

NAME: _____ HOSPITAL NO.: _____ TRANSPORT NO.: _____

TIME OF BIRTH: _____ DOB: _____ BIRTH WEIGHT: _____ GESTATION: _____

THERMAL MANAGEMENT TOOL FOR INFANTS <32 WEEKS GESTATION OR <1500 GMS BEFORE & DURING TRANSPORT (IN THE FIRST FEW DAYS OF LIFE)
(This tool can also be adapted for use with other infants as required)

THE GOAL: Prevent/treat HYPOTHERMIA (<36.5°C) and Avoid HYPERTHERMIA (>37.5°C)

THERMAL MANAGEMENT

From Birth - Before Transport

- All infants <32 weeks gestation to be placed in a Polyethylene Wrap/Bag/‘Neohelp’ at birth and a Cap placed on their head for transfer to the Neonatal Unit.
- Infants < 29 weeks gestation to remain in a Polyethylene Wrap/Bag/‘Neohelp’ if Environmental Humidity cannot be provided, while awaiting transport.
- Ideally, all infants to be nursed in a Closed Incubator utilising ‘Servo Controlled’ Thermal Support until the infant is transferred to the transport incubator. ‘PATIENT SET’ Temperature should always be set at Circa 37°C in this mode.
- Respiratory gases for infants on respiratory support to be heated and humidified.
- Promptly follow the actions enumerated below the graph on the opposite page if infant temperature readings are outside the Normothermic Range

During Transport

- For infants < 29 weeks gestation, reapply a Polyethylene Wrap/Bag/‘Neohelp’ for transport if it has been removed. (Omit this in infants > 5-10 days old if humidity is already discontinued).
- As the Transport Incubator cannot provide servo controlled heating, the ‘INCUBATOR AIR SET’ Temperature must be Manually Set and Adjusted to provide the appropriate heat for the infant. Preterm infants generally will require ACTUAL INCUBATOR AIR TEMPERATURES of 34.5°C-36.5°C, with extreme preterm infants needing air temperatures in the higher range.
- Respiratory gases for infants on respiratory support to be heated and humidified.
- Promptly follow the actions enumerated below the graph on the opposite page if infant temperature readings are outside the Normothermic Range

THERMAL MONITORING

- Continuous skin temperature monitoring to be commenced on admission to the neonatal unit/SCBU and to be continued throughout the transport process
- In addition to skin temperature, Axilla/Rectal temperature to be measured and recorded on admission and then hourly when temperature is within Normothermic range
- If outside the Normothermic Range, repeat Axilla/Rectal temperature every 30 minutes until temperature is within Normothermic Range x 2

Author: Ann Bowden, NNTP, 2021. This tool has been developed by the NNTP with reference to the “Neonatal Resuscitation Program (NRP) 7th Ed.” AAP, 2016) and “Temperature Management of Preterm Infants during Hospital Transfer after Birth”, by Dr K Cunningham (MD Thesis research study 2020, yet unpublished).

Please use this Graph to Record: 1. Skin Temp : 1/2 Hourly while Monitoring Continuously PLUS

2. Axilla /Rectal Temp: On Admission and 1/2 Hourly until Normothermic x 2

3. Axilla /Rectal Temp: On Admission and Hourly when Normothermic

Pink copy for Referring Hosp
Yellow Copy for Receiving Hosp
Original For NNTP

When the patient’s temperature readings are outside the Normothermic Range on this graph, please promptly follow the Actions enumerated below.



ACTION REQUIRED IF HYPOTHERMIC:

1. Ensure skin temperature probe is applied appropriately
2. Apply Cap
3. Apply polyethylene wrap if not already in use
4. Increase incubator set temperature (when not on servo mode)
5. Increase ambient room/ambulance temperature
6. Apply thermal mattress if all other measures not successful and infant temperature <35.5°C

ACTION REQUIRED IF HYPERTHERMIC:

7. Ensure skin temperature probe is applied appropriately
8. Remove thermal mattress
9. Remove Cap
10. Remove polyethylene wrap
11. Reduce incubator set temperature (when not on servo mode)