



# Parent Information

## Positioning and handling of premature babies

Paediatric Physiotherapy  
Liverpool Hospital

If you would like support with this information while your baby is in the nursery please ask to speak to a physiotherapist, or phone us on 8738 5629.



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## **Introduction**

Welcome to the Neonatal Intensive Care Unit (NICU). As physiotherapists, we are interested in how your baby is positioned, moved and held whilst here in the NICU. Furthermore, we spend time with you, so that we can help you to help your baby develop their gross motor skills in the best way possible.

There is so much to learn and discover about your baby during their journey through the NICU. We have some general information to help you understand the role the physiotherapist plays in the development of your premature baby.

### **Some important things to remember...**

#### **How old is my baby?**

Prematurity = A baby is “premature” if they were born at or before 37 weeks gestation.

Gestational age = The number of weeks and days from the first day of your last period.

Chronological Age or Actual Age = The days/weeks from when your baby was born (birth date).

Corrected Gestational age = Whilst your baby is preterm, their age will be referred to in terms of their gestational age, that is, if they were born at 28/40, when they are 4 weeks of age, their CGA is 32/40.

**Immunisations** are given based on chronological age.

### **Support Baby in Your Lap:**

- ◆ This is a good position for eye contact and interacting with your baby. It encourages the curled position for baby's hips and legs and allows two free hands to feed or play. Baby lies in the crook of your lap - arms to the middle and legs tucked up.



### Curl Baby Across Your Chest:

- ◆ This position helps bonding and attachment while supporting your baby's muscle development. Help your baby have their arms and legs tucked up.



### Carrying Over the Shoulder:

- ◆ This position assists your baby to strengthen their neck muscles and prepares them for 'tummy time'. Baby is positioned high over your shoulder - both arms are forward and legs are tucked up. Rocking or walking whilst carrying your baby can be quite comforting.



### Differences in posture between premature babies and full term babies

Premature babies have not experienced the final stages of pregnancy when they would normally spend a little more time curled up in the mother's womb. The final stages of pregnancy are particularly important for the future development of posture and movement for your baby.

When a baby is born prematurely, their muscle strength is not in balance. They are stronger in the muscles that straighten their bodies out (extend) and weaker in the muscles that curl them up (flex). Gravity causes their weak arms and legs to 'flop' out to the side.

As a result your baby will often lie completely flat against the supporting surface (extended position). When they try to move they often arch their back and neck and straighten their arms and legs out to the side. If these patterns of movement continue as your baby grows it can be difficult to learn how to roll, sit and crawl.

**Positioning your baby in a curled up position promotes good development of their movement. Physiotherapists along with nursing and other allied health staff will help to ensure your baby is always appropriately positioned in flexion.**



## Positioning in Hospital

In the NICU, one of our main goals is to position your baby in a curled up position to simulate the position they would be in if still in the womb.

To do this, we encourage:

- ◆ Head in the middle and slightly tucked if medical treatment allows
- ◆ Shoulders forward and hands to the middle and near their face
- ◆ Legs bent up towards their chest and knees/feet towards the middle
- ◆ A curled up position as much as possible, whether it be on their back, tummy or side

Whilst your baby is in the isolette or a hot cot, they will be 'nested'. As your baby grows and approaches term age, your baby will be swaddled or wrapped.

## **Nesting**

It is important for your baby to have their position changed at care times throughout the day. In the isolette your baby will be supported with a "nest" and positioned on their back, side or their tummy. This is possible because your baby is continuously monitored.

The nest provides a supportive boundary around your baby to help keep them in a curled-up position and also provides a boundary which they can push against – similar to the way they would push against the wall of the womb.



## **Carrying your baby**

The Tuck Carry:

- ◆ The position assists you to keep your baby in the curled up position. Baby lies in the crook of your arm - their head is supported, their chin is tucked, back curved, arms to the middle and legs tucked up.



Lying on Side Across Forearm:

- ◆ This position helps your baby to develop head control. Their head and chest should be higher than their hips, making it easier for them to lift their head against gravity. Arms to the middle and legs tucked.



## How To Handle Your Baby

### Picking up your baby

- ◆ Roll your baby on to their side ensuring baby is curled up.
- ◆ Place a hand under each arm with fingers to support the head and pick your baby up.
- ◆ Return your baby to the cot in the same way

This technique also allows your baby to practice control of their neck muscles.

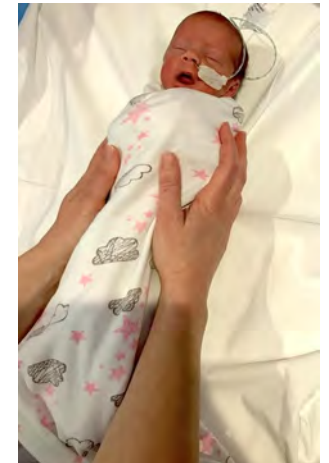


## Wrapping your baby

As your baby grows, they will move out of the isolette and into a cot. In the cot your baby will be wrapped. Wrapping is very important for premature babies as it mimics the curled position in the womb and also allows your baby to feel secure. It can also help your baby to sleep better, startle less often and be less stressed. This also has developmental advantages.

### How to wrap your baby

- ◆ Place your baby on their wrap with it's edge at your baby's ear level
- ◆ Place your baby's hand in the middle and wrap one side firmly over their shoulder/arm and tuck the wrap behind their back.
- ◆ Repeat with the other side



## Positioning and handling

### Containment holds

- ◆ Use this if your child is unwrapped or in the isolette
- ◆ Relax yourself with deep breaths
- ◆ Place your hands firmly over the arms and legs or head and bottom



### How to help during your baby's care times

Often care times (e.g. nappy changes, cleaning, recording temperature) involve lots of movement and changes of position. Premature babies often get stressed by sudden or fast movements and touch. Using a firm touch and containment with your hands helps to keep your baby settled and better tolerate the care process.

Other ideas to help your baby stay settled, comfortable and in the curled posture during cares include:

- ◆ Slow and gentle movements
- ◆ Observing your baby's cues
- ◆ Providing rest breaks
- ◆ Providing containment with your hands
- ◆ Partial swaddling of the limbs with a muslin wrap
- ◆ The use of a peanut pillow
- ◆ Completing care procedures with your baby lying on their side

