



PROCEDURE	
Weight assessment 2 years and over	
<b>Scope (Staff):</b>	Community health staff
<b>Scope (Area):</b>	CAHS-CH, WACHS
<b>Child Safe Organisation Statement of Commitment</b>	
The Child and Adolescent Health Service (CAHS) commits to being a child safe organisation by meeting the National Child Safe Principles and National Child Safe Standards. This is a commitment to a strong culture supported by robust policy documents to ensure the safety and wellbeing of children at CAHS.	

**This document should be read in conjunction with this [DISCLAIMER](#)**

### Aim

To correctly measure and interpret the weight of children aged two years and over.

### Risk

The accurate measuring of weight is an integral part of growth assessment. Failure to undertake weight assessments or obtaining inaccurate weight measurements may delay the identification of significant growth deviations for a child.

### Background

Assessment of growth identifies whether a child has age appropriate growth or is deviating from normal parameters. For assessment of growth to be meaningful, serial measurements should be taken and plotted onto a growth chart over a period of time.<sup>1, 2</sup> Growth assessment monitors slow or excessive growth, check the impact of illness and treatment, and to identify or monitor those at higher risk.<sup>2</sup>

Along with growth measurement; the child should always be assessed according to their overall health and wellbeing, and developmental progress. Consideration of growth trajectory (as indicated on growth charts), child’s history and clinical judgement are required to determine whether further review or referral is required.<sup>3-5</sup>

Nutrition and health status affect weight and overall growth and development. The measurement of weight and height can be used in an equation to calculate the Body Mass Index (BMI). BMI assessment is useful for screening for underweight and overweight and obesity in children from the age of two years.<sup>6</sup> The measurement of weight does not distinguish between fat, muscle and fluid composition.

### Key Points

- To be performed by community health staff with appropriate training and assessment skills.
- Weight assessment is undertaken as a component of the *Universal contact 2 years*.
- Weight assessment should also be completed as part of a holistic assessment when concerns regarding growth or any other identified risk are raised by nurse or parent at any Universal plus contact over two years of age.

- Weight status in children should be plotted and interpreted using age and sex specific reference values.<sup>6</sup>
- Weight measurement is required to complete BMI assessment at the School Entry Health Assessment (SEHA) and any Universal plus growth assessment in the School Health setting, however plotting of weight on weight specific growth charts is not routinely required in the school setting. Refer to *Body Mass Index assessment – Primary School*.
- To ensure weight measurement accuracy, reliable and sensitive equipment must be used along with good technique. Small errors during the measuring, recording or plotting can have a significant impact on the child’s growth assessment results and subsequent care planning.
- Community health nurses must follow the organisation’s overarching Infection Control policies and perform hand hygiene in accordance with WA Health guidelines at all appropriate stages of the procedure.

## Equipment

- Digital weighing scales that weigh in increments of 0.1 kilogram (kg) or 100 grams (g) and with the capacity to weigh up to at least 150 kg.
- The weighing scales should be placed on solid level ground such as concrete or wooden floor. Some models have adjustable ‘feet’ underneath to raise the scales above carpet flooring (follow manufacturer’s instructions if using on carpet).
- Scales should be easily zero-balanced and done so before each individual assessment.
- The stable weighing platform must be large enough to support the child. No height devices should be attached because they do not have a stable platform.
- Scales must be checked for accuracy annually. Refer to Appendix 1 for information on calibration. Refer to Manufacturer’s recommendations, with regard to calibration, servicing and transportation of scales, as required.

## Procedure

Steps	Additional Information
<p><b>Explanation</b></p> <ul style="list-style-type: none"> <li>• Explain the procedure to the child and parent (when present). Allow sufficient time for discussion of parent concerns.</li> </ul>	<p>In child health setting, encourage parent support and involvement with the procedure where possible.</p>
<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>• Explain to the child that their weight will be measured.</li> <li>• Clients in the child health setting may wear light clothing, for example underwear and t-shirt. Clients in the school setting should be requested to remove jumper, coat, shoes and to</li> </ul>	<p>Where there are any growth concerns, then assessment is best conducted with minimal clothing.</p> <p>If the primary school aged child declines to remove items of clothing, the weight is still measured but the refusal and items worn are to be noted on all results. Do not deduct</p>

Steps	Additional Information
empty pockets. Assist as required.	weight from the measurement.
<p><b>Measuring</b></p> <ul style="list-style-type: none"> <li>• Turn the scales on and ensure they are set at zero.</li> <li>• Ask the child to stand in the middle of the scales, with their body weight evenly distributed between both feet looking straight ahead.</li> </ul>	
<p><b>Recording</b></p> <ul style="list-style-type: none"> <li>• Record weight to the nearest 0.1 kg (100 g).</li> <li>• Document any factors which may have interfered with accuracy of weight measurement</li> <li>• Document unusual features, e.g. amputation, artificial limb, congenital disorder impacting weight.</li> </ul>	<p><u>Child health setting:</u></p> <ul style="list-style-type: none"> <li>• Plot the weight on the appropriate weight for age and gender chart.</li> <li>• Age is plotted in years and months.</li> </ul> <p><u>Primary School setting:</u></p> <ul style="list-style-type: none"> <li>• Record weight on CHS409-02 and CHS409-6</li> </ul>
<p><b>Interpretation</b></p> <p><u>Child Health setting:</u></p> <ul style="list-style-type: none"> <li>• Interpret the growth chart with regard to the pattern of growth trajectory.</li> <li>• Discuss findings and expected growth patterns with parents.</li> </ul> <p><u>Primary school setting:</u></p> <ul style="list-style-type: none"> <li>• Rather than a stand alone assessment, weight is measured as a component of the BMI calculation. See <i>BMI assessment – primary school</i>.</li> </ul>	<p>Interpretations of measurements are to be done in conjunction with a holistic assessment.</p> <p>Serial measurements showing changes in the growth trajectories or unexpected movement between percentile lines requires additional assessment and/or referral.</p> <p>For more information refer to the <i>Growth birth – 18 years, Growth faltering and Overweight and obesity guidelines</i>.</p>

## Referral pathway

If required, refer to a General practitioner.

## Documentation

Community health staff will document relevant findings according to CAHS-CH and WACHS processes.

## Appendix 1: Annual accuracy testing of stand-on scales

### Key points

- Checking accuracy of scales must be conducted annually.
- Scales which are moved regularly do not require additional checking if transported with due care.
- Scales must also be checked for accuracy each time the battery is replaced and wherever there is professional concern.
- Staff must comply with health service provider Occupational Safety and Health guidelines for all manual handling tasks.
- Manufacturer's recommendations must be followed with regard to transportation, servicing and calibration.

### Equipment

- Standard weights: 2 x 10 kg weights. Additional 10 kg weights as required.

### Procedure

Steps	Additional Information
<b>Check the zero set according to manufacturer's test instructions</b>	This should read zero +/- 1 unit. If the scales lowest measure is to 0.01 kg (10 g), the zero set should be 0.0 +/- 10 g.
<b>Check the accuracy of the <u>10 kg</u> weight</b>	Place one 10 kg weight on the scales. It should read 10.00 kg +/- 50 g.
<b>Check tare operation</b>	With the 10kg weight still on the scales, press <i>tare</i> operation or 'on/off' button, if required, to zero the scales. It should read: 00.00 kg +/- 10 g.
<b>Check the accuracy of <u>20 kg</u> weight</b>	<ul style="list-style-type: none"> <li>• Remove the 10 kg weight and press 'tare' or 'on/off' to reset, if required. It should read: 00.00 kg +/- 10 g.</li> <li>• Place two 10 kg weights on the scales. It should now read: 20 kg +/- 100 g.</li> </ul>
<b>Check the accuracy of <u>30 kg</u> weight</b>	With the two 10 kg weights still on the scales, place a third 10 kg weight on the scales. It should read: 30 kg +/- 150 g.
<b>Check accuracy of <u>40 kg</u> weight</b>	With the three 10 kg weights still on the scales, place a fourth 10 kg weight on the scales. This should read: 40 kg +/- 200 g.

Steps	Additional Information
Where there are discrepancies in readings, repeat the test	If discrepancy persists on retest, the equipment may require replacement or repair. Liaise with line manager.
Document details and date of weight check	Attach details to the back of the scales.
Replace (as required) and document details of replacement	Attach details to the back of the scales.

## References

1. World Health Organization. Training course on child growth assessment Geneva: World Health Organization; 2006. Available from: [http://www.who.int/nutrition/publications/childgrowthstandards\\_trainingcourse/en/](http://www.who.int/nutrition/publications/childgrowthstandards_trainingcourse/en/).
2. Dietitians of Canada, Canadian Paediatric Society, The College of Family Physicians of Canada, Community Health Nurses of Canada. Promoting optimal monitoring of child growth in Canada: Using the new World Health Organization growth charts – Executive Summary. Paediatrics & Child Health. 2010;15(2):77-9. PubMed PMID: PMC2865939.
3. National Health and Medical Research Council. Infant feeding guidelines: information for health workers. Canberra: NHMRC, 2012. Available from: [http://www.nhmrc.gov.au/files/nhmrc/publications/attachments/n56\\_infant\\_feeding\\_guidelines.pdf](http://www.nhmrc.gov.au/files/nhmrc/publications/attachments/n56_infant_feeding_guidelines.pdf).
4. Freeman JV, Cole TJ, Wales JKH, Cooke J. Monitoring infant weight gain: Advice for practitioners. Community Pract. 2006;79(5):149-51.
5. Smith Z. Faltering Growth. 2008. In: Clinical Paediatric Dietetics [Internet]. Wiley Online Library; [556-65].
6. National Health and Medical Research Council. Clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children in Australia. Melbourne: National Health and Medical Research Council; 2013.

## Related policies, procedures and guidelines

The following documents can be accessed in the **Clinical Nursing Manual** via the [HealthPoint](#) link, [Internet](#) link or for WACHS staff in the [WACHS Policy](#) link

Body Mass Index assessment – child health

Body Mass Index assessment – primary school

Growth birth – 18 years

Growth faltering
Height assessment 2 years and over
Overweight and obesity
Universal contact guidelines
The following documents can be accessed in the <a href="#">CAHS-CH Operational Manual</a>
Hand Hygiene

### Related CAHS-CH forms

The following forms can be accessed from the <a href="#">CAHS-Community Health Forms</a> page on HealthPoint
Body Mass Index Boys (CHS430B)
Body Mass Index Girls (CHS430A)
World Health Organization Growth Charts (CHS800A series)










### Related CAHS-CH resources

The following resources can be accessed from the <a href="#">CAHS-Community Health Resources</a> page on HealthPoint
Child and Antenatal Nutrition (CAN) Manual
Food For Kids
How children develop
Practice Guide for Community Health Nurses
Tips to support healthy choices (2 – 5 years)

### Related external resources

<a href="#">Royal Children's Hospital</a> Child growth e-learning package
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This document can be made available in alternative formats on request for a person with a disability.

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