SURFACTANT ADMINISTRATION

(see Delivery room management and resuscitation guideline)

'All babies born at less than 30 weeks gestation, thought to be at significant risk of developing RDS, should be given surfactant at birth if they need intubation as this has been shown to be associated with improved survival and morbidity outcomes.' (Soll and Morley, 1998).

1. **All** intubated babies at or below 30/40 are eligible for early surfactant administration.

2. The baby should be initially stabilised on labour ward before transfer to UNIT.

   If intubation is required an endotracheal tube (ETT) may be pre-cut to the appropriate length for the estimated weight (See table below).

Gestational age	Estimated mean birthweight	Length of ETT at gums
24-26/40	<1kg	6cm
27/40	1.1kg	6.5cm
28/40	1.2kg	7cm
29/40	1.3kg	7cm
30/40	1.5kg	7cm

   SaO_2, RR , HR and temperature should be monitored as soon as possible after delivery.

   Surfactant should not usually be given on labour ward.

1. Transfer to UNIT as quickly as possible.

2. On UNIT the position of the ETT should be confirmed by visible bilateral equal chest movement and on auscultation.

3. Establish HR, RR and oxygen saturation monitoring as quickly as possible and optimise oxygenation. SaO_2 should maintained at 92-97%

4. Position the head in the mid-line for administration of curosurf.

5. Curosurf should be given within the first hour following delivery. A chest x-ray is not necessary if the ETT position has been confirmed by an experienced paediatrician.

6. Curosurf should be given via the ETT in one bolus via a nasogastric tube through

the port proximal to the ETT. Sterile gloves, blade, nasogastric tube on a sterile field should be used to prepare the curosurf bolus (remember, the tape measure is **not** sterile). The doses of curosurf to be given are equivalent to 100mg/kg (see table below).

Gestational age	Estimated mean birthweight	Dose of curosurf
24-26/40	<1kg	100mg
27/40	1.1kg	110mg
28/40	1.2kg	120mg
29/40	1.3kg	130mg
30/40	1.5kg	150mg

1. Once curosurf has been given the administrator should remain at the cot side to manipulate the ventilation requirements as the effect can be almost instantaneous.
2. As soon as possible after administration arterial access should be achieved and a chest x-ray requested.