**Infant incubator**

**Definition :**

Infant incubator is a Bio Medical Device which provides Warmth, Humidity and Oxygen all in a controlled environment as required by the New born.

**Indications:**

Premature baby or full term baby with critical illness .

**Advantages :**

* It provides the closest environment to that of the mother’s uterus .
* Temperature at a uniform airflow and the Humidity can be controlled to the desired level .
* It protects the baby from all the disturbances and infection in the NICU.

**Disadvantages:**

* The disadvantage is that since the baby lies in a closed hood it is difficult to accesses the baby for medical procedure or care.

**Cleaning the Incubator:**

Some manufacturers suggest cleaning the incubator every day with a mild soap water solution, some don't. But at least the incubator has to be cleaned and disinfected thoroughly.
   after each change of infant
   at least once a week.

**Incubator Preparation :**

* Check the Incubator exterior especially the plexi glass for any signs of damage.
* Check the braking system in the wheels work properly.
* Check that the access ports can be opened and closed properly and limit opening of large door as this interferes with air temperature.
* Switch on the machine.
* Check whether the Manual and Servo mode can be selected.
* Check the switch for Selection of Temperature unit (Centigrade or Farenheit)
* Check whether the set Temperature can be raised and lowered.
* Check whether the set Humidity can be raised and lowered. (Is utilized for incubator care of preterm babies only – NOT required for babies >32weeks)
* In Servo mode remove the Skin Temperature probe and check whether the Probe Fail alarm sounds.
* With the machine switched on disconnect the main power supply and check whether the Power Failure Alarm sounds.
* If ambient temperature is higher than the set value then Incubator will be ineffective.
* When oxygen is administered always check the level using an independent oxygen monitor Safety .
* Pre-warmed to a temperature appropriate to the infant’s age, size and condition. Default incubator temperature in NICU is 35 degrees
* Adjust the incubator temperature by no more or less than 0.5 of a degree at a time.
* Re-check the temperature within half an hour of making any adjustment.
* Monitoring
* Check and record the incubator temperature hourly.
* Maintain axilla temperature between 36.5°C and 37.2°C
* Do not place the Infant Incubator in direct sunlight or other source of light as it might overheat the infant.
* Do not leave any patient inside the Incubator unattended for a long time.
* Ensure baby is nursed naked apart from a nappy.
* Explain to parents/caregivers the purpose of an incubator for their baby
* Maintain a quiet environment
* There is no tapping on the canopy.
* No equipment is placed on top of the canopy.

<http://www.srmuniv.ac.in/sites/default/files/downloads/unit_1_incubator_radiant_warmer_phototherapy_unit.pdf>

<http://www.adhb.govt.nz/newborn/Guidelines/Admission/BabyInIncubator.htm>

<http://www.who.int/medical_devices/innovation/incubator_infant.pdf>