CHEST PHYSIOTHERAPY

To assist with clearance of secretions in specific pulmonary conditions. The decision to use chest physiotherapy is individualised commenced and performed by a physiotherapist on referral from a medical officer.

INDICATIONS
Lung collapse on CXR or Aspiration on CXR

CONTRAINDICATIONS
- Unstable infant, low blood pressure, apnoeas, bradycardias or severe desaturation on handling.
- Recent IVH
- Hypothermia
- Recent pneumothorax and risk or reoccurrence
- Pulmonary haemorrhage
- Thrombocytopenia
- Evidence of osteopenia on Xray

KEY POINTS
The physiotherapist will liaise with the nurse caring for the infant to organise the appropriate time for treatment. A nurse must be in attendance at all times during physiotherapy to attend to the infant’s needs and make ventilator changes.

PROCEDURE
- If infant is on continuous feeds, turn feed off 10 mins prior to treatment.
- Observe HR and oxygen saturation
- Observe ventilator settings and modality: if on SIPPV/PSV reduce the sensitivity of trigger from 1.0 to 1.6 to avoid triggering due to artefacts like manual vibration.
- Auscultate and perform suction as necessary.

Gravity assisted drainage position (GADP): Position infant according to affected lung segments to be treated under the direction of the physiotherapist. Gravity is used to facilitate mobilisation of secretions towards the trachea. Can be used when secretions are thin. No head down position to be used as this raises intracranial pressure and augments gastro-oesophageal reflux. (GOR)

Vibration: Infant is placed in GADP. Fingers cupped around the chest. Apply gentle vibrations with minimal compression in time with the ventilator expiratory phase or expiration. Other hand supports the infant’s head.
Do not use vibrations on infants <28 weeks GA or < 800 grams at time of intervention. Vigorous vibrations can cause rib fractures.

**Percussion:** Used to loosen tenacious secretions. Place infant in GADP. Tap with fingers or facemask over affected area of the lung, followed by vibrations. Hold the infant’s head to prevent shaking. Do not use percussion on infants < 33 weeks GA or < 1200 grams at time of intervention. Vigorous percussion may cause encephaloclastic porencephaly.