



Value Life

Neonatology
Neohelp™ Neonatal Heat Loss Prevention Suit



Neohelp™ Neonatal Heat Loss Prevention Suit

Using Neohelp during delayed cord clamping

Why is delayed cord clamping important?

Provided the baby can be kept warm and does not need immediate resuscitation, the Resuscitation Council UK (RCUK) recommends delayed cord clamping (DCC) for at least 60 seconds whilst breathing is established.¹

DCC has been shown to reduce the relative risk of:

Intraventricular haemorrhage by 41% (RR 0.59, 95% CI 0.41 to 0.85)²

Necrotising enterocolitis by 38% (RR 0.62, 95% CI 0.43 to 0.90)²

In addition, this procedure increases circulation of blood volume after birth and an improvement in cardiovascular stability, reducing the need for a blood transfusion.

Why is thermal care important?

For every 1°C decrease:

Risk of sepsis increases **by 11%**

Risk of death increases **by 28%**³

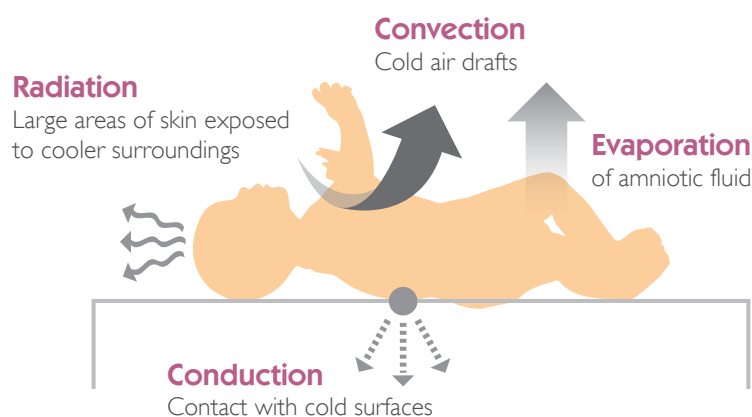
In the first 10-20 minutes,
without any protection, temperature can fall
by 2-4°C⁴

For a preterm infant delivered by c-section, the baby must first be placed in a warm and sterile environment, providing thermal care and skin protection. The sterile Neonatal Heat Loss Prevention Suit, Neohelp, prevents heat loss through its double layer of soft, clear polyethylene, integrated adjustable hood and hermetic VELCRO® seal, whilst DCC and Golden Hour Care takes place.^{5,6}

Physical characteristics of a preterm baby can include unbalanced skin-surface to weight ratio, very little or no capacity to generate heat (brown adipose tissue), inadequate stores of subcutaneous (insulating) fat and immature epidermal barrier.^{7,8}

Consequences of neonatal hypothermia^{8,9}

- Respiratory distress
- Hypoxia
- Metabolic acidosis
- Hypoglycaemia
- Coagulation defects
- Intraventricular haemorrhage
- Brain damage
- Infection/septicaemia
- Death.





International Resuscitation Guidelines

recommend placing premature infants in a polyethylene bag without drying ¹¹

Neohelp™ is a sterile heat loss prevention suit that effectively delivers thermal care in conjunction with delayed cord clamping in preterms delivered via c-section.

According to UNICEF, such interventions can help reduce neonatal mortality or morbidity **by 18-42%** ³

Integrated adjustable hood

Decreases heat loss through radiation:

- More efficient than a stockinette cap allowing air to pass through the material
- Adjusts to the baby's head.

50%
of heat loss comes from the baby's head ¹⁰

Pre-shaped foam

Decreases heat loss through conduction:

- Helps to maintain an open airway by raising the shoulders
- Stabilises the baby's position
- Provides thermal care during transportation
- Provides comfort.

Double layer of polyethylene

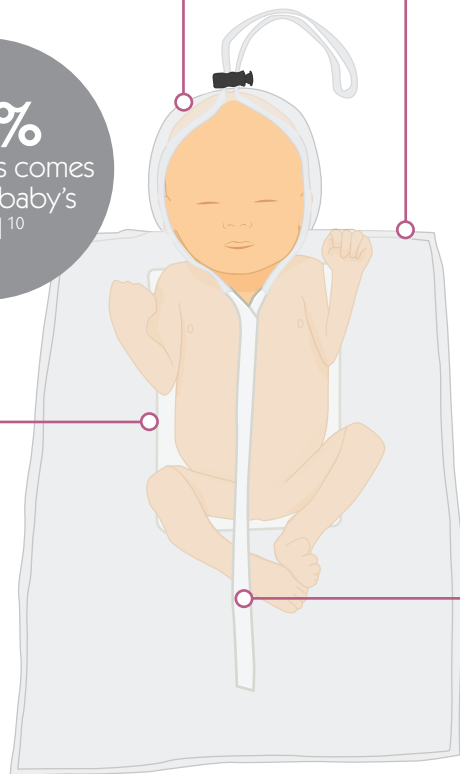
Decreases heat loss through convection and evaporation:

- Creates a warm and humid environment, mimicking the incubator effect
- The thin inner allows for perfect skin contact
- Creates a barrier against drafts
- Allows passage of radiant heat from an additional warming device (if used) ³
- Transparent material allowing the vital observations. ⁹

Central VELCRO® opening

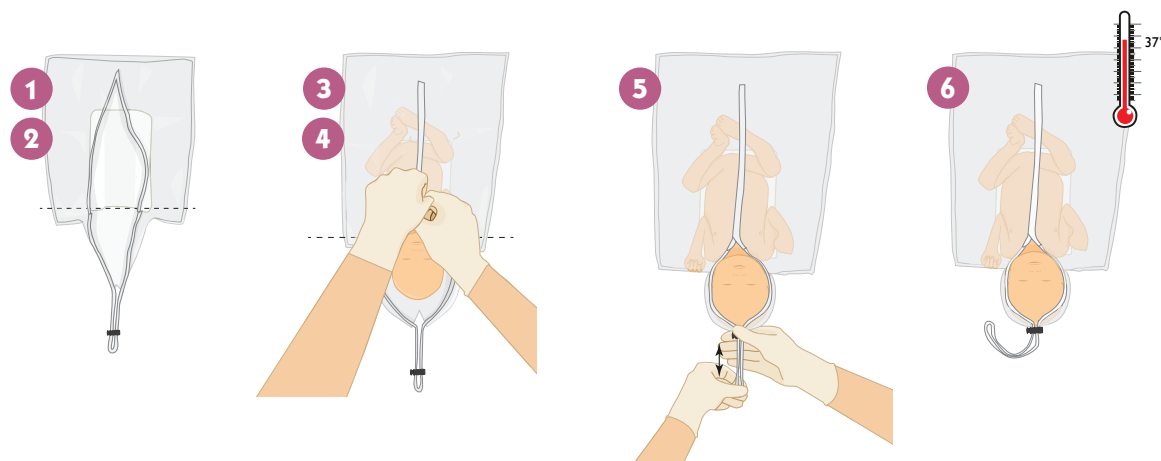
Ensures heat conservation with hermetic closure:

- Easy and quick placement
- Allows full access to the baby's body
- Designed for easy placement of monitoring equipment, IV, umbilical catheters and carrying out Golden Hour Care.



How to use Neohelp™

- 1 Remove Neohelp from the packaging and unfold
- 2 Open the VELCRO® hermetic seal ready to receive the baby
- 3 Place baby in Neohelp (without drying) ensuring shoulders are aligned with edge of foam
- 4 Close with VELCRO® fastener
- 5 Adjust hood to head
- 6 The baby can remain in Neohelp throughout NICU admission, which will help to maintain temperature and humidity.



Implement Neohelp today

Vygon Code	NHSSC	Description	Box Quantity
00370914	BWK1629	Neohelp Small < 1KG L. 38 x W. 38cm	10
00370915	BWK1630	Neohelp Medium 1KG – 2.5KG L. 44 x W. 38cm	10
00370916	BWK1631	Neohelp Large > 2.5KG L. 50 x W. 38cm	10

References

- 1 Resuscitation-Council-UK-(RCUK).Newborn Life Support – National Resuscitation Guidelines. 2015.
- 2 Rabe H, Diaz-Rossello JL, Duley L, Dowswell T. Early cord clamping versus delayed cord clamping or cord milking for preterm babies. Cochrane Database Syst Rev 2012;15 CD003248
- 3 WWMV, Mori R. Interventions to prevent hypothermia at birth in preterm and/or low birth weight infant. RHL.
- 4 World Health Organisation (WHO). Thermal protection of the newborn: practical guide. 1997.
- 5 Rabe H, Diaz-Rossello JL, Duley L, Dowswell T. Effect of timing of umbilical cord clamping and other strategies to influence placental transfusion at preterm birth on maternal and infant outcomes. Cochrane Database Syst Rev 2012;8 CD003248
- 6 Backes CH, Rivera BK, Haque U, et al. Placental transfusion strategies in very preterm neonates: a systematic review and metaanalysis. ObstetGynecol2014; 124:47-56
- 7 B. Mathew and al. Vinyl Bags prevent hypothermia At Birth in Preterm Infants. 2006.
- 8 T. Cordaro and al. Hypothermia and occlusive skin wrap in the low birth weight premature infant. NAINR. 2012;12(2):78-85
- 9 The Cochrane Collaboration. Interventions to prevent hypothermia at birth and/or low birth weight infants (review). 2010.
- 10 R.Bissinger and D. Annibale. Thermoregulation in Very Low-Birth-Weight Infants During the Golden Hour Results and Implications. Advances in Neonatal Care. 2010.
- 11 American Academy of Pediatrics. Neonatal Resuscitation: 2010 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with treatment recommendations.

For further information, please contact: vygon@vygon.co.uk

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