# Health and Wellbeing of Children in Western Australia 2016, 

## Overview and Trends

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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 heath, 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

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).

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 , ${ }^{1}$ or the 2014-15 National Aboriginal and Torres Strait Islander Social Survey. ${ }^{2}$

## 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 ${ }^{\circledR}$ 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) ${ }^{3}$. 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 <br> (a) | Eligible <br> Sample | No answer after 10 attempts | Eligible Contacts <br> (b) | Refusals | Interviews | Raw <br> Response Rate | Adjusted Response Rate (c) | Participation Rate <br> (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 |
| Total | 15916 | 6067 | 9849 | 1955 | 7894 | 710 | 6682 | 67.8 | 84.6 | 90.4 |

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:

[^0]
## 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\ and\ publications/Pop ulation\%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

## 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. ${ }^{4}$

In this report when the acronym SEIFA is used it is referring to the Index of Relative Socioeconomic Disadvantage (IRSD). ${ }^{5}$ 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. ${ }^{5}$ 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/0/22CEDA8038AF7A0DCA257B3B 00116E34/\$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 Accessibilityl 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. ${ }^{6}$

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: $\underline{h t t p: / / w w w . a d e l a i d e . e d u . a u / a p m r c / r e s e a r c h / p r o j e c t s / c a t e g o r y / a b o u t ~ a r i a . h t m l ~}$

## 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 <br> Sample (n) | Estimated <br> Per Cent (\%) |
| :--- | ---: | ---: |
| Age |  |  |
| 0 to 4 years | 169 | 32.8 |
| 5 to 9 years | 255 | 31.9 |
| 10 to 15 years | 393 | 35.3 |
| Gender |  |  |
| Boys | 429 | 51.1 |
| Girls | 388 | 48.9 |
| Australian born |  |  |
| Yes | 735 | 89.4 |
| No | 81 | 10.6 |
| Aboriginal or Torres Strait Islander | 32 | 2.7 * |
| Yes | 784 | 97.3 |
| No |  |  |
| Relationship of respondent to child | 591 | 73.3 |
| Mother | 203 | 24.6 |
| Father | 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 (\%) |
| :---: | :---: | :---: |
| Current living arrangement |  |  |
| 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 |
| Household income |  |  |
| 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 |
| Household spending |  |  |
| 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 |
| Area of residence |  |  |
| Metropolitan | 347 | 77.8 |
| Rural | 318 | 15.5 |
| Remote | 152 | 6.7 |
| SEIFA classification of social disadvantage |  |  |
| 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 |
| Accessibility/Remoteness Index of Ausralia |  |  |
| Inner Regional | 152 | 11.4 |
| Major Cities | 327 | 16.5 |
| Outer Regional | 173 | 20.5 |
| Remote | 106 | 27.8 |
| Very Remote | 59 | 23.9 |
| Have private health insurance |  |  |
| 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 <br> Sample (n) | Unweighted <br> Per Cent (\%) |
| :--- | ---: | ---: |
| Australian born |  |  |
| Yes | 574 | 70.3 |
| No | 243 | 29.7 |
| Aboriginal or Torres Strait Islander |  |  |
| Yes | 18 | 2.2 |
| No | 799 | 97.8 |
| Highest level of education |  |  |
| 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 |
| Employment status |  | 75.4 |
| Employed | 616 | 1.5 |
| Unemployed | 12 | 18.7 |
| Home duties | 153 | 1.7 |
| Retired | 14 | 1.2 |
| Unable to work | 10 | 1.0 |
| Student | 8 | 0.5 |
| Other | 4 | 90.7 |
| Possess a government health care card | 740 | 9.3 |
| Yes | 76 |  |
| No | 707 | 13.3 |
| Share home with a partner |  | 86.8 |
| Yes |  |  |
| No |  |  |
|  |  |  |

## 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. ${ }^{7}$

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 |
| Age Group |  |  |  |  |  |  |  |  |
| 0 to 4 yrs | 59.6 | ( 49.8-69.3) | 25.4 | ( 17.0-33.8) | 10.9 | ( 4.2-17.7) |  | 0.2-8.1) |
| 5 to 9 yrs | 60.5 | ( 52.3-68.7) | 28.5 | ( 20.8-36.2) |  | * ( 3.8 - 12.3) |  | 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) |  | 0.6-4.3) |
| Gender |  |  |  |  |  |  |  |  |
| Boys | 55.7 | ( 48.8-62.5) | 29.8 | ( 23.4-36.2) | 12.0 | ( 7.6-16.4) |  | (0.1-4.8) |
| Girls | 62.8 | ( 56.2-69.3) | 27.0 | ( 21.1-32.9) |  | * ( 2.7 - 10.0) |  | 1.4-6.3) |
| Children | 59.1 | ( 54.4-63.9) | 28.5 | ( 24.1-32.8) | 9.3 | (6.4-12.1) |  | 1.5-4.8) |

* 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) |  | (8.1-15.2) | 3.2 | * ( $1.1-5.3$ ) |
| 2005 | 55.7 ( 51.9-59.4) |  | .9-36.0) |  | 6.9-10.9) | 3.0 | ( $1.6-4.4$ ) |
| 2006 | 60.7 ( 57.3-64.2) |  | 5.4-31.6) |  | (6.2-10.2) | 2.6 | ( $1.3-3.8$ ) |
| 2007 | 58.3 ( 53.3-63.2) |  | 25.5-34.7) | 10.1 | (7.2-13.1) | 1.5 | * ( $0.4-2.6$ ) |
| 2008 | 60.3 ( 55.8-64.9) |  | .6-30.8) |  | 7.8-13.3) | 4 | * ( $1.0-3.8$ ) |
| 2009 | 57.6 ( 54.6-60.6) | 29.4 | 26.7-32.1) |  | (9.1-13.2) | 1.8 | ( $1.2-2.4$ ) |
| 2010 | 58.5 ( 54.3-62.7) | 29. | 6-33.8) |  | .1-12.1) | 2.0 | * ( $1.0-3.0$ ) |
| 2011 | 60.4 ( 55.6-65.2) | 25. | 1.0-29.6) |  | (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 | 5.4-35.4) |  | (5.5-11.1) | 3.2 | * ( $1.3-5.0$ ) |
| 2015 | 58.4 ( 53.6-63.1) | 28.9 | 4.6-33.2) | 10. | (7.2-13.3) | 2.5 | * ( $1.3-3.7$ ) |
| 2016 | 59.2 ( 54.5-63.8) | 28.4 | (24.1-32.7) |  | 6.5-12.1) | 3.1 | * ( $1.5-4.8$ ) |
| Average | 58.1 ( 56.9-59.2) | 29.3 | (28.3-30.4) | 10.1 | (9.4-10.7) | 2.6 | ( $2.2-2.9$ ) |

* 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. ${ }^{8}$ 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
$\% \quad 95 \% \mathrm{Cl}$
Age Group

| 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 |


| Gender <br> Boys <br> Girls | 11.1 | $(6.8-15.4)$ |
| :--- | ---: | :--- |
|  | 6.9 | $(3.8-10.0)$ |
| Children | 9.1 | $(6.4-11.7)$ |

* 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

|  | $\%$ |
| :---: | ---: | :---: |
|  | $95 \% \mathrm{Cl}$ |
| 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 | $9.1(6.4-11.7)$ |
| Average | $8.6(8.0-9.2)$ |

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\% Cl | \% | 95\% CI | \% | 95\% CI | \% | 95\% Cl | \% | 95\% CI |
| 2002 | 23.3 | ( $14.0-32.6$ ) | 30.5 | ( $19.9-41.1$ ) | 30.5 | ( $18.4-42.5$ ) | 9.4 | 7-17.1) | 6.3 | ( $1.5-11.1$ ) |
| 2003 | 17.9 | ( $9.5-26.3$ ) | 39.9 | ( 29.3-50.6) | 33.1 | ( $22.7-43.5$ ) |  | -11.2) | N/A | ( N/A - N/A ) |
| 2004 | 11.1 | *( $3.6-18.6$ ) | 34.7 | ( 20.4-49.0) | 29.7 | ( $16.4-42.9$ ) |  | - 23.1) |  | *( $1.6-22.8$ ) |
| 2005 | 22.7 | ( $12.1-33.4$ ) | 34.6 | ( $22.8-46.4$ ) | 20.9 | ( $10.7-31.2$ ) | 18. | 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 | - 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) |  | 4-46.4) | 2.8 | * $0.3-5.3$ ) |
| 2008 |  | *(11.2-46.3) | 24.6 | * (10.3-38.9) | 34.5 | ( $17.9-51.1$ ) | 7.9 | 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 | 0-6.3) | 7.4 | *(3.2-11.5) |
| 2010 |  | ( $5.6-23.0$ ) | 51.8 | ( 37.0-66.6) |  | *(12.3-37.9) | 3.8 | - 7.3 ) | N/A | ( N/A - N/A ) |
| 2011 |  | ( 3.6-29.5) | 24. | ( 7.9-40.9) |  | * $6.0-37.5$ ) |  | - 37.9 ) |  | ( $0.8-31.0$ ) |
| 2012 |  | ( 5.3-23.6) | 43.2 | ( 30.0-56.4) |  | ( $14.3-40.6$ ) |  | 2-16.3) | N/A | ( N/A - N/A ) |
| 2013 |  | ( 2.7-16.0) | 44.7 | ( 28.4-60.9) |  | * ( 8.0-42.6) | 11.2 | 7-19.8) |  | ( $1.5-17.5$ ) |
| 2014 |  | ( 3.2-30.9) | 38.4 | ( $19.8-57.0$ ) | 26.4 | * ( 9.8-43.0) |  | - $\mathrm{N} / \mathrm{A})$ |  | ( N/A - N/A ) |
| 2015 |  | ( 2.7-25.1) | 38.0 | ( 22.8-53.1) |  | *( $3.3-22.0$ ) | 25.3 | 8-41.8) | 10.2 | ( $2.0-18.3$ ) |
| 2016 |  | *(3.1-18.4) | 38.3 | ( 23.2-53.4) | 36.2 | ( 20.9-51.5) | N/A | A - N/A ) |  | * ( $0.4-17.5$ ) |
| Average | 17.2 | $(14.6-19.8)$ | 39.2 | ( 35.8-42.6) | 25.6 | ( 22.5-28.7) | 10.8 | 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. ${ }^{9,10}$ 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. ${ }^{11}$, ${ }^{12}$

Parents/carers have been asked each year since 2003 whether their child has been diagnosed with ADHD. In 20163.3 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


* 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 |  | 5.6-9.2) |
| 2003 |  | 6.5-10.1) |
| 2004 |  | 5.7-11.5) |
| 2005 |  | 4.7-8.7) |
| 2006 |  | 4.5-8.0) |
| 2007 | 6.3 | 3.9-8.7) |
| 2008 |  | 4.6-9.4) |
| 2009 | 5.9 | 4.7-7.1) |
| 2010 | 5.8 | 3.7-7.8) |
| 2011 |  | 3.7-8.4) |
| 2012 |  | 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) |
| Average | 6.7 | 6.2-7.2) |

### 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. ${ }^{13}$

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. ${ }^{14}$ The latest publically available data for WA children (2013) estimates the prevalence of type 1 diabetes to be 130.4 per 100,000 population. ${ }^{15}$

### 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 ${ }^{14}$. 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. ${ }^{16}$ 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\% Cl | \% | 95\% CI |
| Age Group |  |  |  |  |
| 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) |  | ( 2.8-9.7) |
| 10 to 15 yrs | 13.5 | 9.2-17.9) | 9.1 | ( 5.4-12.8) |
| Gender |  |  |  |  |
| Boys | 12.5 ( | 8.1-16.9) |  | ( 5.1-13.1) |
| Girls | 10.6 ( | 6.1-15.0) | 8.5 | ( 4.2-12.7) |
| Children | 11.6 | 8.4-14.7) | 8.8 | ( 5.9-11.7) |

[^1]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\% Cl | \% 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) |
| Average | 13.6(12.8-14.3 ) | 9.1 ( 8.4-9.7) |

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. ${ }^{9}$ 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

|  | $\%$ | $95 \% \mathrm{CI}$ |
| :--- | :---: | :---: |
| Age Group |  |  |
| 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 | $(21.8-33.6)$ |
| Gender |  |  |
| Boys | 21.7 | $(16.1-27.2)$ |
| Girls | 20.2 | $(15.0-25.5)$ |
| Children | 21.0 | $(17.1-24.8)$ |

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

|  | $\%$ |
| :---: | :---: |
| 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 | $21.2(17.4-24.9)$ |
| Average | $20.6(19.5-21.7)$ |

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 |
| :---: | :---: | :---: |
| Age Group |  |  |
| 0 to 4 yrs | 0.2 | ( 0.1-0.3) |
| 5 to 9 yrs | 0.3 | ( 0.1-0.4) |
| 10 to 15 yrs |  | ( 0.3-0.6) |
| Gender |  |  |
| Boys |  | ( 0.2-0.4) |
| Girls |  | ( 0.2-0.4) |
| Children |  | ( $0.2-0.4$ ) |

[^2]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 | $0.3(0.2-0.4)$ |
| Average | $0.3(0.3-0.3)$ |

## 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. ${ }^{9}$

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


* 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) |  | ( $2.1-4.8$ ) | 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) |  | ( $1.6-3.7$ ) | 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) |  | ( $2.0-5.2$ ) | 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) |  | ( $1.9-5.0$ ) | 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) |  | ( $2.6-4.1$ ) | 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) |  | ( $1.7-3.9$ ) | 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) |  | 0.8-3.3) |  | (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) |  | ( $2.4-5.5$ ) |  | ( $2.1-4.9$ ) |
| 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) |  | ( 2.5-6.1) |  | ( $1.4-3.8)$ |
| 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) |  | ( $4.0-9.0$ ) |  | ( $2.3-6.5$ ) |
| 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) |  | ( 3.8-8.4) |  | ( $3.2-8.0$ ) |
| 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) |  | ( $4.1-8.6$ ) |  | ( $1.6-4.5$ ) |
| Average | 81.2 ( 80.3-82.1) | 25.2 ( 24.2-26.2) | 25.9 ( $24.9-27.0$ ) | 60.01 | 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 |
| Age Group |  |  |  |  |  |  |  |  |  |  |  |  |
| 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) |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |
| 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) |  | 0.8-1.4) | 1.3 | ( $1.1-1.6$ ) | 0.3 | 0.1-0.4) | 0.2 | 0.0-0.3) |
| Children | 3.8 | ( 3.3-4.3) | 0.6 | ( 0.3-0.8) | 1.7 | 0.8-2.6) | 1.2 | ( $1.0-1.4$ ) | 0.4 | 0.1-0.7) | 0.1 | 0.0-0.2) |

* 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 <br> (b) |  | Allied (c) |  | Dental |  | Mental (d) |  | Alternative (e) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | mear | 95\% CI | mear | 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) |  | ( $0.1-0.1$ ) |
| 2006 |  | ( 3.0-3.9) |  | ( 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 |  | ( 2.6-3.3) |  | 0.3-0.5) | 1.6 | 0.8-2.4) | 1.1 | ( $0.9-1.2$ ) | 0.2 | 3 ) | 0.3 | 6 ) |
| 2008 |  | ( 2.7-3.4) |  | ( 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 |  | 2.7-3.1) |  | 0.4-0.5) | 0.9 | ( $0.8-1.1$ | 1.1 | ( $1.0-1.2$ ) |  | 0.1-0.2) |  | ( 0.1-0.1) |
| 2010 | 3.3 | $(3.0-3.6)$ |  | ( 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 |  | ( $2.8-3.5$ ) |  | ( 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) |  | ( 0.3-0.5) | 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 |  | ( 2.7-3.6) |  | $(0.3-0.5)$ | 1.5 | ( $0.8-2.1$ ) | 1.2 | ( $1.0-1.3$ ) |  | 0.1-0.4) | 0.1 * | ( 0.0-0.1) |
| 2014 |  | ( $2.6-3.4$ ) |  | ( 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 | $(3.2-4.4)$ |  | ( 0.4-0.7) | 2.3 | ( $1.3-3.4$ ) | 1.2 | ( $1.0-1.4$ ) | 0.5 * | * (0.2-0.8) |  | ( N/A - N/A ) |
| 2016 | 3.8 | ( 3.3-4.3) |  | ( $0.3-0.8$ ) | 1.7 | ( $0.9-2.5$ ) | 1.2 | ( $1.1-1.4$ ) | 0.4 * | * ( $0.2-0.7$ ) | 0.1 * | * (0.0-0.2) |
| Average | 3.2 | ( 3.1-3.3) | 0.5 | ( 0.4-0.5) | 1.3 | ( $1.2-1.5$ ) | 1.2 | ( $1.1-1.2$ ) | 0.2 | ( $0.2-0.3$ ) | 0.1 | ( $0.1-0.2$ ) |

* 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. ${ }^{13}$

### 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. ${ }^{17}$

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. ${ }^{18} \mathrm{~A}$ 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. ${ }^{19}$

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 than 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
$\left.\begin{array}{cccc}\hline \text { To month }\end{array}{ }^{(\mathrm{a})} \begin{array}{c}\text { Duration exclusively } \\ \text { breastfed for }\end{array} \quad \begin{array}{c}\text { Proportion of children } \\ \text { exclusively breastfed } \\ \text { (b) }\end{array}\right]$
(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 | (a) | Duration <br> predominately <br> breastfed for | Proportion of chlidren <br> predominantly <br> breastfed |
| :---: | :---: | :---: | :---: |
|  | $\%$ | $95 \% \mathrm{Cl}$ |  |
| 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 predominately 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


[^3]
### 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. ${ }^{20}$

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 200711 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 |
| Birth Cohort |  |  |  |  |  |  |
| 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) |

[^4]
## 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. ${ }^{9}$ 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. ${ }^{21,22}$ Physical inactivity can increase the risk of overweight and obesity and can increase the risk of developing chronic health conditions later in life. ${ }^{21,22}$ 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 activel Not at all active |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% |  |  |  |
| Age Group |  |  |  |  |  |  |  |  |  |  |
| 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 | 7.1-27.8) | 16.8 | 2.0-21.5) | 7.0 |  |  | $0.4)$ |
| Gender |  |  |  |  |  |  |  |  |  |  |
| Boys | 55.3 | (47.8-62.9) | 26.2 | (19.5-32.8) | 14.7 | 9.7-19.8) |  |  | 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 ) |
| Children | 52.9 ( 47.6-58.3) |  | 26.6 ( 21.9-31.3) |  | 16.7( 12.9-20.4) |  | 3.7 ( $1.9-5.6)$ |  |  |  |

[^5]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 activel Not at all active |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% 95\% Cl | \% 95\% Cl | \% 95\% Cl | \% | 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) |
| Average | 49.7 ( 48.4-51.0) | 29.8(28.6-31.0) | 16.3(15.4-17.3) | 4.2 | ( 3.7-4.7) |

* 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. ${ }^{21,22}$

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 <br> 7 or more sessions per week but less than 60 mins a session |  | Physically active <br> 7 or more sessions per week and at least 60 mins a session |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |

Age Group

| 5 to 9 yrs | $\mathrm{N} / \mathrm{A}$ | $(\mathrm{N} / \mathrm{A}-\mathrm{N} / \mathrm{A})$ | $30.4(22.6-38.2)$ | 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 | $(29.9-43.1)$ |

Gender

| 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 | $(32.1-46.9)$ |  |
| Children | 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) |
| Average | 3.9 | ( $3.4-4.4$ ) | 33.5 | ( 32.2-34.8) | 17.0 | ( 16.0-18.1) | 45.6 | $\left(\begin{array}{ll}44.2 & 47.0\end{array}\right)$ |

[^6]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


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. ${ }^{23,21,22}$ 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 <br> guidelines for <br> electronic media <br> use |  | Meets guidelines <br> for electronic <br> media use |  |
| :---: | :---: | :---: | :---: |
|  |  |  | $\%$ |

## Age Group

| 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 | $(18.4-28.2)$ | $76.7(71.8-81.6)$ |

Gender

| Boys | 37.4 | $(30.5-44.2)$ | $62.6(55.8-69.5)$ |
| :--- | :--- | :--- | :--- |
| Girls | 38.1 | $(31.2-45.0)$ | $61.9(55.0-68.8)$ |
| Children | 37.7 | $(32.9-42.6)$ | $62.3(57.4-67.1)$ |

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\% Cl | \% 95\% Cl |
| 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) |
| Average | 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, ${ }^{24}$ as shown in Table 32. Outliers and biologically implausible values were removed in the derivation of these categories. ${ }^{25}$

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 |

Age Group

| 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 | $(71.1-82.8)$ | $19.1(13.5-24.6)$ | $4.0 *(1.8-6.2)$ |  |

## Gender

| 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 | * $(1.9-8.7)$ |
| Children | 76.4 | $(71.8-81.0)$ | $18.1(13.9-22.4)$ | 5.5 | $(3.2-7.7)$ |

* 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


[^7]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\% Cl | \% | 95\% CI | \% | 95\% CI |
| 2004 | 73.9 ( 66.9-80.9) | 19. | 12.9-25.4) | 7.0 | 2.9-11.0) |
| 2005 | 71.7 ( 66.4-77.0) | 19 | 4.9-24.0) | 8.9 | 5.3-12.4) |
| 2006 | 79.0 ( 74.9-83.2) | 15 | 1.4-18.8) | 5.8 | ( 3.5-8.1) |
| 2007 | 82.5 ( $77.2-87.8$ ) | 12. | 8.2-17.6) | 4.6 | ( 1.8-7.4) |
| 2008 | 80.3 ( 75.5-85.2) | 14 | 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 | 3.0-21.1) | 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 | 1.2-18.2) | 7.4 | ( 4.5-10.3) |
| 2013 | 78.9 ( 74.4-83.5) | 15. | 1.1-19.1) | 6.0 | ( 3.4-8.5) |
| 2014 | 77.4 ( $72.4-82.3$ ) | 13. | 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) |
| A verage | 77.6 ( 76.4-78.7) | 16.2 | 15.2-17.2) | 6.2 | ( $5.6-6.9)$ |

* 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. ${ }^{24}$ 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 childs's weight |  |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% Cl |
| 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) |

[^8]
### 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. ${ }^{26}$ 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 $95 \% \mathrm{Cl}$ |
| :--- | :--- |
| Age Group |  |
| 0 to 4 yrs | $0.4(0.2-0.6)$ |
| 5 to 9 yrs | $1.8(1.1-2.4)$ |
| 10 to 15 yrs | $2.3(1.8-2.8)$ |
| Gender |  |
| Boys <br> Girls | $1.4(1.0-1.7)$ |
| Children | $1.5(1.1-2.1)$ |

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 | $95 \% \mathrm{Cl}$ |
| :---: | :---: | :---: |
| 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 | $1.5(1.2-1.8)$ |  |
| Average | $1.4(1.3-1.4)$ |  |

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, $\mathbf{0}$ to 15 years, HWSS 2016

|  | Always |  | Most of the time |  | Sometimes |  | Rarely/Never |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |
| Age Group |  |  |  |  |  |  |  |  |
| 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) |
| Gender |  |  |  |  |  |  |  |  |
| 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) |
| Children | 60.3 | (55.7-65.0) | 35.2 | 30.6-39.7) | 3.9 | ( 2.2-5.5) | 0.6 | * ( $0.2-1.1$ ) |

* 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.

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 | 1-56.7) | 41.8 | .1-45.6) |  | . 8 - 5.5 ) | 1.1 | ( 0.4-1.8) |
| 2003 | 53. | 9-56.8) |  | .3-44.2) |  | 2-5.6) | 1.5 * | ( $0.6-2.4$ ) |
| 2004 | 55.2 | 8-60.5) | 38.0 | 2.7-43.2) |  | (3.4-8.7) | N/A | ( N/A - N/A ) |
| 2005 | 62 | 8-66.1) |  | 4-34.3) |  | 8-7.3) | 1. | ( 0.4-1.7) |
| 2006 | 55.9 | 3-59.4) | 36.8 | .4-40.2) |  | ( 8 - 7.2 ) | 1.9 | ( 0.8-2.9) |
| 2007 | 56 | 5-61.6) | 35 | .1-39.9) |  | 3-9.6) | 1.5 | ( 0.5-2.5) |
| 2008 | 59 | 3-64.6) | 32.2 | . $8-36.7$ ) |  | 2-8.5) | 1.5 | ( 0.4-2.6) |
| 2009 | 61. | 1-63.9) | 31 | .1-34.5) |  | (6-6.5) | 2.1 | ( $1.3-3.0$ ) |
| 2010 | 61 | 1-65.4) | 31.9 | .9-35.8) |  | 4-7.2) | 1.5 | ( 0.6-2.5) |
| 2011 | 62.5 | 8-67.2) | 32. | . $4-36.6$ ) |  | 6-6.4) | 1.0 | ( 0.2-1.8) |
| 2012 | 63 | 5-67.9) | 28. | .7-32.5) |  | ( 6 - 7.2 ) | 2.3 | ( 0.9-3.7) |
| 2013 | 63.2 | .6-67.9) | 31.9 | .4-36.4) |  | 1-5.2) | 1.2 | ( $0.1-2.3$ ) |
| 2014 | 58. | 8-63.2) | 36. | .0-41.2) |  | .8-6.7) | 1.2 | ( $0.1-2.2$ ) |
| 2015 | 59.1 | 4.4-63.9) | 35.0 | (30.5-39.6) |  | 2.6-5.8) | 1.6 * | ( $0.1-3.1$ ) |
| 2016 | 60.0 | 5-5-64.6) | 35.3 | (30.9-39.7) | 4.0 | (2.3-5.6) | 0.7 * | ( 0.2-1.1) |
| Average | 59.0 | 8.0-60.1) | 34.5 | (33.5-35.5) | 4.9 | (4.5-5.3) | 1.5 | ( $1.3-1.8$ ) |

* 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.

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, ${ }^{27}$ 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. ${ }^{13}$

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 ) |
| Average | 96.2 (95.9-96.6) | 3.8 | (3.4-4.1) |

* 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. ${ }^{28}$

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 | * ( $0.4-6.0$ ) |
| Average | 76.7 ( 74.7-78.8) | 3.0 | ( 2.2-3.8) | 14.9 | ( 13.2-16.6) | 5.4 | ( $4.3-6.4$ ) |

* 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.

### 10.6 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. ${ }^{9}$ The 2013 Australian Dietary Guidelines by the National Health and Medical Research Council ${ }^{29}$ 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 <br> recommended <br> serves of fruit per <br> day |  | Minimum <br> recommended <br> serves of <br> vegetables per day | Minimum serves of fruit <br> and vegetables per day for <br> 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


* 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


## Age Group

| 2 to 3 yrs | $\mathrm{N} / \mathrm{A}$ | $(\mathrm{N} / \mathrm{A}-\mathrm{N} / \mathrm{A})$ | 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 | $(16.3-27.2)$ |  |

## Gender

| 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 | $(12.6-23.7)$ |  |
| Children | 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 sufficent daily serves of fruit for age and gender^ |  |  | Eats sufficent daily serves of vegetables for age and gender^ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% |  | 95\% CI | \% |  | 95\% |  |
| Age Group |  |  |  |  |  |  |  |
| 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 | $11.8)$ |
| Gender |  |  |  |  |  |  |  |
| 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 ) |
| Children | 79.7 | ( | 75.8-83.5) | 15.7 | ( | 11.8 | 19.5 ) |

[^9]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^, 2013 Australian Dietary Guidelines for fruit and vegetable consumption, 2 to 15 years, HWSS 2002-16

${ }^{\wedge}$ 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 |  | ( $1.9-2.1$ ) |  | 2.0-2.2 ) |
| 2003 |  | ( $1.9-2.1$ ) |  | 1.9-2.1) |
| 2004 |  | ( $1.8-2.0$ ) |  | 2.0-2.3 ) |
| 2005 |  | ( $1.8-2.0$ ) |  | 2.2-2.4) |
| 2006 |  | ( $1.8-2.0$ ) |  | 2.1-2.3 ) |
| 2007 |  | ( $1.9-2.1$ ) | 2.2 | 2.1-2.4) |
| 2008 |  | ( $1.9-2.1$ ) |  | 2.1-2.3 ) |
| 2009 |  | ( 2.0-2.2) |  | 2.3-2.4 ) |
| 2010 |  | ( 2.0-2.2) |  | 2.2-2.4) |
| 2011 |  | ( $1.8-2.0$ ) |  | 2.3-2.5 ) |
| 2012 |  | ( $1.9-2.1$ ) |  | 2.1-2.4) |
| 2013 |  | ( $1.9-2.1$ ) | 2.2 | 2.1-2.4) |
| 2014 |  | ( $1.9-2.2$ ) | 2.3 | ( $2.2-2.4$ ) |
| 2015 |  | ( 2.0-2.2) | 2.4 | 2.2-2.5) |
| 2016 |  | ( $1.9-2.1$ ) | 2.2 | 2.1-2.3) |
| Average |  | ( 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. ${ }^{17}$ 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 fatl whole milk |  | Low/ reduced fatl skim milk |  | Other |  |  |  | Don't use milk |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | 95\% CI | \% | 95\% CI | \% |  |  | 95\% CI | \% |  | 95\% |  |
| Age Group |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 to 4 yrs | 81.7 | 72.3-91.2) | 10.7 | 3.4-18.0) |  | / $/$ A |  | N/A-N/A) | N/A | ( N | N/A - | N/A ) |
| 5 to 9 yrs | 62.1 | 53.7-70.5) | 32.4 | 24.3-40.5) |  | /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 - | $4.4)$ |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 ) |
| Children | 62.5 ( 57.7-67.4) |  | $31.2(26.7-35.8)$ |  | 3.6 * ( $1.6-5.6$ ) |  |  |  | $2.7{ }^{*}(1.0-4.3)$ |  |  |  |

* 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 fatl skim milk |  | Other |  | Don't use milk |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% 95\% CI | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |
| 2002 | 69.7 ( 66.1-73.2) | 28.7 | .2-32.1) | N/A | ( N/A - N/A ) | 1.5 | * ( 0.6-2.3) |
| 2003 | 69.6 ( 66.3-72.9) | 29.8 | .5-33.1) | 0.4 | * ( $0.0-0.8$ ) | 0.2 | ( 0.0-0.5) |
| 2004 | 72.9 ( 68.1-77.7) | 22 | 1-27.0) | 1.9 | * ( 0.5-3.4) | 2.7 | ( 0.9-4.4) |
| 2005 | 62.9 ( 59.0-66.7) | 33. | (0-37.5) | 1.1 | * ( $0.3-2.0$ ) | 2.2 | * ( $1.1-3.3$ ) |
| 2006 | 60.6 ( 56.4-64.9) | 36.3 | .1-40.4) | 1.2 | * (0.4-2.1) | 1.9 | ( $0.6-3.2$ ) |
| 2007 | 64.1 ( 59.1 - 69.0) | 33 | 3-37.9) | 1.4 | * ( $0.1-2.8$ ) |  | * (0.5-2.3) |
| 2008 | 65.1 ( 60.5-69.8) | 31.7 | 7.2-36.1) | 1.3 | * ( $0.0-2.5$ ) | 1.9 | * (0.3-3.5) |
| 2009 | 60.1 ( 57.2-63.0) | 35 | 8-38.5) | 2.2 | ( $1.2-3.3$ ) | 2.0 | ( $1.4-2.6$ ) |
| 2010 | 56.8 ( 52.3-61.3) | 39. | .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. | 7-43.5) | 2.1 | * ( 0.9-3.3) |  | ( 1.5-4.9) |
| 2013 | 57.7 ( 52.7-62.7) | 37. | .5-42.1) | 1.4 | * ( $0.2-2.7$ ) |  | * ( $1.7-5.5$ ) |
| 2014 | 52.8 ( 47.4-58.2) | 40.2 | (34.9-45.5) | 4.3 | * ( $1.9-6.6$ ) |  | * ( $1.0-4.3$ ) |
| 2015 | 56.3 ( 51.3-61.3) | 36.0 | (31.2-40.9) | 4.3 | ( $2.2-6.3$ ) |  | * ( $1.6-5.2$ ) |
| 2016 | 62.4 ( 57.6-67.1) | 31.4 | (26.9-35.8) | 3.6 | * ( $1.6-5.6$ ) |  | * ( $1.0-4.2$ ) |
| A verage | 62.0 ( 61.0-63.1) | 34.0 | (33.0-35.1) | 1.8 | ( $1.5-2.1$ ) |  | ( $1.8-2.5$ ) |

[^10]
## 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\% C | \% | 95\% CI | \% | 95\% C |

Age Group

| 1 to 4 yrs | $48.3(37.3-59.4)$ | $30.7(20.5-40.9)$ | $19.5(10.7-28.4)$ | $\mathrm{N} / \mathrm{A}$ | $(\mathrm{N} / \mathrm{A}-\mathrm{N} / \mathrm{A})$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5 to 9 yrs | $23.6(16.7-30.6)$ | $41.3(33.0-49.6)$ | $34.2(26.4-42.1)$ | $\mathrm{N} / \mathrm{A}$ | $(\mathrm{N} / \mathrm{A}-\mathrm{N} / \mathrm{A})$ |
| 10 to 15 yrs | $20.4(15.2-25.5)$ | $35.8(29.2-42.4)$ | $41.9(35.2-48.7)$ | 1.9 | $*(0.5-3.4)$ |

Gender

| 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 | $34.7(27.9-41.5)$ | $37.2(30.4-44.0)$ | $27.9(21.9-33.8)$ | $N / A$ | $(N / A-N / A)$ |
| Children | $29.5(24.9-34.2)$ | $36.2(31.4-41.0)$ | $32.9(28.3-37.4)$ | 1.4 | $*(0.3-2.5)$ |

* 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.

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. | 8.0-12.2) | 42.3 | 38.9-45.8) | 45. | .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 | .9-21.5) | 38 | .6-43.8) | 40. | .3-45.3) | 3.3 | * ( $1.2-5.5$ ) |
| 2008 | 11.6 | 8.6-14.5) | 42.6 | 37.7-47.5) | 44.1 | 9.2-48.9) | 1.8 | * ( $0.7-2.9$ ) |
| 2009 | 21. | 8.3-24.0) | 36. | 33.1-39.1) | 40.8 | 7.9-43.7) | 2.0 | * ( $1.0-3.0$ ) |
| 2010 | 18.4 | 15.1-21.6) | 40.7 | 36.3-45.0) | 38.3 | 4.0-42.5) | 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 | 9.3-26.9) | 36.7 | 32.5-41.0) | 37.9 | 3.5-42.3) | 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. | 2.5-29.5) | 43.5 | 38.1-48.9) | 30.0 | 5.2-34.7) | 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 | * ( $0.3-2.5$ ) |
| A verage | 17.8 | (17.0-18.7) | 39.5 | (38.5-40.6) | 40.7 | (39.6-41.8) | 1.9 | ( $1.6-2.2$ ) |

[^11]
### 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. ${ }^{30}$ 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 $95 \% \mathrm{Cl}$ |
| :--- | :--- |
| Age Group |  |
| 0 to 4 yrs | $10.5(10.2-10.8)$ |
| 5 to 9 yrs | $10.1(9.9-10.3)$ |
| 10 to 15 yrs | $9.2(9.1-9.4)$ |
| Gender |  |
| Boys <br> Girls | 10.0( $9.8-10.2)$ <br> Children |

## 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. ${ }^{9,31}$ 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. ${ }^{13}$ 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 |
| Age Group |  |  |  |  |  |  |  |  |
| 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) |  | ( 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) |
| Gender |  |  |  |  |  |  |  |  |
| Boys | 62.2 | 55.4-69.1) | 26.6 | ( 20.3-32.8) |  | ( 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 ) |
| Children | 69.1 | 64.6-73.7) | 22.7 | ( 18.5-26.9) |  | ( 3.7-8.2) | 2.2 | ( 0.9-3.6) |

* 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.

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 | 7.9-74.7) | 23.0 | (9-26.1) | 5.0 | ( 3.3-6.7) | 0.8 | * | 0.3-1.3) |
| 2003 | 68.3 | (65.0-71.5) | 24.7 | 1.6-27.7) | 5.7 | ( $4.2-7.3$ ) | 1.3 |  | 0.6-2.0) |
| 2004 | 62.1 | 6.8-67.4) | 28. | .2-32.9) | 7.9 | ( 5.0-10.9) | 1.9 | * | 0.3-3.5) |
| 2005 | 66.0 | (62.4-69.7) | 26.8 | 3.4-30.3) | 6.4 | ( 4.5-8.3) | 0.7 | * | ( 0.1-1.3) |
| 2006 | 69. | 5.8-72.5) | 23. | (6-26.6) | 5.9 | ( 4.2 - 7.7 ) | 1.3 | * | 0.5-2.2) |
| 2007 | 71.8 | 7.3-76.2) | 22.3 | 8.1-26.4) | 4.8 | ( $2.9-6.6$ ) | 1.2 | * | 0.3-2.0) |
| 2008 | 68.1 | (63.6-72.6 ) | 24.4 | 0.2-28.6) | 6.1 | ( 4.0-8.2) | 1.5 | * | ( 0.4-2.5) |
| 2009 | 74.0 | 71.6-76.5) | 20.2 | 7.9-22.4) | 4.3 | ( 3.4-5.2) | 1.5 |  | ( 0.9-2.2) |
| 2010 | 71. | 7.7-75.5) | 22. | (9-26.2) | 5.1 | ( 3.2-7.0) | 0.8 | * | 0.2-1.3) |
| 2011 | 71. | (7.3-76.4) | 23.0 | (8.9-27.2) | 4.4 | * ( $2.0-6.7$ ) | N/A |  | ( N/A - N/A ) |
| 2012 | 68.9 | 4.7-73.0) | 25.0 | (1-28.8) | 5.3 | ( $3.3-7.3$ ) | 0.9 | * | 0.1-1.6) |
| 2013 | 72. | 8.0-76.9) | 18.8 | 5.1-22.6) | 7.5 | ( 4.6-10.4) | 1.3 | * | ( 0.3-2.2) |
| 2014 | 65.5 | 0.4-70.7) | 25.7 | 1.0-30.5) | 7.4 | ( 4.5-10.3) | 1.4 | * | ( 0.3-2.4) |
| 2015 | 70.2 | (65.7-74.8) | 23.1 | 8.9-27.3) | 4.1 | ( 2.4-5.8) | 2.6 | * | ( 0.8-4.4) |
| 2016 | 69.3 | (64.9-73.8) | 22.5 | 8.5-26.6) | 6.0 | ( $3.7-8.2$ ) | 2.2 | * | ( 0.9-3.5) |
| Average | 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

|  | $\%$ | $95 \% \mathrm{Cl}$ |
| :--- | :--- | :---: |
| Age Group   <br> 1 to 4 yrs $\mathrm{N} / \mathrm{A}$ $(\mathrm{N} / \mathrm{A}-\mathrm{N} / \mathrm{A})$ <br> 5 to 9 yrs 39.2 $(25.9-52.6)$ <br> 10 to 15 yrs 37.4 $(25.6-49.3)$ <br> Gender   <br> Boys <br> Girls 36.0 $(25.0-47.1)$ <br> Children 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

|  | $\%$ |
| :--- | :--- |
| 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 | $35.2(26.9-43.5)$ |
| Average | $25.3(23.6-26.9)$ |

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
$\% \quad 95 \% \mathrm{Cl}$

| Age Group <br> 1 to 4 yrs <br> 5 to 9 yrs <br> 10 to 15 yrs |
| :--- |
| $\mathrm{N} / \mathrm{A}$ 10.6 ${ }^{*}(\mathrm{~N} / \mathrm{A}-\mathrm{N} / \mathrm{A})$ <br> (5.3-15.9)   <br> ( $7.8-16.1)$   |
| Boyder <br> Girls |
| Children |

* 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

|  | $\%$ | $95 \% \mathrm{Cl}$ |
| :---: | :---: | :---: |
| 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 | $(5.8-10.5)$ |
| Average | 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. ${ }^{32}$ 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. ${ }^{33,34}$ 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\% Cl | \% 95\% Cl |
| Age Group |  |  |
| 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) |
| Gender |  |  |
| 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) |
| Children | 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\% Cl | \% 95\% Cl |
| 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) |
| Average | 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. ${ }^{35}$ 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 $\mathbf{1 2}$ months, 5 to 15 years, HWSS 2016


* 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 | 1.5-39.2) | 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 | (6-41.2) | 10.5 | 7.8-13.2) | 8.5 | ( 6.0-11.0) |
| 2006 | 35.9 | (2.0-39.9) | 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 | .1-42.5) | 13.8 | (10.3-17.3) | 10.6 | ( 7.5-13.7 |
| 2009 | 33.6 | .2-36.0) | 10.0 | 8.4-11.6) | 6.8 | ( 5.4-8.1 |
| 2010 | 34.7 | 0.1-39.3) | 10.7 | 7.8-13.5) | 8.6 | ( 6.0-11.2) |
| 2011 | 31.1 | 5.8-36.3) | 8.6 | 5.2-12.0) | 7.7 | ( 4.4-11.0) |
| 2012 | 35.6 | (8-40.5) | 8.8 | 6.0-11.5) | 6.8 | ( 4.3-9.2 |
| 2013 | 36.1 | .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 | ( $5.0 \cdot 11.0$ ) | 6.1 | ( 3.4-8.9) |
| 2016 | 31.9 | (26.9-36.8) | 5.4 | ( $3.1 \cdot 7.8$ ) | 4.1 | *( $2.0-6.2$ ) |
| A verage | 35.2 | (34.1-36.3) | 10.7 | ( 9.9-11.4) | 8.2 | ( 7.5-8.8 |

[^12]
## 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. ${ }^{31}$

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\% Cl | \% |  | 95\% CI |
| Age Group |  |  |  |  |  |  |  |  |  |  |  |
| 5 to 9 yrs | 13.4 | 6.7-20.0) | 50.1 | (41.6-58.5) |  | ( $6.3-30.3$ ) |  | 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 | ( $4.3-24.0$ ) | 7.5 | ( 3.7-11.2) | 9.6 |  | 4.5-14.7) |
| Gender |  |  |  |  |  |  |  |  |  |  |  |
| Boys | 12.4 | 7.0-17.8) | 54.1 | (46.4-61.8) | 19.5 | (4.0-25.1) |  | (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 | (6.5-29.1) | 8.7 | ( 4.2-13.3) | 7.9 | ( | 4.1-11.7 |
| Children | 11.4 | ( 7.6-15.2) | 52.2 | (46.8-57.6) | 21.1 | ( $6.9-25.3$ ) |  | 5.4-11.3) |  | ( | ( 3.9 - 9.9 ) |

[^13]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) | .6(3.2-6.1) |
| 2003 | 9.5 ( 6.8-12.2) | 57.2 ( 53.1-61.2) | 21. | ) | . 9 ) |
| 2004 | 9.0 ( 5.3 | 53.4 ( 47.3-59.6) | 22 | ) | ) |
| 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 ( 5.0-1 | 54.6 ( 48.7 | 21.5 ( 16.5 | 7.7 ( 4.5-10.9) | 7.9 ( 5.1-10.8) |
| 2008 | 7.1) 3.9-10. | 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 ( $3.4 \cdot 7.3$ ) | $9.7(6.5 \cdot 13.0)$ |
| 2016 | 11.2 ( $7.6 \cdot 14.9$ ) | 52.2 ( 46.9 - 57.5 ) | 21.1 ( $17.0 \cdot 25.2$ ) | 8.3 ( $5.4 \cdot 11.2)$ | 7.1 ( 4.1 - 10.2 ) |
| Average | 8.5 ( 7.8-9.2) | 53.3 ( 52.1-54.4) | 21.6 ( 20.6-22.5) | 8.4(7.8-9.0) | 8.3 ( 7.6-8.9) |

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 |

## Age Group

| 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 | $42.6(35.9-49.4)$ | $24.9(19.2-30.5)$ | $27.5(21.2-33.7)$ | $5.0 *$ | $(2.4-7.7)$ |

## Gender

| 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 | $50.5(43.0-57.9)$ | $26.4(19.8-33.0)$ | $21.7(15.8-27.5)$ | $1.5 *$ | $(0.4-2.6)$ |
| Children | $42.1(36.8-47.4)$ | $28.0(23.2-32.8)$ | $25.9(21.1-30.7)$ | 4.0 | $(2.1-5.8)$ |

[^14]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\% Cl | \% | 95\% CI | \% | 95\% CI | \% | 95\% CI |
| 2002 | 52.7 (48.4-57.1) | 22. | (8-26.0 ) |  | (8.5-25.6) | 2.8 | ( $1.6-4.0$ ) |
| 2003 | 49.0 ( 44.9-53.0) | 25.6 | .9-29.3 ) |  | 8.5-25.0) | 3.7 | ( 2.2-5.3) |
| 2004 | 45.7 ( 39.5-51.9) | 27.5 | (0-33.1) |  | 6.3-26.3) | 5.4 | * ( $2.3-8.5$ ) |
| 2005 | 47.3 ( 42.8-51.9) | 24.4 | 6-28.2) |  | 1.0-28.8) | 3.4 | ( 1.8-5.1) |
| 2006 | 46.0 ( 41.8-50.2) | 25.9 | .3-29.6 ) |  | 9.2-26.4) | 5.3 | ( 3.5-7.1) |
| 2007 | 50.3 ( 44.4-56.1) | 23.1 | (0-28.2) |  | 6.1-25.6) | 5.8 | ( 3.2-8.3) |
| 2008 | 42.2 ( 36.7-47.7) | 28.6 | .6-33.6 ) |  | . $3-30.5$ ) | 3.4 | * ( $1.5-5.2$ ) |
| 2009 | 42.1 ( 39.6-44.6) | 28. | .9-30.4) |  | 2.9-27.2) | 4.7 | ( 3.7-5.8) |
| 2010 | 45.9 ( 40.8-50.9) | 29.0 | 4-33.5) |  | (9-24.8) | 4.3 | ( 2.5-6.2) |
| 2011 | 43.8 ( 38.2-49.5) | 28.5 | .4-33.7) |  | 8.2-27.3) | 4.9 | * ( 2.3-7.5 ) |
| 2012 | 42.9 ( 37.9-47.9) | 25.8 | .4-30.1) | 24. | 0.4-29.3) | 6.5 | ( 4.0-8.9) |
| 2013 | 45.5 ( 40.2 - 50.8 ) | 25.6 | 1.0-30.3) | 24.7 | 0.1-29.3) | 4.2 | * ( $2.1-6.2$ ) |
| 2014 | 46.6 ( 40.7-52.4) | 24.5 | 9.6-29.4) | 24.9 | 9.9-29.9) | 4.0 | * ( 2.0-6.1) |
| 2015 | 47.5 ( 42.0-52.9) | 25.4 | .8-29.9 ) | 21.8 | 7.5-26.2) | 5.3 | ( 2.8-7.8) |
| 2016 | 42.1 ( 36.9-47.3) | 27.9 | 3.2-32.6) | 26.0 | (21.2-30.7) | 4.0 | ( 2.2-5.9) |
| Average | 45.6 ( 44.4-46.7) | 26.3 | 5.3-27.3) | 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


* 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 | ( $2.0-5.1$ ) |  | ( $7.2-12.5$ ) | 13. | 10.9-16.7) | 72.7 | 68.9-76.6) |
| 2003 | 5.4 | ( 3.6-7.2) |  | ( 6.9-11.3) | 15 | 12.5-18.5) | 70. | 66.3-73.7) |
| 2004 | 2.4 | * ( $0.8-4.0$ ) | 11.5 | 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 | $2(7.1-13.4)$ | 16.3 | 13.1-19.5) | 71.5 | 67.3-75.6) |
| 2006 | 5.8 | ( $3.9-7.8$ ) |  | ( 5.7-10.1) | 16.1 | (13.0-19.2) | 70.2 | 66.4-74.1) |
| 2007 | 4.2 | * ( $2.0-6.4$ ) |  | ( 3.6-9.4) | 16.1 | 12.0-20.3) | 73. | 68.1-78.2) |
| 2008 | 5.5 | ( $3.4-7.6$ | 11.0 | $0(7.5-14.5)$ | 13.6 | 9.9-17.3) | 69.9 | 64.9-74.8) |
| 2009 | 5.4 | ( $4.3-6.6$ ) |  | $4(7.1-9.8)$ | 19. | (17.2-21.1) | 67. | 64.6-69.3) |
| 2010 | 3.6 | * ( $1.8-5.5$ ) | 10.5 | 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 | $4(7.3-13.6)$ | 19.7 | 15.1-24.4) | 66.5 | 61.2-71.8) |
| 2012 | 6.1 | ( 3.9-8.2) |  | ( 5.2-10.3) | 16.6 | (12.7-20.6) | 69.5 | 64.9-74.2) |
| 2013 | 6.7 | ( $4.2-9.1$ ) |  | $2(6.0-12.3)$ | 18.1 | ( $14.0-22.2$ ) | 66.0 | 61.0-71.1) |
| 2014 | 2.5 | * ( $1.0-4.1$ ) |  | $5(5.5-11.5)$ | 14.6 | 10.8-18.5) | 74.3 | 69.5-79.2) |
| 2015 | 5.2 | ( $2.9-7.5$ ) |  | ( $4.8-10.4$ ) | 20.6 | 16.1-25.1) | 66.6 | 61.4-71.7) |
| 2016 | 3.3 | * ( $1.6-5.1$ ) | 10.7 | $7(7.1-14.3)$ | 13.1 | 9.9-16.3) | 72.8 | 68.2-77.5) |
| Average | 4.6 | ( $4.2-5.1$ ) |  | ( 8.3-9.7) | 16.7 | ( $15.8-17.5$ ) | 69.7 | ( 68.7-70.8) |

[^15]
## 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. ${ }^{36}$ The questions used in the HWSS are taken from the McMaster Family Functioning Scale of 12 questions. ${ }^{37}$ Four questions were identified as sufficient to assess family functioning within a population. ${ }^{\text {a }}$ 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\% Cl |

Age Group

| 0 to 4 yrs | $\mathrm{N} / \mathrm{A}$ | $(\mathrm{N} / \mathrm{A}-\mathrm{N} / \mathrm{A})$ | $27.8(18.9-36.7)$ | $71.9(63.0-80.8)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 5 to 9 yrs | $\mathrm{N} / \mathrm{A}$ | $(\mathrm{N} / \mathrm{A}-\mathrm{N} / \mathrm{A})$ | $20.5(13.7-27.3)$ | $77.0(70.0-84.1)$ |
| 10 to 15 yrs | $4.5^{*}(0.3-8.7)$ | $25.9(20.1-31.7)$ | $69.6(63.1-76.1)$ |  |

Gender

| Boys | $3.2^{*}(0.2-6.1)$ | $27.7(21.5-33.8)$ | $69.2(62.7-75.7)$ |
| :--- | :--- | :--- | :--- | :--- |
| Girls | $1.8^{*}(0.1-3.5)$ | $21.8(16.2-27.3)$ | $76.4(70.7-82.1)$ |
| Children | $2.5^{*}(0.8-4.2)$ | $24.8(20.6-29.0)$ | $72.7(68.4-77.1)$ |

* 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.

[^16]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 | 6.8-33.6) | 66.6 | 3.1-70.1) |
| 2003 | 2.2 | ( 1.4-3.1) | 35. | 2.1-38.7) | 62. | .0-65.7) |
| 2004 | 4.2 | * ( 2.1-6.3) | 35. | 0.4-40.7) | 60.3 | 5.0-65.5 ) |
| 2005 | 1.6 | * ( 0.6-2.6) | 33.6 | (30.1-37.2) | 64.8 | .1-68.4) |
| 2006 | 2.1 | ( 1.1-3.1) | 35.8 | (32.4-39.2) | 62. | 8.7-65.6 ) |
| 2007 | 3.5 | ( 1.9-5.1) | 28. | (23.6-32.8) | 68. | .6-73.0) |
| 2008 | 3.1 | * ( $1.4-4.7$ ) | 34.6 | ( $0.1-39.1$ ) | 62.3 | .7-66.9) |
| 2009 | 2.8 | ( 1.9-3.8) | 30.9 | (28.3-33.5) | 66.3 | 3.6-69.0 ) |
| 2010 | 3.1 | ( $1.8-4.5$ ) | 26. | .9-30.5) | 70.2 | .3-74.0) |
| 2011 | 4.2 | * ( 2.0-6.4) | 31.7 | 7.1-36.3) | 64.1 | .3-68.9) |
| 2012 | 3.4 | ( $1.8-5.0$ ) | 33. | (8.9-37.3) | 63.5 | .2-67.8) |
| 2013 | 3.8 | ( 2.0-5.5) | 30.3 | (25.7-34.8) | 66.0 | 1.3-70.7) |
| 2014 | 3.3 | * ( $1.2-5.3$ ) | 28.1 | (23.2-33.0) | 68.6 | (3.6-73.7) |
| 2015 | 2.6 | * ( $1.3-4.0$ ) | 22.1 | (8.0-26.3) | 75.2 | 1.0-79.5) |
| 2016 | 2.6 | * ( 0.8-4.3) | 24.9 | (20.8-29.0) | 72.6 | 8.3-76.8) |
| Average | 2.9 | ( 2.6-3.3) | 31.5 | (30.6-32.5 ) | 65.6 | (6.6-66.6) |

* 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 |
| Age Group |  |  |  |  |  |  |
| 0 to 4 yrs | 12.5 | * (6.1-18.9) |  | 36.2-55.9) |  | 1.7-51.2) |
| 5 to 9 yrs | 11.9 | * ( 6.9-16.9) |  | 37.2-54.0) |  | 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) |
| Gender |  |  |  |  |  |  |
| Boys | 17.5 | ( 12.4-22.7) |  | 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) |
| Children | 15. | ( $11.7-18.5$ ) | 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\% Cl | \% 95\% Cl | \% 95\% Cl |
| 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 ( $38.4-47.8$ ) |
| Average | 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\% Cl | \% | 95\% CI |
| Age Group |  |  |  |  |  |
| 0 to 4 yrs | 4.2 | * (0.2-8.1) | 49.7 ( 39.8-59.6) |  | (36.3-56.0) |
| 5 to 9 yrs | 6.0 | *(2.2-9.8) | 46.2 ( $37.9-54.6$ ) |  | (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) |
| Gender |  |  |  |  |  |
| 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) |
| Children | 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 | (1-12.5) | 43.5 | 39.7-47.2) | 46.3 | .5-50.0) |
| 2003 |  | 7.2-11.5) | 45.0 | 41.5-48.4) | 45.7 | (2.2-49.2) |
| 2004 | 11.3 | 7.7-14.8) | 50.9 | 45.5-56.2) | 37. | .7-43.1) |
| 2005 |  | 4.6-8.0) | 47. | 43.8-51.4) | 46. | .3-49.9) |
| 2006 |  | 3-7.4) | 51.0 | 47.5-54.5) | 43.2 | 9-6-46.7) |
| 2007 |  | 6.7-13.1) | 36.8 | 32.0-41.6) | 53.3 | .3-58.3) |
| 2008 |  | 6.6-12.2) | 45.3 | 40.5-50.1) | 45.3 | 0.5-50.0) |
| 2009 |  | (5.3-8.2) | 47.8 | 44.7-50.9) | 45.5 | 2.4-48.5) |
| 2010 |  | 4.5-8.8) | 43.0 | 38.7-47.2) | 50.4 | .1-54.7) |
| 2011 |  | 3.8-8.2) | 42.5 | 37.8-47.3) | 51.4 | 6-56.3) |
| 2012 |  | 5.0-10.3) | 42.2 | (37.9-46.6) | 50.1 | 5.7-54.5) |
| 2013 | 11.0 | .9-14.0) | 39.5 | 34.6-44.3) | 49.6 | .7-54.5) |
| 2014 |  | 2.9-7.4) | 42.8 | 37.5-48.1) | 52.1 | .7-57.4) |
| 2015 |  | 3.7-7.7) | 37.4 | 32.7-42.1) | 56.9 | (52.1-61.7) |
| 2016 |  | 3.8-8.7) | 44.7 | 40.0-49.4) | 49.1 | (4.4-53.8) |
| Average |  | 7.1-8.2) | 44.8 | (43.8-45.9) | 47.5 | (4.5-48.6) |

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 |
| Age Group |  |  |  |  |  |  |
| 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. | 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) |
| Gender |  |  |  |  |  |  |
| 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) |
| Children | 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\% Cl |
| 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) |
| A verage | 8.7 (8.1-9.3) | 48.6 ( 47.6-49.7) | 42.7 ( 41.6-43.7) |

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, $\mathbf{0}$ 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, $\mathbf{0}$ 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

|  | $\%$ |
| :---: | :---: |
| 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 | $11.3(8.2-14.4)$ |
| Average | $13.3(12.6-14.0)$ |

## 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. ${ }^{7}$

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 |  |
| Child's age group |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | - 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 | ( |  | . | 32.2 ) | 11.2 |  | 8.1 | 14.3 ) |
| Child's sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | $11.6)$ |
| Persons | 25.0 | $($ | 22.0 - | 27.9 ) | 36.5 |  | 33.2 | 39.8 ) | 29.6 |  | 26.5 | 5 - | 32.8 ) | 8.9 | $($ | 7.0 | 10.9 ) |

* 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. ${ }^{9}$

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

(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. ${ }^{38}$ Feelings of lack of control have been found to have adverse effects on health and to increase the risk of mortality. ${ }^{39}$

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 |
| Child's age group |  |  |  |  |  |  |  |  |  |  |
| 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 | ( $0.0-2.0$ ) |
| Child's sex |  |  |  |  |  |  |  |  |  |  |
| 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 ) |
| Persons | 47.9 | ( 44.4-51.3) | 27.4 | ( 24.4-30.5) | 20.3 | ( 17.6-23.1) | 3.7 | ( 2.4-5.0) | 0.7 | (0.1-1.3) |

* 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 |
| Child's age group |  |  |  |  |  |  |  |  |  |  |
| 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 ) |
| Child's sex |  |  |  |  |  |  |  |  |  |  |
| 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 ) |
| Persons | 57.5 | ( 54.1-60.9) | 24.1 | ( 21.2-27.1) | 14.7 | ( 12.3-17.1) | 3.1 | ( $1.9-4.2$ ) | 0.6 | ( $0.1-1.1$ ) |

* 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.

## 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 |
| Child's age group |  |  |  |  |  |  |  |  |  |  |
| 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) |
| Child's sex |  |  |  |  |  |  |  |  |  |  |
| Boys | 55.9 | ( 51.2-60.7) | 21.2 | ( 17.3-25.1) | 16.6 | ( 13.0-20.1) | 4. | 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) |
| Persons | 58.1 | ( 54.7-61.5) | 20.2 | ( $17.4-23.0$ ) | 16.5 | ( 14.0-19.1) | 4.3 | (2.9-5.7) | 0.9 | (0.2-1.5) |

[^17]
## 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 <br> Sample (n) | Unweighted <br> Per Cent (\%) |
| :--- | :---: | :---: |
| Australian born | 520 | 70.3 |
| Yes | 220 | 29.7 |
| No | 18 |  |
| Aboriginal or Torres Strait Islander | 722 | 97.6 |
| Yes |  |  |
| No | 14 | 1.9 |
| Highest level of education | 71 | 9.7 |
| Less than Year 10 | 103 | 4.0 |
| Year 10 or Year 11 | 338 | 28.0 |
| Year 12 | 209 | 89.4 |
| TAFE/ Trade Qualification |  | 1.8 |
| Tertiary degree or equivalent | 659 | 6.4 |
| Employment status | 13 | 1.0 |
| Employed | 47 | 1.1 |
| Unemployed | 7 | 0.7 |
| Home duties | 8 | 0.1 |
| Retired | 5 |  |
| Unable to work | 1 |  |
| Student |  |  |
| Other |  |  |

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[^0]:    http://ww2.health.wa.gov.au/~/media/Files/Corporate/Reports\%20and\%20publications/Pop ulation\%20surveys/2003-Technical-paper-no1-Design-and-Methodology.ashx

[^1]:    * Prevalence estimate has a RSE between $25 \%-50 \%$ and should be used with caution.

[^2]:    * Mean estimate has a RSE between $25 \%-50 \%$ and should be used with caution.

[^3]:    * Prevalence estimate has a RSE between $25 \%-50 \%$ and should be used with caution.

[^4]:    * 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.

[^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.

[^6]:    * Prevalence estimate has a RSE between $25 \%-50 \%$ and should be used with caution.

[^7]:    * Prevalence estimate has a RSE between $25 \%-50 \%$ and should be used with caution.

[^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.

[^9]:    ${ }^{\wedge}$ For reporting purposes guidelines that include half serves have been rounded down to the nearest whole number.

[^10]:    * 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.

[^11]:    * Prevalence estimate has a RSE between $25 \%-50 \%$ and should be used with caution.

[^12]:    * Prevalence estimate has a RSE between $25 \%-50 \%$ and should be used with caution.

[^13]:    * Prevalence estimate has a RSE between $25 \%-50 \%$ and should be used with caution.

[^14]:    * Prevalence estimate has a RSE between $25 \%-50 \%$ and should be used with caution.

[^15]:    * Prevalence estimate has a RSE between $25 \%-50 \%$ and should be used with caution.

[^16]:    ${ }^{\text {a }}$ The analysis of the McMaster instrument was undertaken by Professor Stephen Zubrick of the Telethon Kids Institute, whom the authors gratefully acknowledge

[^17]:    * 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.

