health Survey.<sup>14</sup> The latest publically available data for WA children (2013) estimates the prevalence of type 1 diabetes to be 130.4 per 100,000 population.<sup>15</sup>

## 7.4 Asthma

Asthma is one of the most common chronic conditions among children, affecting ten per cent of the Australian child population (0 to 14 years) based on the 2014-15 National Health Survey<sup>14</sup>. Asthma is a reversible narrowing of the airways in the lungs, with symptoms which include wheezing, coughing, tightness of the chest, breathing difficulty and shortness of breath.<sup>16</sup> Parents/carers were asked whether a doctor had ever told them that their child had asthma and whether their child had symptoms or had taken treatment for asthma during the past 12 months. The WA prevalence of childhood asthma is shown in Table 12.

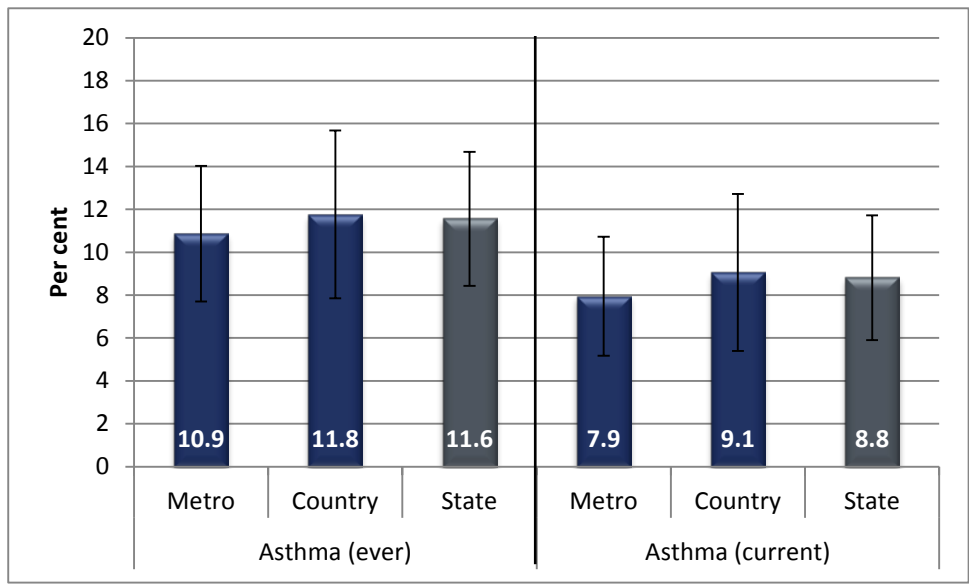
**Table 12: Prevalence of children with asthma, 0 to 15 years, HWSS 2016**

	Lifetime (ever)		Period (current)	
	%	95% CI	%	95% CI
<b>Age Group</b>				
0 to 4 yrs	11.2 *	( 4.1 - 18.3 )	11.0 *	( 3.9 - 18.1 )
5 to 9 yrs	9.7	( 5.4 - 14.1 )	6.3 *	( 2.8 - 9.7 )
10 to 15 yrs	13.5	( 9.2 - 17.9 )	9.1	( 5.4 - 12.8 )
<b>Gender</b>				
Boys	12.5	( 8.1 - 16.9 )	9.1	( 5.1 - 13.1 )
Girls	10.6	( 6.1 - 15.0 )	8.5 *	( 4.2 - 12.7 )
<b>Children</b>	<b>11.6</b>	<b>( 8.4 - 14.7 )</b>	<b>8.8</b>	<b>( 5.9 - 11.7 )</b>

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

Figure 3 shows the prevalence of asthma among children by geographic area of residence.

**Figure 3: Prevalence of children with asthma, by geographic area, 0 to 15 years, HWSS 2016**

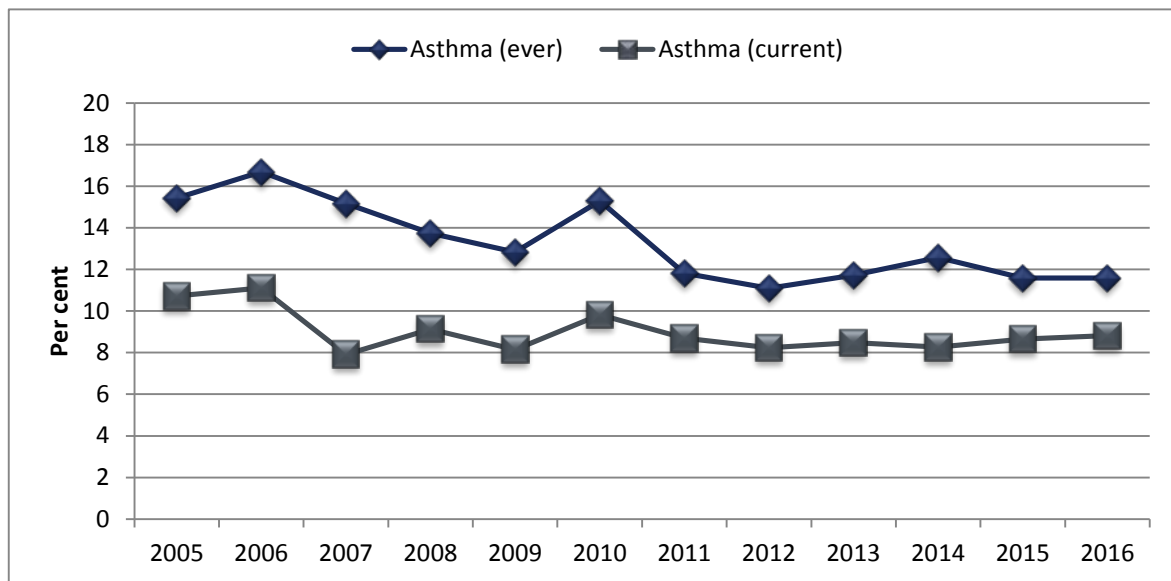


The annual prevalence estimates of childhood asthma are shown in Table 13 and Figure 4.

**Table 13: Prevalence of children with asthma, 0 to 15 years, HWSS 2005–16**

	Lifetime (ever)		Period (current)	
	%	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 )
<b>Average</b>	<b>13.6</b>	<b>( 12.8 - 14.3 )</b>	<b>9.1</b>	<b>( 8.4 - 9.7 )</b>

**Figure 4: Prevalence of children with asthma, 0 to 15 years, HWSS 2005–16**



### 7.5 Respiratory problem other than asthma

Parents/carers have been asked each year since 2007 whether a doctor had told them that their child had a respiratory problem other than asthma, such as chronic bronchitis, that lasted six months or more. In 2016, less than two per cent of children (1.7%) were reported to have been diagnosed with a respiratory problem other than asthma.

## 7.6 Injuries

Injury is a leading, and often preventable, cause of hospitalisation and death in Australia.<sup>9</sup> Parents/carers were asked whether their child had an injury in the past 12 months that required treatment from a health professional (Table 14).

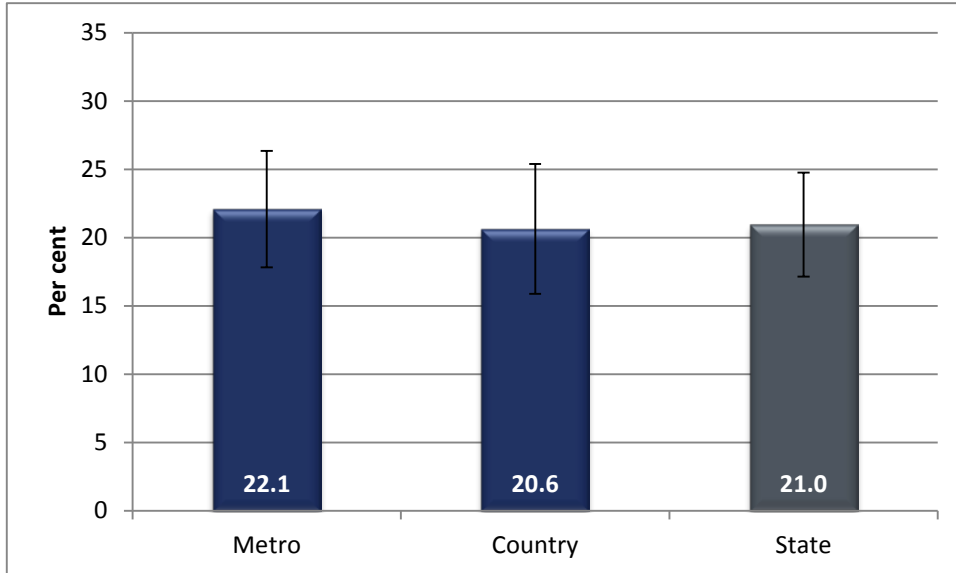
**Table 14: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, 0 to 15 years, HWSS 2016**

	<b>%</b>	<b>95% CI</b>
<b>Age Group</b>		
0 to 4 yrs	17.4	( 10.1 - 24.7 )
5 to 9 yrs	17.2	( 10.7 - 23.7 )
10 to 15 yrs	27.7	( 21.8 - 33.6 )
<b>Gender</b>		
Boys	21.7	( 16.1 - 27.2 )
Girls	20.2	( 15.0 - 25.5 )
<b>Children</b>	<b>21.0</b>	<b>( 17.1 - 24.8 )</b>

Children aged 10 to 15 years were approximately one and a half times more likely to have had an injury requiring treatment from a health professional in the last year compared with children aged 0 to 4 years and 5 to 9 years (27.7% compared with 17.4% and 17.2% respectively). However, these differences are not statistically significant.

Figure 5 shows the proportion of children who had an injury in the past 12 months that required treatment by a health professional, by geographic area of residence.

**Figure 5: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, by geographic area, 0 to 15 years, HWSS 2016**

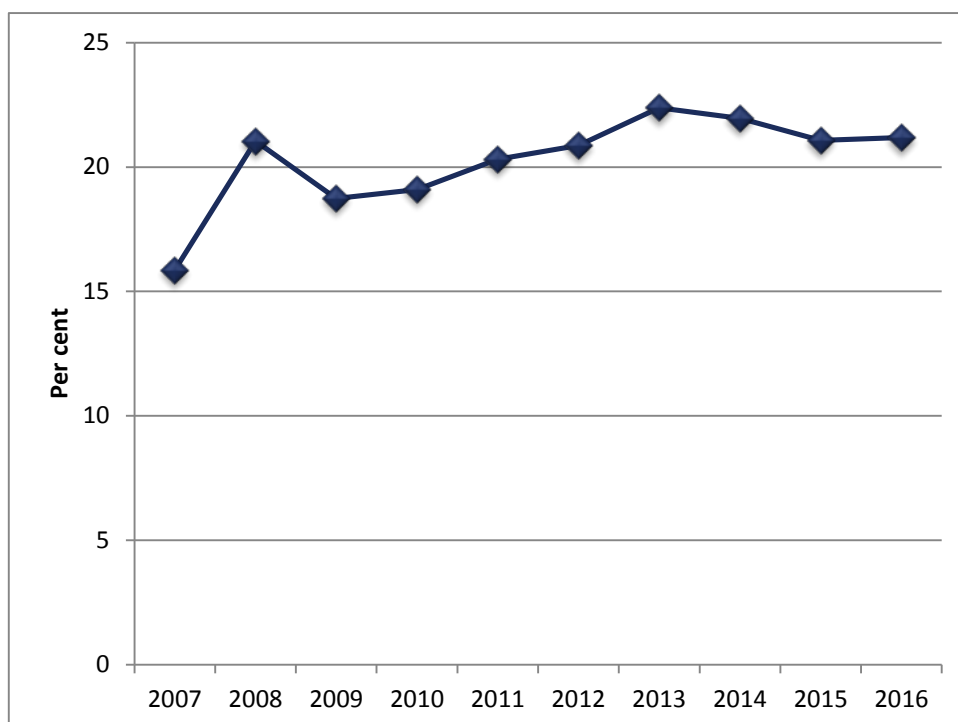


The annual proportions of injury are shown in Table 15 and Figure 6. The proportion of children aged 0 to 15 years in 2016 with an injury in the last 12 months (21.2%) was not significantly different to previous years.

**Table 15: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, 0 to 15 years, HWSS 2007–16**

	%	95% CI
2007	15.9	( 11.3 - 20.4 )
2008	21.1	( 17.1 - 25.0 )
2009	18.7	( 16.5 - 20.9 )
2010	19.1	( 15.6 - 22.6 )
2011	20.3	( 16.5 - 24.1 )
2012	20.9	( 17.3 - 24.4 )
2013	22.4	( 18.2 - 26.5 )
2014	22.0	( 17.7 - 26.2 )
2015	21.1	( 17.3 - 24.8 )
2016	21.2	( 17.4 - 24.9 )
<b>Average</b>	<b>20.6</b>	<b>( 19.5 - 21.7 )</b>

**Figure 6: Proportion of children with injuries in the past 12 months requiring treatment from a health professional, 0 to 15 years, HWSS 2007–16**



The mean number of injuries that required treatment from a health professional in the past 12 months is shown in Table 16.

**Table 16: Mean number of injuries, 0 to 15 years, HWSS 2016**

	mean	95% CI
<b>Age Group</b>		
0 to 4 yrs	0.2	( 0.1 - 0.3 )
5 to 9 yrs	0.3	( 0.1 - 0.4 )
10 to 15 yrs	0.4	( 0.3 - 0.6 )
<b>Gender</b>		
Boys	0.3	( 0.2 - 0.4 )
Girls	0.3	( 0.2 - 0.4 )
<b>Children</b>	<b>0.3</b>	<b>( 0.2 - 0.4 )</b>

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

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. However, this still equates to an

estimated 110,530 injuries that required treatment by a health care professional in 2016 alone.

The mean number of injuries that required treatment from a health professional in the past 12 months since 2007 is shown in Table 17.

**Table 17: Mean number of injuries, 0 to 15 years, HWSS 2007–16**

	mean	95% CI
2007	0.2	( 0.2 - 0.3 )
2008	0.3	( 0.2 - 0.4 )
2009	0.3	( 0.2 - 0.3 )
2010	0.3	( 0.2 - 0.3 )
2011	0.3	( 0.3 - 0.4 )
2012	0.3	( 0.3 - 0.4 )
2013	0.3	( 0.3 - 0.4 )
2014	0.4	( 0.2 - 0.6 )
2015	0.3	( 0.3 - 0.4 )
2016	0.3	( 0.2 - 0.4 )
<b>Average</b>	0.3	( 0.3 - 0.3 )



## 8. 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>9</sup>

Parents/carers were asked whether their child had used a number of common health services within the past 12 months, shown in Table 18. The annual prevalence estimates of health service use are displayed in Table 19.

As seen in Table 18, children aged 0 to 4 years were significantly more likely than 5 to 9 and 10 to 15 year olds to use primary health care services such as medical specialists, general practitioners, community health centres and community or district nurses (94.4% compared with 83.6% and 75.6% respectively). Children aged 5 to 9 years and 10 to 15 years were significantly more likely than 0 to 4 year olds to use dental health services (84.2% and 86.0% compared with 21.5% respectively). Children aged 10 to 15 years were significantly more likely to use allied health services than 0 to 4 and 5 to 9 year olds (46.1% compared with 18.7% and 30.4% respectively).

In 2016, almost one-third of children (32.5%) used an allied health service, which was significantly higher than what was observed in 2005 (22.2%) (Table 19).

The mean number of visits to each health service is shown in Table 20 and the annual mean numbers of visits to each health service are shown in Table 21.

The mean number of visits to dental health services increased significantly with age (Table 20).

**Table 18: Proportion of children utilising health services in the past 12 months, 0 to 15 years, HWSS 2016**

	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	94.4	( 89.6 - 99.2 )	32.5	( 23.3 - 41.6 )	18.7	( 11.2 - 26.3 )	21.5	( 13.6 - 29.3 )	N/A	( N/A - N/A )	1.2 *	( 0.1 - 2.3 )
5 to 9 yrs	83.6	( 77.6 - 89.5 )	25.3	( 18.0 - 32.5 )	30.4	( 22.9 - 37.9 )	84.2	( 78.6 - 89.9 )	7.2 *	( 2.5 - 12.0 )	5.7 *	( 2.0 - 9.5 )
10 to 15 yrs	75.6	( 69.2 - 82.0 )	23.4	( 17.2 - 29.5 )	46.1	( 39.3 - 52.9 )	86.0	( 80.6 - 91.4 )	10.2	( 6.2 - 14.3 )	2.3 *	( 0.2 - 4.5 )
<b>Gender</b>												
Boys	83.2	( 77.9 - 88.5 )	28.7	( 22.3 - 35.0 )	32.1	( 25.8 - 38.4 )	61.8	( 54.9 - 68.7 )	7.3	( 3.8 - 10.8 )	2.1 *	( 0.6 - 3.7 )
Girls	85.5	( 81.1 - 89.9 )	25.1	( 19.2 - 31.1 )	32.2	( 26.1 - 38.2 )	66.7	( 59.8 - 73.7 )	5.3 *	( 2.5 - 8.1 )	4.0 *	( 1.5 - 6.5 )
<b>Children</b>	<b>84.3</b>	<b>( 80.9 - 87.8 )</b>	<b>27.0</b>	<b>( 22.6 - 31.3 )</b>	<b>31.8</b>	<b>( 27.3 - 36.4 )</b>	<b>64.2</b>	<b>( 59.3 - 69.1 )</b>	<b>6.3</b>	<b>( 4.0 - 8.6 )</b>	<b>3.0</b>	<b>( 1.6 - 4.5 )</b>

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

N/A Prevalence estimate has a 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 19: Proportion of children utilising health services in the past 12 months, 0 to 15 years, HWSS 2005–16**

	Primary (a)		Hospital Based (b)		Allied (c)		Dental		Mental (d)		Alternative (e)	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2005	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 )
2006	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 )
2007	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 )
2008	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 )
2009	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 )
2010	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 )
2011	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 )
2012	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 )
2013	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 )
2014	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 )
2015	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 )
2016	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>Average</b>	81.2	( 80.3 - 82.1 )	25.2	( 24.2 - 26.2 )	25.9	( 24.9 - 27.0 )	60.0	( 58.8 - 61.2 )	3.9	( 3.5 - 4.3 )	3.7	( 3.3 - 4.1 )

\* Prevalence estimate has a 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 20: Mean number of visits to health services in the past 12 months, 0 to 15 years, HWSS 2016**

	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	5.7	( 4.6 - 6.8 )	0.6	( 0.3 - 0.9 )	1.0 *	( 0.4 - 1.7 )	0.3	( 0.2 - 0.4 )	N/A	( N/A - N/A )	N/A	( N/A - N/A )
5 to 9 yrs	3.1	( 2.3 - 3.9 )	0.5	( 0.3 - 0.6 )	N/A	( N/A - N/A )	1.3	( 1.1 - 1.5 )	N/A	( N/A - N/A )	0.3 *	( 0.0 - 0.5 )
10 to 15 yrs	2.7	( 2.2 - 3.2 )	0.6 *	( 0.1 - 1.1 )	1.6	( 1.2 - 2.1 )	2.0	( 1.6 - 2.4 )	0.6 *	( 0.3 - 1.0 )	N/A *	( N/A - N/A )
<b>Gender</b>												
Boys	3.7	( 3.0 - 4.5 )	0.6	( 0.3 - 0.8 )	2.3 *	( 0.6 - 3.9 )	1.1	( 0.9 - 1.2 )	0.6 *	( 0.1 - 1.2 )	N/A	( N/A - N/A )
Girls	3.9	( 3.3 - 4.6 )	0.6 *	( 0.2 - 0.9 )	1.1	( 0.8 - 1.4 )	1.3	( 1.1 - 1.6 )	0.3 *	( 0.1 - 0.4 )	0.2 *	( 0.0 - 0.3 )
<b>Children</b>	<b>3.8</b>	<b>( 3.3 - 4.3 )</b>	<b>0.6</b>	<b>( 0.3 - 0.8 )</b>	<b>1.7 *</b>	<b>( 0.8 - 2.6 )</b>	<b>1.2</b>	<b>( 1.0 - 1.4 )</b>	<b>0.4 *</b>	<b>( 0.1 - 0.7 )</b>	<b>0.1 *</b>	<b>( 0.0 - 0.2 )</b>

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

N/A Mean estimate has a 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 21: Mean number of visits to health services in the past 12 months, 0 to 15 years, HWSS 2005–16**

	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
2005	3.3	( 2.9 - 3.7 )	0.4	( 0.4 - 0.5 )	1.1	( 0.8 - 1.4 )	1.2	( 1.0 - 1.3 )	0.2 *	( 0.1 - 0.4 )	0.1	( 0.1 - 0.1 )
2006	3.4	( 3.0 - 3.9 )	0.4	( 0.3 - 0.5 )	1.4	( 1.0 - 1.7 )	1.1	( 1.0 - 1.3 )	0.2 *	( 0.0 - 0.3 )	0.1 *	( 0.0 - 0.1 )
2007	3.0	( 2.6 - 3.3 )	0.4	( 0.3 - 0.5 )	1.6 *	( 0.8 - 2.4 )	1.1	( 0.9 - 1.2 )	0.2 *	( 0.1 - 0.3 )	0.3 *	( 0.0 - 0.6 )
2008	3.1	( 2.7 - 3.4 )	0.4	( 0.3 - 0.5 )	0.9	( 0.7 - 1.2 )	1.0	( 0.9 - 1.1 )	0.4 *	( 0.0 - 0.8 )	0.1 *	( 0.0 - 0.2 )
2009	2.9	( 2.7 - 3.1 )	0.5	( 0.4 - 0.5 )	0.9	( 0.8 - 1.1 )	1.1	( 1.0 - 1.2 )	0.2	( 0.1 - 0.2 )	0.1	( 0.1 - 0.1 )
2010	3.3	( 3.0 - 3.6 )	0.4	( 0.4 - 0.5 )	1.3	( 0.8 - 1.7 )	1.1	( 1.0 - 1.2 )	0.2 *	( 0.1 - 0.3 )	0.1 *	( 0.0 - 0.2 )
2011	3.1	( 2.8 - 3.5 )	0.5	( 0.3 - 0.7 )	1.5	( 0.9 - 2.2 )	1.1	( 0.9 - 1.2 )	0.1 *	( 0.0 - 0.1 )	0.1 *	( 0.1 - 0.2 )
2012	3.3	( 2.9 - 3.7 )	0.4	( 0.3 - 0.5 )	1.5	( 1.1 - 1.9 )	1.1	( 1.0 - 1.2 )	0.3 *	( 0.1 - 0.4 )	0.1	( 0.1 - 0.1 )
2013	3.2	( 2.7 - 3.6 )	0.4	( 0.3 - 0.5 )	1.5	( 0.8 - 2.1 )	1.2	( 1.0 - 1.3 )	0.3	( 0.1 - 0.4 )	0.1 *	( 0.0 - 0.1 )
2014	3.0	( 2.6 - 3.4 )	0.4	( 0.3 - 0.5 )	1.7	( 1.0 - 2.4 )	1.2	( 1.0 - 1.4 )	0.3 *	( 0.2 - 0.5 )	N/A	( N/A - N/A )
2015	3.8	( 3.2 - 4.4 )	0.6	( 0.4 - 0.7 )	2.3	( 1.3 - 3.4 )	1.2	( 1.0 - 1.4 )	0.5 *	( 0.2 - 0.8 )	N/A	( N/A - N/A )
2016	3.8	( 3.3 - 4.3 )	0.6	( 0.3 - 0.8 )	1.7	( 0.9 - 2.5 )	1.2	( 1.1 - 1.4 )	0.4 *	( 0.2 - 0.7 )	0.1 *	( 0.0 - 0.2 )
<b>Average</b>	<b>3.2</b>	<b>( 3.1 - 3.3 )</b>	<b>0.5</b>	<b>( 0.4 - 0.5 )</b>	<b>1.3</b>	<b>( 1.2 - 1.5 )</b>	<b>1.2</b>	<b>( 1.1 - 1.2 )</b>	<b>0.2</b>	<b>( 0.2 - 0.3 )</b>	<b>0.1</b>	<b>( 0.1 - 0.2 )</b>

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

N/A Mean estimate has a 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.

## **9. CHILD DEVELOPMENT**

The early years are very important for laying the foundations for children's physical wellbeing and later competence. There are many important influences on children during this period of rapid change, including biological, social, community and family.<sup>13</sup>

### **9.1 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, and 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>17</sup>

In 2011, national breastfeeding indicators were developed to assist with the reporting of breastfeeding prevalence in Australia and the meeting of the national infant feeding recommendation around exclusive breastfeeding.<sup>18</sup> A total of six indicators were agreed upon and in this report we will report on three of the six. Reporting of the selected indicators uses the same age breakdowns as those used in the AIHW national infant feeding survey where possible.<sup>19</sup>

Parents/carers are asked if their child was breastfed, and if so, how long their child received breast milk for, and 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, only children aged 0 to 4 years at the time of the interview in 2016 are included in the reporting of the breastfeeding indicators. When calculating the proportion of children meeting each indicator, children that were not old enough at the time of interview to have reached the milestone were excluded. For example, if the duration of breastfeeding was less than 3 months then a child must be at least 2 months old to be included.

Overall, in 2016, 91.2 per cent of children aged 0 to 4 years had received some breast-milk in their lifetime. This means that 8.8 per cent of children aged 0 to 4 years at the time of interview had never received any breast milk.

Table 22 and Figure 7 show Indicator 3 – Proportion of children exclusively breastfed to each month of age, 0 to 6 months. Exclusive breastfeeding refers to children who received breast milk in the designated period and did not receive water, infant formula, other liquids or solid foods.

**Table 22: Proportion of children exclusively breastfed to each month of age, 0 to 4 years, HWSS 2016**

To month <sup>(a)</sup>	Duration exclusively breastfed for	Proportion of children exclusively breastfed <sup>(b)</sup>	
		%	95% CI
0	Less than 1 month	64.9	( 54.7 - 75.1 )
1	Less than 2 months	57.3	( 46.6 - 67.9 )
2	Less than 3 months	52.4	( 41.4 - 63.3 )
3	Less than 4 months	38.9	( 28.0 - 49.8 )
4	Less than 5 months	24.2	( 14.6 - 33.8 )
5	Less than 6 months	12.3 *	( 4.9 - 19.6 )
6	Less than 7 months	N/A	( N/A - N/A )

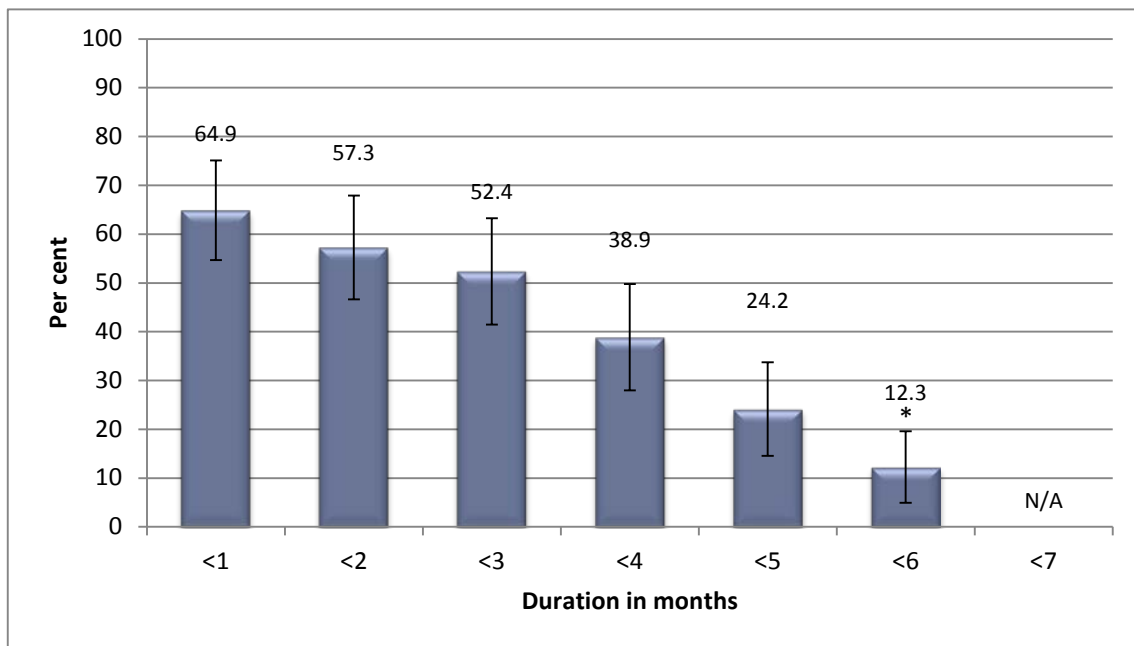
(a) 'To' indicates an infant's age the month before a fluid other than breast milk was introduced. This is effectively the month before another fluid was introduced. For example a child who was introduced to water when they were aged 4 months (in their fifth month of life) was exclusively breastfed to 4 months of age (that is, they had 4 completed months of exclusive breastfeeding).

(b) There were only three respondents who reported that their child was exclusively breastfed to 6 months (less than 7 months) of age, resulting in a high RSE for this prevalence estimate.

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

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

**Figure 7: Proportion of children exclusively breastfed to each month of age, 0 to 4 years, HWSS 2016**



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

Table 23 and Figure 8 show Indicator 4 – Proportion of children predominantly breastfed to each month of age, 0 to 6 months. Predominant breastfeeding refers to children who received breast milk as the predominant source of nourishment in the designated period. In order to be considered predominately breastfed, children are allowed to have received liquids but not infant formula or solid foods. The largest decrease in predominant breastfeeding occurs when children reach 4 months of age.



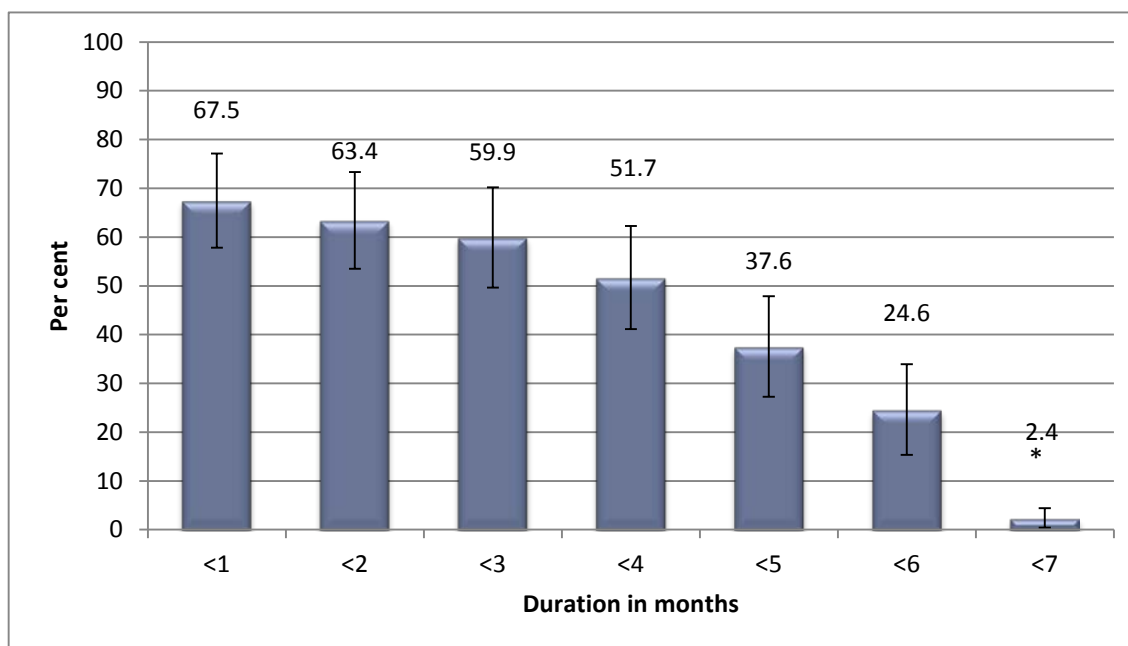
**Table 23: Proportion of children predominantly breastfed to each month of age, 0 to 4 years, HWSS 2016**

To month <sup>(a)</sup>	Duration predominantly breastfed for	Proportion of children predominantly breastfed	
		%	95% CI
0	Less than 1 month	67.5	( 57.8 - 77.1 )
1	Less than 2 months	63.4	( 53.5 - 73.3 )
2	Less than 3 months	59.9	( 49.7 - 70.2 )
3	Less than 4 months	51.7	( 41.1 - 62.3 )
4	Less than 5 months	37.6	( 27.3 - 47.9 )
5	Less than 6 months	24.6	( 15.3 - 34.0 )
6	Less than 7 months	2.4 *	( 0.4 - 4.4 )

(a) This indicates an infant's age the month before the event occurred. For example, a child who was introduced to infant formula when they were aged 4 months (in their fifth month of life) was predominantly breastfed to 4 months of age (that is, they had 4 completed months of predominant breastfeeding).

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

**Figure 8: Proportion of children predominantly breastfed to each month of age, 0 to 4 years, HWSS 2016**



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

## 9.2 Speech

From a very young age children begin to develop language. There are two distinctions in difficulties developing speech: 1) a speech disorder refers to when children have difficulty pronouncing the sounds in words however might have language skills (understanding words and sentences) that are otherwise good; and 2) a language delay is when children miss language development milestones by a long way.<sup>20</sup>

Due to the increased risk of recall bias for parents/carers answering questions on early childhood events on behalf of older children, 2016 data are presented by birth cohorts with the 2012-16 cohort capturing children aged 0 to 4 years at the time of interview, the 2007-11 cohort capturing children aged 5 to 9 years at the time of interview and the 2001-06 cohort capturing children aged 10 to 15 years at the time of interview.

Table 24 presents the proportion of children who were perceived to be late in starting to talk, the proportion of children perceived to need professional help and the proportion who did receive professional help (speech therapy).

Estimates for the 2012-14 cohort have high relative standard errors which impacts on our ability to draw clear conclusions from the data.

**Table 24: Proportion of children late talking and needing professional help with speech, by birth cohort, 2 to 15 years, HWSS 2016**

	Child was late talking		Parents thought child needed professional help with speech		Child received professional help with speech (a)	
	%	95% CI	%	95% CI	%	95% CI
<b>Birth Cohort</b>						
2012-14	18.3	*( 8.3 - 28.3)	11.1	*( 3.7 - 18.5)	55.6	*( 20.0 - 91.2)
2007-11	16.9	( 10.5 - 23.3)	21.0	( 14.3 - 27.7)	95.1	( 87.7 - 100.0)
2001-06	13.9	( 9.2 - 18.5)	19.6	( 14.4 - 24.8)	94.2	( 87.7 - 100.0)

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

(a) The proportion of children who received professional help with speech is based only on the children who were identified as late talking.

## 10. LIFESTYLE FACTORS

There are many factors that influence a person's health, including genetics, lifestyle and environmental (including social) factors. These factors may have a positive effect on health, such as a high consumption of fruit and vegetables, or a negative effect, such as physical inactivity.<sup>9</sup> These modifiable lifestyle behaviours are also associated with the onset of some physiological risk factors, such as obesity.

### 10.1 Physical activity and sedentary behaviour

Physical activity has important effects on children's health. It can influence children's healthy growth and development and have mental health benefits.<sup>21,22</sup> Physical inactivity can increase the risk of overweight and obesity and can increase the risk of developing chronic health conditions later in life.<sup>21,22</sup> Parents/carers were asked to rate their child's physical activity level, as shown in Table 25.

**Table 25: Prevalence of children by parent/ carer rated physical activity level, 5 to 15 years, HWSS 2016**

	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	52.0	( 43.7 - 60.4 )	31.2	( 23.4 - 39.0 )	16.6	( 10.7 - 22.5 )	N/A	( N/A - N/A )
10 to 15 yrs	53.8	( 47.1 - 60.5 )	22.5	( 17.1 - 27.8 )	16.8	( 12.0 - 21.5 )	7.0	( 3.6 - 10.4 )
<b>Gender</b>								
Boys	55.3	( 47.8 - 62.9 )	26.2	( 19.5 - 32.8 )	14.7	( 9.7 - 19.8 )	3.7 *	( 1.3 - 6.2 )
Girls	50.5	( 43.0 - 57.9 )	27.1	( 20.4 - 33.7 )	18.7	( 13.2 - 24.2 )	3.8 *	( 1.0 - 6.5 )
<b>Children</b>	<b>52.9</b>	<b>( 47.6 - 58.3 )</b>	<b>26.6</b>	<b>( 21.9 - 31.3 )</b>	<b>16.7</b>	<b>( 12.9 - 20.4 )</b>	<b>3.7</b>	<b>( 1.9 - 5.6 )</b>

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

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

The annual estimates of physical activity ratings are shown in Table 26.

**Table 26: Prevalence of children by parent/ carer rated physical activity level, 5 to 15 years, HWSS 2005–16**

	Very active		Active		Moderately active		Not very active/ Not at all active	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2005	48.8	( 44.2 - 53.3 )	28.9	( 24.8 - 32.9 )	17.1	( 13.5 - 20.6 )	5.3	( 3.3 - 7.3 )
2006	50.3	( 46.1 - 54.5 )	28.9	( 25.2 - 32.6 )	18.4	( 15.3 - 21.5 )	2.4	( 1.3 - 3.5 )
2007	51.4	( 45.6 - 57.3 )	26.1	( 21.1 - 31.1 )	19.2	( 14.6 - 23.7 )	3.3 *	( 1.3 - 5.4 )
2008	53.3	( 47.9 - 58.8 )	26.9	( 22.1 - 31.7 )	14.6	( 10.8 - 18.3 )	5.2	( 3.0 - 7.4 )
2009	47.8	( 45.3 - 50.3 )	32.9	( 30.6 - 35.3 )	15.3	( 13.5 - 17.1 )	4.0	( 3.1 - 4.9 )
2010	51.7	( 46.7 - 56.7 )	29.3	( 24.7 - 33.8 )	13.9	( 10.5 - 17.2 )	5.1	( 2.9 - 7.4 )
2011	52.1	( 46.5 - 57.8 )	28.5	( 23.3 - 33.7 )	17.2	( 12.9 - 21.5 )	2.2 *	( 0.7 - 3.6 )
2012	49.6	( 44.6 - 54.7 )	30.2	( 25.6 - 34.8 )	14.7	( 11.1 - 18.2 )	5.5	( 3.2 - 7.8 )
2013	46.1	( 40.9 - 51.4 )	30.5	( 25.5 - 35.5 )	20.0	( 15.8 - 24.3 )	3.3 *	( 1.5 - 5.2 )
2014	47.8	( 42.0 - 53.6 )	28.8	( 23.6 - 34.0 )	17.5	( 12.7 - 22.2 )	5.9	( 3.3 - 8.5 )
2015	50.4	( 45.0 - 55.8 )	27.3	( 22.4 - 32.2 )	17.3	( 13.4 - 21.2 )	5.0 *	( 2.4 - 7.6 )
2016	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>Average</b>	<b>49.7</b>	<b>( 48.4 - 51.0 )</b>	<b>29.8</b>	<b>( 28.6 - 31.0 )</b>	<b>16.3</b>	<b>( 15.4 - 17.3 )</b>	<b>4.2</b>	<b>( 3.7 - 4.7 )</b>

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

Based on the 2014 Australian Physical Activity and Sedentary Behaviour Guidelines, 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.<sup>21,22</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 a child completed in the last 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 27.

**Table 27: Prevalence of children by physical activity completed weekly, 5 to 15 years, HWSS 2016**

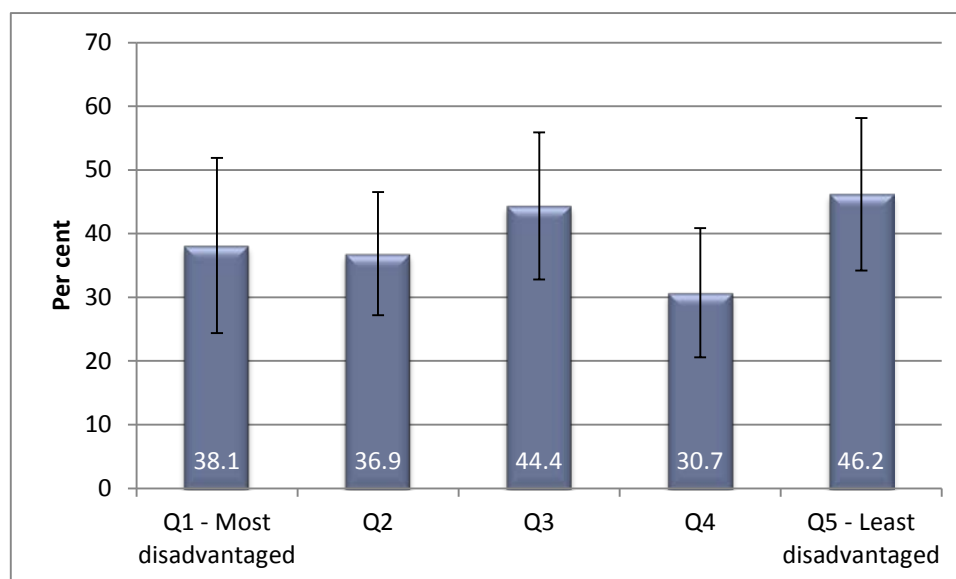
	No sessions of physical activity per week		Physically active 1 to 6 sessions per week		Physically active 7 or more sessions per week but less than 60 mins a session		Physically active 7 or more sessions per week and at least 60 mins a session	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
5 to 9 yrs	N/A	( N/A - N/A)	30.4	( 22.6 - 38.2)	24.7	( 17.4 - 31.9)	43.2	( 34.8 - 51.5)
10 to 15 yrs	5.5 *	( 2.5 - 8.5)	40.2	( 33.5 - 47.0)	17.8	( 12.4 - 23.1)	36.5	( 29.9 - 43.1)
<b>Gender</b>								
Boys	2.4 *	( 0.5 - 4.2)	37.5	( 29.9 - 45.1)	20.3	( 14.2 - 26.3)	39.9	( 32.2 - 47.5)
Girls	5.2 *	( 2.0 - 8.3)	33.5	( 26.6 - 40.4)	21.9	( 15.3 - 28.4)	39.5	( 32.1 - 46.9)
<b>Children</b>	3.7	( 1.9 - 5.6)	35.5	( 30.4 - 40.7)	21.1	( 16.6 - 25.5)	39.7	( 34.4 - 45.0)

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

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

Overall, 39.7 per cent of children aged 5 to 15 years completed sufficient amounts of physical activity. The proportion of boys (39.9%) completing sufficient amounts of physical activity was similar to the proportion of girls (39.5%). Figure 9 shows the proportion of 5 to 15 year olds completing sufficient levels of physical activity for their age by SEIFA quintile.

**Figure 9: Prevalence of children completing sufficient weekly physical activity, by SEIFA quintiles in WA, 5 to 15 years, HWSS 2016**



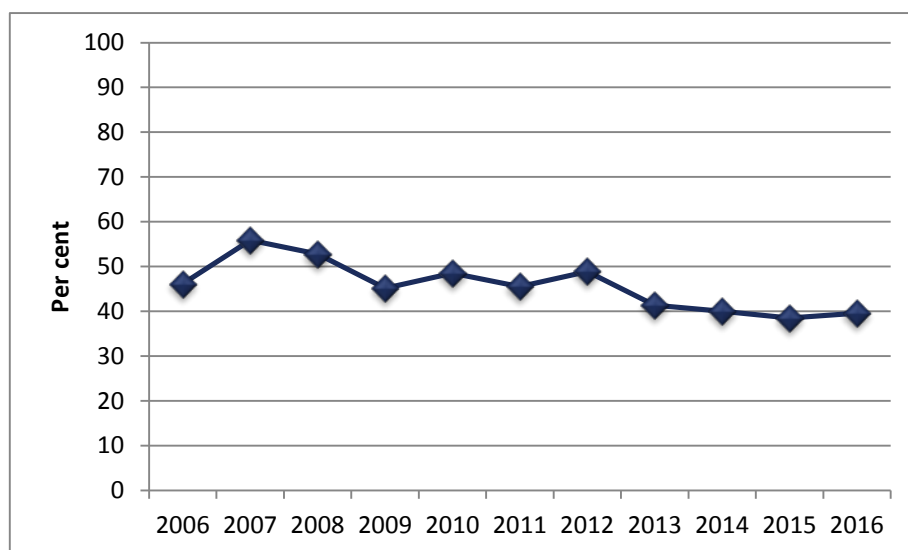
The annual prevalence estimates of weekly physical activity are shown in Table 28 and Figure 10. The proportion of children completing sufficient levels of physical activity in 2016 (39.6) was significantly lower compared with the 2007 (55.9%) and 2008 (52.8%) estimates.

**Table 28: Prevalence of children by physical activity completed weekly, 5 to 15 years, HWSS 2006–16**

	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	( 12.7 - 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 )
<b>Average</b>	<b>3.9</b>	<b>( 3.4 - 4.4 )</b>	<b>33.5</b>	<b>( 32.2 - 34.8 )</b>	<b>17.0</b>	<b>( 16.0 - 18.1 )</b>	<b>45.6</b>	<b>( 44.2 - 47.0 )</b>

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

**Figure 10: Prevalence of children completing sufficient weekly physical activity, 5 to 15 years, HWSS 2006–16**



The mean minutes spent in physical activity per week, for children 5 to 15 years, are shown in Table 29.

**Table 29: Mean time spent in physical activity per week, 5 to 15 years, HWSS 2006–16**

	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	558.8	( 536.2 - 581.4 )
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 )
<b>Average</b>	<b>534.4</b>	<b>( 522.1 - 546.8 )</b>

Australia’s Physical Activity and Sedentary Behaviour Guidelines make recommendations about the maximum amount of time children aged 0 to 17 years should spend using electronic media (for example television, seated electronic games and computer use) during leisure time.<sup>23,21,22</sup> The guidelines recommend no use of electronic media for children less than 2 years of age, less than one hour of use daily for children 2 years to less than 5 years of age and no more than 2 hours of use daily for children 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 30. Children aged 5 to 15 years (76.7%) were significantly more

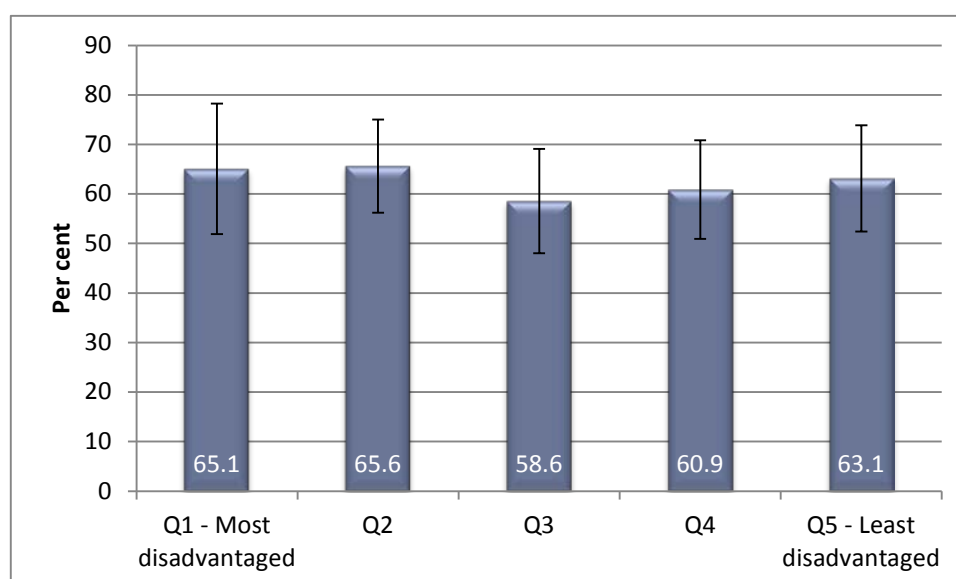
likely to meet the daily leisure time screen usage guidelines compared with children aged 2 to less than 5 years (30.1%) and children less than 2 years (50.4%).

**Table 30: Prevalence of children meeting the Australian sedentary behaviour guidelines for electronic media use, 0 to 15 years, HWSS 2016**

	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	49.6	( 33.3 - 66.0 )	50.4	( 34.0 - 66.7 )
2 to <5 yrs	69.9	( 58.4 - 81.4 )	30.1	( 18.6 - 41.6 )
5 to 15 yrs	23.3	( 18.4 - 28.2 )	76.7	( 71.8 - 81.6 )
<b>Gender</b>				
Boys	37.4	( 30.5 - 44.2 )	62.6	( 55.8 - 69.5 )
Girls	38.1	( 31.2 - 45.0 )	61.9	( 55.0 - 68.8 )
<b>Children</b>	<b>37.7</b>	<b>( 32.9 - 42.6 )</b>	<b>62.3</b>	<b>( 57.4 - 67.1 )</b>

Figure 11 shows the proportion of children meeting the Australian sedentary behaviour guidelines for electronic media use by SEIFA quintile.

**Figure 11: Prevalence of children meeting the Australian sedentary behaviour guidelines for electronic media use, by SEIFA quintiles in WA, 0 to 15 years, HWSS 2016**



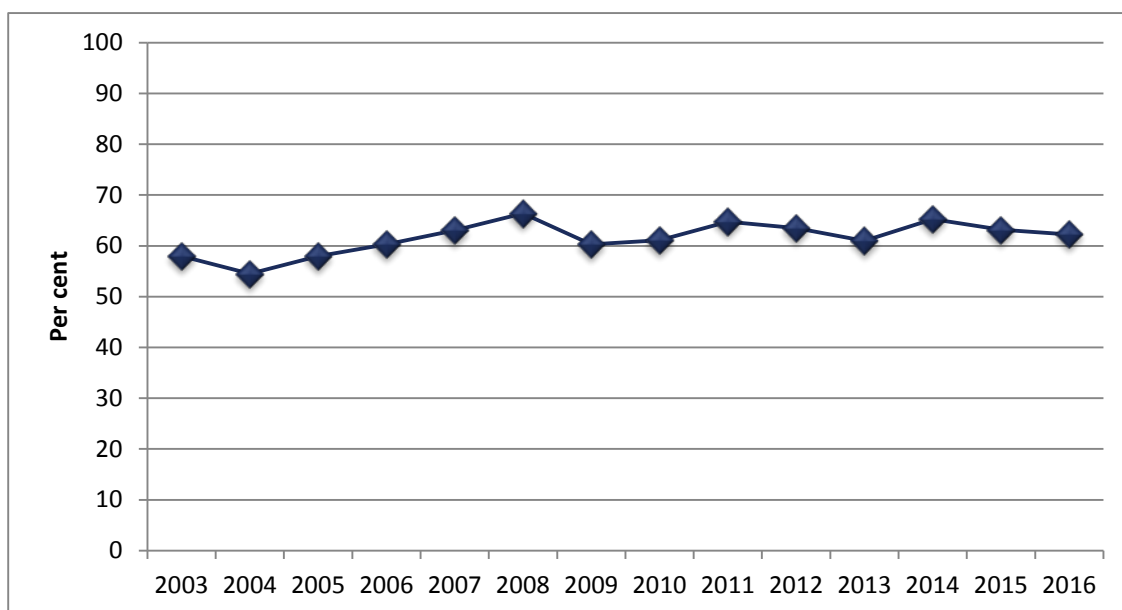


The annual proportion of children meeting the Australian sedentary behaviour guidelines for use of electronic media in leisure time is shown in Table 31 and Figure 12.

**Table 31: Prevalence of children meeting the Australian sedentary behaviour guidelines for electronic media use, 0 to 15 years, HWSS 2003–16**

	Meets guidelines for electronic media use		Does not meet guidelines for electronic media use	
	%	95% CI	%	95% CI
2003	57.9	( 54.5 - 61.4 )	42.1	( 38.6 - 45.5 )
2004	54.5	( 49.1 - 59.9 )	45.5	( 40.1 - 50.9 )
2005	57.9	( 54.2 - 61.7 )	42.1	( 38.3 - 45.8 )
2006	60.3	( 56.8 - 63.7 )	39.7	( 36.3 - 43.2 )
2007	63.1	( 58.1 - 68.0 )	36.9	( 32.0 - 41.9 )
2008	66.4	( 61.8 - 70.9 )	33.6	( 29.1 - 38.2 )
2009	60.3	( 57.1 - 63.4 )	39.7	( 36.6 - 42.9 )
2010	61.1	( 56.9 - 65.3 )	38.9	( 34.7 - 43.1 )
2011	64.8	( 59.9 - 69.6 )	35.2	( 30.4 - 40.1 )
2012	63.5	( 59.2 - 67.8 )	36.5	( 32.2 - 40.8 )
2013	61.0	( 56.0 - 66.0 )	39.0	( 34.0 - 44.0 )
2014	65.2	( 60.1 - 70.4 )	34.8	( 29.6 - 39.9 )
2015	63.2	( 58.5 - 67.8 )	36.8	( 32.2 - 41.5 )
2016	62.2	( 57.5 - 67.0 )	37.8	( 33.0 - 42.5 )
<b>Average</b>	61.2	( 60.1 - 62.3 )	38.8	( 37.7 - 39.9 )

**Figure 12: Prevalence of children meeting the Australian sedentary behaviour guidelines for electronic media use, 0 to 15 years, HWSS 2003–16**



The prevalence of children meeting the Australian guidelines for electronic media use in 2016 was not significantly different from previous years.

## **10.2 Body mass index**

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. Age and sex specific BMI categories were then used to classify children into not overweight or obese, overweight, and obese,<sup>24</sup> as shown in Table 32. Outliers and biologically implausible values were removed in the derivation of these categories.<sup>25</sup>

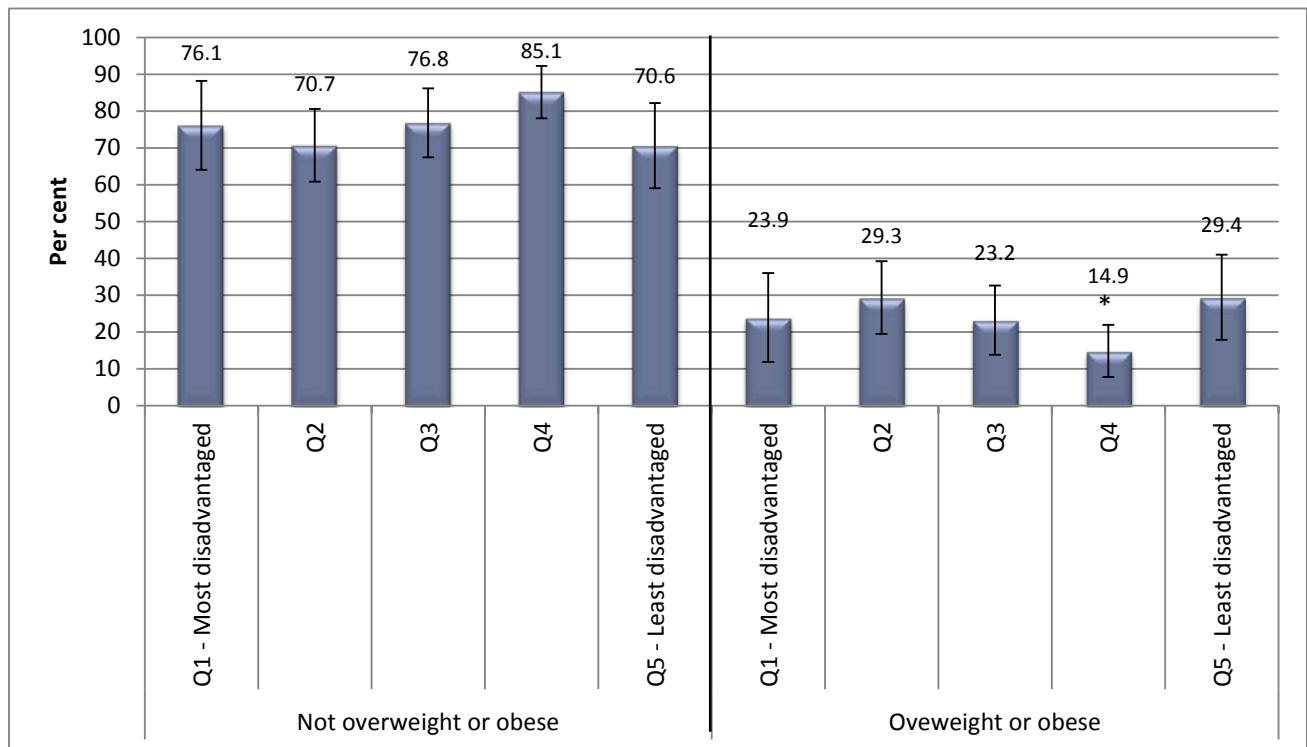
**Table 32: Prevalence of children by body mass index categories, 5 to 15 years, HWSS 2016**

	Not overweight or obese		Overweight		Obese	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
5 to 9 yrs	75.7	( 68.4 - 83.1 )	17.0	( 10.5 - 23.5 )	7.3	* ( 3.1 - 11.5 )
10 to 15 yrs	77.0	( 71.1 - 82.8 )	19.1	( 13.5 - 24.6 )	4.0	* ( 1.8 - 6.2 )
<b>Gender</b>						
Boys	77.8	( 71.3 - 84.3 )	16.5	( 10.5 - 22.5 )	5.7	* ( 2.7 - 8.7 )
Girls	74.9	( 68.4 - 81.4 )	19.8	( 13.9 - 25.8 )	5.3	* ( 1.9 - 8.7 )
<b>Children</b>	<b>76.4</b>	<b>( 71.8 - 81.0 )</b>	<b>18.1</b>	<b>( 13.9 - 22.4 )</b>	<b>5.5</b>	<b>( 3.2 - 7.7 )</b>

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

Figure 13 shows the prevalence of body mass index categories by SEIFA quintiles.

**Figure 13: Prevalence of children by body mass index categories, by SEIFA quintiles in WA, 5 to 15 years, HWSS 2016**



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

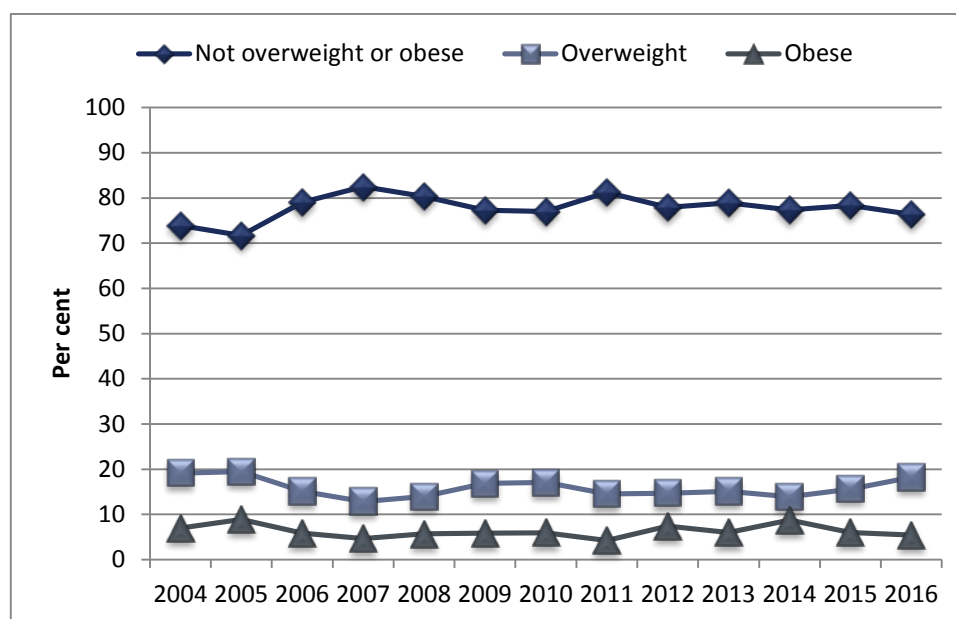
The annual prevalence of body mass index categories is shown in Table 33 and Figure 14. There were no statistically significant changes over time in any of the three categories.

**Table 33: Prevalence of children by body mass index categories, 5 to 15 years, HWSS 2004–16**

	Not overweight or obese		Overweight		Obese	
	%	95% CI	%	95% CI	%	95% CI
2004	73.9	( 66.9 - 80.9 )	19.1	( 12.9 - 25.4 )	7.0 *	( 2.9 - 11.0 )
2005	71.7	( 66.4 - 77.0 )	19.5	( 14.9 - 24.0 )	8.9	( 5.3 - 12.4 )
2006	79.0	( 74.9 - 83.2 )	15.1	( 11.4 - 18.8 )	5.8	( 3.5 - 8.1 )
2007	82.5	( 77.2 - 87.8 )	12.9	( 8.2 - 17.6 )	4.6 *	( 1.8 - 7.4 )
2008	80.3	( 75.5 - 85.2 )	14.0	( 9.7 - 18.2 )	5.7	( 3.0 - 8.4 )
2009	77.3	( 75.1 - 79.5 )	16.9	( 14.9 - 18.8 )	5.8	( 4.6 - 7.0 )
2010	77.0	( 72.5 - 81.5 )	17.0	( 13.0 - 21.1 )	6.0	( 3.6 - 8.3 )
2011	81.2	( 76.8 - 85.7 )	14.5	( 10.6 - 18.4 )	4.2 *	( 1.8 - 6.7 )
2012	77.9	( 73.6 - 82.2 )	14.7	( 11.2 - 18.2 )	7.4	( 4.5 - 10.3 )
2013	78.9	( 74.4 - 83.5 )	15.1	( 11.1 - 19.1 )	6.0	( 3.4 - 8.5 )
2014	77.4	( 72.4 - 82.3 )	13.9	( 9.9 - 17.9 )	8.7	( 5.3 - 12.2 )
2015	78.4	( 73.8 - 82.9 )	15.6	( 11.5 - 19.8 )	6.0	( 3.7 - 8.4 )
2016	76.3	( 71.8 - 80.9 )	18.2	( 14.1 - 22.4 )	5.4	( 3.3 - 7.6 )
<b>Average</b>	<b>77.6</b>	<b>( 76.4 - 78.7 )</b>	<b>16.2</b>	<b>( 15.2 - 17.2 )</b>	<b>6.2</b>	<b>( 5.6 - 6.9 )</b>

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

**Figure 14: Prevalence of children by body mass index categories, 5 to 15 years, HWSS 2004–16**



Parents/carers were also asked for their perceptions of their child's weight (Table 34). Perceptions of weight have been reported against BMI based weight categories derived from parent/ carer reported height and weight for the children.<sup>24</sup> For children 5 to 15 years with BMIs that classified them as overweight or obese, the majority (70.4%) had parents/carers who perceived their child's weight to be normal.

**Table 34: Prevalence of children by parent/ carer perceived body weight, by Body Mass Index classification, 5 to 15 years, HWSS 2016**

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	N/A	( N/A - N/A )	96.3	( 90.9 - 100.0 )	0.0	( 0.0 - 0.0 )
Normal weight	14.6	( 9.7 - 19.5 )	84.2	( 79.2 - 89.2 )	N/A	( N/A - N/A )
Overweight or obese	7.4 *	( 0.4 - 14.4 )	70.4	( 60.5 - 80.4 )	22.2	( 13.9 - 30.5 )

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

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

Parents/carers were then asked what they were trying to do about their child's weight (Table 35). Intentions to change weight have been reported against BMI calculations based on parents/carers reported height and weight for the child. Around one in five (17.2%) children classified as overweight or obese based on BMI had parents/carers intending to help them lose weight. The majority of children classified as overweight or obese based on BMI had parents/carers not intending to make any changes to their child's weight (68.2%).

**Table 35: Prevalence of children by parent/ carer's intentions regarding the child's weight, by Body Mass Index classification, 5 to 15 years, HWSS 2016**

Body Mass index classification	Parent/ carer Intentions around child's body weight							
	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 )	13.8 *	( 0.0 - 28.3 )	84.8	( 70.1 - 99.4 )
Normal weight	N/A	( N/A - N/A )	6.9 *	( 3.5 - 10.4 )	15.8	( 10.7 - 20.8 )	76.0	( 70.2 - 81.9 )
Overweight or obese	17.2	( 9.5 - 24.9 )	N/A	( N/A - N/A )	10.2 *	( 4.0 - 16.4 )	68.2	( 57.9 - 78.4 )

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

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

### 10.3 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>26</sup> Table 36 shows the mean times children were sunburnt in the past 12 months.

**Table 36: Mean times sunburnt in past 12 months, 0 to 15 years, HWSS 2016**

	mean	95% CI
<b>Age Group</b>		
0 to 4 yrs	0.4	( 0.2 - 0.6 )
5 to 9 yrs	1.8	( 1.1 - 2.4 )
10 to 15 yrs	2.3	( 1.8 - 2.8 )
<b>Gender</b>		
Boys	1.4	( 1.0 - 1.7 )
Girls	1.6	( 1.1 - 2.1 )
<b>Children</b>	<b>1.5</b>	<b>( 1.2 - 1.8 )</b>

The annual mean times sunburnt in the past 12 months are shown in Table 37.

**Table 37: Mean times sunburnt in the past 12 months, 0 to 15 years, HWSS 2002–16**

	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 )
<b>Average</b>	<b>1.4</b>	<b>( 1.3 - 1.4 )</b>

Table 38 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. wear a hat, use sunscreen and keep covered). Children aged 10 to 15 years were significantly 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 (47.1% compared with 75.7%).

**Table 38: Prevalence of children by how often parent/ carer checks they are adequately protected before going out into the sunlight, 0 to 15 years, HWSS 2016**

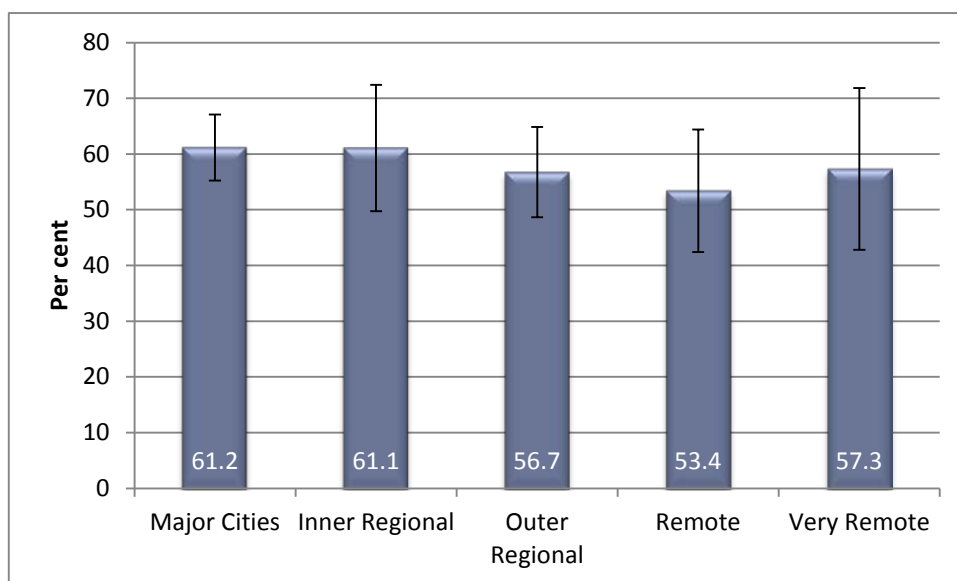
	Always		Most of the time		Sometimes		Rarely/Never	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
0 to 4 yrs	75.7	( 67.1 - 84.3 )	22.3	( 13.9 - 30.7 )	N/A	( N/A - N/A )	N/A	( N/A - N/A )
5 to 9 yrs	59.1	( 51.0 - 67.3 )	38.9	( 30.8 - 46.9 )	N/A	( N/A - N/A )	N/A	( N/A - N/A )
10 to 15 yrs	47.1	( 40.3 - 54.0 )	43.7	( 37.0 - 50.4 )	7.6	( 4.2 - 10.9 )	1.6	* ( 0.5 - 2.7 )
<b>Gender</b>								
Boys	59.3	( 52.5 - 66.0 )	36.8	( 30.2 - 43.5 )	3.0	* ( 1.2 - 4.8 )	0.9	* ( 0.1 - 1.7 )
Girls	59.6	( 52.7 - 66.4 )	32.9	( 26.4 - 39.4 )	5.2	* ( 2.5 - 8.0 )	N/A	( N/A - N/A )
<b>Children</b>	<b>60.3</b>	<b>( 55.7 - 65.0 )</b>	<b>35.2</b>	<b>( 30.6 - 39.7 )</b>	<b>3.9</b>	<b>( 2.2 - 5.5 )</b>	<b>0.6</b>	<b>* ( 0.2 - 1.1 )</b>

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

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

Figure 15 shows the prevalence of children who are always checked by a parent/ carer to ensure they are adequately protected before going out into the sunlight by ARIA category. There were no statistically significant differences by remoteness category.

**Figure 15: Prevalence of children who are always checked to be adequately protected before going out into the sunlight, by ARIA categories in WA, 0 to 15 years, HWSS 2016**



The annual prevalence estimates of children being checked by parents/carers to ensure they are adequately protected before going out into the sunlight are shown in Table 39 and Figure 16.



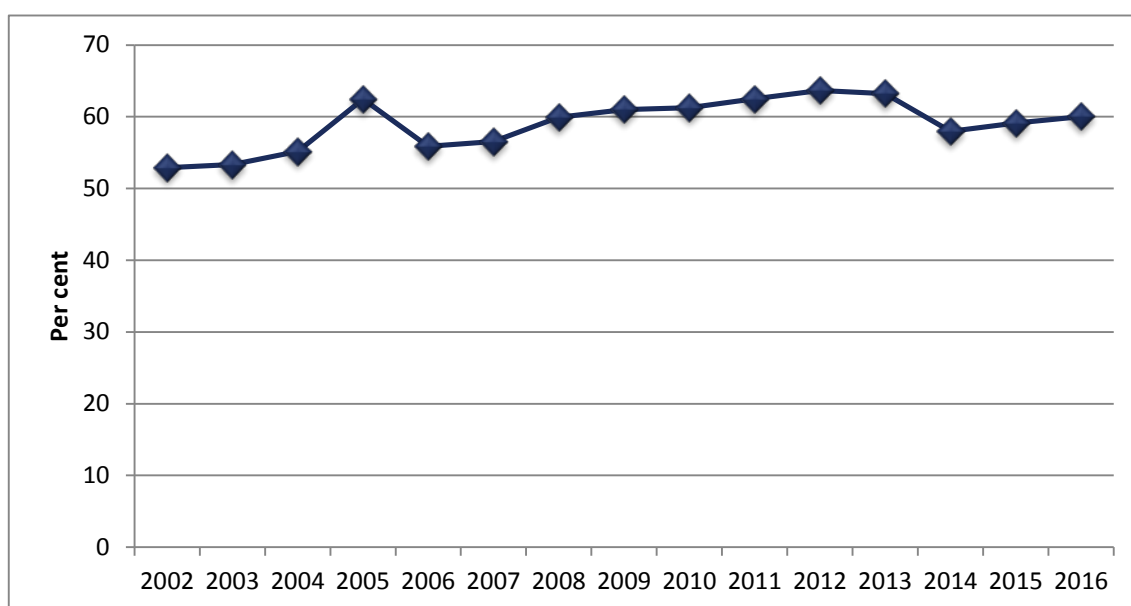
**Table 39: Prevalence of children by how often parent/ carer checks they are adequately protected before going into the sunlight, 0 to 15 years, HWSS 2002–16**

	Always		Most of the time		Sometimes		Rarely/Never	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2002	52.9	( 49.1 - 56.7 )	41.8	( 38.1 - 45.6 )	4.2	( 2.8 - 5.5 )	1.1 *	( 0.4 - 1.8 )
2003	53.3	( 49.9 - 56.8 )	40.8	( 37.3 - 44.2 )	4.4	( 3.2 - 5.6 )	1.5 *	( 0.6 - 2.4 )
2004	55.2	( 49.8 - 60.5 )	38.0	( 32.7 - 43.2 )	6.1	( 3.4 - 8.7 )	N/A	( N/A - N/A )
2005	62.5	( 58.8 - 66.1 )	30.9	( 27.4 - 34.3 )	5.6	( 3.8 - 7.3 )	1.1 *	( 0.4 - 1.7 )
2006	55.9	( 52.3 - 59.4 )	36.8	( 33.4 - 40.2 )	5.5	( 3.8 - 7.2 )	1.9 *	( 0.8 - 2.9 )
2007	56.5	( 51.5 - 61.6 )	35.0	( 30.1 - 39.9 )	7.0	( 4.3 - 9.6 )	1.5 *	( 0.5 - 2.5 )
2008	59.9	( 55.3 - 64.6 )	32.2	( 27.8 - 36.7 )	6.3	( 4.2 - 8.5 )	1.5 *	( 0.4 - 2.6 )
2009	61.0	( 58.1 - 63.9 )	31.8	( 29.1 - 34.5 )	5.0	( 3.6 - 6.5 )	2.1	( 1.3 - 3.0 )
2010	61.3	( 57.1 - 65.4 )	31.9	( 27.9 - 35.8 )	5.3	( 3.4 - 7.2 )	1.5 *	( 0.6 - 2.5 )
2011	62.5	( 57.8 - 67.2 )	32.0	( 27.4 - 36.6 )	4.5	( 2.6 - 6.4 )	1.0 *	( 0.2 - 1.8 )
2012	63.7	( 59.5 - 67.9 )	28.6	( 24.7 - 32.5 )	5.4	( 3.6 - 7.2 )	2.3 *	( 0.9 - 3.7 )
2013	63.2	( 58.6 - 67.9 )	31.9	( 27.4 - 36.4 )	3.6	( 2.1 - 5.2 )	1.2 *	( 0.1 - 2.3 )
2014	58.0	( 52.8 - 63.2 )	36.1	( 31.0 - 41.2 )	4.8	( 2.8 - 6.7 )	1.2 *	( 0.1 - 2.2 )
2015	59.1	( 54.4 - 63.9 )	35.0	( 30.5 - 39.6 )	4.2	( 2.6 - 5.8 )	1.6 *	( 0.1 - 3.1 )
2016	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>Average</b>	<b>59.0</b>	<b>( 58.0 - 60.1 )</b>	<b>34.5</b>	<b>( 33.5 - 35.5 )</b>	<b>4.9</b>	<b>( 4.5 - 5.3 )</b>	<b>1.5</b>	<b>( 1.3 - 1.8 )</b>

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

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

**Figure 16: Prevalence of children who are always checked to be adequately protected before going out into the sunlight, 0 to 15 years, HWSS 2002–16**



## **10.4 Alcohol**

As alcohol abuse is known to be particularly disruptive to family functioning,<sup>27</sup> parents/carers have been asked since 2002 whether or not they thought that alcohol caused problems in the child's household. In 2016, 0.8 per cent of children lived in a household where alcohol was thought to cause a problem, according to their parent/ carer. This is the lowest recorded since 2002 (range 0.8% to 2.5%).

## **10.5 Smoking**

### **10.5.1 Smoking in the home**

The negative health effects of passive smoking on children are well documented. Passive smoking 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>13</sup>

The annual estimates of smoking within the home are shown in Table 40. The prevalence of children living in a smoke-free home has increased significantly from 2002 (90.5%) to 2016 (99.5%).

**Table 40: Prevalence of children by exposure to smoke within the home, 0 to 15 years, HWSS 2002–16**

	The home is smoke free		People occasionally or frequently smoke in the house	
	%	95% CI	%	95% CI
2002	90.5	( 88.5 - 92.4 )	9.5	( 7.6 - 11.5 )
2003	93.7	( 92.2 - 95.1 )	6.3	( 4.9 - 7.8 )
2004	91.2	( 88.5 - 93.9 )	8.8	( 6.1 - 11.5 )
2005	93.6	( 91.8 - 95.4 )	6.4	( 4.6 - 8.2 )
2006	96.5	( 95.3 - 97.7 )	3.5	( 2.3 - 4.7 )
2007	95.7	( 93.9 - 97.5 )	4.3	( 2.5 - 6.1 )
2008	96.5	( 94.8 - 98.1 )	3.5	( 1.9 - 5.2 )
2009	98.1	( 97.5 - 98.6 )	1.9	( 1.4 - 2.5 )
2010	98.2	( 97.2 - 99.3 )	1.8	* ( 0.7 - 2.8 )
2011	97.7	( 96.2 - 99.1 )	2.3	* ( 0.9 - 3.8 )
2012	97.8	( 96.3 - 99.4 )	2.2	* ( 0.6 - 3.7 )
2013	98.1	( 96.7 - 99.4 )	1.9	* ( 0.6 - 3.3 )
2014	98.9	( 98.1 - 99.7 )	1.1	* ( 0.3 - 1.9 )
2015	99.1	( 98.3 - 99.9 )	0.9	* ( 0.1 - 1.7 )
2016	99.5	( 99.0 - 100.0 )	N/A	( N/A - N/A )
<b>Average</b>	<b>96.2</b>	<b>( 95.9 - 96.6 )</b>	<b>3.8</b>	<b>( 3.4 - 4.1 )</b>

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

### 10.5.2 Smoking during pregnancy

Smoking during pregnancy reduces the amount of oxygen available to the baby through the umbilical cord. Smokers have a greater risk of having a premature baby and are more likely to have a low birth weight baby.<sup>28</sup>

The annual estimates of smoking during pregnancy are shown in Table 41. Data are presented for children aged 0 to 4 years at the time of interview as previously described in Section 9 of this report. The prevalence of neither parents smoking during pregnancy has increased significantly from 2005 (66.1%) to 2016 (82.6%).

**Table 41: Prevalence of children by parental smoking status during pregnancy, 0 to 4 years, HWSS 2005–16**

	Neither		Mother only		Father only		Both parents	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2005	66.1	( 59.6 - 72.6 )	5.9 *	( 2.7 - 9.1 )	20.1	( 14.7 - 25.6 )	7.9	( 4.3 - 11.4 )
2006	70.8	( 64.9 - 76.7 )	3.8 *	( 1.3 - 6.2 )	16.7	( 11.9 - 21.4 )	8.8	( 5.1 - 12.5 )
2007	76.1	( 68.2 - 83.9 )	2.6 *	( 0.6 - 4.7 )	13.6	( 7.3 - 19.9 )	7.7 *	( 2.7 - 12.7 )
2008	71.3	( 62.8 - 79.9 )	1.9 *	( 0.1 - 3.7 )	18.9	( 11.4 - 26.4 )	7.9 *	( 2.7 - 13.1 )
2009	78.1	( 71.9 - 84.4 )	4.6 *	( 1.9 - 7.3 )	12.9	( 7.7 - 18.0 )	4.4 *	( 1.4 - 7.4 )
2010	80.5	( 73.4 - 87.6 )	N/A	( N/A - N/A )	14.0	( 7.7 - 20.2 )	N/A	( N/A - N/A )
2011	76.5	( 68.9 - 84.0 )	1.9 *	( 0.4 - 3.4 )	16.8	( 10.2 - 23.4 )	4.8 *	( 0.7 - 9.0 )
2012	74.0	( 66.7 - 81.3 )	2.1 *	( 0.2 - 3.9 )	18.8	( 12.2 - 25.4 )	5.2 *	( 1.7 - 8.6 )
2013	86.1	( 79.1 - 93.1 )	N/A	( N/A - N/A )	10.1 *	( 3.8 - 16.4 )	N/A	( N/A - N/A )
2014	90.3	( 86.1 - 94.5 )	N/A	( N/A - N/A )	6.0 *	( 2.8 - 9.3 )	2.3 *	( 0.1 - 4.5 )
2015	88.5	( 82.2 - 94.9 )	N/A	( N/A - N/A )	9.2 *	( 3.1 - 15.3 )	N/A	( N/A - N/A )
2016	82.6	( 75.5 - 89.7 )	N/A	( N/A - N/A )	12.0 *	( 5.7 - 18.4 )	3.2 *	( 0.4 - 6.0 )
<b>Average</b>	<b>76.7</b>	<b>( 74.7 - 78.8 )</b>	<b>3.0</b>	<b>( 2.2 - 3.8 )</b>	<b>14.9</b>	<b>( 13.2 - 16.6 )</b>	<b>5.4</b>	<b>( 4.3 - 6.4 )</b>

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

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

## 10.6 Nutrition

### Fruit and Vegetables

Diet has an important effect on health and can influence children’s growth, weight and development. Unhealthy eating in childhood can also increase the risk of developing chronic diseases in later life, including coronary heart disease, type 2 diabetes, stroke, and some cancers.<sup>9</sup> The 2013 Australian Dietary Guidelines by the National Health and Medical Research Council<sup>29</sup> are presented in Table 42.

Parents/carers responding to the HWSS 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 will be rounded down to the nearest whole number.

**Table 42: 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 43 shows the prevalence of children 2 to 15 years, by the number of serves of fruit they usually eat daily. In 2016, around two-thirds (65.8%) of children aged 2 to 15 years were eating two or more serves of fruit daily.

**Table 43: Prevalence of children by number of serves of fruit consumed daily, 2 to 15 years, HWSS 2016**

	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	N/A	( N/A - N/A )	27.9 *	( 13.8 - 42.1 )	68.0	( 53.5 - 82.6 )
4 to 8 yrs	N/A	( N/A - N/A )	25.1	( 17.4 - 32.8 )	72.7	( 64.8 - 80.5 )
9 to 15 yrs	7.8 *	( 3.6 - 12.1 )	32.6	( 26.6 - 38.6 )	59.6	( 53.2 - 66.0 )
<b>Gender</b>						
Boys	7.2 *	( 2.9 - 11.4 )	29.3	( 22.7 - 36.0 )	63.5	( 56.4 - 70.6 )
Girls	3.1 *	( 1.0 - 5.1 )	28.8	( 22.3 - 35.2 )	68.2	( 61.6 - 74.7 )
<b>Children</b>	5.1	( 2.7 - 7.5 )	29.1	( 24.4 - 33.7 )	65.8	( 60.9 - 70.6 )

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

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

Table 44 shows the prevalence of children 2 to 15 years, by the number of serves of vegetables they usually eat daily. In 2016, one-third of children (35.3%) were eating two serves of vegetables daily. The next most common serve was one serve of vegetables daily, which accounted for 27.5 per cent of children aged 2 to 15 years.

**Table 44: Prevalence of children by number of serves of vegetables consumed daily, 2 to 15 years, HWSS 2016**

	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		Eats four or more serves of vegetables daily	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>										
2 to 3 yrs	N/A	( N/A - N/A )	50.7	( 35.7 - 65.7 )	35.2	( 20.8 - 49.6 )	7.5 *	( 0.8 - 14.1 )	2.6 *	( 0.0 - 7.6 )
4 to 8 yrs	9.0 *	( 3.4 - 14.7 )	25.5	( 18.3 - 32.8 )	37.1	( 28.5 - 45.8 )	15.9	( 9.7 - 22.1 )	12.4	( 6.7 - 18.1 )
9 to 15 yrs	2.7 *	( 0.6 - 4.9 )	21.2	( 15.7 - 26.7 )	33.9	( 28.1 - 39.7 )	20.4	( 15.3 - 25.6 )	21.7	( 16.3 - 27.2 )
<b>Gender</b>										
Boys	6.8 *	( 2.9 - 10.6 )	32.3	( 25.4 - 39.2 )	33.3	( 26.4 - 40.1 )	15.2	( 10.1 - 20.2 )	12.4	( 8.1 - 16.7 )
Girls	3.7 *	( 0.4 - 7.0 )	22.4	( 16.5 - 28.4 )	37.4	( 30.6 - 44.1 )	18.3	( 13.3 - 23.3 )	18.2	( 12.6 - 23.7 )
<b>Children</b>	5.3	( 2.7 - 7.8 )	27.5	( 22.9 - 32.1 )	35.3	( 30.5 - 40.1 )	16.7	( 13.2 - 20.3 )	15.2	( 11.7 - 18.7 )

\* Prevalence estimate has a RSE between 25%-50% and should be used with caution.  
 N/A Prevalence estimate has a 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 45. 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 (59.6% compared with 96.0% and 97.8% respectively). The proportion of children eating sufficient serves of vegetables was significantly higher for children aged 2 to 3 years (45.2%) compared with children aged 4 to 8 years (12.4%) and 9 to 15 years (8.3%).

**Table 45: Prevalence of children eating sufficient serves of fruit and/or vegetables, 2 to 15 years, HWSS 2016**

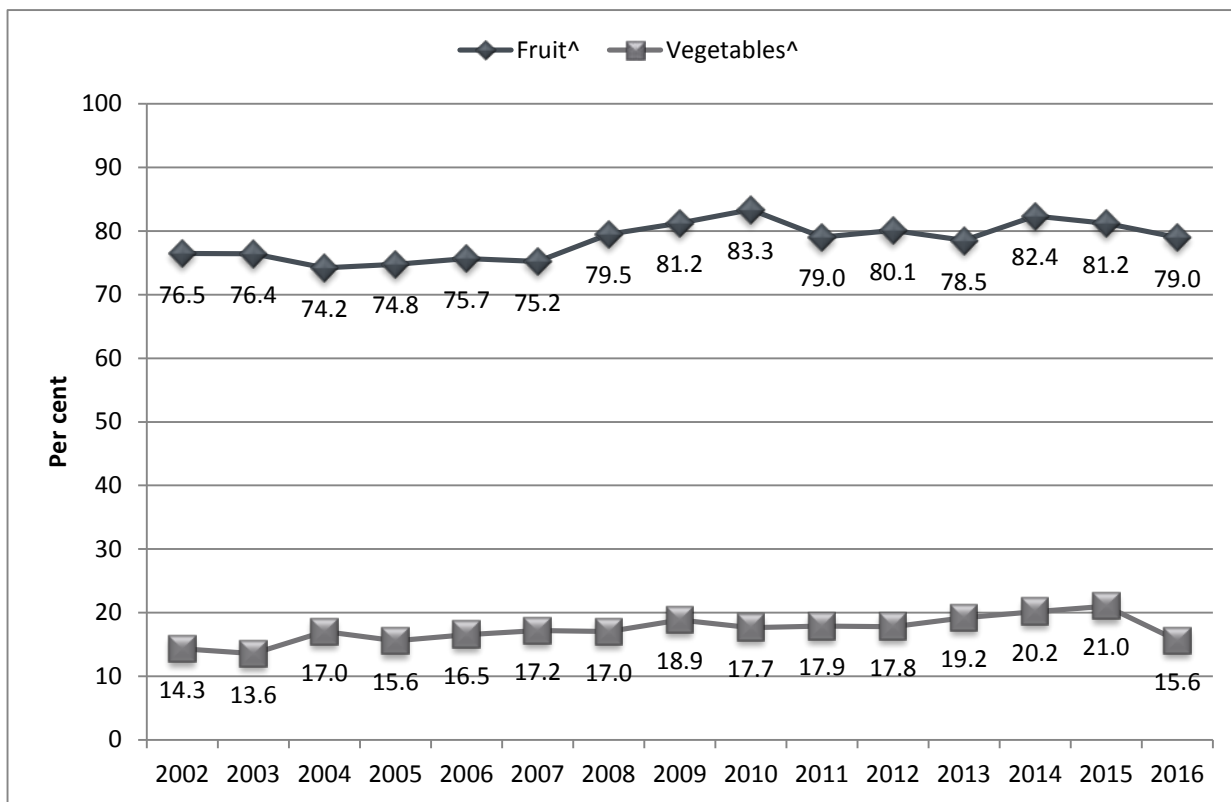
	Eats sufficient daily serves of fruit for age and gender <sup>^</sup>		Eats sufficient daily serves of vegetables for age and gender <sup>^</sup>	
	%	95% CI	%	95% CI
<b>Age Group</b>				
2 to 3 yrs	96.0	( 90.2 - 100.0 )	45.2	( 30.3 - 60.1 )
4 to 8 yrs	97.8	( 95.5 - 100.0 )	12.4	( 6.7 - 18.1 )
9 to 15 yrs	59.6	( 53.2 - 66.0 )	8.3	( 4.7 - 11.8 )
<b>Gender</b>				
Boys	77.4	( 71.5 - 83.3 )	14.3	( 9.0 - 19.6 )
Girls	82.0	( 77.1 - 86.9 )	17.1	( 11.5 - 22.7 )
<b>Children</b>	<b>79.7</b>	<b>( 75.8 - 83.5 )</b>	<b>15.7</b>	<b>( 11.8 - 19.5 )</b>

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

The annual estimates of children aged 2 to 15 years consuming sufficient daily serves of fruit and vegetables based on the 2013 guidelines is shown in Figure 17.



**Figure 17: Prevalence of children eating sufficient serves of fruit and vegetables<sup>^</sup>, 2013 Australian Dietary Guidelines for fruit and vegetable consumption, 2 to 15 years, HWSS 2002–16**



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

The mean serves of fruit and vegetables eaten daily by children 2 to 15 years is shown in Table 46. There was no significant difference in the mean serves of fruit consumed in 2016 compared with previous years. The mean serves of vegetables (2.2 serves) in 2016 was also similar to every other year.

**Table 46: Mean daily fruit and vegetable serves, 2 to 15 years, HWSS 2002–16**

	Fruit		Vegetables	
	mean	95% CI	mean	95% CI
2002	2.0	( 1.9 - 2.1 )	2.1	( 2.0 - 2.2 )
2003	2.0	( 1.9 - 2.1 )	2.0	( 1.9 - 2.1 )
2004	1.9	( 1.8 - 2.0 )	2.1	( 2.0 - 2.3 )
2005	1.9	( 1.8 - 2.0 )	2.3	( 2.2 - 2.4 )
2006	1.9	( 1.8 - 2.0 )	2.2	( 2.1 - 2.3 )
2007	2.0	( 1.9 - 2.1 )	2.2	( 2.1 - 2.4 )
2008	2.0	( 1.9 - 2.1 )	2.2	( 2.1 - 2.3 )
2009	2.1	( 2.0 - 2.2 )	2.3	( 2.3 - 2.4 )
2010	2.1	( 2.0 - 2.2 )	2.3	( 2.2 - 2.4 )
2011	1.9	( 1.8 - 2.0 )	2.4	( 2.3 - 2.5 )
2012	2.0	( 1.9 - 2.1 )	2.2	( 2.1 - 2.4 )
2013	2.0	( 1.9 - 2.1 )	2.2	( 2.1 - 2.4 )
2014	2.1	( 1.9 - 2.2 )	2.3	( 2.2 - 2.4 )
2015	2.1	( 2.0 - 2.2 )	2.4	( 2.2 - 2.5 )
2016	2.0	( 1.9 - 2.1 )	2.2	( 2.1 - 2.3 )
<b>Average</b>	2.0	( 2.0 - 2.0 )	2.2	( 2.2 - 2.3 )

## Milk

Milk is one of the most complete foods as it contains nearly all the constituents of nutritional importance to humans. As milk provides around one-third of the saturated fat in the diet of children and adolescents, reduced-fat varieties are recommended for children aged 2 years and over.<sup>17</sup> Parents/carers were asked what type of milk their child usually consumes (Table 47).

**Table 47: Prevalence of children by type of milk usually consumed, 2 to 15 years, HWSS 2016**

	Full fat/ whole milk		Low/ reduced fat/ skim milk		Other		Don't use milk	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
2 to 4 yrs	81.7	( 72.3 - 91.2 )	10.7	( 3.4 - 18.0 )	N/A	( N/A - N/A )	N/A	( N/A - N/A )
5 to 9 yrs	62.1	( 53.7 - 70.5 )	32.4	( 24.3 - 40.5 )	N/A	( N/A - N/A )	4.0 *	( 0.2 - 7.8 )
10 to 15 yrs	51.4	( 44.6 - 58.2 )	42.5	( 35.9 - 49.2 )	3.8 *	( 1.3 - 6.3 )	2.3 *	( 0.1 - 4.4 )
<b>Gender</b>								
Boys	62.2	( 55.2 - 69.2 )	31.1	( 24.6 - 37.7 )	4.3 *	( 0.9 - 7.7 )	2.3 *	( 0.4 - 4.3 )
Girls	62.9	( 56.2 - 69.5 )	31.3	( 25.1 - 37.6 )	2.8 *	( 0.9 - 4.8 )	3.0 *	( 0.3 - 5.7 )
<b>Children</b>	<b>62.5</b>	<b>( 57.7 - 67.4 )</b>	<b>31.2</b>	<b>( 26.7 - 35.8 )</b>	<b>3.6 *</b>	<b>( 1.6 - 5.6 )</b>	<b>2.7 *</b>	<b>( 1.0 - 4.3 )</b>

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

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

Children aged 2 to 4 years were significantly more likely to consume full fat or whole milk (81.7%) compared with children aged 5 to 9 years (62.1%) and children aged 10 to 15 years (51.4%).

The type of milk usually consumed is shown annually in Table 48.

**Table 48: Prevalence of children by type of milk usually consumed, 2 to 15 years, HWSS 2002–16**

	Full fat/ whole milk		Low/reduced fat/ skim milk		Other		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	( 57.2 - 63.0 )	35.7	( 32.8 - 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 )
<b>Average</b>	62.0	( 61.0 - 63.1 )	34.0	( 33.0 - 35.1 )	1.8	( 1.5 - 2.1 )	2.1	( 1.8 - 2.5 )

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

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

## Fast Food

Parents/carers were asked how many times a week on average their child eats fast food meals, such as burgers, pizza, chicken or chips from fast food outlets. The prevalence of children by how frequently they eat fast food meals per week is shown in Table 49.

**Table 49: Prevalence of children by consumption of meals from fast food outlets per week, 1 to 15 years, HWSS 2016**

	Never		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	48.3	( 37.3 - 59.4 )	30.7	( 20.5 - 40.9 )	19.5	( 10.7 - 28.4 )	N/A	( N/A - N/A )
5 to 9 yrs	23.6	( 16.7 - 30.6 )	41.3	( 33.0 - 49.6 )	34.2	( 26.4 - 42.1 )	N/A	( N/A - N/A )
10 to 15 yrs	20.4	( 15.2 - 25.5 )	35.8	( 29.2 - 42.4 )	41.9	( 35.2 - 48.7 )	1.9	* ( 0.5 - 3.4 )
<b>Gender</b>								
Boys	24.7	( 18.5 - 30.9 )	35.2	( 28.5 - 41.9 )	37.6	( 30.8 - 44.4 )	2.5	* ( 0.4 - 4.6 )
Girls	34.7	( 27.9 - 41.5 )	37.2	( 30.4 - 44.0 )	27.9	( 21.9 - 33.8 )	N/A	( N/A - N/A )
<b>Children</b>	<b>29.5</b>	<b>( 24.9 - 34.2 )</b>	<b>36.2</b>	<b>( 31.4 - 41.0 )</b>	<b>32.9</b>	<b>( 28.3 - 37.4 )</b>	<b>1.4</b>	<b>* ( 0.3 - 2.5 )</b>

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

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

The number of times children eat fast food per week between 2002 and 2016 is shown in Table 50. The number of children who never eat meals from fast food restaurants has increased significantly from 16.2 per cent in 2002 to 29.5 per cent in 2016.

**Table 50: Prevalence of children by consumption of meals from fast food outlets per week, 1 to 15 years, HWSS 2002–16**

	Never		Less than once a week		Once or twice a week		Three or more times per week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2002	16.2	( 12.8 - 19.6 )	36.8	( 32.4 - 41.1 )	44.9	( 40.5 - 49.3 )	2.1	* ( 0.9 - 3.2 )
2003	10.1	( 8.0 - 12.2 )	42.3	( 38.9 - 45.8 )	45.8	( 42.2 - 49.3 )	1.8	* ( 0.9 - 2.7 )
2004	11.9	( 8.4 - 15.3 )	45.2	( 39.8 - 50.6 )	42.2	( 36.8 - 47.6 )	0.7	* ( 0.2 - 1.2 )
2005	12.0	( 9.4 - 14.6 )	44.7	( 40.9 - 48.6 )	41.4	( 37.6 - 45.2 )	1.9	* ( 0.9 - 2.8 )
2006	12.5	( 9.6 - 15.3 )	44.6	( 40.5 - 48.8 )	40.8	( 36.7 - 44.9 )	2.1	* ( 1.0 - 3.2 )
2007	17.7	( 13.9 - 21.5 )	38.7	( 33.6 - 43.8 )	40.3	( 35.3 - 45.3 )	3.3	* ( 1.2 - 5.5 )
2008	11.6	( 8.6 - 14.5 )	42.6	( 37.7 - 47.5 )	44.1	( 39.2 - 48.9 )	1.8	* ( 0.7 - 2.9 )
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 )
<b>Average</b>	17.8	( 17.0 - 18.7 )	39.5	( 38.5 - 40.6 )	40.7	( 39.6 - 41.8 )	1.9	( 1.6 - 2.2 )

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

## 10.7 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>30</sup> In general children sleep less as they grow up. The mean number of hours of sleep for children is shown in Table 51.

**Table 51: Mean time spent sleeping on a usual night, 0 to 15 years, HWSS 2016**

	mean	95% CI
<b>Age Group</b>		
0 to 4 yrs	10.5	( 10.2 - 10.8 )
5 to 9 yrs	10.1	( 9.9 - 10.3 )
10 to 15 yrs	9.2	( 9.1 - 9.4 )
<b>Gender</b>		
Boys	10.0	( 9.8 - 10.2 )
Girls	9.9	( 9.7 - 10.1 )
<b>Children</b>	9.9	( 9.8 - 10.1 )

## 11. PSYCHOSOCIAL AND MENTAL HEALTH

Mental health involves the capacity to interact with people and the environment and refers to the ability to negotiate the social interactions and challenges of life without experiencing undue emotional or behavioural incapacity.<sup>9,31</sup> Mental health is also referred to as psychosocial health as it involves aspects of both social and psychological behaviour.

### 11.1 Emotional problems

Emotional and behavioural problems are terms commonly used to describe changes in thinking, mood or behaviour that are associated with distress or impaired functioning in children.<sup>13</sup> Parents/carers were asked whether their child has trouble with emotions, concentration, behaviour or getting on with people. Population estimates are shown in Table 52.

**Table 52: Prevalence of children by overall trouble with emotions, concentration, behaviour or getting on with people, 1 to 15 years, HWSS 2016**

	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	82.9	( 74.5 - 91.3 )	13.7 *	( 6.0 - 21.4 )	N/A	( N/A - N/A )	N/A	( N/A - N/A )
5 to 9 yrs	58.4	( 50.1 - 66.6 )	31.9	( 24.1 - 39.6 )	6.3 *	( 2.0 - 10.5 )	3.5 *	( 0.4 - 6.6 )
10 to 15 yrs	68.2	( 61.7 - 74.7 )	21.4	( 15.4 - 27.3 )	7.8	( 4.3 - 11.4 )	2.6 *	( 0.5 - 4.7 )
<b>Gender</b>								
Boys	62.2	( 55.4 - 69.1 )	26.6	( 20.3 - 32.8 )	7.5 *	( 3.8 - 11.2 )	3.7 *	( 1.3 - 6.2 )
Girls	76.4	( 70.7 - 82.1 )	18.6	( 13.3 - 23.9 )	4.3 *	( 1.7 - 6.9 )	N/A	( N/A - N/A )
<b>Children</b>	<b>69.1</b>	<b>( 64.6 - 73.7 )</b>	<b>22.7</b>	<b>( 18.5 - 26.9 )</b>	<b>5.9</b>	<b>( 3.7 - 8.2 )</b>	<b>2.2 *</b>	<b>( 0.9 - 3.6 )</b>

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

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

Girls (76.4%) were slightly more likely to experience no trouble with emotions, concentration, behaviour or getting on with people compared with boys (62.2%) (Table 52).

The annual prevalence estimates of children with trouble with emotions, concentration, behaviour or getting on with people are shown in Table 53.



**Table 53: Prevalence of children by overall trouble with emotions, concentration, behaviour or getting on with people, 1 to 15 years, HWSS 2002–16**

	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 - 5.2 )	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 )
<b>Average</b>	69.7	( 68.7 - 70.7 )	23.4	( 22.5 - 24.3 )	5.5	( 5.0 - 6.0 )	1.3	( 1.1 - 1.6 )

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

N/A Prevalence estimate has a 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. Estimates are shown in Table 54.

**Table 54: 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 2016**

	%	95% CI
<b>Age Group</b>		
1 to 4 yrs	N/A	( N/A - N/A )
5 to 9 yrs	39.2	( 25.9 - 52.6 )
10 to 15 yrs	37.4	( 25.6 - 49.3 )
<b>Gender</b>		
Boys	36.0	( 25.0 - 47.1 )
Girls	34.3	( 21.3 - 47.4 )
<b>Children</b>	35.4	( 26.9 - 43.9 )

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

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

The annual prevalence of children regarded as needing special help for emotional problems is shown in Table 55. The prevalence of children regarded by their parent/ carer as needing special help in 2016 (35.2%) was the highest recorded and significantly different to 2002 (20.6%).

**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 2002–16**

	<b>%</b>	<b>95% CI</b>
2002	20.6	( 14.5 - 26.7 )
2003	20.3	( 15.5 - 25.1 )
2004	23.3	( 15.9 - 30.8 )
2005	21.0	( 15.5 - 26.5 )
2006	26.2	( 20.4 - 32.0 )
2007	26.4	( 18.3 - 34.5 )
2008	26.0	( 19.0 - 33.0 )
2009	25.7	( 21.5 - 29.9 )
2010	23.2	( 16.3 - 30.1 )
2011	21.4	( 13.0 - 29.9 )
2012	25.2	( 18.1 - 32.2 )
2013	34.2	( 24.8 - 43.7 )
2014	32.8	( 23.7 - 41.9 )
2015	28.0	( 19.9 - 36.1 )
2016	35.2	( 26.9 - 43.5 )
<b>Average</b>	<b>25.3</b>	<b>( 23.6 - 26.9 )</b>

Table 56 shows the prevalence of children aged 1 to 15 years who have been treated for an emotional or mental health problem as reported by a parent/ carer.

**Table 56: Prevalence of children ever treated for an emotional or mental health problem, 1 to 15 years, HWSS 2016**

	<b>%</b>	<b>95% CI</b>
<b>Age Group</b>		
1 to 4 yrs	N/A	( N/A - N/A )
5 to 9 yrs	10.6	* ( 5.3 - 15.9 )
10 to 15 yrs	11.9	( 7.8 - 16.1 )
<b>Gender</b>		
Boys	9.4	( 5.6 - 13.2 )
Girls	6.8	( 3.7 - 9.8 )
<b>Children</b>	<b>8.1</b>	<b>( 5.7 - 10.6 )</b>

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

N/A Prevalence estimate has a 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 problem is shown in Table 57. The prevalence of children ever treated for an emotional or mental health problem in 2016 was 8.1 per cent which was the highest recorded since collection began and significantly higher than 2002.

**Table 57: Prevalence of children ever treated for an emotional or mental health problem, 1 to 15 years, HWSS 2002–16**

	%	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 )
<b>Average</b>	5.5	( 5.1 - 6.0 )

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

## 11.2 Social support

Social support relates to the resources available within communities and is believed to have a positive influence on health status.<sup>32</sup> Measures of social support for children include the level of social integration that the individual is involved with; it usually comes from a group of people or friends; the assurance of worth from others such as positive reinforcement that inspires and boosts the self-esteem; the reliable alliance support provided from others, which means that the individual knows they can depend on receiving support from family members whenever it was needed.<sup>33, 34</sup> The HWSS measures social support via participation within the community, including whether or not the child has a close mate and whether or not the child has a group of friends.

The prevalence of children who have a close mate and/or group of friends is shown in Table 58.

**Table 58: Prevalence of children who have a close mate and/or group of friends, 5 to 15 years, HWSS 2016**

	Special friend or really close mate		Group of friends to play with or hang around with	
	%	95% CI	%	95% CI
<b>Age Group</b>				
5 to 9 yrs	71.6	( 63.6 - 79.5 )	95.5	( 92.2 - 98.7 )
10 to 15 yrs	85.8	( 80.6 - 90.9 )	93.2	( 88.7 - 97.7 )
<b>Gender</b>				
Boys	72.6	( 65.3 - 79.9 )	90.9	( 85.7 - 96.0 )
Girls	85.7	( 79.9 - 91.4 )	97.8	( 96.2 - 99.4 )
<b>Children</b>	79.0	( 74.2 - 83.8 )	94.3	( 91.5 - 97.1 )

Girls were more likely to have a group of friends to play with or hang around with when compared with boys (97.8% compared with 90.9%) (Table 58).

The annual prevalence of children who have a close mate and/or a group of friends is shown in Table 59.

**Table 59: Prevalence of children who have a close mate and/or group of friends, 5 to 15 years, HWSS 2002–16**

	Special friend or really close mate		Group of friends to play with or hang around with	
	%	95% CI	%	95% CI
2002	82.9	( 79.6 - 86.2 )	93.6	( 91.6 - 95.5 )
2003	80.4	( 77.1 - 83.6 )	94.9	( 93.3 - 96.5 )
2004	81.5	( 76.6 - 86.4 )	92.5	( 89.0 - 96.0 )
2005	81.8	( 78.3 - 85.2 )	93.8	( 91.8 - 95.9 )
2006	78.2	( 74.7 - 81.7 )	93.4	( 91.4 - 95.5 )
2007	80.2	( 75.6 - 84.7 )	92.9	( 90.0 - 95.7 )
2008	77.7	( 73.0 - 82.5 )	93.1	( 90.6 - 95.7 )
2009	81.7	( 79.8 - 83.6 )	94.3	( 93.1 - 95.5 )
2010	86.2	( 82.9 - 89.6 )	94.1	( 91.9 - 96.3 )
2011	82.2	( 77.8 - 86.6 )	93.9	( 91.2 - 96.6 )
2012	79.4	( 75.4 - 83.4 )	95.4	( 93.3 - 97.4 )
2013	80.5	( 76.2 - 84.9 )	91.8	( 88.9 - 94.7 )
2014	81.6	( 76.9 - 86.3 )	95.2	( 92.7 - 97.8 )
2015	75.7	( 71.0 - 80.4 )	95.9	( 94.0 - 97.8 )
2016	79.4	( 74.8 - 84.0 )	94.2	( 91.4 - 97.1 )
<b>Average</b>	80.9	( 80.0 - 81.8 )	94.1	( 93.6 - 94.6 )

### 11.3 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 and it may even affect the family.<sup>35</sup> 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 has been bullied in the past 12 months and whether their child has bullied other children in the past 12 months. As shown in Table 60, around one-third (31.9%) of children in WA had been bullied in the past 12 months.

**Table 60: Prevalence of children who have bullied and/or have been bullied in the past 12 months, 5 to 15 years, HWSS 2016**

	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	33.6	( 25.7 - 41.5 )	5.6	* ( 2.0 - 9.1 )	4.2	* ( 1.0 - 7.4 )
10 to 15 yrs	30.3	( 23.9 - 36.8 )	5.3	* ( 2.1 - 8.4 )	3.9	* ( 1.0 - 6.8 )
<b>Gender</b>						
Boys	34.5	( 26.8 - 42.2 )	8.9	* ( 4.5 - 13.4 )	6.6	* ( 2.6 - 10.7 )
Girls	29.2	( 22.8 - 35.6 )	1.9	* ( 0.5 - 3.2 )	1.5	* ( 0.3 - 2.7 )
<b>Children</b>	31.9	( 26.8 - 36.9 )	5.4	* ( 3.0 - 7.8 )	4.1	* ( 1.9 - 6.2 )

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

The annual prevalence of bullying is shown in Table 61. The prevalence of being bullied in the past 12 months in 2016 (31.9%) is similar to previous years however, there is a significant decrease in the prevalence of children 'bullying' in the past 12 months when 2016 estimates (5.4%) are compared with 2002 (13.1%) .

**Table 61: Prevalence of children who have bullied and/or have been bullied in the past 12 months, 5 to 15 years, HWSS 2002–16**

	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
2002	39.9	( 35.6 - 44.1 )	13.1	( 10.1 - 16.0 )	8.8	( 6.4 - 11.2 )
2003	35.4	( 31.5 - 39.2 )	12.7	( 10.0 - 15.5 )	10.0	( 7.4 - 12.5 )
2004	38.3	( 32.4 - 44.2 )	17.4	( 12.5 - 22.4 )	13.4	( 9.1 - 17.8 )
2005	36.9	( 32.6 - 41.2 )	10.5	( 7.8 - 13.2 )	8.5	( 6.0 - 11.0 )
2006	35.9	( 32.0 - 39.9 )	12.1	( 9.4 - 14.7 )	8.8	( 6.5 - 11.0 )
2007	38.0	( 32.4 - 43.7 )	13.7	( 9.8 - 17.6 )	9.4	( 6.3 - 12.6 )
2008	37.3	( 32.1 - 42.5 )	13.8	( 10.3 - 17.3 )	10.6	( 7.5 - 13.7 )
2009	33.6	( 31.2 - 36.0 )	10.0	( 8.4 - 11.6 )	6.8	( 5.4 - 8.1 )
2010	34.7	( 30.1 - 39.3 )	10.7	( 7.8 - 13.5 )	8.6	( 6.0 - 11.2 )
2011	31.1	( 25.8 - 36.3 )	8.6	( 5.2 - 12.0 )	7.7	( 4.4 - 11.0 )
2012	35.6	( 30.8 - 40.5 )	8.8	( 6.0 - 11.5 )	6.8	( 4.3 - 9.2 )
2013	36.1	( 30.9 - 41.2 )	7.1	( 4.7 - 9.5 )	5.6	( 3.5 - 7.8 )
2014	33.8	( 28.3 - 39.3 )	5.9	( 3.3 - 8.4 )	5.1	*( 2.6 - 7.6 )
2015	29.0	( 24.2 - 33.9 )	8.0	( 5.0 - 11.0 )	6.1	( 3.4 - 8.9 )
2016	31.9	( 26.9 - 36.8 )	5.4	( 3.1 - 7.8 )	4.1	*( 2.0 - 6.2 )
<b>Average</b>	<b>35.2</b>	<b>( 34.1 - 36.3 )</b>	<b>10.7</b>	<b>( 9.9 - 11.4 )</b>	<b>8.2</b>	<b>( 7.5 - 8.8 )</b>

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



## 12. 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>31</sup>

Parents/carers were asked how many days, not counting official school holidays, which their child was away from school for any reason. The days absent from school were classified into the number of weeks, as shown in Table 62. The annual prevalence of weeks absent from school is shown in Table 63.

**Table 62: Prevalence of children by weeks absent from school, 5 to 15 years, HWSS 2016**

	Zero		Less than a week		One to two weeks		Two to three weeks		Three weeks or more	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>										
5 to 9 yrs	13.4 *	( 6.7 - 20.0 )	50.1	( 41.6 - 58.5 )	23.3	( 16.3 - 30.3 )	9.4 *	( 4.7 - 14.1 )	3.9 *	( 1.4 - 6.5 )
10 to 15 yrs	9.6	( 5.9 - 13.4 )	54.1	( 47.3 - 61.0 )	19.2	( 14.3 - 24.0 )	7.5 *	( 3.7 - 11.2 )	9.6 *	( 4.5 - 14.7 )
<b>Gender</b>										
Boys	12.4	( 7.0 - 17.8 )	54.1	( 46.4 - 61.8 )	19.5	( 14.0 - 25.1 )	8.0	( 4.2 - 11.9 )	6.0 *	( 1.4 - 10.6 )
Girls	10.4 *	( 5.1 - 15.6 )	50.2	( 42.7 - 57.7 )	22.8	( 16.5 - 29.1 )	8.7 *	( 4.2 - 13.3 )	7.9	( 4.1 - 11.7 )
<b>Children</b>	11.4	( 7.6 - 15.2 )	52.2	( 46.8 - 57.6 )	21.1	( 16.9 - 25.3 )	8.4	( 5.4 - 11.3 )	6.9	( 3.9 - 9.9 )

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

**Table 63: Prevalence of children by weeks absent from school, 5 to 15 years, HWSS 2002–16**

	Zero		Less than a week		One to two weeks		Two to three weeks		Three weeks or more	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2002	10.2	( 7.5 - 12.9 )	60.8	( 56.6 - 65.0 )	17.5	( 14.5 - 20.6 )	6.9	( 4.6 - 9.1 )	4.6	( 3.2 - 6.1 )
2003	9.5	( 6.8 - 12.2 )	57.2	( 53.1 - 61.2 )	21.5	( 18.1 - 24.9 )	6.5	( 4.7 - 8.3 )	5.4	( 3.9 - 6.9 )
2004	9.0	( 5.3 - 12.7 )	53.4	( 47.3 - 59.6 )	22.8	( 17.5 - 28.1 )	7.8	( 4.9 - 10.7 )	7.0	( 3.9 - 10.1 )
2005	9.6	( 6.7 - 12.5 )	55.5	( 50.9 - 60.0 )	22.0	( 18.3 - 25.8 )	5.7	( 3.7 - 7.7 )	7.2	( 4.9 - 9.5 )
2006	7.9	( 5.5 - 10.3 )	50.8	( 46.6 - 55.0 )	23.0	( 19.6 - 26.4 )	9.9	( 7.2 - 12.5 )	8.4	( 6.2 - 10.6 )
2007	8.3	( 5.0 - 11.5 )	54.6	( 48.7 - 60.5 )	21.5	( 16.5 - 26.4 )	7.7	( 4.5 - 10.9 )	7.9	( 5.1 - 10.8 )
2008	7.1	( 3.9 - 10.3 )	54.2	( 48.6 - 59.8 )	20.9	( 16.3 - 25.5 )	9.1	( 6.1 - 12.1 )	8.7	( 5.6 - 11.8 )
2009	7.8	( 6.5 - 9.2 )	48.3	( 45.8 - 50.8 )	22.9	( 20.8 - 25.0 )	10.1	( 8.6 - 11.6 )	10.9	( 9.3 - 12.4 )
2010	8.2	( 5.3 - 11.2 )	50.8	( 45.8 - 55.9 )	23.0	( 18.7 - 27.2 )	10.1	( 7.3 - 13.0 )	7.9	( 5.2 - 10.5 )
2011	8.7	( 5.3 - 12.1 )	49.0	( 43.3 - 54.7 )	20.5	( 16.1 - 24.9 )	11.1	( 7.6 - 14.6 )	10.7	( 7.0 - 14.4 )
2012	6.3	( 4.0 - 8.6 )	50.8	( 45.8 - 55.9 )	26.6	( 22.1 - 31.2 )	8.5	( 5.9 - 11.1 )	7.7	( 5.2 - 10.3 )
2013	9.8	( 6.4 - 13.1 )	58.3	( 53.1 - 63.5 )	15.8	( 12.0 - 19.5 )	8.0	( 5.2 - 10.7 )	8.2	( 5.8 - 10.6 )
2014	6.0	( 3.6 - 8.5 )	60.4	( 54.8 - 66.0 )	19.1	( 14.7 - 23.5 )	7.6	( 4.6 - 10.7 )	6.8	( 4.1 - 9.5 )
2015	8.8	( 5.6 - 12.0 )	54.6	( 49.2 - 60.0 )	21.6	( 17.3 - 25.9 )	5.3	( 3.4 - 7.3 )	9.7	( 6.5 - 13.0 )
2016	11.2	( 7.6 - 14.9 )	52.2	( 46.9 - 57.5 )	21.1	( 17.0 - 25.2 )	8.3	( 5.4 - 11.2 )	7.1	( 4.1 - 10.2 )
<b>Average</b>	<b>8.5</b>	<b>( 7.8 - 9.2 )</b>	<b>53.3</b>	<b>( 52.1 - 54.4 )</b>	<b>21.6</b>	<b>( 20.6 - 22.5 )</b>	<b>8.4</b>	<b>( 7.8 - 9.0 )</b>	<b>8.3</b>	<b>( 7.6 - 8.9 )</b>

Parents/carers were asked to rate how well their child was doing in school overall, based on their school work and school reports. Over two-thirds of children were doing well or very well in school (Table 64).

**Table 64: Prevalence of children by parent/ carer reported overall school performance, 5 to 15 years, HWSS 2016**

	Very well		Well		Average		Poor or Very poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>								
5 to 9 yrs	41.5	( 33.3 - 49.7 )	31.5	( 23.7 - 39.4 )	24.2	( 16.7 - 31.6 )	2.8 *	( 0.3 - 5.3 )
10 to 15 yrs	42.6	( 35.9 - 49.4 )	24.9	( 19.2 - 30.5 )	27.5	( 21.2 - 33.7 )	5.0 *	( 2.4 - 7.7 )
<b>Gender</b>								
Boys	34.0	( 26.9 - 41.1 )	29.6	( 22.6 - 36.5 )	30.0	( 22.6 - 37.5 )	6.4 *	( 3.0 - 9.8 )
Girls	50.5	( 43.0 - 57.9 )	26.4	( 19.8 - 33.0 )	21.7	( 15.8 - 27.5 )	1.5 *	( 0.4 - 2.6 )
<b>Children</b>	<b>42.1</b>	<b>( 36.8 - 47.4 )</b>	<b>28.0</b>	<b>( 23.2 - 32.8 )</b>	<b>25.9</b>	<b>( 21.1 - 30.7 )</b>	<b>4.0</b>	<b>( 2.1 - 5.8 )</b>

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

The annual estimates of how well children were doing in school as perceived by their parents/carers are shown in Table 65.

**Table 65: Prevalence of children by parent/ carer reported overall school performance, 5 to 15 years, HWSS 2002–16**

	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 )
<b>Average</b>	45.6	( 44.4 - 46.7 )	26.3	( 25.3 - 27.3 )	23.7	( 22.7 - 24.7 )	4.5	( 4.0 - 4.9 )

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

The prevalence of parents/carers reporting overall school performance as very well has decreased significantly between 2002 and 2016 (52.7% compared with 42.1%) (Table 65).

Parents/carers were asked to rate how often their child looks forward to going to school each day. Population estimates are shown in Table 66. Girls were significantly more likely than boys to almost always look forward to going to school every day (81.0% compared with 65.5%).

**Table 66: Prevalence of children by frequency of looking forward to going to school each day, 5 to 15 years, HWSS 2016**

	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 )	8.9 *	( 3.8 - 14.0 )	12.0	( 7.2 - 16.7 )	78.2	( 71.5 - 85.0 )
10 to 15 yrs	5.3 *	( 2.4 - 8.2 )	12.3	( 7.2 - 17.4 )	13.8	( 9.5 - 18.2 )	68.6	( 62.2 - 75.0 )
<b>Gender</b>								
Boys	5.0 *	( 1.9 - 8.1 )	15.3	( 9.3 - 21.4 )	14.1	( 9.7 - 18.6 )	65.5	( 58.3 - 72.7 )
Girls	N/A	( N/A - N/A )	6.0 *	( 2.2 - 9.7 )	11.7	( 7.0 - 16.4 )	81.0	( 75.1 - 86.8 )
<b>Children</b>	3.2 *	( 1.5 - 4.9 )	10.7	( 7.1 - 14.3 )	12.9	( 9.7 - 16.2 )	73.2	( 68.5 - 77.8 )

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

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

The annual estimates of how frequently children look forward to going to school are shown in Table 67.

**Table 67: Prevalence of children by frequency of looking forward to going to school each day, 5 to 15 years, HWSS 2002–16**

	Almost never or Rarely		Sometimes		Often		Almost always	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
2002	3.6	( 2.0 - 5.1 )	9.9	( 7.2 - 12.5 )	13.8	( 10.9 - 16.7 )	72.7	( 68.9 - 76.6 )
2003	5.4	( 3.6 - 7.2 )	9.1	( 6.9 - 11.3 )	15.5	( 12.5 - 18.5 )	70.0	( 66.3 - 73.7 )
2004	2.4 *	( 0.8 - 4.0 )	11.5	( 7.3 - 15.7 )	13.5	( 9.5 - 17.6 )	72.5	( 67.0 - 78.0 )
2005	2.0 *	( 0.9 - 3.1 )	10.2	( 7.1 - 13.4 )	16.3	( 13.1 - 19.5 )	71.5	( 67.3 - 75.6 )
2006	5.8	( 3.9 - 7.8 )	7.9	( 5.7 - 10.1 )	16.1	( 13.0 - 19.2 )	70.2	( 66.4 - 74.1 )
2007	4.2 *	( 2.0 - 6.4 )	6.5	( 3.6 - 9.4 )	16.1	( 12.0 - 20.3 )	73.2	( 68.1 - 78.2 )
2008	5.5	( 3.4 - 7.6 )	11.0	( 7.5 - 14.5 )	13.6	( 9.9 - 17.3 )	69.9	( 64.9 - 74.8 )
2009	5.4	( 4.3 - 6.6 )	8.4	( 7.1 - 9.8 )	19.1	( 17.2 - 21.1 )	67.0	( 64.6 - 69.3 )
2010	3.6 *	( 1.8 - 5.5 )	10.5	( 7.4 - 13.6 )	16.3	( 12.8 - 19.8 )	69.6	( 65.1 - 74.1 )
2011	3.3 *	( 1.6 - 5.1 )	10.4	( 7.3 - 13.6 )	19.7	( 15.1 - 24.4 )	66.5	( 61.2 - 71.8 )
2012	6.1	( 3.9 - 8.2 )	7.8	( 5.2 - 10.3 )	16.6	( 12.7 - 20.6 )	69.5	( 64.9 - 74.2 )
2013	6.7	( 4.2 - 9.1 )	9.2	( 6.0 - 12.3 )	18.1	( 14.0 - 22.2 )	66.0	( 61.0 - 71.1 )
2014	2.5 *	( 1.0 - 4.1 )	8.5	( 5.5 - 11.5 )	14.6	( 10.8 - 18.5 )	74.3	( 69.5 - 79.2 )
2015	5.2	( 2.9 - 7.5 )	7.6	( 4.8 - 10.4 )	20.6	( 16.1 - 25.1 )	66.6	( 61.4 - 71.7 )
2016	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>Average</b>	4.6	( 4.2 - 5.1 )	9.0	( 8.3 - 9.7 )	16.7	( 15.8 - 17.5 )	69.7	( 68.7 - 70.8 )

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

### 13. 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>36</sup> The questions used in the HWSS are taken from the McMaster Family Functioning Scale of 12 questions.<sup>37</sup> Four questions were identified as sufficient to assess family functioning within a population.<sup>a</sup> The questions are stated in the negative and reverse scored to assess overall family functioning. Each question is shown with the original wording and scoring. The first question is about the family not usually getting along (Table 68).

**Table 68: Prevalence of children by whether their family usually does not get on well together, 0 to 15 years, HWSS 2016**

	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)	27.8	( 18.9 - 36.7 )	71.9	( 63.0 - 80.8 )
5 to 9 yrs	N/A	( N/A - N/A)	20.5	( 13.7 - 27.3 )	77.0	( 70.0 - 84.1 )
10 to 15 yrs	4.5 *	( 0.3 - 8.7 )	25.9	( 20.1 - 31.7 )	69.6	( 63.1 - 76.1 )
<b>Gender</b>						
Boys	3.2 *	( 0.2 - 6.1 )	27.7	( 21.5 - 33.8 )	69.2	( 62.7 - 75.7 )
Girls	1.8 *	( 0.1 - 3.5 )	21.8	( 16.2 - 27.3 )	76.4	( 70.7 - 82.1 )
<b>Children</b>	2.5 *	( 0.8 - 4.2 )	24.8	( 20.6 - 29.0 )	72.7	( 68.4 - 77.1 )

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

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

The annual estimates of family not usually getting along are shown in Table 69.

**Table 69: Prevalence of children by whether their family usually does not get on well together, 0 to 15 years, HWSS 2002–16**

	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 )
<b>Average</b>	2.9	( 2.6 - 3.3 )	31.5	( 30.6 - 32.5 )	65.6	( 64.6 - 66.6 )

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

The second question asked parents/carers whether planning family activities is usually difficult (Table 70).

**Table 70: Prevalence of children by whether planning family activities is usually difficult, 0 to 15 years, HWSS 2016**

	Strongly agree or Agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
0 to 4 yrs	12.5 *	( 6.1 - 18.9 )	46.0	( 36.2 - 55.9 )	41.5	( 31.7 - 51.2 )
5 to 9 yrs	11.9 *	( 6.9 - 16.9 )	45.6	( 37.2 - 54.0 )	42.5	( 34.3 - 50.7 )
10 to 15 yrs	20.4	( 14.6 - 26.2 )	34.7	( 28.4 - 41.0 )	44.9	( 38.1 - 51.7 )
<b>Gender</b>						
Boys	17.5	( 12.4 - 22.7 )	41.7	( 34.8 - 48.5 )	40.8	( 34.1 - 47.5 )
Girls	12.5	( 8.3 - 16.8 )	42.1	( 35.4 - 48.9 )	45.3	( 38.5 - 52.2 )
<b>Children</b>	15.1	( 11.7 - 18.5 )	41.9	( 37.1 - 46.7 )	43.0	( 38.2 - 47.8 )

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

The annual estimates of whether planning family activities is usually difficult are shown in Table 71.



**Table 71: Prevalence of children by whether planning family activities is usually difficult, 0 to 15 years, HWSS 2002–16**

	Strongly agree or Agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
2002	19.4	( 16.4 - 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 )
<b>Average</b>	17.4	( 16.6 - 18.2 )	42.4	( 41.4 - 43.5 )	40.2	( 39.2 - 41.2 )

The third question asked parents/carers whether their family usually avoid discussing their fears and concerns openly with each other (Table 72).

**Table 72: Prevalence of children by whether their family usually avoid discussing fears and concerns openly with each other, 0 to 15 years, HWSS 2016**

	Strongly agree or Agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
0 to 4 yrs	4.2	* ( 0.2 - 8.1 )	49.7	( 39.8 - 59.6 )	46.2	( 36.3 - 56.0 )
5 to 9 yrs	6.0	* ( 2.2 - 9.8 )	46.2	( 37.9 - 54.6 )	47.8	( 39.4 - 56.2 )
10 to 15 yrs	8.3	* ( 3.5 - 13.1 )	39.0	( 32.5 - 45.5 )	52.7	( 45.9 - 59.5 )
<b>Gender</b>						
Boys	8.7	( 4.4 - 13.0 )	48.7	( 41.8 - 55.5 )	42.6	( 35.9 - 49.4 )
Girls	3.6	* ( 1.3 - 5.8 )	40.8	( 34.0 - 47.5 )	55.7	( 48.9 - 62.5 )
<b>Children</b>	6.2	( 3.7 - 8.7 )	44.8	( 40.0 - 49.6 )	49.0	( 44.2 - 53.8 )

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

N/A Prevalence estimate has a 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 73.

**Table 73: Prevalence of children by whether their family usually avoid discussing fears and concerns openly with each other, 0 to 15 years, HWSS 2002–16**

	Strongly agree or Agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
2002	10.3	( 8.1 - 12.5 )	43.5	( 39.7 - 47.2 )	46.3	( 42.5 - 50.0 )
2003	9.3	( 7.2 - 11.5 )	45.0	( 41.5 - 48.4 )	45.7	( 42.2 - 49.2 )
2004	11.3	( 7.7 - 14.8 )	50.9	( 45.5 - 56.2 )	37.9	( 32.7 - 43.1 )
2005	6.3	( 4.6 - 8.0 )	47.6	( 43.8 - 51.4 )	46.1	( 42.3 - 49.9 )
2006	5.8	( 4.3 - 7.4 )	51.0	( 47.5 - 54.5 )	43.2	( 39.6 - 46.7 )
2007	9.9	( 6.7 - 13.1 )	36.8	( 32.0 - 41.6 )	53.3	( 48.3 - 58.3 )
2008	9.4	( 6.6 - 12.2 )	45.3	( 40.5 - 50.1 )	45.3	( 40.5 - 50.0 )
2009	6.7	( 5.3 - 8.2 )	47.8	( 44.7 - 50.9 )	45.5	( 42.4 - 48.5 )
2010	6.7	( 4.5 - 8.8 )	43.0	( 38.7 - 47.2 )	50.4	( 46.1 - 54.7 )
2011	6.0	( 3.8 - 8.2 )	42.5	( 37.8 - 47.3 )	51.4	( 46.6 - 56.3 )
2012	7.6	( 5.0 - 10.3 )	42.2	( 37.9 - 46.6 )	50.1	( 45.7 - 54.5 )
2013	11.0	( 7.9 - 14.0 )	39.5	( 34.6 - 44.3 )	49.6	( 44.7 - 54.5 )
2014	5.2	( 2.9 - 7.4 )	42.8	( 37.5 - 48.1 )	52.1	( 46.7 - 57.4 )
2015	5.7	( 3.7 - 7.7 )	37.4	( 32.7 - 42.1 )	56.9	( 52.1 - 61.7 )
2016	6.2	( 3.8 - 8.7 )	44.7	( 40.0 - 49.4 )	49.1	( 44.4 - 53.8 )
<b>Average</b>	<b>7.7</b>	<b>( 7.1 - 8.2 )</b>	<b>44.8</b>	<b>( 43.8 - 45.9 )</b>	<b>47.5</b>	<b>( 46.5 - 48.6 )</b>

The fourth question asked parents/carers whether making decisions is usually a problem in the family because they misunderstand each other (Table 74).

**Table 74: Prevalence of children by whether making decisions within their family is usually a problem because they misunderstand each other, 0 to 15 years, HWSS 2016**

	Strongly agree or Agree		Disagree		Strongly disagree	
	%	95% CI	%	95% CI	%	95% CI
<b>Age Group</b>						
0 to 4 yrs	8.6	* ( 2.7 - 14.4 )	48.4	( 38.5 - 58.3 )	43.0	( 33.2 - 52.8 )
5 to 9 yrs	5.9	* ( 2.6 - 9.2 )	51.5	( 43.1 - 59.9 )	42.6	( 34.3 - 51.0 )
10 to 15 yrs	9.1	* ( 4.3 - 13.9 )	46.0	( 39.3 - 52.7 )	44.9	( 38.2 - 51.6 )
<b>Gender</b>						
Boys	9.0	( 4.6 - 13.4 )	50.6	( 43.8 - 57.5 )	40.4	( 33.7 - 47.1 )
Girls	6.8	* ( 3.4 - 10.1 )	46.3	( 39.5 - 53.2 )	46.9	( 40.0 - 53.7 )
<b>Children</b>	7.9	( 5.1 - 10.7 )	48.5	( 43.7 - 53.4 )	43.6	( 38.8 - 48.4 )

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

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

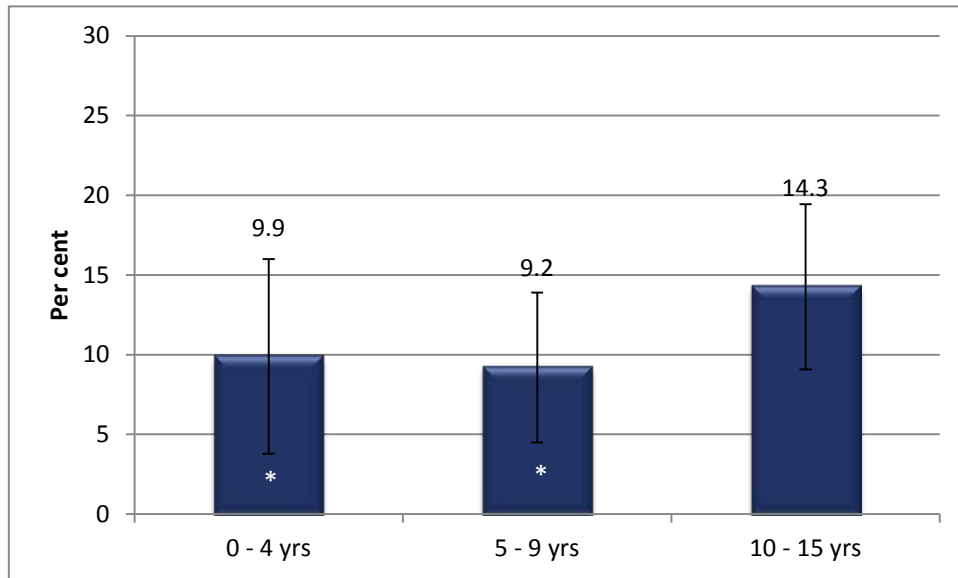
The annual estimates of whether making decisions is usually a problem is shown in Table 75.

**Table 75: Prevalence of children by whether making decisions within their family is usually a problem because they misunderstand each other, 0 to 15 years, HWSS 2002–16**

	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 )
<b>Average</b>	<b>8.7</b>	<b>( 8.1 - 9.3 )</b>	<b>48.6</b>	<b>( 47.6 - 49.7 )</b>	<b>42.7</b>	<b>( 41.6 - 43.7 )</b>

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 Figure 18.

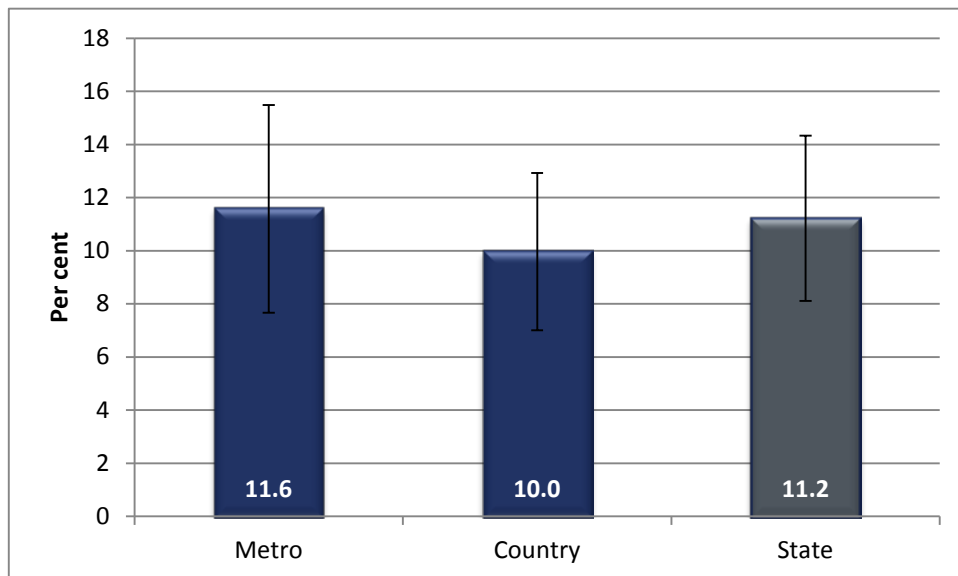
**Figure 18: Prevalence of children with poor family functioning, 0 to 15 years, HWSS 2016**



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

Figure 19 shows the prevalence of children with poor family functioning scores by geographic area of residence.

**Figure 19: Prevalence of children with poor family functioning, by geographic area, 0 to 15 years, HWSS 2016**



The annual estimates of poor family functioning are shown in Table 76. The prevalence of children in households with poor family functioning in 2016 (11.3%) was similar to previous years.

**Table 76: Prevalence of children with poor family functioning, 0 to 15 years, HWSS 2002–16**

	<b>%</b>	<b>95% CI</b>
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 )
<b>Average</b>	<b>13.3</b>	<b>( 12.6 - 14.0 )</b>

## 14. CHILD RESPONDENT

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 Australia's child population and so the information regarding the parent/ carer respondent to the survey has not been weighted. The demographic characteristics of the respondent compared with the general population have been presented in Section 5.

### 14.1 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>7</sup>

Table 77 shows the respondents' self-reported general health status.

**Table 77: General health status of respondent, HWSS 2016**

	Excellent		Very Good		Good		Fair/Poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>Child's age group</b>								
0 to 4 yrs	30.2	( 23.2 - 37.1 )	36.1	( 28.8 - 43.4 )	27.2	( 20.5 - 33.9 )	6.5 *	( 2.8 - 10.2 )
5 to 9 yrs	22.4	( 17.2 - 27.5 )	36.5	( 30.6 - 42.4 )	34.1	( 28.3 - 39.9 )	7.1 *	( 3.9 - 10.2 )
10 to 15 yrs	24.4	( 20.2 - 28.7 )	36.6	( 31.9 - 41.4 )	27.7	( 23.3 - 32.2 )	11.2	( 8.1 - 14.3 )
<b>Child's sex</b>								
Boys	24.0	( 20.0 - 28.1 )	35.9	( 31.3 - 40.4 )	31.0	( 26.6 - 35.4 )	9.1	( 6.4 - 11.8 )
Girls	26.0	( 21.7 - 30.4 )	37.1	( 32.3 - 41.9 )	28.1	( 23.6 - 32.6 )	8.8	( 5.9 - 11.6 )
<b>Persons</b>	<b>25.0</b>	<b>( 22.0 - 27.9 )</b>	<b>36.5</b>	<b>( 33.2 - 39.8 )</b>	<b>29.6</b>	<b>( 26.5 - 32.8 )</b>	<b>8.9</b>	<b>( 7.0 - 10.9 )</b>

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



## 14.2 Mental health

Mental health problems include both short-term problems, such as depression and anxiety and long-term conditions, such as chronic depression and schizophrenia. Mental health problems are associated with higher rates of death, poorer physical health and increased exposure to health risk factors.<sup>9</sup>

Respondents were asked whether or not 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 problems is shown in Table 78.

**Table 78: Mental health of respondent, HWSS 2016**

	Mental health condition in the last 12 months (a)		Currently receiving treatment (b)	
	%	95% CI	%	95% CI
<b>Child's age group</b>				
0 to 4 yrs	17.8	( 12.0 - 23.5 )	11.8	( 7.0 - 16.7 )
5 to 9 yrs	16.1	( 11.6 - 20.6 )	10.6	( 6.8 - 14.4 )
10 to 15 yrs	17.0	( 13.3 - 20.8 )	15.0	( 11.5 - 18.6 )
<b>Child's sex</b>				
Boys	18.9	( 15.2 - 22.6 )	14.2	( 10.9 - 17.5 )
Girls	14.7	( 11.2 - 18.2 )	11.6	( 8.4 - 14.8 )
<b>Persons</b>	16.9	( 14.3 - 19.5 )	13.0	( 10.7 - 15.3 )

(a) In the last 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.

## 14.3 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>38</sup> Feelings of lack of control have been found to have adverse effects on health and to increase the risk of mortality.<sup>39</sup>

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

Table 79 shows self-reported lack of control over life in general.

**Table 79: Lack of control over life in general during past four weeks, respondent, HWSS 2016**

	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	46.2	( 38.6 - 53.7 )	30.2	( 23.2 - 37.1 )	20.7	( 14.6 - 26.8 )	3.0 *	( 0.4 - 5.5 )	0.0	( 0.0 - 0.0 )
5 to 9 yrs	49.4	( 43.3 - 55.6 )	27.1	( 21.6 - 32.5 )	20.8	( 15.8 - 25.8 )	2.0 *	( 0.3 - 3.7 )	N/A	( N/A - N/A )
10 to 15 yrs	47.6	( 42.6 - 52.5 )	26.5	( 22.1 - 30.8 )	19.8	( 15.9 - 23.8 )	5.1	( 2.9 - 7.3 )	1.0 *	( 0.0 - 2.0 )
<b>Child's sex</b>										
Boys	46.2	( 41.4 - 50.9 )	27.3	( 23.0 - 31.5 )	21.4	( 17.6 - 25.3 )	4.2 *	( 2.3 - 6.1 )	0.9 *	( 0.0 - 1.8 )
Girls	49.7	( 44.8 - 54.7 )	27.6	( 23.1 - 32.0 )	19.1	( 15.2 - 23.0 )	3.1	( 1.4 - 4.8 )	N/A	( N/A - N/A )
<b>Persons</b>	<b>47.9</b>	<b>( 44.4 - 51.3 )</b>	<b>27.4</b>	<b>( 24.4 - 30.5 )</b>	<b>20.3</b>	<b>( 17.6 - 23.1 )</b>	<b>3.7</b>	<b>( 2.4 - 5.0 )</b>	<b>0.7 *</b>	<b>( 0.1 - 1.3 )</b>

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

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

Table 80 shows self-reported lack of control over personal life.

**Table 80: Lack of control over personal life during past four weeks, respondent, HWSS 2016**

	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	54.2	( 46.6 - 61.7 )	28.6	( 21.7 - 35.4 )	15.5	( 10.0 - 21.0 )	N/A	( N/A - N/A )	0.0	( 0.0 - 0.0 )
5 to 9 yrs	56.9	( 50.8 - 63.0 )	25.1	( 19.8 - 30.4 )	15.3	( 10.9 - 19.7 )	2.0 *	( 0.3 - 3.7 )	N/A	( N/A - N/A )
10 to 15 yrs	59.3	( 54.4 - 64.2 )	21.6	( 17.5 - 25.7 )	14.0	( 10.6 - 17.4 )	4.3	( 2.3 - 6.3 )	N/A	( N/A - N/A )
<b>Child's sex</b>										
Boys	57.1	( 52.4 - 61.8 )	22.8	( 18.9 - 26.8 )	15.6	( 12.2 - 19.1 )	4.0	( 2.1 - 5.8 )	N/A	( N/A - N/A )
Girls	57.9	( 53.0 - 62.8 )	25.6	( 21.2 - 29.9 )	13.7	( 10.3 - 17.1 )	2.1 *	( 0.6 - 3.5 )	N/A	( N/A - N/A )
<b>Persons</b>	<b>57.5</b>	<b>( 54.1 - 60.9 )</b>	<b>24.1</b>	<b>( 21.2 - 27.1 )</b>	<b>14.7</b>	<b>( 12.3 - 17.1 )</b>	<b>3.1</b>	<b>( 1.9 - 4.2 )</b>	<b>0.6 *</b>	<b>( 0.1 - 1.1 )</b>

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

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

Table 81 shows self-reported lack of control over health.

**Table 81: Lack of control over health during past four weeks, respondent, HWSS 2016**

	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	59.8	( 52.4 - 67.2 )	19.5	( 13.5 - 25.5 )	16.6	( 11.0 - 22.2 )	3.0 *	( 0.4 - 5.5 )	N/A	( N/A - N/A )
5 to 9 yrs	54.9	( 48.8 - 61.0 )	22.7	( 17.6 - 27.9 )	18.4	( 13.7 - 23.2 )	3.5 *	( 1.3 - 5.8 )	N/A	( N/A - N/A )
10 to 15 yrs	59.5	( 54.7 - 64.4 )	18.8	( 15.0 - 22.7 )	15.3	( 11.7 - 18.8 )	5.3	( 3.1 - 7.6 )	1.0 *	( 0.0 - 2.0 )
<b>Child's sex</b>										
Boys	55.9	( 51.2 - 60.7 )	21.2	( 17.3 - 25.1 )	16.6	( 13.0 - 20.1 )	4.7 *	( 2.7 - 6.7 )	1.6 *	( 0.4 - 2.8 )
Girls	60.6	( 55.7 - 65.4 )	19.1	( 15.2 - 23.0 )	16.5	( 12.8 - 20.2 )	3.9 *	( 1.9 - 5.8 )	0.0	( 0.0 - 0.0 )
<b>Persons</b>	<b>58.1</b>	<b>( 54.7 - 61.5 )</b>	<b>20.2</b>	<b>( 17.4 - 23.0 )</b>	<b>16.5</b>	<b>( 14.0 - 19.1 )</b>	<b>4.3</b>	<b>( 2.9 - 5.7 )</b>	<b>0.9 *</b>	<b>( 0.2 - 1.5 )</b>

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

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

## 15. CHILD RESPONDENT'S PARTNER

The demographic characteristics of the child respondent's partner and unweighted proportions are shown below in Table 82.

**Table 82: Demographics of respondent's partner, HWSS 2016**

Characteristic	Unweighted Sample (n)	Unweighted Per Cent (%)
<b>Australian born</b>		
Yes	520	70.3
No	220	29.7
<b>Aboriginal or Torres Strait Islander</b>		
Yes	18	2.4
No	722	97.6
<b>Highest level of education</b>		
Less than Year 10	14	1.9
Year 10 or Year 11	71	9.7
Year 12	103	14.0
TAFE/ Trade Qualification	338	46.0
Tertiary degree or equivalent	209	28.4
<b>Employment status</b>		
Employed	659	89.1
Unemployed	13	1.8
Home duties	47	6.4
Retired	7	1.0
Unable to work	8	1.1
Student	5	0.7
Other	1	0.1

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