MECONIUM STAINED LIQUOR

BACKGROUND
- Meconium stained liquor occurs in 10–20% of deliveries, increasing to over 30% after 42 weeks' gestation
- Meconium aspiration syndrome occurs in 2–5% of babies born through meconium stained liquor
- Significant meconium at onset of labour carries the worst prognosis and is associated with five or seven-fold increased risk of perinatal death

DEFINITION
Significant
- Dark green or black amniotic fluid that is thick or tenacious or any meconium-stained amniotic fluid containing lumps of meconium

Light
- Staining of lesser severity

MANAGEMENT
- Continuous electronic fetal monitoring (EFM) is advised for women with significant meconium stained liquor – see Electronic fetal monitoring guideline

Not in labour
- If mother not in labour and thick meconium present, arrange induction of labour

In labour
- If no signs of fetal distress, augment labour
- Whatever the degree or time of passage of meconium, risks associated are increased. If fetal heart rate abnormalities also present, perform fetal blood sampling – see Fetal blood sampling guideline
- When delivery imminent, call neonatologist and/or advanced neonatal nurse practitioner according to local practice

RESUSCITATION OF BABIES BORN FROM MECONIUM STAINED LIQUOR

Ensure resuscitation equipment is checked and ready for use before delivery

Active baby
- If baby crying and active at birth:
  - dry and cover to avoid hypothermia
  - do not aspirate airways
  - neonatologist does not inspect larynx or aspirate trachea (unnecessary intubation and lower airway suction does more harm than good)

Floppy baby
- If baby floppy, pale and makes no immediate respiratory effort at birth, call neonatal team (if not already present) – see Neonatal resuscitation guideline or follow local guidance
- Obtain arterial and venous cord blood to assay pH and blood gases – see Umbilical cord sampling guideline and record values in maternal healthcare record and, if local practice, in neonatal notes
Postnatal observations

- For any baby delivered with a history of significant meconium, perform the following observations at 1 and 2 hr of age and then 2-hrly until 12 hr of age. Document in neonatal observations chart:
  - general wellbeing
  - chest movement and nasal flare
  - skin colour including perfusion by capillary refill
  - feeding
  - muscle tone
  - temperature
  - heart rate and respiration
- If light meconium staining occurred, observations for baby as above at 1 and 2 hr of age and document in neonatal observations chart
- If baby's condition causes concern at any time, review by neonatologist