**Aim**
To correctly measure and interpret the recumbent length of infants and children up to two years of age.

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

**Background**
Assessment of growth identified 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 is especially important during infancy to detect and monitor slow or excessive growth, check the impact of illness and treatment, and to identify or monitor those at higher risk.

**Key Points**
- To be performed by staff with appropriate training and assessment skills.
- Assessment of length is offered and conducted at the 8 week, 4 month, 12 month and 2 year universal contacts.
- For children receiving the Enhanced Aboriginal Child Health Schedule, length assessment is offered and conducted at each scheduled contact up to and including two years of age.
- Length assessment should also be offered and conducted at any Universal plus contact or drop in session, where there is parent and/or professional concern regarding growth, or any other identified risk.
- Length status in children should be assessed using age and sex specific reference values.
- Routine recumbent length assessment is recommended for infants or children under the age of two years of age.
For children close to two years of age, standing height may be measured rather than recumbent length, if appropriate for the individual. If Body Mass Index (BMI) is to be calculated, children must be two years of age or older.

It is important to record whether length or height has been measured when documenting findings. Recumbent length is approximately 1 - 2 centimetres (cm) greater than standing height.

To ensure length measurement accuracy, reliable and sensitive equipment should be used along with good technique. Small errors during the measuring, recording or plotting can have a large impact on the infant and/or child’s growth assessment.

Recumbent length measurement process requires two people, that is, a health professional and a parent.

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**

Recumbent length board or infantometer (infant length board).

- The board should have a firm, flat horizontal surface with a measuring tape in 0.1 cm or 1.0 millimetre (mm) increments.
- The tape or measurements should be fixed, and easily read.
- The measuring board should have a fixed, stationary headpiece at right angles to the tape.
- A movable or non-attached foot board foot board perpendicular to the tape.

**Procedure**

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<thead>
<tr>
<th>Steps</th>
<th>Additional Information</th>
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<tbody>
<tr>
<td><strong>Explanation</strong></td>
<td>Explain the procedure to the parent, and child where appropriate. Allow sufficient time for discussion of concerns. Encourage parent support and involvement with the procedure where possible.</td>
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<td><strong>Preparation</strong></td>
<td>Remove the child’s shoes and socks, if applicable</td>
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<td><strong>Measuring</strong></td>
<td>Ask the parent to lay the infant in a supine position on the length board. Ask the parent to hold the child’s head against the headboard, throughout the procedure. The crown of the head must touch the stationary, vertical headboard. The infant’s line of vision should face vertically upwards.</td>
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- Ensure the child’s body and pelvis is straight along the measuring device.

- Extend the infant’s legs gently at the hips and knees and lie them flat against the length-board with toes pointing directly up.

- Move the foot board into position against the infant's feet.

**Recording**

- Record the length to the nearest 0.1cm.

- Plot the length on the appropriate age for length and gender chart.

- Document that recumbent length has been measured.

- Use dots to plot but do not join the dots with a line.

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

- Infants born between 37-40 weeks should be plotted on the WHO birth to 2 year growth charts. The actual age for these infants commences at birth. Growth measurement plotting begins at birth at “0” and continues according to actual age.

- Infants born <37 weeks gestation should be plotted onto the WHO birth to 2 year growth charts using their age corrected for their prematurity until 2 years of age.  

**Interpretation**

- Interpret the growth chart with regard to the pattern of growth trajectory.

- Discuss findings and growth patterns with parent.

Age is plotted in completed weeks from birth until age 3 months; in completed months from 3 to 12 months; and then in completed years and months.

A child born before 37 completed weeks gestation is considered preterm. Once a corrected age of 40 weeks is reached, the WHO standards can be used to monitor ongoing growth. Corrected age should be used until 2 years of age. If this child catches up before this then actual age can be used.

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 curves, requires additional assessment and/or referral.

For more information refer to the *Growth birth – 18 years, Growth faltering, Overweight and obesity, Body Mass Index assessment 2 – 5 years (excluding SEHA)*
Length assessment 0 - 2 years

and **Body Mass Index assessment** – primary school guidelines.

### Referral pathway

If required, refer to a medical practitioner.

### Documentation

Community health staff will document finding according to local processes.

### References


### 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

- Growth birth – 18 years
- Growth faltering
- Head circumference assessment
- Overweight and obesity
- Physical assessment 0 – 4 years
- Universal contact guidelines
- Weight assessment 0 - 2 years
Related internal resources and forms

The following resources and forms can be accessed from the HealthPoint CACH Intranet link:

- How children develop
- Practice guide for Community Health Nurses
- Preterm Fenton Growth Charts
- World Health Organization Charts 0 – 6 months (external link)
- World Health Organization Charts (CHS800A series)

Useful resources

Royal Children’s Hospital Child Growth learning resource.

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

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<th>Director Clinical Services Community Health</th>
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<tbody>
<tr>
<td>Reviewer / Team:</td>
<td>Clinical Nursing Policy Team</td>
</tr>
<tr>
<td>Date First Issued:</td>
<td>Jan 2014</td>
</tr>
<tr>
<td>Last Reviewed:</td>
<td>July 2017</td>
</tr>
<tr>
<td>Scheduled Review Date:</td>
<td>1 August 2020</td>
</tr>
<tr>
<td>Approved by:</td>
<td>CACH/WACHS Community Health Clinical Nursing Policy Governance Group</td>
</tr>
<tr>
<td>Endorsed by:</td>
<td>CACH Executive Director</td>
</tr>
<tr>
<td>Date:</td>
<td>3 July 17</td>
</tr>
<tr>
<td>Standards Applicable:</td>
<td>NSQHS Standards: 1.7, 1.8</td>
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