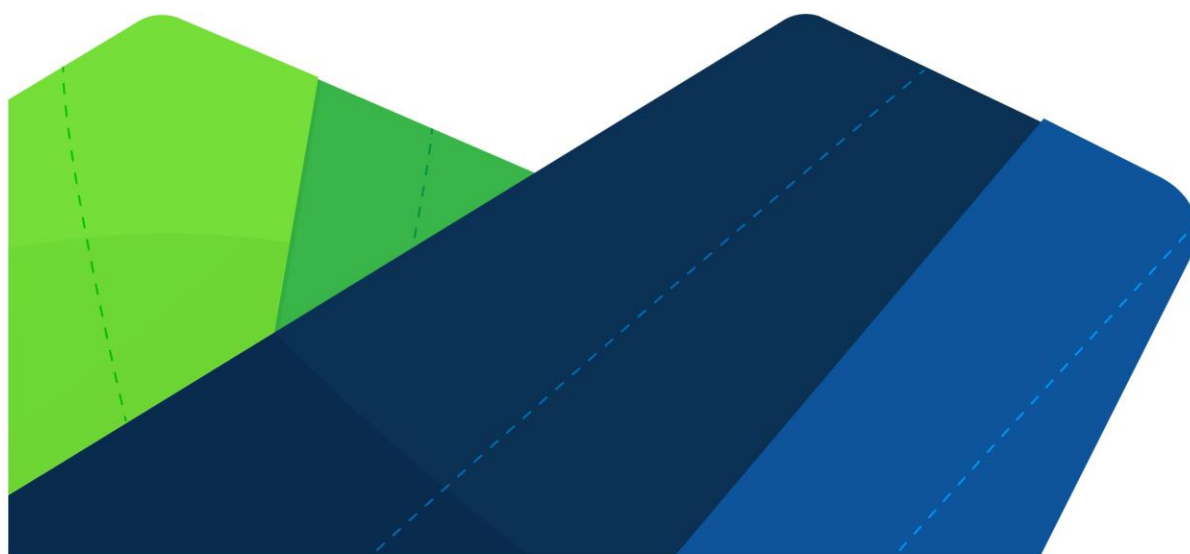


Changes in weight status of children and adults in Queensland and Australia

2017–18 prevalence and jurisdictional differences

May 2019



About this report

The objective of this report is to describe the measured weight status of Queenslanders, and to examine jurisdictional differences. The reporting of weight status, as categorised by body mass index, was derived from the most recent National Health Survey completed in 2017–18, with previous surveys conducted in 1995, 2007–08, 2011–12 and 2014–15. Each survey included actual height and weight measurements from representative samples of children and adults.

For the first time, data on measured weight status is reportable for most Hospital and Health services (HHSs) and Primary Health Networks (PHNs) in Queensland.

This report was prepared by Preventive Health Branch (Danielle Herbert and Margaret Bright). The investment and expertise associated with the data collection undertaken by the Australian Bureau of Statistics is acknowledged.

Suggested citation: Department of Health. Changes in weight status of children and adults in Queensland and Australia: 2017–18 prevalence and jurisdictional differences. Department of Health, Queensland Government: Brisbane; 2019.

Published by the State of Queensland (Queensland Health), May 2019



This document is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit creativecommons.org/licenses/by/3.0/au
© State of Queensland (Queensland Health) 2019

You are free to copy, communicate and adapt the work, as long as you attribute the State of Queensland (Queensland Health).

For more information contact:

Manager Epidemiology, Preventive Health Branch, Department of Health, Herston, Brisbane QLD 4006, email: population_epidemiology@health.qld.gov.au.

An electronic version of this document is available at https://www.health.qld.gov.au/CHO_report

Disclaimer:

The content presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations or warranties about the accuracy, completeness or reliability of any information contained in this publication. The State of Queensland disclaims all responsibility and all liability (including without limitation for liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason reliance was placed on such information.

Summary

Prevalence

For Queensland in 2017–18:

- 2 in 3 children were healthy weight (66%)
- 1 in 4 children were overweight or obese (25%)
- 1 in 3 adults were healthy weight (32%)
- 2 in 3 adults were overweight or obese (66%).

Queensland children and adults did not differ from national for any weight category.

For adults, the prevalence of healthy weight was lower than the state average in Darling Downs HHS, while none of the other HHSs differed. The prevalence of adult overweight and obesity was lowest in Gold Coast HHS and highest in Darling Downs HHS, although none of the HHSs differed from the state average. Child data was reported by PHN and while there was variation, no PHN differed from the state average for any weight category.

Trends

Based on age-standardised prevalence between 2007–08 and 2017–18 and using statistical criteria to assess difference over time:

- there was no change in any weight category for Queensland children
- the prevalence of measured obesity in Queensland adults increased by 20% between 2007–08 and 2011–12, with no change since
- there was no change in any other weight category for Queensland adults.

Jurisdictional ranking

For children, among the jurisdictions (8 in total) in 2017–18, Queensland was ranked:

- 2nd lowest for overweight and obesity (combined)
- 2nd lowest for overweight, and 4th highest for obesity
- 2nd highest for underweight
- 6th highest for healthy weight.

For adults, among the jurisdictions (8 in total) in 2017–18, Queensland was ranked:

- 2nd lowest for overweight and obesity (combined)
- lowest for overweight, and 2nd highest for obesity
- highest for underweight
- 4th highest for healthy weight.

Note: difference in ranking does not imply statistical difference.

Life course patterns over time:

The pattern of change in weight status across the life course has been consistent over the past decade with relatively little variation between 2007–08 and 2017–18.

- Healthy weight prevalence is highest in young children, with decline occurring in teenage years and plateauing in middle-age
- Overweight and obesity is lowest in young children with a relatively rapid increase occurring in young adulthood, reaching a peak of about 80% among middle-aged adults
- The availability of national data for 1995 demonstrates that two decades ago Australian children and adults were more likely to be in the healthy weight range than in 2017–18 and Australian adults particularly, were less likely to be obese.

Contents

Summary	3
Prevalence	3
Trends	3
Jurisdictional ranking	3
Life course patterns over time:	3
Background	5
Data sources	5
Measurements	5
Methods	6
Prevalence 2017–18	7
Children (5 to 17 years)	7
Adults (18 years and older)	7
Prevalence in children by HHS and PHN	8
Prevalence in adults by HHS and PHN	10
Ranking by jurisdiction	14
Children (5 to 17 years) by jurisdiction	15
Adults (18 years and older) by jurisdiction	22
Patterns of change over a decade	29
Children (5 to 17 years)	29
Adults (18 years and older)	30
Changes by sex differences: children and adults	32
Age group differences 2017–18	35
Children (5 to 17 years)	35
Adults (18 years and older)	37
Patterns of change across age groups	39
Queensland	39
Australia	39
Long-term health conditions and weight status	43
Queensland	43
Australia	43
Most common long-term conditions by life stage in Queensland	46
References	48

Background

Data sources

National health surveys are conducted by the Australian Bureau of Statistics (ABS) every three years to collect information on the prevalence of conditions, diseases and selected risk factors. Interviewers from the ABS visit people in their homes to conduct personal interview components of the survey. Within selected dwellings, a random sub-sample of residents is selected as one adult and one child (where applicable). Limited data is available for remote areas of Australia due to geographical limitations of interviewing.

State and territory summary level statistics are available from the ABS website. Queensland Health uses this data for reporting jurisdictional differences and for selected key health status and risk behaviour patterns. The most recent National Health Survey was completed in 2017–18¹ (Table 1). Children are generally defined as 5–17 years and adults as 18 years and older.

In 2017–18, Queensland Health funded an over-sampling of households to increase the representation of the state population and as a result, for the first time, measured weight status for adults was reportable for most Hospital and Health Services (HHSs) and Primary Health Networks (PHNs). Data was generally not publishable for children by HHS due to small sample sizes and the resultant high margins of error. Child measured data has greater limitations but was available for most PHNs.

Table 1. Approximate number of persons surveyed in selected national health surveys

Year of survey	Queensland All ages	Australia All ages
1995 National Nutrition Survey ²	n.a.	13,800
2007–08 National Health Survey ³	3,100	20,800
2011–12 Australian Health Survey ⁴	3,200	32,000
2014–15 National Health Survey ⁴	3,000	19,300
2017–18 National Health Survey ¹	4,400	21,000

n.a. not available

The selected surveys included measured height and weight.


Measurements

The selected national health surveys include the physical measurement of the participant's height and weight from a representative sample of Australian children and adults across all jurisdictions. These measurements are used to determine weight status as categorised by body mass index (BMI) (Table 2). Adult BMI is calculated by dividing a person's weight (kg) by square of their height (m), that is: **BMI = (kg/m²)**.

The calculation of children's BMI requires knowledge of the child's sex and age to within six months.^{5,6} There are different cut-offs for BMI categories for male and female children, and these categories differ to those used for adult BMI classification.

Measured data is the most accurate for weight status. In comparison, self-reported BMI is subject to reporting bias resulting in lower prevalence of unhealthy weight. It is possible that the nature of bias may vary over time and across weight categories with obese people likely to underestimate their weight or overestimate their height, or both.

Table 2. Adult body mass index categories

Body mass index	Criteria	BMI = (kg/m ²)
Underweight	Less than 18.5	
Healthy weight	≥ 18.5 but < 25.0	
Overweight	≥ 25.0 but < 30.0	
Obese	30.0 and higher	
Overweight and obese	25.0 and higher	

Methods

Crude prevalence provides a summary measure of the proportion of persons within each BMI category. However, crude prevalence is not used for jurisdictional comparisons. The age standardised prevalence accounts for differences due to the differing age structures within each jurisdiction (as standardised to the 2001 population).

The difference in prevalence between Queensland and national, and across time, was based on age-standardised prevalence and non-overlap of 95% confidence intervals calculated from the margin of error. Where age standardised prevalence was not available, crude prevalence was used.

Age-standardised prevalence of all weight categories for children and adults was available from the ABS for three reporting periods: 2007–08, 2011–12 and 2014–15.⁷ Age-standardised prevalence for adult overweight, obese and overweight/obese in 2017–18 was provided with the first data release from the ABS.

For measured healthy weight and underweight in 2017–18 only crude prevalence was available with the first data release from the ABS. Data for 2017–18 will be updated with age-standardised prevalence for healthy weight and underweight when available.

The age-standardised prevalence of any weight category for children in 2017–18 was not available. The use of the crude prevalence for children aged 5 to 17 years provided an appropriate estimate for age-standardised prevalence where required, as based on an assumption that the population profile for 5–17 years did not change greatly across the decade covering the four reporting periods or between jurisdictions.

It is important to note that the ranking of jurisdictions in this report is based on ordering by proportion and does not imply significant difference in prevalence. For some comparisons, the actual difference between proportions is very small.

Additional data including margins of error and confidence intervals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001> .

Prevalence 2017–18

Children (5 to 17 years)

For Queensland in 2017–18 (Table 3):

- 2 in 3 children were healthy weight (66%)
- 1 in 4 children were overweight or obese (25%).

Queensland children did not differ from national for any weight category.

Adults (18 years and older)

For Queensland in 2017–18 (Table 3):

- 1 in 3 adults were healthy weight (32%)
- 2 in 3 adults were overweight or obese (66%).

Queensland adults did not differ from national for any weight category.

Table 3. Measured weight status, crude prevalence, Queensland and Australia 2017–18

BMI category		2019 population estimate	BMI category		2019 population estimate
Queensland children (5 to 17 years)			Queensland adults (18 years and older)		
66%	Healthy weight	563,000	32%	Healthy weight	1,262,000
10%	Underweight	85,000	2%	Underweight	70,000
16%	Overweight	137,000	34%	Overweight	1,309,000
8%	Obese	71,000	32%	Obese	1,266,000
25%	Overweight/obese	211,000	66%	Overweight/obese	2,575,000
Australian children (5 to 17 years)			Australian adults (18 years and older)		
67%	Healthy weight	2,720,000	32%	Healthy weight	6,267,000
8%	Underweight	325,000	1%	Underweight	257,000
17%	Overweight	690,000	36%	Overweight	7,037,000
8%	Obese	329,000	31%	Obese	6,187,000
25%	Overweight/obese	1,011,000	67%	Overweight/obese	13,245,000

Totals may not sum due to rounding.

Prevalence in children by HHS and PHN

Data was generally not publishable for children by Hospital and Health Service (HHS) due to small sample sizes and the resultant high margins of error. However, results are available for most Primary Health Networks (PHN), noting that Brisbane North PHN represents the Metro North HHS, Brisbane South PHN represents the Metro South HHS and Gold Coast PHN represents the Gold Coast HHS (Table 4, Figure 1).

None of the PHNs differed from the state average for any weight category. However:

- Gold Coast PHN had the highest proportion of children in the healthy weight range (77%) and the rural and remote areas had the lowest at less than 60%.
- Western Queensland had the highest proportion of overweight and obese children at more than 30% (with a high margin of error), followed by Brisbane South PHN with 26%.

Table 4. Measured weight status, crude prevalence by Primary Health Network, children, Queensland, 2017–18

	Healthy weight	Under-weight	Over-weight	Obese	Overweight and obese
	%	%	%	%	%
Queensland (5–17 years)	65.5	9.9	15.9	8.3	24.6
Queensland (2–17 years)	65.2	10.8	15.4	8.7	24.5
Primary Health Network					
Brisbane North	66.2	10.9	14.1	9.4	23.5
Brisbane South	65.1	8.4	18.6	9.1	25.7
Central Qld & Sunshine Coast	#62.6	18.3	11.6	9.0	21.4
Darling Downs & West Moreton	#58.4	13.9	17.9	10.3	24.5
Gold Coast	77.4	10.2	13.8	9.5	22.0
Northern Queensland	#58.3	10.3	12.7	11.9	24.6
Western Queensland	#59.3	#6.4	#12.9	#22.9	#34.3

Proportion has a high margin of error and assessment of difference should be used with caution.

It is important to note the proportions marked with # have a high margin of error and assessment of difference should be used with caution.

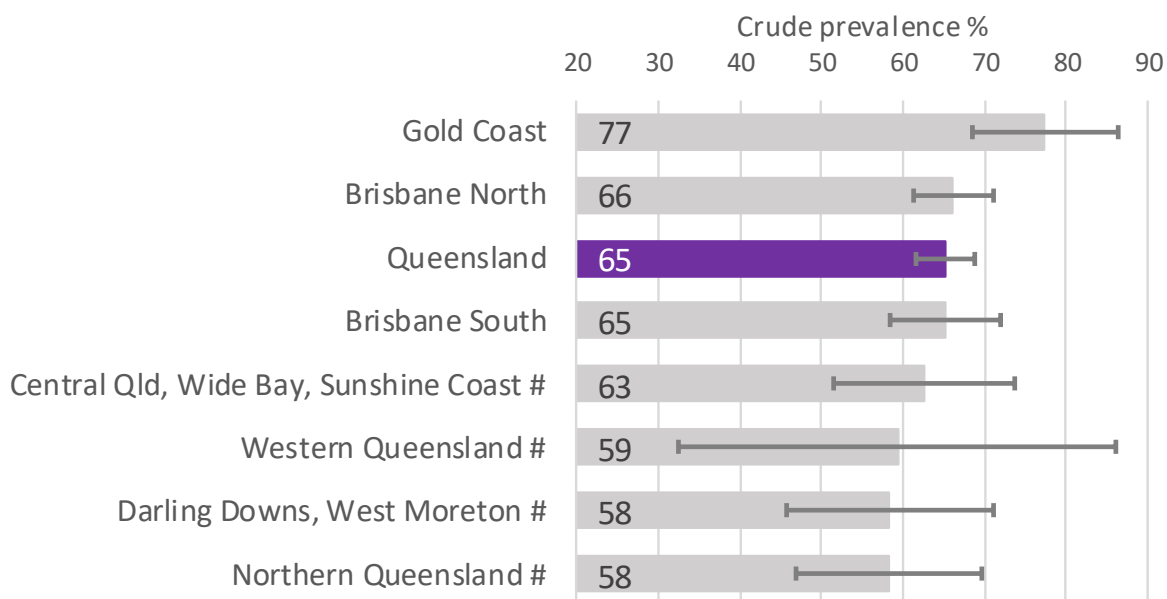
The BMI of children by Primary Health Network (PHN) is reported above for the expanded age range of 2–17 years as the margins of error were lower due to larger samples compared with the standard age range used for children in this report (5–17 years).

Additional data including margins of error and confidence intervals for the totals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

Additional data on the PHNs will be provided by the Australian Institute of Health and Welfare (AIHW) later in 2019.

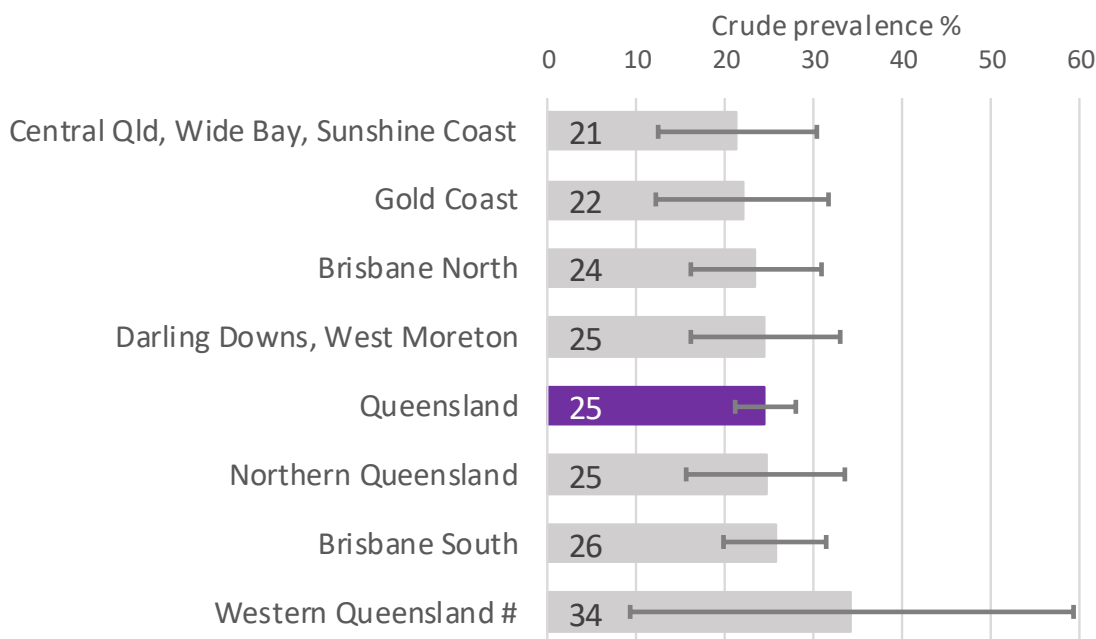
Figure 1. Measured weight status, crude prevalence by Primary Health Network, children 2–17 years, Queensland, 2017–18

a. Healthy weight



Proportion has a high margin of error and assessment of difference should be used with caution.

b. Overweight and obesity



Proportion has a high margin of error and assessment of difference should be used with caution.

Prevalence in adults by HHS and PHN

In Queensland in 2017–18 among the HHSs (Table 5, Figure 2):

- the prevalence of healthy weight was 22% lower in Darling Downs HHS than the state average (25% compared with 32%) but did not differ for the remaining HHSs
- Gold Coast HHS had the highest prevalence of healthy weight and West Moreton HHS had the lowest.
- overweight and obesity did not differ from the state average for any of the HHSs. It was however, lowest in Gold Coast and highest in Darling Downs closely followed by Townsville.

In Queensland in 2017–18 among the PHNs (Table 5, Figure 3):

- Darling Downs and West Moreton PHN differed from the state average. It had
 - the lowest prevalence of healthy weight (22% lower than the state average)
 - highest prevalence of overweight and obesity (12% higher).
- For all other PHNs there was no difference from the state average for any weight category.
- Gold Coast had the highest prevalence of healthy weight and lowest proportion of overweight and obesity.

It is important to note the proportions marked with # have a high margin of error and assessment of difference should be used with caution.

Additional data including margins of error and confidence intervals for the totals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

Additional data on the PHNs will be provided by the Australian Institute of Health and Welfare (AIHW) later in 2019.

Table 5. Measured weight status, crude prevalence by Hospital and Health Service and Primary Health Network, adults, Queensland, 2017–18

	Healthy weight	Under-weight	Over-weight	Obese	Overweight and obese
	%	%	%	%	%
Queensland (18+ years)	32.3	1.8	33.5	32.4	65.9
Hospital and Health Service					
Cairns and Hinterland	33.0	0.0	36.0	#30.5	62.3
Central Queensland	27.9	5.2	38.2	31.3	67.3
Central West	n.a.	n.a.	n.a.	n.a.	n.a.
Darling Downs	25.1 **	#0.9	31.0	#40.3	71.7
Gold Coast	40.2	1.8	31.3	27.0	59.5
Mackay	34.5	0.0	32.2	#34.8	64.8
Metro North	31.2	1.1	32.0	35.3	67.8
Metro South	33.8	1.3	35.5	29.2	64.3
North West ^a	31.2	0.0	34.4	36.6	70.4
South West	n.p.	n.p.	n.p.	n.p.	n.p.
Sunshine Coast	31.9	#1.8	34.3	32.4	65.6
Torres and Cape	n.a.	n.a.	n.a.	n.a.	n.a.
Townsville	26.7	#1.7	40.7	31.7	71.6
West Moreton	24.6	6.5	30.7	38.9	70.6
Wide Bay	35.1	0.0	26.4	34.1	59.9
Primary Health Network					
Brisbane North	31.2	1.1	32.0	35.3	67.9
Brisbane South	33.8	1.3	35.5	29.2	64.3
Central Qld & Sunshine Coast	32.5	2.2	33.4	31.3	64.9
Darling Downs & West Moreton	25.3	2.9	32.3	41.0	73.7
Gold Coast	40.2	1.8	31.3	27.0	59.5
Northern Queensland	31.5	#1.9	34.6	32.0	66.9
Western Queensland	#27.4	0.0	36.7	37.4	#71.4

Proportion has a high margin of error and assessment of difference should be used with caution.

n.a. not available due to limitation of data collection in remote and very remote areas.

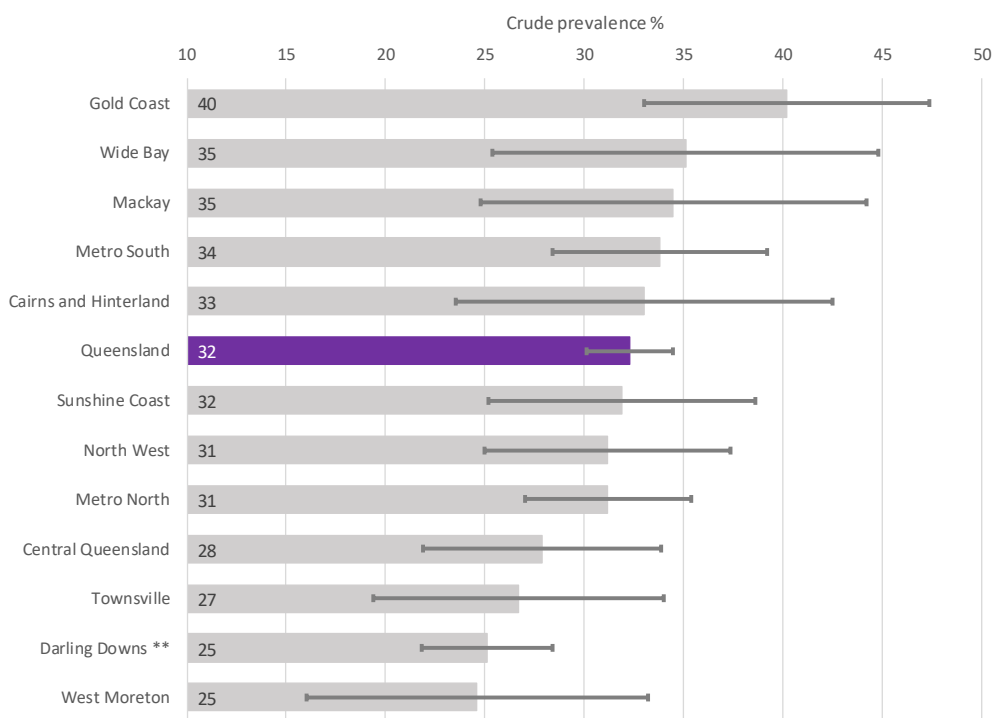
n.p. not publishable due to high margins of error.

** Significantly different to the state average.

^a Data collection restricted to Mt Isa.

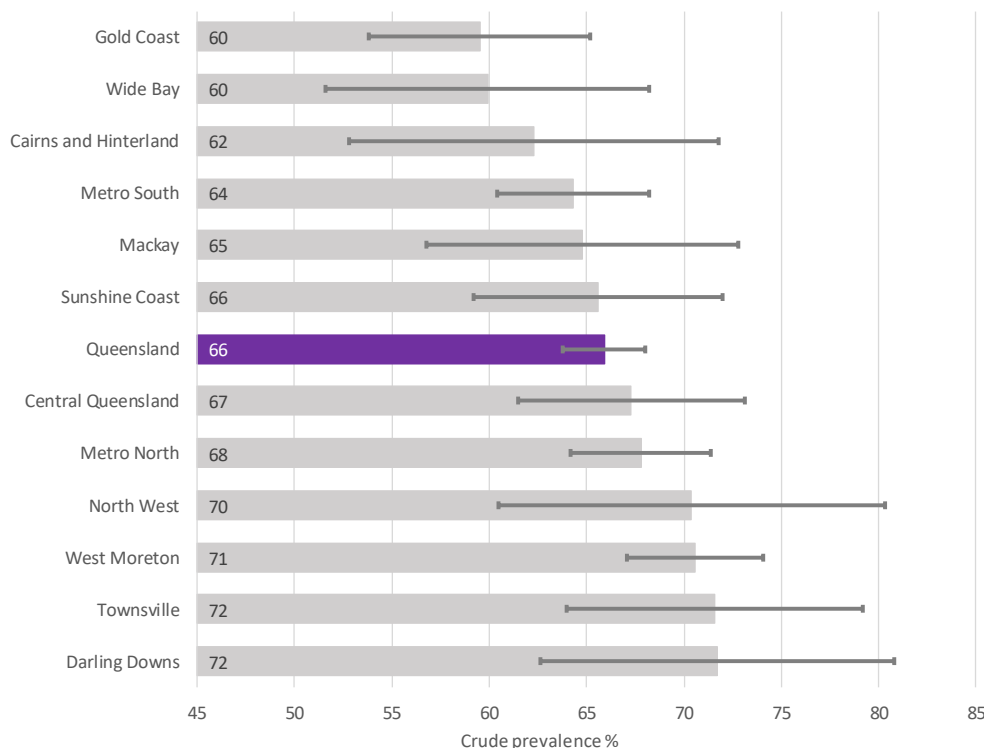
Figure 2. Measured weight status, crude prevalence by Hospital and Health Service, adults, Queensland, 2017–18

a. Healthy weight



** Significantly lower than the state average.

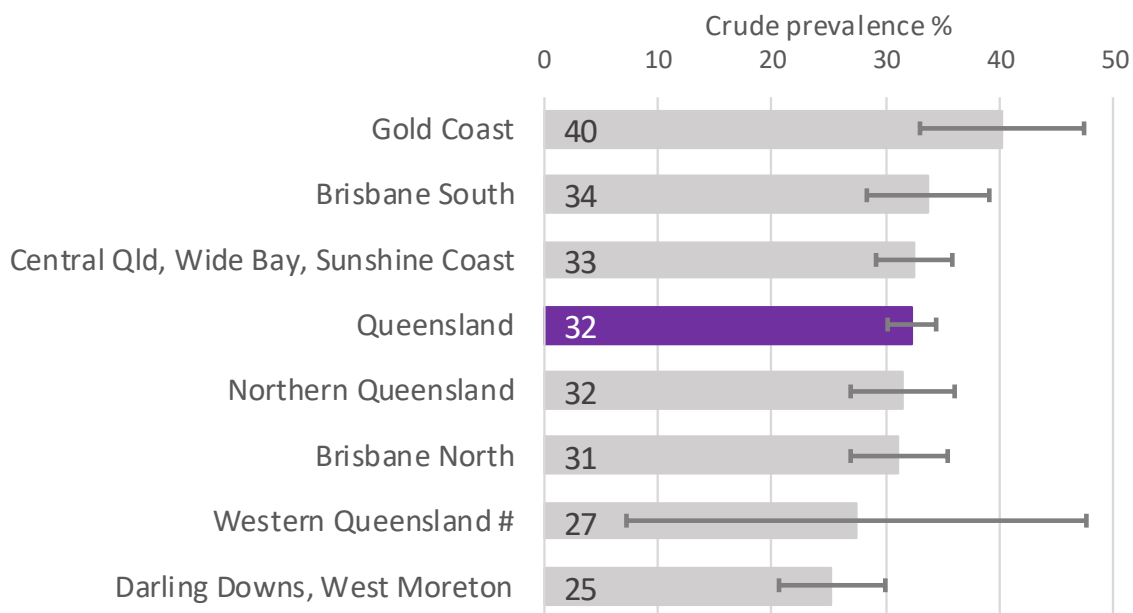
b. Overweight and obesity



Data not publishable for Central West, South West and Torres and Cape HHSs due to high margins of error.

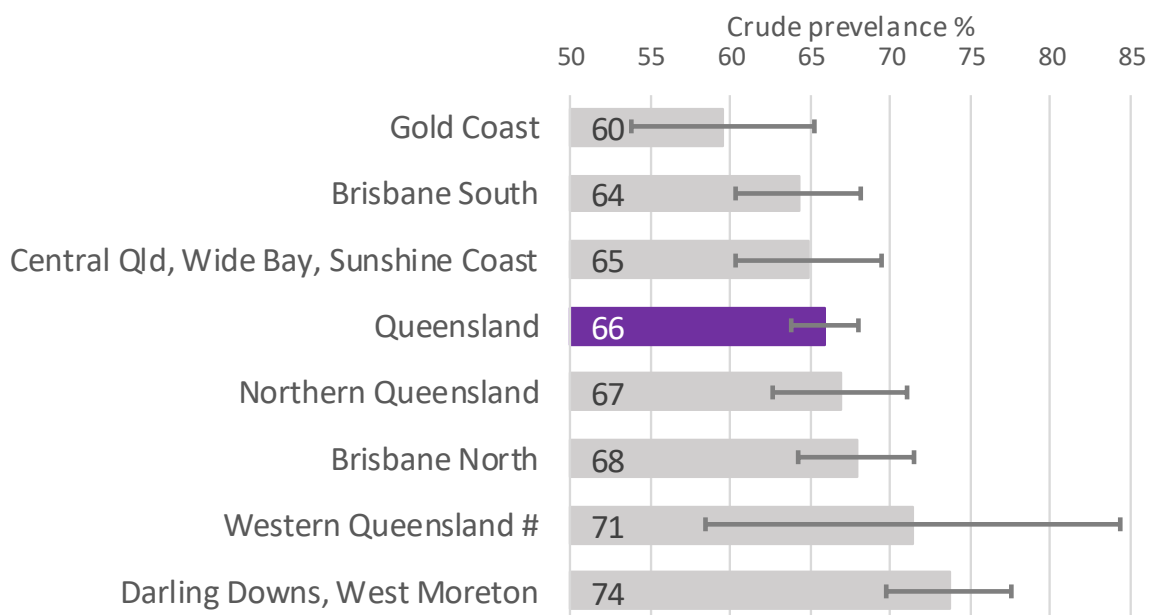
Figure 3. Measured weight status, crude prevalence by Primary Health Network, adults, Queensland, 2017–18

a. Healthy weight



Proportion has a high margin of error and assessment of difference should be used with caution.

b. Overweight and obesity



Proportion has a high margin of error and assessment of difference should be used with caution.

Ranking by jurisdiction

The ranking of jurisdictions is based on the ordering of the age standardised proportions. The order and direction of the ranking depends on the BMI category as to which is deemed to be 'best' or healthiest:

- Healthy weight – **highest is best**, and ranking is from highest to lowest proportion.
- Underweight, overweight, obese and overweight/obese – **lowest is best**, and ranking is from lowest to highest proportion.

For children, among the jurisdictions (8 in total) in 2017–18, Queensland was ranked (Table 6 and Table 7):

- 6th highest for healthy weight (Figure 4)
- 2nd highest for underweight (Figure 5)
- 2nd lowest for overweight (Figure 6)
- 4th highest for obesity (Figure 7)
- 2nd lowest for overweight and obesity (Figure 8).

Note: difference in ranking does not imply statistical difference.

For adults, among the jurisdictions (8 in total) in 2017–18, Queensland was ranked (Table 8 and Table 9):

4th highest for healthy weight (Figure 9)

- highest for underweight (Figure 10)
- lowest for overweight (Figure 11)
- 2nd highest for obesity (Figure 12)
- 2nd lowest for overweight and obesity (Figure 13).

Note: difference in ranking does not imply statistical difference.

It is important to note that the ranking is based on ordering by proportions and does not imply significant difference between the age standardised prevalence. For some comparisons, the actual difference between proportions is very small.

Further details on margins of error and 95% confidence intervals for prevalence in 2017–18 are available from the ABS website.

The crude prevalence of a relatively narrow age group is appropriate to compare jurisdictions, such as 5–17 years for children, in the absence of age-standardised prevalence.

In the graphs on the following pages, the vertical scale on the y axis was formatted to maximise the ranking display, and so zero prevalence is not shown.

Data for Northern Territory (NT) in 2007–08 (Table 6 and Table 8) are not displayed in the graphs (Figure 4 to Figure 13) as the data are not comparable to 2011–12 and 2014–15 due to the increase in sample size in the later years, as advised by the ABS.

Children (5 to 17 years) by jurisdiction

Table 6. Measured weight status, crude prevalence, children, 2017–18

Healthy weight	% (95% CI)	Best	
VIC	71.3 (67.1–75.5)	1	Queensland was ranked 6th highest (or 6th best of 8) for healthy weight children in 2017–18.
WA	67.5 (61.3–73.7)	2	
SA	67.1 (60.9–73.3)	3	Previous ranking of Queensland children for healthy weight :
NT	66.9 (59.8–74.0)	4	
ACT	65.7 (58.6–72.8)	5	<ul style="list-style-type: none"> • 4th lowest, 5 of 8 in 2014–15 (age-std.) • 3rd lowest, 6 of 8 in 2011–12 (age-std.) • lowest, 8 of 8 in 2007–08 (age-std.)
Queensland	65.5 (61.0–70.0)	6	
TAS	65.2 (58.6–71.8)	7	
NSW	63.6 (59.2–68.0)	8	
Australia	67.0 (65.0–69.0)	-	

Underweight	% (95% CI)	Best	
NT	4.4 (1.5–7.3)	1	Queensland was ranked 2nd highest (or 7th best of 8) for underweight children in 2017–18.
TAS	4.9 (1.6–8.2)	2	
WA	5.4 (2.9–7.9)	3	Previous ranking of Queensland children for underweight :
VIC	5.8 (3.1–8.5)	4	
SA	6.2 (2.8–9.6)	5	<ul style="list-style-type: none"> • highest, 8 of 8 in 2014–15 (age-std.) • 2nd highest, 7 of 8 in 2011–12 (age-std.) • highest, 7 of 7 in 2007–08 (age-std., no data for NT).
ACT	9.3 (4.4–14.2)	6	
Queensland	9.9 (7.0–12.8)	7	
NSW	10.5 (8.0–13.0)	8	
Australia	8.0 (6.8–9.2)	-	

Overweight	% (95% CI)	Best	
VIC	14.3 (11.4–17.2)	1	Queensland was ranked 2nd lowest (or 2nd best of 8) for overweight children in 2017–18.
Queensland	15.9 (12.5–19.3)	2	
NSW	17.2 (14.2–20.2)	3	Previous ranking of Queensland children for overweight :
TAS	17.4 (11.9–22.9)	4	
SA	17.8 (13.1–22.5)	5	<ul style="list-style-type: none"> • 5th lowest, 5 of 8 in 2014–15 (age-std.) • 3rd lowest, 3 of 8 in 2011–12 (age-std.) • 3rd lowest, 3 of 6 in 2007–08 (age-std., no data for ACT and NT).
ACT	18.1 (10.9–25.3)	6	
NT	20.6 (15.2–26.0)	7	
WA	20.7 (15.4–26.0)	8	
Australia	17.0 (15.4–18.6)	-	

Obese	% (95% CI)	Best	
WA	6.0 (3.0–9.0)	1	Queensland was ranked 4th highest (or 5th best of 8) for obese children in 2017–18.
VIC	7.6 (4.9–10.3)	2	
ACT	8.0 (4.5–11.5)	3	Previous ranking of Queensland children for obesity :
NSW	8.1 (5.5–10.7)	4	
Queensland	8.3 (5.5–11.1)	5	<ul style="list-style-type: none"> • 4th highest, 5 of 8 in 2014–15 (age-std.) • highest, 8 of 8 in 2011–12 (age-std.) • highest, 6 of 6 in 2007–08 (age-std., no data for ACT and NT).
SA	9.9 (5.4–14.4)	6	
TAS	10.2 (6.2–14.2)	7	
NT	10.8 (6.8–14.8)	8	
Australia	8.1 (6.7–9.5)	-	

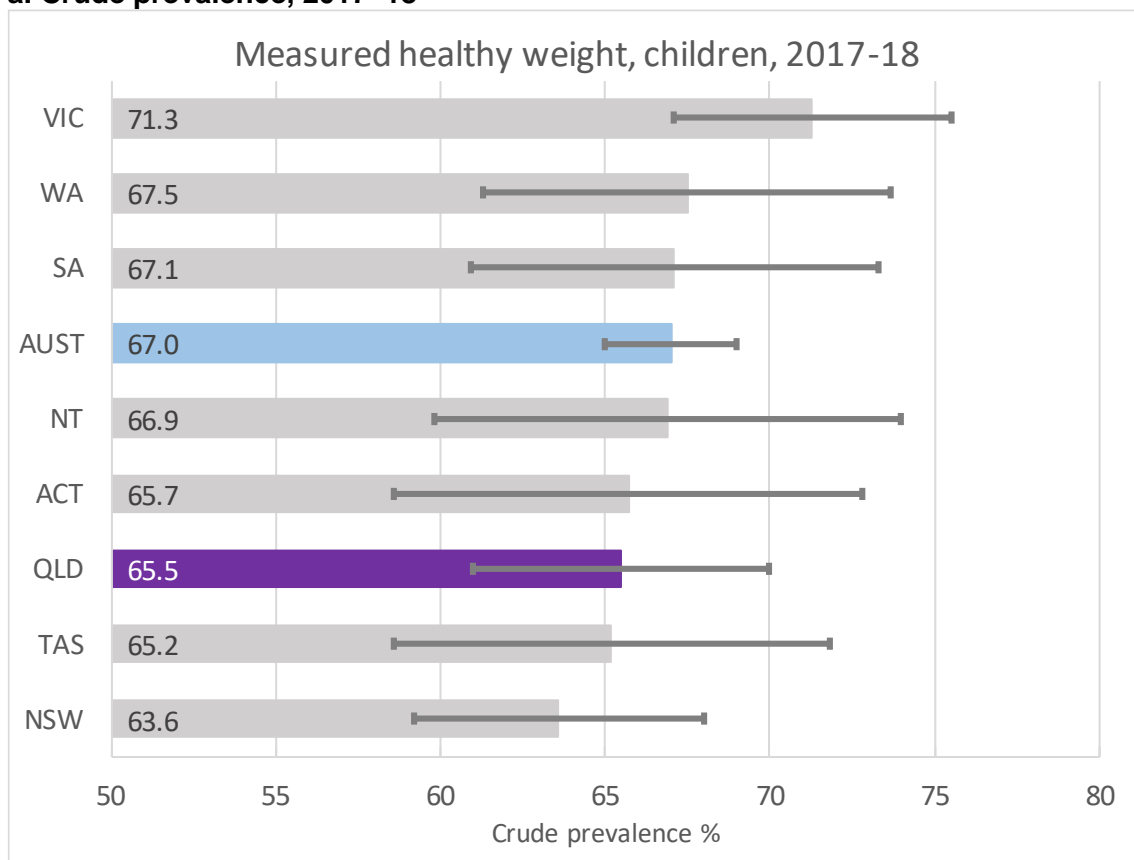
Overweight/obese	% (95% CI)	Best	
VIC	21.6 (18.1–25.1)	1	Queensland was ranked 2nd lowest (or 2nd best of 8) for overweight and obese children in 2017–18.
Queensland	24.6 (20.7–28.5)	2	
ACT	24.7 (17.1–32.3)	3	Previous ranking of Queensland children for overweight and obesity :
NSW	25.6 (22.1–29.1)	4	
WA	26.2 (20.0–32.4)	5	<ul style="list-style-type: none"> • 4th lowest, 4 of 8 in 2014–15 (age-std.) • 2nd highest, 7 of 8 in 2011–12 (age-std.) • highest, 6 of 6 in 2007–08 (age-std., no data for ACT and NT).
SA	28.4 (22.4–34.4)	6	
TAS	28.6 (22.5–34.7)	7	
NT	31.4 (24.9–37.9)	8	
Australia	24.9 (23.3–26.5)	-	

Note: Ranking does not imply statistical difference between prevalence.

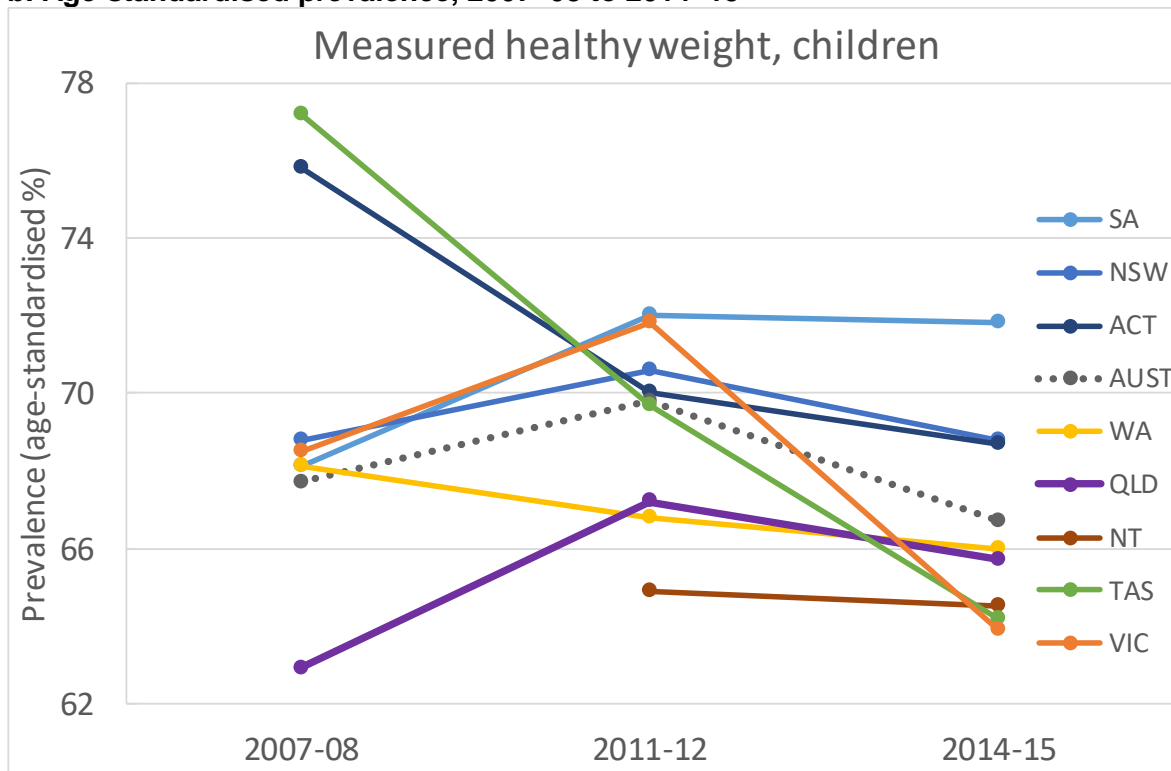
Age-standardised prevalence for 2017–18 is currently not available. The crude prevalence of a relatively narrow age group is an appropriate estimate to compare jurisdictions.

Figure 4. Measured healthy weight, prevalence by jurisdiction, children

a. Crude prevalence, 2017–18



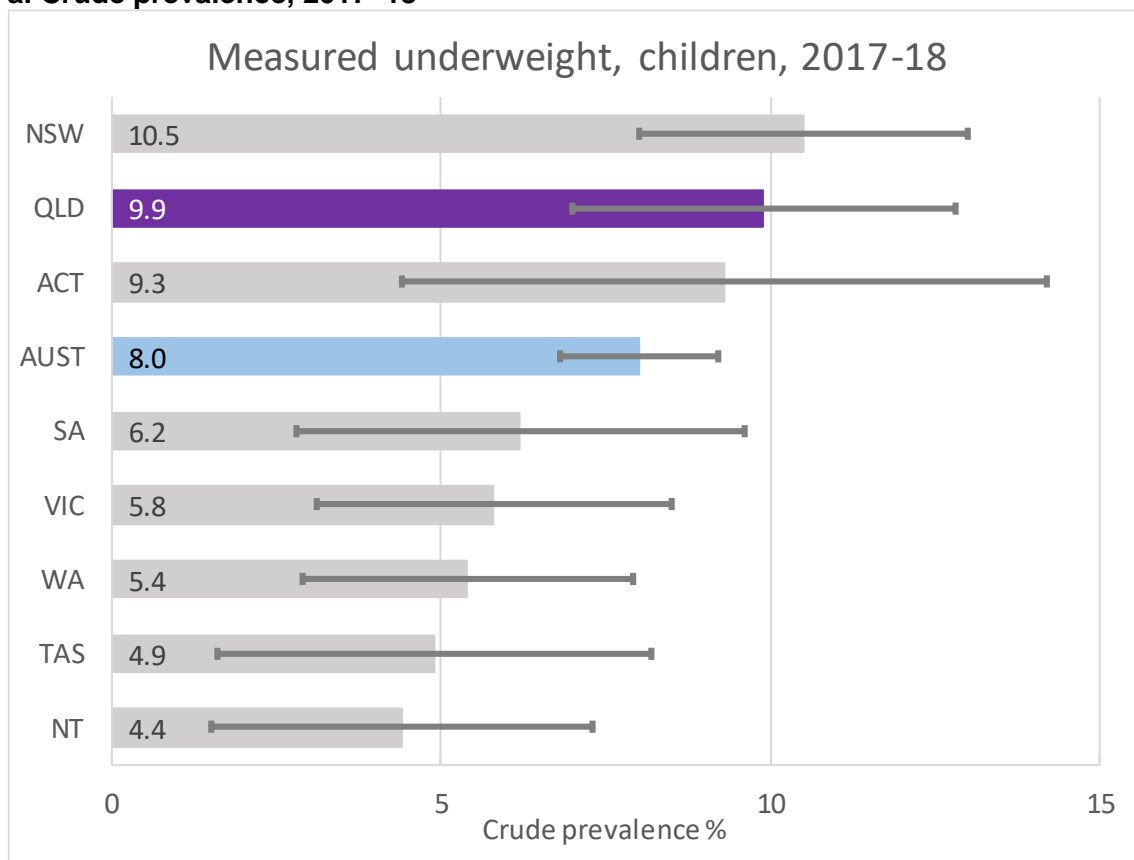
b. Age-standardised prevalence, 2007–08 to 2014–15



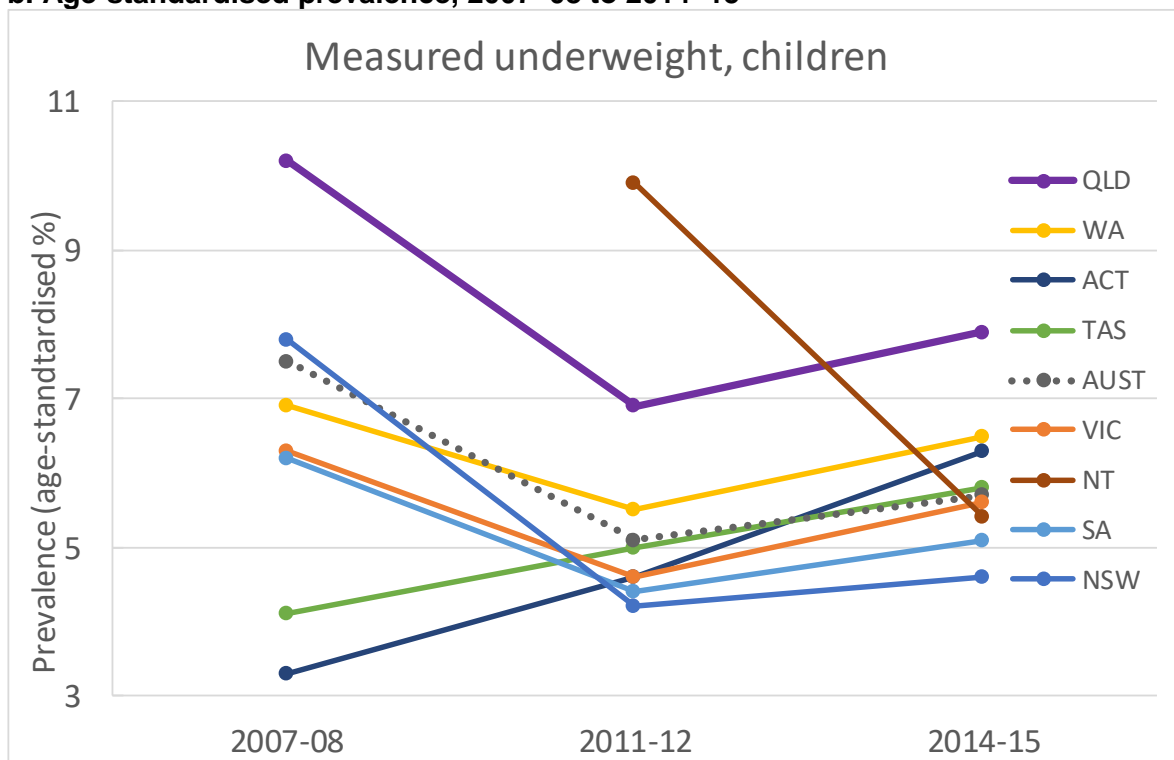
Note: Age-standardised prevalence for 2017–18 is currently not available.

Figure 5. Measured underweight, prevalence by jurisdiction, children

a. Crude prevalence, 2017–18



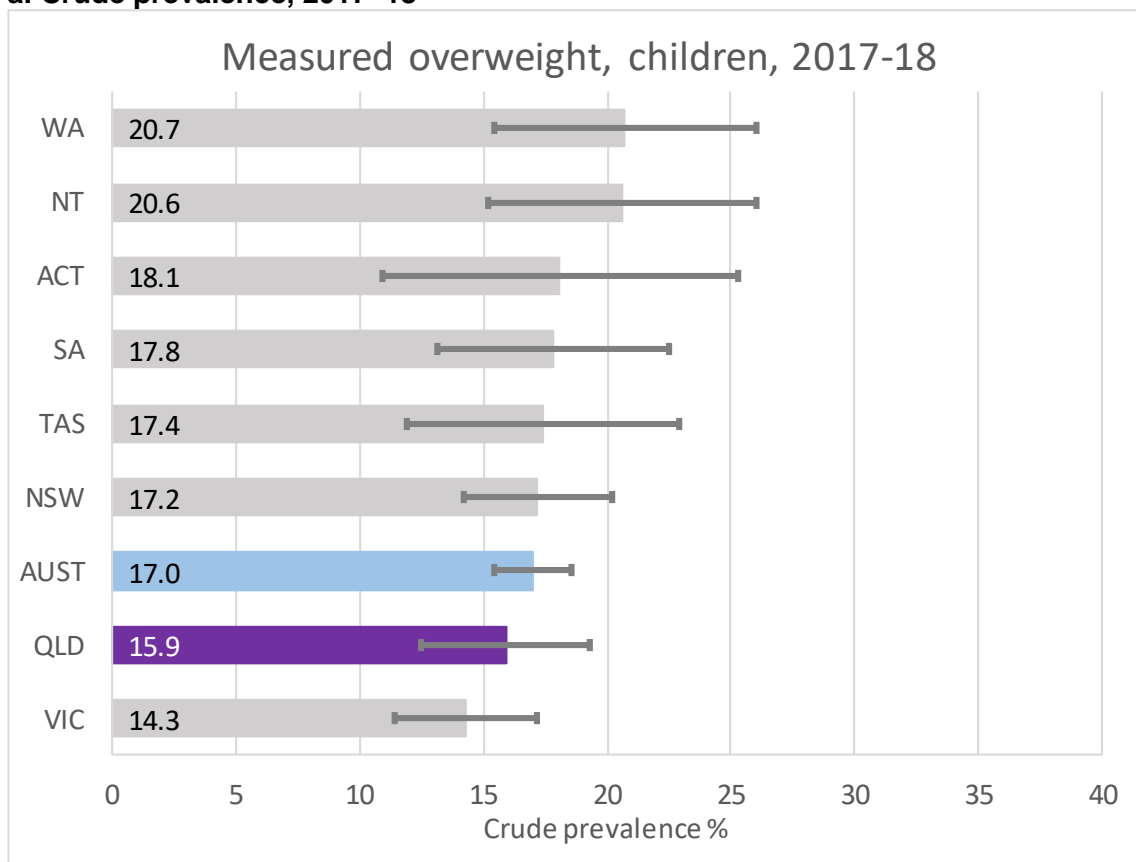
b. Age-standardised prevalence, 2007–08 to 2014–15



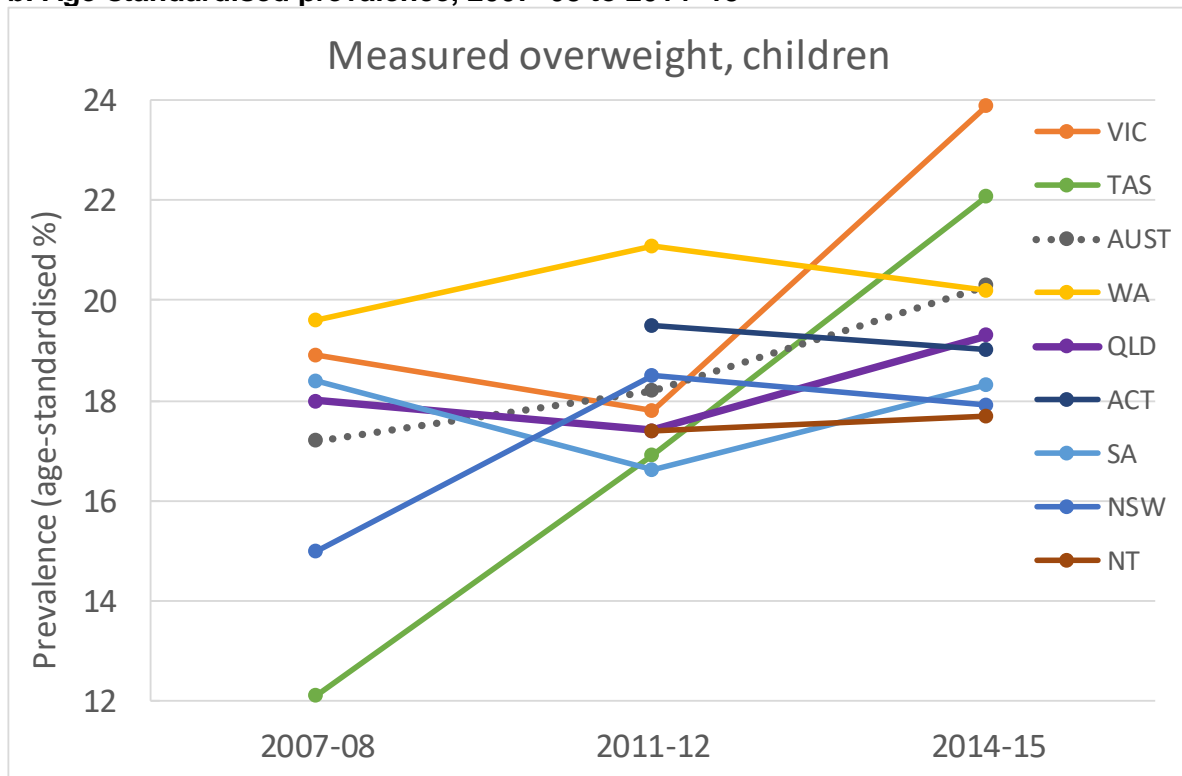
Note: Age-standardised prevalence for 2017–18 is currently not available.

Figure 6. Measured overweight, prevalence by jurisdiction, children

a. Crude prevalence, 2017–18



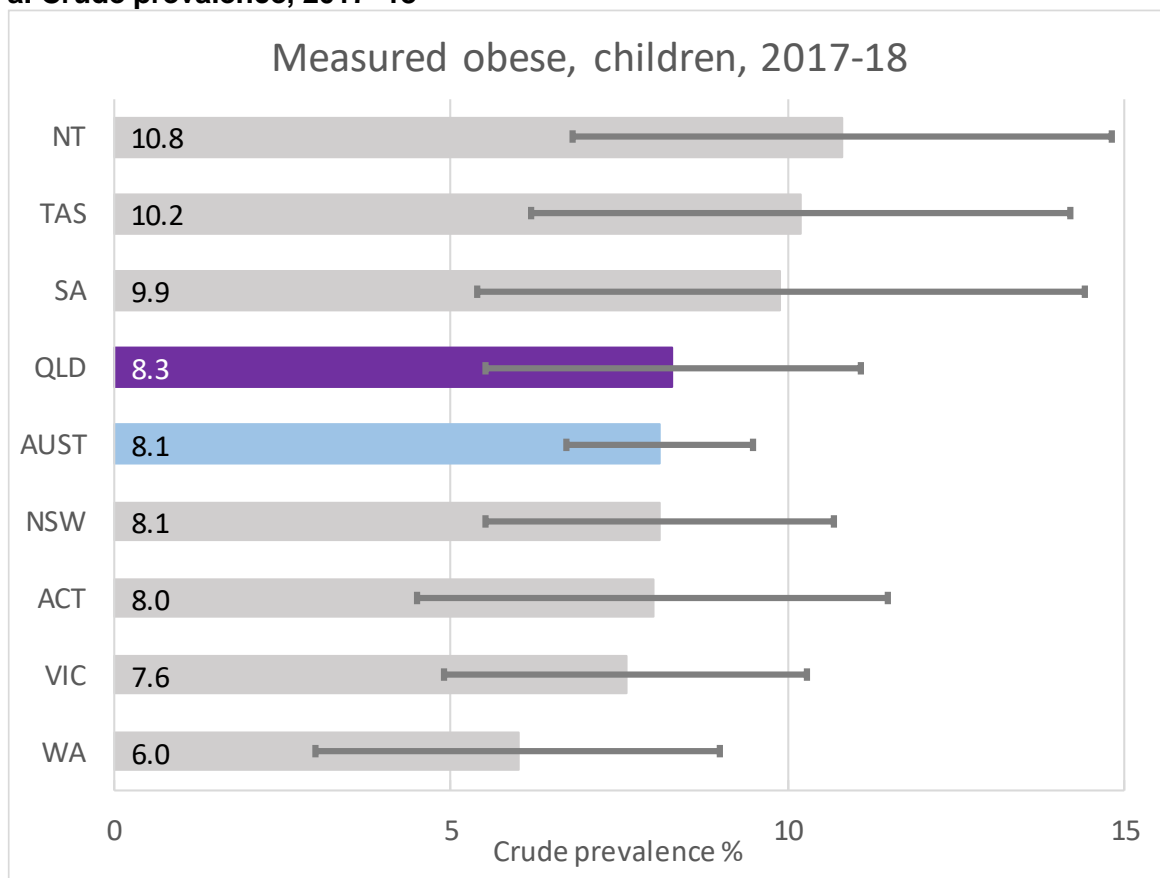
b. Age-standardised prevalence, 2007–08 to 2014–15



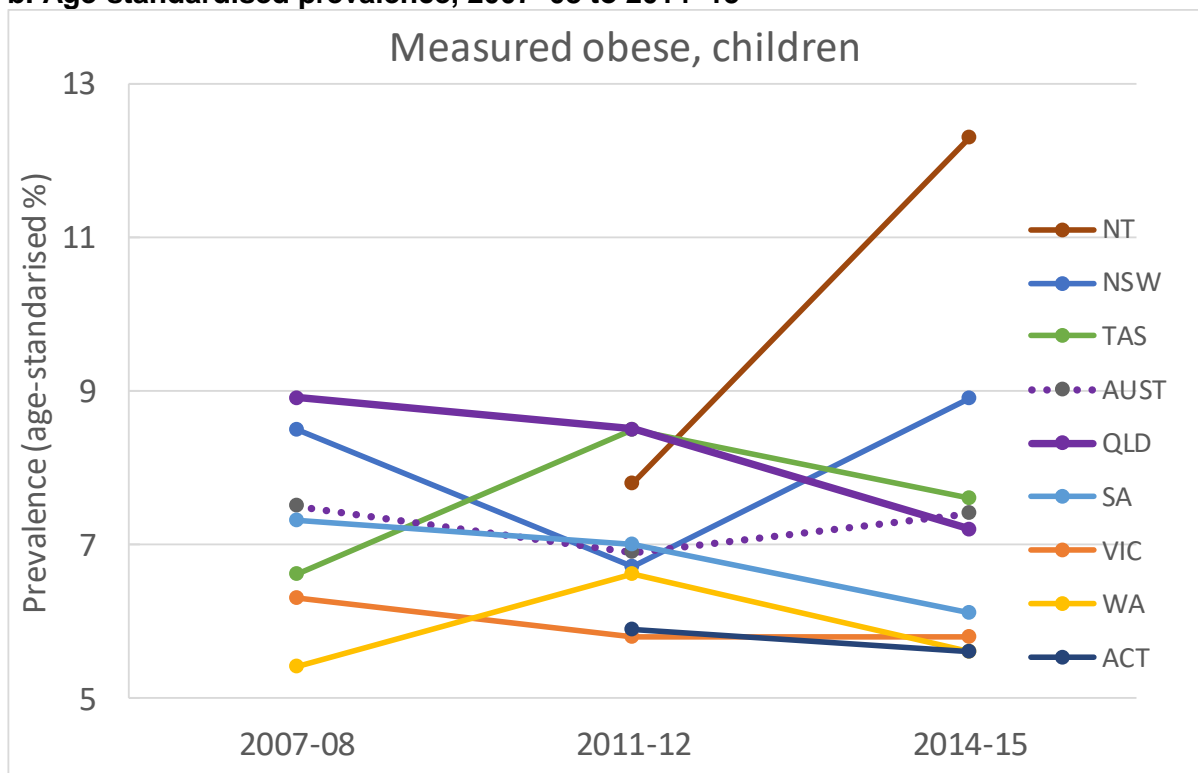
Note: Age-standardised prevalence for 2017–18 is currently not available.

Figure 7. Measured obesity, prevalence by jurisdiction, children

a. Crude prevalence, 2017–18



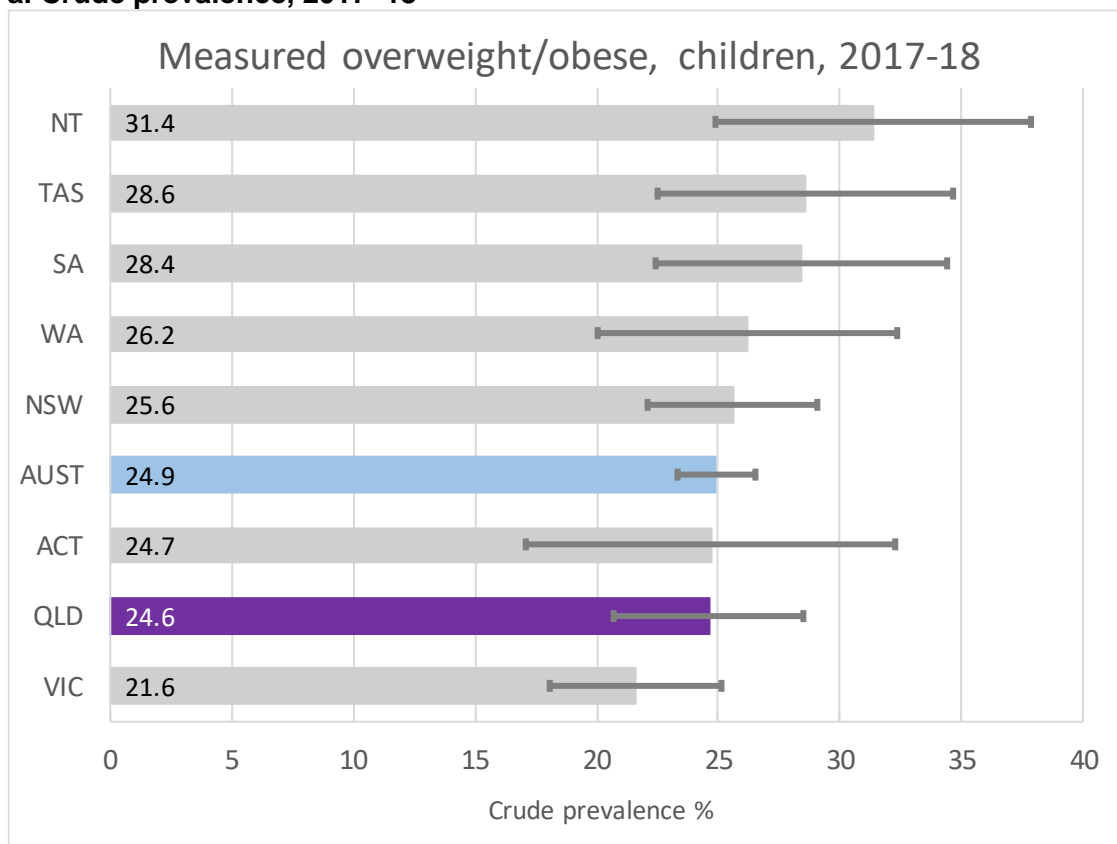
b. Age-standardised prevalence, 2007–08 to 2014–15



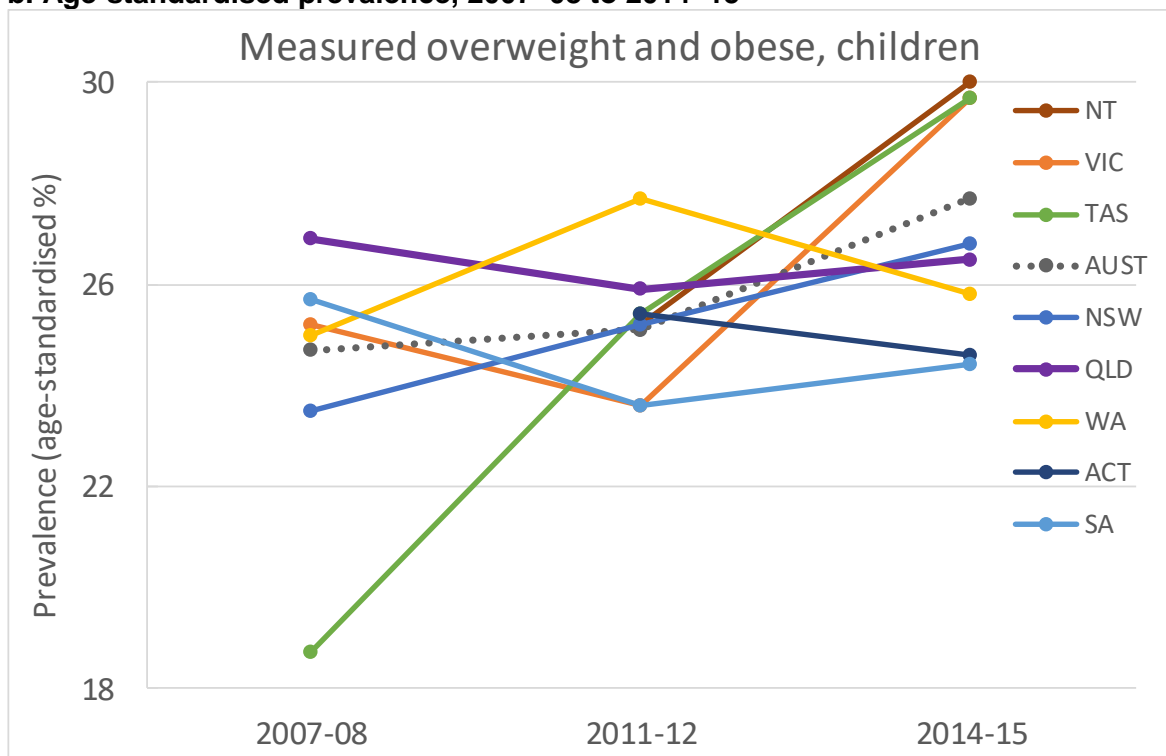
Note: Age-standardised prevalence for 2017–18 is currently not available.

Figure 8. Measured overweight and obesity, prevalence by jurisdiction, children

a. Crude prevalence, 2017–18



b. Age-standardised prevalence, 2007–08 to 2014–15



Note: Age-standardised prevalence for 2017–18 is currently not available.

Table 7. Measured weight status, crude and age-standardised prevalence by jurisdiction, children

	Crude prevalence								
	AUS	QLD	NSW	VIC	SA	WA	TAS	NT	ACT
	%	%	%	%	%	%	%	%	%
2017–18									
Healthy weight	67.0	65.5	63.6	71.3	67.1	67.5	65.2	66.9	65.7
Underweight	8.0	9.9	10.5	5.8	6.2	5.4	4.9	4.4	9.3
Overweight	17.0	15.9	17.2	14.3	17.8	20.7	17.4	20.6	18.1
Obese	8.1	8.3	8.1	7.6	9.9	6.0	10.2	10.8	8.0
Overweight/obese	24.9	24.6	25.6	21.6	28.4	26.2	28.6	31.4	24.7
	Age-standardised prevalence								
	AUS	QLD	NSW	VIC	SA	WA	TAS	NT	ACT
	%	%	%	%	%	%	%	%	%
2014-15									
Healthy weight	66.7	65.7	68.8	63.9	71.8	66.0	64.2	64.5	68.7
Underweight	5.7	7.9	4.6	5.6	5.1	6.5	5.8	5.4	6.3
Overweight	20.3	19.3	17.9	23.9	18.3	20.2	22.1	17.7	19.0
Obese	7.4	7.2	8.9	5.8	6.1	5.6	7.6	12.3	5.6
Overweight/obese	27.7	26.5	26.8	29.7	24.4	25.8	29.7	30.0	24.6
2011-12									
Healthy weight	69.8	67.2	70.6	71.8	72.0	66.8	69.7	64.9	70.0
Underweight	5.1	6.9	4.2	4.6	4.4	5.5	5.0	9.9	4.6
Overweight	18.2	17.4	18.5	17.8	16.6	21.1	16.9	17.4	19.5
Obese	6.9	8.5	6.7	5.8	7.0	6.6	8.5	7.8	5.9
Overweight/obese	25.1	25.9	25.2	23.6	23.6	27.7	25.4	25.2	25.4
2007-08									
Healthy weight	67.7	62.9	68.8	68.5	68.1	68.1	77.2	88.4	75.8
Underweight	7.5	10.2	7.8	6.3	6.2	6.9	4.1	a	3.3
Overweight	17.2	18.0	15.0	18.9	18.4	19.6	12.1	n.p.	n.p.
Obese	7.5	8.9	8.5	6.3	7.3	5.4	6.6	n.p.	n.p.
Overweight/obese	24.7	26.9	23.5	25.2	25.7	25.0	18.7	n.p.	n.p.

n.p. not publishable

Notes:

- Data for the NT should be interpreted with caution as the Australian Health Survey and National Health Survey excluded discrete Aboriginal and Torres Strait Islander communities and very remote areas, which comprise around 25 per cent of the estimated resident population of the NT.
- Data for the NT for 2011–12 and 2014–15 are not comparable to data for previous years due to the increase in sample size.
- Age-standardised prevalence of measured weight status in 2017–18 is currently not available.
- Additional data including margins of error and confidence intervals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.
- Awaiting data for age-standardised prevalence of all weight categories for all jurisdictions in 2017–18.

Adults (18 years and older) by jurisdiction

Table 8. Measured weight status, age-standardised prevalence, adults, 2017–18

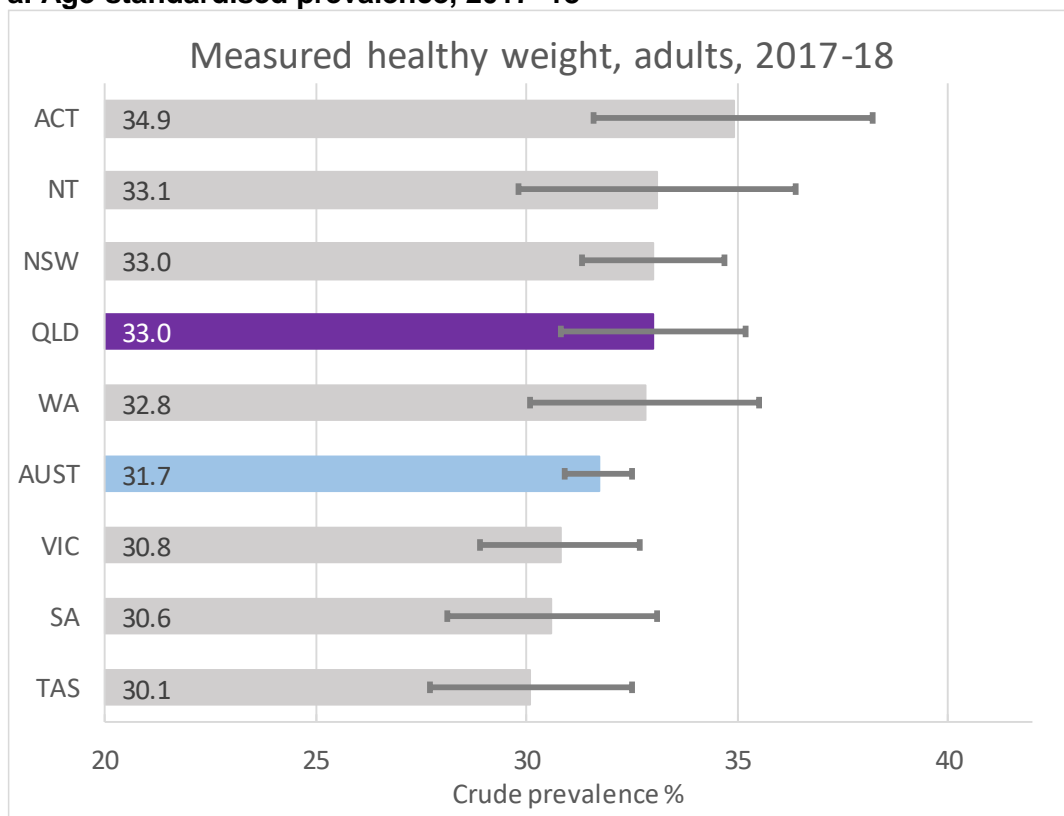
Healthy weight	% (95% CI)	Best	
ACT	34.9 (31.6–38.2)	1	Queensland was ranked 4th highest (or 4th best of 8), for healthy weight adults in 2017–18.
NT	33.1 (29.8–36.4)	2	
NSW	33.0 (31.3–34.7)	3	Previous ranking of Queensland adults for healthy weight :
Queensland	33.0 (30.8–35.2)	4	
WA	32.8 (30.1–35.5)	5	
VIC	30.8 (28.9–32.7)	6	
SA	30.6 (28.1–33.1)	7	
TAS	30.1 (27.7–32.5)	8	
Australia (crude)*	31.7 (30.9–32.5)	-	
Underweight	% (95% CI)	Best	
SA	1.0 (0.4–1.6)	1	Queensland was ranked highest (or 8th best of 8), for underweight adults in 2017–18.
TAS	1.0 (0.4–1.6)	2	
VIC	1.0 (0.5–1.5)	3	Previous ranking of Queensland adults for underweight :
WA	1.1 (0.4–1.8)	4	
ACT	1.4 (0.6–2.2)	5	
NT	1.5 (0.7–2.3)	6	
NSW	1.5 (0.9–2.1)	7	
Queensland	1.8 (1.2–2.4)	8	
Australia (crude)*	1.3 (1.1–1.5)	-	
Overweight	% (95% CI)	Best	
Queensland	33.4 (31.4–35.4)	1	Queensland was ranked lowest (or best of 8), for overweight adults in 2017–18.
NSW	34.9 (33.0–36.8)	2	Previous ranking of Queensland adults for overweight :
TAS	35.0 (32.2–37.8)	3	
NT	35.2 (31.9–38.5)	4	
VIC	36.6 (34.7–38.5)	5	
SA	37.6 (35.0–40.2)	6	
WA	37.7 (34.9–40.5)	7	
ACT	37.8 (34.4–41.2)	8	
Australia	35.6 (34.6–36.6)	-	
Obese	% (95% CI)	Best	
ACT	26.3 (23.1–29.5)	1	Queensland was ranked 2nd highest (or 7th best of 8), for obese adults in 2017–18.
WA	28.3 (26.0–30.6)	2	
NT	30.0 (26.7–33.3)	3	Previous ranking of Queensland adults for obesity :
NSW	30.2 (28.2–32.2)	4	
SA	30.9 (28.5–33.3)	5	
VIC	31.5 (29.4–33.6)	6	
Queensland	31.7 (29.7–33.7)	7	
TAS	34.2 (31.4–37.2)	8	
Australia	30.8 (29.9–31.7)	-	
Overweight/obese	% (95% CI)	Best	
ACT	64.1 (60.8–67.4)	1	Queensland was ranked 2nd lowest (or 2nd best of 8) for overweight and obese adults in 2017–18.
Queensland	65.2 (63.1–67.3)	2	
NSW	65.4 (63.7–67.1)	3	Previous ranking of Queensland adults for overweight and obesity :
NT	65.5 (62.1–68.9)	4	
WA	66.2 (63.7–68.7)	5	
VIC	68.0 (66.1–69.9)	6	
SA	68.3 (65.6–71.0)	7	
TAS	69.3 (67.1–71.5)	8	
Australia	66.4 (65.6–67.2)	-	

Ranking does not imply statistical difference between prevalence.

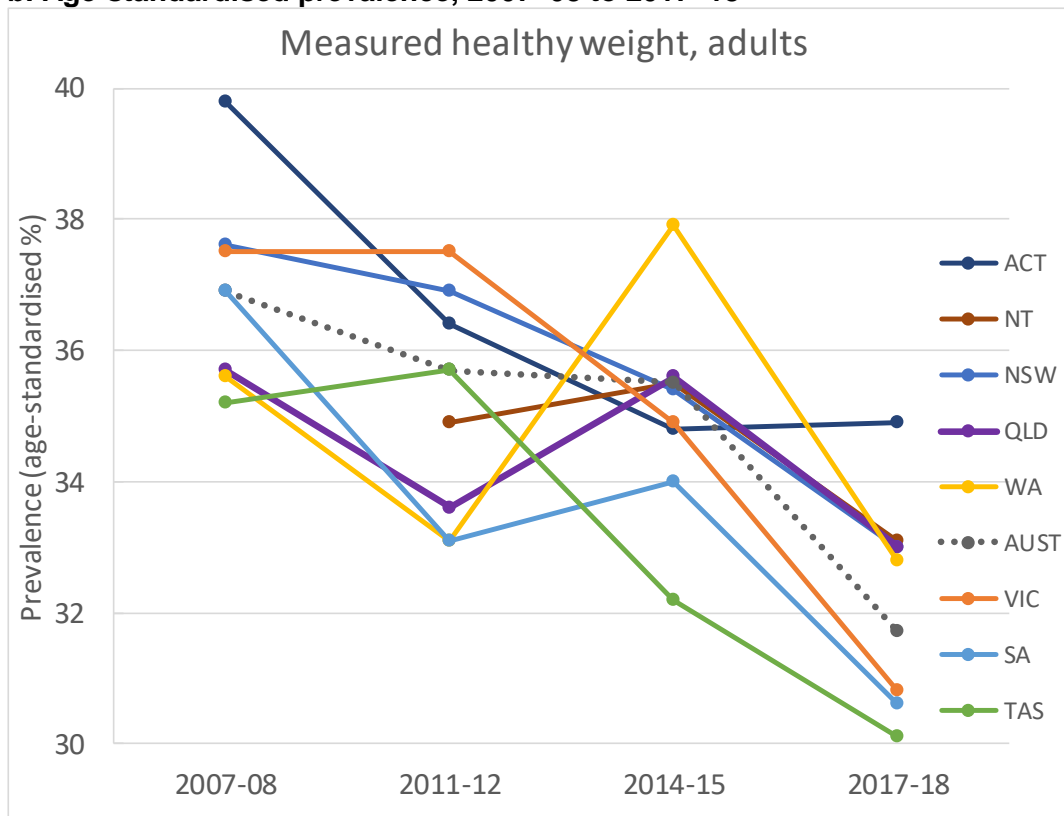
* Awaiting data for age-standardised prevalence of healthy weight/underweight in Australia (2017–18).

Figure 9. Measured healthy weight, prevalence by jurisdiction, adults

a. Age-standardised prevalence, 2017–18



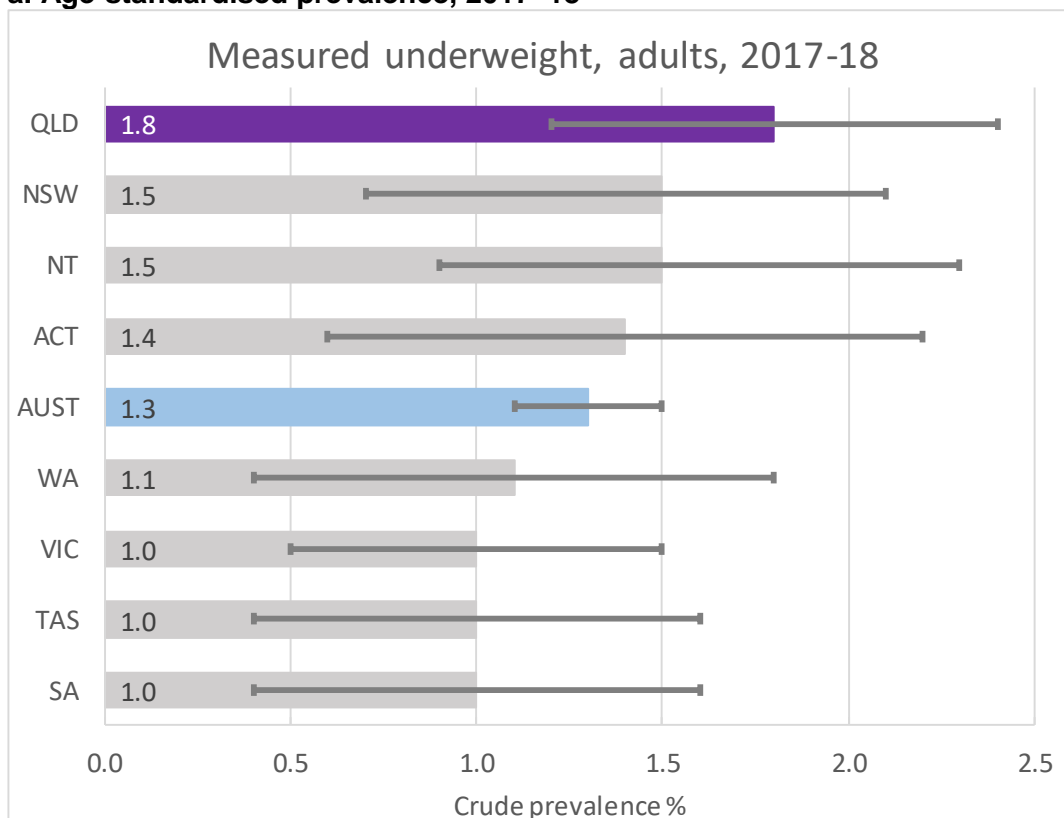
b. Age-standardised prevalence, 2007–08 to 2017–18



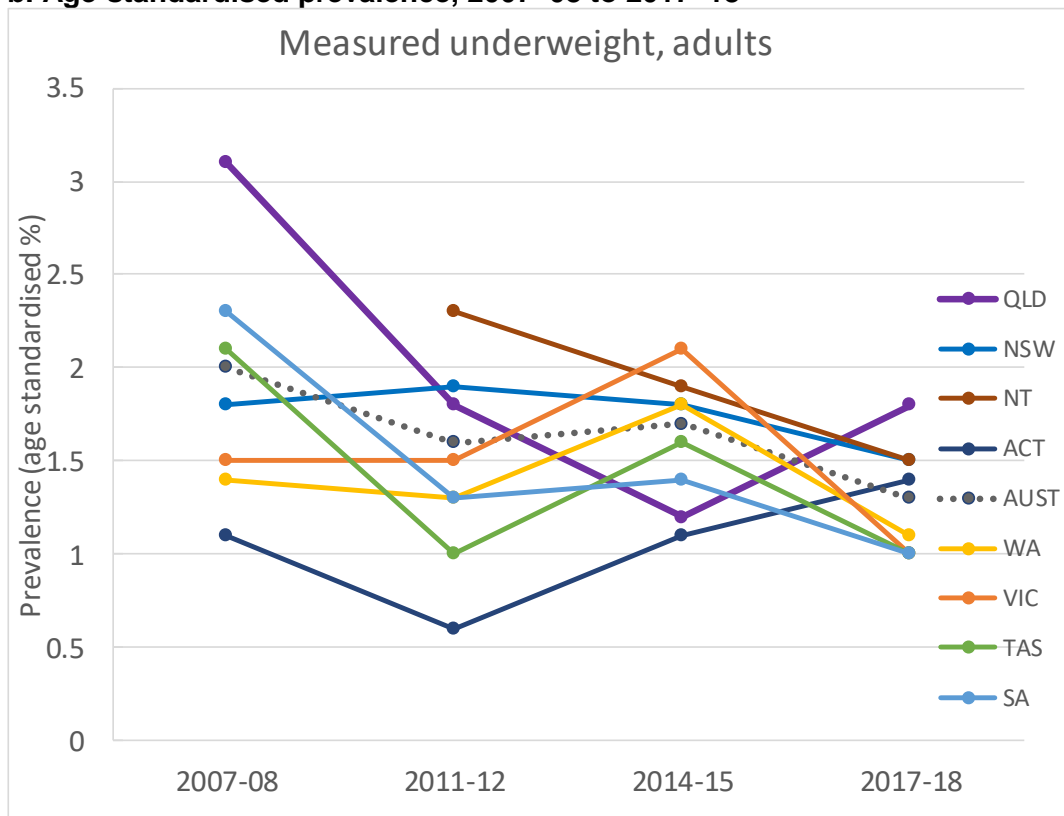
Awaiting data for age-standardised prevalence of healthy weight in Australia in 2017–18.

Figure 10. Measured underweight, prevalence by jurisdiction, adults

a. Age-standardised prevalence, 2017-18



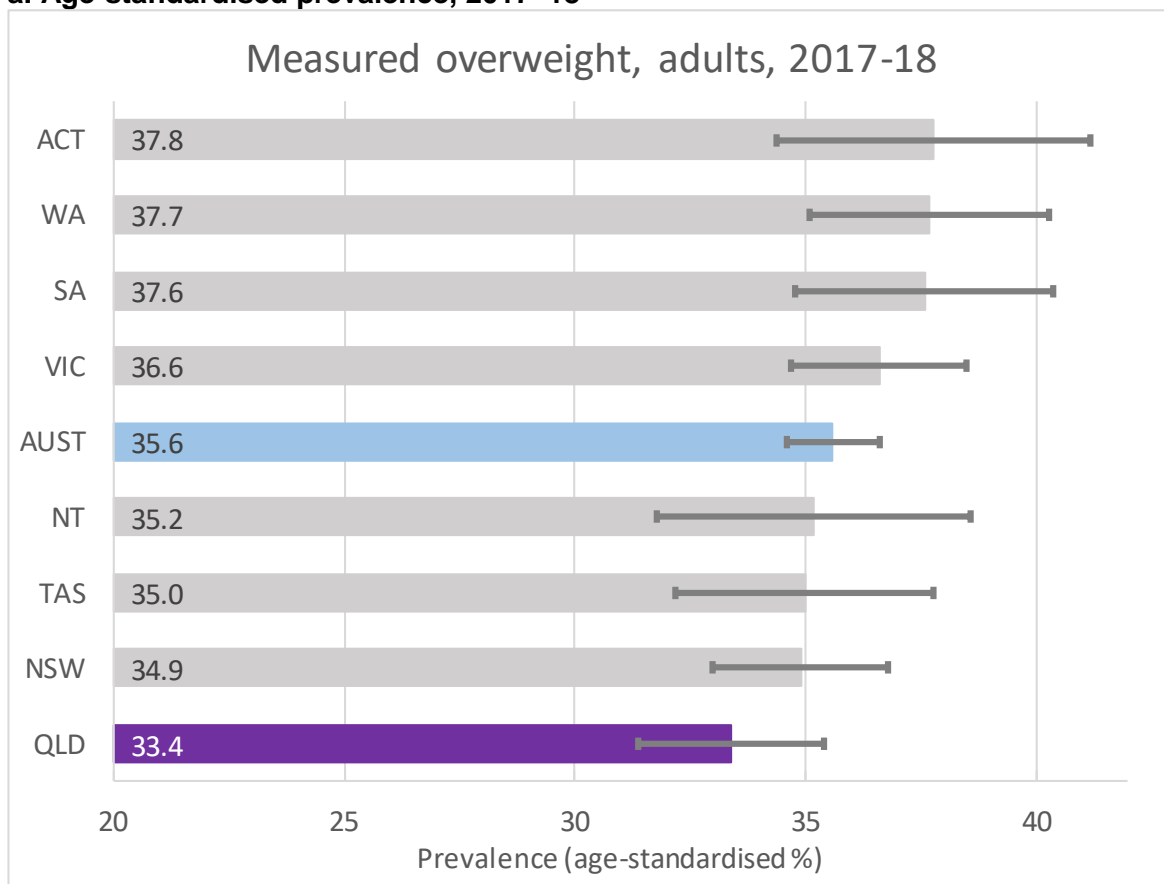
b. Age-standardised prevalence, 2007-08 to 2017-18



Awaiting data for age-standardised prevalence of underweight in Australia in 2017-18.

Figure 11. Measured overweight, prevalence by jurisdiction, adults

a. Age-standardised prevalence, 2017-18



b. Age-standardised prevalence, 2007-08 to 2017-18

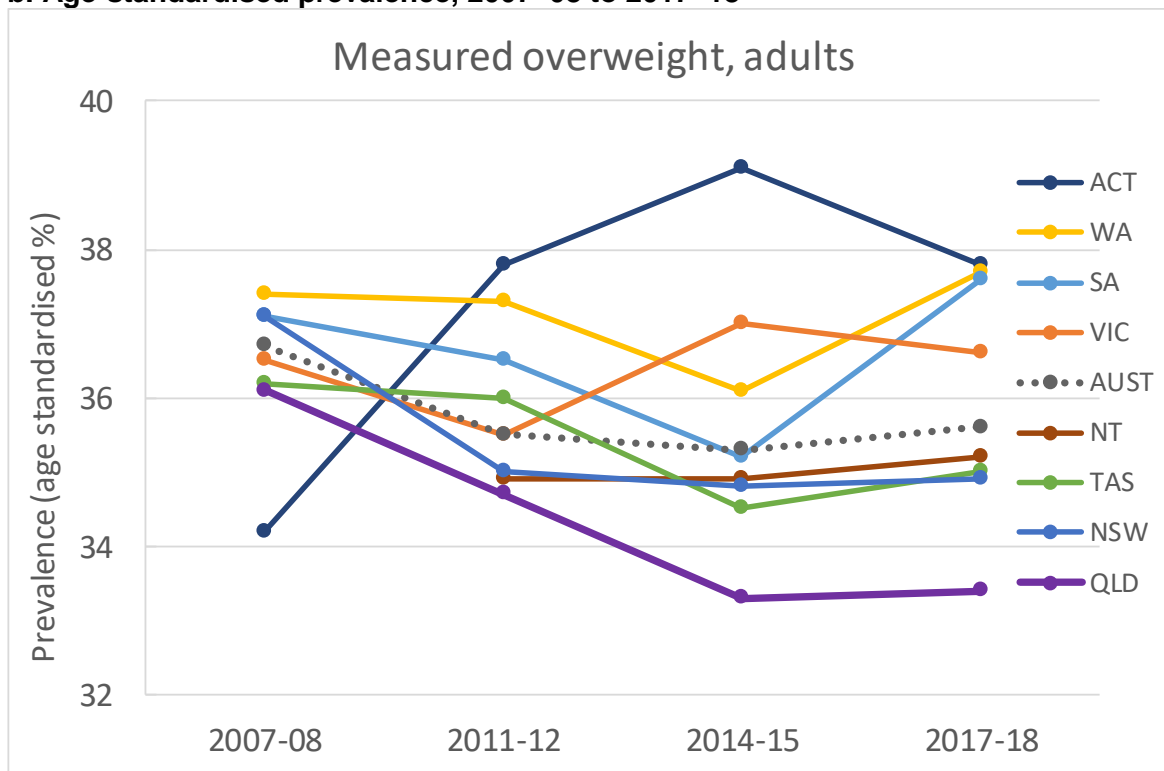
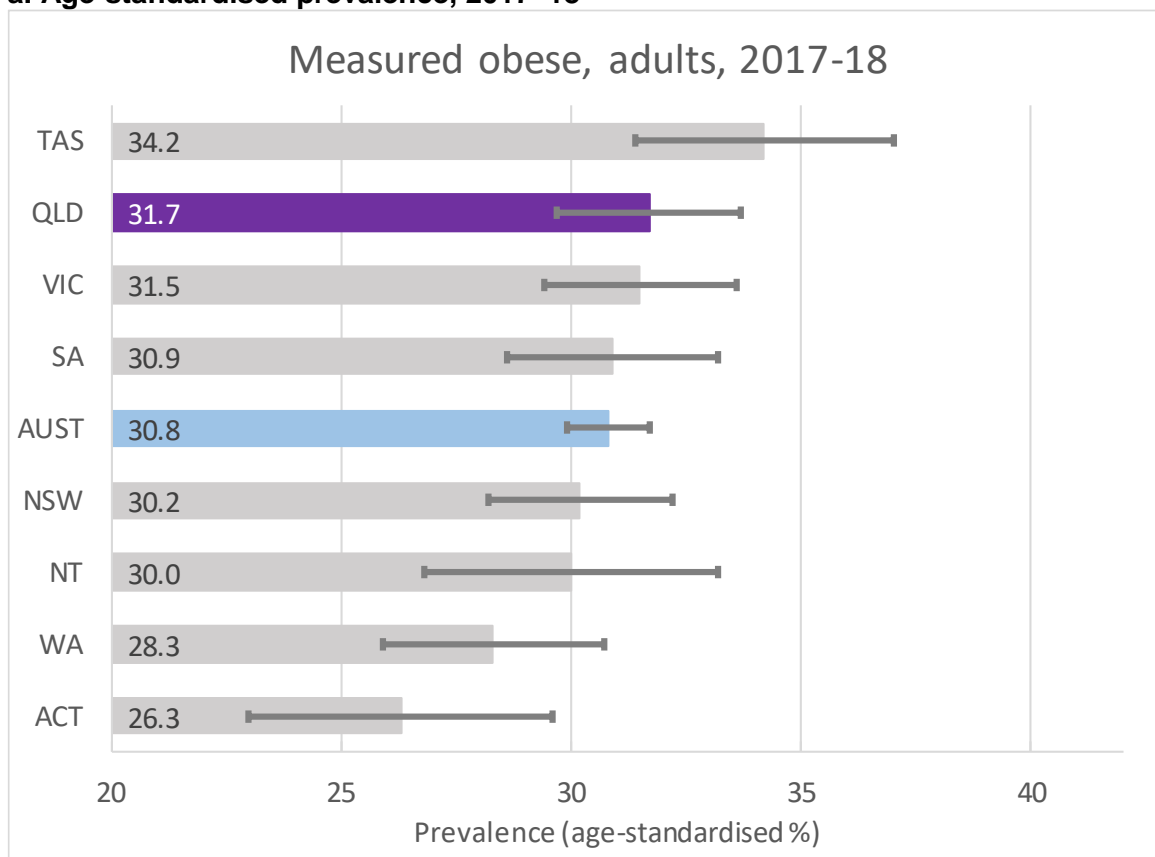


Figure 12. Measured obesity, prevalence by jurisdiction, adults

a. Age-standardised prevalence, 2017–18



b. Age-standardised prevalence, 2007–08 to 2017–18

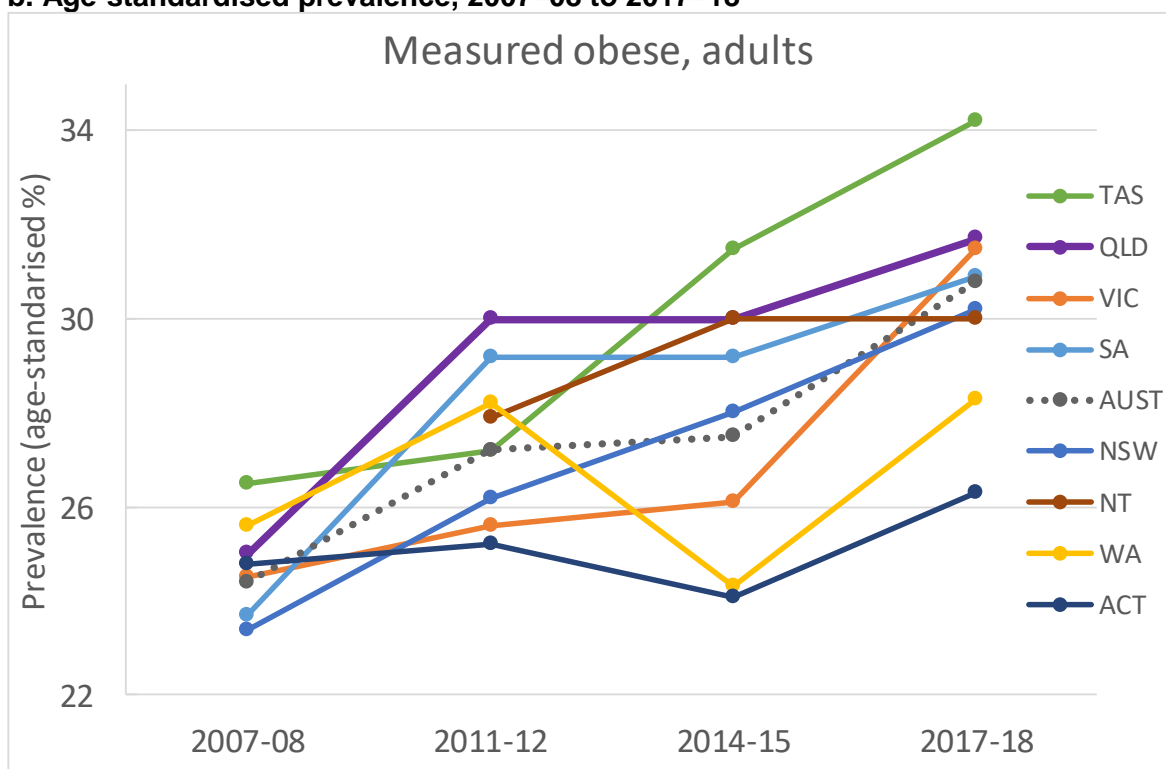
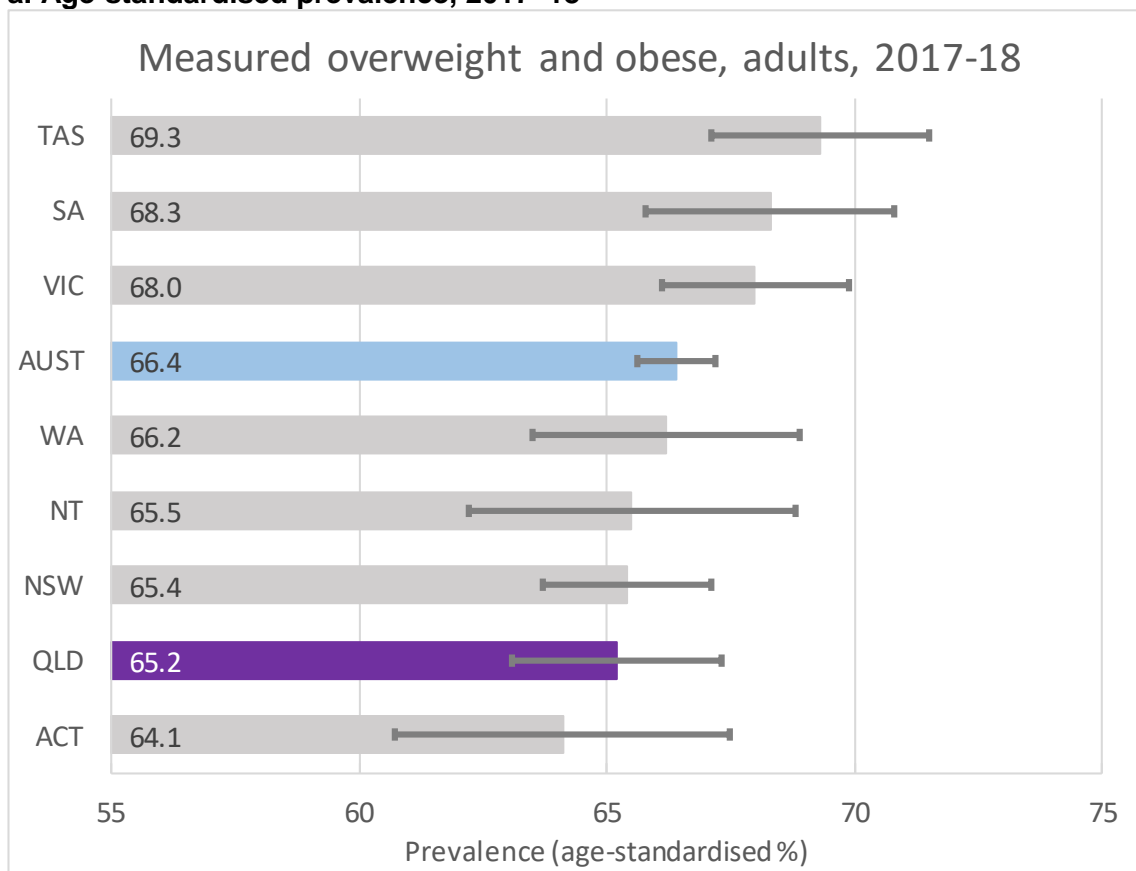


Figure 13. Measured overweight and obesity, prevalence by jurisdiction, adults

a. Age-standardised prevalence, 2017–18



b. Age-standardised prevalence, 2007–08 to 2017–18

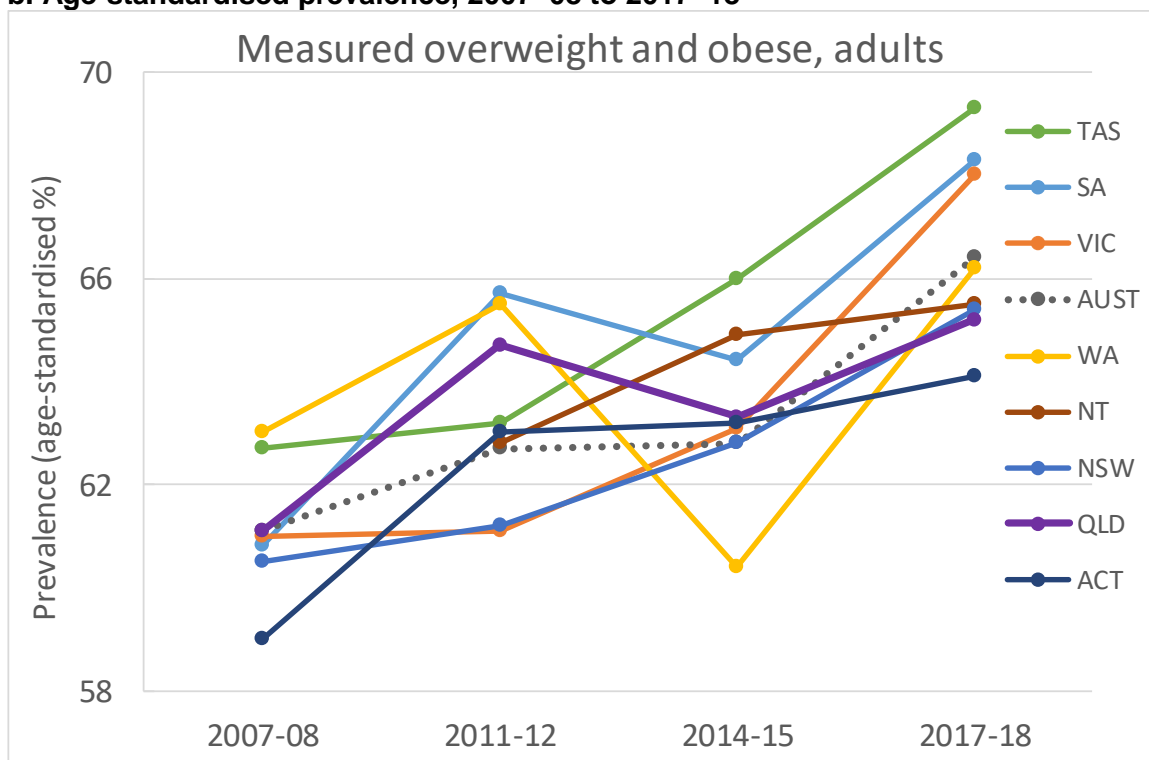


Table 9. Measured weight status, crude and age-standardised prevalence by jurisdiction, adults

	Age-standardised prevalence								
	AUS	QLD	NSW	VIC	SA	WA	TAS	NT	ACT
	%	%	%	%	%	%	%	%	%
2017–18									
Healthy weight	31.7*	33.0	33.0	30.8	30.6	32.8	30.1	33.1	34.9
Underweight	1.3*	1.8	1.5	1.0	1.0	1.1	1.0	1.5	1.4
Overweight	35.6	33.4	34.9	36.6	37.6	37.7	35.0	35.2	37.8
Obese	30.8	31.7	30.2	31.5	30.9	28.3	34.2	30.0	26.3
Overweight/obese	66.4	65.2	65.4	68.0	68.3	66.2	69.3	65.5	64.1
2014-15									
Healthy weight	35.5	35.6	35.4	34.9	34.0	37.9	32.2	35.5	34.8
Underweight	1.7	1.2	1.8	2.1	1.4	1.8	1.6	1.9	1.1
Overweight	35.3	33.3	34.8	37.0	35.2	36.1	34.5	34.9	39.1
Obese	27.5	30.0	28.0	26.1	29.2	24.3	31.5	30.0	24.1
Overweight/obese	62.8	63.3	62.8	63.1	64.4	60.4	66.0	64.9	63.2
2011-12									
Healthy weight	35.7	33.6	36.9	37.5	33.1	33.1	35.7	34.9	36.4
Underweight	1.6	1.8	1.9	1.5	1.3	1.3	1.0	2.3	0.6
Overweight	35.5	34.7	35.0	35.5	36.5	37.3	36.0	34.9	37.8
Obese	27.2	30.0	26.2	25.6	29.2	28.2	27.2	27.9	25.2
Overweight/obese	62.7	64.7	61.2	61.1	65.7	65.5	63.2	62.8	63.0
2007-08									
Healthy weight	36.9	35.7	37.6	37.5	36.9	35.6	35.2	36.8	39.8
Underweight	2.0	3.1	1.8	1.5	2.3	1.4	2.1	a	1.1
Overweight	36.7	36.1	37.1	36.5	37.1	37.4	36.2	30.4	34.2
Obese	24.4	25.0	23.4	24.5	23.7	25.6	26.5	32.8	24.8
Overweight/obese	61.1	61.1	60.5	61.0	60.8	63.0	62.7	63.2	59.0

Notes:

- Data for the NT should be interpreted with caution as the Australian Health Survey and National Health Survey excluded discrete Aboriginal and Torres Strait Islander communities and very remote areas, which comprise around 25 per cent of the estimated resident population of the NT.
- Data for the NT for 2011–12 and 2014–15 are not comparable to data for previous years due to the increase in sample size.
- Age-standardised healthy weight and underweight prevalence in 2017–18 is currently not available.
- Additional data including margins of error and confidence intervals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

* Awaiting data for age-standardised prevalence of healthy weight and underweight in Australia in 2017–18.

Patterns of change over a decade

Children (5 to 17 years)

Based on age-standardised prevalence since 2007–08 and considering four reporting periods (Table 10 and Table 12):

- there was no change in any weight category for **Queensland children** between 2007–08 and 2017–18
- the prevalence of measured underweight in **Australian children** decreased by 32% (7.5% compared with 5.1%) between 2007–08 and 2011–12, with no change since.

Table 10. Changes in measured weight status, age-standardised prevalence, children, Queensland and Australia

Children	2007–08 to 2011–12	2011–12 to 2014–15	2014–15 to 2017–18*
Queensland			
Healthy weight	no change	no change	no change
Underweight	no change	no change	no change
Overweight	no change	no change	no change
Obese	no change	no change	no change
Overweight/obese	no change	no change	no change
Australia			
Healthy weight	no change	no change	no change
Underweight	32% decrease	no change	no change
Overweight	no change	no change	no change
Obese	no change	no change	no change
Overweight/obese	no change	no change	no change

* All weight categories for children in 2017–18 were crude prevalence; awaiting data for age-standardised prevalence.

Comparisons were based on statistical difference of best available data.

Additional data including margins of error and confidence intervals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

Adults (18 years and older)

Based on age-standardised prevalence since 2007–08 and considering four reporting periods (Table 11 and Table 12):

- the prevalence of measured obesity in **Queensland adults** increased by 20% (25% compared with 30%) between 2007–08 and 2011–12, with no change since
- there was no change for any other weight category in **Queensland adults** over the past 10 years
- the prevalence of measured healthy weight in **Australian adults** decreased by 11% (32% compared with 36%) between 2014–15 and 2017–18 (crude prevalence)
- the prevalence of measured obesity in **Australian adults** increased by 11% (24% compared with 27%) between 2007–08 and 2011–12, and further increased by 12% (28% compared with 31%) between 2014–15 and 2017–18
- the prevalence of measured overweight and obesity in **Australian adults** increased by 6% (63% compared with 66%) between 2014–15 and 2017–18.

Table 11. Changes in measured weight status, age-standardised prevalence, adults, Queensland and Australia

Adults	2007–08 to 2011–12	2011–12 to 2014–15	2014–15 to 2017–18*
Queensland			
Healthy weight	no change	no change	no change
Underweight	no change	no change	no change
Overweight	no change	no change	no change
Obese	20% increase	no change	no change
Overweight/obese	no change	no change	no change
Australia			
Healthy weight	no change	no change	11% decrease
Underweight	no change	no change	no change
Overweight	no change	no change	no change
Obese	11% increase	no change	12% increase
Overweight/obese	no change	no change	6% increase

* Healthy weight and underweight in 2017–18 were crude prevalence; awaiting data for age-standardised prevalence.

Comparisons were based on statistical difference of best available data.

Additional data including margins of error and confidence intervals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

Table 12. Measured weight status, crude and age-standardised prevalence by year, children and adults, Queensland and Australia, 2007–08 to 2014–15

Persons	Crude prevalence		Age-standardised prevalence	
	Queensland	Australia	Queensland	Australia
Children (5–17 years)				
2017–18				
Healthy weight	65.5 (61.0-70.0)	67.0 (65.0-69.0)	awaiting data	awaiting data
Underweight	9.9 (7.0-12.8)	8.0 (6.8-9.2)		
Overweight	15.9 (12.5-19.3)	17.0 (15.4-18.6)		
Obese	8.3 (5.5-11.1)	8.1 (6.7-9.5)		
Overweight/obese	24.6 (20.7-28.5)	24.9 (23.3-26.5)		
2014–15				
Healthy weight	65.7 (60.7-70.7)	66.7 (64.4-69.0)	65.7 (60.6-70.8)	66.7 (64.4-69.0)
Underweight	8.0 (4.8-11.2)	5.7 (4.5-6.9)	7.9 (4.7-11.1)	5.7 (4.5-6.9)
Overweight	19.2 (15.2-23.2)	20.2 (18.2-22.2)	19.3 (15.2-23.4)	20.3 (18.3-22.3)
Obese	7.2 (4.4-10.0)	7.4 (6.1-8.7)	7.2 (4.3-10.1)	7.4 (6.1-8.7)
Overweight/obese	26.2 (21.9-30.5)	27.4 (25.2-29.6)	26.5	27.7
2011–12				
Healthy weight	67.2	69.1 (67.3-70.9)	67.2 (63.7-70.7)	69.8 (68.1-71.5)
Underweight	6.9	5.3 (4.7-5.9)	6.9 (5.0-8.8)	5.1 (4.5-5.7)
Overweight	18.2 (15.5-20.9)	18.3 (16.9-19.7)	17.4 (14.8-20.0)	18.2 (16.9-19.5)
Obese	9.3 (7.0-11.6)	7.4 (6.4-8.4)	8.5 (6.5-10.5)	6.9 (6.0-7.8)
Overweight/obese	27.5 (23.6-31.4)	25.7 (24.1-27.3)	25.9	25.1
2007–08				
Healthy weight	*73.3 (67.3–79.3)	*75.3 (72.5–78.1)	62.9 (56.5-69.3)	67.7 (64.8-70.6)
Underweight	*	*	10.2 (6.7-13.7)	7.5 (6.1-8.9)
Overweight	17.9 (12.7–23.1)	17.2 (15.1–19.3)	18.0 (12.7-23.3)	17.2 (15.1-19.3)
Obese	8.8 (4.8–12.8)	7.5 (5.8–9.2)	8.9 (4.9-12.9)	7.5 (5.8-9.2)
Overweight/obese	26.7	24.7	26.9	24.7
Adults (18 years and older)				
2017–18				
Healthy weight	32.3 (30.1-34.5)	31.7 (30.9-32.5)	33.0 (30.8-35.2)	awaiting data
Underweight	1.8 (1.2-2.4)	1.3 (1.1-1.5)	1.8 (1.2-2.4)	
Overweight	33.5 (31.5-35.5)	35.6 (34.6-36.6)	33.4 (31.4-35.4)	35.6 (34.6-36.6)
Obese	32.4 (30.4-34.4)	31.3 (30.4-32.2)	31.7 (29.7-33.7)	30.8 (29.9-31.7)
Overweight/obese	65.9 (63.8-68.0)	67.0 (66.2-67.8)	65.2 (63.1-67.3)	66.4 (65.6-67.2)
2014–15				
Healthy weight	35.3 (33.1-37.5)	35.0 (34.0-36.0)	35.6 (33.4-37.8)	35.5 (34.4-36.6)
Underweight	1.2 (0.7-1.7)	1.6 (1.3-1.9)	1.2 (0.7-1.7)	1.7 (1.4-2.0)
Overweight	33.4 (31.4–35.4)	35.5 (34.6–36.4)	33.4 (31.3-35.5)	35.3 (34.3-36.3)
Obese	30.2 (27.8–32.6)	27.9 (26.9–28.9)	29.9 (27.5-32.3)	27.5 (26.5-28.5)
Overweight/obese	63.6 (61.5–65.7)	63.4 (62.4–64.4)	63.3 (61.2-65.4)	62.8 (61.8-63.8)
2011–12				
Healthy weight	33.4 (31.4-35.4)	35.5 (34.6-36.4)	33.6 (31.6-35.6)	35.7 (34.8-36.6)
Underweight	1.8 (1.3-2.3)	1.7 (1.4-2.0)	1.8 (1.3-2.3)	1.6 (1.4-1.8)
Overweight	34.5 (32.6–36.4)	35.3 (34.6-36.0)	34.7 (33.0-36.4)	35.5 (34.8-36.2)
Obese	30.4 (28.9–31.9)	27.5 (26.7-28.3)	30.0 (28.4-31.6)	27.2 (26.4-28.0)
Overweight/obese	64.9 (63.0–66.8)	62.8 (61.9-63.7)	64.7 (62.8-66.6)	62.7 (61.8-63.6)
2007–08				
Healthy weight	35.9 (33.4-38.4)	36.8 (36.2-37.4)	35.7 (33.2-38.2)	36.9 (35.7-38.1)
Underweight	3.2 (1.8-4.6)	2.0 (1.8-2.2)	3.1 (1.7-4.5)	2.0 (1.6-2.4)
Overweight	35.9 (33.4–38.4)	36.7 (35.5–37.9)	36.1 (33.6-38.6)	36.7 (35.5-37.9)
Obese	24.9 (22.4–27.4)	24.6 (23.5–25.7)	25.0 (22.6-27.4)	24.4 (23.3-25.5)
Overweight/obese	60.8 (58.1–63.5)	61.2 (60.0–62.4)	61.2 (58.6-63.8)	61.1 (60.1-62.1)

Note: Confidence intervals were not available for all estimates.

* Underweight combined with healthy weight.

Changes by sex differences: children and adults

Changes in prevalence for Queensland boys and girls

Based on age-standardised prevalence in 2014–15 and considering two reporting periods (Table 13 and Table 14):

- there was no change in any weight category for **Queensland boys or girls** between 2014–15 and 2017–18, nor for Australian boys or girls.

Changes in prevalence for Queensland adult males and females

Based on age-standardised prevalence in 2014–15 and considering two reporting periods (Table 13 and Table 14):

- there was no change in any weight category for **Queensland males or females** between 2014–15 and 2017–18.

Changes in prevalence for Australian adult males

Based on age-standardised prevalence in 2014–15 and considering two reporting periods (Table 13 and Table 14):

- the prevalence of measured healthy weight in **Australian males** decreased by 12% (28% compared with 25%) between 2014–15 and 2017–18
- the prevalence of measured obesity in **Australian males** increased by 14% (28% compared with 33%) between 2014–15 and 2017–18
- the prevalence of measured overweight and obesity in **Australian males** increased by 5% (75% compared with 71%) between 2014–15 and 2017–18.

Changes in prevalence for Australian adult females

Based on age-standardised prevalence in 2014–15 and considering two reporting periods (Table 13 and Table 14):

- the prevalence of measured healthy weight in **Australian females** decreased by 7% (42% compared with 39%) between 2014–15 and 2017–18
- the prevalence of measured obesity in **Australian females** increased by 10% (27% compared with 30%) between 2014–15 and 2017–18
- the prevalence of measured overweight and obesity in **Australian females** increased by 6% (56% compared with 60%) between 2014–15 and 2017–18.

Table 13. Changes in measured weight status, crude and age-standardised prevalence by sex, children and adults, Queensland and Australia, 2014–15 and 2017–18

	Queensland 2014–15 and 2017–18*	Australia 2014–15 and 2017–18*
Boys 5–17 years		
Healthy weight	no change	no change
Underweight	no change	no change
Overweight	no change	no change
Obese	no change	no change
Overweight/obese	no change	no change
Girls 5–17 years		
Healthy weight	no change	no change
Underweight	no change	no change
Overweight	no change	no change
Obese	no change	no change
Overweight/obese	no change	no change
Adult males		
Healthy weight	no change	12% decrease
Underweight	no change	no change
Overweight	no change	no change
Obese	no change	14% increase
Overweight/obese	no change	5% increase
Adult females		
Healthy weight	no change	7% decrease
Underweight	no change	no change
Overweight	no change	no change
Obese	no change	10% increase
Overweight/obese	no change	6% increase

* All weight categories for children in 2017–18 were crude prevalence. Healthy weight and underweight for adults in 2017–18 were crude prevalence; awaiting data for age-standardised prevalence.

Comparisons were based on statistical difference of best available data.

Additional data including margins of error and confidence intervals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

Table 14. Measured weight status, crude prevalence by sex, children and adults, Queensland and Australia, 2014–15 and 2017–18

	Crude prevalence	
	Queensland	Australia
Children (5-17 years)		
Males		
2017–18		
Healthy weight	63.4 (57.1-69.7)	66.7 (64.2-69.2)
Underweight	6.9 (2.9-10.9)	7.5 (5.9-9.1)
Overweight	18.2 (13.5-22.9)	17.6 (15.4-19.8)
Obese	10.3 (6.3-14.3)	8.5 (6.8-10.2)
Overweight/obese	29.7 (24.3-35.1)	26.1 (23.8-28.4)
2014–15		
Healthy weight	67.0 (60.6-73.4)	65.9 (62.9-68.9)
Underweight	5.8 (1.0-9.8)	5.7 (4.0-7.4)
Overweight	18.3 (13.2-23.4)	21.9 (19.4-24.4)
Obese	7.4 (4.1-10.7)	6.6 (4.9-8.3)
Overweight/obese	26.9 (21.4-32.4)	28.4 (25.5-31.3)
Females		
2017–18		
Healthy weight	67.2 (61.3-73.1)	67.5 (64.6-70.4)
Underweight	12.5 (7.5-17.5)	8.6 (6.7-10.5)
Overweight	13.5 (9.4-17.6)	16.2 (14.1-18.3)
Obese	7.9 (4.4-11.4)	7.4 (5.4-9.4)
Overweight/obese	19.9 (15.2-24.6)	24.0 (21.6-26.4)
2014–15		
Healthy weight	63.8 (55.9-71.7)	67.5 (64.1-70.9)
Underweight	8.8 (3.5-14.1)	5.7 (4.2-7.2)
Overweight	19.3 (13.1-25.5)	18.2 (15.5-20.9)
Obese	7.1 (2.1-12.1)	8.2 (6.2-10.2)
Overweight/obese	27.2 (19.8-34.6)	26.6 (23.3-29.9)
Adults (18 years and older)		
Males		
2017–18		
Healthy weight	25.3 (22.5-28.1)	24.7 (23.3-26.1)
Underweight	2.1 (1.2-3.0)	0.9 (0.6-1.2)
Overweight	39.0 (35.9-42.1)	42.0 (40.5-43.5)
Obese	33.9 (31.0-36.8)	32.5 (31.0-34.0)
Overweight/obese	72.9 (70.2-75.6)	74.5 (73.2-75.8)
2014–15		
Healthy weight	28.3 (24.9-31.7)	28.1 (26.6-29.6)
Underweight	1.1 (0.3-1.9)	1.2 (0.9-1.5)
Overweight	38.4 (35.1-41.7)	42.4 (41.0-43.8)
Obese	31.9 (28.3-35.5)	28.4 (26.9-29.9)
Overweight/obese	70.7 (67.3-74.1)	70.8 (69.2-72.4)
Females		
2017–18		
Healthy weight	39.4 (36.5-42.3)	38.6 (37.4-39.8)
Underweight	1.7 (0.9-2.5)	1.7 (1.3-2.1)
Overweight	28.2 (25.5-30.9)	29.6 (28.3-30.9)
Obese	30.7 (28.3-33.1)	30.2 (29.0-31.4)
Overweight/obese	59.3 (56.5-62.1)	59.7 (58.4-61.0)
2014–15		
Healthy weight	42.4 (39.8-45.0)	41.7 (40.3-43.1)
Underweight	1.2 (0.4-2.0)	2.1 (0.7-2.5)
Overweight	28.6 (26.2-31.0)	28.8 (27.6-30.0)
Obese	28.4 (25.6-31.2)	27.4 (26.1-28.7)
Overweight/obese	56.6 (54.1-59.1)	56.3 (55.0-57.6)

Age group differences 2017–18

Children (5 to 17 years)

The weight status of children is volatile during puberty, and differs for boys and girls. This volatility presents challenges for population based measurement of weight in pre-pubescent and pubescent children which may influence the prevalence of weight status. The transition from the teenage years into adulthood presents further volatility in weight changes.

Queensland children

Many of the proportions for Queensland children by age group had high margins of errors and assessment of difference should be used with caution (Table 15).

Australian children

Healthy weight was highest (that is, best) at 72% for children aged 12–15 years (Table 16) and:

- highest at 74% for boys aged 12–15 years and 69% for girls aged 16–17 years
- lowest at 65% for children aged 5–7 years.

Underweight was lowest (that is, best) at 7% for children aged 16–17 years and:

- lowest at 5% for boys aged 12–15 years and 4% for girls aged 16–17 years
- highest at 10% for children aged 8–11 years.

Overweight was lowest (that is, best) at 15% for children aged 12–15 years and:

- lowest at 14% for boys aged 12–15 years and 13% for girls aged 8–11 years
- highest at 18% for children aged 16–17 years.

Obesity was lowest (that is, best) at 7% for Australian children aged 12–15 years and:

- lowest at 7% for boys aged 8–11 years and 6% for girls aged 12–15 years
- highest at 10% for children aged 5–7 years or 16–17 years.

Overweight and obesity was lowest (that is, best) at 21% for children aged 12–15 years and:

- lowest at 20% for boys aged 12–15 years and 20% for girls aged 8–11 years
- highest at 28% for children aged 16–17 years.

Table 15. Measured weight status, crude prevalence by age group and sex, children, Queensland, 2017–18

Queensland children	5–17	2–17	2–4	5–7	8–11	12–15	16–17
Persons	%	%	%	%	%	%	%
Healthy weight	65.5	65.2	#63.2	66.9	59.4	68.3	67.0
Underweight	9.9	10.8	13.9	8.6	14.4	10.3	#3.4
Overweight	15.9	15.4	11.0	15.7	16.6	13.6	#22.0
Obese	8.3	8.7	9.4	7.7	10.6	9.0	7.9
Overweight/obese	24.6	24.5	19.9	23.4	29.2	22.1	#24.8
Males							
Healthy weight	63.4	63.0	#62.9	#69.0	#54.8	#65.6	#63.7
Underweight	6.9	10.4	#20.2	6.7	#11.4	#4.2	#3.4
Overweight	18.2	17.4	#8.4	7.9	24.7	18.0	#26.0
Obese	10.3	9.8	#5.0	13.3	7.6	11.4	#8.7
Overweight/obese	29.7	26.2	#13.6	23.5	#34.6	#26.7	#30.8
Females							
Healthy weight	67.2	66.3	#65.8	#60.6	#58.5	#72.6	#78.6
Underweight	12.5	10.4	7.5	#3.3	#18.2	#12.5	#3.5
Overweight	13.5	13.9	15.7	#21.8	10.6	9.2	#16.0
Obese	7.9	8.4	11.1	6.2	9.8	#4.0	#4.3
Overweight/obese	19.9	21.7	#28.5	#25.1	#24.6	12.6	#15.5

Proportion has high margin of error and assessment of difference should be used with caution.

Additional data including margins of error and confidence intervals are available from the ABS website

<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

Table 16. Measured weight status, crude prevalence by age group and sex, children, Australia, 2017–18

Australian children	5–17	2–17	2–4	5–7	8–11	12–15	16–17
Persons	%	%	%	%	%	%	%
Healthy weight	67.0	66.9	66.6	65.1	65.4	71.6	65.8
Underweight	8.0	8.2	8.5	7.5	9.5	7.4	7.3
Overweight	17.0	16.7	16.0	17.4	17.7	14.8	18.0
Obese	8.1	8.2	9.2	10.3	6.9	6.7	10.3
Overweight/obese	24.9	24.9	24.6	27.5	25.2	20.8	28.1
Males							
Healthy weight	66.7	66.6	66.0	64.1	64.7	73.8	59.9
Underweight	7.5	7.7	9.9	8.0	7.9	5.4	8.1
Overweight	17.6	17.3	15.3	16.4	22.0	14.0	20.2
Obese	8.5	8.5	8.7	10.9	6.9	7.2	10.7
Overweight/obese	26.1	25.4	24.1	26.7	28.0	20.4	32.3
Females							
Healthy weight	67.5	67.6	67.0	64.4	67.1	69.1	69.4
Underweight	8.6	8.3	7.8	6.1	12.7	8.1	4.3
Overweight	16.2	16.3	15.3	20.0	13.3	15.2	16.9
Obese	7.4	7.9	10.8	9.3	6.7	5.7	8.7
Overweight/obese	24.0	24.3	26.1	29.6	20.0	21.4	24.7

Additional data including margins of error and confidence intervals are available from the ABS website

<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

Adults (18 years and older)

The weight status of adults was healthiest among those aged 18–24 years (Table 17 and Table 18). As adults age the prevalence of healthy weight decreases as excess weight is gained.

Queensland adults

Healthy weight was highest (that is, best) at 50% for adults aged 18–24 years (Table 17) and lowest at 24% for adults aged 55–64 years.

Underweight was lowest (that is, best) at 0.8% for adults aged 65 years and older and highest at 7% for adults aged 18–24 years.

Overweight was lowest (that is, best) at 25% for adults aged 18–24 years and highest at 37% for adults aged 35–44 years.

Obesity was lowest (that is, best) at 17% for adults aged 18–24 years and highest at 43% for adults aged 55–64 years.

Overweight and obesity was lowest (that is, best) at 41% for adults aged 18–24 years and highest at 76% for adults aged 55–64 years.

Australian adults

Healthy weight was highest (that is, best) at 50% for adults aged 18–24 years (Table 18) and:

- highest at 45% for males and 56% for females both aged 18–24 years
- lowest at 24% for adults aged 65 years and older.

Underweight was lowest (that is, best) at 0.6% for adults aged 35–44 years and highest at 4% for adults aged 18–24 years.

Overweight was lowest (that is, best) at 30% for adults aged 18–24 years and:

- lowest at 35% for males aged 18–24 years and 26% for females aged 18–34 years
- highest at 38% for adults aged 65 years and older.

Obesity was lowest (that is, best) at 16% for adults aged 18–24 years and:

- lowest at 18% for males and 14% for females both aged 18–24 years
- highest at 40% for adults aged 55–64 years.

Overweight and obesity was lowest (that is, best) at 46% for adults aged 18–24 years and:

- lowest at 52% for males and 40% for females both aged 18–24 years
- highest at 76% for adults aged 65 years and older.

Table 17. Measured weight status, crude prevalence by age group and sex, adults, Queensland, 2017–18

Queensland adults	18+	18–24	25–34	35–44	45–54	55–64	65+
Persons	%	%	%	%	%	%	%
Healthy weight	32.3	50.0	39.5	32.6	27.9	24.2	24.6
Underweight	1.8	6.7	#0.9	#0.6	0.9	1.5	0.8
Overweight	33.5	24.9	35.0	36.5	33.8	33.4	36.1
Obese	32.4	16.7	25.0	31.4	38.0	42.6	38.4
Overweight/obese	65.9	41.2	60.2	67.5	71.1	75.9	74.4
Males							
Healthy weight	25.3	44.3	29.8	22.6	20.8	14.6	23.1
Underweight	2.1	12.3	0.0	0.0	#1.0	1.7	0.0
Overweight	39.0	26.1	43.7	43.5	36.9	42.4	37.7
Obese	33.9	19.9	26.6	34.9	40.3	43.6	39.3
Overweight/obese	72.9	46.0	69.9	78.0	78.8	84.8	78.1
Females							
Healthy weight	39.4	#60.3	48.4	42.4	34.6	32.2	27.4
Underweight	1.7	#2.8	#1.1	0.0	#0.9	#0.8	1.4
Overweight	28.2	20.9	27.3	28.2	30.7	26.5	35.1
Obese	30.7	13.6	23.9	27.4	34.1	40.3	38.5
Overweight/obese	59.3	#36.5	50.9	57.3	65.1	67.2	73.3

Proportion has high margin of error and assessment of difference should be used with caution.

Additional data including margins of error and confidence intervals are available from the ABS website

<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001> .

Table 18. Measured weight status, crude prevalence by age group and sex, adults, Australia, 2017–18

Australian adults	18+	18–24	25–34	35–44	45–54	55–64	65+
Persons	%	%	%	%	%	%	%
Healthy weight	31.7	49.9	40.7	30.7	25.2	24.6	23.5
Underweight	1.3	4.3	1.7	0.6	0.8	0.7	0.9
Overweight	35.6	30.3	33.9	38.1	36.6	34.8	38.2
Obese	31.3	15.5	23.8	30.6	37.4	39.9	37.4
Overweight/obese	67.0	46.0	57.7	68.7	74.0	74.7	75.6
Males							
Healthy weight	24.7	44.5	32.9	22.5	16.9	15.7	19.4
Underweight	0.9	3.6	0.6	#0.3	#0.3	0.7	0.6
Overweight	42.0	35.0	42.2	45.4	43.0	42.2	42.8
Obese	32.5	18.1	24.6	32.0	40.6	41.6	37.4
Overweight/obese	74.5	52.4	66.5	77.5	82.9	83.6	80.3
Females							
Healthy weight	38.6	56.1	48.6	38.9	33.4	32.7	27.2
Underweight	1.7	5.0	2.4	0.5	1.5	0.9	1.2
Overweight	29.9	26.0	26.0	30.7	30.7	28.4	34.1
Obese	30.2	13.5	22.9	29.6	34.5	38.1	37.2
Overweight/obese	59.7	39.9	49.2	60.1	65.2	66.6	71.5

Proportion has high margin of error and assessment of difference should be used with caution.

Additional data including margins of error and confidence intervals are available from the ABS website

<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001> .

Patterns of change across age groups

The pattern of change in weight status across the life course has been consistent over the past decade with relatively little variation between 2007–08 and 2017–18. This would suggest that addressing life course transitions is a more critical issue than focussing on time trend change.

Additional data including margins of error and confidence intervals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

Queensland

Healthy weight prevalence is highest in young children, with decline occurring in teenage years and plateauing in middle-age (Figure 14a).

Overweight and obesity is lowest in young children with a relatively rapid increase occurring in young adulthood, reaching a peak of about 80% among middle aged adults (Figure 14b).

Overweight prevalence is lowest in young children and steadily increases over the life course into old age (Figure 14c).

Obesity remains relatively low in children with an increase evident in teenage years followed by a steady upward trend into middle age (Figure 14d).

Underweight prevalence in children shows volatility and considering Australian patterns, the prevalence is highest in young children, falling rapidly during teenage years and remaining low at less than 2% thereafter, although rising slightly in old age (Figure 16).

Australia

Nationally, the pattern of change in weight status across the age course was very similar to that described above for Queensland (Figure 15, Figure 16).

The availability of national data for 1995 demonstrates that two decades ago Australian children and adults were more likely to be in the healthy weight range than in 2017–18 and Australian adults, particularly, were less likely to be obese (Figure 15a).

Figure 14. Measured weight status, crude prevalence by age group, children and adults, Queensland, 2007–08 to 2017–18



Figure 15. Measured weight status, crude prevalence by age group, children and adults, Australia, 1995 to 2017-18

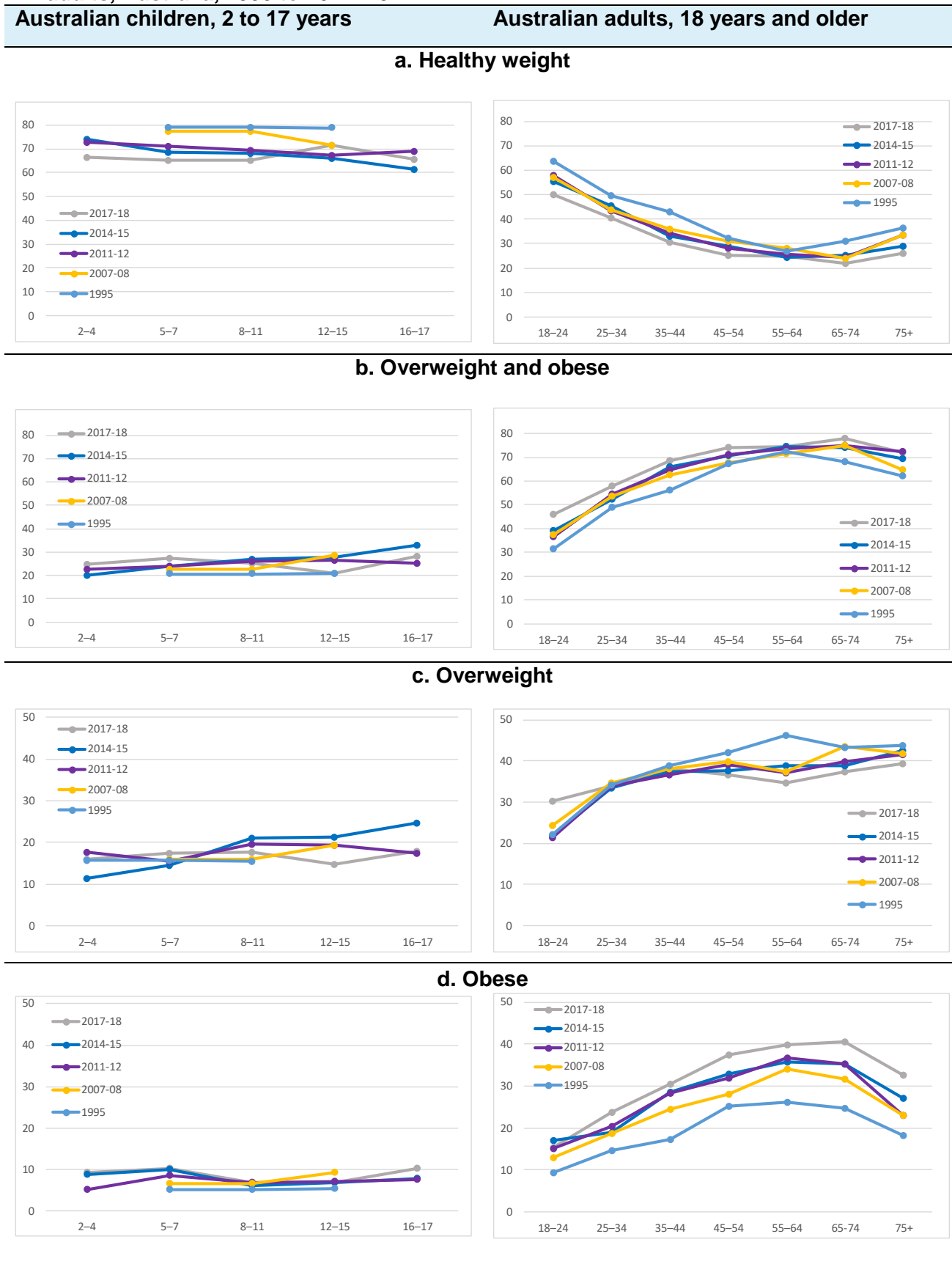
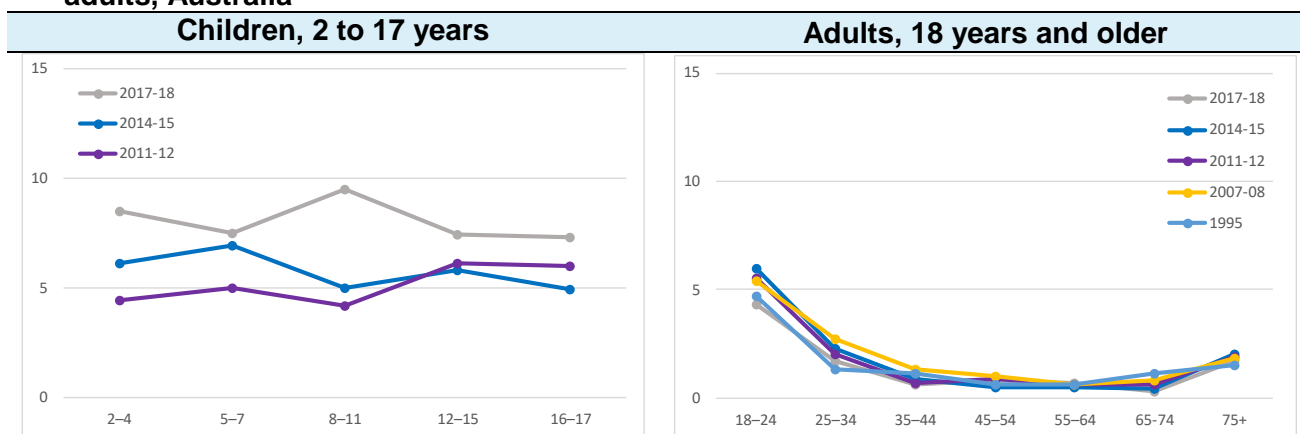


Figure 16. Measured underweight status, crude prevalence by age group, children and adults, Australia



Additional data including margins of error and confidence intervals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>

Underweight by age group for Queensland in 2014–15 and 2017–18 was not displayed in Figure 13 due to high margins of error and assessment of difference by age group should be used with caution.

Underweight by age group as a separate weight category to healthy weight for Queensland in 2007–08 and 2011–12 is not currently available. Underweight was combined with healthy weight in these reporting periods for Queensland.

Long-term health conditions and weight status

Excess weight impacts on health over the life course, with overweight and obese adults likely to experience significantly higher rates of many chronic conditions. This section reports the prevalence of selected long-term conditions by weight status for Queensland (Table 19) and Australia (Table 20). Conditions by healthy weight as separate to underweight is currently not available for Queensland.

Maintaining a healthy weight may be associated with lower prevalence of some long-term health conditions (Table 19 and Table 20). A long-term health condition was defined by the ABS as a current medical condition which has lasted, or is expected to last, for six months or more. The data was not adjusted for age differences which may have contributed to higher prevalence of some long-term health conditions. To assist in understanding the impact of age on the prevalence of chronic disease prevalence, a table of such information was included for Queensland (Table 21).

Queensland

Compared with Queensland adults (aged 18 years and older) of healthy weight and underweight (combined), overweight or obese adults were (Table 19):

- 37% more likely to have back problems
- 83% more likely to have arthritis
- 29% more likely to have asthma
- almost three times as likely to have hypertension
- 78% more likely to have heart, stroke or vascular disease
- almost three times as likely to have diabetes mellitus
- at least twice as likely to have kidney disease.

Australia

Compared with Australians of healthy weight (aged 15 years and older), those who were overweight or obese were (Table 20):

- 39% more likely to have back problems
- almost twice as likely to have arthritis
- 38% more likely to have asthma
- almost three times as likely to have hypertension
- twice as likely to have heart, stroke or vascular disease
- at least three times as likely to have diabetes mellitus
- at least twice as likely to have kidney disease.

Table 19. Selected long-term health conditions by measured weight status, crude prevalence, adults, Queensland, 2017–18

Selected current long-term health conditions (from highest to lowest total prevalence)				
	Mental and behavioural conditions	Back problems	Arthritis	Hayfever and chronic rhinitis
Measured BMI	%	%	%	%
Healthy/underweight	23.5	17.5	11.9	18.4
Overweight	23.1	20.3	17.0	16.4
Obese	29.4	28.4	26.2	17.4
Overweight/obese	25.9	24.0	21.8	17.0
Total, 18+ years	25.0	21.8	18.4	17.4
	Hypertension	Asthma	Heart, stroke and vascular disease	Osteoporosis
Measured BMI	%	%	%	%
Healthy/underweight	5.8	10.3	4.1	5.5
Overweight	11.9	10.7	5.8	4.2
Obese	22.1	16.2	9.1	5.0
Overweight/obese	17.0	13.3	7.3	4.5
Total, 18+ years	13.2	12.2	6.2	4.9
	Diabetes mellitus	Chronic obstructive pulmonary disease, COPD	Cancers (malignant)	Kidney disease
Measured BMI	%	%	%	%
Healthy/underweight	2.6	3.8	1.8	0.6
Overweight	4.2	3.3	1.7	0.8
Obese	10.9	5.2	2.9	2.0
Overweight/obese	7.5	4.3	2.2	1.4
Total, 18+ years	5.8	4.0	2.0	1.3

Additional data including margins of error and confidence intervals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

Table 20. Selected long-term health conditions by measured weight status, crude prevalence, persons aged 15 years and older, Australia, 2017–18

Selected current long-term health conditions (from highest to lowest total prevalence)				
	Mental and behavioural conditions	Hayfever and chronic rhinitis	Back problems	Arthritis
Measured BMI	%	%	%	%
Healthy weight	21.0	21.7	16.2	11.4
Underweight	22.0	19.9	7.9	9.9
Overweight	19.3	21.2	19.2	18.1
Obese	26.8	21.7	26.4	27.5
Overweight/obese	22.8	21.4	22.5	22.4
Total, 15+ years	22.2	21.5	20.2	18.6
Total, 18+ years	22.1	21.6	20.9	19.4
	Hypertension	Asthma	Diabetes mellitus	Heart, stroke and vascular disease
Measured BMI	%	%	%	%
Healthy weight	5.8	9.3	2.4	3.5
Underweight	3.0	7.1	#1.6	1.8
Overweight	12.7	10.4	5.6	5.7
Obese	21.9	15.6	10.6	9.0
Overweight/obese	17.0	12.8	7.9	7.2
Total, 15+ years	13.0	11.5	6.0	5.9
Total, 18+ years	13.6	11.5	6.2	6.2
	Osteoporosis	Chronic obstructive pulmonary disease, COPD	Cancers (malignant)	Kidney disease
Measured BMI	%	%	%	%
Healthy weight	4.9	2.2	1.6	0.6
Underweight	4.5	3.3	1.5	#0.4
Overweight	4.2	2.6	2.4	1.3
Obese	5.2	3.8	2.7	1.6
Overweight/obese	4.7	3.2	2.5	1.5
Total, 15+ years	4.7	2.9	2.2	1.2
Total, 18+ years	5.0	3.0	2.3	1.2

Proportion has high margin of error and assessment of difference should be used with caution. Additional data including margins of error and confidence intervals are available from the ABS website <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001>.

Most common long-term conditions by life stage in Queensland

Some of the differences in long-term conditions can be explained by the disease pattern with higher prevalence as people age (Table 21). This section includes the five leading conditions by age group (awaiting customised 2017–18 data for early life stages).

All Queenslanders aged 0–85 years and older

- Eye and adnexa 55%
- Respiratory system 30%
- Musculoskeletal system and connective tissue 29%
- Mental and behavioural problems 23%
- Circulatory system 16%

Youngest persons aged 0–24 years

- Respiratory system 23%
- Eye and adnexa 23%
- Mental and behavioural problems 20%
- Symptoms, signs and conditions 14%
- Musculoskeletal system and connective tissue 6%

Younger adults aged 25–44 years

- Eye and adnexa 44%
- Respiratory system 31%
- Mental and behavioural problems 24%
- Musculoskeletal system and connective tissue 23%
- Symptoms, signs and conditions 16%

Middle-aged adults aged 45–64 years

- Eye and adnexa 87%
- Musculoskeletal system and connective tissue 44%
- Respiratory system 34%
- Mental and behavioural problems 27%
- Circulatory system 24%

Older people aged 65 years and older

- Eye and adnexa 93%
- Musculoskeletal system and connective tissue 65%
- Circulatory system 56%
- Ear and mastoid 40%
- Endocrine, nutritional and metabolic 37%

2014–15

Children aged 0–14 years

- Respiratory system 19%
- Symptoms, signs and conditions 11%
- Eye and adnexa 10%
- Mental and behavioural problems 9%
- Ear and mastoid 3%

Young people aged 15–29 years

- Eye and adnexa 37%
- Respiratory system 32%
- Mental and behavioural problems 21%
- Musculoskeletal system and connective tissue 18%
- Symptoms, signs and conditions 17%

Table 21. Long-term health conditions, crude prevalence by age group, Queensland, 2017–18

	2014–15 *		2017–18				
	0–14	15–29	0–24	25–44	45–64	65+ years	Persons All ages
Total disease groupings	%	%	%	%	%	%	%
Eye and adnexa	10.2	37.0	22.7	43.6	86.9	93.0	54.8
Respiratory system	19.4	32.2	23.0	31.3	34.0	36.6	29.9
Musculoskeletal system and connective tissue	1.8	17.9	5.8	22.9	44.4	65.0	28.6
Mental and behavioural problems	9.3	21.1	19.5	24.1	26.5	20.4	22.7
Mood (affective) disorders	2.3	9.7	7.5	14.2	17.9	14.0	12.8
Anxiety-related disorders	6.8	15.7	14.5	16.2	18.1	12.3	15.6
Circulatory system	#0.6	4.2	1.9	5.9	24.1	55.7	16.4
Heart, stroke and vascular	#0.5	0.0	#0.3	0.6	7.0	18.9	4.7
Hypertension	0.0	0.0	0.3	2.0	15.0	38.2	10.1
Symptoms, signs and conditions	11.2	17.3	14.0	16.2	21.4	25.7	18.3
Ear and mastoid	2.9	6.8	3.7	9.5	22.3	40.3	15.4
Endocrine, nutritional and metabolic	#0.7	3.3	1.8	6.3	20.1	37.0	12.7
Nervous system	1.2	11.2	3.6	9.6	11.0	5.6	7.5
Digestive system	1.8	3.4	1.7	5.6	10.1	14.1	6.7
Skin and subcutaneous tissue	1.9	2.6	4.0	3.0	5.6	4.3	4.2
Genito-urinary system	#0.5	#0.9	0.7	3.1	5.9	11.9	4.3
Cancers (malignant)	0.0	#0.5	0.0	#0.3	2.0	6.9	1.6
Blood and blood forming organs	0.0	3.7	1.0	2.8	2.2	3.3	2.4
Congenital malformations, deformations, chromosomal abnormalities	#0.5	0.0	0.9	0.0	#0.4	#0.3	0.4
Certain infectious and parasitic diseases	0.0	0.0	#0.2	0.6	0.9	#0.5	0.6

* 2014-15 data to be replaced with 2017–18 when available.

Proportion has a high margin of error and assessment of difference should be used with caution.

Additional data including margins of error and confidence intervals are available from the ABS website

<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001> .

References

1. Australian Bureau of Statistics. *National health survey: first results 2017-18*. Cat. no. 4364.0.55.001. ABS: Canberra; 2019.
2. Australian Bureau of Statistics. *National health survey: first results 1995*. Cat. no. 4392.0. ABS: Canberra; 1996.
3. Australian Bureau of Statistics. *National health survey: summary of results. State tables. 2007-08 (Re-issue)*. Cat. no. 4364.0. ABS: Canberra; 2011.
4. Australian Bureau of Statistics. *Australian health survey 2011-12 and national health survey 2014-15: customised reports*. Cat. no. 4364.0.55.001. ABS: Canberra; 2018.
5. Cole TJ, Bellizzi MC, Flegal KM, Dietz WH. Establishing a standard definition for child overweight and obesity worldwide: international survey. *British Medical Journal* 2000;320:1240.
6. Cole T, Flegal K, Nicholls D, Jackson A. Body mass index cut offs to define thinness in children and adolescents: international survey. *British Medical Journal* 2007;335:194.
7. Productivity Commission. *Report on government services 2019: health*. Australian Government: Canberra 2019.