

## 3.11 Body weight

### Why this measure is included

Being overweight or obese increases a child's risk of poor physical health in both the short and long term. Being obese increases a child's risk of a range of conditions such as asthma, Type 2 diabetes and cardiovascular conditions.<sup>157</sup> Overweight or obese children who continue to be overweight or obese in adulthood face a higher risk of developing coronary heart disease, diabetes, certain cancers, gall bladder disease, osteoarthritis and endocrine disorders.<sup>158 159</sup>

Children and young people who are overweight or obese can also experience discrimination, victimisation and teasing by their peers. This may contribute to poor peer relationships, school experiences and psychological wellbeing, particularly among older overweight and obese children.<sup>160</sup>

**Table 3.33: Prevalence of BMI categories for children 5 to 15 years: in per cent, Western Australia, 2004 to 2012**

	Not overweight or obese	Overweight	Obese
2004	73.6	19.7	6.7
2005	70.7	19.9	9.3
2006	78.8	15.1	6.1
2007	82.5	12.9	4.6
2008	80.2	14.1	5.8
2009	77.3	16.8	5.8
2010	77.7	17.0	5.3
2011	81.0	14.7	4.3
2012	77.9	14.7	7.3

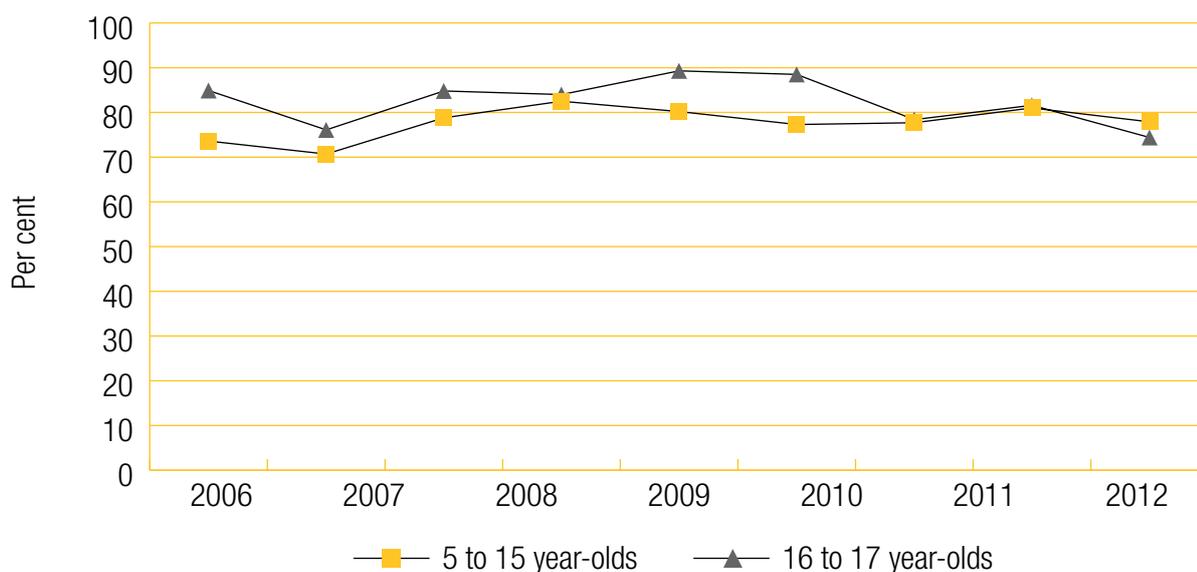
Source: Tomlin S and Joyce S 2013, *Health and Wellbeing of Children in Western Australia 2012, Overview and Trends*

**Table 3.34: Prevalence of BMI categories for young people 16 to 17 years: in per cent, Western Australia, 2004 to 2012**

	Not overweight or obese	Overweight	Obese
2004	84.9	8.4	6.7
2005	76.1	17.3	6.6
2006	84.8	13.4	1.8
2007	84.0	14.0	2.2
2008	89.3	6.2	4.6
2009	88.5	7.3	4.3
2010	78.4	16.3	5.2
2011	81.6	14.3	4.1
2012	77.2	19.1	3.6

Source: Data supplied by Public Health and Clinical Services Division, WA Department of Health, custom report

**Figure 3.14: Proportion of children and young people not overweight or obese: in per cent, by age group, Western Australia, 2004 to 2012**



Source: Data supplied by Public Health and Clinical Services Division, WA Department of Health, custom report

**Table 3.35: Prevalence of BMI categories for children and young people 5 to 15 years: in per cent, by gender and region, Western Australia, 2012**

	Not overweight or obese	Overweight	Obese
<b>Gender</b>			
Males	76.9	14.4	8.7
Females	78.9	15.0	6.0
<b>Region</b>			
Metropolitan Area	78.8	13.5	7.7
Regional Areas	75.0	18.9	6.4
<b>Total</b>	77.9	14.7	7.4

Source: Tomlin S and Joyce S 2013, *Health and Wellbeing of Children in Western Australia 2012, Overview and Trends*

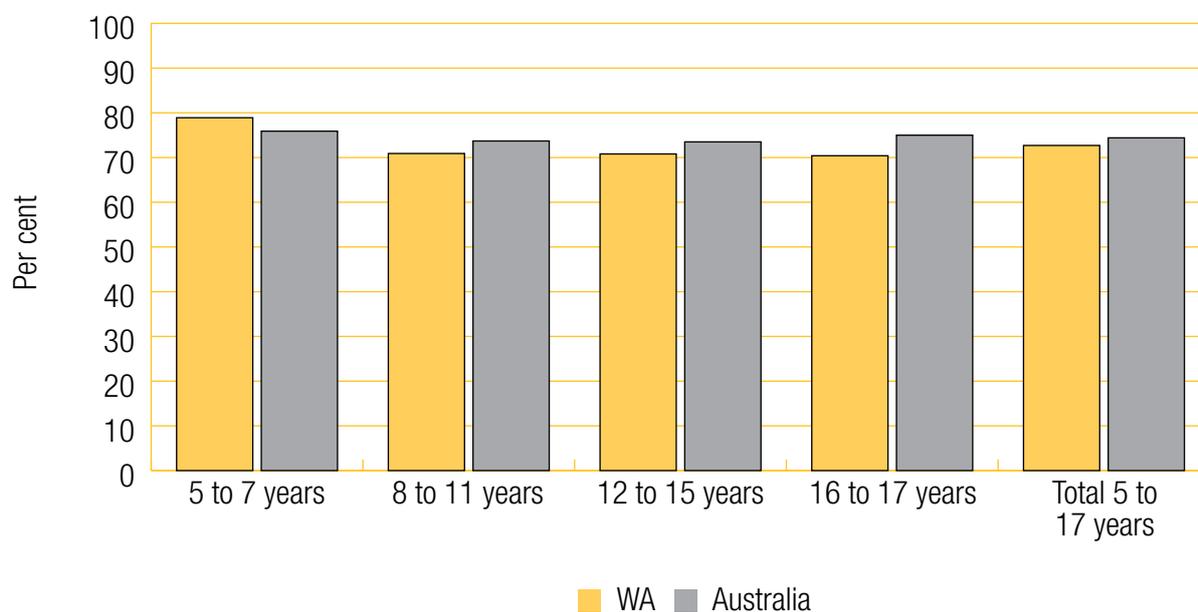
**Table 3.36: Prevalence of BMI categories for children and young people 5 to 17 years: in per cent, by age group, Western Australia and Australia, 2011–12**

	Not overweight or obese	Overweight	Obese	Overweight/Obese (BMI 25.00 or more)
<b>Western Australia</b>				
5 to 7 years	78.9	13.7	7.4*	21.1
8 to 11 years	70.9	22.6	6.5*	29.1
12 to 15 years	70.8	23.6	5.6*	29.2
16 to 17 years	70.4	22.0	7.6*	29.6
Total 5 to 17 years	72.7	20.7	6.6	27.3
<b>Australia</b>				
5 to 7 years	75.9	15.5	8.5	24.1
8 to 11 years	73.7	19.6	6.7	26.2
12 to 15 years	73.5	19.5	7.1	26.6
16 to 17 years	75.0	17.4	7.6	25.0
Total 5 to 17 years	74.4	18.3	7.4	25.7

Source: Australian Bureau of Statistics 2013, *Australian Health Survey: Updated Results, 2011–12*

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

**Figure 3.15: Proportion of children and young people not overweight or obese (BMI less than 25.00): in per cent, by age group, Western Australia and Australia, 2011–12**



Source: Australian Bureau of Statistics 2013, *Australian Health Survey: Updated Results, 2011–12*

## What is this measure?

This measure is concerned with the Body Mass Index (BMI) of children and young people aged five to 17 years. BMI is a common measure for defining whether a person is overweight or obese,<sup>161</sup> calculated by dividing weight in kilograms by the square of height in metres. BMI scores for children take into account the sex and age of the child. The BMI however is not a fixed measure, it varies as body composition changes with normal growth and stage of puberty.

Two separate data collections are used for this measure.

The first set of data is from the WA Health and Wellbeing Surveillance System (HWSS)<sup>162</sup> which is a strong trend indicator.<sup>163</sup> The HWSS is a continuous data collection initiated in 2002 to monitor the health status of the general population. In 2012, almost 900 parents or carers of children aged 0 to 15 years were interviewed.<sup>164</sup>

Parents and carers were asked to provide their child's height without shoes and their weight without clothes or shoes. A BMI was derived from these figures.<sup>165</sup> Data for young people aged 16 and 17 years was based on self-assessment.<sup>166</sup>

The second set of data comes from the *2011–13 Australian Health Survey (AHS)*, a national survey with a sample size of approximately 32,000 adults and children.<sup>167</sup> In this survey, questions about height and weight were voluntary, and 79.9 per cent of children aged two to 17 years involved in the survey had their height and weight measured. The measurements were conducted by trained interviewers.<sup>168</sup>

The two data sets that inform this measure do not include data about Aboriginality.

## Commentary

In 2012, the HWSS found that just over three-quarters of WA children aged five to 15 years were not overweight or obese (77.9%). This was at the lower end of the range observed since 2006 (77.3% to 82.5%), but higher than the proportion not overweight or obese in 2004 (73.6%) and 2005 (70.7%) (Table 3.33).

The proportion of WA young people aged 16 and 17 years classified as not overweight or obese was 77.2 per cent, which is the second lowest proportion recorded to date (Table 3.34).

In terms of gender, WA girls aged five to 15 years were slightly more likely than boys to be not overweight or obese (78.9% compared to 76.9%).

There are some differences in the proportions of overweight children and young people in regional areas compared with children in the metropolitan area, however the differences are not statistically significant (Table 3.35).

Separately, the AHS reported that in 2011–12 less than three-quarters (72.7%) of five to 17 year-olds in WA were not overweight or obese. This proportion is slightly lower than the proportion recorded nationally (74.4%) (Table 3.36).

The AHS also found that in WA, children aged five to seven years were significantly more likely not to be overweight or obese than children in older age groups (78.9% compared to 70.4% to 70.9%). National figures showed more consistency across age groups, with a range of 73.5 per cent to 75.9 per cent across age groups (Table 3.36).

The proportion of WA children aged five to seven years who were not overweight or obese was higher than the national average (78.9% compared to 75.9%). For all other age groups, WA children and young people were more likely to be overweight or obese than the national average (Table 3.36 and Figure 3.15).

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The focus and methods of the HWSS and the AHS differ in many ways, which accounts for differences in their results. Generally, the HWSS data is a strong trend indicator for WA, while the AHS provides robust one-off estimates for all states and territories.

## Strategies

### **Western Australian Health Promotion Strategic Framework 2012–2016, Western Australian Government**

This framework sets out the WA Health's strategic directions and priorities for the prevention of chronic disease and injury over the next five years.

The goal is to lower the incidence of avoidable chronic disease and injury by facilitating improvements in health behaviours and environments. The framework focuses on the main lifestyle risk factors including:

- overweight and obesity
- nutrition
- physical activity
- tobacco use
- harmful levels of drinking.

Further information is available at [www.public.health.wa.gov.au/2/1588/2/the\\_wa\\_health\\_promotion\\_strategic\\_framework\\_.pm](http://www.public.health.wa.gov.au/2/1588/2/the_wa_health_promotion_strategic_framework_.pm)

### **National Partnership Agreement on Preventative Health (NPAPH), Council on Australian Governments (released 2009)**

The NPAPH is a joint Australian, state and territory initiative implemented between July 2009 and June 2018.

The objective of the NPAPH is to reduce the risk of chronic disease and help assure Australian children of a healthy start to life. It focuses on improving nutrition, increasing levels of physical activity and reducing the prevalence of overweight and obesity in children, young people and adults. The NPAPH has enabled WA to implement a suite of programs targeting children aged up to 16 years, parents and adults, in and through a range of settings, through its Healthy Children and Healthy Workers initiatives. These are supported by the LiveLighter® campaign, which targets adults and parents to prevent overweight and obesity through good diet and active living, and the School Breakfast Program.

Details about the school, professional development and community-based programs funded under the WA Healthy Children Program are available on the WA Department of Health website at [www.public.health.wa.gov.au/3/1775/2/wa\\_healthy\\_children\\_program.pm](http://www.public.health.wa.gov.au/3/1775/2/wa_healthy_children_program.pm)

Further information about the NPAPH is available at [www.health.gov.au/internet/main/publishing.nsf/Content/phd-prevention-np](http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-prevention-np)

### **Global Strategy on Diet, Physical Activity and Health, World Health Organization (WHO) (released 2004)**

This strategy provides recommendations for the promotion of healthy diets and regular physical activity to prevent non-communicable diseases (NCDs). The 2013 World Health Assembly endorsed the Global NCD Action Plan 2013–2020, which includes a set of actions for member states, international partners and the WHO Secretariat to promote healthy diets and physical activity, and to attain nine voluntary global targets for NCDs. The strategy includes a focus on childhood obesity, which is recognised as one of the most serious public health challenges of the 21st century. Further information is available at [www.who.int/dietphysicalactivity/en/](http://www.who.int/dietphysicalactivity/en/)



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## Want to know more?

### Data on body weight

The WA Department of Health publishes annual data on the BMI categories for five to 15 year-olds in *Health and Wellbeing of Children in Western Australia*, available at [www.health.wa.gov.au](http://www.health.wa.gov.au)

The WA Department of Health publishes annual data on the BMI categories for people 16 years and over in the *Health and Wellbeing of Adults in Western Australia*, available at [www.health.wa.gov.au](http://www.health.wa.gov.au)

Information about the Australian Health Survey and the results are available at [www.abs.gov.au/australianhealthsurvey](http://www.abs.gov.au/australianhealthsurvey)

### Other information

The National Physical Activity Guidelines recommend the minimum levels of physical activity for children and young people, available at [www.health.gov.au/internet/main/publishing.nsf/content/health-publhlth-strateg-phys-act-guidelines#rec\\_5\\_12](http://www.health.gov.au/internet/main/publishing.nsf/content/health-publhlth-strateg-phys-act-guidelines#rec_5_12)

The *Australian Dietary Guidelines* use the best available scientific evidence to provide information on the types and amounts of foods, food groups and dietary patterns that aim to promote health and wellbeing, reduce the risk of diet-related conditions and reduce the risk of chronic disease. Further information available at [www.nhmrc.gov.au/guidelines/publications/n55](http://www.nhmrc.gov.au/guidelines/publications/n55)

The 2013 clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children in Australia are intended for use by clinicians and make recommendations regarding the management of individuals who are overweight or obese and are at risk or currently have an obesity related comorbidity. The guidelines are available at [www.nhmrc.gov.au/guidelines/publications/n57](http://www.nhmrc.gov.au/guidelines/publications/n57)

Within WA Health, the Chronic Disease Prevention Directorate, Public Health and Clinical Services Division and Child and Adolescent Community Health Statewide Policy and Planning lead public health policy in relation to obesity. The Chronic Disease Prevention Directorate coordinates the implementation of the National Partnership Agreement on Preventive Health in Western Australia. Further information is available at [www.public.health.wa.gov.au/1/1573/2/healthy\\_lifestyles.pm](http://www.public.health.wa.gov.au/1/1573/2/healthy_lifestyles.pm)

The Department of Sport and Recreation (DSR) is the lead agency responsible for the implementation of government policy and initiatives in sport and recreation. DSR supports a number of initiatives to encourage physical activity by children and young people. These include organised sport as well as access to natural spaces and child-friendly built environments. Further information is available at [www.dsr.wa.gov.au/](http://www.dsr.wa.gov.au/)

