## **Queensland Paediatric Emergency Care**

Skill Sheets

# Infant Measurements - Weight, Length & Head Circumference

Accurate measurements plotted in the appropriate growth charts over time can assist in the assessment and evaluation of general health and wellbeing of a child. Measurements can influence clinical care and should be performed in a standardised manner which reflects best practice guidelines. The key measurements as outlined in this skills sheet are – weight, length and head circumference. This document contains key information from the guideline "Measurement and documentation of growth in children and young people at Queensland Children's Hospital".



#### **ALERT**

Inaccurate measurements or recording of growth measurements can lead to misleading information and clinical interpretation resulting in unnecessary intervention, changes to clinical management and unnecessary parental/carer concern.

## **GATHER EQUIPMENT**



Scales (measure to 3 decimal places)



Measuring tape

\*Inaccurate measurements or recording of growth measurements can lead to misleading information and clinical interpretation resulting in unnecessary intervention, changes to clinical management and unnecessary parental/carer concern.



Infantometer





## Weight

Where possible, ensure the infant is fully undressed with their nappy removed. Where this is not possible, weigh the infant in a clean, dry nappy and deduct the dry nappy weight before documenting. Record weight to nearest o.o1kg

1

Place scales on a hard, flat surface. Check most recent scales calibration date, as a minimum, scales should be calibrated annually. Place a clean paper towel or thin blanket on scales.



Turn on the scales and tare to zero grams.



Where possible, ask for assistance from the infant's parent/caregiver to place the infant in the centre of the scales to ensure weight is distributed evenly and no limbs are hanging off the edges or touching walls.



Wait until the infant is lying still and the scales have settled at a reading before recording the measurement.









## Length

For infants up to 2 years old, an infantometer (infant length board) should be used for length measurement. Length is performed in the recumbent position with the crown of the head resting firmly against the headboard. Record length to nearest 0.1cm



Ask the parent or caregiver to assist by holding the infant's head steady and provide comfort to the infant.



The second person straightens the infant's legs, ensures the pelvis and body are straight along the measurement device, and holds feet so toes are pointing directly upwards.



The second person moves the foot board against the soles of the infant's feet and takes the measurement quickly while the infant is in position.











## Head Circumference

Head circumference should be measured in all children aged two years and under. Head circumference should be measured on admission and at least monthly until the age of two. A flexible, non-stretchable measuring tape or disposable paper tape, 0.5-1cm in width and able to measure in 0.1cm increments is to be used for measurement of head circumference. Record head circumference to nearest 0.1cm.

1

Ask the parent or caregiver to assist by holding the infant's head steady whilst sitting up and provide comfort to the infant. If poor head control, measure with infant lying down.



Remove any hats or headbands. Place the tape evenly around the head anchoring it just above the ears and eyebrows and around the fullest protuberance (largest circumference) of the skull at the back at the back of the child's head.



Gently pull the tape so it fits snugly against the infant's skull, compressing the hair and skin.







# Reference:

Children's Health Queensland (CHQ). (2024). Measurement and documentation of growth in children and young people at Queensland Children's Hospital. Retrieved from CHQ-GDL-01083 Measurement and documentation of growth in children and young people at Queensland Children's Hospital

This Queensland Paediatric Emergency Skill Sheet was developed and revised by the Emergency Care of Children working group.

Initial work was funded by the Queensland Emergency Department Strategic Advisory Panel.

A special thanks and acknowledgement to the Queensland Children's Hospital Nursing Education team (medical wards) for their work collating the original content for this skill sheet.





## Skill Sheet Legal Disclaimer

The information contained in these Queensland Paediatric Emergency Care skill sheets is for information purposes only. It was developed to inform emergency nursing care, but can also be applied by other clinicians acting within their scope of practice. The information has been prepared using a multidisciplinary approach with reference to the best information and evidence available at the time of preparation. No representation, warranty or assurance is given that the information is entirely complete, current, or accurate in every respect. The skill sheets are not a substitute for clinical judgement, knowledge and expertise, or medical advice. Variation from the skill sheets, taking into account individual circumstances may be appropriate. This does not address all elements of standard practice and accepts that individual clinicians are responsible for the following:

- Providing care within the context of locally available resources, expertise, and scope of practice.
- Supporting consumer rights and informed decision making in partnership with healthcare practitioners including the right to decline intervention or ongoing management.

- Advising consumers of their choices in an environment that is culturally appropriate and which enables comfortable and confidential discussion. This includes the use of interpreter services where necessary.
- Ensuring informed consent is obtained prior to delivering care.
- Meeting all legislative requirements and professional standards.
- Applying standard precautions, and additional precautions as necessary, when delivering care.
- Documenting all care in accordance with mandatory and local requirements.

Children's Health Queensland disclaims, to the maximum extent permitted by law, all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs incurred for any reason associated with the use of this skill sheet, including the materials within or referred to throughout this document being in any way inaccurate, out of context, incomplete or unavailable.



