



**CLINICAL PRACTICE GUIDELINE**

Guideline coverage includes NICU KEMH, NICU PMH and NETS WA

# Developmental Positioning Guideline

This document should be read in conjunction with the [Disclaimer](#)

This positioning protocol aims to:

- Improve and maintain physiological status or autonomic system of the infant.
- Facilitate flexion in limbs and trunk appropriate for gestational maturation.
- Promote recommendations for infants preparing for discharge home in line with current recommendations of Sudden Infant Death Syndrome (SIDS) prevention.
- Incorporate position changes where appropriate to facilitate mobility, prevent developmental delays and support self-regulatory behaviours.

## Key Points

- Safety is paramount, any positioning aids used need to be easily removed in emergency situations.
- Do not apply boundaries too tight as it may restrict spontaneous movements.
- Avoid rolls in front of the face: occlusion and distortion of nares
- Correct alignment of head, trunk and limbs in any position will assist in preventing acquired postural deformity.
- Peanut pillows are available to maintain head alignment during all cares only. Remove before leaving the bedside.
- Positioning is based on how much and how little assistance the infant needs. Avoid over-protection and recognise each infant's competency. Positioning and positioning aids should be based on the infant's cues.
- Explain to parents the use of positioning aids and why they should not be used in the home environment (SIDS recommendations).

## Prone and ¼ Turn Prone

Long-term prone positioning results in excessive abduction, external-rotation of legs and arms and reduced mobility. It is important to provide boundaries as sick or very preterm infants do not have the muscle strength to maintain a comfortable flexed position.

**See diagrams in nursery for a visual guide.**

**All positioning is guided by the acronym:**

**A - Alignment    B - Boundary    C - Comfort    F - Flexion    M - Midline**

Place infant with chin slightly tucked, and arms flexed and hands close to shoulders or face. Avoid excessive hip abduction. Maintain position with use of a **nest** or **swaddled**. Prone position preferred for:

- Sick infants, infants with low tone.
- Infants with acute respiratory disease (ventilated or on CPAP).
- Infants with feed intolerance.

### **¼ Turn Prone (Only for Ventilated/Nasal CPAP Infants)**

Alternate prone with ¼ turn prone as soon as infant is stable as long-term prone position results in tight shoulder blade adductors and gluteus muscles with over-lengthening of shoulder and hip adductors.

- Flex uppermost arm and leg over a roll that supports the trunk from shoulder to pelvis.
- Position other arm and leg as in 'recovery' position.
- Both knees and feet should face the same way or be in neutral position. Use a **Roll** as a positioning aid.

### **Side-Lying**

Side lying tends to minimise hip/shoulder abduction and rotation, promotes midline behaviour and encourages hand to face and grasping behaviour. Can be used to treat unilateral lung disease, better oxygenation may be achieved by positioning the 'good' lung uppermost. Left lateral position is as effective as prone position to reduce the severity of GOR. Infants with neurological impairments and CNLD who have had prolonged admission will benefit from side lying as this encourages and help to establish oral feeding.

Leave infant's hands free so that he/she can touch their face, suck on their fingers or hold onto a toy. Avoid over-protection, and remove positioning aids when infant is competent to remain in position unaided.

Preferred position for:

- Infants who do not have to be in prone position for respiratory reasons.
- Stable infants tolerating milk feeds.
- Surgical infants who are unable to be nursed prone.

### **Procedure**

1. Place head in midline and align with the trunk.
2. Slightly curved back.
3. Pelvis tucked and legs flexed.
4. Place lower arm well forward to prevent infant rolling to prone position.
5. Bring uppermost arm and shoulder forward.
6. Use a **Sling, Roll, swaddling** as positioning aids.

## Supine

### Infants Requiring Intensive Care

Support shoulders, arms, hips and legs (use rolls and a nest). Support and alter head position with use of a peanut pillow or 'fat pad'. Check pressure areas 4 hourly, refer to [Skin Care Guidelines](#) and be aware of flattening of the head on one side (plagiocephaly).

Preferred position for:

- Muscle relaxed infants.
- Infants with unilateral and bilateral intercostal catheters.
- Surgical infants as required.

### Infants not Requiring Intensive Care

Preferred position for stable infants who:

- Do not require cardiac monitoring.
- Have no increased respiratory rate.
- Have not experienced large vomits or spills during the previous 48 hours.
- > 34 weeks and/or ready for discharge.

Swaddle. Place infant with feet at the bottom of the cot. Tuck in bedclothes securely to prevent the infant slipping under the covers. No bumpers or toys in cot (SIDS Guidelines). Alter infant's head position from side to side.

### Supported Sitting with a Frazer Chair




Frazer chairs are provided by the Physiotherapy Department for post-term infants for ongoing neurodevelopmental support as appropriate. Please contact the Paediatric Physiotherapist for further guidance.

## References

1. [JBI Best Practice: positioning of preterm Infants for optimal physiological development.](#)
2. Chong A, Murphy N, Matthews T. Effect of prone sleeping on circulatory control in infants Archives of disease in childhood. . 2000 (adc.bmj.com).
3. Ehrenkranz RA, Dusick AM, Vohr BR, Wright LL, Wrage LA, Poole WK, et al. Growth in the Neonatal Intensive Care Unit Influences Neurodevelopmental and Growth Outcomes of Extremely Low Birth Weight Infants. Pediatrics. 2006 April 1, 2006;117(4):1253-1261.
4. Gouna G, Rakza T, Kuissi E, Pennaforte T, Mur S, Strome L. Positioning Effects on Lung Function and Breathing Pattern in Premature Newborns. The Journal of Pediatrics. June 2013; 162(6): 1133-1137.e1.
5. Hough JL, Johnston L, Brauer SG, Woodgate PG, Pham TMT, Schibler A. Effect of body position on ventilation distribution in preterm infants on continuous positive airway pressure. Pediatric Critical Care Medicine. 2012;13(4):446-451 10.1097/PCC.0b013e31822f18d9.
6. Levy J, Habib R, Liptsen E, Singh R. Prone versus supine positioning in the well preterm infant: effects on work of breathing and breathing patterns. Pediatric Pulmonology. 2006; Wiley Online Library.
7. Sleeping position, oxygenation and lung function in prematurely born infants studied post term. Arch. Dis. Child. Fetal Neonatal Ed. 2009;94(2):F133-F137.

## Related WNHS policies, procedures and guidelines

[Neonatology Clinical Guideline - Skin Care Guidelines](#)

Document owner:	Neonatal Coordinating Group		
Author / Reviewer:	Neonatal Coordinating Group		
Date first issued:	August 2006		
Last reviewed:	1 <sup>st</sup> August 2014	Next review date:	1 <sup>st</sup> August 2017
Endorsed by:	Neonatal Coordinating Group	Date endorsed:	August 2014
Standards Applicable:	NSQHS Standards: 1  Governance, 6  Clinical Handover, 8  Pressure		
<b>Printed or personally saved electronic copies of this document are considered uncontrolled. Access the current version from the WNHS website.</b>			