

### POLICY

Newborns are cared for in a neutral thermal environment (NTE) appropriate for their age and birth weight. Incubators provide a constant warm environment for thermoregulation:

- Of the newborn or
- While a newborn is receiving phototherapy treatment.

The duration of the newborn's stay in the incubator is at the discretion of the Registered Nurse (RN). The duration of the phototherapy treatment is in consultation with the Physician, when necessary.

Applicability: Care of the newborn in the incubator occurs in the postpartum area of the Acute Perinatal Program.

### PROCEDURE

The [Joey Bed Warmer](#) is the first choice for thermoregulation of the newborn and for newborn's thermoregulation while receiving phototherapy in the postpartum area.

#### 1.1 Gather Supplies

- Incubator
- Mattress and mattress cover
- Phototherapy lights, if required, see [Phototherapy](#) policy

#### 1.2 Preparation

Set the incubator temperature according to NTE table for age and birth weight, see 1.4.

- Initially, use the lower value of the range indicated by the NTE table

#### 1.3 Newborn Care and Monitoring

Place the newborn in the incubator, only in diaper:

- Position newborn in supine position at all times while in the incubator
- Check newborn is wearing eye protection at all times, when phototherapy treatment is being administered and phototherapy lights are turned on.

**Monitor** the incubator temperature every hour and document hourly.

- Monitor newborn temperature every hour for the initial three (3) hours by axilla.
- Adjust the incubator NTE temperature value until newborn's temperature is stable.
- After 3 hours of stable observations, monitor the newborn's temperature at each feeding, (approximately every three to four hours) and as necessary.

**Note:** A single temperature is not a full assessment of the thermal environment of the baby.

#### Conditions for which the below temperature ranges apply:

- Draft-free surroundings
- Incubator air temperature measured directly over the baby's chest
- Single-walled incubator

**1.4 Incubator Temperature Ranges for a Neutral Thermal Environment (C)**

<b>Age</b>	<b>1500 - 2000 grams</b>	<b>2000 - 2500 grams</b>	<b>2500 grams plus 36 weeks</b>
0 – 6 hour (hr)	35.7 - 34.2	34.8 - 33.6	34.8 - 32.7
6 – 12 hr	35.7 - 34.1	34.8 - 33.0	34.8 - 32.0
12 – 36 hr	35.6 - 34.1	34.7 - 32.5	34.7 - 31.6
24 – 36 hr	35.5 - 34.0	34.7 - 32.3	34.4 - 31.2
36 – 48 hr	35.4 - 33.9	34.6 - 32.0	34.2 - 31.0
48 – 72 hr	35.2 - 33.6	34.4 - 31.8	34.1 - 30.6
72 – 96 hr	35.1 - 33.5	34.2 - 31.7	33.6 - 30.2
4 - 5 days	35.0 - 33.3	34.1 - 31.6	33.4 - 29.9
5 - 6 days	34.9 - 33.2	33.9 - 31.6	33.1 - 29.8
6 - 8 days	34.8 - 33.0	33.8 - 31.6	32.5 - 29.3
8 - 10 days	34.6 - 32.8	33.5 - 31.6	32.5 - 29.3
10 - 12 days	34.4 - 32.7	33.4 - 31.6	32.0 - 29.3
12 - 14 days	34.3 - 32.6	33.3 - 31.6	31.4 - 29.3

C = ( celsius)

**DOCUMENTATION**

- Interprofessional Progress Notes
- Newborn Clinical Path
- Special Clinical Record

**REFERENCES**

[Joey Bed Warmer](#). (2011). NN.15.02. Neonatal Program BCW.

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[Phototherapy](#)

Sherman TI; Greenspan JS; St. Clair N; Touch SM; Shaffer TH; Neonatal Network, (2006 Jul-Aug). 25 (4): 251-65.

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