

Title: Baby Wearing and Carrying with Neonatal Unit Patients			
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Target Audience:		Physiotherapy, Speech and Language Therapy, Occupational Therapy, nursing and care staff involved in treating Neonatal Unit patients. Neonatal Community Outreach team (NCOT) also use for guidance. This document may also be of benefit to other members of the multidisciplinary team working with babies under six months of age.	
Keywords (min. 5):		Physiotherapy, Baby wearing, skin to skin, sling, baby carrying, AHP, newborn	

Version Control

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1.0 Purpose

To provide guidance for members of the multidisciplinary team (MDT) who are supporting parents who have babies who would benefit from baby wearing or carrying.

2.0 Scope

The aim of this guideline is to provide staff with guidance on how to carry out baby wearing on the Neonatal Unit.

This covers some background information, inclusion and exclusion criteria, contraindications, teaching pathway and referral information. It is not intended to be an exhaustive list or replace individuals' clinical reasoning.

Medical and nursing staff may use the document to help with the referral process to a trained Peer Supporter or to gain more understanding into baby wearing and its importance on the Neonatal Unit.

3.0 Definitions

Baby wearing- Using baby wrap or carrier to place a baby securely on a parents chest. Commonly done using one-way stretchy wrap. Parents are based at bed space and do not walk around.

Baby carrying- Using a one way stretchy wrap to secure a baby in a safe manner so that a parent can walk independently without using hands to support the baby. Carried out at home not in inpatient environment.

One-way stretchy wrap- Length of material that stretches in one direction only and can be used to secure a baby in a back facing position on parent's chest. **All Scottish Baby Box slings are one-way stretch**

Peer Supporter- individual trained by Close & Calm in baby wearing/carrying and have received certification.

Staff trained- Taught to use one-way stretchy wrap by a peer supporter. Have not received certification in baby carrying or wearing.

Skin to Skin- Baby placed on parent chest with no or minimal clothing between the two.

High risk babies- Preterm babies born at less than 34+0 weeks or 1500g

Neuro Critical- Babies with Grade 3 HIE requiring cooling; term baby with meningitis; term babies with seizures; severe hyperinsulemia; Neonatal stroke.

4.0 Roles and responsibilities

All Neonatal staff teaching parents to baby wear using sling should be aware of this guidance. Nursing staff caring for babies where parents are taught to baby wear/carry should also be directed to this document.

Neonatal Physiotherapists working in Simpsons Neonatal Unit are responsible for updating this guideline.

5.0 Main content

5.1 Introduction and Background

Sustained physical contact and direct skin-to-skin contact has well documented positive effects on maternal health and infant development¹. It promotes physiological stabilisation in premature babies, enhances breast feeding rates, improves parental and infant mental health and infant development. By baby wearing or carrying during skin to skin, parents feel more confident, comfortable and can maintain the position for longer periods.

National guidance documents support its use:

Baby Friendly Standards-

- parents are actively encouraged to provide comfort and emotional support for their baby, including prolonged skin contact, comforting touch and responsiveness to their baby's behavioural cues
- mothers receive care that supports the transition to breastfeeding, including the use of skin-to-skin contact to encourage instinctive feeding behaviour.

Bliss Baby Charter-

1.3A Close contact between parents and their babies is integral to the unit philosophy.

5.2 Aims

- Educate all staff in Neonatal unit re benefits and use of baby wearing and carrying
- Aim to establish baby wearing as standard practice, as appropriate, in Neonatal Unit

- Increased bed side nurse confidence when caring for baby and parent who are baby wearing or carrying
- Improve long term neonatal developmental outcomes by replicating in utero environment- see attached growth schedule
- Reduce length of hospital stay
- Establish quicker progression to oral feeding
- Reduce impact of altered head shape in premature babies
- Continuing to work toward Unicef Achieving Sustainability award Standard 1 – Skin contact (breastfeeding mothers)
- Support work towards achieving Bliss Friendly charter
- Support Simpson's breast feeding strategy and improved rates of breast feeding

5.3 Benefits

Baby

- Physiological stabilisation
- Temperature regulationⁱⁱ
- Stability in respiratory effortsⁱⁱⁱ
- Increased quiet sleep^{iv}
 - Reduced heart rate
 - Reduced pain/ need for pain relief due to increased oxytocin^v
 - Improved oxygen saturations

Improved Development

- Accelerated brain growth^{vi}
- Midline positioning and flexion

- Reduced crying
- Proprioception and vestibular stability
- Improved head shape
- Containment and encompassing pressure
- Increased parental responsiveness

Feeding and Nutrition

- Reduced reflux^{vii}
- Improved digestion^{viii}
- Earlier establishment of oral feeding
- Increased rate of sustained breast feeding at 6months^{ix}

Parent

- Increased and maintained breast milk production
- Improved maternal and paternal bonding
- Reduced post-natal depression
- Reduced trauma associated with NNU stay
- Parental anxiety reduced through reduction in cortisol release^x
- Easier to read baby cues

Staff

- Reduced parental anxiety and concern
- Reduced unplanned interventions
- Improved parental engagement

5.4 Inclusion Criteria for NNU and NCOT

- Babies on the NNU with more than 72 hours till discharge. If to be discharged within 72 hours highlight to NCOT.
- Babies under the care of physiotherapy, speech and language (SALT) or occupational therapy (OT) can be referred to that professional.
- High risk babies (see 3.0) or neurological insult- refer to physio, SALT or OT. Other trained staff **should not** teach parents of high risk infants.
- Babies born 34+1 or > 1500g refer to nursing staff peer supporters or Infant Feeding Advisors

- Parental consent
 - >2.5kg/5lbs
 - Medically stable and no restriction to handling
 - Bedside nurse appropriately informed and happy to support

5.5 Exclusion Criteria

- NEC
- Receiving transfusion
- Respiratory support insecure- eg. CPAP seal not stable
- Intubated and ventilated
- Deterioration in condition within last 24 hours including: Increasing respiratory requirements; increased O₂; significant change in HR or RR; change in feed tolerance; all other changes which cause concern- discuss with bedside nurse or medical staff for patient suitability
- Active joint sepsis
- Apnoea monitor in-situ
- Baby fitted with Palvik Harness

5.6 Caution- discuss babies in this category with nursing or medical staff

- Episodes of bradycardia or desaturation which do not self-resolve
- Active infusion of IV fluids or antibiotics
- High levels of parental anxiety
- Mum within 6 weeks of c-section
- Orthopaedic or musculoskeletal concerns

5.7 Parent Education

- Parents should be given information regarding benefits of baby wearing and training required before initial session
- Teaching should occur over three independent sessions
- NNU staff cannot teach parents to carry twins or triplets together, but can be taught to carry one baby at a time. If parents wish to carry multiples they can be provided with a list of carrying professionals
- Discussions should be had with parents re appropriate clothing for baby wearing eg, completing skin to skin, bra only, strappy top. Discuss increase in body temperature and putting thicker clothing (cardigans, hoodys etc) over top once baby is in position
- **First teaching session:** should include covering of how to use baby wrap, introduction of TICKS and safety checks (including temperature). Parents should

watch demonstration of applying and safety checks by staff member applying sling and positioning doll. Parents should then demonstrate how to apply the sling, with guidance from staff as appropriate, discussing safety checks at each stage. Parents should be then given a period to practice applying the sling independently. Parents should be given copy of the baby carrying leaflet, including link to YouTube video.

- **Second teaching session:** Review session for parent questions or concerns. Review any elements that parents need to practice. Ask parents to demonstrate applying sling and putting doll in sling, discussing safety points. If competent and safe putting doll in sling, progress to supporting parents putting their baby in sling (point A) and if not safe to do so follow point B.
 - Point A- assist parents to place their baby in the sling. Ask parents to apply sling from stage 1, adjusting straps to appropriate size for baby. Assist parents to place baby in sling, assisting with baby positioning, wires and attachments as needed. Support parents with straps and shoulder flips. Ask parents to describe safety points independently. Assist parents to take baby safely out of sling. If parents able to complete competently with second person may continue to practice **only** with trained bedside nurse or second trained parent present. Baby can be worn in sling for maximum of 15minutes
 - Point B- further teaching session on putting sling on safely. Review safety points and ensure understanding. Repeat any aspects of difficulties on multiple occasions. Repeat second teaching session as many times as needed in order to be able to be safe to proceed to point A
- **Third teaching session:** Review session for putting baby in sling and taking out safely. Review parents placing baby in sling and description of safety steps. Aim for parents to complete independently.
 - If parents completing independently and can be signed off as competent to do so, parents can use baby sling without supervision of staff or second parent. Provide advice re trouble shooting,
 - Advise that they cannot use sling front facing for more than 15 minutes and only once baby is 6 months CGA
 - Provide contact details for queries or concerns
 - Provide list of reputable carrying professions
 - Ensure received copy of baby carrying leaflet
 - Discuss washing instructions

5.8 Trained Peer Supporters

Peer supporters- must not teach parents of high risk babies and babies with neurological insult (see criteria above)

- Once trained staff must regularly complete joint session with another peer supporter to ensure safe and standardised

- practice. Training log (see appendix one) must be completed and signed by both staff members. This should occur on a minimum of a 6 monthly basis, and more regularly if required
- For NCOT patients, parents may be taught by a staff trained member, but not for high-risk babies (as defined above). If teaching parents of high-risk babies one session must be reviewed or supervised by a peer supporter eg. Ex 30 week preterm baby now 2.8kg and being reviewed at home. Staff-trained NCOT nurse teaches sessions 1 and 3. Session 2 is taught by peer-supporting NCOT nurse

5.9 Bedside Nurses

- Nursing staff at the bedside who are not peer supporters or staff-trained carrying educators should be aware of this guidance document before supporting a family
- Staff should complete annual training session to support parents. This may be in the form of training at the bedside or lunch time teaching session. Record of attendance should be available.
- Review session should be provided by peer-supporter or staff-trained educators every time a parent in the nurses care is taught. This should include review of TICKS safety advice, how to safely remove baby from sling in case of emergency; position of attachments whilst baby wearing.
- Staff should be provided with contact details for peer-supporter or staff-trained educator if parents under their care have completed training. This should be documented on “What matters to me”..
- Provided opportunity to ask questions at each training session
- It is the bedside nurse responsibility to raise concerns or highlight if they do not feel confident caring for a baby which a parent is baby wearing

5.10 Provision of Slings

- One-way stretch slings are available to all babies in Scotland via the Scottish Baby Box.
- For parents that have not ordered their baby box this can be arranged through the health visitor

- If parents have not received their box yet a sling can be provided from the NNU stock on the provision that when parents receive their box the new sling is returned. For multiples please only provide one new sling per family
- Only slings in new packaging can be issued to parents
- Slings not in packaging can be used for teaching and should be used in stage 1 of teaching. Once finished teaching with one family they should be washed according to local policy (see infection control policy below)
- If parents have their own slings we are unable to provide teaching on how to use these. NNU staff can advise on safety as per TICKS **only**. It is the parents responsibility to ensure their own and babies safety as per manufacturers guidance

5.11 Infection Control

- Slings are single patient use
- Slings provided by the NNU should be in a new condition in original packaging if providing for patient use
- If parents providing their own sling, this should be washed according to local guidance before bringing to the unit
- For teaching, old slings can be used with parents but a baby **must not come in to contact with this sling**
- After teaching has finished with a family the sling must be washed according to local policy before using again for teaching
- Slings must not be altered or adapted. All labels should remain attached
- Any signs of wear and tear, fraying or damage to the sling and it should be safely disposed of

6.0 Associated materials

Parent information leaflet for Baby Wearing with One Way Stretchy Wrap

One Way Stretchy Shoulder Flips: <https://www.youtube.com/watch?v=K56y0kLHdNU>

Close and Calm Website: closeandcalm.co.uk

Carrying Matters Website: carryingmatters.co.uk (includes resource posters)

[ticks.pdf \(babyslingsafety.co.uk\)](#)

<https://www.carryingmatters.co.uk/perinatal-mood-disorders-and-carrying/>

<https://www.carryingmatters.co.uk/snowsuits-scarves-slings-and-safety/>

<https://www.carryingmatters.co.uk/carrying-in-the-heat>

<https://www.carryingmatters.co.uk/breast-and-bottle-feeding-safely-in-a-sling-3/>

<https://www.bbc.co.uk/news/health-46591640> Gently Stroking Babies Pain Relief

<https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/implementing-standards-resources/skin-to-skin-contact/>

7.0 Evidence base

McCain GC, Ludington-Hoe SM, Swinth JY, Hadeed AJ. Heart rate variability responses of a preterm infant to kangaroo care. *J Obstet Gynecol Neonatal Nurs.* 2005 Nov-Dec;34(6):689-94 [Heart Rate Variability Responses of a Preterm Infant to Kangaroo Care - PMC \(nih.gov\)](#)

Effect of mother/infant skin-to-skin contact on postpartum depressive symptoms and maternal physiological stress Ann Bigelow 1, Michelle Power, Janis MacLellan-Peters, Marion Alex, Claudette McDonald <https://www.ncbi.nlm.nih.gov/pubmed/22537390>

Use of baby carriers to increase breastfeeding duration among term infants: the effects of an educational intervention in Italy Alfredo Pisacane 1, Paola Continisio, Cristina Filosa, Valeria Tagliamonte, Grazia Isabella Continisio <https://pubmed.ncbi.nlm.nih.gov/22734604/>

Mother-infant contact after birth can reduce postpartum post-traumatic stress symptoms through a reduction in birth-related fear and guilt Rotem Kahalonab, Heidi PreisacYael Benyaminia <https://www.sciencedirect.com/science/article/abs/pii/S0022399922000010>

Oxytocin and early parent-infant interactions: A systematic review Naomi Scatliffe,^{a,b} Sharon Casavant,^a Dorothy Vittner,^{a,c} and Xiaomei Conga,
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6838998/>

Increased carrying reduces infant crying: a randomized controlled trial U A Hunziker, R G Barr
<https://pubmed.ncbi.nlm.nih.gov/3517799>

Culture, carrying, and communication: Beliefs and behavior associated with baby wearing Emily E.LittleaCristine H.LegarebLeslie J.Carvera
<https://www.sciencedirect.com/science/article/abs/pii/S016363831830256X>

Infant carrying as a tool to promote secure attachments in young mothers: Comparing intervention and control infants during the still-face paradigm *Infant Behavior & Development*, 58 (2020)
<https://doi.org/j.infbeh.2020.101413>

Evelin Kirklionis; A baby wants to be carried. P.72: “When a baby is carried, his proprio-vestibular system is not only activated more intensively, but the baby is also presented with more and different stimuli than in a pushchair”

8.0 Stakeholder consultation

Consultation with: Speech and Language, Occupational Therapy, Physiotherapy, Infant Feeding Advisor, Neonatal Consultant, Nursing Education Team, NCOT Team Lead, NNU nursing lead and NNU Parents.

9.0 Monitoring and review

This Guideline will be reviewed on 01/03/2026 to compare and update with relevant literature

ⁱ Little, E.E., Legare, C.H. and Carver, L.J., 2019. Culture, carrying, and communication: Beliefs and behavior associated with babywearing. *Infant Behavior and Development*, 57

ⁱⁱ Bier et al., 1995; Chwo et al., 2002; Cleary, Spinner, Gibson, & Greenspan, 1997; Ludington-Hoe, Nguyen, Swinith, & Satyshur, 2000

ⁱⁱⁱ Bier et al.; Cleary, et al.; Ludington-Hoe, Anderson, Swinith, Thompson, & Hadeed, 2004

^{iv} Chwo et al.

- ^v [Oxytocin and early parent-infant interactions: A systematic review - PMC \(nih.gov\)](#)
- ^{vi} [Skin-to-skin contact - Baby Friendly Initiative \(unicef.org.uk\)](#)
- ^{vii} [Reflux in babies - NHS \(www.nhs.uk\)](#)
- ^{viii} [Skin-to-skin contact - Baby Friendly Initiative \(unicef.org.uk\)](#)
- ^{ix} [Babywearing Can Help You Meet Your Breastfeeding Goals - Ergobaby Blog](#)
- ^x [Perinatal Mood Disorders and Carrying - Carrying Matters](#)