VYGON

neohelp™

A sterile heat loss prevention suit to deliver life-saving thermal care

Immediately after a premature baby is delivered by c-section, the priority is to place them in a warm and sterile environment. neo**help**™ provides this essential protection so other essential Golden Hour care and treatment, including delayed cord clamping, can take place.[1,2]

NEONATAL THERMOREGULATION

Integrated adjustable hood

Decreases heat loss through radiation:

- More efficient than a stockinette cap allowing air to pass through the material
- The toggle allows you to adjust to the baby's head

Double layer of soft clear polyethylene

Decreases heat loss through convection and evaporation:

- Creates a warm and humid environment, mimicking the incubator effect
- The thin inner allows for excellent skin contact
- Creates a barrier against drafts
- Allows passage of radiant heat from an additional warming device (if used)[3]
- Transparent material allows vital observations[4]

Pre-shaped foam support

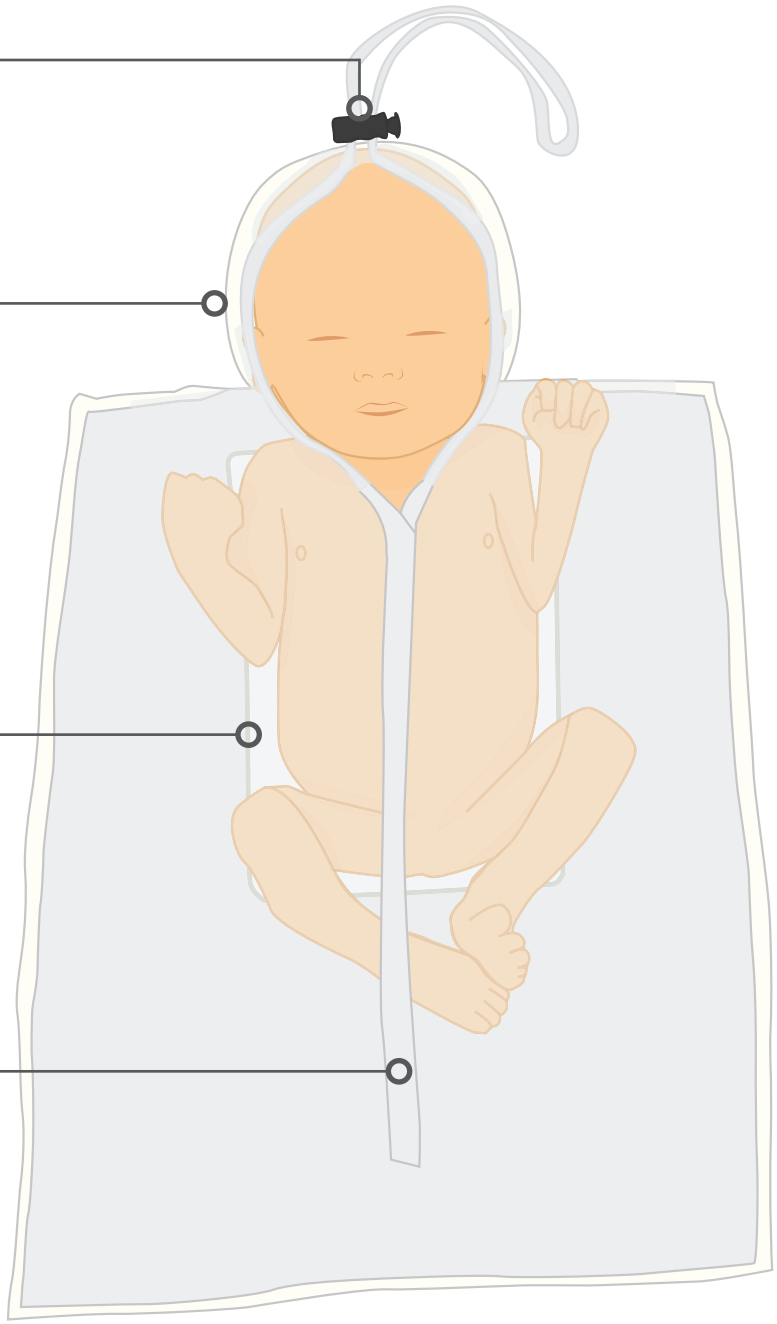
Decreases heat loss through conduction:

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

Central VELCRO® opening

Provides optimum seal to ensure heat conservation:

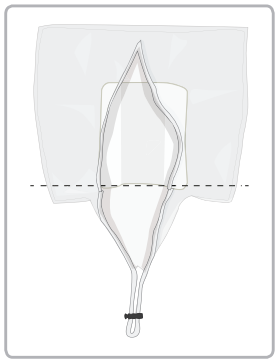
- Quick and easy to place around the baby
- Allows full access to the baby's body
- Designed for easy placement of monitoring equipment, IV, umbilical catheters and carrying out Golden Hour care



DISTRIBUTED BY:
ADVANCED SURGI-PHARM INC.
www.advancedsurgipharm.com
Tel.1-800-661-5432

ADVANCED SURGI-PHARM

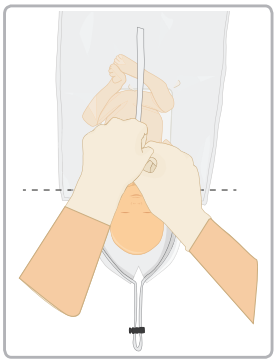
How to use neohelp™



1. Unfold neohelp™ completely.

2. Place it on the resuscitation table, under the heat lamp (if applicable).

3. Fully open the Velcro and the hood to facilitate the baby's reception.

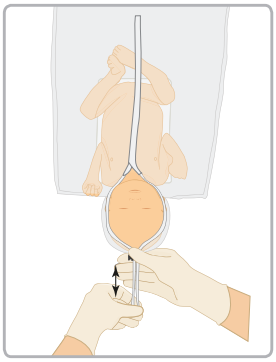


4. Do not dry the baby at birth.

5. Place the baby immediately afte birth in neohelp™

6. Align the shoulders at the upper edges of the foam.

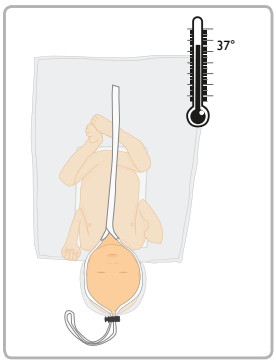
7. Close the Velcro tightly along its entire length.



8. Adjust the hood to the head of the baby.

Do not cover the airways due to the risk of suffocation.

9. Other heating appliances (e.g. heating) will need to be adjusted accordingly due to risk of hyperthermia.



10 The baby should be kept wrapped until temperature stabilization.

11 Temperature of the baby should be monitored continuously or consecutively (ideally every 5 minutes).

12 Do not use more than 24 hours.

Why is thermal care important?

Thermal care is vital for a preterm infant because they may have 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. [4,5]

At this vital time, neohelp™ prevents heat loss through its double layer of soft, clear polyethylene, integrated adjustable hood and VELCRO® seal.

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°C** [6]

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.[7]

Delayed cord clamping has been shown to reduce the relative risk of:

- Intraventricular haemorrhage by 41% (RR 0.59, 95% CI 0.41 to 0.85)[8]
- Necrotising enterocolitis by 38% (RR 0.62, 95% CI 0.43 to 0.90)[8]

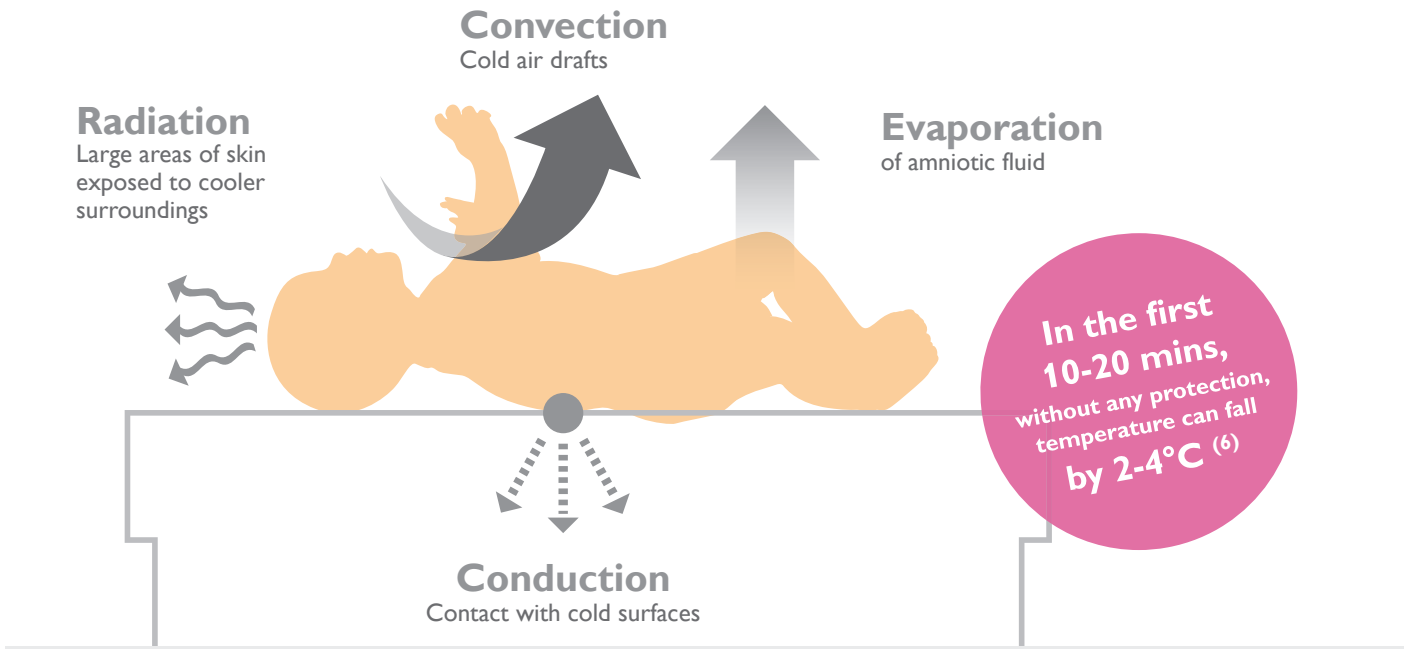
In addition, this procedure increases circulation of blood volume after birth and an improvement in cardiovascular stability, reducing the need for a blood transfusion.

Neonatal hypothermia: a worldwide issue

Hypothermia is an **important factor** in **morbidity** and **mortality** of all birthweights and gestational ages, and **particularly for vulnerable preterm infants**[9].

Incidence of hypothermia on admission in the NICU from the delivery room is [10]:

- ≥ 56% for infants < 750g
- ≥ 25% for infants ≤ 2500g



Consequences of neonatal hypothermia

Consequences of neonatal hypothermia (9,4)

- Respiratory distress
- Hypoxia
- Coagulation defects
- Intraventricular hemorrhage
- Brain damage
- Metabolic acidosis
- Hypoglycemia
- Infection / Septicaemia
- **Death**

For every 1°C decrease [4]:
- sepsis increases by **11%**
- risk of death increases by **28%**

Neonatal heat loss prevention suit

neo**help**™ is a sterile suit to swaddle the baby immediately after birth (before resuscitation).

- Polyethylene
- Occlusive
- Transparent

neo**help**™ prevents heat loss due to convection, conduction, radiation and evaporation.

Product Code	Baby weight	Description	Dimensions	Units/Box
37.09.14	< 1 kg	neo**help**™ Small	L. 38 cm x W. 30 cm	10
37.09.15	1 – 2.5 kg	neo**help**™ Medium	L. 44 cm x W. 38 cm	10
37.09.16	> 2.5 kg	neo**help**™ Large	L. 50 cm x W. 38 cm	10

International recommendations

"The transparency of bags makes it easier for caregivers to observe and manage the infant with minimal disruption of the wrap."[4]

"The transport incubator used to limit heat loss can be cumbersome and difficult to obtain. It may be «replaced » by a stockinette cap and a transparent polyethylene bag wrapping whilst the baby is still wet. This greatly reduces the risk of hypothermia."[11]

" Meta-analysis of […] studies found that plastic wraps (polyurethane or polyethylene bag) were statistically significantly more effective than routine care in reducing heat losses in infants aged < 28 weeks' of gestation.Stockinette caps were not effective in reducing heat loss in infants".[12]

References

1. 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.
2. Backes CH, Rivera BK, Haque U, et al. Placental transfusion strategies in very preterm neonates: a systematic review and metaanalysis. ObstetGynecol2014; 124:47-56
3. W.WMV, Mori R. Interventions to prevent hypothermia at birth in preterm and/or low birth weight infant. RHL.
4. T. Cordaro and al. Hypothermia and occlusive skin wrap in the low birth weight premature infant. NAINR. 2012;12(2):78-85.
5. B. Mathew and al.Vinyl Bags prevent hypothermia At Birth in Preterm Infants. 2006.
6. World Health Organisation (WHO).Thermal protection of the newborn: practical guide. 1997.
7. Resuscitation-Council-UK-(RCUK).Newborn Life Support – National Resuscitation Guidelines. 2015.
8. 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.
9. The Cochrane Collaboration. Interventions to prevent hypothermia at birth in preterm and/or low birthweight infants (review), 2010.
10. DR Bhatt, R. White and al. Transitional hypothermia in preterm newborns. Journal of Perinatalogy, 2007.
11. J.F. Diependaele and A. Fily. Management of a newborn baby, 51st congress of French Society of Anesthesia and Intensive care, 2009.
12. Wariki WMV and Mori R. Interventions to prevent hypothermia at birth in preterm and/or lowbirth-weight infants: RHL commentary (last revised: 1 June 2010). The WHO Reproductive Health Library; Geneva: World Health Organization.