HEAD BOX OXYGEN

To provide adequate supplemental oxygen to maintain an infant’s oxygen saturation’s in the required range, in infants with an oxygen requirement not requiring assisted ventilation.

EQUIPMENT

- Appropriate size head box
- Oxygen high flow meter
- Air high flow meter
- Oxygen and air tubing
- Oxygen analyser
- Oxygen saturation monitor
- Humidification if care ongoing

1. Calibrate oxygen analyser prior to the commencement of head box oxygen and at the commencement of each shift as per instructions on side of analyser. Ensure that the head of the oxygen calibrator is positioned close to the infant’s face.

2. Set up head box, pre blend oxygen and air to the desired concentration. Ensure that there is a minimum flow rate of between 6-8L/min. This prevents a build up of harmful levels of carbon dioxide.

3. Position the infant prone if appropriate, utilising appropriate positional aids as this splints the chest wall improving lung capacity, therefore increasing tidal volumes.

4. The infant should have continuous oxygen saturation monitoring when headbox oxygen is being administered. Ensure ongoing monitoring and assessment of respiratory rate and effort, and blood gas analysis, and report any deterioration in condition.

5. Gases delivered to the infant should be directed away from the infant’s head to prevent the infant from becoming cold. A hat should also be placed on the infant’s head if temperature regulation is problematic.

6. If the head box needs to be removed for any procedures, ensure that the infant has an adequate supply of oxygen via nasal cannulae or O2 by mask.

7. If the infant is being nursed in an incubator with head box oxygen, it is not necessary to run cot oxygen simultaneously; the above requirement should be followed if the head box is removed.

NASAL CANNULA OXYGEN (PBF)

To provide supplemental oxygen to infants with a stable ongoing oxygen requirement not needing ventilation.
EQUIPMENT
- Low flow oxygen meter
- Appropriate size nasal prongs
- Skin protection tape / tape to secure prongs to face

PROCEDURE
1. Apply skin protection to face.
2. Connect nasal prongs to oxygen supply and dial up required flow on meter.
3. Place nasal cannula onto infants face ensuring the cannula are pointing downward to follow the natural curve of the nostrils.
4. Maintain SaO2 as per protocol.
5. Check and document flow hourly and at any time the infant deteriorates.