

3.10 Physical activity

Why this measure is included

Physical activity makes an important positive contribution to the health and wellbeing of children and young people. The time spent on physical activity has long been a focus for research and policy makers. A complementary research focus is sedentary behaviour, particularly time spent on screen-based activities.¹³⁰ Sedentary behaviour and physical inactivity are risk factors associated with several chronic health conditions including coronary heart disease, stroke and diabetes.¹³¹

Table 3.25: Weekly physical activity of 5 to 15 year-olds: in per cent, Western Australia, 2006 to 2012

	No activity	1 to 6 sessions	7 or more sessions but less than 60 mins	7 or more sessions and 60 mins or more (meets the recommendation)
2006	2.2	31.6	20.3	45.9
2007	2.7	26.5	14.8	56.0
2008	3.3	28.6	15.3	52.8
2009	4.0	36.3	14.3	45.4
2010	3.3	32.7	14.8	49.2
2011	4.0	32.1	18.3	45.5
2012	4.6	31.9	14.4	49.1

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

Note: This publication follows the current National Physical Activity Recommendations.¹³² For children aged 5 to 15 the recommendation is at least 60 minutes of moderate to vigorous physical activity every day.

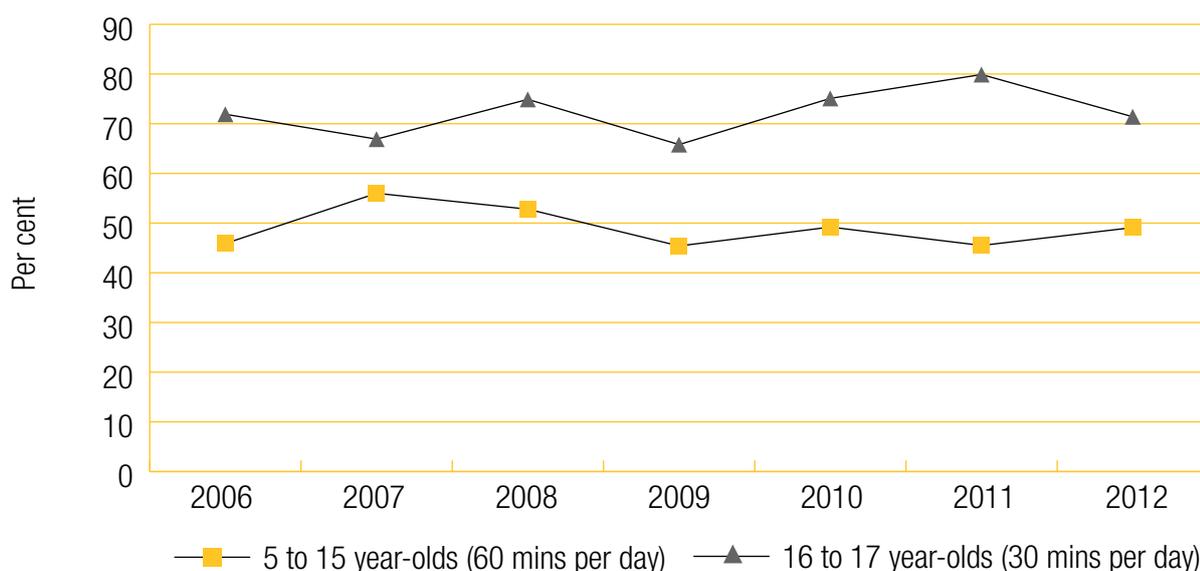
Table 3.26: Weekly physical activity of 16 to 17 year-olds: in per cent, Western Australia, 2006 to 2012

	No activity	Less than 150 mins	150 mins or more but not over 5 sessions	150 mins or more over 5 or more sessions
2006	6.7	11.4	10.0	71.9
2007	4.9	20.7	7.4	66.9
2008	3.7	16.3	5.1	74.9
2009	2.4	20.0	11.7	65.8
2010	1.8	14.5	8.5	75.1
2011	2.0	13.9	4.2	79.9
2012	4.7	16.9	7.0	71.4

Source: Data supplied by Public Health and Clinical Services Division, WA Department of Health, custom report (unpublished)

Note: This report assesses 16 to 17 year-olds against the National Physical Activity Recommendations¹³³ for adults. For adults the recommendation is at least 30 minutes of moderate-intensity physical activity on most, preferably all, days.

Figure 3.13: Proportion of children and young people completing sufficient levels of physical activity per week: in per cent, by age group, Western Australia, 2006 to 2012



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

Note: The minimum requirements are seven sessions of at least 60 minutes for five to 15 year-olds and five sessions of at least 30 minutes for 16 to 17 year-olds.

Table 3.27: Weekly physical activity of 5 to 15 year-olds: in per cent, by age group and region, Western Australia, 2012

	No activity	1 to 6 sessions	7 or more sessions but less than 60 min	7 or more and 60 min or more (meets the recommendation)
Gender				
Males	3.6	28.5	12.9	55.0
Females	5.7	35.4	16.2	42.7
Age Group				
5 to 9 years	2.8	27.0	19.6	50.6
10 to 15 years	6.2	35.9	10.4	47.5
Region				
Metropolitan Area	n/a	n/a	n/a	47.8
Regional areas	n/a	n/a	n/a	52.4
Total	4.6	31.9	14.5	48.9

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

Notes: This publication follows the current National Physical Activity Recommendations.¹³⁴ For children aged five to 15 years the recommendation is at least 60 minutes of moderate to vigorous physical activity every day.

Totals presented for 2012 have been weighted to the 2011 Estimated Resident Population. As a result, 2012 estimates in this table differ slightly from the estimates presented in the trend table (see Table 3.25) due to the standardising of estimates to different populations.

Table 3.28: Weekly screen-based activity of 0 to 15 year-olds: in per cent, by age group and region, Western Australia, 2012

	Does not meet the recommendation	Meets the recommendation
Gender		
Males	36.3	63.7
Females	36.7	63.3
Age Group		
0 to <2 years	50.6	49.4
2 to 5 years	71.7	28.3
5 to 15 years	21.1	78.9
Region		
Metropolitan area	38.0	62.0
Regional areas	31.8	68.2
Total	36.5	63.5

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

Notes: This publication follows the current National Physical Activity Recommendations.¹³⁵ For children aged 0 to 15 the recommended amounts per day are no screen-based activity for children younger than two years, less than one hour for two to four year-olds¹³⁶ and no more than two hours for five to 15 year-olds.

Table 3.29: Proportion of children and young people 2 to 17 years meeting physical activity and screen-based activity recommendations: in per cent, Western Australia and Australia, 2011–12

	Whether met physical activity recommendation on all 7 days (a) (b)		Whether met screen-based activity recommendation on all 7 days (b) (c)		Total (d)
	Met recommendation	Did not meet recommendation	Met recommendation	Did not meet recommendation	
WA	32.5	66.9	24.0	74.3	100.0
Australia	29.7	69.1	28.7	70.3	100.0

Source: Australian Bureau of Statistics 2013, *Australian Health Survey: Physical Activity, 2011–12*

(a) The physical activity recommendation for children two to four years is 180 minutes or more per day, for children five to 17 years it is 60 minutes or more per day.

(b) In seven days prior to interview

(c) The screen-based recommendation for children two to four years is no more than 60 minutes per day, for children five to 17 years it is no more than two hours per day for entertainment purposes.

(d) Includes whether met recommendation on one or more days not known.

Table 3.30: Average time spent on sedentary screen-based activity by children 5 to 17 years: in minutes per day, Western Australia and Australia, 2011–12

	Average time spent on sedentary screen-based activity per day (a) (b)				
	Watching TV, DVDs or videos	Playing electronic games	Using the internet/ computer for non-homework purposes (excl. games)	Using the internet/ computer for homework purposes	Average per day
WA	91	26	23	4	146
Australia	84	21	25	6	136

Source: Australian Bureau of Statistics 2013, *Australian Health Survey: Physical Activity, 2011-12*

(a) In seven days prior to interview.

(b) Sedentary is defined as sitting or lying down for activities.

Notes: This ABS publication follows the current National Physical Activity Recommendations.¹³⁷

For children aged 0 to 15 years the recommended amounts are no screen-based activity for 0 to one year-olds, less than one hour for two to four year-olds and no more than two hours for five to 15 year-olds.

What is this measure?

This measure examines the physical activity as well as screen-based activity levels of children and young people aged 0 to 17 years. Two separate data collections are used for this measure.

The first set of data is from the WA Health and Wellbeing Surveillance System (HWSS)¹³⁸ which is a strong trend indicator.¹³⁹ 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.¹⁴⁰ The HWSS provides data on weekly physical and screen-based activities for children and young people aged five to 15 years (reported by parents) and 16 to 17 years (self-reported).¹⁴¹

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.¹⁴² This survey provides national as well as state and territory data on daily physical and screen-based activities for children and young people aged two to 17 years.¹⁴³ The AHS is the largest and most comprehensive health survey ever conducted in Australia.

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

Commentary

Physical activity

According to the HWSS, less than one-half of five to 15 year-olds in WA (48.9%)¹⁴⁴ met the recommended amount of physical activity in 2012. The recommended amount for five to 15 year-olds, stipulated in the National Physical Activity Guidelines,¹⁴⁵ is at least 60 minutes of moderate to vigorous physical activity every day.

Trend data for the last seven years shows that the proportion of WA children meeting the recommended amount of activity was greater in 2012 compared with 2011 (49.1% compared to 45.5%)¹⁴⁶ and also greater than the average for the seven-year period (47.5%).¹⁴⁷ None of the described differences were statistically significant.

It is important to note that almost five per cent of WA children were not physically active in 2012 (Table 3.25).

In terms of gender, male children were more likely than female children to meet the recommended amounts (55.0% compared to 42.7%), however this difference was not statistically significant. Children aged five to nine years were more active than children aged 10 to 15 years (50.6% compared to 47.5%), and children in regional areas were slightly more active than their metropolitan counterparts (52.4% compared to 47.8%) (Table 3.27).

The proportion of WA 16 to 17 year-olds doing the recommended amount of physical activity was smaller in 2012 than in 2011 (71.4% compared to 79.9%). As with the younger age group, it is important to note that almost five per cent of WA young people were not physically active in 2012, which is the third largest figure over the seven-year period (Table 3.26).

The AHS¹⁴⁸ shows that only one-third of WA children (32.5%) aged two to 17 years met the recommended National Physical Activity Guidelines¹⁴⁹ for daily physical activity. Nationally, less than 30 per cent of children met the guidelines in 2011–12 (Table 3.29).

Screen-based activity

According to the HWSS, almost two-thirds of 0 to 15 year-olds in WA (63.5%)¹⁵⁰ met the guidelines for screen-based activity in 2012. The National Physical Activity Guidelines¹⁵¹ recommend that children younger than two years should not spend any time using electronic media for entertainment,¹⁵² two to five year-olds should spend no more than one hour, and five to 15 year-olds should spend no more than two hours a day using electronic media for entertainment.

Trend data for the past 10 years shows that while the proportion of WA children meeting the recommendations was lower in 2012 than 2011 (64.6% compared to 66.0%),¹⁵³ it was still above the average for the ten-year period (61.5%).¹⁵⁴

Significantly, children and young people aged five to 15 years were more likely than younger children to meet the recommendations for screen-based activity. Almost 80 per cent of the older age group were reported to spend two hours or less a day using electronic media. However, more than one-half (50.6%) of infants aged 0 to one year, and more than two-thirds (71.7%) of two to four year-olds spent more time than recommended using electronic media. While there was no marked difference in use between the genders, regional location appears to have some impact on use; children in regional areas were more likely than their metropolitan counterparts to meet the recommendation, although the difference was not statistically significant¹⁵⁵ (Table 3.28).

In contrast, results from the AHS show that less than one-quarter (24.0%) of two to 17 year-olds in WA met the recommendation for daily screen-based activity in 2011–12. This proportion was the lowest of all states and territories, meaning that children in WA were least likely to meet the recommendations for daily screen use. The national average for this category was 28.7 per cent (Table 3.29).

According to the AHS, WA children and young people aged five to 17 years spent 146 minutes per day engaged in screen-based activities, 10 minutes more than the national average of 136 minutes. WA children spent around 90 minutes a day watching TV, with an additional 50 minutes spent on playing electronic games and using the internet for non-homework related purposes (Table 3.30).

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

Strategies

The Western Australian Health Promotion Strategic Framework 2012–2016, Government of Western Australia

This framework sets out directions and priorities for the prevention of chronic disease and injury in WA over the next five years. The goal is to lower the incidence of avoidable chronic disease and injury by increasing healthy 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.

There is also a section on injury prevention.

Further information is available at www.public.health.wa.gov.au/cproot/4462/2/wa_health_promotion_strategic_framework.pdf

National Partnership Agreement on Preventative Health (NPAPH) – Healthy Children Initiative, Council of 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 by 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 Western Australia 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 is available on the Western Australian Department of Health website at www.public.health.wa.gov.au/3/1775/2/wa_healthy_children_program.pm

Further information about the overall NPAPH is available at www.health.gov.au/internet/main/publishing.nsf/Content/phd-prevention-np

Active Living for All: A Framework for Physical Activity in Western Australia 2012-2016, Government of Western Australia

Active Living for All represents the strategic direction for increasing and improving opportunities for physical activity in WA over the five-year period 2012 to 2016. Further information is available at www.dsr.wa.gov.au/active-living-for-all-framework

Want to know more?

Data on physical activity

The WA Department of Health publishes annual data on the physical activity of five to 15 year-olds in the *Health and Wellbeing of Children in Western Australia*, available at www.health.wa.gov.au



The WA Department of Health publishes annual data on the physical activity of adults 16 years and over in the *Health and Wellbeing of Adults in Western Australia*, available at www.health.wa.gov.au

Comparison data on physical activity for WA and other states and territories is available from the Australian Health Survey, available at www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.004

The Child and Adolescent Physical Activity and Nutrition survey, conducted in 2003 and 2008, measured physical activity levels and nutrition behaviours of WA children and young people adolescents. Further information is available at www.beactive.wa.gov.au/index.php?id=316

Other information

The National Physical Activity Guidelines recommend the minimum levels of physical activity for children and young people. Recommendations are available for young children (0-5), children (5-12) and young people (13-17), at www.commcarelink.health.gov.au/internet/main/publishing.nsf/Content/health-publth-strateg-phys-act-guidelines.

The Unplug and Play Parent Campaign provides information and resources to help parents increase physical activity and decrease sedentary behaviour in children, available at www.participaction.com/get-moving/unplug-play/ (campaign no longer being actively implemented).

Nature Play WA provides resources for parents and families on how to get your children more involved in outdoor activities, available at www.natureplaywa.org.au/

The Chronic Disease Prevention Directorate within the Public Health and Clinical Services Division at the WA Department of Health leads public health and health promotion policy around physical activity and 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

The Department of Sport and Recreation (DSR) is the lead agency in WA 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/

Additional tables

Table 3.31: Proportion of children and young people 2 to 17 years meeting physical activity and screen-based activity recommendations: in per cent, states and territories, 2011–12

	Whether met physical activity recommendation on all 7 days (a) (b)		Whether met screen-based activity recommendation on all 7 days (b) (c)		Total (d)
	Met recommendation	Did not meet recommendation	Met recommendation	Did not meet recommendation	
WA	32.5	66.9	24.0	74.3	100.0
NSW	26.1	72.0	30.9	67.9	100.0
Vic	26.1	72.9	28.2	70.6	100.0
Qld	35.1	64.1	29.0	70.7	100.0
SA	35.4	63.8	24.3	74.9	100.0
Tas	33.5	64.7	34.1	65.0	100.0
NT	37.1	62.4	33.3	66.7	100.0
ACT	31.2	68.0	26.5	72.8	100.0
Australia	29.7	69.1	28.7	70.3	100.0

Source: Australian Bureau of Statistics 2013, *Australian Health Survey: Physical Activity, 2011–12*



- (a) The physical activity recommendation for children two to four years is 180 minutes or more per day, for children five to 17 years it is 60 minutes or more per day.
- (b) In seven days prior to interview.
- (c) The screen-based recommendation for children two to four years is no more than 60 minutes per day, for children five to 17 years it is no more than two hours per day for entertainment purposes.
- (d) Includes whether met recommendation on one or more days not known.

Table 3.32: Average time spent on sedentary screen-based activity by children 5 to 17 years: in minutes per day, states and territories, 2011–12

	Average time spent on sedentary screen-based activity per day (a) (b)				
	Watching TV, DVDs or videos	Playing electronic games	Using the internet/computer for non-homework purposes (excl. games)	Using the internet/computer for homework purposes	Average per day
WA	91	26	23	4	146
NSW	77	22	26	7	133
Vic	84	14	25	5	128
Qld	89	22	21	9	142
SA	88	26	25	6	145
Tas	85	18	28	3	135
NT	93	20	19	2	134
ACT	88	27	28	5	149
Australia	84	21	25	6	136

Source: Australian Bureau of Statistics 2013, *Australian Health Survey: Physical Activity, 2011-12*

- (a) In seven days prior to interview.
- (b) Sedentary is defined as sitting or lying down for activities.

Notes: This ABS publication follows the current National Physical Activity Recommendations.¹⁵⁶

For children aged 0 to 15 the recommended amounts per day are no screen-based activity for children younger than two years, less than one hour for two to less than five year-olds and less than two hours for five to 15 year-olds.

