

Health and Wellbeing of Children in Western Australia 2012, Overview and Trends

Health Survey Unit Epidemiology Branch Department of Health, WA

Delivering a Healthy WA

Acknowledgements

Thanks are extended to the parents and carers of children in Western Australia who participated in the Health and Wellbeing Survey. Appreciation is extended to our colleagues and specialists in the field who reviewed and commented on the report.

Suggested citation

Tomlin, Stephania and Joyce, Sarah 2013. The Health and Wellbeing of Children in Western Australia in 2012, Overview and Trends. Department of Health, Western Australia.

Table of contents

| EXECUTIVE SUMMARY | xi |
|--|----|
| 1. INTRODUCTION | 1 |
| 2. METHODOLOGY | 3 |
| 2.1 Mode of administration and sampling | 3 |
| 2.2 Weighting the data | |
| 2.3 Response rates | 3 |
| 3. HOW ESTIMATES ARE REPORTED | 5 |
| 3.1 Percentage and prevalence | 5 |
| 3.2 Confidence intervals | 6 |
| 3.3 Using this report | 6 |
| 4. TRENDS OVER TIME | 7 |
| 5. DEMOGRAPHICS | 8 |
| 6. GENERAL HEALTH | 11 |
| 6.1 Self-reported general health | 11 |
| 6.2 Disability | 12 |
| 7. CHRONIC CONDITIONS | 15 |
| 7.1 Attention deficit hyperactivity disorder | 15 |
| 7.2 Developmental problems | |
| 7.3 Type 1 diabetes | |
| 7.4 Asthma | |
| 7.5 Respiratory problem other than asthma | 21 |
| 7.6 Injuries | 22 |
| 8. HEALTH SERVICE UTILISATION | |
| 9. CHILD DEVELOPMENT | 31 |
| 9.1 Birth weight | |

| 9.2 Breastfeeding | 34 |
|------------------------------------|----|
| 9.3 Speech | 37 |
| 10. LIFESTYLE FACTORS | 38 |
| 10.1 Physical Activity | 38 |
| 10.2 Body mass index | 45 |
| 10.3 Sun protection | 48 |
| 10.4 Alcohol | 51 |
| 10.5 Smoking | 52 |
| 10.5.1 Smoking in the home | 52 |
| 10.5.2 Smoking during pregnancy | 54 |
| 10.6 Nutrition | 55 |
| 10.7 Sleep | 63 |
| 11. PSYCHOSOCIAL AND MENTAL HEALTH | 64 |
| 11.1 Emotional problems | 64 |
| 11.2 Social support | 67 |
| 11.3 Bullying | 69 |
| 12. SCHOOL CONNECTEDNESS | 71 |
| 12.1 School | 71 |
| 13. FAMILY FUNCTIONING | 74 |
| 14. CHILD RESPONDENT | 80 |
| 14.1 General health | 80 |
| 14.2 Mental health | 80 |
| 14.3 Lack of control | 81 |
| 15. CHILD RESPONDENT'S PARTNER | 83 |
| 16. REFERENCES | 84 |

List of tables

| Table 1: Response rate for Health and Wellbeing survey by month, 2012 | 4 |
|---|-----|
| Table 2: Demographic characteristics of the child, HWSS 2012 | 8 |
| Table 3: Characteristics of the household where the child is resident, HWSS 2012 | . 9 |
| Table 4: Demographic characteristics of respondent for child, HWSS 2012 | 10 |
| Table 5: The health status of children 15 years and under, HWSS 2012 | 11 |
| Table 6: Health status of children 15 years and under, HWSS 2004 – 2012 | 11 |
| Table 7: Child with disability, long-term illness or pain that puts a burden on the family, | |
| HWSS 2012 | 12 |
| Table 8: Child with disability, long-term illness or pain that puts a burden on the family, | |
| HWSS 2004 – 2012 | 13 |
| Table 9: Burden due to a child with a disability, long-term illness or pain, HWSS 2012 | 13 |
| Table 10: Burden due to a child with a disability, long-term illness or pain, HWSS 2002 - | |
| 2012 | 14 |
| Table 11: Prevalence of ADHD, 2 years and over, HWSS 2012 | 15 |
| Table 12: Prevalence of ADHD, 2 years and over, HWSS 2002 – 2012 | 16 |
| Table 13: Prevalence of development problems, HWSS 2012 | 16 |
| Table 14: Prevalence of developmental problems, HWSS 2002 – 2012 | 17 |
| Table 15: Prevalence of Type 1 diabetes, HWSS 2002 – 2012 | 18 |
| Table 16: Prevalence of asthma, HWSS 2012 | 19 |
| Table 17: Prevalence of asthma, HWSS 2005 – 2012 | 20 |
| Table 18: Prevalence of respiratory related conditions, HWSS 2012 | 21 |
| Table 19: Prevalence of respiratory related conditions, HWSS 2007 – 2012 | 21 |
| Table 20: Prevalence of injuries in the past 12 months requiring treatment from a health | |
| professional, HWSS 2012 | 22 |
| Table 21: Annual prevalence of injuries in the past 12 months requiring treatment from a | |
| health professional, HWSS 2007 – 2012 | 23 |
| Table 22: Mean number of injuries, HWSS 2012 | 24 |
| Table 23: Mean number of injuries, HWSS 2007 – 2012 | 25 |
| Table 24: Health service utilisation, HWSS 2012 | 27 |
| Table 25: Health service utilisation, HWSS 2004 – 2012 | 28 |
| Table 26: Mean number of visits to health services in the past 12 months, HWSS 2012 | 29 |

| Table 27: Mean number of visits to health services in the past 12 months, HWSS 2004 - | |
|--|----|
| 2012 | 30 |
| Table 28: Mean birth weight (grams) by birth cohort, HWSS 2012 | 31 |
| Table 29: Mean birth weight (grams), $0 - 4$ year olds, HWSS 2012 | 32 |
| Table 30: Mean birth weight (grams), 0–4 year olds, HWSS 2002 – 2012 | 33 |
| Table 31: Proportion of children born with a low birth weight, by birth cohort, HWSS 2012 | 33 |
| Table 32: Proportion of children born with a low birth weight, aged 0–4 year olds, HWSS | |
| 2012 | 33 |
| Table 33: Proportion of children born with a low birth weight, 0–4 year olds, HWSS 2002 | - |
| 2012 | 34 |
| Table 34: Prevalence of breastfeeding, by birth cohort, HWSS 2012 | 35 |
| Table 35: Prevalence of breastfeeding, 0–4 year olds, HWSS 2012 | 35 |
| Table 36: Prevalence of breastfeeding, 0–4 year olds, HWSS 2003 – 2012 | 36 |
| Table 37: Proportion of children late talking and needing professional help with speech, 2 | |
| year olds and over, by birth cohort, HWSS 2012 | 37 |
| Table 38: Parent-rated physical activity for children 5–15 years, HWSS 2012 | 38 |
| Table 39: Parent-rated physical activity for children aged 5–15 years, HWSS 2005 – 2012 | 2 |
| | 39 |
| Table 40: Weekly physical activity for children aged 5–15 years, HWSS 2012 | 39 |
| Table 41: Weekly physical activity for children aged 5–15 years, HWSS 2006–2012 | 41 |
| Table 42: Proportion watching TV, videos or using the computer based on Australian | |
| guidelines, on average, for children aged 0–15 years, HWSS 2012 | 42 |
| Table 43: Proportion watching TV, videos or using the computer based on Australian | |
| guidelines, on average, for children aged 0–15 years, HWSS 2003–2012 | 43 |
| Table 44: Prevalence of body mass index categories for children aged 5–15 years, HWS | S |
| 2012 | 45 |
| Table 45: Prevalence of body mass index categories for children 5–15 years, HWSS | |
| 2004–2012 | 46 |
| Table 46: Prevalence of body mass index categories by respondent perceptions, HWSS | |
| 2012 | 47 |
| Table 47: Respondent's intentions regarding child's weight, HWSS 2012 | 47 |
| Table 48: Mean times sunburnt in past 12 months, HWSS 2012 | 48 |
| Table 49: Mean times sunburnt in past 12 months, HWSS 2002–2012 | 48 |

| Table 50: How often parent/ carer checks to see if child is adequately protected before | |
|---|------|
| going out into sunlight, HWSS 2012 | 49 |
| Table 51: How often parent/carer checks to see if child is adequately protected before go | oing |
| out into sunlight, HWSS 2002–2012 | 50 |
| Table 52: Alcohol causing problems in the household, HWSS 2012 | 51 |
| Table 53: Alcohol causing problems in the household, HWSS 2002–2012 | 51 |
| Table 54: Smoking within the home, HWSS 2012 | 52 |
| Table 55: Smoking within the home, HWSS 2002–2012 | 53 |
| Table 56: Prevalence of smoking during pregnancy, HWSS 2012 | 54 |
| Table 57: Prevalence of smoking during pregnancy, 0–4 year olds, HWSS 2005 – 2012 | 54 |
| Table 58: Proportion eating recommended daily fruit serves, ages 4–15 years, HWSS 20 | 12 |
| | 55 |
| Table 59: Proportion eating recommended daily fruit serves, ages 4–15 years, HWSS | |
| 2002–2012 | 57 |
| Table 60: Mean daily fruit serves, ages 4-15 years, HWSS 2012 | 57 |
| Table 61: Mean daily fruit serves, ages 4-15 years, HWSS 2002–2012 | 58 |
| Table 62: Proportion eating recommended daily vegetable serves, ages 4-15 years, HWS | SS |
| 2012 | 58 |
| Table 63: Proportion eating recommended daily vegetable serves, 4–15 years, HWSS | |
| 2002–2012 | 60 |
| Table 64: Mean daily vegetable serves, 4 – 15 years, HWSS 2012 | 60 |
| Table 65: Mean daily vegetable serves, 4–15 years, HWSS 2002 – 2012 | 61 |
| Table 66: Type of milk consumed, 2 – 15 years, HWSS 2012 | 61 |
| Table 67: Type of milk usually consumed, 2–15 years, HWSS 2002 – 2012 | 62 |
| Table 68: Meals from fast food outlets per week, 1–15 years, HWSS 2012 | 62 |
| Table 69: Meals from fast food outlets per week, 1–15 years, HWSS 2002– 2012 | 63 |
| Table 70: Mean time spent sleeping on a usual night, HWSS 2012 | 63 |
| Table 71: Overall trouble with emotions, concentration, behaviour or getting on with peop | ole, |
| 1–15 years, HWSS 2012 | 64 |
| Table 72: Overall trouble with emotions, concentration, behaviour or getting on with peop | ole, |
| 1–15 years, HWSS 2002–2012 | 65 |
| Table 73: Proportion who think child needs special help for emotional problem, 1–15 year | rs, |
| HWSS 2012 | 65 |

| Table 74: Proportion who think child needs special help for emotional problem, 1–15 years, |
|---|
| HWSS 2002–2012 |
| Table 75: Proportion of children ever treated for an emotional or mental health problem, 1– |
| 15 years, HWSS 2012 |
| Table 76: Proportion of children ever treated for an emotional or mental health problem, 1– |
| 15 years, HWSS 2002–2012 |
| Table 77: Prevalence of friends, 5–15 years, HWSS 2012 |
| Table 78: Prevalence of friends, 5–15 years, HWSS 2002–2012 |
| Table 79: Prevalence of bullying in past 12 months, 5–15 years, HWSS 2012 69 |
| Table 80: Prevalence of bullying in past 12 months, 5–15 years, HWSS 2002–2012 70 |
| Table 81: Weeks absent from school, 5–15 years, HWSS 2012 |
| Table 82: Weeks absent from school, 5–15 years, HWSS 2002–2012 |
| Table 83: How child is doing in school overall, 5–15 years, HWSS 2012 |
| Table 84: How child is doing in school overall, 5–15 years, HWSS 2002–2012 |
| Table 85: Child looks forward to going to school every day, 5–15 years, HWSS 2012 73 |
| Table 86: Child looks forward to going to school everyday, 5–15 years, HWSS 2002–2012 |
| |
| Table 87: Family usually don't get on well together, HWSS 201274 |
| Table 88: Family usually don't get on well together, HWSS 2002–2012 |
| Table 89: Planning family activities is usually difficult, HWSS 2012 |
| Table 90: Planning family activities is usually difficult, HWSS 2002–2012 |
| Table 91: Usually avoid discussing fears and concerns openly with each other, HWSS 2012 |
| |
| Table 92: Usually avoid discussing fears and concerns openly with each other, HWSS |
| 2002–2012 |
| Table 93: Making decisions is usually a problem because they misunderstand each other, |
| HWSS 2012 |
| Table 94: Making decisions is usually a problem because they misunderstand each other, |
| HWSS 2002–2012 |
| Table 95: Poor family functioning, HWSS 2002–2012 |
| Table 96: General health status of child respondent, HWSS 2012 |
| Table 97: Mental health of child respondent, HWSS 2012 81 |

| Table 98: Lack of control over life in general during past four weeks, child respondent, | |
|--|------|
| HWSS 2012 | . 82 |
| Table 99: Lack of control over personal life during past four weeks, child respondent, | |
| HWSS 2012 | . 82 |
| Table 100: Lack of control over health during past four weeks, child respondent, HWSS | |
| 2012 | . 82 |
| Table 101: Demographics of child respondent's partner, HWSS 2012 | 83 |

List of figures

| Figure 1: Child with disability, long-term illness or pain that puts a burden on the family, by |
|---|
| geographic area, HWSS 2012 12 |
| Figure 2: Prevalence of development problems, by geographic area, HWSS 2012 17 |
| Figure 3: Prevalence of asthma, by geographic area, HWSS 2012 |
| Figure 4: Prevalence of asthma over time, children 15 years and under, HWSS 2005 - |
| 2012 |
| Figure 5: Prevalence of injuries in the past 12 months requiring treatment from a health |
| professional, by geographic area, HWSS 2012 23 |
| Figure 6: Prevalence of injuries in the past 12 months requiring treatment from a health |
| professional, by year, HWSS 2007 – 2012 |
| Figure 7: Mean birth weight (grams), $0 - 4$ year olds, by geographic area, HWSS 2012 32 |
| Figure 8: Proportion of children aged 5–15 years, meeting recommended guidelines for |
| physical activity, by geographic area, HWSS 2012 40 |
| Figure 9: Proportion of children aged 5–15 years completing sufficient levels of physical |
| activity per week, HWSS 2006–2012 41 |
| Figure 10: Proportion of children meeting the TV viewing guidelines (a), for children aged |
| 0-15 years, by geographic areas, HWSS 2012 43 |
| Figure 11: Proportion of children aged 0–15 years, meeting TV viewing Australian |
| guidelines, on average, HWSS 2003–2012 |
| Figure 12: Prevalence of body mass index categories for children aged 5–15 years, by |
| geographic area, HWSS 2012 |
| Figure 13: Prevalence of body mass index categories for children 5–15 years, HWSS |
| 2004–2012 |
| Figure 14: Proportion of parents/ carers that always check that child is adequately protected |
| before going into the sun, by geographic areas, HWSS 2012 |
| Figure 15: How often parent/carer always checked to see if child was adequately protected |
| before going out into sunlight, HWSS 2002–2012 |
| Figure 16: Proportion eating recommended daily fruit serves, ages 4–15 years, by |
| geographic area, HWSS 2012 |
| Figure 17: Proportion eating recommended daily vegetable serves, ages 4–15 years, by |
| geographic area, HWSS 2012 |

| Figure 18: Poor family functioning, HWSS 2012 | . 78 |
|--|------|
| Figure 19: Poor family functioning, by geographic areas, HWSS 2012 | . 79 |

EXECUTIVE SUMMARY

This report describes the findings from the 2012 Health and Wellbeing Surveillance System and provided the health sector and the general public with important information about a number of aspects of health and wellbeing relevant to the Western Australian child population.

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 2012, almost 900 parents/ carers of children aged 0 to 15 years were interviewed via computer assisted telephone interviews between January and December, reflecting a participation rate of 92.1%. The sample is randomly selected and then weighted to reflect the Western Australian child population.

Some key findings from the report include:

General health:

• In 2012, just over 85% of children aged 0-15 years were reported as having very good or excellent health by their parents/carers.

Chronic health conditions:

- The prevalence of lifetime asthma in 2012 (11.4%) was the lowest recorded to date and was significantly lower compared with 2006 (17.1%).
- In 2012, children aged 10 to 15 years were almost 2.5 times more likely to have been injured compared with children aged 0 to 4 years (30.1% compared with 12.3%).

Lifestyle and physiological risk factors:

• In 2012, just under half (48.9%) of children aged 5 to 15 years were completing the recommended amount of physical activity per week for good health.

- Children aged 5 to 15 years were significantly more likely to meet the television viewing guidelines for their age group (78.9%) compared with children aged 0 to 1 years (49.4%) and 2 to 4 years (28.3%).
- There were no statistically significant changes in the proportion of children aged 5 to 15 years classified as very overweight (7.3% in 2012).
- In 2012, the average number of times a child was sunburnt in the past 12 months increased with age (0 to 4 years; 0.4 times compared with 10 to 15 years; 1.9 times).
- The majority of parents/carers (92.3%) check if the child is adequately protected before going out into the sun all or most of the time, and since 2002 the proportion of parents/carers always checking that their child was protected before going into the sun increased significantly (53.1% in 2002 to 63.0% in 2012).
- The proportion of children living in smoke free homes has increased significantly from 2002 (89.6%) to 2012 (97.9%).
- Children aged 12 to 15 years were significantly less likely to consume the recommended daily serves of fruit and vegetables compared to younger age groups.

Emotional health and wellbeing:

- Just over one-third (35.6%) of children were bullied in the past 12 months in 2012.
- The proportion of children aged 1 to 15 years ever treated for an emotional or mental health problem increased significantly from 2002 (3.0%) to 2012 (6.2%).
- Almost one in seven (13.9%) parents/guardians reported having been diagnosed with a mental health problem in the last 12months and one in nine (11.2%) were currently receiving treatment for such a problem.

1. INTRODUCTION

The WA Health & Wellbeing Surveillance System (HWSS) is a continuous data collection system, which was developed to monitor the health and wellbeing of Western Australians. Each month, more than 550 people throughout Western Australia are interviewed. The HWSS began in March 2002 and as at December 2012 approximately 65,000 interviews have been conducted. Of these, 12,493 were conducted with parents/carers of children up to the age of 15 years. This report presents the information collected on children for 2012 with trends over time.

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. The Telethon Institute of Child Health Research (TICHR) 1996 Child Health Survey methodology and questionnaire¹ guided development of these questions.

Information from the survey is used to monitor the health status of Western Australian (WA) children, to inform health education programs, to evaluate interventions, to inform health policy development, to identify and monitor emerging trends and to evaluate the new National Public Health Initiatives.

All the information provided in this report is based on self-reported data collected from the child's parent/guardian. Testing has shown that the responses to the questions on the survey are reliable but in a very few cases, may not be completely accurate. For example, parents are unlikely to know the exact amount of physical exercise their child does, but test-retest information shows that the estimate they give is 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.

While the information provided in this report is representative of WA children as a whole, it may not 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 generated from the 2001-2002 WA Aboriginal Child Health Survey² and also the 2004-05 National Aboriginal and Torres Strait Islander Health Survey³.

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 2008-2009 White Pages by a stratified random process. An approach letter is sent to all selected households informing them about the survey and 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 about the HWSS and provides contact numbers for people to call for more information.

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 between and within areas or categories. 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.

The HWSS data are weighted to compensate for the over-sampling in the rural and remote areas of WA and then adjusted to the most recent Estimated Resident Population (ERP) for the year of the survey. Rural and remote areas of WA are over-sampled proportional to their populations within WA. This is done to provide enough interviews to enable reliable and robust estimates to be made for these areas. 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 2006 Estimated Resident Population. 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/guardian 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

3

biased. Each year since the HWSS began response rates of over 75% have been attained. The response rate for each month of 2012 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.

| Month | Sample Frame | Out of Scope (a) | Eligible Sample | No answer after 10 attempt | Eligible Contacts (b) | Sample Frame | Interviews | Raw Response Rate | Adjusted Response Rate | Particip- ation Rate (c) |
|-------|-----------------|------------------------|--------------------|-------------------------------------|-----------------------------|-----------------|------------|-------------------------|------------------------------|--------------------------------|
| Jan | 1197 | 392 | 805 | 96 | 709 | 51 | 610 | 75.8 | 86.0 | 92.3 |
| Feb | 1168 | 416 | 752 | 60 | 692 | 63 | 590 | 78.5 | 85.3 | 90.4 |
| Mar | 1168 | 418 | 750 | 70 | 680 | 51 | 563 | 75.1 | 82.8 | 91.7 |
| Apr | 1168 | 413 | 755 | 76 | 679 | 67 | 562 | 74.4 | 82.8 | 89.3 |
| May | 1169 | 439 | 730 | 66 | 664 | 55 | 553 | 75.8 | 83.3 | 91.0 |
| Jun | 1336 | 473 | 863 | 86 | 777 | 73 | 625 | 72.4 | 80.4 | 89.5 |
| Jul | 1234 | 472 | 762 | 55 | 707 | 76 | 557 | 73.1 | 78.8 | 88.0 |
| Aug | 1234 | 458 | 776 | 53 | 723 | 80 | 567 | 73.1 | 78.4 | 87.6 |
| Sep | 1234 | 460 | 774 | 91 | 683 | 69 | 542 | 70.0 | 79.4 | 88.7 |
| Oct | 1262 | 468 | 794 | 92 | 702 | 74 | 583 | 73.4 | 83.0 | 88.7 |
| Nov | 1460 | 596 | 864 | 99 | 795 | 95 | 624 | 72.2 | 78.5 | 86.8 |
| Dec | 1004 | 398 | 606 | 92 | 514 | 37 | 432 | 71.3 | 84.0 | 92.1 |
| Total | 14634 | 5403 | 9231 | 936 | 8325 | 791 | 6808 | 73.8 | 81.8 | 89.6 |

Table 1: Response rate for Health and Wellbeing survey by month, 2012

a) Non-operational, business or dedicated fax numbers and people who are out of scope, e.g. real estate agent or house sitter. 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 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 DoH intranet and the DoH Internet at the following web addresses:

http://www.health.wa.gov.au/publications/documents/Technical%20paper%20no%201%20 Design%20and%20Methodology.pdf

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 has 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 involves 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. A copy of the questionnaire is available on the intranet at:

http://intranet.health.wa.gov.au/epidemiology/docs/HWSS_Questionnaire.pdf

Non DOH employees are asked to contact the Health Survey Unit, Epidemiology Branch, System Policy and Planning Division, (Health Department of Western Australia) for a copy of the questionnaire.

3.2 Confidence intervals

Each table presents the estimate of the prevalence of a condition or the estimate of the proportion of the population with a particular characteristic along with the 95% confidence interval around that estimate, presented as percentages.

The 95 per cent confidence interval is the range between which the true estimate would lie 95 out of 100 times. 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. The wider the confidence interval is around an estimate the less precise that estimate is and the more caution that should be applied with using it. In this report wide confidence intervals 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. Information on how to determine whether or not a difference is statistically significant can be found at:

http://www.health.wa.gov.au/publications/pop_surveys.cfm

3.3 Using this report

This report has been generated to be a reference document and therefore contains little interpretative text. The confidence intervals should be used to determine statistical significance if no text has been provided. If more detailed information is required or interpretation needed, please contact the Health Survey Unit, Epidemiology Branch, Division of Public Health, Health Department of Western Australia.

4. TRENDS 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 have been provided.

The prevalence or proportion of males and females who reported a selected condition/risk factor of interest was derived for each year from 2002 to 2012.

To guarantee any changes in prevalence estimates are not the result of changes in the age and sex distribution of the population, all years have been standardised by weighting them to the 2006 Estimated Resident Population. As a result, 2012 estimates presented in trend tables may differ slightly from 2012 estimates presented in prevalence tables due to the standardising of estimates to different populations.

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

5. DEMOGRAPHICS

The demographic characteristics of the child sample who participated in the HWSS in 2012 are shown in Table 2. The table shows the unweighted number in the sample for each group and the weighted prevalence expressed as a percent.

| Characteristic | Unweighted Sample (n) | Estimated Prevalence (%) | | |
|--------------------------------------|--------------------------|-----------------------------|--|--|
| Age | | | | |
| 0 to 4 years | 241 | 32.5 | | |
| 5 to 9 years | 259 | 30.4 | | |
| 10 to 15 years | 391 | 37.1 | | |
| Gender | | | | |
| Boys | 462 | 51.0 | | |
| Girls | 429 | 49.0 | | |
| Australian born | | | | |
| Yes | 838 | 93.6 | | |
| No | 53 | 6.4 | | |
| Aboriginal or Torres Strait Islander | | | | |
| Yes | 33 | 3.8 | | |
| No | 856 | 96.2 | | |
| Relationship of respondent to child | | | | |
| Mother | 706 | 78.2 | | |
| Father | 165 | 19.4 | | |
| Other | 20 | 2.4 | | |

Table 2: Demographic characteristics of the child, HWSS 2012

The characteristics of the household and the weighted estimated percent of the population are shown in Table 3.

| | Unweighted Sample (n) | Estimated Prevalence (%) |
|--|--------------------------|-----------------------------|
| Current living arrangment | , | |
| Family with a child or children living with biological or adoptive parents | 752 | 84.6 |
| Step or blended family | 42 | 4.5 |
| Sole parent family | 75 | 8.6 |
| Other family structure | 22 | 2.4 |
| Household income | | |
| Under \$20,000 | 16 | 1.7 |
| \$20,000 to \$40,000 | 67 | 6.3 |
| \$40,000 to \$60,000 | 66 | 7.7 |
| \$60,000 to \$80,000 | 119 | 15.1 |
| \$80,000 to \$100,000 | 132 | 17.6 |
| \$100,000 to \$120,000 | 132 | 16.8 |
| \$120,000 to \$140,000 | 97 | 12.1 |
| More than \$140,000 | 181 | 22.6 |
| Household spending | | |
| Spend more money than earn/get | 22 | 3.5 |
| Have just enough money to get by | 131 | 16.6 |
| Spend left over money | 60 | 6.4 |
| Save a bit every now and then | 283 | 30.4 |
| Save some regularly | 310 | 34.8 |
| Save a lot | 80 | 8.4 |
| Area of residence | | |
| Metropolitan | 385 | 76.1 |
| Rural | 347 | 16.7 |
| Remote | 159 | 7.2 |
| SEIFA classification of social disadvantage | | |
| SEIFA Quintile 1 (Most disadvantaged) | 82 | 8.3 |
| SEIFA Quintile 2 | 175 | 18.2 |
| SEIFA Quintile 3 | 170 | 17.7 |
| SEIFA Quintile 4 | 274 | 29.9 |
| SEIFA Quintile 5 (Most advantaged) | 190 | 25.8 |
| Have private health insurance | | |
| Yes | 638 | 73.6 |
| No | 246 | 26.4 |

Table 3: Characteristics of the household where the child is resident, HWSS 2012

The demographic characteristics, with unweighted percentage, of the respondents for the children are shown in Table 4.

| Characteristic | Unweighted Sample (n) | Unweighted Prevalence (%) |
|-------------------------------|--------------------------|------------------------------|
| Australian born | | |
| Yes | 683 | 76.7 |
| No | 207 | 23.3 |
| Aboriginal or Torres Strait | | |
| Yes | 19 | 2. |
| No | 872 | 97.9 |
| Highest level of education | | |
| Less than Year 10 | 13 | 1. |
| Year 10 or Year 11 | 106 | 11. |
| Year 12 | 116 | 13. |
| TAFE/Trade qualification | 376 | 42.1 |
| Tertiary degree or equivalent | 278 | 31. |
| Employment status | | |
| Employed | 641 | 71. |
| Unemployed | 19 | 2. |
| Home duties | 206 | 23. |
| Retired | 8 | 0. |
| Unable to work | 5 | 0. |
| Student | 9 | 1. |
| Other | 3 | 0. |
| Possess a government health | care card | |
| Yes | 132 | 14. |
| No | 759 | 85. |
| Share home with a partner | | |
| Yes | 795 | 89. |
| No | 94 | 10. |

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 compared with excellent or very good ratings.⁴ Parents/carers were asked to rate their child's general health (Table 5).

| Table 5: The health status of children 15 years and under, | HWSS 2012 |
|--|-----------|
| ······································ | |

| | E: | xcellent | Ve | ery Good | (| Good | | Fair | | Poor |
|--------------|--------|---------------|--------|---------------|--------|--------------|-------|-------------|-------|-------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Age Group | | | | | | | | | | |
| 0 to 4 yrs | 66.4 (| 58.4 - 74.4) | 20.2 (| 13.3 - 27.1) | 10.5 (| 5.6 - 15.3) | 2.9 (| (0.2 - 5.5) | 0.0 (| 0.0 - 0.0) |
| 5 to 9 yrs | 54.5 (| 46.8 - 62.3) | 30.3 (| 23.2 - 37.4) | 11.5 (| 5.9 - 17.1) | 2.8 (| (0.1 - 5.6) | 0.9 (| 0.0 - 1.9) |
| 10 to 15 yrs | 54.9 (| 48.4 - 61.4) | 29.4 (| 23.6 - 35.3) | 13.8 (| 9.2 - 18.4) | 1.4 (| (0.5 - 2.4) | 0.4 (| 0.0 - 1.0) |
| Gender | | | | | | | | | | |
| Boys | 57.0 (| 51.0 - 63.0) | 26.3 (| 21.1 - 31.6) | 13.5 (| 9.1 - 18.0) | 2.4 (| (0.8 - 4.1) | 0.7 (| 0.0 - 1.5) |
| Girls | 60.2 (| 54.0 - 66.3) | 27.1 (| 21.5 - 32.6) | 10.4 (| 6.8 - 14.1) | 2.2 (| (1.0 - 4.1) | 0.1 (| 0.0 - 0.3) |
| Children | 58.5 (| 54.2 - 62.8) | 26.7 (| 22.9 - 30.5) | 12.0 (| 9.1 - 14.9) | 2.3 (| (1.1 - 3.6) | 0.4 (| 0.0 - 0.8) |

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 nearly 90% of children reported having very good or excellent health.

| | Excellent | | Ve | ery Good | | Good | | Fair | Poor | |
|----------|-----------|---------------|--------|---------------|--------|--------------|-------|------------|-------|-------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| 2004 | 55.3 (| 50.1 - 60.5) | 30.2 (| 25.5 - 35.0) | 11.2 (| 7.9 - 14.5) | 2.2 (| 0.6 - 3.9) | 1.0 (| 0.0 · 2.3) |
| 2005 | 55.5 (| 51.8 - 59.2) | 32.4 (| 28.9 - 35.9) | 9.0 (| 7.0 - 11.1) | 2.4 (| 1.1 - 3.6) | 0.7 (| 0.0 · 1.3) |
| 2006 | 60.3 (| 56.9 - 63.6) | 28.9 (| 25.8 - 32.0) | 8.2 (| 6.3 - 10.2) | 2.3 (| 1.1 - 3.5) | 0.3 (| 0.0 · 0.6) |
| 2007 | 58.4 (| 53.6 - 63.2) | 30.0 (| 25.6 - 34.5) | 10.0 (| 7.2 - 12.8) | 1.3(| 0.2 - 2.4) | 0.3 (| 0.0 · 0.7) |
| 2008 | 59.9 (| 55.4 - 64.4) | 27.0 (| 22.9-31.0) | 10.7 (| 8.0 - 13.5) | 2.0 (| 0.8 - 3.2) | 0.4 (| 0.0 · 1.1) |
| 2009 | 57.3 (| 54.5-60.1) | 29.6 (| 27.1 - 32.1) | 11.2 (| 9.3 - 13.1) | 1.4 (| 0.9 - 2.0) | 0.5 (| 0.1 · 0.8) |
| 2010 | 58.7 (| 54.6 - 62.8) | 29.8 (| 25.9-33.6) | 9.6 (| 7.2 - 12.0) | 1.8 (| 0.8 - 2.8) | 0.2 (| 0.0 · 0.4) |
| 2011 | 60.5 (| 55.8 - 65.2) | 25.4 (| 21.2 - 29.6) | 10.4 (| 7.4 - 13.5) | 2.4 (| 0.9 - 3.8) | 1.3 (| 0.0 · 2.8) |
| 2012 | 58.3 (| 54.0 - 62.5) | 26.9 (| 23.2 - 30.7) | 12.0 (| 9.2 - 14.9) | 2.3 (| 1.1 - 3.5) | 0.5 (| 0.0 · 0.9) |
| A verage | 57.8 (| 56.5 - 59.0) | 29.5 (| 28.4 - 30.6) | 10.2 (| 9.5 - 11.0) | 1.9 (| 1.6 - 2.3) | 0.6 (| 0.3 - 0.8) |

6.2 Disability

Disability may be experienced in terms of impairments of body functions and structures, activity limitations or participation restrictions.⁵ Parents/carers were asked whether their child has a disability, long-term illness or pain that put a burden on the family, as shown in Table 7. In 2012, children aged 10 to 15 years were almost three times as likely to have a disability, long-term illness or pain that put a burden on the family compared with those aged 0 to 4 years (12.5% compared with 4.5%).

| | % | 95% CI |
|--------------|--------|-------------|
| Age Group | | |
| 0 to 4 yrs | 4.5 (| 1.3 - 7.7) |
| 5 to 9 yrs | 9.2 (| 5.0 - 13.4) |
| 10 to 15 yrs | 12.5 (| 8.3 - 16.7) |
| Gender | | |
| Boys | 8.2 (| 5.2 - 11.2) |
| Girls | 9.7 (| 6.2 - 13.1) |
| Children | 8.9 (| 6.6 - 11.2) |
| | | |

Figure 1 shows the prevalence of disability among children by geographic area of residence. The prevalence of disability, long-term illness or pain that put burden on the family was slightly higher among children who reside in the country compared with their metro counterparts, however this difference was not statistically significant.

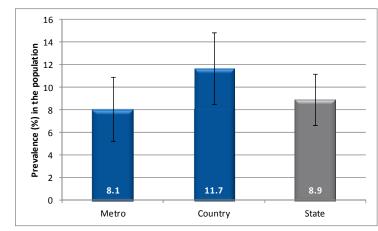


Figure 1: Child with disability, long-term illness or pain that puts a burden on the family, by geographic area, HWSS 2012

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

| | % 95% CI |
|---------|---------------------|
| 2002 | 9.6(7.4-11.9) |
| 2003 | 10.3 (8.3 - 12.4) |
| 2004 | 13.8(10.1 - 17.5) |
| 2005 | 9.7(7.4-11.9) |
| 2006 | 9.2 (7.0 - 11.3) |
| 2007 | 8.1 (5.5 - 10.7) |
| 2008 | 7.3 (5.0 - 9.6) |
| 2009 | 6.8 (5.6 - 8.0) |
| 2010 | 8.2 (6.0 - 10.5) |
| 2011 | 8.4 (5.5 - 11.3) |
| 2012 | 9.2 (6.9 - 11.5) |
| Average | 8.7 (8.1 - 9.4) |

Table 8: Child with disability, long-term illness or pain that puts a burden on the family, HWSS 2004 – 2012

Parents/carers were asked who was the principal carer of the child with the disability, long-term illness or pain. In 2012, the majority of children were cared for by their mother (84.7%).

Parents/carers who reported their child had a disability, long-term illness or pain that put a burden on the family were asked to rate the extent of the burden, as shown in Table 9. Please note that this table is based on small numbers.

| | Not much | | A little | | Fairly big | | Big | | Very big | |
|--------------|----------|--------------|----------|---------------|------------|---------------|--------|--------------|----------|--------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Age Group | | | | | | | | | | |
| 0 to 4 yrs | 17.1 (| 0.0-47.7) | 51.7 (| 14.8-88.6) | 31.2 (| 0.0-65.4) | 0.0 (| 0.0- 0.0) | 0.0 (| 0.0 - 0.0) |
| 5 to 9 yrs | 12.7 (| 0.0-28.5) | 32.5 (| 14.1 - 50.8) | 38.3 (| 13.0-63.6) | 7.0 (| 0.0 - 15.9) | 9.6 (| 0.0-27.5) |
| 10 to 15 yrs | 14.6 (| 3.5 - 25.7) | 46.9 (| 28.6 - 65.2) | 19.8 (| 4.3-35.3) | 13.5 (| 6.0-25.5) | 5.1 (| 0.0 - 10.7) |
| Gender | | | | | | | | | | |
| Boys | 11.3 (| 0.0-23.7) | 34.9 (| 18.1 - 51.7) | 35.0 (| 15.2 - 54.7) | 9.1 (| 0.0 - 19.0) | 9.8 (| 0.0-22.5) |
| Girls | 17.2 (| 3.9-30.6) | 50.6 (| 31.5 - 69.7) | 20.8 (| 3.9 - 37.7) | 9.4 (| 0.0 - 19.3) | 2.0 (| 0.0- 5.9) |
| Children | 14.4 (| 5.3-23.6) | 43.2 (| 30.0 - 56.4) | 27.5 (| 14.3 - 40.6) | 9.3 (| 2.2 - 16.3) | 5.6 (| 0.0 - 12.1) |

Table 9: Burden due to a child with a disability, long-term illness or pain, HWSS 2012

The annual prevalence estimates of the burden are shown in Table 10. The estimates vary widely due to the small numbers reporting.

| | Not much | | A little | | airly big | | Big | Very big | |
|----------|------------------|-----------|---------------|--------|----------------|--------|--------------|----------|--------------|
| | % 95% C | I % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| 2002 | 23.8 (13.9 - 33 | .6) 31.6 | (20.3 - 42.9) | 29.8 (| (18.2 - 41.4) | 9.2 (| 1.4 - 17.0) | 5.6 (| 0.6 - 10.7) |
| 2003 | 18.4 (30.4 - 51 | .5) 41.0 | (30.4 - 51.5) | 33.0 (| (22.9 - 43.1) | 5.2 (| 1.1 - 9.2) | 2.5 (| 0.0 - 5.0) |
| 2004 | 11.9 (4.0 - 19 | .8) 33.4 | (19.5 - 47.3) | 28.4 (| (15.4 - 41.3) | 13.0 (| 1.4 - 24.6) | 13.3 (| 2.0 - 24.7) |
| 2005 | 21.5 (11.6 - 31 | .5) 34.8 | (23.2 - 46.4) | 21.9 (| (11.3 - 32.5) | 18.4 (| 7.8 - 28.9) | 3.4 (| 0.9 - 5.9) |
| 2006 | 25.5 (13.4 - 37 | .6) 31.4 | (18.9 - 43.9) | 25.9 (| (13.5 - 38.3) | 7.8(| 2.3 - 13.4) | 9.4 (| 1.1 - 17.7) |
| 2007 | 7.9 (1.0 - 14 | .8) 34.0 | (18.6 - 49.4) | 26.8 (| (11.9 - 41.8) | 28.2(1 | 0.4 - 46.1) | 3.1 (| 0.3 - 5.8) |
| 2008 | 27.9(11.0 - 44 | .9) 24.8 | (11.3 - 38.4) | 34.7 (| (18.5 - 50.9) | 7.9 (| 0.8 - 15.0) | 4.6 (| 0.5 - 8.8) |
| 2009 | 17.7 (8.9 - 26 | .4)50.8 | (41.6 - 59.9) | 20.1 (| (13.6 - 26.6) | 3.8 (| 1.0 - 6.5) | 7.7 (| 3.4 - 11.9) |
| 2010 | 14.7 (5.9 - 23 | .6)50.3 | (35.7 - 64.9) | 25.8 (| (12.8 - 38.8) | 3.9 (| 0.3 - 7.6) | 5.2 (| 0.0 - 11.8) |
| 2011 | 17.0 (4.0 - 30 |).1) 24.6 | (8.3 - 41.0) | 21.8 (| (6.6 - 37.0) | 20.7 (| 4.9 - 36.6) | 15.8 (| 1.1 - 30.5) |
| 2012 | 14.2 (5.4 - 23 | 8.0) 43.7 | (30.7 - 56.7) | 26.9 (| (14.1 - 39.7) | 9.5 (| 2.4 - 16.5) | 5.7 (| 0.0 - 12.1) |
| A verage | 17.8 (14.9 - 20 | 0.6) 38.9 | (35.2 - 42.6) | 26.3 (| (22.9 - 29.6) | 10.3 (| 8.0 - 12.7) | 6.8 (| 4.9 - 8.7) |

Table 10: Burden due to a child with a disability, long-term illness or pain, HWSS 2002 - 2012

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 are National Health Priority Areas due to their health impact and the potential to reduce their burden.⁶ 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.⁷ The prevalence of ADHD is shown in Table 11.

| | % | 95% CI |
|--------------|-------|------------|
| Age Group | | |
| 2 to 4 yrs | 0.0 (| 0.0-0.0) |
| 5 to 9 yrs | 3.9 (| 0.6 - 7.3) |
| 10 to 15 yrs | 2.8 (| 0.8 - 4.8) |
| Gender | | |
| Boys | 2.6 (| 0.7 - 4.5) |
| Girls | 2.4 (| 0.3-4.5) |
| Children | 2.5 (| 1.1 - 3.9) |

Table 11: Prevalence of ADHD, 2 years and over, HWSS 2012

The annual prevalence estimates of ADHD are shown in Table 12.

| | % 95% CI |
|---------|-------------------|
| 2002 | 3.7 (2.1 - 5.3) |
| 2003 | 3.0 (1.8 - 4.1) |
| 2004 | 4.9 (2.4 - 7.5) |
| 2005 | 3.8 (2.3 - 5.4) |
| 2006 | 2.9 (1.8 - 3.9) |
| 2007 | 3.3 (1.4 - 5.3) |
| 2008 | 2.1 (1.0 - 3.2) |
| 2009 | 2.1 (1.5 - 2.7) |
| 2010 | 1.6 (0.7 - 2.6) |
| 2011 | 2.6 (1.0 - 4.1) |
| 2012 | 2.6 (1.1 - 4.0) |
| Average | 2.8 (2.4 - 3.1) |

Table 12: Prevalence of ADHD, 2 years and over, HWSS 2002 – 2012

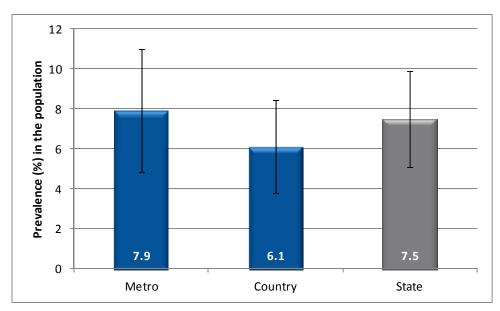
7.2 Developmental problems

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 13.

 Table 13: Prevalence of development problems, HWSS 2012

| | % 95% Cl |
|--------------|--------------------|
| Age Group | |
| 0 to 4 yrs | 5.6 (0.8 - 10.5) |
| 5 to 9 yrs | 9.3 (5.0 - 13.6) |
| 10 to 15 yrs | 7.6(4.1-11.1) |
| Gender | |
| Boys | 8.1 (4.4 - 11.8) |
| Girls | 6.9(3.8-9.9) |
| Children | 7.5 (5.1 - 9.9) |

Figure 2 shows the prevalence of developmental problems among children by geographic area of residence. The prevalence of developmental problems was slightly lower among children from the country compared with children from the metropolitan region; however this difference was not statistically significant.





The annual prevalence estimates of developmental problems are shown in Table 14.

| | % 95% CI |
|---------|-------------------|
| 2002 | 7.1(5.3 - 9.0) |
| 2003 | 8.7 (6.8 - 10.5) |
| 2004 | 9.3 (6.3 - 12.3) |
| 2005 | 6.9 (4.9 - 8.9) |
| 2006 | 6.4 (4.7 - 8.2) |
| 2007 | 6.5 (4.0 - 9.0) |
| 2008 | 7.2 (4.8 - 9.6) |
| 2009 | 6.0 (4.8 - 7.2) |
| 2010 | 5.8 (3.8 - 7.8) |
| 2011 | 6.0 (3.7 - 8.3) |
| 2012 | 7.5 (5.2 - 9.9) |
| Average | 6.9 (6.3 - 7.4) |

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.⁸ In 2012, only one respondent indicated that their child had been diagnosed with Type 1 diabetes. The annual prevalence estimates of diabetes are shown in Table 15.

| | % | 95% CI |
|---------|-------|------------|
| 2002 | 0.0 (| 0.0-0.0) |
| 2003 | 0.0 (| 0.0-0.0) |
| 2004 | 0.0 (| 0.0-0.0) |
| 2005 | 0.1 (| 0.0-0.2) |
| 2006 | 0.2 (| 0.0-0.3) |
| 2007 | 0.2 (| 0.0-0.5) |
| 2008 | 0.0 (| 0.0-0.0) |
| 2009 | 0.2 (| 0.0 - 0.4) |
| 2010 | 0.0 (| 0.0-0.0) |
| 2011 | 0.2 (| 0.0-0.5) |
| 2012 | 0.1 (| 0.0-0.3) |
| Average | 0.1 (| 0.0 - 0.1) |

Table 15: Prevalence of Type 1 diabetes, HWSS 2002 – 2012

7.4 Asthma

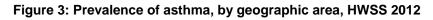
Asthma is a common chronic condition and a National Health Priority Area.⁶ It is a reversible narrowing of the airways in the lungs, with symptoms which include wheezing, coughing, tightness of the chest, breathing difficulty and shortness of breath.⁴ Parents/carers were asked whether a doctor had ever told them their child had asthma and whether their child had symptoms or had taken treatment for asthma during the past 12 months. The prevalence of asthma is shown in Table 16.

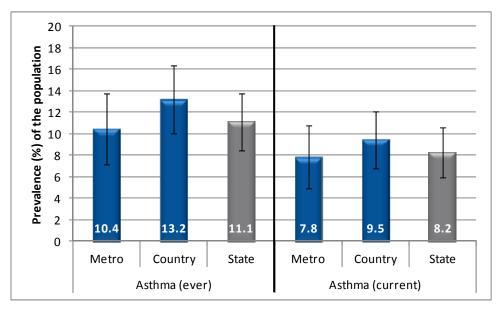
| | Lifeti | Lifetime (ever) | | d (current) |
|--------------|--------|-----------------|--------|--------------|
| | % | 95% CI | % | 95% CI |
| Age Group | | | | |
| 0 to 4 yrs | 5.8 (| 2.1 - 9.5) | 5.4 (| 1.8 - 9.1) |
| 5 to 9 yrs | 13.9 (| 8.7 - 19.0) | 11.9 (| 7.1 - 16.8) |
| 10 to 15 yrs | 13.5 (| 9.0 - 18.0) | 7.7 (| 4.2 - 11.3) |
| Gender | | | | |
| Boys | 10.7 (| 7.2 - 14.3) | 7.3 (| 4.4 - 10.2) |
| Girls | 11.5 (| 7.6 - 15.4) | 9.2 (| 5.6 - 12.8) |
| Children | 11.1 (| 8.5 - 13.7) | 8.2 (| 5.9 - 10.6) |

Table 16: Prevalence of asthma, HWSS 2012

Children aged 10 to 15 years of age were almost twice as likely to be reported as ever having had asthma compared with currently having asthma (13.5% compared with 7.7%). However, this difference was not statistically significant.

Figure 3 shows the prevalence of asthma among children by geographic area of residence. The prevalence of lifetime (ever) and current asthma was slightly higher among children from the country compared with children from the metropolitan region; however this difference was not statistically significant.



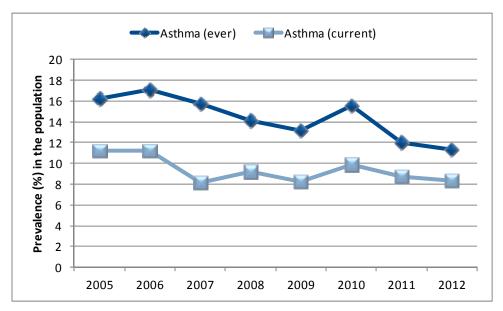


The annual prevalence estimates of asthma are shown in Table 17 and Figure 4. The lifetime prevalence of asthma in children was the lowest recorded to date in 2012 (11.4%) and this was significantly lower compared with the prevalence in 2006 (17.1%). The current asthma prevalence in 2012 (8.3%) was the second lowest that has been recorded, but was not significantly lower compared to previous years.

| | Lifetime (ever) | Period (current) |
|---------|---------------------|---------------------|
| | % 95% CI | % 95% Cl |
| 2005 | 16.2(13.4-19.0) | 11.2 (8.7 - 13.7) |
| 2006 | 17.1(14.5 - 19.7) | 11.3 (9.0 - 13.5) |
| 2007 | 15.7(12.2-19.3) | 8.2 (5.7 - 10.6) |
| 2008 | 14.1(10.9・17.3) | 9.2 (6.4 - 12.1) |
| 2009 | 13.2(11.4-14.9) | 8.3 (6.8 - 9.7) |
| 2010 | 15.6(12.6-18.6) | 9.9 (7.4 - 12.4) |
| 2011 | 12.0(9.0-15.1) | 8.7 (6.0 - 11.4) |
| 2012 | 11.4 (8.8 - 14.0) | 8.3 (6.0 - 10.6) |
| Average | 14.4(13.5 - 15.3) | 9.4 (8.6 - 10.1) |

Table 17: Prevalence of asthma, HWSS 2005 – 2012

Figure 4: Prevalence of asthma over time, children 15 years and under, HWSS 2005 – 2012



7.5 Respiratory problem other than asthma

Parents/carers were asked whether a doctor had told them their child had a respiratory problem other than asthma, such as chronic bronchitis, that lasted six months or more. The prevalence of respiratory problems is shown in Table 18.

| | Lifeti | Lifetime (ever) | | Period (current) | |
|--------------|--------|-----------------|-------|------------------|--|
| | % | 95% CI | % | 95% CI | |
| Age Group | | | | | |
| 0 to 4 yrs | 3.3 (| 0.6-6.0) | 1.7 (| (0.0 - 3.7) | |
| 5 to 9 yrs | 1.2 (| 0.0 - 2.7) | 0.6 (| (0.0 - 1.6) | |
| 10 to 15 yrs | 0.9 (| 0.0 - 2.1) | 0.4 (| (0.0 - 0.9) | |
| Gender | | | | | |
| Boys | 2.4 (| 0.6 - 4.3) | 1.0 (| (0.0 - 2.2) | |
| Girls | 1.1 (| 0.1 - 2.2) | 0.8 (| (0.0 - 1.7) | |
| Children | 1.8 (| 0.7 - 2.9) | 0.9 (| (0.1 - 1.6) | |

Table 18: Prevalence of respiratory related conditions, HWSS 2012

Note: These figures are based on small numbers and may not be wholly representative of the child population.

The annual prevalence estimates of respiratory problems are shown in Table 19. Due to changes in the wording of the questions the data is only comparable from 2007 onwards.

| | Lifetime (ever) | Period (current) |
|---------|-------------------|------------------|
| | % 95% Cl | % 95% CI |
| 2007 | 1.4 (0.1 - 2.8) | 1.2 (0.0 - 2.6) |
| 2008 | 0.8 (0.2 - 1.4) | 0.6 (0.0 - 1.2) |
| 2009 | 1.5 (0.9 - 2.0) | 0.7 (0.3 - 1.1) |
| 2010 | 0.7 (0.1 - 1.3) | 0.3 (0.0 - 0.5) |
| 2011 | 0.5 (0.0 - 1.3) | 0.2 (0.0 - 0.4) |
| 2012 | 1.8 (0.7 - 2.8) | 0.9 (0.2 - 1.6) |
| Average | 1.4 (1.0 - 1.7) | 0.7 (0.4 - 1.0) |

Table 19: Prevalence of respiratory related conditions, HWSS 2007 – 2012

Note: These figures are based on small numbers and may not be wholly representative of the child population.

7.6 Injuries

Injury is a leading cause of hospitalisation and death in Australia and is a National Health Priority Area.⁶ Parents/carers were asked whether their child had injuries in the past 12 months that required treatment from a health professional, as shown in Table 20.



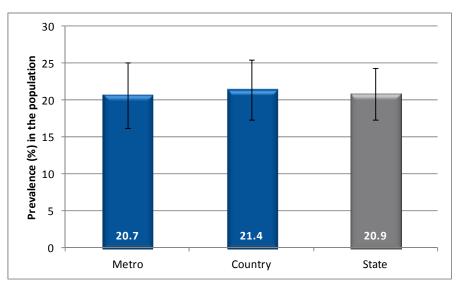
| | % | 95% CI |
|--------------|--------|---------------|
| Age Group | | |
| 0 to 4 yrs | 12.3 (| 7.0 - 17.6) |
| 5 to 9 yrs | 18.8 (| 12.3 - 25.4) |
| 10 to 15 yrs | 30.1 (| 24.0 - 36.2) |
| Gender | | |
| Boys | 24.0 (| 18.6 - 29.3) |
| Girls | 17.6 (| 13.1 - 22.1) |
| Children | 20.9 (| 17.3 - 24.4) |

Boys were more likely to have had an injury requiring treatment from a health professional in the last year compared with girls (24.0% compared with 17.6%). This difference was not statistically significant.

Children aged 10-15 years were almost 2.5 times more likely to have had an injury requiring treatment from a health professional in the last year compared to children aged 0-4 years (30.1% compared to 12.3%).

Figure 5 shows the prevalence of injury in the past 12 months by geographic area of residence.

Figure 5: Prevalence of injuries in the past 12 months requiring treatment from a health professional, by geographic area, HWSS 2012

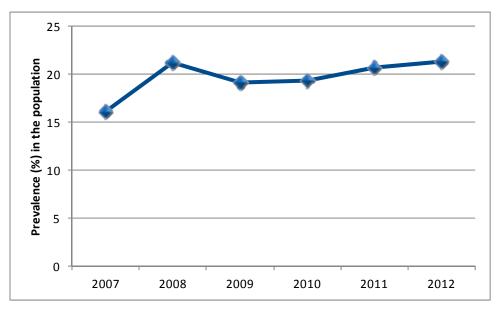


The annual prevalence estimates of injury are shown in Table 21 and Figure 6. The prevalence of injury in the last 12 months for children aged 15 years and under in 2012 (21.3%) was the highest recorded to date, however this was not significantly different from any of the previous years.

| Table 21: Annual prevalence of injuries in the past 12 months requiring treatment from a health |
|---|
| professional, HWSS 2007 – 2012 |

| | % 95% Cl |
|---------|----------------------|
| 2007 | 16.1(11.7 - 20.6) |
| 2008 | 21.2 (17.4 - 25.0) |
| 2009 | 19.1(17.0・21.2) |
| 2010 | 19.3(15.9 - 22.8) |
| 2011 | 20.7(16.9 - 24.5) |
| 2012 | 21.3 (17.8 - 24.9) |
| Average | 20.4 (19.1 - 21.6) |





The mean number of injuries that required treatment from a health professional in the past 12 months is shown in Table 22.

Table 22: Mean number of injuries, HWSS 2012

•

| | \overline{x} | 95% CI |
|--------------|----------------|------------|
| Age Group | | |
| 0 to 4 yrs | 0.1 (| 0.1 - 0.2) |
| 5 to 9 yrs | 0.3 (| 0.2 - 0.4) |
| 10 to 15 yrs | 0.5 (| 0.4 - 0.7) |
| Gender | | |
| Boys | 0.4 (| 0.3 - 0.5) |
| Girls | 0.3 (| 0.2-0.4) |
| Children | 0.3 (| 0.3 - 0.4) |

The mean number of injuries that required treatment from a health professional in the past 12 months since 2007 is shown in Table 23.

| | - r 95% Cl |
|---------|-------------------|
| | χ 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) |
| | |
| Average | 0.3 (0.3 - 0.3) |

Table 23: Mean number of injuries, HWSS 2007 – 2012

8. HEALTH SERVICE UTILISATION

Health services are the way in which health care is provided to patients and the general population and consist of many different forms, including GP, dental, mental and alternative health services.⁵ Parents/carers were asked whether their child had used a number of common health services within the past 12 months, shown in Table 24. The annual prevalence estimates of health service use are displayed in Table 25.

The mean number of visits to each health service is shown in Table 26 and the annual mean numbers of visits to each health service use are shown in Table 27.

Table 24: Health service utilisation, HWSS 2012

| | Primary (a) | | ry (a) Hospital based (b) | | | A | Allied (c) | | | Dental | | | Mental (d) | | | Alternative (e) | | |
|--------------|-------------|--------|---------------------------|--------|--------|-------|------------|--------|-------|--------|--------|-------|------------|-------|------|-----------------|-------|------|
| - | % | 95% | CI | % | 95% | CI | % | 95% | CI | % | 95% | CI | % | 95% (| | % | 95% | CI |
| Age Group | | | | | | | | | | | | | | | | | | |
| 0 to 4 yrs | 92.4 (| 87.2 - | 97.6) | 33.4 (| 25.5 - | 41.3) | 20.5 (| 13.8 - | 27.3) | 8.8 (| 3.8 - | 13.9) | 0.2 (| 0.0 - | 0.5) | 3.6 (| 1.0 - | 6.2) |
| 5 to 9 yrs | 82.0 (| 76.2 - | 87.8) | 21.8 (| 15.2 - | 28.3) | 30.7 (| 23.7 - | 37.8) | 76.7 (| 69.9 - | 83.5) | 5.2 (| 2.0 - | 8.4) | 3.7 (| 1.2 - | 6.1) |
| 10 to 15 yrs | 71.9 (| 65.8 - | 78.0) | 20.3 (| 15.2 - | 25.3) | 38.8 (| 32.3 - | 45.3) | 86.9 (| 82.4 - | 91.4) | 6.2 (| 2.9 - | 9.5) | 3.3 (| 1.2 - | 5.3) |
| Gender | | | | | | | | | | | | | | | | | | |
| Boys | 79.2 (| 74.0 - | 84.3) | 29.9 (| 24.2 - | 35.7) | 30.9 (| 25.3 - | 36.6) | 57.1 (| 50.9 - | 63.3) | 4.2 (| 1.8 - | 6.6) | 3.4 (| 1.5 - | 5.2) |
| Girls | 84.1 (| 79.8 - | 88.4) | 19.8 (| 15.2 - | 24.5) | 29.9 (| 24.3 - | 35.5) | 59.8 (| 53.4 - | 66.2) | 3.6 (| 1.6 - | 5.7) | 3.6 (| 1.6 - | 5.6) |
| Children | 81.6 (| 78.2 - | 85.0) | 25.0 (| 21.2 - | 28.8) | 30.4 (| 26.4 - | 34.4) | 58.4 (| 54.0 - | 62.9) | 3.9 (| 2.4 - | 5.5) | 3.5 (| 2.1 - | 4.9) |

(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.

Table 25: Health service utilisation, HWSS 2004 – 2012

| | Primary (a) | | Primary (a) | | | Н | Hospital Based (b) Allied (c) | | | | Dental | | | Mental (d) | | | Alternative (e) | | |
|---------|-------------|--------|-------------|--------|--------|-------|-------------------------------|--------|-------|--------|--------|-------|-------|------------|------|-------|-----------------|------|--|
| | % | 95% | CI | % | 95% | 5 CI | % | 95% | CI | % | 95% | CI | % | 95% | CI | % | 95% (| CI | |
| 2004 | 85.0 (| 81.6 - | 88.5) | na | | | 16.7 (| 12.8 - | 20.6) | 58.6 (| 53.4 - | 63.8) | na | | | na | | | |
| 2005 | 81.9 (| 79.0 - | 84.8) | 24.3 (| 21.2 - | 27.5) | 22.6 (| 19.5 - | 25.7) | 61.2 (| 57.5 - | 64.8) | 3.4 (| 2.1 - | 4.7) | 3.6 (| 2.4 - | 4.9) | |
| 2006 | 79.0 (| 75.8 - | 82.2) | 23.8 (| 20.5 - | 27.1) | 25.5 (| 22.1 - | 28.9) | 59.9 (| 56.0 - | 63.8) | 2.9 (| 1.8 - | 4.0) | 3.0 (| 1.9 - | 4.2) | |
| 2007 | 81.9 (| 78.3 - | 85.6) | 24.7 (| 20.6 - | 28.9) | 24.9 (| 20.7 - | 29.1) | 57.7 (| 52.7 - | 63.8) | 3.8 (| 2.2 - | 5.4) | 4.5 (| 2.7 - | 6.3) | |
| 2008 | 79.7 (| 76.0 - | 83.4) | 23.0 (| 19.1 - | 26.9) | 23.7 (| 19.8 - | 27.5) | 59.3 (| 54.7 - | 63.9) | 3.7 (| 2.1 - | 5.3) | 3.4 (| 1.9 - | 5.0) | |
| 2009 | 78.4 (| 76.2 - | 80.6) | 26.7 (| 24.1 - | 29.4) | 23.7 (| 21.4 - | 26.0) | 60.2 (| 57.1 - | 63.3) | 3.5 (| 2.7 - | 4.3) | 3.5 (| 2.7 - | 4.3) | |
| 2010 | 84.0 (| 80.9 - | 87.1) | 26.9 (| 23.1 - | 30.6) | 25.6 (| 22.0 - | 29.2) | 59.9 (| 55.8 - | 64.0) | 3.0 (| 1.9 - | 4.1) | 3.9 (| 2.3 - | 5.4) | |
| 2011 | 82.1 (| 78.7 - | 85.6) | 23.5 (| 19.5 - | 27.4) | 24.7 (| 20.7 - | 28.7) | 60.3 (| 55.7 - | 65.0) | 2.1 (| 0.8 - | 3.4) | 3.7 (| 1.9 - | 5.4) | |
| 2012 | 81.0 (| 77.6 - | 84.4) | 24.8 (| 21.1 - | 28.4) | 30.8 (| 26.9 - | 34.8) | 60.6 (| 56.3 - | 64.8) | 4.1 (| 2.5 - | 5.7) | 3.5 (| 2.2 - | 4.9) | |
| Average | 80.6 (| 79.6 - | 81.5) | 25.5 (| 24.4 - | 26.7) | 24.2 (| 23.1 - | 25.2) | 60.9 (| 59.7 - | 62.2) | 3.6 (| 3.1 - | 4.0) | 3.7 (| 3.3 - | 4.2) | |

(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.

| | Primary (a) | | Primary (a) | | | Hospita | al based | (b) | Allied (c) | | | Dental | | | Mental (d) | | | Alternative (e) | | |
|--------------|---------------|-------|-------------|---------------|-------|---------|---------------|-------|------------|---------------|-------|--------|---------------|-------|------------|---------------|-------|-----------------|--|--|
| | $\frac{-}{x}$ | 95% (| CI | $\frac{-}{x}$ | 95% | CI | $\frac{1}{x}$ | 95% (| CI | $\frac{-}{x}$ | 95% (| CI | $\frac{1}{x}$ | 95% | CI | $\frac{-}{x}$ | 95% (| CI | | |
| Age Group | | | | | | | | | | | | | | | | | | | | |
| 0 to 4 yrs | 4.4 (| 3.7 - | 5.1) | 0.5 (| 0.4 - | 0.7) | 1.0 (| 0.4 - | 1.6) | 0.1 (| 0.0 - | 0.2) | 0.0 (| 0.0 - | 0.0) | 0.1 (| 0.0 - | 0.2) | | |
| 5 to 9 yrs | 3.1 (| 2.5 - | 3.8) | 0.3 (| 0.2 - | 0.4) | 1.6 (| 0.8 - | 2.3) | 1.2 (| 1.0 - | 1.3) | 0.2 (| 0.1 - | 0.4) | 0.1 (| 0.0 - | 0.2) | | |
| 10 to 15 yrs | 2.5 (| 2.0 - | 2.9) | 0.3 (| 0.3 - | 0.4) | 1.9 (| 1.3 - | 2.5) | 1.9 (| 1.7 - | 2.2) | 0.6 (| 0.2 - | 0.9) | 0.1 (| 0.0 - | 0.1) | | |
| Gender | | | | | | | | | | | | | | | | | | | | |
| Boys | 3.3 (| 2.8 - | 3.8) | 0.5 (| 0.4 - | 0.6) | 1.4 (| 1.0 - | 1.9) | 1.1 (| 0.9 - | 1.2) | 0.3 (| 0.1 - | 0.5) | 0.1 (| 0.0 - | 0.1) | | |
| Girls | 3.3 (| 2.8 - | 3.8) | 0.3 (| 0.2 - | 0.4) | 1.6 (| 1.0 - | 2.2) | 1.2 (| 1.0 - | 1.4) | 0.2 (| 0.0 - | 0.4) | 0.1 (| 0.0 - | 0.2) | | |
| Children | 3.3 (| 2.9 - | 3.7) | 0.4 (| 0.3 - | 0.5) | 1.5 (| 1.1 - | 1.9) | 1.1 (| 1.0 - | 1.2) | 0.3 (| 0.1 - | 0.4) | 0.1 (| 0.1 - | 0.1) | | |

Table 26: Mean number of visits to health services in the past 12 months, HWSS 2012

(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.

| | Primary (a) | Hospital based (b) | Allied (c) | Dental | Mental (d) | Alternative (e) |
|----------|-----------------|--------------------|---------------------|-------------------|-------------------|-------------------|
| | - x 95% Cl | 95% Cl | | 95% CI | 95% CI | 95% CI |
| 2004 | 3.1 (2.8 - 3.5 |) na | 0.9 (0.6 - 1.2) | 1.3 (1.1 - 1.6) | na | na |
| 2005 | 3.2 (2.9 - 3.6 |) 0.4 (0.3 - 0.5 |) 1.0 (0.7 - 1.3) | 1.2 (1.0 - 1.3) | 0.2 (0.1 - 0.3) | 0.1 (0.1 - 0.1) |
| 2006 | 3.3 (3.0 - 3.7 |) 0.4 (0.3 - 0.5 |) 1.4 (1.0 - 1.7) | 1.2 (1.0 - 1.3) | 0.2 (0.1 - 0.4) | 0.1 (0.0 - 0.1) |
| 2007 | 2.9 (2.6 - 3.2 |) 0.4 (0.3 - 0.5 |) 1.6 (0.8 - 2.5) | 1.1 (1.0 - 1.3) | 0.2 (0.1 - 0.3) | 0.3 (0.0 - 0.6) |
| 2008 | 3.0 (2.7 - 3.4 |) 0.4 (0.3 - 0.5 |) 1.0 (0.7 - 1.2) | 1.0 (0.9 - 1.2) | 0.5 (0.1 - 0.9) | 0.1 (0.0 - 0.2) |
| 2009 | 2.9 (2.7 - 3.0 |) 0.5 (0.4 - 0.5 |) 0.9 (0.8 - 1.1) | 1.2 (1.1 - 1.2) | 0.2 (0.1 - 0.2) | 0.1 (0.1 - 0.1) |
| 2010 | 3.2 (2.9 - 3.5 |) 0.4 (0.4 - 0.5 |) 1.3 (0.8 - 1.7) | 1.1 (1.0 - 1.2) | 0.2 (0.1 - 0.3) | 0.1 (0.0 - 0.2) |
| 2011 | 3.1 (2.7 - 3.4 |) 0.5 (0.3 - 0.6 |) 1.5 (0.9 - 2.1) | 1.1 (1.0 - 1.3) | 0.1 (0.0 - 0.1) | 0.1 (0.1 - 0.2) |
| 2012 | 3.2 (2.9 - 3.6 |) 0.4 (0.3 - 0.5 |) 1.5 (1.1 - 1.9) | 1.2 (1.0 - 1.3) | 0.3 (0.1 - 0.4) | 0.1 (0.1 - 0.1) |
| A verage | 3.1 (3.0 - 3.2 |) 0.4 (0.4 - 0.5 |) 1.2 (1.1 - 1.3) | 1.2 (1.1 - 1.2) | 0.2 (0.2 - 0.3) | 0.1 (0.1 - 0.1) |

(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.⁸ Data presented in this section are split into two groups. Tables reporting only 2012 data are presented in birth cohorts with 2008-2012 capturing children aged 0-4 years at the time of interview, 2003-2007 for children aged 5-9 years at the time of interview and 1997-2002 for children aged 10-15 years at the time of interview. A gender breakdown for 2012 data is supplied only for children aged 0-4 years. Data reported by year from 2002-2012 is provided only for children aged 0-4 years at the time of interview. Some of the data is therefore reported for smaller numbers of respondents due to the age specifications and this may lead to larger variation in the estimates reported compared to what is reported in other sections.

9.1 Birth weight

Birth weight is a key indicator of infant health, with low birth weight defined by the World Health Organization (WHO) as less than 2,500 grams .⁹ Babies born with a low birth weight have a greater risk of poor health and mortality and are more likely to develop significant disabilities.⁹ The mean birth weight by birth cohort is shown in Table 28 and by gender for 0-4 year olds in Table 29.

| | $\frac{-}{x}$ | 95% CI |
|--------------|---------------|---------------------|
| Birth Cohort | | |
| 2008-2012 | 3198.4 (| (3083.9 - 3312.8) |
| 2003-2007 | 3309.0 (| (3205.2 - 3412.8) |
| 1997-2002 | 3317.9 (| (3249.5 - 3386.2) |

Table 28: Mean birth weight (grams) by birth cohort, HWSS 2012

| | \overline{x} | 95% CI |
|----------|----------------|-------------------|
| Gender | | |
| Boys | 3209.8 (| 3046.4 - 3373.3) |
| Girls | 3186.0 (| 3023.8 - 3348.3) |
| Children | 3198.4 (| 3083.3 - 3313.5) |

Table 29: Mean birth weight (grams), 0 – 4 year olds, HWSS 2012

Figure 7 shows the mean birth weight of children aged 0-4 years at the time of interview by geographic area of residence.

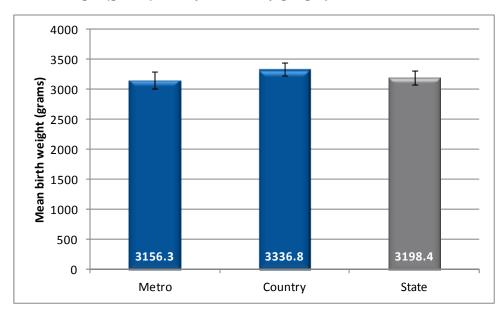


Figure 7: Mean birth weight (grams), 0 – 4 year olds, by geographic area, HWSS 2012

| | $\frac{1}{x}$ | 95% Cl |
|---------|---------------|-------------------|
| 2002 | 3360.7 (| 3278.0 - 3443.4) |
| 2003 | 3376.0 (| 3298.4 - 3453.6) |
| 2004 | 3331.6 (| 3187.0 - 3476.1) |
| 2005 | 3355.2 (| 3276.7 - 3433.7) |
| 2006 | 3339.8 (| 3268.4 - 3411.3) |
| 2007 | 3456.0 (| 3334.8 - 3577.3) |
| 2008 | 3245.6 (| 3147.4 - 3343.8) |
| 2009 | 3406.0 (| 3324.5 - 3487.5) |
| 2010 | 3339.8 (| 3238.0 - 3441.5) |
| 2011 | 3318.4 (| 3208.1 - 3428.8) |
| 2012 | 3202.2 (| 3089.3 - 3315.1) |
| Average | 3333.7 (| 3305.7 - 3361.7) |

Table 30: Mean birth weight (grams), 0-4 year olds, HWSS 2002 - 2012

The proportion of children born with a low birth weight, by birth cohort, is shown in Table 31 and the proportion by gender is shown in Table 32.

Table 31: Proportion of children born with a low birth weight, by birth cohort, HWSS 2012

| | % | 95% CI |
|--------------|--------|-------------|
| Birth Cohort | | |
| 2008-2012 | 14.0 (| 7.1 - 20.8) |
| 2003-2007 | 12.1 (| 6.4 - 17.8) |
| 1997-2002 | 4.5 (| 1.7 - 7.2) |

Table 32: Proportion of children born with a low birth weight, aged 0-4 year olds, HWSS 2012

| | % | 95% CI |
|----------|--------|-------------|
| Gender | | |
| Boys | 15.6 (| 5.1 - 26.1) |
| Girls | 12.2 (| 3.6 - 20.8) |
| Children | 14.0 (| 7.1 - 20.8) |

The annual proportion of children born with a low birth weight is shown in Table 33. The proportion of 0-4 year olds with a low birth weight in 2012 was the highest recorded to date (13.8%). However this was not statistically significantly different from other years, except 2009.

| | Weight <2500 gms at birth or told baby was a low weight baby |
|---------|---|
| | % 95% CI |
| 2002 | 6.4 (3.1 - 9.7) |
| 2003 | 4.7 (1.9 - 7.6) |
| 2004 | 5.5 (1.1 - 9.9) |
| 2005 | 7.3(3.6-11.0) |
| 2006 | 6.2 (3.1 - 9.2) |
| 2007 | 6.5 (1.6 - 11.3) |
| 2008 | 9.0 (3.8 - 14.1) |
| 2009 | 2.9 (0.5 - 5.2) |
| 2010 | 10.3 (5.4 - 15.2) |
| 2011 | 10.4 (3.8 - 17.1) |
| 2012 | 13.8 (7.1 - 20.5) |
| Average | 7.5 (6.2 - 8.8) |

Table 33: Proportion of children born with a low birth weight, 0-4 year olds, HWSS 2002 - 2012

9.2 Breastfeeding

Breastfeeding is an important contributor to infant health, as it promotes the survival, growth, development and health of infants and young children⁹. It helps protect against many conditions, including diarrhoea, respiratory infections, middle ear infections, diabetes, and allergic diseases. Hence, Australia's national dietary guidelines strongly recommend exclusive breastfeeding for infants up to about six months.¹⁰ The prevalence of breastfeeding is shown in Table 34 for each birth cohort and Table 35 by gender for 0-4 year olds. The annual prevalence estimates are shown in Table 36.

| | | astfed less n 6 months | month | astfed 6 ns or more water only | mon | eastfed 6 ths or more ther liquid or solid | exclu | eastfed sively for 6 ns or more | deter long | able to mine how breastfed clusivley | Didn't | breastfeed |
|--------------|--------|---------------------------|-------|--------------------------------------|--------|---|--------|---------------------------------------|---------------|---|--------|--------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Birth Cohort | | | | | | | | | | | | |
| 2008-2012 | 28.5 (| (21.2 - 35.8) | 8.0 (| 3.3 - 12.8) | 31.7 (| 23.6 - 39.8) | 12.6 (| 7.1 - 18.1) | 5.8 (| 1.8 - 9.8) | 13.4 (| 6.6 - 20.2) |
| 2003-2007 | 25.7 (| (19.1 - 32.4) | 8.5 (| 4.3 - 12.7) | 31.4 (| 24.3 - 38.5) | 21.6 (| 14.9 - 28.3) | 4.1 (| 1.7 - 6.6) | 8.6 (| 3.9 - 13.3) |
| 1997-2002 | 30.6 (| (24.5 - 36.7) | 9.0 (| 5.2 - 12.9) | 30.4 (| 24.4 - 36.5) | 12.8 (| 8.2 - 17.4) | 7.2 (| 4.0 - 10.4) | 9.9 (| 5.7 - 14.2) |

 Table 34: Prevalence of breastfeeding, by birth cohort, HWSS 2012

Table 35: Prevalence of breastfeeding, 0–4 year olds, HWSS 2012

| | | astfed less 6 months | month | eastfed 6 ns or more water only | mont | eastfed 6 ths or more ther liquid or solid | exclu | eastfed sively for 6 hs or more | detei Iong | hable to rmine how breastfed clusivley | Didn't | breastfeed |
|----------|--------|-------------------------|--------|---------------------------------------|--------|---|--------|---------------------------------------|---------------|---|--------|--------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Gender | | | | | | | | | | | | |
| Boys | 32.9 (| 22.7 - 43.1) | 4.0 (| 0.0 - 8.7) | 35.6 (| 24.0 - 47.1) | 10.4 (| 3.3 - 17.4) | 4.3 (| 0.5 - 8.0) | 12.9 (| 3.9 - 22.0) |
| Girls | 23.9 (| 13.2 - 34.5) | 12.3 (| 3.8 - 20.7) | 27.7 (| 16.3 - 39.0) | 15.0 (| 6.4 - 23.5) | 7.4 (| 0.3 - 14.5) | 13.8 (| 3.5 - 24.1) |
| Children | 28.5 (| 21.1 - 35.8) | 8.0 (| 3.2 - 12.9) | 31.7 (| 23.5 - 39.9) | 12.6 (| 7.1 - 18.1) | 5.8 (| 1.8 - 9.8) | 13.4 (| 6.5 - 20.2) |

| | | astfed less 6 months | mont | eastfed 6 ns or more water only | mont | eastfed 6 hs or more ther liquid or solid | exclu | eastfed sively for 6 nonths | deter Iong | able to mine how breastfed clusively | Never | breastfed |
|---------|--------|-------------------------|--------|---------------------------------------|--------|--|--------|-----------------------------------|---------------|---|--------|--------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% Cl |
| 2003 | 30.4 (| 24.3 - 36.4) | 2.3 (| 0.9 · 3.6) | 37.6 (| 31.1 - 44.1) | 13.8 (| 9.1 - 18.5) | 2.7 (| 0.5 - 5.0) | 13.3 (| 8.9 - 17.7) |
| 2004 | 32.4 (| 22.7 - 42.0) | 6.6 (| 1.6 - 11.7) | 32.9 (| 23.0 - 42.9) | 14.6 (| 7.0 - 22.2) | 5.4 (| 2.5 - 8.3) | 8.0 (| 2.2 - 13.9) |
| 2005 | 32.2 (| 25.9 - 38.5) | 7.2 (| 3.6 - 10.8) | 25.9 (| 19.9 - 31.8) | 13.5 (| 8.7 - 18.3) | 14.1 (| 8.9 - 19.3) | 7.1(| 3.7 - 10.6) |
| 2006 | 30.0 (| 24.3 - 35.7) | 9.8 (| 6.0 - 13.7) | 24.7 (| 19.0 - 30.4) | 17.3 (| 12.1 - 22.5) | 11.4 (| 7.2 - 15.5) | 6.7 (| 3.2 - 10.3) |
| 2007 | 34.8 (| 25.4 - 44.2) | 12.1 (| 6.3 - 18.0) | 15.5 (| 8.6 - 22.5) | 15.6 (| 8.8 - 22.4) | 13.4 (| 7.0 - 19.8) | 8.5 (| 3.2 - 13.8) |
| 2008 | 23.2 (| 15.4 - 31.1) | 6.0 (| 2.2 - 9.8) | 25.1 (| 17.0 - 33.1) | 25.3 (| 17.3 - 33.4) | 9.6 (| 4.9 - 14.3) | 10.8 (| 4.9 - 16.7) |
| 2009 | 27.3 (| 20.6 - 33.9) | 10.7 (| 5.7 - 15.7) | 33.0 (| 25.4 - 40.5) | 15.7 (| 10.2 - 21.3) | 6.0 (| 2.9 - 9.1) | 7.3 (| 2.8 - 11.9) |
| 2010 | 31.5 (| 24.2 - 38.7) | 11.3 (| 5.9 - 16.6) | 24.4 (| 17.5 - 31.3) | 19.1 (| 12.4 - 25.9) | 6.7 (| 2.8 - 10.5) | 7.0 (| 2.8 - 11.2) |
| 2011 | 36.6 (| 27.8 - 45.5) | 4.8 (| 1.7 - 7.9) | 29.0 (| 20.5 - 37.5) | 18.7 (| 10.6 - 26.7) | 8.7 (| 4.2 - 13.3) | 2.2 (| 0.1 - 4.3) |
| 2012 | 28.5 (| 21.3 - 35.7) | 8.0 (| 3.3 - 12.7) | 31.8 (| 23.8 - 39.8) | 12.6 (| 7.2 - 18.0) | 5.9 (| 1.9- 9.8) | 13.2 (| 6.5 - 19.9) |
| Average | 30.4 (| 28.1 - 32.6) | 7.7 (| 6.5 - 9.0) | 28.7 (| 26.4 - 30.9) | 16.2 (| 14.3 - 18.1) | 8.8 (| 7.4 - 10.2) | 8.2 (| 6.8 - 9.6) |

Table 36: Prevalence of breastfeeding, 0–4 year olds, HWSS 2003 – 2012

9.3 Speech

From a very young age children begin to develop language. There are two distinctions in difficulties developing speech: 1) speech delay, which is when speech follows the usual pattern of speech development, but is slower than normal and 2) speech disorder, which is when speech does not follow the usual pattern of development.¹¹ The proportion of children who were perceived to be late in starting to talk and the proportion of children perceived to need and received professional help (speech therapy) are shown in Table 37 by birth cohort.

Table 37: Proportion of children late talking and needing professional help with speech, 2 year olds and over, by birth cohort, HWSS 2012

| | Child was late talking | | chi profe | nts thought ld needed ssional help h speech | Child received professional help with speech (a) | | |
|--------------|---------------------------|--------------|--------------|--|--|----------------|--|
| | % | 95% CI | % | 95% CI | % | 95% CI | |
| Birth Cohort | | | | | | | |
| 2008-2010 | 19.1 (| 10.9 - 27.2) | 8.6 | (2.9 - 14.3) | 88.7 (| 75.5 - 100.0) | |
| 2003-2007 | 16.7 (| 11.0 - 22.4) | 25.0 (| (18.4 - 31.6) | 92.1 (| 85.4 - 98.8) | |
| 1997-2002 | 12.9 (| 8.5 - 17.3) | 21.7 | (16.2 - 27.2) | 96.6 (| 91.7 - 100.0) | |

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

10. LIFESTYLE FACTORS

There are many factors that influence a person's health, including genetics, lifestyle and environmental (including social) factors. These factors may have a positive effect on health, such as a high consumption of fruit and vegetables, or a negative effect, such as physical inactivity.⁵ These modifiable lifestyle behaviours are also associated with the onset of some physiological risk factors, such as obesity.

10.1 Physical Activity

Physical inactivity is a behavioural risk factor associated with several chronic health conditions, including coronary heart disease, stroke and diabetes. Being physically active reduces the risk of developing such conditions, while also improving general wellbeing.¹² Parents/carers were asked to rate their child's physical activity level, as shown in Table 38.

| | Very active | | Active | | Moderately active | | Not v | ery active | Not at all active | |
|--------------|-------------|---------------|--------|---------------|-------------------|---------------|-------|--------------|-------------------|-------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Age Group | | | | | | | | | | |
| 5 to 9 yrs | 53.5 (| 45.8 - 61.2) | 32.8 (| 25.6 - 40.0) | 11.3 (| 6.2 - 16.4) | 1.5 (| 0.0 - 3.4) | 0.9 (| 0.0 - 2.6) |
| 10 to 15 yrs | 46.5 (| 39.9 - 53.1) | 28.1 (| 22.1 - 34.1) | 17.4 (1 | 12.5 - 22.3) | 8.0 (| 4.4 - 11.5) | 0.1 (| 0.0- 0.2) |
| Gender | | | | | | | | | | |
| Boys | 55.2 (| 48.1 - 62.3) | 25.4 (| 19.1 - 31.7) | 11.9 (| 7.3 - 16.5) | 6.7 (| 3.2 - 10.1) | 0.8 (| 0.0 - 2.3) |
| Girls | 43.9 (| 36.9 - 50.8) | 35.2 (| 28.5 - 42.0) | 17.5 (<i>'</i> | 12.2 - 22.9) | 3.4 (| 0.9- 5.9) | 0.0 (| 0.0 - 0.0) |
| Children | 49.6 (| 44.6 - 54.7) | 30.2 (| 25.6 - 34.8) | 14.7 (1 | 11.1 - 18.2) | 5.1 (| 2.9 - 7.2) | 0.4 (| 0.0 - 1.2) |

Table 38: Parent-rated physical activity for children 5–15 years, HWSS 2012

Children aged 10 to 15 years were significantly more likely to be rated as not very active compared with 5 to 9 year olds (8.0% compared to 1.5%).

The annual estimates of physical activity ratings are shown in Table 39.

| | Very a | ctive | Active | | Modera | tely active | Not v | ery active | Not at | t all active |
|----------|-------------|--------------|--------------|-------|----------|--------------|-------|-------------|--------|--------------|
| | % 95 | 5% CI | % 95% | CI | % | 95% CI | % | 95% CI | % | 95% CI |
| 2005 | 48.8 (44.3 | 3 - 53.3) 2 | 8.6 (24.6 - | 32.6) | 17.4(1 | 3.8 - 20.9) | 5.0 (| 3.0 - 6.9) | 0.2 (| 0.0 - 0.6) |
| 2006 | 50.3 (46.2 | 2 - 54.4) 2 | 8.7 (25.0 - | 32.3) | 18.5(1 | 5.5 · 21.6) | 2.5 (| 1.3 - 3.6) | 0.0 (| 0.0 - 0.1) |
| 2007 | 51.5 (45.7 | 7 - 57.2) 2 | 6.0 (21.0 - | 30.9) | 19.2(1 | 4.7 · 23.7) | 2.8 (| 1.0 - 4.7) | 0.5 (| 0.0 - 1.5) |
| 2008 | 53.2 (47.9 | 9 58.6) 2 | 6.9 (22.2 - | 31.7) | 14.6(1 | 0.8 - 18.3) | 4.8 (| 2.7 - 7.0) | 0.4 (| 0.0 - 1.0) |
| 2009 | 47.8 (45.3 | 3 - 50.3) 3 | 2.8 (30.5 - | 35.2) | 15.4(1 | 3.6 - 17.1) | 3.3 (| 2.5 - 4.2) | 0.6 (| 0.3 - 1.0) |
| 2010 | 51.6 (46.6 | 6 - 56.5) 2 | 9.3 (24.8 - | 33.7) | 14.0(1 | 0.7 · 17.4) | 4.6 (| 2.4 - 6.7) | 0.6 (| 0.0 - 1.3) |
| 2011 | 52.2 (46.7 | 7 - 57.8) 2 | 8.4 (23.3 - | 33.5) | 17.2(1 | 2.9 · 21.4) | 2.1 (| 0.7 - 3.5) | 0.0 (| 0.0 - 0.1) |
| 2012 | 49.7 (44.8 | 3 - 54.7) 3 | 0.1 (25.6 - | 34.7) | 14.6(1 | 1.1 - 18.1) | 5.1 (| 2.9 - 7.2) | 0.4 (| 0.0 - 1.1) |
| A verage | 49.8 (48.3 | 3 - 51.2) 3 | 0.1 (28.8 - | 31.5) | 16.0 (1 | 4.9 - 17.1) | 3.7 (| 3.2 - 4.2) | 0.4 (| 0.2 - 0.6) |

Table 39: Parent-rated physical activity for children aged 5–15 years, HWSS 2005 – 2012

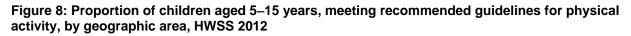
In 2006, questions were included in the survey to enable reporting against the 2004 recommendations outlined in the publication Australia's Physical Activity Recommendations for Children. The recommendations for children aged between 5 and 18 years are to participate in at least 60 minutes of moderate to vigorous physical activity each day and to spend no more than two hours a day watching TV, videos or using the computer.^{13, 14} The results for children aged 5 to 15 years are shown in Table 40.

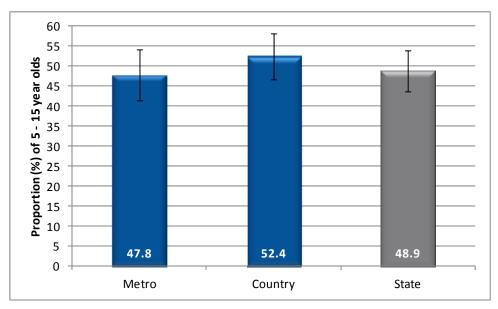
Table 40: Weekly physical activity for children aged 5–15 years, HWSS 2012

| | No sessions of physical activity | | | ically active 6 sessions | 7 sessio than | cally active or more ons but less 60 mins a ession | Physically active 7 or more sessions and more than 60 mins a session | | |
|--------------|----------------------------------|------------|--------|-----------------------------|---------------------|--|--|---------------|--|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | |
| Age Group | | | | | | | | | |
| 5 to 9 yrs | 2.8 (| 0.0- 5.8) | 27.0 (| 20.3 - 33.8) | 19.6 (| 13.3 - 26.0) | 50.6 (| 42.8 - 58.3) | |
| 10 to 15 yrs | 6.2 (| 2.9-9.4) | 35.9 (| 29.7 - 42.1) | 10.4 (| 6.5 - 14.3) | 47.5 (| 40.8 - 54.2) | |
| Gender | | | | | | | | | |
| Boys | 3.6 (| 0.9- 6.3) | 28.5 (| 22.2 - 34.7) | 12.9 (| 8.1 - 17.7) | 55.0 (| 47.8 - 62.1) | |
| Girls | 5.7 (| 2.1 - 9.3) | 35.4 (| 28.8 - 42.1) | 16.2 (| 10.8 - 21.6) | 42.7 (| 35.7 - 49.7) | |
| Children | 4.6 (| 2.4 - 6.9) | 31.9 (| 27.3 - 36.5) | 14.5 (| 10.9 - 18.2) | 48.9 (| 43.8 - 54.0) | |

Boys were more likely to complete the recommended amount of physical activity compared to girls (55.0% compared to 42.7%), however this difference was not statistically significant. Overall, less than half of children (48.9%) met the physical activity recommendations for 5 to 18 year olds of 60 minutes of moderate to vigorous activity every day.

Figure 8 shows the proportion of 5–15 year olds, meeting the recommended levels of physical activity for their age by geographic area of residence. Children aged 5–15 years in country areas were slightly more likely to complete sufficient levels of physical activity compared to their metro counterparts (52.4% compared to 47.8%), however this difference was not statistically significant.



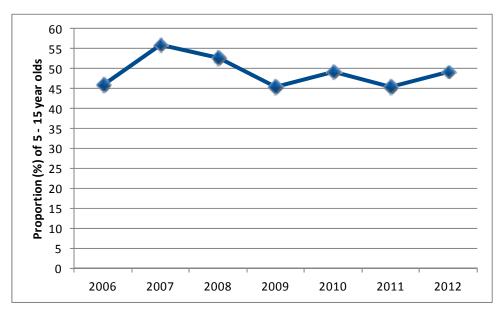


The annual prevalence estimates of weekly physical activity are shown in Table 41 and Figure 9. The proportion of children completing sufficient levels of physical activity was higher in 2012 (49.1%) compared with 2011 (45.5%), but was still lower compared with the peak in 2007 (56.0%). None of the described differences were statistically significant.

| | Did no sessions of physical activity last week | Was physically active 1 to 6 sessions | Was physically active for 7 or more sessions but did less than 60 minutes a session | Was physically active for 7 or more sessions and did 60 minutes or more a session |
|---------|--|---|--|--|
| | % 95% CI | % 95% CI | % 95% CI | % 95% Cl |
| 2006 | 2.2 (1.2 - 3.2) | 31.6 (27.7 - 35.4) | 20.3 (17.0 - 23.7) | 45.9 (41.8 - 50.0) |
| 2007 | 2.7 (1.0 - 4.3) | 26.5 (21.4 - 31.6) | 14.8 (10.8 - 18.7) | 56.0 (50.2 - 61.8) |
| 2008 | 3.3 (1.5 - 5.2) | 28.6 (23.4 - 33.7) | 15.3 (11.5 - 19.2) | 52.8 (47.2 - 58.4) |
| 2009 | 4.0 (3.0 - 4.9) | 36.3 (33.9 - 38.7) | 14.3 (12.6 - 16.1) | 45.4 (42.9 - 47.9) |
| 2010 | 3.3 (1.5 - 5.0) | 32.7 (27.1 - 38.3) | 14.8(10.7 - 19.0) | 49.2 (43.2 - 55.1) |
| 2011 | 4.0 (1.3 - 6.7) | 32.1 (26.9 - 37.4) | 18.3 (14.1 - 22.6) | 45.5 (40.0 - 51.1) |
| 2012 | 4.6 (2.4 - 6.8) | 31.9 (27.4 - 36.4) | 14.4 (10.9 - 17.9) | 49.1 (44.1 - 54.1) |
| Average | 3.6 (3.0 - 4.2) | 33.0 (31.5 - 34.5) | 15.9 (14.7 - 17.1) | 47.5 (45.9 - 49.2) |

Table 41: Weekly physical activity for children aged 5–15 years, HWSS 2006–2012

Figure 9: Proportion of children aged 5–15 years completing sufficient levels of physical activity per week, HWSS 2006–2012



Guidelines are available on the maximum amount of time children aged 0 to 18 years should spend using computers and watching television each day during leisure time.^{15, 14,13} The proportion of children who met the guidelines for their specific age group is shown in Table 42. Children aged 5–15 years (78.9%) were significantly more likely to meet the daily viewing guidelines compared with children aged less than 5.

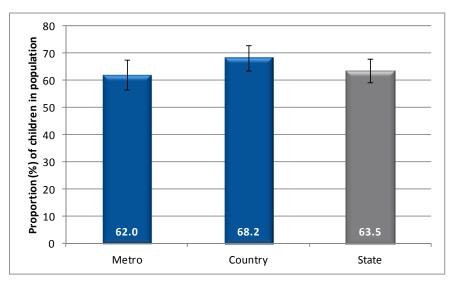
Table 42: Proportion watching TV, videos or using the computer based on Australian guidelines, on average, for children aged 0–15 years, HWSS 2012

| | reco | es not meet ommended / guidelines 95% Cl | for | s guidelines daily TV ewing (a) 95% Cl |
|--------------|--------|---|--------|---|
| Age Group | | | | |
| 0 to < 2 yrs | 50.6 (| 35.8 - 65.3) | 49.4 (| 34.7 - 64.2) |
| 2 to <5 yrs | 71.7 (| 62.9 - 80.4) | 28.3 (| 19.6 - 37.1) |
| 5 to 15 yrs | 21.1 (| (16.9 - 25.4) | 78.9 (| 74.6 - 83.1) |
| Gender | | | | |
| Boys | 36.3 (| (30.0 - 42.7) | 63.7 (| 57.3 - 70.0) |
| Girls | 36.7 (| 30.7 - 42.6) | 63.3 (| 57.4 - 69.3) |
| Children | 36.5 (| (32.2 - 40.8) | 63.5 (| 59.2 - 67.8) |

 (a) The guidelines for hours of TV viewing per day are: Ages 0 to less that 2 years, no TV; ages 2 to less than 5 years, less than one hour per day; ages 5 to 15 years, two or less hours per day

Figure 10 shows the proportion of children meeting the TV viewing time guidelines by area of geographic residence. Children in the country areas were slightly more likely to meet the TV viewing guidelines compared to metro children, however this difference was not statistically significant.

Figure 10: Proportion of children meeting the TV viewing guidelines (a), for children aged 0–15 years, by geographic areas, HWSS 2012



 (a) The guidelines for hours of TV viewing per day are: Ages 0 to less that 2 years, no TV; ages 2 to less than 5 years, less than one hour per day ages 5 to 15 years, two or less hours per day

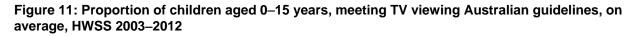
The annual proportion of children watching TV, videos or using the computer in leisure time is shown in Table 43 and Figure 11.

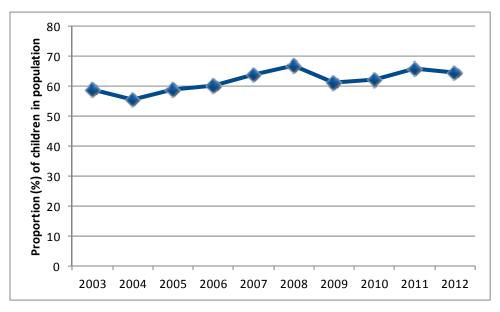
Table 43: Proportion watching TV, videos or using the computer based on Australian guidelines, on average, for children aged 0–15 years, HWSS 2003–2012

| | Meets guidelines for daily TV viewing (a) % 95% Cl | Does not meet recommended daily guidelines % 95% Cl |
|---------|---|--|
| | 76 95% CI | 76 95% CI |
| 2003 | 59.0 (55.6 - 62.4) | 41.0 (37.6 - 44.4) |
| 2004 | 55.7 (50.4 - 60.9) | 44.3 (39.1 - 49.6) |
| 2005 | 59.0 (55.4 - 62.7) | 41.0 (37.3 - 44.6) |
| 2006 | 60.4 (57.0 - 63.7) | 39.6 (36.3 - 43.0) |
| 2007 | 64.0 (59.2 - 68.7) | 36.0 (31.3 - 40.8) |
| 2008 | 67.0(62.6-71.3) | 33.0 (28.7 - 37.4) |
| 2009 | 61.1(58.2 - 64.0) | 38.9 (36.0 - 41.8) |
| 2010 | 62.2 (58.1 - 66.3) | 37.8 (33.7 - 41.9) |
| 2011 | 66.0(61.4-70.7) | 34.0 (29.3 - 38.6) |
| 2012 | 64.6 (60.5 - 68.8) | 35.4 (31.2 - 39.5) |
| Average | 61.5 (60.4 - 62.7) | 38.5 (37.3 - 39.6) |

(a) The guidelines for hours of TV viewing per day are:

Ages 0 to less that 2 years, no TV; ages 2 to less than 5 years, less than one hour per day ages 5 to 15 years, two or less hours per day





There was no statistically significant change over time in the proportion of children meeting the Australian guidelines on TV viewing.

10.2 Body mass index

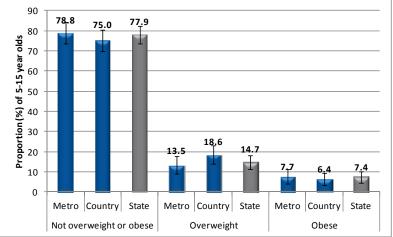
Parents/carers were asked to provide their child's height without shoes and their weight without clothes or shoes. A Body Mass Index (BMI) was derived from these figures by dividing weight in kilograms by height in metres squared. Age and sex specific BMI categories were then used to classify the children into not overweight or obese, overweight, and obese,¹⁶ as shown in Table 44. Outliers and biologically implausible values were removed in the derivation of these categories.¹⁷

Table 44: Prevalence of body mass index categories for children aged 5–15 years, HWSS 2012

| | Not overweight or obese | | Ov | erweight | C | Obese |
|--------------|----------------------------|---------------|--------|---------------|-------|-------------|
| | % | 95% CI | % | 95% CI | % | 95% Cl |
| Age Group | | | | | | |
| 5 to 9 yrs | 77.1 (| 70.2 - 84.0) | 13.5 (| 8.0 - 19.1) | 9.4 (| 4.6 - 14.2) |
| 10 to 15 yrs | 78.5 (| 73.1 - 83.9) | 15.5 (| 11.0 - 20.1) | 5.9 (| 2.4 - 9.5) |
| Gender | | | | | | |
| Boys | 76.9 (| 70.6 - 83.3) | 14.4 (| 9.4 - 19.3) | 8.7 (| 4.1 - 13.4) |
| Girls | 78.9 (| 73.3 - 84.6) | 15.0 (| 10.1 - 19.9) | 6.0 (| 2.7 - 9.3) |
| Children | 77.9 (| 73.6 - 82.2) | 14.7 (| 11.2 - 18.2) | 7.4 (| 4.5 - 10.3) |

Figure 12 shows the prevalence of body mass index categories by geographic area of residence.



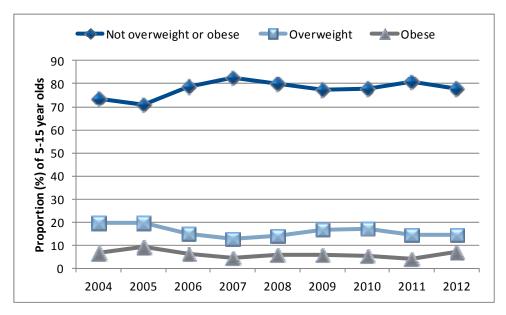


The annual prevalence of body mass index categories are shown in Table 45 and Figure 13. There were no statistically significant changes over time in any of the three categories. Descriptively, the proportion of children classified as obese increased from 2011 (4.3%) to 2012 (7.3%) and was the second highest proportion reported to date.

| | | verweight or obese | O | <i>r</i> erweight | Obese | | | |
|---------|--------|-----------------------|--------|-------------------|-------|-------------|--|--|
| | % | 95% CI | % | 95% CI | % | 95% CI | | |
| 2004 | 73.6 (| 66.6 - 80.6) | 19.7 (| 13.3 - 26.0) | 6.7 (| 2.9 - 10.6) | | |
| 2005 | 70.7 (| 65.4 - 76.1) | 19.9 (| 15.3 - 24.6) | 9.3 (| 5.8 - 12.9) | | |
| 2006 | 78.8 (| 74.7 - 82.9) | 15.1 (| 11.4 - 18.7) | 6.1 (| 3.8 - 8.5) | | |
| 2007 | 82.5 (| 77.2 - 87.7) | 12.9 (| 8.2 - 17.6) | 4.6 (| 1.9- 7.3) | | |
| 2008 | 80.2 (| 75.3 - 85.0) | 14.1 (| 9.9 - 18.2) | 5.8 (| 3.1 - 8.5) | | |
| 2009 | 77.3 (| 75.2 - 79.5) | 16.8 (| 14.9 - 18.8) | 5.8 (| 4.7 - 7.0) | | |
| 2010 | 77.7 (| 73.3 - 82.1) | 17.0 (| 12.9 - 21.0) | 5.3 (| 3.1 - 7.5) | | |
| 2011 | 81.0 (| 76.6 - 85.4) | 14.7 (| 10.8 - 18.5) | 4.3 (| 1.9- 6.8) | | |
| 2012 | 77.9 (| 73.7 - 82.1) | 14.7 (| 11.3 - 18.2) | 7.3 (| 4.5 - 10.2) | | |
| Average | 77.5 (| 76.2 - 78.8) | 16.3 (| 15.2 - 17.5) | 6.2 (| 5.4 - 6.9) | | |

Table 45: Prevalence of body mass index categories for children 5–15 years, HWSS 2004–2012

Figure 13: Prevalence of body mass index categories for children 5–15 years, HWSS 2004–2012



Respondents were also asked for their perceptions of the child's weight, Table 46. The majority of respondents perceived their child to be of a normal weight, while the proportion of children perceived to be very overweight was significantly lower compared to the proportion of children actually classified as obese, based on BMI (Table 44).

| | Underweight | | Normal weight | | Ove | erweight | Very overweight | | |
|--------------|-------------|--------------|---------------|---------------|--------|--------------|-----------------|------------|--|
| | % | 95% CI | % | 95% Cl | % | 95% CI | % | 95% Cl | |
| Age Group | | | | | | | | | |
| 5 to 9 yrs | 9.3 (| 5.5 - 13.2) | 84.7 (| 79.6 - 89.8) | 6.0 (| 2.3 - 9.6) | 0.0 (| 0.0 - 0.0) | |
| 10 to 15 yrs | 10.3 (| 6.4 - 14.2) | 76.9 (| 71.6 - 82.2) | 12.3 (| 8.3 - 16.2) | 0.5 (| 0.0 - 1.2) | |
| Gender | | | | | | | | | |
| Boys | 12.8 (| 8.4 - 17.1) | 77.6 (| 72.0 - 83.3) | 9.5 (| 5.6 - 13.5) | 0.1 (| 0.0 - 0.2) | |
| Girls | 6.8 (| 3.5 - 10.2) | 83.3 (| 78.5 - 88.2) | 9.3 (| 5.6 - 13.0) | 0.5 (| 0.0 - 1.2) | |
| Children | 9.9 (| 7.1 - 12.6) | 80.4 (| 76.7 - 84.2) | 9.4 (| 6.7 - 12.2) | 0.3 (| 0.0 - 0.6) | |

| Table 46: Prevalence of body mass | index categories by respondent | perceptions, HWSS 2012 |
|-----------------------------------|--------------------------------|------------------------|
|-----------------------------------|--------------------------------|------------------------|

Respondents were then asked what they were trying to do about their child's weight (Table 47).

| | Lose weight | | Gain weight | | | | the same veight | I am not trying to do anything about my child's weight | | |
|--------------|-------------|-------------|-------------|-------|------|--------|--------------------|--|--------------|--|
| | % | 95% CI | % | 95% | CI | % | 95% CI | % | 95% CI | |
| Age Group | | | | | | | | | | |
| 5 to 9 yrs | 3.9 (| 1.2 - 6.6) | 5.6 (| 2.3 - | 9.0) | 15.4 (| 9.5 - 21.3) | 75.0 (| 68.3 - 81.8) | |
| 10 to 15 yrs | 9.1 (| 5.8 - 12.4) | 5.8 (| 2.9 - | 8.8) | 17.1 (| 12.0 - 22.2) | 67.9 (| 61.8 · 74.0) | |
| Gender | | | | | | | | | | |
| Boys | 5.6 (| 2.8 - 8.4) | 6.6 (| 3.4 - | 9.8) | 14.1 (| 9.0 - 19.3) | 73.7 (| 67.5 - 79.9) | |
| Girls | 8.0 (| 4.6 - 11.4) | 4.9 (| 1.8 - | 8.0) | 18.7 (| 13.0 - 24.4) | 68.4 (| 61.8 - 75.0) | |
| Children | 6.8 (| 4.6 - 9.0) | 5.8 (| 3.5 - | 8.0) | 16.4 (| 12.5 - 20.2) | 71.1 (| 66.6 - 75.6) | |

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.¹⁸ Table 48 shows the mean times children were sunburned in the past 12 months. The mean times sunburnt increased significantly with age.

| | $\frac{-}{x}$ | 95% CI |
|--------------|---------------|------------|
| Age Group | | |
| 0 to 4 yrs | 0.4 (| 0.3-0.5) |
| 5 to 9 yrs | 1.2 (| 0.9-1.4) |
| 10 to 15 yrs | 1.9 (| 1.6 - 2.2) |
| Gender | | |
| Boys | 1.1 (| 0.9-1.3) |
| Girls | 1.3 (| 1.1 - 1.5) |
| Children | 1.2 (| 1.1 - 1.3) |

The annual mean times sunburnt in the past 12 months are shown in Table 49. The mean times sunburnt in 2012 (1.2 times) was the joint lowest recorded value, and was significantly lower compared to the mean recorded in 2004.

| Table 49: Mean times sunburnt in past | 12 months, HWSS 2002–2012 |
|---------------------------------------|---------------------------|
|---------------------------------------|---------------------------|

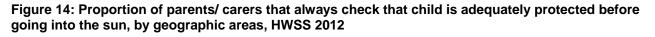
| | $\frac{-}{x}$ | 95% CI |
|----------|---------------|---------------|
| 2002 | 1.7 | (1.4 - 2.1) |
| 2003 | 1.5 | (1.3 - 1.6) |
| 2004 | 1.7 | (1.5 - 1.9) |
| 2005 | 1.3 | (1.2 - 1.5) |
| 2006 | 1.6 | (1.3 - 1.7) |
| 2007 | 1.5 | (1.3 - 1.7) |
| 2008 | 1.4 | (1.2 - 1.5) |
| 2009 | 1.2 | (1.1 - 1.3) |
| 2010 | 1.4 | (1.2 - 1.6) |
| 2011 | 1.5 | (1.3 - 1.7) |
| 2012 | 1.2 | (1.1 1.4) |
| A verage | 1.4 | (1.4 - 1.5) |

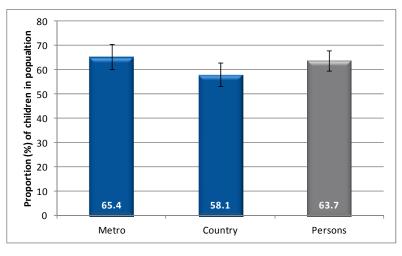
Table 50 shows how often parents/carers checked to see whether their child was adequately protected before going out into the sunlight (i.e. wear a hat, use sunscreen and keep covered). Parents/ carers were significantly less likely to always check that 10-15 year olds were adequately protected before going out into the sun compared with children aged 0-4 years (53.3% compared with 75.9%).

| | Always | | Most | Most of the time | | Sometimes | | | Rarely | | | Never | |
|--------------|--------|---------------|--------|------------------|-------|-----------|-------|-------|--------|------|-------|-------|-----|
| | % | 95% CI | % | 95% CI | % | 95% | CI | % | 95% | CI | % | 95% | CI |
| Age Group | | | | | | | | | | | | | |
| 0 to 4 yrs | 75.9 (| 68.5 - 83.2) | 19.6 (| 12.5 - 26.6) | 2.6 (| 0.6 - | 4.6) | 0.0 (| 0.0 - | 0.0) | 1.4 (| 0.0 - | 3.4 |
| 5 to 9 yrs | 63.2 (| 55.8 - 70.7) | 31.7 (| 24.5 - 38.9) | 3.2 (| 0.8 - | 5.7) | 0.3 (| 0.0 - | 1.0) | 1.5 (| 0.0 - | 4.3 |
| 10 to 15 yrs | 53.3 (| 46.8 - 59.9) | 33.9 (| 27.7 - 40.1) | 9.7 (| 5.7 - | 13.6) | 1.4 (| 0.0 - | 3.0) | 1.7 (| 0.0 - | 3.5 |
| Gender | | | | | | | | | | | | | |
| Boys | 62.9 (| 57.1 - 68.8) | 28.1 (| 22.8 - 33.5) | 6.1 (| 3.3 - | 8.8) | 0.7 (| 0.0 - | 1.8) | 2.1 (| 0.0 - | 4.3 |
| Girls | 64.4 (| 58.4 - 70.5) | 29.1 (| 23.3 - 34.9) | 4.8 (| 2.4 - | 7.1) | 0.8 (| 0.1 - | 1.6) | 0.9 (| 0.0 - | 2.2 |
| Children | 63.7 (| 59.5 - 67.9) | 28.6(| 24.7 - 32.5) | 5.4 (| 3.6 - | 7.2) | 0.8 (| 0.1 - | 1.4) | 1.5 (| 0.3 - | 2.8 |

Table 50: How often parent/ carer checks to see if child is adequately protected before going out into sunlight, HWSS 2012

Figure 14 shows the proportion of children who are always checked by a parent/ carer to ensure they are adequately protected before going into the sun. Children residing in the metro areas of the State were more likely to be always checked before going into the sun compared with children residing in the country (65.4% compared with 58.1%), however this difference was not statistically significant.



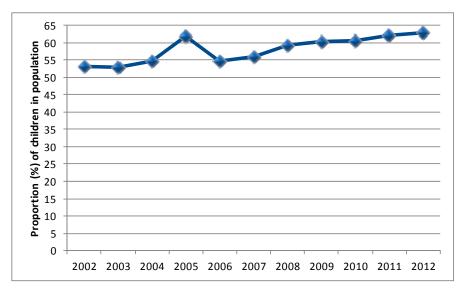


The annual prevalence estimates of checking to see if child is adequately protected before going out into sunlight are shown in Table 51 and Figure 15. The proportion of children always checked by a parent/carer for adequate sun protection before going into sunlight was significantly higher in 2012 (63.0%) compared with the 2006 (54.7%) and 2002 (53.1%).

| | Always | Most of the time | Sometimes | Rarely | Never |
|---------|--------------------|------------------------|-------------------|-------------------|-------------------|
| | % 95% CI | % 95% CI | % 95% Cl | % 95% Cl | % 95% CI |
| 2002 | 53.1 (49.2 - 57.0 |) 41.5 (37.6 · 45.4) | 4.1(2.7 - 5.5) | 0.6 (0.0 · 1.2) | 0.7 (0.1 · 1.3) |
| 2003 | 52.9 (49.4 - 56.3 |) 41.1 (37.7 · 44.5) | 4.5 (3.3 - 5.7) | 0.9 (0.2 · 1.7) | 0.6 (0.1 - 1.1) |
| 2004 | 54.6 (49.4 - 59.9 |) 38.3 (33.1 · 43.4) | 6.1 (3.5 - 8.7) | 0.5 (0.0 · 1.2) | 0.5 (0.0 - 1.4) |
| 2005 | 61.8 (58.2 - 65.5 |) 31.5 (28.1 · 35.0) | 5.6 (3.8 - 7.4) | 0.7 (0.2 · 1.2) | 0.4 (0.0 - 0.7) |
| 2006 | 54.7 (51.3 - 58.2 |) 37.8 (34.5 · 41.2) | 5.6 (3.9 - 7.3) | 0.9 (0.3 · 1.6) | 0.9 (0.1 - 1.7) |
| 2007 | 55.9 (51.0 - 60.8 |) 35.6 (30.8 · 40.4) | 7.0 (4.4 - 9.5) | 0.2 (0.0 · 0.6) | 1.3 (0.3 - 2.3) |
| 2008 | 59.2 (54.6 - 63.7 |) 32.7 (28.4 · 37.1) | 6.5 (4.3 - 8.7) | 0.7 (0.0 · 1.4) | 0.9 (0.0 - 1.9) |
| 2009 | 60.4 (57.7 - 63.2 |) 32.3 (29.7 · 34.9) | 5.1 (3.7 - 6.5) | 1.4 (0.8 · 2.0) | 0.8 (0.3 - 1.3) |
| 2010 | 60.5 (56.4 - 64.6 |) 32.4 (28.4 · 36.3) | 5.5 (3.6 - 7.4) | 0.8 (0.1 · 1.4) | 0.9 (0.1 - 1.6) |
| 2011 | 62.1 (57.4 - 66.7 |) 32.3 (27.8 · 36.8) | 4.6 (2.7 - 6.6) | 0.6 (0.0 · 1.2) | 0.4 (0.0 - 0.8) |
| 2012 | 63.0 (58.8 - 67.1 |) 29.1 (25.2 · 33.0) | 5.6 (3.7 - 7.4) | 0.8 (0.1 · 1.5) | 1.5 (0.3 - 2.8) |
| Average | 58.2 (57.1 - 59.3 |) 35.0 (33.9 · 36.1) | 5.2 (4.7 - 5.7) | 0.9 (0.7 · 1.1) | 0.7 (0.6 - 0.9) |

Table 51: How often parent/carer checks to see if child is adequately protected before going out into sunlight, HWSS 2002–2012

Figure 15: How often parent/carer always checked to see if child was adequately protected before going out into sunlight, HWSS 2002–2012



10.4 Alcohol

As alcohol abuse is known to be particularly disruptive to family functioning,¹⁹ parents/carers were asked whether or not they thought that alcohol caused problems in their household. The proportion of parents/carers reporting that alcohol causes problems in the household is shown in Table 52.

| | Alcohol causes problems in child's home | | | |
|--------------|---|-------|------|--|
| | % | 95% | CI | |
| Age Group | | | | |
| 0 to 4 yrs | 0.1 (| 0.0 - | 0.3) | |
| 5 to 9 yrs | 1.4 (| 0.0 - | 3.0) | |
| 10 to 15 yrs | 1.7 (| 0.1 - | 3.3) | |
| Gender | | | | |
| Boys | 1.0 (| 0.0 - | 2.2) | |
| Girls | 1.1 (| 0.0 - | 2.2) | |
| Children | 1.1 (| 0.3 - | 1.9) | |

The annual proportion of parents/carers reporting that alcohol causes problems in the household is shown in Table 53.

Table 53: Alcohol causing problems in the household, HWSS 2002–2012

| | Alcohol causes problems in child's home |
|---------|---|
| | % 95% CI |
| 2002 | 2.5 (1.0-3.9) |
| 2003 | 1.7 (0.9 - 2.6) |
| 2004 | 2.5 (1.0 - 4.1) |
| 2005 | 1.6 (0.6 - 2.5) |
| 2006 | 1.9 (0.6 - 3.3) |
| 2007 | 2.2 (0.5 - 3.8) |
| 2008 | 2.3 (0.9-3.6) |
| 2009 | 1.1(0.7 - 1.5) |
| 2010 | 1.6 (0.4 - 2.8) |
| 2011 | 2.3 (0.4 - 4.1) |
| 2012 | 1.1(0.3 - 1.9) |
| Average | 1.7(1.4 - 2.0) |

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.⁸ Parents/carers were asked about their home situation in regards to whether or not people smoke in the household, shown in Table 54.

| | The home is smoke free % 95% Cl | | occ smc | People asionally ke in the nouse 95% Cl | People frequently smoke in the house % 95% Cl | | |
|--------------|---------------------------------------|----------------|------------|---|---|------------|--|
| | 70 | 95% CI | 70 | 90 % CI | 70 | 95% CI | |
| Age Group | | | | | | | |
| 0 to 4 yrs | 96.7 (| 92.6 - 100.0) | 3.2 (| 0.0 - 7.3) | 0.1 (| 0.0-0.3) | |
| 5 to 9 yrs | 99.2 (| 98.4 - 100.0) | 0.8 (| 0.0 - 1.6) | 0.0 (| 0.0-0.0) | |
| 10 to 15 yrs | 97.7 (| 95.8 - 99.6) | 2.1 (| 0.2 - 3.9) | 0.3 (| 0.0-0.7) | |
| Gender | | | | | | | |
| Boys | 99.1 (| 98.4 - 99.8) | 0.7 (| 0.1 - 1.3) | 0.2 (| 0.0-0.6) | |
| Girls | 96.5 (| 93.5 - 99.5) | 3.5 (| 0.4 - 6.5) | 0.0 (| 0.0-0.1) | |
| Children | 97.8 (| 96.3 - 99.4) | 2.0 (| 0.5 - 3.6) | 0.1 (| 0.0 - 0.3) | |

Table 54: Smoking within the home, HWSS 2012

The vast majority of children were reported as living in a smoke-free house (97.8%).

The annual estimates of smoking within the home are shown in Table 55. The proportion of children living in a smoke-free house has increased significantly from 2002 (89.6%) to 2012 (97.9%).

| | The home is smoke free | People occasionally smoke in the house | People frequently smoke in the house |
|----------|------------------------|---|---|
| | % 95% CI | % 95% CI | % 95% CI |
| 2002 | 89.6 (87.4 - 91.8) | 6.7 (4.9 - 8.6) | 3.7 (2.4 - 5.0) |
| 2003 | 93.6(92.1-95.1) | 3.5 (2.4 - 4.7) | 2.9 (1.9 - 3.8) |
| 2004 | 90.8 (88.0 - 93.6) | 5.5 (3.2 - 7.8) | 3.7 (2.0 - 5.4) |
| 2005 | 93.6 (91.8 - 95.4) | 3.7 (2.2 - 5.1) | 2.7 (1.6 - 3.8) |
| 2006 | 96.4 (95.1 - 97.6) | 1.8 (1.0 - 2.6) | 1.9 (0.9 - 2.8) |
| 2007 | 95.6 (93.9 - 97.4) | 2.6 (1.2 - 4.0) | 1.8 (0.7 - 2.9) |
| 2008 | 96.3 (94.6 - 98.0) | 1.5 (0.5 - 2.5) | 2.2 (0.8 - 3.6) |
| 2009 | 98.0 (97.4 - 98.6) | 1.0 (0.6 - 1.4) | 1.0 (0.6 - 1.4) |
| 2010 | 98.2 (97.2 - 99.2) | 1.6 (0.6 - 2.6) | 0.2 (0.0 - 0.5) |
| 2011 | 97.6 (96.2 - 99.0) | 1.8 (0.5 - 3.1) | 0.6 (0.0 - 1.2) |
| 2012 | 97.9 (96.4 - 99.3) | 2.0 (0.6 - 3.4) | 0.1 (0.0 - 0.3) |
| A verage | 95.5(95.1-95.9) | 2.7 (2.3 - 3.0) | 1.8 (1.5 - 2.1) |

Table 55: Smoking within the home, HWSS 2002–2012

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.²⁰ Data are presented based on birth cohort and then more specifically for children aged 0-4 years at the time of interview as previously described in Section 9 of this report. Parents/carers were asked about their smoking status during pregnancy, shown in Table 56.

| | | Neither | Mot | her or | nly | Fat | ther only | Both | n parents |
|----------------|---------|---------------|-------|--------|------|--------|---------------|-------|-------------|
| | % | 95% CI | % | 95% | CI | % | 95% CI | % | 95% CI |
| Birth Cohort | | | | | | | | | |
| 2008-2012 | 74.0 (| 66.8 - 81.3) | 2.1 (| 0.2 - | 3.9) | 18.8 (| 12.2 - 25.3) | 5.2 (| 1.8- 8.6) |
| 2003-2007 | 72.0 (| 65.0 - 79.0) | 3.7 (| 0.8 - | 6.6) | 19.8 (| 13.4 - 26.2) | 4.5 (| 1.7 - 7.3) |
| 1997-2002 | 69.5 (| 63.4 - 75.6) | 4.5 (| 2.2 - | 6.9) | 17.4 (| 12.5 - 22.2) | 8.6 (| 4.3 - 12.9) |
| Gender (0-4 ye | ear old | s) | | | | | | | |
| Boys | 71.0 (| 61.1 - 81.0) | 3.6 (| 0.1 - | 7.1) | 19.2 (| 10.6 - 27.7) | 6.2 (| 1.2 - 11.2) |
| Girls | 77.1 (| 66.4 - 87.9) | 0.4 (| 0.0 - | 1.1) | 18.4 (| 8.2 - 28.5) | 4.1 (| 0.0 - 8.7) |

| Table 56: Prevalence | of smoking | ı durina prean | ancy, HWSS 2012 |
|----------------------|------------|-----------------|-------------------|
| | or smoking | , aaning progin | unoy, 111100 2012 |

The annual estimates of smoking during pregnancy are shown in Table 57.

Table 57: Prevalence of smoking during pregnancy, 0–4 year olds, HWSS 2005 – 2012

| | l | Neither | Мо | ther only | Fa | ther only | Bot | h parents |
|---------|--------|---------------|-------|-------------|--------|---------------|-------|--------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| 2005 | 66.9 (| 60.5 - 73.2) | 5.9 (| 2.7 - 9.0) | 19.7 (| 14.4 - 25.1) | 7.5 (| 4.1 - 10.9) |
| 2006 | 69.9 (| 64.1 - 75.8) | 3.6 (| 1.3 - 5.9) | 17.0(| 12.3 - 21.7) | 9.5 (| 5.7 - 13.3) |
| 2007 | 75.9 (| 68.2 - 83.6) | 2.7 (| 0.6 - 4.8) | 13.8 (| 7.6 - 20.0) | 7.6 (| 2.7 - 12.4) |
| 2008 | 71.4 (| 63.1 - 79.8) | 1.9 (| 0.1 - 3.7) | 18.9 (| 11.5 - 26.2) | 7.8 (| 2.8 - 12.9) |
| 2009 | 77.9 (| 71.7 - 84.0) | 4.6 (| 1.9 - 7.3) | 13.0 (| 7.9 - 18.1) | 4.6 (| 1.5 - 7.6) |
| 2010 | 80.5 (| 73.5 - 87.5) | 2.5 (| 0.0 - 5.2) | 13.9 (| 7.8 - 20.0) | 3.1 (| 0.0 - 6.2) |
| 2011 | 76.3 (| 68.8 - 83.8) | 2.0 (| 0.4 - 3.6) | 16.9 (| 10.4 - 23.5) | 4.8 (| 0.7 - 8.8) |
| 2012 | 73.9 (| 66.8 - 81.1) | 2.2(| 0.3 - 4.0) | 18.8 (| 12.3 - 25.3) | 5.1 (| 1.8 - 8.5) |
| Average | 73.6 (| 71.2 - 76.0) | 3.5 (| 2.6 - 4.5) | 16.6 (| 14.5 - 18.6) | 6.4 (| 5.0 - 7.7) |

10.6 Nutrition

Diet has an important effect on health and can influence the risk of various diseases, including coronary heart disease, Type 2 diabetes, stroke, and digestive system cancers.⁶ Eating fruit and vegetables is important to improve one's health and to protect against the risk of disease. A nutritious diet is especially important for normal growth and development in children.²¹ Children aged 4 to 11 years of age are recommended to eat at least one serve of fruit each day, while 12 to 18 year olds are recommended to eat three serves.²¹ Parents/carers were asked how many serves of fruit their child usually eats each day. The proportion of children eating the recommended daily serves of fruit is shown in Table 58.

Table 58: Proportion eating recommended daily fruit serves, ages 4–15 years, HWSS 2012

| | recc | Less than recommended serves of fruit | | 1+ for 4-11 yrs; 3+ for 12-17 yrs | | |
|--------------|--------|---|--------|--------------------------------------|--------|--|
| | % | 95% CI | % | 95% | CI | |
| Age Group | | | | | | |
| 4 to 7 yrs | 4.5 (| 1.0- 8.0) | 95.5 (| 92.0 - | 99.0) | |
| 8 to 11 yrs | 2.4 (| 0.0- 5.2) | 97.6 (| 94.8 - | 100.0) | |
| 12 to 15 yrs | 84.6 (| 79.2 - 90.0) | 15.4 (| 10.0 - | 20.8) | |
| Gender | | | | | | |
| Boys | 30.0 (| 24.0 - 36.1) | 70.0 (| 63.9 - | 76.0) | |
| Girls | 32.1 (| 25.8 - 38.4) | 67.9 (| 61.6 - | 74.2) | |
| Children | 31.1 (| 26.7 - 35.4) | 68.9 (| 64.6 - | 73.3) | |

Children aged 12 to 15 years were significantly less likely to eat the recommended daily serves of fruit than children aged 4 to 7 years (15.4% compared to 95.5%) or children aged 8 to 11 years (15.4% compared to 97.6%).

Figure16 shows the proportion of children 4-15 years eating the recommended daily serves of fruit by geographic area.

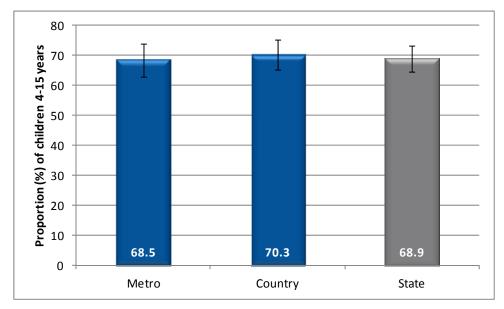


Figure 16: Proportion eating recommended daily fruit serves, ages 4–15 years, by geographic area, HWSS 2012

The annual proportion of children eating the recommended daily serves of fruit is shown in Table 59. The proportion of children eating the recommended daily serves of fruit for their age group peaked in 2010 (73.6%) and has decreased in 2011 (68.9%) and 2012 (68.2%). These changes have not been statistically significant.

| | reco | ess than ommended ves of fruit 95% Cl | | or 4-11 yrs; or 12-17 yrs 95% Cl |
|---------|--------|--|--------|--|
| | 70 | 95% CI | 70 | 95% CI |
| 2002 | 30.4 (| 26.5 - 34.2) | 69.6 (| 65.8 - 73.5) |
| 2003 | 30.7 (| 27.2 - 34.1) | 69.3 (| 65.9 - 72.8) |
| 2004 | 36.2 (| 30.5 - 42.0) | 63.8 (| 58.0 - 69.5) |
| 2005 | 33.4 (| 29.3 - 37.5) | 66.6 (| 62.5 - 70.7) |
| 2006 | 30.7 (| 27.3 - 34.1) | 69.3 (| 65.9 - 72.7) |
| 2007 | 29.7 (| 24.7 - 34.6) | 70.3 (| 65.4 - 75.3) |
| 2008 | 28.5 (| 24.1 - 32.9) | 71.5(| 67.1 - 75.9) |
| 2009 | 27.8 (| 25.6 - 30.1) | 72.2 (| 69.9 - 74.4) |
| 2010 | 26.4 (| 22.4 - 30.3) | 73.6 (| 69.7 - 77.6) |
| 2011 | 31.1 (| 26.3 - 35.9) | 68.9 (| 64.1 - 73.7) |
| 2012 | 31.8 (| 27.5 - 36.2) | 68.2 (| 63.8 - 72.5) |
| Average | 30.3 (| 29.2 - 31.4) | 69.7 (| 68.6 - 70.8) |

Table 59: Proportion eating recommended daily fruit serves, ages 4–15 years, HWSS 2002–2012

The mean serves of fruit eaten daily are shown in Table 60. The mean serves of fruit was significantly lower for children age 12-15 years compared to 4-7 year olds (1.8 serves compared to 2.3 serves).

 Table 60: Mean daily fruit serves, ages 4-15 years, HWSS 2012

| | 95% Cl |
|--------------|-------------------|
| Age Group | |
| 4 to 7 yrs | 2.3 (2.0 · 2.5) |
| 8 to 11 yrs | 2.0(1.8- 2.1) |
| 12 to 15 yrs | 1.8(1.6- 1.9) |
| Gender | |
| Boys | 2.0(1.9- 2.2) |
| Girls | 2.0 (1.8 - 2.1) |
| Children | 2.0(1.9- 2.1) |

The annual mean serves of fruit eaten daily are shown in Table 61.

| | 95% Cl |
|---------|-------------------|
| 2002 | 1.9 (1.8 - 2.0) |
| 2003 | 2.0 (1.9 - 2.1) |
| 2004 | 1.9 (1.8 - 2.1) |
| 2005 | 1.9 (1.8 - 2.0) |
| 2006 | 1.9 (1.8 - 2.1) |
| 2007 | 2.0 (1.8 - 2.1) |
| 2008 | 2.0 (1.9 - 2.1) |
| 2009 | 2.1 (2.0 - 2.2) |
| 2010 | 2.1 (2.0 - 2.2) |
| 2011 | 1.9 (1.8 - 2.0) |
| 2012 | 2.0 (1.9 - 2.1) |
| Average | 2.0 (2.0 - 2.0) |

| Table 61: Mear | n daily fruit serves | , ages 4-15 years, | HWSS 2002–2012 |
|----------------|----------------------|--------------------|----------------|
|----------------|----------------------|--------------------|----------------|

It is recommended that children aged 4 to 7 years of age eat at least two serves of vegetables each day, 8 to 11 year olds eat at least three serves a day and 12 to 15 year olds eat at least four serves a day.²¹ Parents/carers were asked how many serves of vegetables their child usually eats each day. The proportion of children eating the recommended daily serves of vegetables is shown in Table 62.

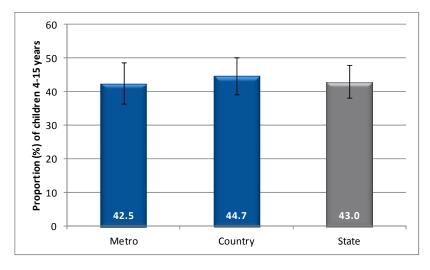
| | Less than recommended serves of vegetables | | 2+ for 4-7 yrs; 3+ for 8-11 yrs; 4+ for 12-17 yrs | |
|--------------|---|---------------|---|---------------|
| | % | 95% CI | % | 95% CI |
| Age Group | | | | |
| 4 to 7 yrs | 36.0 (| 27.6 - 44.5) | 64.0 (| 55.5 - 72.4) |
| 8 to 11 yrs | 54.0 (| 45.4 - 62.7) | 46.0 (| 37.3 - 54.6) |
| 12 to 15 yrs | 80.3 (| 74.3 - 86.2) | 19.7 (| 13.8 - 25.7) |
| Gender | | | | |
| Boys | 60.2 (| 53.4 - 67.0) | 39.8 (| 33.0 - 46.6) |
| Girls | 53.7 (| 46.8 - 60.6) | 46.3 (| 39.4 - 53.2) |
| Children | 57.0 (| 52.1 - 61.8) | 43.0 (| 38.2 - 47.9) |

There was a significant age related decrease in the proportion of children who meet the recommended daily intake of vegetables for their age group.

Overall, just over 4 out of 10 of children met the recommended daily servings of vegetables in 2012.

Figure 17 shows the proportion of children 4–15 years eating the recommended daily serves of vegetables by geographic area.

Figure 17: Proportion eating recommended daily vegetable serves, ages 4–15 years, by geographic area, HWSS 2012



The annual proportion of children eating the recommended daily serves of vegetables is shown in Table 63.

| | reco s ve | ess tha ommen erves c egetable 95% | ded if es | 2+ for 4-7 yrs; 3+ for 8-11 yrs; 4+ for 12-17 yrs % 95% Cl | | | | |
|---------|-----------------|--|-----------------|---|---------------|--|--|--|
| 2002 | 63.0 (| 58.7 - | 67.3) | 37.0 (| 32.7 - 41.3) | | | |
| 2003 | 63.3 (| 59.6 - | 67.0) | 36.7 (| 33.0 - 40.4) | | | |
| 2004 | 60.6 (| 54.9 - | 66.4) | 39.4 (| 33.6 - 45.1) | | | |
| 2005 | 56.2 (| 52.0 - | 60.5) | 43.8 (| 39.5 - 48.0) | | | |
| 2006 | 58.8 (| 55.0 - | 62.7) | 41.2 (| 37.3 - 45.0) | | | |
| 2007 | 57.7 (| 52.2 - | 63.2) | 42.3 (| 36.8 - 47.8) | | | |
| 2008 | 58.5 (| 53.2 - | 63.7) | 41.5 (| 36.3 - 46.8) | | | |
| 2009 | 52.8 (| 50.1 - | 55.6) | 47.2 (| 44.4 - 49.9) | | | |
| 2010 | 55.8 (| 51.0 - | 60.5) | 44.2 (| 39.5 - 49.0) | | | |
| 2011 | 50.4 (| 45.0 - | 55.8) | 49.6 (| 44.2 - 55.0) | | | |
| 2012 | 57.5 (| 52.8 - | 62.3) | 42.5 (| 37.7 - 47.2) | | | |
| Average | 57.5 (| 56.2 - | 58.7) | 42.5 (| 41.3 - 43.8) | | | |

| Table 62: Drepartian acting recommanded dails | wagatable carvas 4 15 | VAARA HWEE 2002 2012 |
|---|--------------------------|-----------------------|
| Table 63: Proportion eating recommended daily | y vegetable serves, 4–15 | years, mwss 2002-2012 |

In 2012 the proportion of children meeting the guidelines for vegetable consumption was the lowest since 2008, however there were no statistically significant differences.

The mean serves of vegetables eaten daily is shown in Table 64.

Table 64: Mean daily vegetable serves, 4 – 15 years, HWSS 2012

| | x 95% Cl |
|--------------|-------------------|
| Age Group | |
| 4 to 7 yrs | 1.9(1.8- 2.1) |
| 8 to 11 yrs | 2.4 (2.2 - 2.6) |
| 12 to 15 yrs | 2.5 (2.3 - 2.7) |
| Gender | |
| Boys | 2.2(2.0-2.3) |
| Girls | 2.4 (2.2 - 2.6) |
| Children | 2.3 (2.2 - 2.4) |

The annual mean serves of vegetables eaten daily are shown in Table 65.

| | 95% Cl |
|---------|-------------------|
| 2002 | 2.1 (2.0 - 2.2) |
| 2003 | 2.1 (2.0 - 2.2) |
| 2004 | 2.2 (2.0 - 2.4) |
| 2005 | 2.4 (2.3 - 2.6) |
| 2006 | 2.3 (2.2 - 2.4) |
| 2007 | 2.4 (2.2 - 2.5) |
| 2008 | 2.3 (2.2 - 2.4) |
| 2009 | 2.5 (2.4 - 2.5) |
| 2010 | 2.4 (2.3 - 2.5) |
| 2011 | 2.5 (2.3 - 2.6) |
| 2012 | 2.3 (2.2 - 2.4) |
| Average | 2.3 (2.3 - 2.4) |

Table 65: Mean daily vegetable serves, 4–15 years, HWSS 2002 – 2012

Milk is one of the most complete of all 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. Reduced-fat milk is not recommended for children under 2 years of age as milk usually forms a much higher proportion of their diet and is a major source of energy.²¹ Parents/carers were asked what type of milk their child usually consumes, shown in Table 66.

Table 66: Type of milk consumed, 2 – 15 years, HWSS 2012

| | Full fat or whole milk of any kind, including soya | | milk c | educed fat of any kind, iding soya | Skim milk, that is milk with no Other fat content at all | | | Dont use milk | | | | | |
|--------------|--|---------------|--------|--|--|-------|------|---------------|-------|------|-------|-------|------|
| | % | 95% CI | % | 95% CI | % | 95% | CI | % | 95% | CI | % | 95% | CI |
| Age Group | | | | | | | | | | | | | |
| 2 to 4 yrs | 78.9 (| 70.9 - 86.8) | 15.8 (| 8.6 - 23.0) | 1.7 (| 0.0 - | 4.5) | 2.9 (| 0.5 - | 5.4) | 0.7 (| 0.0 - | 2.1) |
| 5 to 9 yrs | 49.5 (| 41.8 - 57.1) | 39.8 (| 32.3 - 47.2) | 4.7 (| 1.5 - | 8.0) | 2.7 (| 0.0 - | 5.4) | 3.4 (| 0.1 - | 6.6) |
| 10 to 15 yrs | 46.6 (| 40.0 - 53.2) | 41.4 (| 34.9 - 47.8) | 6.2 (| 2.9 - | 9.5) | 1.1 (| 0.0 - | 2.3) | 4.7 (| 1.7 - | 7.6) |
| Gender | | | | | | | | | | | | | |
| Boys | 57.1 (| 50.7 - 63.4) | 32.7 (| 26.8 - 38.5) | 4.8 (| 2.2 - | 7.5) | 1.7 (| 0.4 - | 3.1) | 3.7 (| 0.9 - | 6.6) |
| Girls | 54.0 (| 47.5 - 60.5) | 36.4 (| 30.3 - 42.5) | 4.4 (| 1.7 - | 7.1) | 2.5 (| 0.5 - | 4.4) | 2.8 (| 0.9 - | 4.6) |
| Children | 55.5 (| 51.0 - 60.1) | 34.5 (| 30.3 - 38.7) | 4.6 (| 2.7 - | 6.5) | 2.1 (| 0.9 - | 3.3) | 3.2 (| 1.5 - | 4.9) |

The type of milk usually consumed is shown annually in Table 67.

| | Full fat or whole milk of any kind, including soya | Low/reduced fat milk of any kind, including soya | Skim milk, that is milkwith no fat content at all | Other | Don't use milk | |
|----------|--|--|---|-------------------|-------------------|--|
| | % 95% CI | % 95% CI | % 95% Cl | % 95% CI | % 95% Cl | |
| 2002 | 69.6 (65.9 - 73.3) | 25.7 (22.2 - 29.2) | 3.2 (1.9 - 4.6) | 0.2 (0.0 - 0.5) | 1.3 (0.5 - 2.1) | |
| 2003 | 68.8 (65.5 - 72.1) | 27.8 (24.6 - 31.0) | 2.8 (1.7 - 3.8) | 0.4 (0.0 - 0.7) | 0.3 (0.0 - 0.6) | |
| 2004 | 72.7 (67.9 - 77.4) | 21.6 (17.3 - 25.9) | 1.4 (0.4 - 2.5) | 1.9 (0.5 - 3.2) | 2.5 (0.9 - 4.0) | |
| 2005 | 62.3 (58.5 - 66.2) | 33.4 (29.7 - 37.2) | 1.1 (0.4 - 1.8) | 1.0 (0.3 - 1.8) | 2.1 (1.1 - 3.2) | |
| 2006 | 59.7 (55.5 - 63.9) | 35.5 (31.4 - 39.6) | 1.6 (0.8 - 2.3) | 1.3 (0.5 - 2.2) | 1.9 (0.6 - 3.2) | |
| 2007 | 63.4 (58.5 - 68.3) | 31.0 (26.3 - 35.6) | 2.9 (1.3 - 4.4) | 1.3 (0.1 - 2.5) | 1.5 (0.6 - 2.4) | |
| 2008 | 64.3 (59.8 - 68.9) | 29.6 (25.3 - 33.9) | 2.9 (1.5 - 4.3) | 1.2 (0.1 - 2.3) | 1.9 (0.3 - 3.5) | |
| 2009 | 59.7 (56.9 - 62.4) | 32.5 (29.8 - 35.1) | 3.7 (2.8 - 4.5) | 2.2 (1.2 - 3.2) | 2.0 (1.4 - 2.7) | |
| 2010 | 56.5 (52.1 - 60.9) | 34.8 (30.6 - 39.0) | 4.7 (2.8 - 6.5) | 1.6 (0.4 - 2.7) | 2.4 (1.1 - 3.8) | |
| 2011 | 56.6 (51.6 - 61.6) | 34.3 (29.6 - 38.9) | 3.8 (1.8 - 5.7) | 3.5 (1.4 - 5.6) | 1.9 (0.5 - 3.2) | |
| 2012 | 54.9 (50.4 - 59.3) | 35.1 (30.9 - 39.3) | 4.7 (2.8 - 6.6) | 2.0 (0.9 - 3.2) | 3.3 (1.6 - 5.0) | |
| A verage | 62.5 (61.3 - 63.6) | 31.2 (30.1 - 32.2) | 3.0 (2.7 - 3.4) | 1.4 (1.1 - 1.7) | 1.9 (1.6 - 2.3) | |

Table 67: Type of milk usually consumed, 2–15 years, HWSS 2002 – 2012

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, as shown in Table 68.

Table 68: Meals from fast food outlets per week, 1–15 years, HWSS 2012

| | Never | | | han ono week | ce a | Once or twice a week | | Three or four times a week | | | Five or more times a week | | | | |
|--------------|--------|----------|-------|-----------------|----------|----------------------|--------|-------------------------------|-------|-------|------------------------------|------|-------|-------|------|
| | % | 95% (| CI | % | 95% (| CI | % | 95% | CI | % | 95% | CI | % | 95% | CI |
| Age Group | | | | | | | | | | | | | | | |
| 1 to 4 yrs | 40.2 (| 31.0 - 4 | 9.4) | 31.4 (| 22.9 - 3 | 9.8) | 26.8 (| 18.4 - | 35.1) | 1.6 (| 0.0 - | 4.0) | 0.0 (| 0.0 - | 0.0) |
| 5 to 9 yrs | 20.5 (| 14.7 - 2 | 26.3) | 38.7 (| 31.2 - 4 | 6.3) | 38.5 (| 31.0 - | 46.0) | 2.2 (| 0.0 - | 4.5) | 0.0 (| 0.0 - | 0.0) |
| 10 to 15 yrs | 12.2 (| 8.4 - 1 | 6.1) | 39.2 (| 32.8 - 4 | 5.6) | 45.8 (| 39.2 - | 52.5) | 2.7 (| 0.5 - | 4.9) | 0.0 (| 0.0 - | 0.0) |
| Gender | | | | | | | | | | | | | | | |
| Boys | 20.5 (| 15.5 - 2 | 25.5) | 35.8 (| 29.8 - 4 | 1.7) | 42.0 (| 35.7 - | 48.2) | 1.8 (| 0.2 - | 3.3) | 0.0 (| 0.0 - | 0.0) |
| Girls | 25.8 (| 20.1 - 3 | 81.6) | 37.8 (| 31.7 - 4 | 3.9) | 33.6 (| 27.6 - | 39.7) | 2.8 (| 0.6 - | 4.9) | 0.0 (| 0.0 - | 0.0) |
| Children | 23.1 (| 19.3 - 2 | 26.9) | 36.7 (| 32.5 - 4 | 1.0) | 37.9 (| 33.5 - | 42.3) | 2.3 (| 0.9 - | 3.6) | 0.0 (| 0.0 - | 0.0) |

The number of times children eat fast food is shown annually in Table 69. For the first time, in 2012, since collection began no children were reported as eating fast food five or more times per week.

| | l | Never | | Less than once a week | | Once or twice a week | | e or four per week | Five or more times per week | |
|----------|--------|---------------|--------|--------------------------|--------|----------------------|-------|-----------------------|--------------------------------|-------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| 2002 | 18.0 (| 14.3 - 21.7) | 37.1 (| 32.7 - 41.5) | 42.8 (| 38.4 - 47.1) | 2.1 (| 0.8-3.3) | 0.1 (| 0.0 - 0.2) |
| 2003 | 9.7 (| 7.6 - 11.7) | 43.1 (| 39.6 - 46.6) | 45.6 (| 42.1 - 49.1) | 1.5 (| 0.7 - 2.3) | 0.2 (| 0.0 - 0.5) |
| 2004 | 11.1 (| 7.9 - 14.2) | 45.9 (| 40.6 - 51.3) | 42.3 (| 37.0 - 47.6) | 0.5 (| 0.0- 0.9) | 0.2 (| 0.0 - 0.4) |
| 2005 | 11.9 (| 9.4 - 14.4) | 45.0 (| 41.1 - 48.8) | 41.4 (| 37.6 - 45.2) | 1.5 (| 0.6 - 2.4) | 0.2 (| 0.0 - 0.4) |
| 2006 | 11.8 (| 9.1 - 14.4) | 45.4 (| 41.4 - 49.5) | 40.7 (| 36.8 - 44.7) | 1.9 (| 0.8 - 3.0) | 0.2 (| 0.0 - 0.4) |
| 2007 | 17.3 (| 13.7 - 20.9) | 38.8 (| 33.8 - 43.8) | 40.7 (| 35.8 - 45.6) | 2.8 (| 0.9 - 4.7) | 0.4 (| 0.0 - 1.1) |
| 2008 | 11.5 (| 8.7 - 14.3) | 42.3 (| 37.6 - 47.1) | 44.3 (| 39.6 - 49.0) | 1.6 (| 0.5 - 2.7) | 0.2 (| 0.0 - 0.6) |
| 2009 | 20.7 (| 18.1 - 23.4) | 36.1 (| 33.3 - 38.9) | 41.2 (| 38.4 - 44.0) | 1.8 (| 0.9 - 2.7) | 0.1 (| 0.0 - 0.3) |
| 2010 | 18.1 (| 15.0 - 21.2) | 40.6 (| 36.4 - 44.9) | 38.6 (| 34.4 - 42.8) | 2.4 (| 1.2 - 3.6) | 0.3 (| 0.0 - 0.6) |
| 2011 | 22.9 (| 18.6 - 27.1) | 36.3 (| 31.7 - 41.0) | 38.8 (| 34.0 - 43.5) | 1.8 (| 0.4 - 3.3) | 0.2 (| 0.0 - 0.5) |
| 2012 | 22.6 (| 18.9 - 26.2) | 36.9 (| 32.7 - 41.0) | 38.3 (| 34.1 - 42.6) | 2.2 (| 0.9- 3.5) | 0.0 (| 0.0 - 0.0) |
| A verage | 15.7 (| 14.8 - 16.5) | 40.0 (| 38.9 - 41.2) | 42.4 (| 41.2 - 43.5) | 1.8 (| 1.4 - 2.1) | 0.2 (| 0.1 - 0.3) |

Table 69: Meals from fast food outlets per week, 1–15 years, HWSS 2002– 2012

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 recommended amount of sleep for children varies from 8 to 14 hours depending on age and individual requirements.²² In general children sleep less as they grow up. The mean number of hours of sleep for children is shown in Table 70.

| Table 70: | Mean | time spent | sleeping | on a us | sual night, | HWSS 2012 |
|-----------|------|------------|----------|---------|-------------|-----------|
|-----------|------|------------|----------|---------|-------------|-----------|

| 95% CI |
|----------------------|
| |
| 10.6 (10.3 - 10.9) |
| 10.3 (10.2 - 10.5) |
| 9.2 (9.1 - 9.4) |
| |
| 10.0 (9.8 - 10.2) |
| 10.1 (9.9 - 10.3) |
| 10.0 (9.9 - 10.2) |
| |

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.²³ 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.⁸ Parents/carers were asked whether their child has trouble with emotions, concentration, behaviour or getting on with people, as shown in Table 71.

Table 71: Overall trouble with emotions, concentration, behaviour or getting on with people, 1–15 years, HWSS 2012

| | No | | On | ly a little | Q | uite a lot | Ve | ry much |
|--------------|--------|---------------|--------|---------------|-------|--------------|-------|------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Age Group | | | | | | | | |
| 1 to 4 yrs | 76.0 (| (68.1 - 84.0) | 20.4 (| 12.8 - 28.0) | 3.2 (| 0.1 - 6.2) | 0.0 (| 0.0-0.0) |
| 5 to 9 yrs | 65.3 (| 58.1 - 72.6) | 25.6 (| 19.0 - 32.2) | 7.9 (| 3.7 - 12.1) | 1.1 (| 0.0-3.1) |
| 10 to 15 yrs | 66.3 (| 60.0 - 72.6) | 27.9 (| 21.9 - 33.9) | 4.8 (| 1.8-7.8) | 1.0 (| 0.0-2.0) |
| Gender | | | | | | | | |
| Boys | 65.6 (| 59.8 - 71.5) | 27.9 (| 22.5 - 33.3) | 5.7 (| 2.8 - 8.6) | 0.7 (| 0.0-1.5) |
| Girls | 72.2 (| 66.3 - 78.1) | 21.9 (| 16.4 - 27.4) | 4.9 (| 2.2 - 7.6) | 1.0 (| 0.0 - 2.3) |
| Children | 68.9 (| 64.7 - 73.0) | 25.0 (| 21.1 - 28.8) | 5.3 (| 3.3 - 7.3) | 0.9 (| 0.1 - 1.6) |

Just over 30% of children aged 1 to 15 years were reported as having some amount of trouble with emotions, concentration, behaviour or getting on with people.

The annual prevalence estimates of children with trouble with emotions, concentration,

behaviour or getting on with people area shown in Table 72.

| | | No | On | ly a little | Q | uite a lot | Very much | | |
|------------------|--------|----------------|--------|---------------|-------|--------------|-----------|-------------|--|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | |
| 2002 | 70.3 (| (66.7 - 73.8) | 23.7 (| 20.4 - 27.0) | 5.3 (| 3.4 - 7.1) | 0.8 (| 0.3 - 1.3 | |
| 2003 | 68.1 (| (64.8 - 71.3) | 24.4 (| 21.4 - 27.5) | 6.0 (| 4.4 - 7.7) | 1.5 (| 0.7 - 2.2) | |
| 2004 | 62.4 (| (57.2 - 67.5) | 27.9 (| 23.2 - 32.6) | 8.1 (| 5.2 - 11.0) | 1.6 (| 0.3 - 3.0) | |
| 2005 | 65.4 (| (61.8 - 69.1) | 27.3 (| 23.9 - 30.8) | 6.4 (| 4.6 - 8.3) | 0.8 (| 0.1 - 1.5) | |
| 2006 | 68.6 (| (65.3 - 71.9) | 24.2 (| 21.1 - 27.2) | 5.9 (| 4.2 - 7.6) | 1.4 (| 0.5 - 2.2) | |
| 2007 | 71.2 (| (66.7 - 75.6) | 22.6 (| 18.5 - 26.7) | 5.0 (| 3.1 - 6.9) | 1.2(| 0.4 - 2.1) | |
| 2008 | 67.3 (| (62.9 - 71.7) | 24.8 (| 20.7 - 28.9) | 6.3 (| 4.2 - 8.5) | 1.6 (| 0.4 - 2.7) | |
| 2009 | 73.4 (| (71.0 - 75.7) | 20.6 (| 18.5 - 22.8) | 4.5 (| 3.5 - 5.4) | 1.5 (| 0.9 - 2.2) | |
| 2010 | 71.3 (| (67.5 - 75.2) | 22.7 (| 19.1 - 26.3) | 5.2 (| 3.3 - 7.1) | 0.8 (| 0.2 - 1.4) | |
| 2011 | 71.6 (| (67.1 - 76.0) | 23.3 (| 19.1 - 27.4) | 4.4 (| 2.1 - 6.8) | 0.8 (| 0.0 - 1.6) | |
| 2012 | 68.6 (| (64.5 - 72.6) | 25.2 (| 21.4 - 29.0) | 5.4 (| 3.4 - 7.3) | 0.9 (| 0.1 - 1.7) | |
| A <i>vera</i> ge | 69.3 (| (68.3 - 70.4) | 23.9 (| 22.9 - 24.9) | 5.5 (| 5.0 - 6.0) | 1.3 (| 1.0 - 1.5) | |

| Table 72: Overall trouble with emotions, concentration, behaviour or getting on with people, 1–15 |
|---|
| years, HWSS 2002–2012 |

Parents/carers who reported 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, shown in Table 73.

| Table 73: Proportion who think child needs special help for emotional problem, 1–15 years, HWSS | |
|---|--|
| 2012 | |

| | % | 95% CI |
|--------------|--------|---------------|
| Age Group | | |
| 1 to 4 yrs | 8.0 (| 0.0 - 17.8) |
| 5 to 9 yrs | 31.5 (| 19.0 - 44.0) |
| 10 to 15 yrs | 29.5 (| 18.3 - 40.7) |
| Gender | | |
| Boys | 23.7 (| 14.8 - 32.7) |
| Girls | 27.0 (| 15.8 - 38.2) |
| Children | 25.2 (| 18.1 - 32.2) |

The annual proportion of children regarded as needing special help for emotional problems is shown in Table 74.

| | % 95% Cl |
|----------|----------------------|
| 2002 | 20.8 (14.7 - 26.8) |
| 2003 | 21.6(16.6-26.5) |
| 2004 | 23.4 (16.2 - 30.7) |
| 2005 | 21.0(15.5 - 26.5) |
| 2006 | 26.2 (20.5 - 31.9) |
| 2007 | 27.2(19.1 - 35.3) |
| 2008 | 26.7(19.8-33.7) |
| 2009 | 25.9 (21.9 - 30.0) |
| 2010 | 23.6 (16.8 - 30.5) |
| 2011 | 21.9(13.5-30.3) |
| 2012 | 25.7 (18.7 - 32.7) |
| A verage | 24.1 (22.4 - 25.9) |

Table 74: Proportion who think child needs special help for emotional problem, 1–15 years, HWSS2002–2012

All parents/carers of children aged 1 to 15 years were asked wether their child had ever been treated for an emotional or mental health problem, shown in Table 75.

Table 75: Proportion of children ever treated for an emotional or mental health problem, 1–15 years, HWSS 2012

| | % | 95% CI |
|--------------|--------|--------------|
| Age Group | | |
| 1 to 4 yrs | 0.0 (| 0.0- 0.0) |
| 5 to 9 yrs | 5.3 (| 1.9- 8.7) |
| 10 to 15 yrs | 11.1 (| 7.0 - 15.1) |
| Gender | | |
| Boys | 6.5 (| 3.6 - 9.3) |
| Girls | 5.5 (| 2.8- 8.1) |
| Children | 6.0 (| 4.0 - 7.9) |

The annual proportion of children ever treated for an emotional or mental health problem is shown in Table 76. The proportion of children ever treated for an emotional or mental health problem was significantly higher in 2012 (6.2%) compared with 2002 (3.0%).

| | % 95% CI |
|---------|--------------------|
| 2002 | 3.0 (1.8 - 4.1) |
| 2003 | 4.7 (2.9 - 6.6) |
| 2004 | 5.7 (1.3 - 10.0) |
| 2005 | 5.3 (3.7 - 7.0) |
| 2006 | 6.7 (5.0 - 8.4) |
| 2007 | 5.3 (3.0 - 7.6) |
| 2008 | 6.0 (4.1 - 8.0) |
| 2009 | 5.1 (4.2 - 6.1) |
| 2010 | 4.8 (3.2 - 6.4) |
| 2011 | 4.2 (2.4 - 6.1) |
| 2012 | 6.2 (4.2 - 8.2) |
| Average | 5.3 (4.8 - 5.8) |

Table 76: Proportion of children ever treated for an emotional or mental health problem, 1–15 years,HWSS 2002–2012

11.2 Social support

Social support relates to the resources available within communities and is believed to have a positive influence on health status.²⁴ 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.²⁵ The HWSS measures social supports 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 proportion of children who have a close mate and/or group of friends is shown in Table 77.

| | | Special friend or really close mate | | p of friends lay with or around with |
|--------------|--------|-------------------------------------|--------|--|
| | % | 95% CI | % | 95% CI |
| Age Group | | | | |
| 5 to 9 yrs | 78.9 (| 72.6 - 85.3) | 94.4 (| 91.1 - 97.8) |
| 10 to 15 yrs | 79.8 (| 74.7 - 84.9) | 96.1 (| 93.6 - 98.6) |
| Gender | | | | |
| Boys | 77.4 (| 71.5 - 83.4) | 95.4 (| 92.6 - 98.2) |
| Girls | 81.5 (| 76.2 - 86.8) | 95.3 (| 92.4 - 98.2) |
| Children | 79.4 (| 75.4 - 83.4) | 95.4 (| 93.3 - 97.4) |

Table 77: Prevalence of friends, 5–15 years, HWSS 2012

The annual prevalence of children who have a close mate and/or a group of friends is shown in Table 78.

Table 78: Prevalence of friends, 5–15 years, HWSS 2002–2012

| | Special friend or really close mate | Group of friends to play with or hang around with |
|---------|-------------------------------------|---|
| | % 95% CI | % 95% CI |
| 2002 | 83.3 (79.9 - 86.7) | 93.1 (90.9 - 95.4) |
| 2003 | 80.7 (77.4 - 83.9) | 94.8 (93.2 - 96.4) |
| 2004 | 81.1 (76.2 - 85.9) | 92.6 (89.1 - 96.0) |
| 2005 | 81.5 (78.1 - 85.0) | 93.8 (91.7 - 95.9) |
| 2006 | 78.1(74.7 - 81.5) | 93.6 (91.6 - 95.6) |
| 2007 | 80.1 (75.6 - 84.6) | 92.9 (90.1 - 95.7) |
| 2008 | 77.8 (73.1 - 82.4) | 93.0 (90.5 - 95.6) |
| 2009 | 81.6 (79.7 - 83.6) | 94.2 (93.1 - 95.4) |
| 2010 | 86.1 (82.8 - 89.5) | 94.0 (91.8 - 96.2) |
| 2011 | 82.2 (77.9 - 86.6) | 93.9 (91.2 - 96.6) |
| 2012 | 79.4 (75.5 - 83.3) | 95.3 (93.3 - 97.3) |
| Average | 81.2 (80.2 - 82.2) | 94.0 (93.4 - 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.²⁶ 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 kids in the past 12 months, shown in Table 79. Just over one-third of children had been bullied in the past 12 months.

| | Been bullied in past 12 months | | | bullied in 12 months | Has both bullied and been bullied in past 12 months | | |
|--------------|-----------------------------------|---------------|--------|-------------------------|--|--------------|--|
| | % | 95% CI | % | 95% CI | % | 95% CI | |
| Age Group | | | | | | | |
| 5 to 9 yrs | 34.1 (| 26.8 - 41.5) | 9.6 (| 5.4 - 13.8) | 6.8 (| 3.1 - 10.5) | |
| 10 to 15 yrs | 36.9 (| 30.4 - 43.3) | 8.1 (| 4.6 - 11.6) | 6.8 (| 3.5 - 10.0) | |
| Gender | | | | | | | |
| Boys | 36.2 (| 29.2 - 43.1) | 11.9 (| 7.5 - 16.4) | 8.0 (| 4.2 - 11.9) | |
| Girls | 35.1 (| 28.3 - 41.8) | 5.4 (| 2.5 - 8.3) | 5.5 (| 2.5 - 8.5) | |
| Children | 35.6 (| 30.8 - 40.5) | 8.8 (| 6.0 - 11.5) | 6.8 (| 4.3 - 9.2) | |

Table 79: Prevalence of bullying in past 12 months, 5–15 years, HWSS 2012

The annual prevalence of bullying is shown in Table 80.

| | | n bullied in 12 months | Has bullied in past 12 months | | and been bulli | | |
|---------|--------|---------------------------|-------------------------------|---------------|----------------|--------------|--|
| | % | 95% CI | % | 95% CI | % | 95% CI | |
| 2002 | 40.6 (| 36.1 - 45.1) | 13.1 (| 10.0 - 16.2) | 8.9 | (6.4 - 11.5) | |
| 2003 | 35.7 (| 31.8 - 39.5) | 13.0 (| 10.2 - 15.7) | 9.9 | (7.4 - 12.4) | |
| 2004 | 38.6 (| 32.8 - 44.5) | 17.5 (| 12.6 - 22.4) | 13.3 | (9.1 - 17.6) | |
| 2005 | 36.7 (| 32.5 - 41.0) | 10.4 (| 7.7 - 13.1) | 8.4 | (5.9 - 10.9) | |
| 2006 | 36.4 (| 32.5 - 40.3) | 12.6 (| 9.9 - 15.2) | 9.2 | (6.9 - 11.4) | |
| 2007 | 38.2 (| 32.6 - 43.8) | 13.9 (| 10.0 - 17.7) | 9.6 | (6.5 - 12.7) | |
| 2008 | 37.6 (| 32.4 - 42.7) | 14.1 (| 10.6 - 17.5) | 10.8 | (7.8 - 13.9) | |
| 2009 | 33.7 (| 31.3 - 36.0) | 10.0 (| 8.4 - 11.6) | 6.8 | (5.4 - 8.1) | |
| 2010 | 34.8 (| 30.2 - 39.3) | 10.8 (| 7.9 - 13.6) | 8.6 | (6.1 - 11.2) | |
| 2011 | 30.9 (| 25.7 - 36.1) | 8.5 (| 5.3 - 11.8) | 7.6 | (4.4 - 10.8) | |
| 2012 | 35.8 (| 31.0 - 40.6) | 8.9 (| 6.2 - 11.6) | 6.9 | (4.5 - 9.4) | |
| Average | 35.9 (| 34.7 - 37.1) | 11.7 (| 10.9 - 12.5) | 8.7 | (8.0 - 9.4) | |

Table 80: Prevalence of bullying in past 12 months, 5–15 years, HWSS 2002–2012

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.²⁷

12.1 School

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 81.

Table 81: Weeks absent from school, 5–15 years, HWSS 2012

| | | Zero | | Less | than a week | | ne to two weeks | | | to three /eeks | | e weeks o more | or |
|--------------|-------|-------|-------|--------|---------------|--------|--------------------|----|-------|-------------------|--------|-------------------|----|
| | % | 95% | CI | % | 95% CI | % | 95% CI | | % | 95% CI | % | 95% CI | |
| Age Group | | | | | | | | | | | | | |
| 5 to 9 yrs | 6.9 (| 3.0 - | 10.7) | 49.4 (| 41.7 - 57.2) | 25.2 (| 18.3 - 32. | 1) | 7.8 (| 4.0 - 11.6) | 10.7 (| 6.1 - 15.4 | 4) |
| 10 to 15 yrs | 5.8 (| 3.2 - | 8.5) | 52.0 (| 45.3 - 58.6) | 27.8 (| 21.8 - 33. | 9) | 9.1 (| 5.5 - 12.7) | 5.2 (| 2.8 - 7.1 | 7) |
| Gender | | | | | | | | | | | | | |
| Boys | 6.4 (| 3.1 - | 9.7) | 49.4 (| 42.1 - 56.6) | 28.5 (| 21.7 - 35. | 2) | 9.4 (| 5.6 - 13.1) | 6.4 (| 3.3 - 9.0 | 6) |
| Girls | 6.2 (| 3.1 - | 9.3) | 52.3 (| 45.3 - 59.4) | 24.7 (| 18.7 - 30. | 8) | 7.6 (| 3.9 - 11.4) | 9.1 (| 5.1 - 13. | 1) |
| Children | 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 | 3) |

The weeks absent from school is shown annually in Table 82.

Table 82: Weeks absent from school, 5–15 years, HWSS 2002–2012

| | Zero | Less than a week One to two we | | Two to three weeks | Three weeks or more |
|---------|---------------------|--------------------------------|----------------------|-----------------------|------------------------|
| | % 95% CI | % 95% Cl | % 95% Cl | % 95% CI | % 95% Cl |
| 2002 | 10.7 (7.7 - 13.7) | 60.7 (56.3 - 65.1) | 17.1(13.9-20.2) | 6.6 (4.4 - 8.7) | 4.9 (3.3 - 6.5) |
| 2003 | 9.5 (6.8 - 12.2) | 57.3 (53.3 - 61.4) | 21.2 (17.9 - 24.6) | 6.3 (4.6 - 8.1) | 5.6 (4.0 - 7.2) |
| 2004 | 8.7 (5.1 - 12.3) | 53.8 (47.6 - 59.9) | 22.5 (17.4 - 27.7) | 8.1 (5.1 - 27.7) | 6.9 (3.9 - 9.8) |
| 2005 | 9.8 (6.9 - 12.7) | 55.5 (51.0 - 60.0) | 21.9 (18.2 - 25.6) | 5.5 (3.5 - 7.5) | 7.4 (5.1 - 9.6) |
| 2006 | 7.6 (5.2 - 9.9) | 50.5 (46.4 - 54.6) | 23.4 (20.0 - 26.8) | 9.7 (7.3 - 12.2) | 8.8(6.5-11.1) |
| 2007 | 8.3(5.0-11.5) | 54.4 (48.5 - 60.2) | 21.7 (16.8 - 26.6) | 7.7(4.5-10.9) | 8.0 (5.2 - 10.8) |
| 2008 | 7.1(4.0-10.2) | 54.2 (48.7 - 59.7) | 20.9 (16.4 - 25.4) | 9.1 (6.2 - 12.1) | 8.6 (5.6 - 11.6) |
| 2009 | 7.8 (6.5 - 9.2) | 48.2 (45.7 - 50.7) | 23.0 (20.9 - 25.0) | 10.1 (8.6 - 11.6) | 10.9(9.3-12.4) |
| 2010 | 8.3(5.3 - 11.2) | 50.6 (45.6 - 55.6) | 23.1 (18.9 - 27.3) | 10.2 (7.4 - 12.9) | 7.9(5.3-10.5) |
| 2011 | 8.7 (5.4 - 12.0) | 49.0 (43.4 - 54.6) | 20.6 (16.3 - 24.9) | 11.1 (7.6 - 14.5) | 10.6(7.0-14.2) |
| 2012 | 6.3 (4.1 - 8.6) | 50.8 (45.8 - 55.8) | 26.5 (22.0 - 31.0) | 8.6 (6.0 - 11.2) | 7.7(5.3 - 10.2) |
| Average | 8.4 (7.7 - 9.1) | 52.6 (51.3 - 53.8) | 22.1 (21.0 - 23.1) | 8.7 (8.0 - 9.4) | 8.3 (7.6 - 9.0) |

Parents/carers were asked to rate how well their child was doing in school overall, based on their school work and school reports, as shown in Table 83. Over two-thirds of children were doing well or very well in school.

| | Very well | | | Well | | Average | F | Poorly | Very poorly | |
|--------------|-----------|---------------|------|---------------|------|-----------------|-------|-------------|-------------|-------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Age Group | | | | | | | | | | |
| 5 to 9 yrs | 42.4 (| 34.8 - 50.0) | 24.6 | (17.8 - 31.3) | 26.0 | (19.2 - 32.8) | 4.6 (| 1.4 - 7.8) | 2.4 (| 1.4 - 5.1) |
| 10 to 15 yrs | 43.3 (| 36.7 - 49.9) | 26.8 | (21.1 - 32.4) | 23.9 | (21.1 - 32.4) | 5.5 (| 2.6 - 8.3) | 0.5 (| 0.0 - 1.1) |
| Gender | | | | | | | | | | |
| Boys | 38.8 (| 31.8 - 45.8) | 24.8 | (18.7 - 30.9) | 30.1 | (23.4 - 36.8) | 5.2 (| 2.2 - 8.1) | 1.1 (| 0.0 - 2.6) |
| Girls | 47.1 (| 40.1 - 54.2) | 26.8 | (20.6 - 33.0) | 19.4 | (13.8 - 25.0) | 5.0 (| 1.9 - 8.0) | 1.7 (| 0.0 - 3.7) |
| Children | 42.9 (| 37.9 - 47.9) | 25.8 | (21.4 - 30.1) | 24.9 | (20.4 - 29.3) | 5.1 (| 3.0 - 7.2) | 1.4 (| 0.1 - 2.6) |

| Table 83: How child is doing in school overall, 5–15 years, HWSS 2012 |
|---|
|---|

The annual estimates of how well children were doing in school are shown in Table 84.

| | Very well | Well | Average | Poorly | Very poorly |
|----------|----------------------|----------------------|----------------------|-------------------|-------------------|
| | % 95% CI | % 95% Cl | % 95% CI | % 95% CI | % 95% CI |
| 2002 | 52.6 (48.0 - 57.1) | 22.5 (18.8 - 26.3) | 21.7(18.0 - 25.3) | 2.8 (1.5 - 4.1) | 0.4 (0.0 - 0.7) |
| 2003 | 48.6 (44.6 - 52.7) | 25.7 (22.0 - 29.4) | 21.9(18.6 - 25.1) | 2.5 (1.3 - 3.6) | 1.4 (0.3 - 2.4) |
| 2004 | 44.6 (38.5 - 50.8) | 28.8 (23.1 - 34.5) | 21.4 (16.6 - 26.2) | 4.1 (1.7 - 6.5) | 1.1 (0.0 - 2.6) |
| 2005 | 47.3 (42.8 - 51.8) | 24.4 (20.6 - 28.2) | 24.8 (20.9 - 28.6) | 3.0 (1.4 - 4.5) | 0.5 (0.0 - 1.2) |
| 2006 | 45.9 (41.8 - 50.0) | 25.8 (22.3 - 29.4) | 22.7 (19.2 - 26.3) | 4.5 (2.9 - 6.2) | 1.0 (0.2 - 1.8) |
| 2007 | 49.8 (44.0 - 55.6) | 23.1 (18.1 - 28.2) | 21.2(16.5 - 25.9) | 4.5 (2.2 - 6.8) | 1.4 (0.2 - 2.5) |
| 2008 | 42.1 (36.7 - 47.5) | 28.4 (23.5 - 33.3) | 26.1 (21.6 - 30.7) | 2.3 (0.8 - 3.8) | 1.1 (0.0 - 2.2) |
| 2009 | 42.0 (39.6 - 44.5) | 28.1 (25.9 - 30.3) | 25.1 (22.9 - 27.3) | 4.0 (3.0 - 5.0) | 0.7 (0.3 - 1.1) |
| 2010 | 45.8 (40.8 - 50.8) | 28.8 (24.3 - 33.3) | 21.0 (17.1 - 24.9) | 3.8 (2.0 - 5.6) | 0.5 (0.1 - 1.0) |
| 2011 | 43.7 (38.2 - 49.3) | 28.5 (23.4 - 33.6) | 22.9 (18.4 - 27.4) | 2.6 (1.1 - 4.2) | 2.2 (0.2 - 4.3) |
| 2012 | 42.9 (37.9 - 47.8) | 25.8 (21.5 - 30.1) | 24.9 (20.6 - 29.3) | 5.1 (3.0 - 7.2) | 1.4 (0.1 - 2.6) |
| A verage | 45.5 (44.3 - 46.8) | 26.3 (25.1 - 27.4) | 23.7 (22.6 - 24.8) | 3.6 (3.1 - 4.1) | 0.9 (0.7 - 1.2) |

Table 84: How child is doing in school overall, 5–15 years, HWSS 2002–2012

Parents/carers were asked to rate how much their child looks forward to going to school each day, shown in Table 85.

| | Almost never | | Rarely | | Sometimes | | Often | | Almost always | | | | |
|--------------|--------------|-------|--------|-------|-----------|------|--------|-------|---------------|------|---------------|--------|---------------|
| | % | 95% | CI | % | 95% | CI | % | 95% | | % | 95% CI | % | 95% CI |
| Age Group | | | | | | | | | | | | | |
| 5 to 9 yrs | 3.7 (| 1.1 - | 6.3) | 1.5 (| 0.0 - | 3.4) | 5.4 (| 2.3 - | 8.5) | 16.3 | (10.2 - 22.5) | 73.1 (| 66.1 - 80.0) |
| 10 to 15 yrs | 3.2 (| 1.4 - | 5.1) | 3.5 (| 1.3 - | 5.8) | 9.7 (| 5.9 - | 13.5) | 16.9 | (11.8-21.9) | 66.6 (| 60.5 - 72.8) |
| Gender | | | | | | | | | | | | | |
| Boys | 5.0 (| 2.4 - | 7.6) | 4.1 (| 1.4 - | 6.9) | 10.0 (| 6.0 - | 14.0) | 15.8 | (10.1 - 21.4) | 65.1 (| 58.3 - 72.0) |
| Girls | 1.8 (| 0.2 - | 3.5) | 1.1 (| 0.0 - | 2.1) | 5.4 (| 2.5 - | 8.3) | 17.6 | (12.1 - 23.0) | 74.1 (| 68.1 - 80.2) |
| Children | 3.4 (| 1.9 - | 5.0) | 2.6 (| 1.1 - | 4.1) | 7.8 (| 5.2 - | 10.3) | 16.6 | (12.7 - 20.6) | 69.5 (| 64.9 - 74.2) |

| Table 85: Child looks forward to going to school e | every day, 5–15 years, HWSS 2012 |
|--|----------------------------------|
|--|----------------------------------|

The annual estimates of children looking forward to school are shown in Table 86.

| | Almos | st never | | Rarely | So | metimes | Often | | Almost always | |
|---------|---------|-------------|-------|-------------|--------|--------------|--------|---------------|---------------|---------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| 2002 | 1.1 (0 |).5 - 1.7) | 1.9 (| 0.8 - 3.1) | 9.9 (| 7.2 - 12.5) | 14.3 (| 11.1 - 17.4) | 72.8 (| 68.8 - 76.8) |
| 2003 | 3.2 (1 | .7 - 4.6) | 2.2 (| 1.2 - 3.3) | 9.1 (| 6.9 - 11.3) | 15.7 (| 12.7 - 18.7) | 69.8 (| 66.1 - 73.5) |
| 2004 | 1.1 (C |).2 - 2.1) | 1.5 (| 0.1 - 2.9) | 11.5 (| 7.4 - 15.7) | 13.9 (| 9.8 - 18.0) | 72.0 (| 66.5 - 77.5) |
| 2005 | 0.4 (0 |).1 - 0.7) | 1.6 (| 0.5 - 2.7) | 10.2 (| 7.1 - 13.2) | 16.5 (| 13.3 - 19.7) | 71.3 (| 67.2 - 75.4) |
| 2006 | 3.3 (1 | .9 - 4.7) | 2.7 (| 1.3 - 4.2) | 8.0 (| 5.8 - 10.2) | 16.0 (| 13.0 - 19.0) | 70.0 (| 66.2 - 73.8) |
| 2007 | 3.1(1 | .1 - 5.2) | 1.1 (| 0.2 - 2.0) | 6.6 (| 3.7 - 9.4) | 16.1 (| 12.1 - 20.2) | 73.1 (| 68.1 - 78.1) |
| 2008 | 2.7(1 | .3 - 4.0) | 3.0 (| 1.4 - 4.6) | 11.0 (| 7.6 - 14.5) | 13.7 (| 10.1 - 17.4) | 69.6 (| 64.7 - 74.5) |
| 2009 | 2.4 (1 | .6 - 3.2) | 3.1 (| 2.2 - 3.9) | 8.5 (| 7.2 - 9.8) | 19.3 (| 17.3 - 21.2) | 66.7 (| 64.4 - 69.1) |
| 2010 | 1.7 (0 |).5 - 2.9) | 2.0 (| 0.6 - 3.4) | 10.6 (| 7.6 - 13.7) | 16.5 (| 13.0 - 20.0) | 69.2 (| 64.8 - 73.7) |
| 2011 | 0.9 (0 |).1 - 1.7) | 2.5 (| 0.9 - 4.1) | 10.4 (| 7.3 - 13.6) | 19.8 (| 15.2 - 24.4) | 66.3 (| 61.1 - 71.6) |
| 2012 | 3.5 (1 | .9 - 5.0) | 2.7 (| 1.2 - 4.2) | 7.9(| 5.4 - 10.4) | 16.6 (| 12.7 - 20.4) | 69.4 (| 64.8 - 74.0) |
| Average | 2.3 (1 | .9 - 2.6) | 2.4 (| 2.1 - 2.8) | 9.0 (| 8.3 - 9.8) | 16.7 (| 15.8 - 17.7) | 69.6 (| 68.4 - 70.7) |

Table 86: Child looks forward to going to school everyday, 5–15 years, HWSS 2002–2012

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.²⁸ The questions used in the HWSS are taken from the McMaster Family Functioning Scale of 12 questions.²⁹ Four questions were identified as sufficient to assess family functioning within a population^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 87.

| | Strongly agree | | ŀ | Agree | ۵ | Disagree | Strongly disagree | |
|--------------|----------------|------------|-------|------------|--------|---------------|-------------------|---------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Age Group | | | | | | | | |
| 0 to 4 yrs | 0.5 (| 0.0-1.3) | 2.4 (| 0.0-4.9) | 31.8 (| (23.4 - 40.2) | 65.3 (| 56.8 - 73.8) |
| 5 to 9 yrs | 0.4 (| 0.0-1.3) | 2.9 (| 0.0-5.8) | 29.1 (| (22.2 - 36.1) | 67.5 (| 60.3 - 74.7) |
| 10 to 15 yrs | 1.0(| 0.0-2.5) | 2.9 (| 0.7 - 5.0) | 37.5 (| 31.0 - 44.0) | 58.6 (| 52.0 - 65.2) |
| Gender | | | | | | | | |
| Boys | 0.9 (| 0.0-2.0) | 2.9 (| 0.8-5.1) | 36.6 (| 30.6 - 42.7) | 59.6 (| 53.5 - 65.7) |
| Girls | 0.5 (| 0.0 - 1.1) | 2.5 (| 0.6 - 4.4) | 29.4 (| 23.6 - 35.2) | 67.6 (| 61.6 - 73.5) |
| Children | 0.7 (| 0.0 - 1.3) | 2.7 (| 1.3 - 4.2) | 33.1 (| (28.9 - 37.3) | 63.5 (| 59.2 - 67.8) |

Table 87: Family usually don't get on well together, HWSS 2012

^a The analysis of the McMaster instrument was undertaken by Professor Stephen Zubrick of the Telethon Institute for Child Health Research, whom the authors gratefully acknowledge

The annual estimates of family not usually getting along are shown in Table 88.

| | Strongly agree | Agree | Disagree | Strongly disagree | |
|---------|-------------------|-------------------|----------------------|----------------------|--|
| | % 95% CI | % 95% Cl | % 95% CI | % 95% CI | |
| 2002 | 0.7 (0.1 - 1.2) | 2.7 (1.4 - 4.1) | 30.4 (26.9 - 33.9) | 66.2 (62.6 - 69.8) | |
| 2003 | 0.5 (0.1 - 0.9) | 1.8 (1.0 - 2.6) | 35.8 (32.5 - 39.1) | 61.9 (58.6 - 65.3) | |
| 2004 | 0.2 (0.0 - 0.4) | 4.1 (2.1 - 6.2) | 35.5 (30.5 - 40.6) | 60.2 (55.0 - 65.3) | |
| 2005 | 0.3 (0.0 - 0.7) | 1.4 (0.5 - 2.3) | 34.0 (30.4 - 37.5) | 64.4 (60.8 - 68.0) | |
| 2006 | 0.2 (0.0 - 0.6) | 1.9 (1.0 - 2.8) | 36.0 (32.7 - 39.4) | 61.8 (58.4 - 65.2) | |
| 2007 | 1.0 (0.0 - 1.9) | 2.5 (1.2 - 3.9) | 28.4 (23.8 - 32.9) | 68.1 (63.5 - 72.8) | |
| 2008 | 0.8 (0.0 - 1.8) | 2.2 (0.9 - 3.5) | 35.1 (30.7 - 39.5) | 61.8 (57.3 - 66.3) | |
| 2009 | 0.5 (0.2 - 0.8) | 2.3 (1.5 - 3.2) | 31.4 (28.9 - 33.9) | 65.7 (63.1 - 68.3) | |
| 2010 | 0.6 (0.0 - 1.3) | 2.5 (1.3 - 3.7) | 26.8 (23.1 - 30.5) | 70.1 (66.3 - 73.9) | |
| 2011 | 1.2 (0.0 - 2.4) | 2.9 (1.2 - 4.7) | 31.6 (27.1 - 36.1) | 64.3 (59.6 - 68.9) | |
| 2012 | 0.7 (0.0 - 1.4) | 2.7 (1.3 - 4.1) | 33.3 (29.2 - 37.4) | 63.3 (59.1 - 67.5) | |
| Average | 0.6 (0.4 - 0.8) | 2.3 (2.0 - 2.6) | 33.0 (32.0 - 34.1) | 64.1 (63.0 - 65.2) | |

 Table 88: Family usually don't get on well together, HWSS 2002–2012

The second question asked parents/carers whether planning family activities is usually difficult, Table 89.

 Table 89: Planning family activities is usually difficult, HWSS 2012

| | Stror | ngly agree | | Agree | C | Disagree | Strongly disagree | |
|--------------|-------|-------------|--------|---------------|--------|---------------|-------------------|---------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Age Group | | | | | | | | |
| 0 to 4 yrs | 5.3 (| 0.3 - 10.4) | 13.9 (| 7.8 - 20.0) | 35.4 (| 27.2 - 43.7) | 45.3 (| 36.8 - 53.8) |
| 5 to 9 yrs | 0.4 (| 0.0 - 0.8) | 15.3 (| 9.7 - 21.0) | 40.3 (| 32.7 - 47.9) | 43.9 (| 36.4 - 51.5) |
| 10 to 15 yrs | 3.3 (| 0.9 - 5.8) | 19.9 (| 14.6 - 25.2) | 43.6 (| 37.1 - 50.2) | 33.2 (| 26.9 - 39.4) |
| Gender | | | | | | | | |
| Boys | 3.4 (| 0.6 - 6.2) | 18.2 (| 13.5 - 22.9) | 38.8 (| 32.8 - 44.8) | 39.6 (| 33.6 - 45.5) |
| Girls | 2.8 (| 0.3 - 5.3) | 14.8 (| 10.2 - 19.4) | 41.2 (| 35.0 - 47.4) | 41.2 (| 35.0 - 47.4) |
| Children | 3.1 (| 1.2 - 5.0) | 16.6 (| 13.3 - 19.8) | 40.0 (| 35.7 - 44.3) | 40.4 (| 36.1 - 44.7) |

The annual estimates of whether planning family activities is usually difficult are shown in Table 90.

| | Strongly agree | | | Agree | C | Disagree | Strongly disagree | |
|---------|----------------|-------------|--------|---------------|--------|---------------|-------------------|---------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| 2002 | 2.1 (| 1.2 - 3.1) | 18.5 (| 15.2 - 21.8) | 39.8 (| 36.0 - 43.5) | 39.6 (| 35.8 - 43.4) |
| 2003 | 3.3 (| 1.9 - 4.8) | 16.7 (| 14.1 - 19.3) | 44.8 (| 41.4 - 48.2) | 35.1 (| 31.8 - 38.5) |
| 2004 | 2.0 (| 0.5 - 3.6) | 19.5 (| 15.4 - 23.7) | 43.7 (| 38.5 - 49.0) | 34.7 (| 29.6 - 39.7) |
| 2005 | 2.7 (| 1.5 - 4.0) | 13.5 (| 11.0 - 16.0) | 46.7 (| 42.9 - 50.4) | 37.1 (| 33.5 - 40.7) |
| 2006 | 2.3 (| 1.2 - 3.4) | 17.6 (| 15.1 - 20.2) | 45.3 (| 41.9 - 48.8) | 34.7 (| 31.4 - 38.0) |
| 2007 | 2.2 (| 0.5 - 3.8) | 14.8 (| 11.4 - 18.2) | 41.6 (| 36.8 - 46.5) | 41.4 (| 36.5 - 46.3) |
| 2008 | 1.6 (| 0.6 - 2.6) | 20.8 (| 17.0 - 24.6) | 43.8 (| 39.2 - 48.4) | 33.8 (| 29.4 - 38.2) |
| 2009 | 1.1 (| 0.7 - 1.5) | 14.0 (| 12.0 - 16.0) | 43.4 (| 40.5 - 46.2) | 41.5 (| 38.6 - 44.4) |
| 2010 | 3.0 (| 1.5 - 4.5) | 13.3 (| 10.5 - 16.2) | 40.2 (| 36.1 - 44.4) | 43.5 (| 39.3 - 47.6) |
| 2011 | 1.8 (| 0.4 - 3.2) | 14.5 (| 11.0 - 18.0) | 40.1 (| 35.5 - 44.8) | 43.6 (| 38.9 - 48.3) |
| 2012 | 3.0 (| 1.3 - 4.8) | 16.7 (| 13.4 - 19.9) | 40.3 (| 36.1 - 44.5) | 40.0 (| 35.9 - 44.2) |
| Average | 2.2(| 1.9 - 2.6) | 15.9 (| 15.1 - 16.7) | 43.5 (| 42.4 - 44.6) | 38.4 (| 37.3 - 39.5) |

The third question asked parents/carers whether they usually avoid discussing their fears and concerns openly with each other, Table 91.

| | Stror | ngly agree | J | Agree | | D | Disagree | Stron | gly disagree |
|--------------|-------|------------|-------|------------|---|--------|---------------|--------|---------------|
| | % | 95% CI | % | 95% CI | _ | % | 95% CI | % | 95% CI |
| Age Group | | | | | | | | | |
| 0 to 4 yrs | 3.2 (| 0.0 - 7.1) | 5.5 (| 1.1 - 9.8 |) | 40.5 (| 32.0 - 49.0) | 50.8 (| 42.2 - 59.4) |
| 5 to 9 yrs | 2.5 (| 0.0-5.1) | 3.7 (| 0.4 - 7.0 |) | 40.5 (| 32.9 - 48.1) | 53.4 (| 45.7 - 61.1) |
| 10 to 15 yrs | 0.5 (| 0.0-1.5) | 7.4 (| 3.8 - 11.1 |) | 45.1 (| 38.6 - 51.7) | 46.9 (| 40.3 - 53.5) |
| Gender | | | | | | | | | |
| Boys | 0.2 (| 0.0-0.5) | 5.3 (| 2.4 - 8.3 |) | 47.5 (| 41.4 - 53.6) | 46.9 (| 40.9 - 53.0) |
| Girls | 3.8 (| 0.7-6.9) | 6.0(| 2.7 - 9.3 |) | 36.8 (| 30.8 - 42.7) | 53.5 (| 47.1 - 59.8) |
| Children | 2.0 (| 0.4 - 3.5) | 5.7 (| 3.4 - 7.9 |) | 42.2 (| 37.9 - 46.6) | 50.1 (| 45.7 - 54.5) |

The annual estimates of whether families avoid discussing fears and concerns openly with each other are shown in Table 92.

| | Strongly agree | Agree | Disagree | Strongly disagree |
|---------|-------------------|--------------------|----------------------|----------------------|
| | % 95% CI | % 95% CI | % 95% Cl | % 95% CI |
| 2002 | 1.8 (0.8 - 2.8) | 8.5 (6.4 - 10.5) | 42.9 (39.1 · 46.7) | 46.8 (42.9 - 50.7) |
| 2003 | 0.4 (0.1 - 0.7) | 9.3 (7.1 - 11.5) | 44.6 (41.1 · 48.0) | 45.7 (42.3 - 49.2) |
| 2004 | 1.4 (0.1 - 2.6) | 9.5 (6.4 - 12.6) | 51.1 (45.9 · 56.4) | 38.0 (32.9 - 43.2) |
| 2005 | 0.4 (0.1 - 0.7) | 6.1 (4.4 - 7.8) | 47.7 (44.0 · 51.5) | 45.8 (42.1 - 49.5) |
| 2006 | 0.6 (0.1 - 1.0) | 5.2 (3.8 - 6.7) | 51.4 (48.0 · 54.9) | 42.8 (39.4 - 46.2) |
| 2007 | 1.1 (0.0 - 2.2) | 8.9 (5.9 - 12.0) | 37.0 (32.3 · 41.7) | 52.9 (48.0 - 57.8) |
| 2008 | 1.8(0.5 - 3.1) | 7.9(5.3-10.4) | 45.1 (40.4 · 49.7) | 45.3 (40.7 - 49.9) |
| 2009 | 0.8 (0.3 - 1.3) | 6.0 (4.8 - 7.3) | 47.9 (45.0 · 50.7) | 45.3 (42.4 - 48.1) |
| 2010 | 1.1 (0.2 - 1.9) | 5.6 (3.7 - 7.6) | 43.1 (39.0 · 47.3) | 50.2 (45.9 - 54.4) |
| 2011 | 0.5 (0.0 - 1.0) | 5.4 (3.4 - 7.5) | 42.6 (37.9 · 47.2) | 51.5 (46.7 - 56.2) |
| 2012 | 1.9 (0.4 - 3.3) | 5.7 (3.5 - 7.8) | 42.5 (38.3 · 46.8) | 49.9 (45.6 - 54.2) |
| Average | 1.0 (0.8 - 1.3) | 6.9 (6.3 - 7.4) | 45.8 (44.7 · 47.0) | 46.3 (45.1 - 47.4) |

Table 92: Usually avoid discussing fears and concerns openly with each other, HWSS 2002–2012

The fourth question asked parents/carers whether making decisions is usually a problem in the family because they misunderstand each other, Table 93.

| | Stror | igly agree | J | Agree | D | Disagree | Stron | gly disagree |
|--------------|-------|------------|--------|--------------|--------|---------------|--------|---------------|
| | % | 95% Cl | % | 95% CI | % | 95% CI | % | 95% CI |
| Age Group | | | | | | | | |
| 0 to 4 yrs | 0.5 (| 0.0-1.3) | 5.9 (| 2.5 - 9.3) | 49.7 (| 41.1 - 58.3) | 43.9 (| 35.5 - 52.4) |
| 5 to 9 yrs | 0.4 (| 0.0-0.9) | 7.5 (| 3.0 - 12.1) | 45.1 (| 37.5 - 52.8) | 47.0 (| 39.3 - 54.6) |
| 10 to 15 yrs | 0.5 (| 0.0 - 1.1) | 10.2 (| 5.9 - 14.4) | 42.0 (| 35.6 - 48.5) | 47.3 (| 40.7 - 53.9) |
| Gender | | | | | | | | |
| Boys | 0.5 (| 0.0-1.2) | 7.4 (| 4.1 - 10.8) | 45.3 (| 39.2 - 51.4) | 46.7 (| 40.7 - 52.8) |
| Girls | 0.3 (| 0.0-0.8) | 8.5 (| 5.1 - 12.0) | 45.7 (| 39.4 - 52.0) | 45.5 (| 39.2 - 51.8) |
| Children | 0.4 (| 0.1 - 0.8) | 8.0 (| 5.6 - 10.4) | 45.5 (| 41.1 - 49.8) | 46.1 (| 41.8 - 50.5) |

The annual estimates of whether making decisions is usually a problem is shown in Table 94.

| | Strongly agree | Agree | Disagree | Strongly disagree |
|---------|-------------------|---------------------|----------------------|----------------------|
| | % 95% Cl | % 95% CI | % 95% CI | % 95% CI |
| 2002 | 0.7 (0.1 - 1.3) | 9.5 (7.1 - 11.8) | 45.4 (41.5 - 49.3) | 44.4 (40.5 - 48.3) |
| 2003 | 0.1 (0.0 - 0.3) | 9.8 (7.7 - 11.9) | 50.2 (46.8 - 53.7) | 39.9 (36.5 - 43.3) |
| 2004 | 0.5 (0.0 - 1.6) | 11.4 (8.0 - 14.7) | 54.2 (49.0 - 59.4) | 33.9 (29.0 - 38.8) |
| 2005 | 0.5 (0.0 - 1.1) | 8.8 (6.7 - 10.9) | 52.6 (48.9 - 56.4) | 38.0 (34.4 - 41.7) |
| 2006 | 0.4 (0.0 - 0.9) | 9.9 (7.9 - 11.9) | 52.1 (48.7 - 55.6) | 37.6 (34.3 - 40.9) |
| 2007 | 0.5 (0.0 - 2.1) | 7.8 (5.5 - 10.1) | 46.7 (41.8 - 51.7) | 44.5 (39.5 - 49.4) |
| 2008 | 0.3 (0.0 - 0.7) | 10.0 (7.3 - 12.7) | 51.2 (46.5 - 55.8) | 2.3 (34.0 - 43.0) |
| 2009 | 0.4 (0.1 - 0.7) | 7.3 (6.0 - 8.6) | 49.3 (46.4 - 52.2) | 43.0 (40.1 - 45.8) |
| 2010 | 0.8 (0.1 - 1.6) | 6.2 (4.3 - 8.2) | 47.2 (43.0 - 51.4) | 45.7 (41.5 - 50.0) |
| 2011 | 0.8 (0.1 - 1.5) | 5.8 (3.5 - 8.1) | 45.1 (40.3 - 49.8) | 48.3 (43.6 - 53.1) |
| 2012 | 0.5 (0.1 - 0.8) | 8.0 (5.6 - 10.4) | 45.4 (41.1 - 49.7) | 46.1 (41.8 - 50.4) |
| Average | 0.5 (0.4 - 0.7) | 8.6 (8.0 - 9.2) | 49.4 (48.3 - 50.6) | 41.5 (40.3 - 42.6) |

Table 94: Making decisions is usually a problem because they misunderstand each other, HWSS2002–2012

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 Curtin University Centre for Developmental Health at the Telethon Institute for Child Health Research, 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: Poor family functioning, HWSS 2012

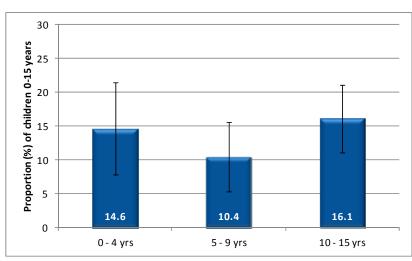


Figure 19 shows the proportion of children with poor family functioning scores by area of residence.

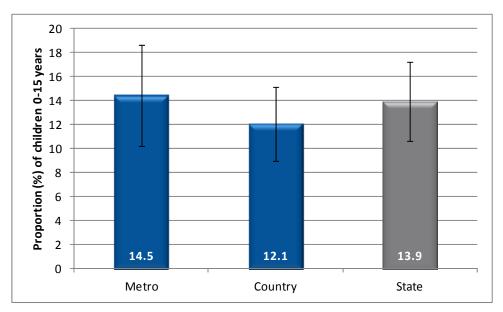


Figure 19: Poor family functioning, by geographic areas, HWSS 2012

The annual estimates of poor family functioning are shown in Table 95.

 Table 95: Poor family functioning, HWSS 2002–2012

| | % | 95% CI |
|---------|--------|--------------|
| 2002 | 15.7(1 | 2.9 - 18.5) |
| 2003 | 14.8(1 | 2.3 - 17.3) |
| 2004 | 19.7(1 | 5.4 - 23.9) |
| 2005 | 12.8(1 | 0.5 - 15.2) |
| 2006 | 15.7(1 | 3.3 - 18.2) |
| 2007 | 14.6(1 | 1.0 - 18.1) |
| 2008 | 16.2(1 | 2.9 - 19.5) |
| 2009 | 11.7(1 | 0.0 - 13.3) |
| 2010 | 11.4 (| 8.7 - 14.0) |
| 2011 | 11.4 (| 8.3 - 14.5) |
| 2012 | 13.9(1 | 0.7 - 17.1) |
| Average | 13.9(1 | 3.2 - 14.7) |

14. CHILD RESPONDENT

As well as information regarding the child, demographic, social and psychosocial information was collected from the parent/guardian responding about the child. 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/guardian respondent to the survey has not been weighted. The demographic characteristics of the respondent compared to the general population have been presented in Section 4.

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.⁴

| Table 96 shows the child respondents' self- | -reported general health status. |
|---|----------------------------------|
|---|----------------------------------|

| | E | Excellent Very good | | | Good | | Fair | Poor | | |
|----------------|--------|---------------------|--------|---------------|--------|--------------|-------|-------------|-------|------------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Child's age gr | oup | | | | | | | | | |
| 0 to 4 yrs | 32.4 (| (26.4 - 38.3) | 40.7 (| 34.5 - 46.9) | 24.5 (| 19.0 - 29.9) | 2.1 (| 0.3 · 3.9) | 0.4 (| 0.0 - 1.2) |
| 5 to 9 yrs | 22.0 (| (17.0 - 27.1) | 35.9 (| 30.1 - 41.8) | 33.6 (| 27.8 - 39.4) | 7.3 (| 4.2 · 10.5) | 1.2 (| 0.0 - 2.5) |
| 10 to 15 yrs | 20.5 (| 16.5 - 24.5) | 34.5 (| 29.8 - 39.2) | 34.0 (| 29.3 - 38.7) | 9.7 (| 6.8 · 12.7) | 1.3 (| 0.2 - 2.4) |
| Child's sex | | | | | | | | | | |
| Boy | 22.7 (| 18.9 - 26.6) | 35.7 (| 31.3 - 40.1) | 33.3 (| 29.0 - 37.6) | 7.4 (| 5.0 · 9.7) | 0.9 (| 0.0 - 1.7) |
| Girl | 25.6 (| 21.5 - 29.8) | 37.5 (| 32.9 - 42.1) | 29.1 (| 24.8 - 33.4) | 6.5 (| 4.2 · 8.9) | 1.2 (| 0.1 - 2.2) |
| Persons | 24.1 (| 21.3 - 26.9) | 36.6 (| 33.4 - 39.8) | 31.3 (| 28.3 - 34.4) | 7.0 (| 5.3 · 8.6) | 1.0 (| 0.4 - 1.7) |

Table 96: General health status of child respondent, HWSS 2012

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. As mental health problems are associated with higher rates of death, poorer physical health and increased exposure to health risk factors, they are a National Health Priority Area. 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 97.

| | proble | ital health m in last 12 onths (a) | re | urrently ceiving tment (b) |
|----------------|--------|--|--------|----------------------------------|
| | % | 95% CI | % | 95% CI |
| Child's age gr | oup | | | |
| 0 to 4 yrs | 13.7 (| 9.3 - 18.0) | 12.4 (| 8.3 - 16.6) |
| 5 to 9 yrs | 13.5 (| 9.3 - 17.7) | 8.9 (| 5.4 - 12.4) |
| 10 to 15 yrs | 14.3 (| 10.8 - 17.8) | 12.0 (| 8.8 - 15.3) |
| Child's sex | | | | |
| Boy | 17.3 (| 13.9 - 20.8) | 14.1 (| 10.9 - 17.2) |
| Girl | 10.3 (| 7.4 - 13.1) | 8.2 (| 5.6 - 10.8) |
| Persons | 13.9 (| 11.6 - 16.2) | 11.2 (| 9.1 - 13.3) |

Table 97: Mental health of child respondent, HWSS 2012

(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 diagnosed in the last 12 months.

14.3 Lack of control

Perceptions of control relate to an individual's belief as to whether outcomes are determined by external events outside their control or by their own actions.³⁰ Feelings of lack of control have been found to have adverse effects on health and to increase the risk of mortality.^{31, 32}

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

| | Never | | Never Rarely | | So | metimes | (| Often | Always | |
|----------------|--------|--------------|--------------|--------------|--------|---------------|-------|------------|--------|-----------|
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% Cl | % | 95% CI |
| Child's age gr | oup | | | | | | | | | |
| 0 to 4 yrs | 48.1 (| 41.8 - 54.5) | 25.3 (| 19.8 - 30.8) | 21.6 (| 16.4 - 26.8) | 4.1 (| 1.6-6.7) | 0.8 (| 0.0 - 2.0 |
| 5 to 9 yrs | 46.5 (| 40.4 - 52.6) | 28.7 (| 23.2 - 34.2) | 19.8 (| 14.9 - 24.6) | 3.5 (| 1.2 - 5.7) | 1.6(| 0.0 - 3.1 |
| 10 to 15 yrs | 55.8 (| 50.8 - 60.7) | 21.7 (| 17.6 - 25.8) | 19.2 (| 15.3 - 23.1) | 2.6 (| 1.0 - 4.1) | 0.8 (| 0.0 - 1.6 |
| Child's sex | | | | | | | | | | |
| Воу | 47.4 (| 42.8 - 52.0) | 26.0 (| 22.0 - 30.0) | 22.3 (| 18.5 - 26.1) | 2.8 (| 1.3-4.3) | 1.5 (| 0.4 - 2.6 |
| Girl | 54.9 (| 50.2 - 59.6) | 23.4 (| 19.3 - 27.4) | 17.5 (| 13.9 - 21.1) | 3.7 (| 1.9- 5.5) | 0.5 (| 0.0 - 1.1 |
| Persons | 51.0 (| 47.7 - 54.3) | 24.7 (| 21.9 - 27.6) | 20.0 (| 17.4 - 22.6) | 3.3 (| 2.1 - 4.4) | 1.0 (| 0.4 - 1.7 |

Table 98: Lack of control over life in general during past four weeks, child respondent, HWSS 2012

Lack of control over personal life is shown in Table 99.

Table 99: Lack of control over personal life during past four weeks, child respondent, HWSS 2012

| | Never | | Rarely | | Sometimes | | Often | | Always | |
|----------------|--------|--------------|--------|---------------|-----------|---------------|-------|------------|--------|------------|
| | % | 95% CI | % | 95% CI | % | 95% Cl | % | 95% CI | % | 95% CI |
| Child's age gr | oup | | | | | | | | | |
| 0 to 4 yrs | 56.0 (| 49.7 - 62.3) | 25.3 (| 19.8 - 30.8) | 15.8 (| 11.2 - 20.4) | 2.1 (| 0.3-3.9) | 0.8 (| 0.0-2.0) |
| 5 to 9 yrs | 52.7 (| 46.6 - 58.8) | 23.6 (| 18.4 - 28.8) | 18.2 (| 13.5 - 22.9) | 4.3 (| 1.8-6.7) | 1.2 (| 0.0-2.5) |
| 10 to 15 yrs | 59.0 (| 54.1 - 63.9) | 22.7 (| 18.5 - 26.9) | 15.7 (| 12.1 - 19.4) | 1.8 (| 0.5- 3.1) | 0.8 (| 0.0-1.6) |
| Child's sex | | | | | | | | | | |
| Boy | 52.3 (| 47.7 - 56.8) | 26.5 (| 22.4 - 30.5) | 17.4 (| 13.9 - 20.8) | 3.0 (| 1.5- 4.6) | 0.9 (| 0.0 - 1.7) |
| Girl | 60.8 (| 56.2 - 65.4) | 20.7 (| 16.8 - 24.5) | 15.5 (| 12.1 - 18.9) | 2.1 (| 0.7 - 3.5) | 0.9 (| 0.0- 1.9) |
| Persons | 56.4 (| 53.1 - 59.6) | 23.7 (| 20.9 - 26.5) | 16.5 (| 14.0 - 18.9) | 2.6 (| 1.5 - 3.6) | 0.9 (| 0.3 - 1.5) |

Table 100 shows self-reported lack of control over health.

| Table 100: Lack of control of | over health during past four weeks, | child respondent, HWSS 2012 |
|-------------------------------|-------------------------------------|-----------------------------|
| | | |

| | | | | • • | | | | | | |
|----------------|--------|---------------|--------|--------------|-----------|---------------|-------|------------|--------|------------|
| | Never | | Rarely | | Sometimes | | Often | | Always | |
| | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI | % | 95% CI |
| Child's age gr | oup | | | | | | | | | |
| 0 to 4 yrs | 57.7 (| (51.4 - 63.9) | 20.3 (| 15.2 - 25.4) | 16.6 (| 11.9-21.3) | 3.3 (| 1.1 - 5.6) | 2.1 (| 0.3-3.9) |
| 5 to 9 yrs | 53.5 (| (47.4 - 59.6) | 18.6 (| 13.8 - 23.4) | 22.1 (| 17.0 - 27.2) | 4.7 (| 2.1 - 7.2) | 1.2 (| 0.0 - 2.5) |
| 10 to 15 yrs | 58.8 (| (53.9-63.7) | 18.2 (| 14.3 - 22.0) | 17.1 (| 13.4 - 20.9) | 4.6 (| 2.5-6.7) | 1.3 (| 0.2 - 2.4) |
| Child's sex | | | | | | | | | | |
| Boy | 54.1 (| (49.6 - 58.7) | 19.0 (| 15.5 - 22.6) | 20.3 (| 16.7 - 24.0) | 4.5 (| 2.6-6.4) | 1.9 (| 0.7 - 3.2) |
| Girl | 60.0 (| (55.4 - 64.7) | 18.7 (| 15.0 - 22.4) | 16.4 (| 12.8 - 19.9) | 4.0 (| 2.1 - 5.8) | 0.9 (| 0.0 - 1.8) |
| Persons | 57.0 (| (53.7 - 60.2) | 18.9 (| 16.3 - 21.5) | 18.4 (| 15.9 - 21.0) | 4.3 (| 2.9-5.6) | 1.5 (| 0.7 - 2.3) |

15. CHILD RESPONDENT'S PARTNER

The demographic characteristics of the child respondent's partner and unweighted proportions are shown below in Table 101.

| Characteristic | Unweighted Sample (n) | Unweighted Prevalence (%) | |
|-------------------------------------|--------------------------|------------------------------|--|
| Australian born | | | |
| Yes | 607 | 76.4 | |
| No | 188 | 23.6 | |
| Aboriginal or Torres Strait Islande | r | | |
| Yes | 18 | 2.3 | |
| No | 777 | 97.7 | |
| Highest level of education | | | |
| Less than Year 10 | 15 | 1.9 | |
| Year 10 or Year 11 | 92 | 11.6 | |
| Year 12 | 104 | 13.1 | |
| TAFE/Trade qualification | 394 | 49.7 | |
| Tertiary degree or equivalent | 187 | 23.6 | |
| Employment status | | | |
| Employed | 731 | 92.2 | |
| Unemployed | 6 | 0.8 | |
| Home duties | 46 | 5.8 | |
| Retired | 3 | 0.4 | |
| Unable to work | 5 | 0.6 | |
| Student | 1 | 0.7 | |
| Other | 2 | 0.3 | |

Table 101: Demographics of child respondent's partner, HWSS 2012

16. REFERENCES

1. Silburn S.R. and Zubrick S.R., 1996, The WA Child Health Survey: Methodology and Policy Implications.Accessed: 1 August, 2007. Available from: http://www.aifs.gov.au/conferences/aifs5/silburn.html.

2. Zubrick S.R., Lawrence D.M., Silburn S.R., Blair E., Milroy H., Wilkes T., Eades S., D'Antoine H., Read A., Ishiguchi P. and Doyle S., 2004, The Western Australian Aboriginal Child Health Survey: The Health of Aboriginal Children and Young People, Telethon Institue for Child Health Research, Perth. Accessed: 17 August,, 2007. Available from: <u>www.ichr.uwa.edu.au/waachs/?=/waachs</u>.

3. Australian Bureau of Statistics, 2005, National Aboriginal and Torres Strait Islander Health Survey, Australia 2004-2005, cat. no. 4715.0, ABS, Canberra. Accessed: 17 August, 2007. Available from:

http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/B1BCF4E6DD320A0BCA25714C 001822BC/\$File/47150_2004-05.pdf.

4. Draper G., Unwin E., Serafino S., Somerford P. and Price S., 2005, Health Measures 2005: A report on the health of the people of Western Australia, Department of Health, Perth.

5. Australian Institute of Health and Welfare, 2006, Australia's Health 2006, cat. no. AUS37, AIHW, Canberra. Accessed: 15 February, 2007. Available from: <u>http://www.aihw.gov.au/publication-detail/?id=6442467855</u>.

6. Department of Health and Ageing, 2010, Chornic Disease, Department of Health and Ageing, Canberra.Accessed: 8 December, 2011. Available from: <u>http://www.health.gov.au/internet/main/publishing.nsf/content/pq-ncds</u>.

7. Better Health Channel, 2011, Attention deficit hyperactiviity disorder, Better Health Channel, Melbourne.Accessed: 8 December, 2011. Available from: http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Attention_deficit_hyperactivity_disorder.

8. Australian Institute of Health and Welfare, 2012, A picture of Australia's children 2012, cat. no. PHE 167, AIHW, Canberra. Accessed: 24 January 2013. Available from: http://www.aihw.gov.au/publication-detail/?id=10737423343.

9. United Nations Children's Fund and World Health Organisation, 2004, Low birth weight: country, regional and global estimates, UNICEF, New York. Accessed: 26 June, 2007. Available from: <u>http://www.unicef.org/publications/files/low_birthweight_from_EY.pdf</u>.

10. Australian Institute of Health and Welfare, 2004, Key national indicators of children's health, development and well-being, Bulletin issue 20, AIHW, Canberra. Accessed: 27 June, 2007. Available from: <u>http://www.aihw.gov.au/publications/aus/bulletin20/bulletin20-c01.pdf</u>.

11. Novita Children's Services, 2011, Speech, Novita Children's Services, Adelaide.Accessed: 8 December, 2011. Available from: <u>http://www.novita.org.au/content.aspx?p=62</u>.

12. Australian Institute of Health and Welfare, 2003, The Active Australia Survey, A guide and manual for implementation, analysis and reporting, cat. no. CVD 22, AIHW, Canberra. Available from: <u>http://www.aihw.gov.au/publication-detail/?id=6442467449</u>.

13. Department of Health and Ageing, 2004, Australia's Physical Activity Recommendations for 12-18 Year Olds, Department of Health and Ageing, Canberra. Accessed: 26 June, 2007. Available from: <u>http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-physical-activity-youth-pdf-cnt.htm/\$FILE/youth_phys.pdf</u>.

14. Department of Health and Ageing, 2004, Australia's Physical Activity Recommendations for 5-12 Year Olds, Department of Health and Ageing, Canberra. Accessed: 26 June, 2007. Available from:

http://www.health.gov.au/internet/main/Publishing.nsf/Content/9D7D393564FA0C42CA256 F970014A5D4/\$FILE/kids_phys.pdf.

15. Department of Health and Ageing, 2010, Move and Play Every Day. National Physical Activity Recommendations for Children 0-5 years, DOHA, Canberra. Accessed: 31 January 2013. Available from:

http://www.health.gov.au/internet/main/publishing.nsf/Content/CB94BC879F76C211CA257 7AE007F78FC/\$File/0-5yrACTIVE_Brochure_FA%20SCREEN.pdf.

16. Cole T.J., Bellizzi M.C., Flegal K.M. and Diets W.H., 2000, 'Establishing a standard definition for child overweight and obesity worldwide: international survey.', *BMJ*, 320(7244): 1240-43.

17. Centers for Disease Control and Prevention, 2011, A SAS Program for the CDC Growth Charts, CDC, Atlanta (GA).Accessed: 8 December, 2011. Available from: http://www.cdc.gov/nccdphp/dnpao/growthcharts/resources/sas.htm.

18. Cancer Council Australia, 2012, National Cancer Prevention Policy: Ultraviolet radiation, Cancer Council Australia, Sydney.Accessed: 1 February, 2013. Available from: http://wiki.cancer.org.au/prevention/UV/Link_between_UV_and_cancer.

19. Dawe S., Frye S., Best D., Moss D., Atkinson J., Evans C., Lynch M. and Harnett P., 2006, Drug use in the family: Impacts and implications for children, ANCD, Canberra. Accessed: 27 June, 2007. Available from: http://www.ancd.org.au/images/PDF/Researchpapers/rp13_drug_use_in_family.pdf?phpMy

Admin=rGQ2XkOOsKjMp24r2sFwuVc5ibb.

20. NSW Department of Health, 2007, Smoking and pregnancy, NSW Department of Health, Sydney. Accessed: 8 December, 2011. Available from: http://www.health.nsw.gov.au/factsheets/general/smoking_preg.html.

21. National Health and Medical Research Council, 2003, Dietary Guidelines for Children and Adolescents in Australia (incorporating the Infant Feeding Guidelines for Health

Workers) NHMRC, Canberra. Accessed: 27 June, 2007. Available from: http://www.nhmrc.gov.au/_files_nhmrc/file/publications/synopses/n34.pdf.

22. Heussler H., 2005, 'Common causes of sleep distruption and daytime sleepiness: childhood sleep disorders', *MJA*, 182(9): 484-89.

23. Australian Institute of Health and Welfare, 1998, National Health Priority Areas Report, Mental Health: A report focussing on depression, cat. no. PHE 11, AIHW, Canberra. Accessed: 15 February, 2007. Available from: <u>http://www.aihw.gov.au/publication-</u> <u>detail/?id=6442467062</u>.

24. Australian Bureau of Statistics, 2004, Charateristics of people reporting good or better health, 2001, ABS, Canberra. Accessed: 19 February, 2007. Available from: http://www.abs.gov.au/ausstats/abs@.nsf/ProductsbyReleaseDate/E8CD6F5CEDCC9587C http://www.abs.gov.au/ausstats/abs@.nsf/ProductsbyReleaseDate/E8CD6F5CEDCC9587C http://www.abs.gov.au/ausstats/abs@.nsf/ProductsbyReleaseDate/E8CD6F5CEDCC9587C

25. Clark C.M., 2005, Relations between Social Support and Physical Health.Accessed: 10 September, 2007. Available from: <u>http://www.personalityresearch.org/papers/clark.html</u>.

26. Rigby K., 2003, Bullying among young children: A guide for teachers and carers, Australia Governmemnt Attorney-General's Department, Canberra. Accessed: 27 June, 2007. Available from:

http://www.yarrileess.eq.edu.au/home/ngilm6/Positive/Positive%20PDF/Bullying+Teachers.pdf.

27. Australian Institute of Health and Welfare, 2007, Young Australians: Their Health and Wellbeing 2007, cat. no. PHE 87, AIHW, Canberra. Accessed: 27 June, 2007. Available from: <u>http://www.aihw.gov.au/publication-detail/?id=6442467991</u>.

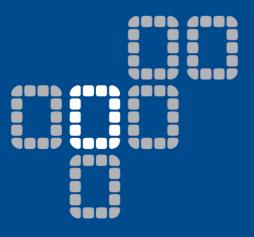
28. NSW Department of Health, n.d, Family functioning and parental support, NSW Department of Health, Sydney.Accessed: 8 December, 2011. Available from: http://www.health.nsw.gov.au/publichealth/surveys/hsc/0506/toc/5_soc_03_famfuncparenta_lsup.pdf.

29. Epstein N.B., Baldwin L.M. and Bishop D.S., 1983, 'The McMaster family Assessment Device', *Journal of Marital & Family Therapy*, 9(2): 171-80.

30. Cabinet Office, 2004, Work Stress and Health: the Whitehall II study, CCSU, London. Accessed: 1 February, 2007. Available from: <u>http://www.ucl.ac.uk/whitehallII/pdf/Whitehallbooklet_1_.pdf</u>.

31. Crouchley K., Daly A. and Molster C., 2006, An Overview of the Health and Wellbeing of Young Adults in Western Australia 2002-2005, Department of Health, Perth.

32. Bailis D.S., Seagall A., Mahon M.J., Chipperfield J.G. and Dunn E.M., 2001, 'Perceived control in relation to socioeconomic and behavioural resources for health', *Social Science and Medicine*, 52: 1661-76.



Delivering a Healthy WA





All information/data provided in this report is accurate and up to date at the time of release. The Epidemiology Branch cannot be held liable for any damages arising from the use of this data.