Frimley Health
NHS Foundation Trust

Newborn Life Support Guideline

Key Points

- The purpose of this guideline is to provide direction and guidance for all health professionals involved
- The key to a successful resuscitation is adequate preparation
- All resuscitation equipment, in all care settings, must be maintained in a state of readiness at all times
- Almost all babies needing help at birth will respond to successful lung inflation with an increase in heart rate followed quickly by normal breathing

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Abbreviations

ANNP	Advanced neonatal nurse practitioner
BLS	Basic Life Support
CMW	Community midwife
CPAP	Continuous positive airway pressure
ETT	Endotracheal Tube
LMA	Laryngeal Mask Airway
NLS	Newborn Life Support
PEEP	Positive End Expiration Pressure
PIP	Positive Inspiratory Pressure

Contents

1. Purpose of the Guideline

Passage through the birth canal is a hypoxic experience for the fetus, since significant respiratory exchange at the placenta is prevented for the 50-75 second duration of the average contraction. Though most newborns tolerate this well, the few that do not may require help to establish normal breathing at delivery. The majority of these newborns require supported perinatal transition rather than resuscitation.

1.1 Newborn Life Support (NLS) is intended to provide this help and comprises the following elements:

- Drying and covering the newborn to conserve heat, where possible facilitate delayed cord clamping
- Assessing the need for any intervention
- Opening the airway
- Inflation breaths
- Ventilation breaths
- Chest compression
- Administration of drugs (rarely)

1.2 This NLS guideline fully supports the recommendations for clinical practice and training in newborn life support published by the Resuscitation Council UK (2021).

1.3 The purpose of this guideline is to provide direction and guidance for all health professionals involved in newborn resuscitation including the equipment required; resuscitation procedure; and the process for ensuring the availability of clinicians with advanced newborn life support skills. This guideline is for use by all clinicians involved in the resuscitation of the newborn.

The Guideline

2. Roles and Responsibilities

Midwife - To assess newborn's condition at birth, call for appropriate help; commence NLS, document events, verbal handover to neonatal team. If time, please ensure fully aware of all plans for birth and the neonate.

Neonatal team - To attend neonatal emergency in the hospital, perform NLS, and advanced resuscitation as appropriate, document events and communicate with the parents and midwifery team.

Further roles and responsibilities are explained in Section 3.4 – Availability of Key Personnel

3. Resuscitation Staff and Equipment

3.1 Designated Link Consultant Neonatologist

There is a designated named link Consultant Neonatologist for the Labour Ward that is responsible for the clinical standards in relation to care of the newborn. The designated link Consultant Neonatologist:

- Is a member of the Labour Ward Forum
- Liaises regularly with the Practice Development Team with regard to the provision of Newborn Life Support training
- Works with the Obstetric Clinical Governance Group to develop and implement key policies and guidelines to ensure the provision of quality neonatal care
- Meets regularly with the Neonatal Lead Nurse and Care Group Manager to discuss neonatal service provision

3.2 Resuscitation equipment

3.2.1 Resuscitation equipment is available in the following care settings:

Wexham Park Hospital	Frimley Park Hospital
Labour Ward • Fully stocked Resuscitaires x6 with oxygen and air cylinders. • Fully stocked Neonatal Resuscitation Trolley x1 Labour Ward and x1 Elective/Emergency Theatres • Neonatal Emergency drug box	Labour Ward • Fully stocked Resuscitaires x 11 • Fully stocked Resuscitaires x 1 Recovery (without blender) • Fully stocked Resuscitaires x 2 Operating theatre
Juniper Birth Centre • Fully stocked Resuscitaire x1 with oxygen and air cylinders	Mulberry Birth Centre • Fully stocked Resuscitaire x1 with oxygen and air cylinders
Ward 22 (postnatal ward) • Fully stocked Resuscitaire x1 with Oxygen and Air cylinders • Neonatal Emergency drug box	Antenatal Ward • Access Resuscitaire on Postnatal Ward
Ward 21 (antenatal ward) • Fully stocked Resuscitaire x1 with Oxygen and Air cylinders • Neonatal Emergency drug box	• Postnatal Ward Fully Stocked Resuscitaire (without Blender) • Neonatal Emergency Drug Box.
MAC • Fully stocked Resuscitaire x1 with Oxygen and Air cylinders	
Community Midwives – for a full list of equipment, refer to the Homebirth guideline	Homebirth team/Community Midwives – for a full list of equipment, refer to the Homebirth guideline
Emergency Department • Neonatal Resuscitation Crash Trolley (3kg +) • Bag valve mask • Oxygen	Emergency Department • Fully stocked Resuscitaire x2 with Oxygen and Air cylinders

3.3 Emergency Equipment Checking, Replenishment & Cleaning

3.3.1 All resuscitation equipment, in all care settings, must always be maintained in a state of readiness. Resuscitaires and the neonatal resuscitation trolleys should be checked by an appropriately trained member of staff at least once in every 24 hours and/or immediately before and immediately following delivery by using the standardised check list on MyKitCheck My Kit Check - compliance at your fingertips. All staff are responsible for having and maintaining their own MyKitCheck login.

3.3.2 The Resuscitaires and neonatal resuscitation trolleys must be stocked in accordance with the standardised list which is attached to the equipment. All Resuscitaires need to be stocked in accordance with MyKitCheck checklist.

3.3.3 Each midwife in the community/homebirth team is responsible for checking their on-call equipment at the start of their shift whenever they are on call. This check must be documented either in a small notebook to be held in the bag (for bags with multiple users) or within the CMW's/Homebirth midwives diary (for those who have their own on-call bag which is not shared) (WPH). At FPH, community midwives sign the monthly equipment check log which is handed to the community matron. If there is any fault, this must be reported immediately, and replacements sought. If a suitable replacement is not available for unforeseen exceptional circumstances, then the homebirth service may need to be suspended to ensure patient safety.

- Disposable items must be replenished at the earliest opportunity from the central storage area on the relevant site.
- Non-disposable items must be de-contaminated / cleaned in accordance with TPP124/6 Ward Environment and Equipment Disinfection Procedure and re-instated to the trolley as soon as practical. A replacement must be provided in the meantime.
- Pharmacy items must be replenished from pharmacy in working hours or from the emergency drug cupboard outside of pharmacy hours.

See **Appendix 1** check lists.

3.4 Availability of Key Personnel

3.4.1 Clinicians with newborn life support skills

Clinicians with newborn life support skills must be available in areas where neonatal resuscitation may be required. The Trust maternity services have identified the following clinicians and processes for ensuring the availability of key personnel:

3.4.2 Midwives

- All midwives must have annual mandatory training in Newborn Life support and neonatal resuscitation scenarios.
- Midwives should be encouraged and supported to attend the UK Resuscitation council Newborn Life Support Course.
- Midwives are trained in the use of the Resuscitaire as part of their training and on commencement of employment.
- Annual mandatory Newborn Life Support training includes use of the Resuscitaire.
- Prior to delivery, the midwife must request the presence of a suitably trained Neonatal team member or practitioner competent in Newborn Life Support for example an

Advanced Neonatal Nurse Practitioner (ANNP) if there are concerns regarding the condition of the fetus.

- If it is anticipated that the baby may be born in poor condition and may require resuscitation at birth, the midwife must request the presence of a neonatal team which includes a middle grade doctor or ANNP.

3.4.3 Neonatal Junior Medical Staff (Tier 1 doctor)/ANNP

- All neonatal team members receive mandatory training in neonatal BLS and neonatal resuscitation scenarios as part of the local induction programme and must attend annual mandatory training updates whilst working within the Trust.
- All neonatal team members are trained in the use of the Resuscitaire as part of the local induction programme and the annual mandatory training updates.
- If it is anticipated that the baby is likely to be severely compromised at birth, the neonatal Tier 2 doctor should be called in addition.

3.4.4 Neonatal Registrar

- All neonatal registrars are experienced in advanced newborn life support skills, including endotracheal intubation and must attend mandatory annual MDT training whilst working within the trust.
- There is a 24 hour on call neonatal registrar rota.
- The neonatal registrar must attend deliveries if requested.

3.4.5 Neonatal Consultant

- There is a consultant rota ensuring 24-hour cover for the Labour Ward.
- Monday - Friday (WPH: 09.00-17.00 and FPH: 09.00 to 21.00) the neonatal consultant of the day will provide emergency cover for the Labour Ward and is available via bleep.
- Out of hours the on-call consultant will provide emergency cover for the Labour Ward and will be available within 30 minutes of being called. The on-call consultant is contactable via switchboard. This will ensure 24-hour availability on site of a clinician competent in advanced newborn life support skills.
- The Neonatal Consultant rota is available on the Labour Ward and the Labour Ward Co-ordinator will ensure that the staff allocation and bleep numbers on the handover board is kept up to date.
- All consultants must attend mandatory annual MDT training whilst working within the trust.

3.5 When and how to call the Neonatal team

To contact the neonatal team the internal bleep system should be used. The neonatal team ST2 and Registrar carry a baton bleep and the numbers should be readily available on the boards in ALL clinical areas. If they are required urgently the emergency bleep system should be used on *2222* and state *Neonatal emergency*. Consultants are available via switchboard out of hours.

3.5.1 On admission

In the following conditions, plans may need to be made before delivery so early notification to the neonatal registrar is essential:

- Premature labour (<34 weeks)
- Haemolytic disease
- Major malformation
- Narcotic addiction / child abuse / some mental health-medications

3.5.2 Neonatal SHO for delivery

- Preterm labour <35 weeks
- Presumed fetal distress
- Significant meconium, in the absence of fetal distress
- Instrumental deliveries
- Caesarean sections Category 1 and 2. Not required to be present for category 3 or elective caesarean sections unless there is a breech presentation, transverse, unstable lie, or multiple pregnancy. Please alert Neonatal SHO to standby if the woman is having a general anaesthetic.
- Fetal abnormalities and haemolytic disease
- Maternal psychotropic drugs/ narcotic addiction/heavy analgesia
- Others at request of Obstetrician or Midwife.

3.5.3 Neonatal Registrar

also to be called for:

- Preterm <34 weeks
- Multiple pregnancy <35 weeks or with fetal distress
- Severe haemolytic disease / fetal abnormalities
- Vaginal breech presentation vaginal or caesarean delivery
- Anticipated poor condition of baby at birth, e.g., severe fetal distress
- Category 1 Caesarean Section
- Significant meconium in the presence of fetal distress.

For full details, see Immediate Care of the Newborn guideline.

4. Preparation for Resuscitation

The key to a successful resuscitation is adequate preparation. If there are concerns during labour regarding the condition of the fetus, preparations must be made for resuscitation at birth:

- A suitably trained clinician, dependent on situation, must be called prior to delivery.
- Resuscitation equipment must be checked before each use as equipment failure would seriously compromise resuscitation.
- Ensure the Resuscitaire heater is switched on.
- Always have a spare laryngoscope, LMA or iGel, Endotracheal Tube (ETT) a size bigger and smaller.
- Aim to use an LMA/iGel size 1, ETT size 3cm or 3.5cm (2.5cm preterm) as ventilation is better achieved.
- Check T piece and ventilation settings – Positive Inspiratory Pressure (PIP) 30cm for term infant and 25cm for preterm and use Positive End Expiration Pressure (5 cm Water) (PEEP).
- Set the O2 on the blender at 21% for babies above 32/40's, between 21-30% for babies 28-32 weeks (depending on history and condition), less than 28 weeks set at 30%.
- Check Ambubag blow off valve and appropriate size mask.
- Check suction and availability of a wide bore suction catheter ideally baby Yankauer.
- Check clock is working and set to zero.
- A stethoscope, oropharyngeal airways and an Umbilical Venous Catheter set is available.
- Ensure warm towels and hat available for baby, reduce draughts.

4.1 Initial assessment of newborn

Start the clock as soon as the infant is born.

- Dry, remove wet towels and cover with warm towels. Apply a hat on the baby. During this period, it is possible to assess the baby and decide what is required, this initial assessment should usually occur before the cord is clamped and cut.
- For uncompromised term and preterm infants, a delay in cord clamping of at least one minute from the complete birth of the infant is recommended. For infants requiring resuscitation, resuscitative intervention remains the priority. In order to provide assistance, the baby may need to be moved; this in turn, may require clamping and cutting the cord. If the baby is limp or very pale, has a very slow heart rate (less than 60 min) or is making no effort to breathe, transfer the baby to the resuscitation area.
- Assess: Breathing, Heart Rate, Colour and Tone.
- Follow Newborn Life Support Guidelines below and algorithm at **Appendix 2**
- At any time during the resuscitation call for more senior/experienced help if the situation is not improving
- Where possible consider starting oxygen saturation monitoring.

4.2 Airway

Before the baby can breathe effectively the airway **must** be open. Commence life support if the initial assessment the baby has not established adequate normal breathing or has a heart rate <100 bpm.

- The best way to achieve this is to place the baby on its back with the head in the **neutral position**, i.e., with the neck neither flexed nor extended. Most newborn babies will have a relatively prominent occiput which will tend to flex the neck if the baby is placed on its back on a flat surface. This can be avoided by placing some support under the shoulders of the baby but be careful not to overextend the neck.
- If the baby is very floppy it may also be necessary to apply chin lift or single- or two-handed jaw thrust if competent to do so.

4.3 Breathing

- If the baby is not breathing adequately by about 90 seconds **give 5 inflation breaths** using air.
- Until now the baby's lungs will have been filled with fluid. Aeration of the lungs in these circumstances is likely to require sustained application of pressures of 30cm H2O for 2-3 seconds with a PEEP of 5cm H2O – these are **'inflation breaths'** (25cm H2O in preterm babies with PEEP of 5cm H2O).
- % Oxygen - >32 weeks: 21%
  - 28-32 weeks: 21-30%
  - <28 weeks: 30%
- Apply O2 Saturation probe to baby's right hand.
- If the heart rate was below 100 beats/min initially then it should rapidly increase as oxygenated blood reaches the heart. If the heart rate does increase, then you can assume that you have successfully aerated the lungs.
- If the heart rate increases but the baby does not start breathing for themselves, then continue to provide regular breaths at a rate of about 30-40 per min until the baby starts to breathe on its own. Do this by delivering **ventilation** breaths of 1-2 seconds with the pressures the same-reassess the baby every 30 seconds.
- If the **heart** rate does not increase following inflation breaths, then either the lungs are not being aerated or the baby needs more than lung aeration alone. By far the most likely reason is that the lungs are not being aerated effectively. **If the heart rate does not increase, and the chest does not passively move with each inflation breath, then the lungs have not been aerated.**

Consider:

- Is the baby's head in the neutral position?
- Is a jaw thrust needed?
- Using some oxygen after checking O2 saturations
- Is a longer inflation time needed?
- Is a second person's help needed with the airway?
- Is there an obstruction in the oropharynx (laryngoscope and suction)?
- What about an oropharyngeal (iGel or Guedel) airway?

- Check that the baby's head and neck are in the neutral position, that the inflation breaths are at the correct pressure (30cm of water) and applied for the correct time (2-3 second inspiration), and that the chest moves with each breath.
- If the **chest still does not** move, ask for help in maintaining the airway and consider an obstruction in the oropharynx, which may be removable by suction under direct vision. An oropharyngeal airway may be helpful.
- A laryngeal mask airway (LMA) is an alternative means of establishing and securing an airway in babies of 34 weeks and above. This must be undertaken by personnel competent in the procedure with appropriate equipment. Otherwise continue with mask ventilation and call for help.
- An oropharyngeal airway is an alternative means of establishing and securing an airway, although it can increase airway obstruction in infants less than 34 weeks.
- **MECONIUM:** A screaming baby has an open airway, non-vigorous babies born through meconium-stained amniotic fluid are at significant risk for requiring advanced resuscitation and a neonatal team competent in advanced resuscitation may be required. Do not inspect the oropharynx or suction unless you have been unable to inflate the chest despite standard airway maneuvers. Use the standard NLS algorithm, if chest rise is not seen after 5 inflation breathes, reposition and delivering a further 5 inflation breaths, inspect the airway under direct vision.
- **Routine suctioning of the airway of non-vigorous babies is likely to delay initiating ventilation and is not recommended.**
- Without adequate lung aeration, chest compressions will be ineffective; therefore, where the heart rate remains very slow, confirm effective ventilation through observed chest movement before progressing to chest compressions.
- If the heart rate remains slow (less than 60 per min^{-1}) or absent after 5 effective inflation breaths and 30 seconds of effective ventilation, start chest compressions.

4.4 Chest compressions

4.4.1 Almost all babies needing help at birth will respond to successful lung inflation with an increase in heart rate followed quickly by normal breathing. However, in some cases chest compression is necessary.

- Chest compression should be started only when you are sure that the lungs have been aerated successfully.
- When starting chest compressions increase the inspired oxygen to 100%.
- Call experienced help if not already summoned.
- In babies, the most efficient method of delivering chest compression is to grip the chest in both hands in such a way that the two thumbs can press on the lower third of the sternum, just below an imaginary line joining the nipples, with the fingers over the spine at the back.
- Compress the chest quickly and firmly, reducing the antero-posterior diameter of the chest by about one third.
- **Use a synchronous technique with the ratio of compressions to inflations in newborn resuscitation is 3:1.**
- The ratio of 3:1 remains unchanged, regardless of how the airway is being managed-reassess every 30-60 secs-unless advised otherwise.

- Chest compressions move oxygenated blood from the lungs back to the heart. Allow enough time during the relaxation phase of each compression cycle for the heart to refill with blood. Ensure that the chest is inflating with each breath.

4.4.2 In a very few babies, inflation of the lungs and effective chest compression will not be sufficient to produce an effective circulation. In these circumstances drugs may be helpful.

4.5 Vascular Access if drugs required

Vascular access should be achieved via the umbilical vein, or intraosseous access.

- If using the umbilical vein, ensured a closed system to prevent air embolism during insertion should the baby gasp and generate negative pressure. Confirm the position of the blood vessel through aspiration of blood prior to administrating fluids/drugs. Clean, rather than sterile, access technique is sufficient in an emergency. The umbilical route may still be achieved some days after birth and should be considered in cases of postnatal collapse.

4.6 Drugs recommended in Resuscitation

Drugs are needed only if the HR remains below 60 bpm, despite effective lung inflation and chest compression.

- The drugs used are adrenaline (1:10,000), sodium bicarbonate (ideally 4.2%), and glucose (10%). They are best delivered close to the heart, usually via an umbilical venous catheter, intraosseous access is an acceptable alternative.

  - The dose for adrenaline is 20 microgram/ kg and should be administered first if possible

    0.2 mL / kg of 1:10,000 solution (1000 micrograms in 10 ml).
    Subsequent doses every 3-5 minutes if heart rate remains < 60 bpm.

  - The dose for sodium bicarbonate is between 1-2 mmol of bicarbonate per kg (2 to 4 mL / kg of 4.2% bicarbonate solution) by slow intravenous injection.

  - The dose of glucose recommended is 250 mg kg-1 (2.5 ml / kg of 10% glucose).

- Volume replacement with suspected blood loss or shock unresponsive to other resuscitative measures, the heart rate cannot increase because the baby has lost significant blood volume. Use of isotonic crystalloid rather than albumin is preferred for emergency volume replacement.
- A bolus of 10 mL / kg of group O Rh-negative blood or of sodium chloride 0.9% or similar given over 10 - 20 sec will often produce a rapid response and can be safely repeated if needed.

  In the absence of an adequate response consider other reversible factors (e.g., tension pneumothorax hypovolemia, equipment failure) or congenital abnormalities.

4.7 When to Stop Resuscitation

In a newly born baby with no detectable cardiac activity, and with cardiac activity that remains undetectable for 10 minutes, review clinical factors, effectiveness of resuscitation, and clinical teams' views about continuing resuscitation. The decision to continue resuscitation efforts beyond 20 minutes with no cardiac activity is often complex and may be influenced by issues such as the presumed cause of the arrest, the gestation of the baby, the presence or absence of complications, and the parents' previous expressed feelings about acceptable risk of morbidity, and all reversible causes have been excluded. This decision must be discussed with a senior Neonatologist.

There is a neonatal audit form from the Resuscitation department, and this should be completed and returned to the Senior Resuscitation Officer after each crash call and each occasion in which a baby requires more than 5 inflation breaths (see **Appendix 2**).

4.8 Placenta to histology

In cases where there has been prolonged resuscitation, poor cord blood gases or low Apgars requiring NNU admission or withdrawal of care at resuscitation, ensure the placenta is sent, correctly labelled, to histology.

5. Training

All training is expected to be in line with the Trust Policy, Maternity Training Needs Analysis and Skills & Drills (IP13). Neonatal resuscitation forms part of the multi-professional mandatory training programme.

6. Implementation Plan

The latest ratified version of this guidance will be posted on the Trust's Intranet site for all members of staff to view. A notice will be placed on the intranet and the 'In Touch' newsletter informing Maternity staff of version changes. New members of Maternity staff will be signposted to how to find and access this guidance at Trust Induction.

7 Monitoring compliance with this guideline

Audit and monitoring against the following auditable standards will be undertaken by a member of the Neonatal and/or Midwifery team and will be monitored by the Obstetric Clinical Governance Group (OCGG).

Auditable standards	Assurance	Frequency	Responsibility
There is a designated link Neonatal Consultant for the Labour Ward	Minutes of Labour Ward Forum	6 monthly	Labour Ward Forum
Resuscitation equipment is available and checked daily as per this guideline	Equipment Check	6 monthly	Lead Midwife Inpatient Services
There is 24-hour availability of a clinician with advanced neonatal life support skills	Neonatal Staff Rotas	6 monthly	Patient Safety and Clinical Governance Group

There is 24-hour availability, within 30 minutes, of a Neonatal Consultant	Consultant of the Day rotas R. L	6 monthly	Patient Safety and Clinical Governance Group
Staff receive mandatory training in Newborn Life Support as identified in the maternity services Training Needs assessment	Attendance records at local induction programmes Mandatory Training Programmes Skills and Drills Programmes Training Attendance Records	6 monthly	Patient Safety and Clinical Governance Group

Results of these audits will be presented to the Cross site Clinical Governance group, Labour Ward Forums and the Perinatal Mortality Meeting. Recommendations from the audit will be discussed at these meetings and where shortfalls in the expected standard have been identified a lead will be allocated and an action plan will be formulated as agreed by the Patient Safety and Clinical Governance group. The Patient Safety and Clinical Governance group will monitor compliance against the action plan which will remain an agenda item until completion.

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Appendix 1a: Resuscitaire Checklist, Wexham Park Maternity Unit
To be completed daily and after every use.
Please do not overstock

NHS Frimley Health NHS Foundation Trust

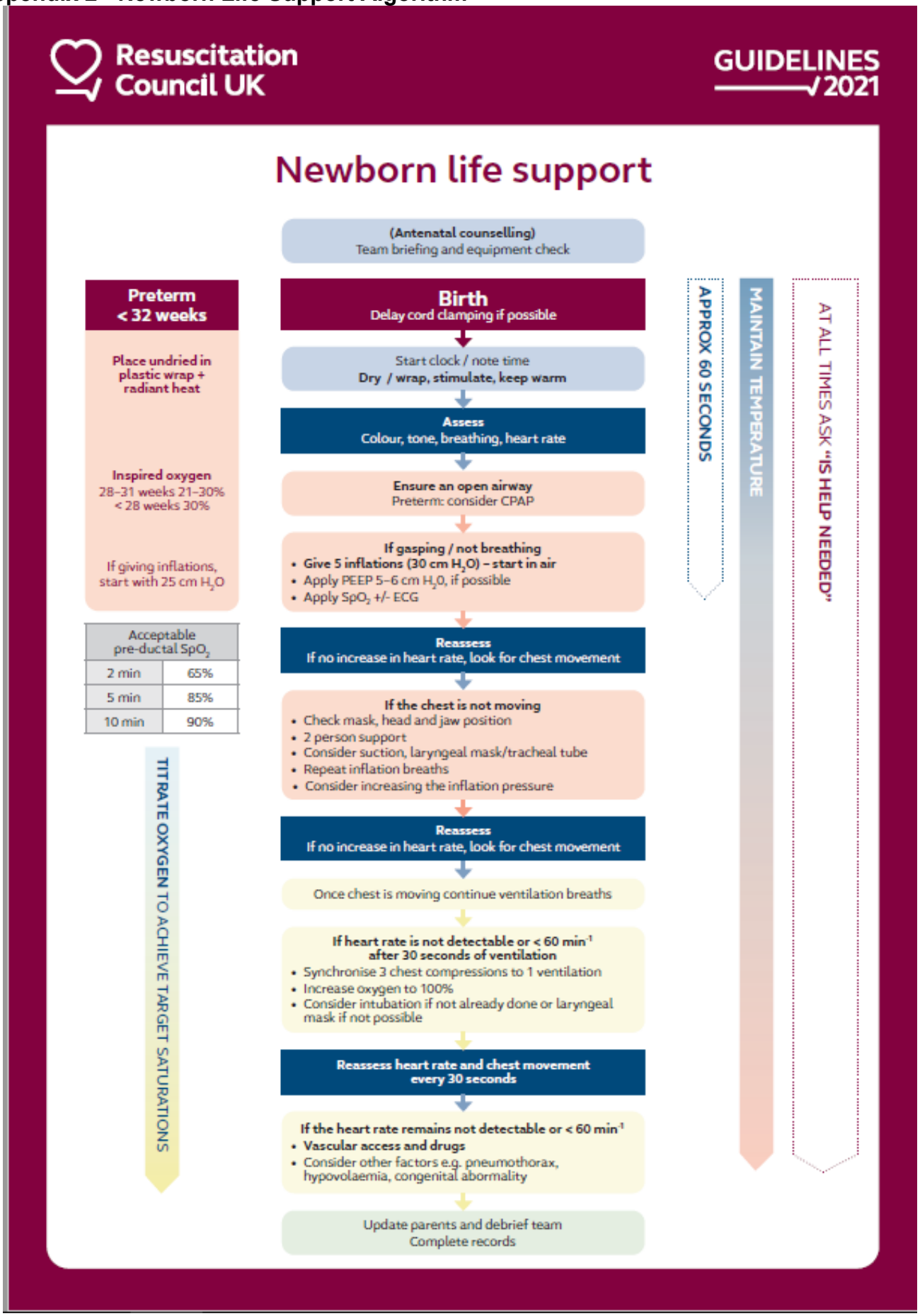
Resuscitaire :								
Date:								
Time:								
Spanner (for oxygen and air cylinder)								
Check oxygen cylinder – turn on and OFF								
Check air cylinder – turn on and OFF Ensure gauge measures >500 psi if less change cylinder								
Turn on overhead heat and light								
Turn on and check O2 sats monitor								
Check suction tube								
Check Apgar clock working								
Top								
Ambubag with medium mask attached								
Posey wrap								
O2 saturation probe (single use)								
T-Piece with medium mask attached Check Pressures (PIP 30 cm Peep 3-5 cm H2O)								
Laryngoscopes x 2, 1 large, 1 small-check working								
2 Towels								
Stethoscope								
Cord clamp and scissors								
Drawer – Tray								
Small and large face masks								
Neo-fit Neonatal Endotracheal Tube Grip								
Airways size 00, 0 & 1								
3 Knitted hats, different sizes								
1 Cord clamp and scissors								
Scissors – not sterile								
Temperature probe								
Drawer – main area								
Endotracheal Tubes – 1 each of sizes 2.0, 2.5, 3.0, 3.5, 4.0. I-Gel size 1 x 1								
2 Stylets/introducers								
1 T piece circuit as spare								
Alcowipes x 6								
Roll of Micropore								
Cord gas syringes x 2								
FPH – Green Emergency Drug Box								
Suction Drawer								
Suction catheters 2 each of blue, green and Yankauer								
SIGN								

Appendix 1b: Resuscitaire Checklist, Frimley Park Maternity Unit
To be completed daily and after every use via MyKitCheck.
Please do not overstock

NHS Frimley Health NHS Foundation Trust

Resuscitaire :							
Date:							
Time:							
Spanner (for oxygen and air cylinder)							
Check oxygen cylinder – turn on and OFF							
Check air cylinder – turn on and OFF Ensure gauge measures >500 psi if less change cylinder							
Turn on overhead heat and light							
Check suction working							
Check Apgar clock working							
Top							
Ambubag (Volume 400-500mls)with medium mask attached							
T-Piece with medium mask attached Check Pressures (PIP 30 cm Peep 3-5 cm H2O)							
Laryngoscopes x 2, 1 large, 1 small- check working							
2 Towels							
Stethoscope							
Cord clamp							
Drawer – Tray							
Small and large face masks							
Neo-fit Neonatal Endotracheal Tube Grip							
Airways size 00, 0 & 1							
iGel							
3 Knitted hats, different sizes							
1 Cord clamp							
Drawer – main area							
Endotracheal Tubes – 1 each of sizes 2.0, 2.5, 3.0, 3.5, 4.0. I-Gel size 1 x 1							
2 Stylets/introducers							
1 T piece circuit as spare							
Alcowipes x 6							
Roll of Micropore							
Cord gas syringes x 2							
Yankauer							
FPH – Green Emergency Drug Box							
SIGN							

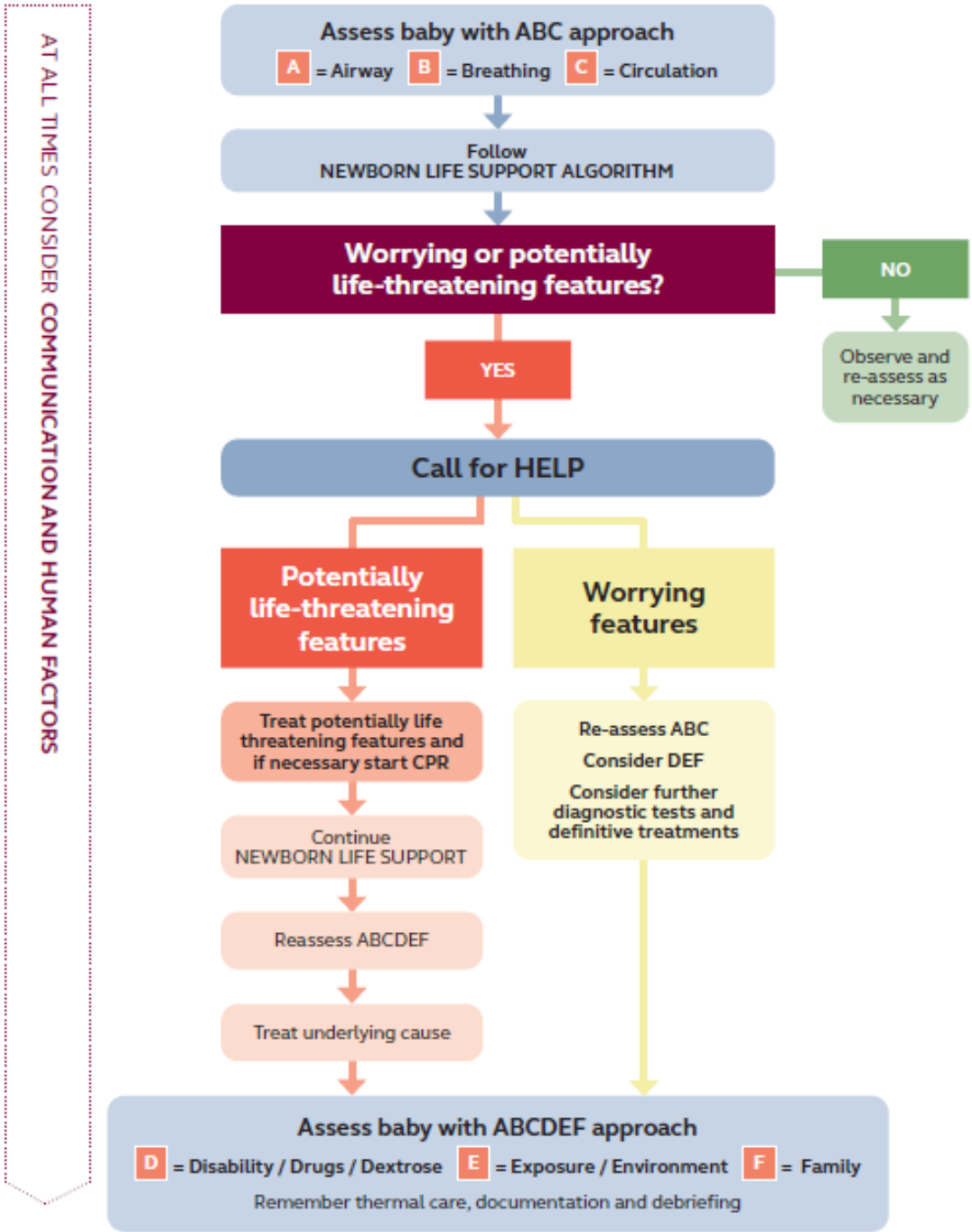
Appendix 2 - Newborn Life Support Algorithm



Resuscitation Council UK

GUIDELINES 2021

Advanced resuscitation of the newborn infant



Appendix 3 – Neonatal Resuscitation Emergency Trolley Checklist, Maternity Unit, Wexham Park Hospital
To be completed daily and after every use.
Please do not overstock

Frimley Health NHS Foundation Trust

Theatre / Corridor/ MLU							
Date:							
Time:							
Top Shelf Green Emergency drugs box							
IV Access Drawer							
Syringes 2 x 1ml, 2ml, 5ml, 10ml and 20ml							
Needles – 3 orange, 3 green							
IV Cannulae 2 x size 24, 26 and Neoflon							
Alcowipes x 6							
2 T-piece extensions							
2 three way taps							
Roll of Micropore							
3 x Tegaderm dressing							
3 x Steristrips							
1 Baby Splint							
Paediatric Blood bottles – 2 white, 2 orange, 2 red, 1 Blood culture							
10 ampoules 0.9% Saline							
Airway Drawer							
2 Laryngoscopes, 1 large and 1 small blade. Check working							
ET Tubes 2 x size 2.0, 2.5, 3.0, 3.5, 4.0, I-gel size 1 x 1							
2 Stylets							
ET Tube clips, size 2, 2.5,3, 3.5,4							
Tape for tying ET Tubes							
Face Masks – small, medium and large							
Airways, size 00 and 1							
3 knitted hats, different sizes							
1 pair Mosquito Forceps							
Size 10 Chest Drain							
Neopeep circuit							
Size 23 Butterfly needle x2							
10ml Syringe							
Three way Tap							
Bottle Sterile water							
Cut Down and Fluids Drawer							
Cut down set + Scalpel + 3.0 silk suture							
Size 4 Umbilical Catheter							
3 Way Tap							
500ml bag 0.9% Saline							
500ml bag 10% Dextrose							
NG Tubes size 5 and 6							
Oral syringe (Purple) 2x 1ml, 2ml, 5ml, 10ml							
PH paper							
Temperature Control Drawer							
Transwarmer							
Roll of plastic bags							
SIGN							

NB Stocks of neonatal blood bottles, IV cannula, Tegaderm, Steristrips and ET Tube Clips may be obtained from NNU.

Full version control record

Version:	3.0
Guidelines Lead(s):	Abbey Ford, Practice Development Midwife, FPH Sydney Sopacua, Labour Ward Coordinator, WPH
Contributor(s):	
Lead Director / Chief of Service:	Miss Anne Deans, CoS for Obstetrics and Gynaecology
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This guideline has been registered with the trust. However, clinical guidelines are guidelines only. The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician. If in doubt, contact a senior colleague or expert. Caution is advised when using guidelines after the review date. This guideline is for use in Frimley Health Trust hospitals only. Any use outside this location will not be supported by the Trust and will be at the risk of the individual using it.

Version History

Version	Date	Guideline Lead(s)	Status	Comment
1.0	December 2019	Pippa Clark, Rekha Sanghavi	Final	First cross site version, approved at cross site O&G CG meeting
1.1	June 2020	Pippa Clark, Rekha Sanghavi	Interim	Addition of FPH Resuscitaire checklist Appendix 1b, approved at OGCG 22.06.2020
2.0	October 2021	Nicky Galdeano, Rekha Sanghavi	Final	Cross-Site, updated to reflect new Resuscitation Council Guidance 2021
3.0	June 2024	Sydney Sopacua, Labour Ward Coordinator, WPH; Abbey Ford, Practice Development Midwife, FPH	Final	Scheduled review. Neonatal SHOs no longer required to be present for cat 3 or elective caesarean sections unless there is a breech presentation, transverse, unstable lie, or multiple pregnancy.

Related Documents

Document Type	Document Name
Guideline	Immediate Care of the Newborn
Guideline	Homebirth