PROCEDURE

Weight assessment 2 – 5 years

<table>
<thead>
<tr>
<th>Scope (Staff):</th>
<th>Community health staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope (Area):</td>
<td>CACH, WACHS</td>
</tr>
</tbody>
</table>

Aim
To correctly measure and interpret the weight of children from two to five years of age.

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. Growth assessment monitors slow or excessive growth, check the impact of illness and treatment, and to identify or monitor those at higher risk. Along with growth measurement; the child should always be assessed according to their overall health and wellbeing, and developmental progress. Consideration of rate of growth, growth trajectory (as indicated on growth charts), child’s history and clinical judgement are required to determine whether further review or referral is required.

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 wasting and thinness and overweight and obesity in children from the age of two years. The measurement of weight provides an overall measure of body size but 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 offered as a component of the universal contact 2 years.
- For children receiving the Enhanced Aboriginal Child Health Schedule, weight assessment is offered and conducted at each scheduled contact from 2.5 years until 5 years of age.
• Weight assessment should also be offered and conducted at any Universal plus contact or drop in session over two years of age, where there is a parent and/or professional concern regarding growth, or any other identified risk.

• Weight is most accurately measured without clothing, however, light clothing can be worn for this age group (for example underwear and t-shirt).

• Weight status in children should be assessed using age and sex specific reference values. 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.

• Scales must be cleaned after use for each child, according to manufacturer’s recommendations and organisational policy guidelines.

• Community health staff are to follow policy and procedures relating to infection control and perform hand hygiene in accordance with Western Australian 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.

• Scales should be easily zero-balanced and done so before each individual assessment.

• The measurement must be clearly readable under all conditions of use.

• 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 calibrated 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

<table>
<thead>
<tr>
<th>Steps</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation</strong></td>
<td>Encourage parent support and involvement with the procedure where possible.</td>
</tr>
<tr>
<td>• Explain the procedure to the parent. Allow sufficient time for discussion of parent concerns.</td>
<td></td>
</tr>
<tr>
<td><strong>Preparation</strong></td>
<td>Where there are any growth concerns, then assessment is best conducted with minimal clothing. The amount of clothing worn must be clearly</td>
</tr>
<tr>
<td>• Explain to the child that their weight will be measured.</td>
<td></td>
</tr>
<tr>
<td>Steps</td>
<td>Additional Information</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
</tr>
<tr>
<td>underwear and t-shirt. Request the child remove outer clothing and assist with removing shoes, if required.</td>
<td>documented.</td>
</tr>
</tbody>
</table>

**Measuring**
- Turn the scales on and ensure they are set at zero.
- Ask the child to stand in the middle of the scales, with their body weight evenly distributed between both feet looking straight ahead.

**Recording**
- Record to the nearest 0.1 kg (100 g).
- Plot the weight on the appropriate weight for age and gender chart.
- Age is plotted in years and months.

**Interpretation**
- Interpret the growth chart with regard to the pattern of growth trajectory.
- Discuss findings and growth patterns with parents.

- Document if the child is in plaster, harness, or any other item unable to be removed, which may impact on results.

- Follow the manufacturer’s guide to read the weight recording, as some scales may take time to give a stable reading.

- Interpretations of measurements are to be done in conjunction with a holistic assessment.
- Serial measurements showing changes in the growth trajectories or unexpected movement on the curves, requires additional assessment and/or referral.
- For more information refer to the Growth birth – 18 years, Growth faltering or Overweight and obesity, Body Mass Index assessment 2 - 5 years (excluding SEHA), Body Mass Index assessment – primary school guidelines.

**Referral pathway**
If required, refer to a medical practitioner.

**Documentation**
Community health staff will document relevant findings according to local processes.
### Related internal policies, procedures and guidelines

The following policy documents can be accessed in the Community Health Manual via the [HealthPoint](#) link and [Internet](#) link

- Body Mass Index assessment – child health
- Body Mass Index assessment – primary school
- Growth birth – 18 years
- Growth faltering
- Head circumference assessment
- Height assessment 2 – 5 years
- Overweight and obesity
- Universal contact guidelines

### Related internal resources and forms

The following documents can be accessed via the forms page on [HealthPoint](#)

- Body Mass Index Boys (CHS430B)
- Body Mass Index Girls (CHS430A)
- Food For Kids
- How children develop
- Practice Guide for Community Health Nurses
- Tips to support healthy choices (2 – 5 years)
- World Health Organization Growth Charts (CHS800A series)

### Useful resources

- [Royal Children’s Hospital Melbourne Child Growth learning resource](#)
Appendix 1: Annual calibration testing of stand-on scales

Key points
- Calibration testing 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 calibrated 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

<table>
<thead>
<tr>
<th>Steps</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check the zero set according to manufacturer’s test instructions</td>
<td>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.</td>
</tr>
<tr>
<td>Check the accuracy of the 10 kg weight</td>
<td>Place one 10 kg weight on the scales. It should read 10.00 kg +/- 50 g.</td>
</tr>
<tr>
<td>Check tare operation</td>
<td>With the 10kg weight still on the scales, press <em>tare</em> operation or ‘on/off’ button, if required, to zero the scales. It should read: 00.00 kg +/- 10 g.</td>
</tr>
</tbody>
</table>
| Check the accuracy of 20 kg weight                          | • Remove the 10 kg weight and press ‘tare’ or ‘on/off’ to reset, if required. It should read: 00.00 kg +/- 10 g.  
• Place two 10 kg weights on the scales. It should now read: 20 kg +/- 100 g. |
| Check the accuracy of 30 kg weight                          | 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. |
| Check accuracy of 40 kg weight                              | 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. |
## Weight assessment 2 - 5 years

<table>
<thead>
<tr>
<th>Steps</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where there are discrepancies in readings, repeat the test</td>
<td>If discrepancy persists on retest, the equipment may require replacement of repair. Liaise with line manager.</td>
</tr>
<tr>
<td>Document details of calibration</td>
<td>Attach details to the back of the scales.</td>
</tr>
<tr>
<td>Replace (as required) and document details of replacement</td>
<td>Attach details to the back of the scales.</td>
</tr>
</tbody>
</table>

## References


This document can be made available in alternative formats on request for a person with a disability.