



PROCEDURE

Length assessment 0 – 2 years

Scope (Staff):	Community Health
Scope (Area):	CAHS-CH, WACHS

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

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

Aim

To correctly measure, record and interpret the recumbent length of infants and young children up to two years of age.

Risk

Failure to conduct a length assessment or obtain an accurate length measurement may delay the identification of significant growth deviations for an infant or young child.

Background

Assessing and monitoring the growth of infants and young children through the measurement of recumbent length is important in the first two years of life. Measuring length is a non-invasive procedure¹ and, when conducted as part of a regular and holistic growth assessment, can assist in determining whether:

- an infant or young child has age-appropriate growth; or
- a growth deviation is apparent that may indicate an underlying health, developmental or social issue which warrants further assessment, early intervention and monitoring².

For the assessment of growth to be meaningful, serial measurements should be taken and plotted onto a growth chart over a period of time³. However, decisions about growth deviations should never be determined solely by these charts⁴. Reviewing growth measurements from previous child health contacts will assist in interpreting

overall growth status. Unexpected stasis, or downward or upward movement on the growth chart, indicates the need for further assessment and/or referral³.

Key points

- Recumbent length should be measured:
 - at the 8 week, 4 month, 12 month and 2 year Universal contacts; or
 - when concerns regarding growth or any other identified risk are raised by a parent/carer or Community Health Nurse at any Universal Plus contact.
- If a young child is close to two years of age and able to stand unassisted, their standing height may be measured (refer to [Height assessment 2 years and over](#)).

NOTE: For Body Mass Index (BMI) to be calculated, children must be at least two years of age and their standing height must be measured.

- Length assessments are to be performed by staff with appropriate training and assessment skills.
- Suitable equipment and the correct measuring technique must be used. Inaccurately taking, recording or plotting a length measurement can lead to a misleading growth assessment, clinical misinterpretation and unnecessary concern for parents/carers.
- Community Health Nurses need to provide a culturally safe service delivery, which demonstrates a welcoming environment that recognises the importance of cultural beliefs and practices of all clients.
- 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.
- All nurses will refer to the [Nursing and Midwifery Board AHPRA Decision-making framework](#) in relation to scope of practice and delegation of care to ensure that decision-making is consistent, safe, person-centred and evidence-based.

Equipment

- A clean, recumbent infant length board (infantometer) that has a:
 - firm, flat surface with a measuring tape in 0.1 centimetre (cm) or 1.0 millimetre (mm) increments;
 - tape or measurements that are fixed and easy-to-read;
 - fixed, stationary headboard at right angles to the tape; and
 - movable or non-attached footboard perpendicular to the tape.
- The length board must be cleaned before and after each use (see Appendix 1 - [Medical Devices: Single Use, Single Patient Use and Reusable](#)).

Procedure

Steps	Additional Information
<p>Explanation</p> <ul style="list-style-type: none"> • Explain the procedure to the parent/carer and, where appropriate, the young child. • Allow sufficient time for the discussion of any parent/carer concerns. 	<ul style="list-style-type: none"> • Measuring recumbent length requires two people. Request parent/carer assistance with the procedure.
<p>Preparation</p> <ul style="list-style-type: none"> • Place the clean, length board on a flat, stable surface. • Ask the parent/carer to remove any items or hair accessories worn on the infant/young child's head, and their shoes and socks. • For greater accuracy, it is preferable that all clothing and the nappy be removed prior to measurement. 	<ul style="list-style-type: none"> • Cultural beliefs and practices should be considered prior to asking the parent/carer to remove any items worn by the infant/young child. • At a minimum, request the removal of any items worn on the head, and shoes and socks.
<p>Measuring</p> <ul style="list-style-type: none"> • Ask the parent/carer to lay the infant/young child in a supine position on the length board. The crown of the head must touch the stationary, vertical headboard. • The infant/young child's line of vision should face vertically upwards. • Ensure the infant/young child's body and pelvis are straight along the length board. • Gently extend the infant/young child's legs at the hips and knees. While holding the knees, pull the footboard against their feet. The soles of the feet should be flat against the headboard with the toes pointing upwards. 	<ul style="list-style-type: none"> • Ask the parent/carer to stand behind the headboard and hold the infant/young child's head against the headboard throughout the procedure. • Stand on the side of the headboard where you can see the measuring tape and move the footboard. • The knees of a newborn cannot be extended to the same degree as older infants and young children. Apply minimal pressure to prevent injury.

Steps	Additional Information
<p>Recording</p> <ul style="list-style-type: none"> • Record the length measurement to the nearest 0.1cm. • CAHS-CH Nurses must use a CDIS assessment screen to record the length measurement. The measurement will be automatically plotted on the relevant growth chart. • WACHS Nurses must enter the length measurement in relevant CHIS qualifiers and review it on the appropriate centile chart. • CAHS-CH and WACHS Nurses should note in CDIS/CHIS: <ul style="list-style-type: none"> ○ Whether recumbent length or standing height has been measured. Recumbent length is approximately 0.7cm greater than standing height⁵. ○ Any factors that may have interfered with the accuracy of the measurement (e.g. if the infant/young child is in plaster, a harness or any item that is unable to be removed). • If CDIS/CHIS are temporarily unavailable, the relevant paper-based growth chart should be used to precisely plot the length measurement (see <i>Additional information</i>). The measurement should be entered into CDIS/CHIS, when available. 	<ul style="list-style-type: none"> • Age is plotted in completed weeks/months/years, as appropriate. • If an unexpected growth trajectory is evident when the length measurement is plotted, re-take the measurement to check for accuracy. <p><u>Paper-based recording in the child health setting:</u></p> <ul style="list-style-type: none"> • For infants born after 37 weeks gestation, plot the measurement on the relevant World Health Organization (WHO) growth chart: <ul style="list-style-type: none"> ○ <i>Length-for-age: Birth to 6 months</i> (Girls or Boys) ○ <i>Length-for-age: Birth to 2 years</i> (Girls or Boys) <p>The actual age for these infants commences at birth. Growth measurement plotting begins at birth at “0 years” and continues according to the actual age.</p> <ul style="list-style-type: none"> • For infants born at less than 37 weeks gestation, plot the measurement using the <i>Fenton Preterm Growth Charts</i>. <p>Once a corrected age of 40 weeks is reached, the WHO <i>Length-for-age</i> growth charts should be used.</p> <p>Corrected aged must be used until two years. If the child catches up before this, actual age can be used.</p> <ul style="list-style-type: none"> • If concerns with growth status are identified in infants less than six-months of age, use the WHO

Steps	Additional Information
	<p><i>Length-for-age: Birth to 6 Months</i> growth charts to record and monitor serial length and weight measurements.</p> <ul style="list-style-type: none"> • Where a child is aged two or under and recumbent length cannot be measured but the child can stand unassisted, measure height and plot on the relevant growth chart: <ul style="list-style-type: none"> ○ <i>Length-for-age: Birth to two years</i> (Girls or Boys) <p>See Height Assessment 2 years and over.</p>
<p>Interpretation</p> <ul style="list-style-type: none"> • Interpret the length measurement on the growth chart as part of a holistic growth assessment. Serial measurements of length, weight and head circumference must be considered. • Note any changes in growth trajectory. • Discuss the findings and growth pattern with the parent/carer. 	<ul style="list-style-type: none"> • For more information about interpreting growth, refer to: <ul style="list-style-type: none"> ○ Body Mass Index assessment – Child health ○ Head circumference assessment ○ Growth - birth to 18 years ○ Growth - static or downward trajectory ○ Height assessment 2 years and over ○ Overweight and obesity ○ Weight assessment 0 – 2 years • Serial measurements showing unexpected changes in the growth trajectories require additional assessment and/or referral.
<p>Referral</p> <ul style="list-style-type: none"> • If concerned about growth, refer the infant/young child to a medical practitioner for further assessment. 	<ul style="list-style-type: none"> • For further information about the referral process for static or downward growth, refer to Growth – static or downward trajectory.

Training

Staff are required to complete the *Child Growth* eLearning Training Package as per the CAHS-CH [Practice Framework for Community Health Nurses or the](#) WACHS Practice Framework for Population Health Nurses.




References
1. The Royal Children's Hospital Melbourne. Child growth and growth charts in the early years. 2013. Available from: www.rch.org.au/uploadedFiles/Main/Content/childgrowth/DoHA_backgroundreading_April2013(2)(1).pdf#:~:text=Growth%20assessment%20involving%20the%20measuring%20of%20weight%20%20length,general%20health%20and%20well%20being%20of%20the%20child.
2. The Royal Children's Hospital Melbourne. About child growth (E-learning module). No year. Available from: www.rch.org.au/childgrowth .
3. Secker D. Promoting optimal monitoring of child growth in Canada: using the new WHO growth charts. <i>Can J Diet Pract Res.</i> 2010;71(1):e1-3.
4. The Royal Children's Hospital Melbourne. The 10 top things about growth charts. Victoria: The Royal Children's Hospital Melbourne; 2013. Available from: https://www.rch.org.au/uploadedFiles/Main/Content/childgrowth/10%20top%20things%20about%20growth%20charts_Nov2013.pdf .
5. World Health Organization. Job-aid - Weighing and measuring a child. Training Course on Child Growth Assessment - WHO Child Growth Standards. 2008.

Related internal policies, procedures and guidelines
The following documents can be accessed in the CH Clinical Nursing Manual: HealthPoint link or Internet link or for WACHS staff in the WACHS Policy link
Growth - birth - 18 years
Growth - static or downward trajectory
Head circumference assessment
Overweight and obesity
Physical Assessment 0 - 4 years
Universal contact (8 weeks, 4 months, 12 months and 2 years)
Weight assessment 0 - 2 years
The following documents can be accessed in the CAHS Infection Control Policies manual on HealthPoint.
Infection Control Policies

Related internal resources (including related forms)
World Health Organization Charts (CHS800A series)
How Children Develop – 0 - 12 years Resource
Practice guide for Community Health Nurses
Practice Framework for Community Health Nurses

Related external resources (including related forms)
CDC Stature-for-age percentiles (Girls) 2 to 20 years
CDC Stature-for-age percentiles (Boys) 2 to 20 years
Fenton Preterm Growth Charts
Royal Children’s Hospital Melbourne Child Growth learning resource
WHO growth charts: Length/height-for-age
WHO Height-for-age (Girls) 2 to 5 Years
WHO Height-for-age (Boys) 2 to 5 Years

This document can be made available in alternative formats on request.

Document Owner:	Nurse Director, Community Health		
Reviewer / Team:	Clinical Nursing Policy Team		
Date First Issued:	January 2014	Last Reviewed:	September 2023
Amendment Dates:		Next Review Date:	29 September 2026
Approved by:	Community Health Clinical Nursing Policy Governance Group	Date:	22 September 2023
Endorsed by:	Executive Director, Community Health	Date:	29 September 2023
Standards Applicable:	NSQHS Standards:    Child Safe Standards: 1, 3, 4, 7, 10		

Printed or personally saved electronic copies of this document are considered uncontrolled



Healthy kids, healthy communities

Compassion Excellence Collaboration Accountability Equity Respect

Neonatology | Community Health | Mental Health | Perth Children’s Hospital