

Positioning the Neonatal Infant (Developmental Care)

1. Introduction and Who Guideline applies to

This guideline is aimed at all Health care professionals involved in the care of infants within the Neonatal Service.

Key Points

- This guideline refers to positioning techniques and developmental care used in the care of the newborn infant
- Babies who are not monitored should not be positioned in prone and parents should be given SIDS recommendations on discharge

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2. Guideline Standards and Procedures

Background

Positioning is what we can do to make the baby comfortable and to also support their posture and movements. This in turn is vital for their development and self-regulation. The position that is the best for the baby is the one in which he is most competent and stable.

When in-utero, the baby develops within predictable boundaries where movement and vestibular development are achieved. Muscle tone and strength, hand to mouth and self-calming movements, flexion, midline position and symmetrical growth are all sustained within this environment.

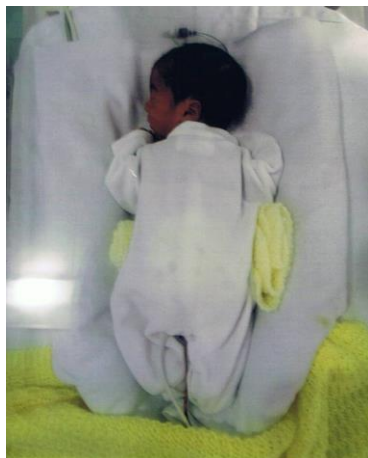
A preterm or sick neonate may experience an environment where there are no boundaries, with surfaces flat and hard. The effects of gravity may lead to difficulty with hand to mouth and other self-calming behaviours, extended position and poor postural development. Sudden abrupt movements to the baby and the effects of equipment may also have detrimental consequences.

Additionally, this inappropriate environment may lead to discomfort, compromised skin integrity, disrupted sleep patterns, physiological instability, increased intracranial pressure, impaired cerebral blood flow, poor thermoregulation, increased gastro-oesophageal reflux (GOR), inability to socially interact, a flattened elongated head shape and poor parental perception of the baby.

Guidance	Explanation
Nurse infant in a position that is most appropriate to their individual behavioural cues, whilst paying attention to respiratory and gastrointestinal considerations.	To maximise physiological stability whilst ensuring comfort
Utilise available positioning aids, such as nests, to provide deep, predictable boundaries, containment and 'bracing' for all preterm, sick and neurologically compromised infants. Care should be taken to ensure that rolls etc. are deep enough to provide appropriate support.	To promote physiological stability, aid flexion, prevent postural deformity, protect sleep and facilitate self-regulation. Without appropriate support and positioning the infant may adopt abnormal postures and make unnecessary and tiring movements. Shallow rolls are ineffective.
Utilise gel pillows under head and shoulders of all babies under 35 weeks and older babies if they are hypotonic/sick/neurologically compromised.	To promote rounded head shape and prevent flattening/ elongation

For babies $\leq 32/40$ and birth weight < 1500 grams please refer to the early care Neonatal neuroprotective bundle

Prone



In prone, ensure limbs are tucked with arms forwards and hands near to face. A small roll may be placed under baby from head to hips to allow a rounded flexed posture, Support with good boundaries to prevent excessive hip abduction ('frog' position). Avoid hyperextension of the neck. Babies settle well in prone, cry less, and lose less heat. Lifting in prone is less unsettling for the baby.

Suitable for infants with

- Respiratory compromise
- Gastro-oesophageal reflux
- Unsettled babies
- Older babies to encourage physical development – when awake only
- **Babies who are not monitored should not be positioned in prone and parents should be given SIDS recommendations on discharge**

- Improved oxygenation and ventilation; decreased episodes of bradycardia and hypoxaemia.
- Decreases the risk of aspiration and the severity of GOR
- Aids sleep, so reduces energy expenditure.
- Facilitates hand to mouth activity for self-calming
- Facilitates active neck extension, head control and subsequent gross motor skills.

Supine



In supine position, more heat and energy are lost, respiration is more difficult and reflux more likely. More difficult to move against gravity and control movements. Provide supportive boundaries to allow baby to bring hands to face/mouth and to prevent shoulder retraction ('w' position). Avoid excessive neck rotation (to prevent obstruction to cerebral blood flow). If a neck roll has to be used, ensure that it is as small and soft as possible to avoid restricting blood flow to cerebellum.

Suitable for infants with

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| <ul style="list-style-type: none"> • some surgical and medical conditions • Older babies ready for interaction • Intubated babies whose heads need to be supported in the midline (including cooling babies) • Safest sleeping position for babies who are not monitored. | <ul style="list-style-type: none"> • Allows easy access for medical care • Facilitate face to face social contact and easier visual exploration • Allows head to be positioned in the midline • SIDS advice(Lullaby advice) |
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Side lying



Side lying position is the position of choice for comfort and for allowing the baby to organise himself. When positioning in side-lying provide support to back. Avoid too much flexion which may hinder respiration and digestion. Avoid any rolls or blankets between the legs to prevent abduction and skin damage in extreme preterm babies when in incubators with humidification.

- Suitable for most babies
- Gastro-oesophageal reflux (left side)

- Lying on the side is closest to fetal position
- Easiest for babies to make themselves comfortable.
- It facilitates hands towards midline and helps to prevent retracted shoulders and excessive hip abduction
- Left lateral shown to reduce reflux. Breast fed babies lie on their sides to feed; a similar position works for bottle fed babies.

Parents need to be advised that their baby may nurse on their side or tummy for therapeutic reasons. Preterm and sick babies have special needs that may require this. When a baby is stable and preparing to go home, sleeping on the back should be established and all additions to bedding should be removed from the cot.

Babies may be swaddled in a sheet or tight wrap and care taken to ensure that they do not overheat.

Sitting



Sitting position is generally unsuitable for preterm babies as they do not have sufficient muscle tone to be propped up in a seat. As babies reach term, they may benefit from being placed in a reclining baby seat. Additional support (blanket rolls etc.) may be needed to maintain a midline position to prevent slumping and avoid respiratory compromise and possible asymmetry and plagiocephaly. Keep hips in the middle of seat Put padding behind the back (from shoulder level) to allow head to rest in line with the body Tuck rolls under shoulders to bring arms forward.

Suitable for:

- Babies near to term who are ready for more interaction/stimulation
- Babies with GOR

- Encourages interaction with carers, play, environment
- Encourages midline, chin tuck, eye/hand co-ordination
- Avoid overstimulation by placing objects too close to baby's face.
- Reduces GOR – care should be taken to ensure that the baby is not allowed to slump in the chair as this may increase GOR

3. Education and Training

None

4. References

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Additional resources

<https://nidcap.org>

Early Care Neonatal Neuroprotective Bundle on BadgerNet

5. Key Words

Movement, Posture, Prone, Side lying, Sitting, Supine

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

Contact and review details			
Written: May 2015 Author: Elsie Kumar and Lorraine Harrison Guideline Lead (Name and Title) E Kumar - Sister S Mittal – Consultant guidelines lead		Executive Lead Chief Nurse	
Details of Changes made during review:			
Date	Issue Number	Reviewed By	Description Of Changes (If Any)
April- May 2015			New guideline put forward for review Senior neonatal nurse (band 7) comments received New photographs
2/6/2015	1	Neonatal Governance Meeting (approval)	
Oct 2018	2	Neonatal Guidelines and Governance meeting	
Oct 2021	3	Neonatal Guidelines and Governance meeting	Format update Photograph changed Added additional resources info
December 2024	4	Neonatal Guidelines and Governance meeting	No changes