

## Guideline for the Management of a Baby with Meconium Present at Delivery

<b>Key Document code:</b>	WAHT-KD-015
<b>Key Documents Owner:</b>	Anna Gregory
<b>Approved by:</b>	Neonatal Guidelines Review Meeting
<b>Date of Approval:</b>	11 <sup>th</sup> November 2022
<b>Date of Review:</b> <b>This is the most current version and should be used until a revised document is in place</b>	11 <sup>th</sup> November 2025

### Key Amendments

Date	Amendments	Approved by
3 <sup>rd</sup> Nov 2021	Stop routinely suctioning under direct vision if baby not making respiratory effort at delivery, start using standard NLS algorithm as with all other babies	Neonatal Development meeting
November 2022	Document approved for 3 years with no amendments	Dr Gregory/ Neonatal Guidelines Review Meeting

## INTRODUCTION

Whilst the approach to neonatal resuscitation is standardised as much as possible, it is important to understand that in some situations a slightly different approach may be needed. The majority of babies born through meconium stained liquor will be healthy and vigorous at delivery, but a small number of infants born with significant meconium staining will be asphyxiated and potentially at risk of meconium aspiration. This guideline aims to help the paediatrician or midwife identify the most appropriate intervention.

The patients covered by this guideline are newborn infants delivered in hospitals within the Worcestershire Acute Hospitals NHS Trust.

### THIS GUIDELINE IS FOR USE BY THE FOLLOWING STAFF GROUPS:

Staff with basic training in neonatal resuscitation (either attendance at a neonatal resuscitation workshop, NLS provider status or compliance with your Royal College recommendations if different).

Management of a newborn with meconium-stained liquor present at birth should follow current Resuscitation Council UK guidance:

### NLS Recommendation

*Lightly meconium stained liquor is common and does not usually give rise to much difficulty during transition. The less common finding of very thick or particulate meconium-stained liquor at birth is an indicator of perinatal distress.*

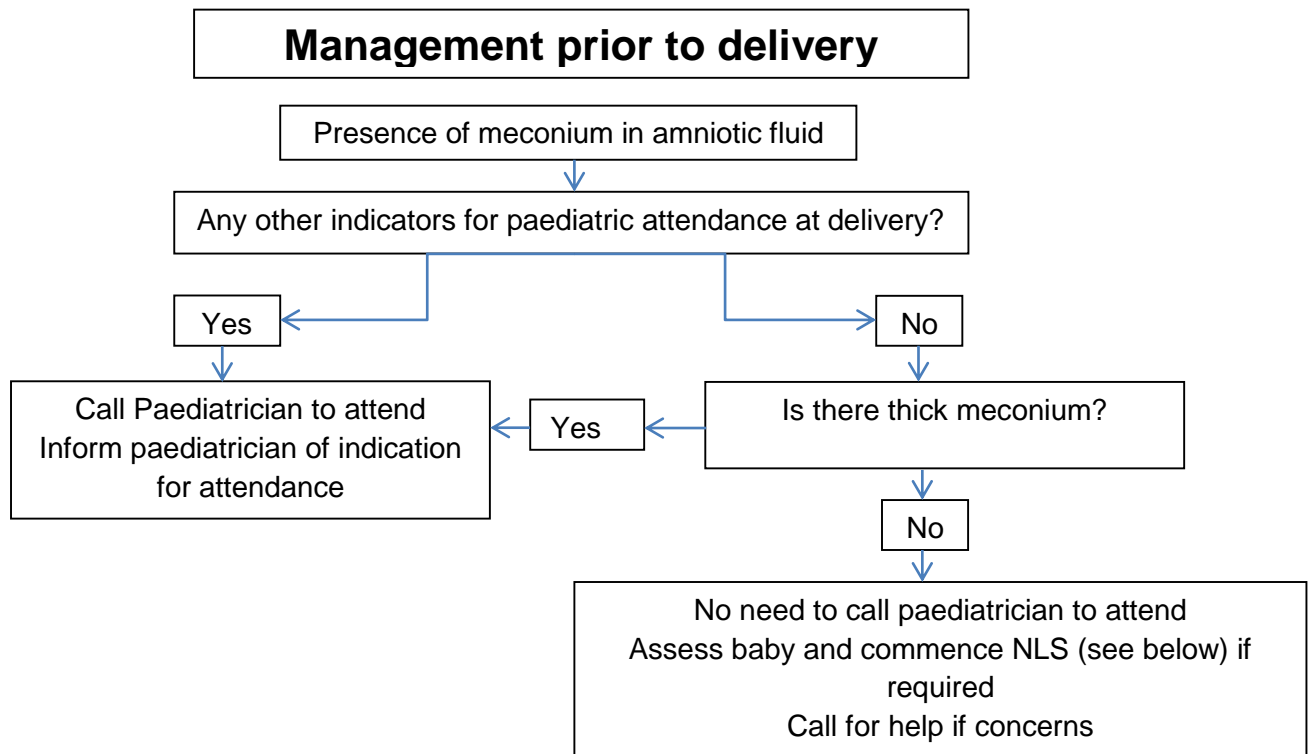
**WAHT-KD-015**  
**Neonatal Key Documents**

*Most babies born through meconium-stained liquor have not inhaled any particulate material into the lower respiratory tract. If they have not done so as a result of anoxic gasping before birth, they will only very rarely do so at birth. Suction of the baby's airways on the perineum or routine suction after delivery is not recommended. In a bradycardic baby, the emphasis must be to inflate the lungs within the first minute after birth and this should not be delayed. Do not inspect the oropharynx or suction the trachea until you have attempted and been unable to inflate the chest despite standard airway opening manoeuvres. There is no evidence to support routine tracheal suctioning in this situation. If you fail to inflate the lungs and you strongly suspect airway obstruction, inspect the airway under direct vision.*

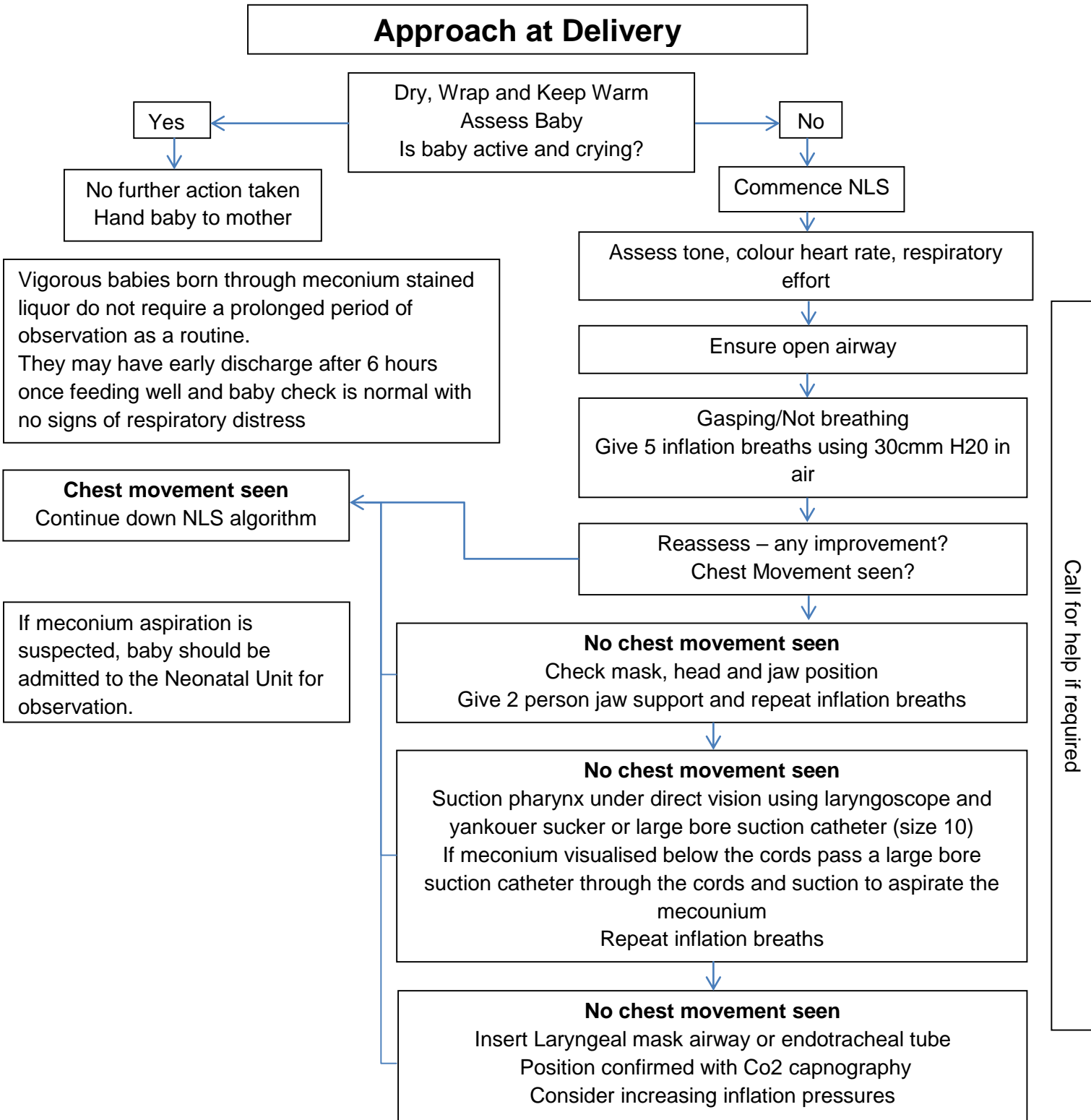
When the presence of meconium is identified in amniotic fluid, staff present at the birth will use their clinical judgement to assess whether there are any other indications for a paediatrician to attend delivery- suspected fetal compromise, preterm infant for example. In the presence of thick (particulate) meconium, a paediatrician will be contacted and asked to attend the birth.

If the baby is vigorous and crying at birth, there is no indication to suction the oropharynx or trachea. If the baby is in poor condition with no spontaneous breathing initial efforts should still be focussed on good airway positioning and inflating the chest with inflation breaths. Only when this is unsuccessful despite good mask placement and airway positioning should oropharyngeal and tracheal suctioning under direct vision be considered - see algorithm.

Actions taken during resuscitation should be documented in the neonatal records along with postnatal ward management plans as required.



## Approach at Delivery



**WAHT-KD-015**  
**Neonatal Key Documents**

**MONITORING TOOL**

How will monitoring be carried out?

Prospective audit of notes following requests for paediatrician at delivery for thick meconium.

Who will monitor compliance with the guideline?

Paediatric clinical governance group.

STANDARDS:

Added Item	%	Exceptions
Paediatrician called for delivery in the presence of thick meconium	100	Born before arrival of health professional or home birth

## REFERENCES

1. Halliday HL, Sweet DG. Endotracheal intubation at birth for preventing morbidity and mortality in vigorous, meconium-stained infants born at term. Cochrane Database of Systematic Reviews 2001, Issue 1. Art. No.: CD000500. DOI: 10.1002/14651858.CD000500
2. Wiswell TE: Delivery room management of the apparently vigorous meconium stained neonate: results of the multicenter collaborative trial, Ped Res 43: 203a; 1998.
3. Fuloria M, Wiswell TE: Managing meconium aspiration, Contemporary Pediatrics. Apr.1, 2000.
4. UK Resuscitation Council: Newborn Life Support 5<sup>TH</sup> Edition 2021
5. Intrapartum care for healthy women and babies NICE CG190 pub Dec 2014 updated Feb 2017
6. Nangia S, Thukral A, Chawla D. Tracheal suction at birth in non-vigorous neonates born through meconium-stained amniotic fluid. Cochrane Database of Systematic Reviews 2021, Issue 6. Art. No.: CD012671. DOI:10.1002/14651858.CD012671.pub2.