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Royal Cornwall Hospitals NHS
NHS Trust

# NEWBORN LIFE SUPPORT - CLINICAL GUIDELINE

## NLS FLOWCHART

All staff have a responsibility to prepare, check, and be familiar with using any resuscitation equipment available. Community births should have an area set up with resuscitation equipment for any baby born in unexpected poor condition. Hospital births should have a checked resuscitaire and emergency neonatal resuscitation equipment available. Alert Neonatal Team as detailed in Section 2.

For Emergency Neonatal help dial 2222, state 'neonatal emergency' and your exact location

**Term baby delivery**

Resuscitaire pressures 30/4

Blender set to 21% oxygen (air)

Mask and laryngoscope blade size 0 and 1

Aim to delay cord clamping
Keep warm

**Preterm Delivery**

Resuscitaire pressures 20-25/5

Blender set to 30% oxygen

Mask and laryngoscope blade size 0 or 00

Aim to delay cord clamping

Plastic bag for thermal support <32 weeks/≤1.5kg

Give antenatal steroids and magnesium sulphate as indicated

Call Consultant in addition to NNU team if < 27 weeks gestation

Assess heart rate and breathing at birth
If HR over 100, delay cord clamping
Dry and reassess, apply hat, keep warm, if available, use pulse oximetry to guide oxygenation/supplemental 02 use

Refer to Resuscitation council 2015 Newborn Life Support algorithm http://resus.org.uk

Complete documentation concurrently or as soon as possible
Complete a neonatal transfer sheet for all babies transferred to NNU
Complete a Datix incident report for all unexpected neonatal admissions
Keep parents updated

# 1. Aim/Purpose of this Guideline

This guideline applies to obstetric, midwifery, paediatric, and neonatal staff who may be involved in the resuscitation or stabilisation of the newborn in the hospital or community setting. Its aim is for all staff to follow the same principles and practice of resuscitation. Emphasis is placed on the need to anticipate potential problems and to call for expert assistance as early as possible.

This guideline identifies where equipment is located and the process for ensuring it is clean, checked and ready for use and how and when to call for the support of the neonatal team.

The purpose of the guideline is to support the specialist skill of newborn resuscitation which is required by all staff who may be attendant at birth and is written in accordance with current Resuscitation Council UK guidance: Newborn Life Support: Resuscitation at Birth 3rd edition (2010).

# 2. The Guidance

## 2.1. Staff roles and responsibilities

**Consultant Paediatrician:**

It is their responsibility to attend emergencies when required and to lead advanced resuscitation procedures or give advice.

**Neonatal Team:** (ST1-8/ANNP).

It is their responsibility to anticipate the need for extra help e.g. extreme prematurity, babies with known perinatal compromise/anomalies and to inform the NNU of an impending admission. All staff at these grades should be trained in resuscitation of the newborn.

The most senior member of the neonatal team is responsible for ceasing resuscitation measures where further treatment is felt to be futile.
Following a neonatal resuscitation, parents must be seen and updated regarding the treatment and condition of the baby as soon as feasibly possible by a senior member of the paediatric team.

**Obstetric Team:**

It is their responsibility to liaise with the NNU regarding the possible or expected birth of any baby known or thought to be likely to need resuscitation or stabilisation at birth. Discussions include plans for delivery and staff requirements at delivery.

**Midwives:**

It is the responsibility of midwives to identify any woman in labour whose baby/babies may require initial support and to contact the on call SHO/ANNP in a timely fashion. They are responsible for that checking emergency equipment is ready for use. For babies born in unexpected poor condition or prematurely, the urgency of the call needs to be conveyed indicating gestation, reason for the call

and location of the baby. Midwives should initiate treatment for sick babies whilst awaiting support from the neonatal team or, if in a community setting, whilst waiting for an ambulance.

**All registered staff working in Maternity Services:**

All registered staff, working within maternity and neonatal services, who care for newborns in the hospital or community setting should be competent to perform basic newborn life support as required. Initial training on induction will be provided to all appropriate groups of staff and updated as per RCHT Maternity services training needs analysis.

Staff who are newborn life support providers (NLS) following Resuscitation Council UK assessment are deemed competent for the time that the qualification remains valid. Staff who are accredited Resuscitation Council Instructors will be deemed competent whilst their accreditation is valid.

## 2.2. Resuscitation Equipment (See Appendix 3 Hospital, Appendix 4 Community)

- Each resuscitaire has a list of all required equipment. At each routine check the resuscitaire should be cleaned, checked for completeness and to be in full working order.
- Any deficiencies identified with the equipment, that cannot be immediately rectified, should be reported to the delivery suite coordinator/midwife in charge.
- Any resuscitaire that is out of use will be recorded on the delivery suite white board and handed over at each shift change during the safety briefing.
- If a resuscitaire is out of use on either Wheal Rose or Wheal Fortune it will be replaced with a resuscitaire from Delivery Suite until it is back in full working order.
- If a resuscitaire is out of use in the community setting a risk assessment must be undertaken. Suitable alternative equipment supplied or births suspended in the setting.
- Before each anticipated use, check heat, light, air/oxygen and suction.
- Every resuscitaire should be checked at the start of every shift.
- Following each use, clean and replace any used items and check to ensure the resuscitaire is in full working order.
- It is the responsibility of the individual to ensure they are trained and updated in the use of any medical devices they are likely to need to use. All medical devices training must be entered on the relevant training database.

## 2.3. Births requiring neonatal team member attendance

- Births<37 weeks completed gestation
- Emergency caesarean sections
- Instrumental deliveries
- Meconium stained liquor
- Vaginal breech deliveries
- Any baby where the need for resuscitation is anticipated, acutely or antenatally

### 2.4. Emergency On Call Neonatal Team

Call 2222 and ask for the NEONATAL TEAM and specify your EXACT LOCATION.

The Neonatal Emergency Team should be called in the event of:

- Need for resuscitation at birth with no member of neonatal team present at delivery
- Neonatal Team member call for help in new-born life support setting
- Postnatal neonatal collapse

The Neonatal Team will consist of:

- Neonatal Registrar
- Advanced Neonatal Nurse Practitioner or SHO
- Neonatal Nurse

### 2.5. On Call Neonatal Team

| | |
|---|---|
| **SHO/ ANNP:** Available on site 24hrs a day | Bleep via Bleep **3217**, the number is displayed on delivery suite white board |
| **Neonatal Registrar:** Available on site 09.00 hours -17.00 On-call. | The neonatal registrars are contacted via Bleep **3216,** the number is displayed on delivery suite white board |
| **Neonatal Consultant:** Available Monday – Friday 09.00 hours – 17.00 hours | Call via main hospital switchboard |
| **Paediatric Consultants:** On call at home (30 minutes response time) between 17.00 hours -09.00 hours and weekends and bank holidays | Call via main hospital switchboard |

### 2.6. Resuscitation on Wheal Fortune/Wheal Rose Wards

If a baby requires resuscitation they should be taken to the resuscitaire on the ward. Call 2222 Neonatal Emergency specifying location. The midwife should initiate newborn life support and continue until neonatal assistance arrives.

### 2.7. Transfer of the sick newborn to the neonatal unit from community birth

Request paramedic ambulance via **999** emergency call. In a full resuscitation situation, communication **should be made directly** with the delivery suite coordinator who will liaise with the on call neonatal team and NNU to agree the most appropriate place for admission/ambulance destination. This could be direct to Delivery Suite **or** NNU for on-going resuscitation/stabilisation. If two midwives are present the midwife undertaking the resuscitation should escort the baby with the ambulance crew and document events on arrival. If only one midwife present and the woman requires care by the midwife, the resuscitation of the baby should be handed over to the paramedic team.

**2.8. Transfer from Emergency Department or other areas of the hospital**

The on call neonatal resuscitation team should be contacted via hospital switchboard, the baby will be stabilised then transferred to neonatal unit using the transport incubator.

**2.9. Unexpected admissions to the NNU/ unexpected poor birth condition including community births**

Delivery Suite co-coordinator to ensure NNU is alerted immediately of any pending delivery likely to need neonatal support or NNU admission. Any baby whose admission to NNU has not been anticipated and the need for resuscitation identified by the condition of the baby at birth, should be reported as a clinical incident via the electronic online reporting system (Datix) as per the trigger list.

**2.10. Resuscitation of the Newborn** (see also 2.14 & 2.15 for management of meconium and prematurity)

- Babies who are compromised at delivery should have immediate cord clamping and transfer to the resuscitaire/prepared area then dried, covered with a dry towel, and placed in a neutral head position with assessment of their airway, breathing, heart rate and tone following the 2015 NLS algorithm (See Appendix 5). It is essential to call for help early (See section 2.4).

- Where possible pulse oximetry should be used. Probe attachment to the right hand or arm should provide oxygen saturation readings within 90 seconds.

- For **term** infants, air should be used initially for resuscitation. Inflation breaths require sustained pressure of 2-3 seconds at 30cm $H_2$ 0 PIP to aerate the lungs with 4cm PEEP. If, despite effective ventilation (with chest movement seen) oxygenation/ central colour (ideally guided by pulse oximetry) remains unacceptable, a higher oxygen concentration should be used.

- For **preterm** infants use a PIP setting of 20-25cm pressure with 5cm PEEP with oxygen flow of 21-30% (Resuscitation Council 2015).

- In the **absence** of pulse oximetry, a baby who remains dusky/cyanosed/ heart rate under 100, after chest movement seen, oxygen should be administered. No current evidence supports a particular oxygen concentration but where blending is available, increasing in 25% (ratio of $0^2$ to air flow) increments is reasonable, otherwise use 100% oxygen in place of air. Reduce oxygen concentration until infant is pink and spontaneously breathing without support.

- Reassessment of the baby should occur every 30seconds during NLS

resuscitation, focusing on the rising heart rate as the primary guide to successful resuscitation, aiming for ≥100bpm. If the heart rate responds but the baby is still not breathing, give ventilation breaths (1 second duration) at 30 per minute until senior review or normal breathing is established.

- If the heart rate remains very slow, ≤ 60 despite chest wall movement, give **30 seconds ventilation breaths with 100% oxygen,** reassess, if still ≤ 60, commence cardiac compressions (Resuscitation Council 2015)

**2.11. Advanced Resuscitation (See Appendix 5 for Equipment)**

- If appropriately skilled personnel are available intubation or laryngeal mask placement can be used to secure/establish an open airway.
- Laryngeal mask Size 1 can be used for babies over 33 weeks/ 2kg weight.

**2.12. Indications for intubation include:**

- To clear matter obstructing the airway e.g. meconium, blood clot, vernix
- To protect/support the airway
- For surfactant or adrenaline drug administration
- For anticipated prolonged respiratory support

**2.13. The use of drugs in neonatal resuscitation**

Drugs are rarely needed and should only be used if there is no significant cardiac output despite effective lung inflation and chest compressions.

- Optimal venous access is via Umbilical Venous Catheter (UVC)
- Community paramedic/ED may choose to access via intraosseous needle
- Initial blood aspirated should optimally be analysed for blood gas and glucose, plus FBC, blood group and blood spot.

- **Adrenaline:** 1:10,000 solution IV dose 10mcg/kg (0.1ml / kg) If not effective doses of up to 30mcg/kg (0.3ml/kg) can be used. Adrenaline doses can be repeated after 2 – 3 minutes
- **Sodium Bicarbonate:** 4.2% solution 2-4 ml/kg (e.g. 1-2 mmols/kg) or 8.4% solution diluted 1:1 with intravenous water or dextrose.
- **Sodium Chloride 0.9%** 10ml/kg for volume support if cardiac output remains poor and hypovolaemic shock is suspected, can be repeated
- **Dextrose 10%**: 2.5ml/kg for hypoglycaemia
- **Naloxone** 400mcg/ml; Naloxone is not a drug of resuscitation but if the baby remains apnoeic once the airway has been established, heart rate over 100bpm and mother received opiates within 4 hours of baby's delivery consider 200mcg.stat dose IM. NB. If the mother is opiate dependent Naloxone should be given with caution as it may cause acute withdrawal/seizures in the baby.

**2.14. Meconium**

- If meconium is seen in the liquor and baby is not compromised at birth with heart rate over 100 and an open airway normal care can continue,

including deferred cord clamping.

- If the baby does not breathe at delivery/floppy or heart rate <100, avoid stimulation, transfer to the resuscitaire/prepared area and inspect the airway. Apply suction with large bore catheter/yankauer sucker to remove any meconium seen before giving inflation breaths. If meconium remains copious after suctioning/intubation and direct suction, commence inflation breaths within1minute to avoid hypoxia.

## 2.15. Prematurity

Every effort should be made to ensure a senior grade from the Neonatal Team paediatrician/neonatologist is at the delivery of babies born under 30 weeks gestation. Premature babies under 32 weeks are more likely to lose body heat and should be placed into a plastic bag, up to their neck, with a plastic clamp on a long cord. The head should be dried, hat applied and, when available, pulse oximetry probe attached to right wrist. Inflation pressures are initially set at lower levels (20-25cms peak pressures, 5cms positive end expiratory pressure)
Oxygen flow setting at 21-30% (NLS 2015)
If the baby is spontaneously breathing, consider mask PEEP early
If intubation is required, surfactant should be administered promptly, preferably within 15 minutes (see appendix 6 for guidance)

### Cord Gas Analysis

Cord blood should be taken and analysed at birth, for any baby where there have been concerns of compromise during labour or the baby is born unexpectedly in poor condition. This is not achievable in the community setting. Placental weight/swab/histology may also be required.

## 2.16. Documentation and Record Keeping

Clear, detailed, factual notes that are legible, dated and signed should be made as soon as possible after the resuscitation. Where possible contemporaneous documentation should be made whilst the resuscitation is in progress.
Detail should aim to include:

- Who was present at delivery and immediate concerns
- When further assistance was requested
- When any further assistance arrived
- Heart rate at birth and when it first exceeded 100bpm
- Whether gasping respirations preceded onset of breathing and for how long this was seen
- When baby started to breathe regularly
- Respiratory assistance given and timing of any intervention
- Whether cardiac massage was given and duration
- Any drugs administered with times and route
- Cord gas analysis
- Detail of information given to parents

## 3. Monitoring compliance and effectiveness

| | |
|---|---|
| Element to be monitored | • The audit will take into account record keeping by obstetric, anaesthetic and paediatric doctors, midwives, nurse, students and maternity support workers<br>• The results will be inputted onto an excel spreadsheet<br>• The audit will be registered with the Trust's Audit Department |
| Lead | Maternity Risk Management Midwife |
| Tool | • Was an equipment check list attached to each resuscitaire in all maternity care settings<br>• **For Delivery Suite**: was the individual location identified and the check signed for in the ward diary<br>• Was the weekly check of the emergency paediatric trolley signed for in the book on the trolley<br>• **Wheal Rose:** Was the daily check signed for in the ward diary<br>• **Wheal Fortune**: Was the daily check signed for in the book on the resuscitaire<br>• **Penrice**: Was the daily check signed for in the book on the resuscitaire<br>• **Helston & St Mary's**: Was the weekly check signed for in the book on the resuscitaire<br>• If resuscitation equipment not available in any clinical area, was this included in the safety briefing and a plan/risk assessment in place for alternative arrangements |
| Frequency | Every 3 months the team leader/ward manager will complete the above audit and address any deficiencies identified |
| Reporting arrangements | • A formal report of the results will be received annually at the Maternity Risk Management and Clinical Audit Forum, as per the audit plan<br>• During the process of the audit if compliance is below 75% or other major deficiencies identified, this will be highlighted at the next Maternity Risk Management and Clinical Audit Forum and an action plan agreed |
| Acting on recommendations and Lead(s) | • Any deficiencies identified on the annual report will be discussed at the Maternity Risk Management and Clinical Audit Forum and an action plan developed<br>• Action leads will be identified and a time frame for the action to be completed by<br>• The action plan will be monitored by the Maternity Risk Manager until all actions complete |
| Change in practice and lessons to be shared | • Required changes to practice will be identified and actioned within a time frame agreed on the action plan<br>• A lead member of the forum will be identified to take each change forward where appropriate<br>• The results of the audits will be distributed to all staff through the risk management newsletter/audit forum as per the action plan |

# 4. Equality and Diversity

**4.1.** This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Diversity & Human Rights Policy' or the Equality and Diversity website.

## *4.2. Equality Impact Assessment*

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

# Appendix 1: Governance Information

| | | | | | |
|---|---|---|---|---|---|
| **Document Title** | Newborn Life support (NLS) – Clinical Guideline | | | | |
| **Date Issued/Approved:** | 16/06/2017 | | | | |
| **Date Valid From:** | 01/08/2017 | | | | |
| **Date Valid To:** | 01/08/2020 | | | | |
| **Directorate / Department responsible (author/owner):** | Judith Clegg, ANNP, Neonatal Unit<br>Obs & Gynae Directorate | | | | |
| **Contact details:** | 01872 252667 | | | | |
| **Brief summary of contents** | Newborn Life Support guidance for Hospital and Community settings, staff responsibilities and equipment required | | | | |
| **Suggested Keywords:** | Neonate, Newborn, Neonatal, life support, resuscitation, NLS, Midwifery, pulse oximetry | | | | |
| **Target Audience** | RCHT | PCH | CFT | KCCG | |
| | ✓ | | | | |
| **Executive Director responsible for Policy:** | Medical Director | | | | |
| **Date revised:** | I6th June 2017 | | | | |
| **This document replaces (exact title of previous version):** | Newborn Life SupportClinical Guideline | | | | |
| **Approval route (names of committees)/consultation:** | Maternity Guideline Group<br>Obs and Gynae Directorate<br>Divisional Board | | | | |
| **Divisional Manager confirming approval processes** | Head of Midwifery | | | | |
| **Name and Post Title of additional signatories** | None required | | | | |
| **Signature of Executive Director giving approval** | {Original Copy Signed} | | | | |
| **Publication Location (refer to Policy on Policies – Approvals and Ratification):** | Internet & Intranet | ✓ | Intranet Only | | |
| **Document Library Folder/Sub Folder** | Clinical/Midwifery and Obstetrics | | | | |

| | |
|---|---|
| **Links to key external standards** | |
| • Related Documents: | • Newborn Life Support (2015): Resuscitation at Birth 4th edition. London: Resuscitation Council (UK)<br>• Safer Childbirth (2007): Minimum Standards for the Organisation and Delivery of Care in Labour. London: RCOG Press.<br>• Gibbs J. Newson T. et.al. (1989) Naloxone Hazard in infant of opioid abuser LANCET 2:159-60<br>• CESDI (2003) Project 27/28 An enquiry into the quality of care and its effect on the survival of babies born at 27-28 weeks London: HMSO<br>• Sudden Unexpected Postnatal collapse in the first week of life Guideline (2011) March BAPM endorsed. British Paediatric Surveillance Unit RCPCH |
| **Training Need Identified?** | Yearly, mandatory training requirement for obstetric and paediatric staff |

**Version Control Table**

| Date | Version No | Summary of Changes | Changes Made by *(Name and Job Title)* |
|---|---|---|---|
| 09/2009 | V1.0 | | Judith Clegg, ANNP Jan Clarkson, Jane Pascoe, Midwife Delivery Suite |
| 09/2012 | V2.0 | Updated equipment, updated new National NLS Guidance, separated from admission to NNU guideline | Judith Clegg, ANNP |
| 5/9/2013 | V3.0 | Updated equipment requirements, contact telephone numbers and guidance for community obstetric staff, section 2.9 | Judith Clegg, ANNP |

| | | | |
|---|---|---|---|
| 3rd July 2014 | V4.0 | Updated Emergency Bleep Numbers<br>Neonatal Emergency Group Bleep 3100<br>Neonatal Registrar Bleep 3216<br>Advanced Neonatal Nurse Practitioner or SHO Bleep 3217<br>Neonatal Nurse bleep 3218<br><br>Updated In the event of neonatal collapse, call 2222 and ask for the NEONATAL TEAM and specify your EXACT LOCATION. | Elizabeth Anderson Practice Development Midwife |
| 16th June 2017 | V5.0 | Updated Resuscitation Council 2015 NLS algorithm amendment re. 30 seconds ventilation breaths prior to cardiac compressions. Addition of flow chart | Judith Clegg ANNP Neonatal Unit |

# Appendix 2. Initial Equality Impact Assessment Form

| | |
|---|---|
| Name of Name of the strategy / policy /proposal / service function to be assessed (hereafter referred to as *policy*) (Provide brief description): NEW-BORN LIFE SUPPORT CLINICAL GUIDELINE | |
| Directorate and service area:<br>Obs & Gynae Directorate | Is this a new or existing Policy<br>Existing |
| Name of individual completing assessment: Judith Clegg | Telephone:<br>01872 252667 |
| 1. Policy Aim*<br>Who is the strategy / policy / proposal / service function aimed at? | To inform obstetric, midwifery, paediatric, neonatal staff and Community Midwives/GPs of the best evidenced based approach to resuscitation at birth |
| 2. Policy Objectives* | To ensure optimum newborn life support |
| 3. Policy – intended Outcomes* | Best possible outcome for sick new-born babies |
| 4. *How will you measure the outcome? | Compliance Monitoring Tool |
| 5. Who is intended to benefit from the policy? | Newborn babies and their parents |
| 6a) Is consultation required with the workforce, equality groups, local interest groups etc. around this policy?<br><br>b) If yes, have these *groups been consulted?<br><br>C). Please list any groups who have been consulted about this procedure. | No<br><br>NA<br><br>N/A |

| **7. The Impact**<br>Please complete the following table. | | | |
|---|---|---|---|
| Are there concerns that the policy **could** have differential impact on: | | | |
| Equality Strands: | Yes | No | Rationale for Assessment / Existing Evidence |

| | | | |
|---|---|---|---|
| **Age** | | **X** | All newborn babies |
| **Sex** (male, female, trans-gender / gender reassignment) | | **X** | All newborn babies |
| **Race / Ethnic communities /groups** | | **X** | All newborn babies |
| **Disability -** learning disability, physical disability, sensory impairment and mental health problems | | **X** | All newborn babies |
| **Religion / other beliefs** | | **X** | All newborn babies |
| **Marriage and civil partnership** | | **X** | All newborn babies |
| **Pregnancy and maternity** | | **X** | All newborn babies |
| **Sexual Orientation,** Bisexual, Gay, heterosexual, Lesbian | | **X** | All newborn babies |

You will need to continue to a full Equality Impact Assessment if the following have been highlighted:

- You have ticked "Yes" in any column above and
- No consultation or evidence of there being consultation- this excludes any *policies* which have been identified as not requiring consultation**. or**
- Major service redesign or development

| | | |
|---|---|---|
| 8. Please indicate if a full equality analysis is recommended. | **Yes** | **No X** |

9. If you are not recommending a Full Impact assessment please explain why.

N/A

| | |
|---|---|
| Signature of policy developer / lead manager / director Judith Clegg | Date of completion and submission |

| | | |
|---|---|---|
| Names and signatures of members carrying out the Screening Assessment | 1. Dr Paul Munyard | |

**Keep one copy and send a copy to the Human Rights, Equality and Inclusion Lead,** c/o Royal Cornwall Hospitals NHS Trust, Human Resources Department, Knowledge Spa, Truro, Cornwall, TR1 3HD

A summary of the results will be published on the Trust's web site.

**Appendix 3: Neonatal Resuscitation Equipment Hospital Setting**

| Ward / Area | Equipment/ Location | Checks |
|---|---|---|
| **Delivery Suite** | **Resuscitaires:**<br>•D/S Corridor<br>•D/S Theatre<br>•High Risk Delivery Rooms, 7,10 & 11 | **Daily checks:**<br>• Individual locations identified and check signed for in ward diary<br>**Other checks**<br>• Before use if anticipated<br>• After Use |
| **Delivery Suite** | **Paediatric Emergency Trolley:**<br>• Stored in D/S Store Room | **Weekly check:**<br>• Signed for in check book on the trolley<br>**Other checks**<br>• Before use if anticipated<br>• After Use |
| **Wheal fortune** | **Resuscitaire**:<br>• Located in the Neonatal Treatment/Drs Room | **Daily check:**<br>• Signed for in book on Resuscitaire<br>**Other checks**<br>• After Use |
| **Wheal Rose** | **Resuscitaire:**<br>• Located in the corridor by Midwives office | **Daily check:**<br>• Signed for in ward diary<br>**Other checks**<br>• After Use |

**Appendix 4: Neonatal Resuscitation Equipment Community Setting**

| Area | Equipment / Location | Checks |
|---|---|---|
| **Penrice Birth Centre** | **Resuscitaire:**<br>• Kept in room opposite the delivery rooms | **Daily check:**<br>• Signed for in book on Resuscitaire<br>**Other checks**<br>• Prior to and following use |
| **Helston Birth Centre** | **Resuscitaire:**<br>• Kept in birth room | **Weekly check:**<br>• Signed for in book on Resuscitaire<br>**Other checks**<br>• Prior to and following use |
| **St Mary's hospital, Isles of Scilly** | **Resuscitaire**<br>• Kept in birth room | **Weekly check:**<br>• Signed for in book on Resuscitaire<br>**Other checks**<br>• Prior to and following use |
| **Home Birth Equipment** | **Each community midwife carries:**<br>• Single use 500ml Bag / Mask valve<br>• Masks x 2 size 1 size 0<br>• Guedel Airway | All Items Single Patient use and must be replaced following use. |

## Appendix 5: NLS Algorithm ©

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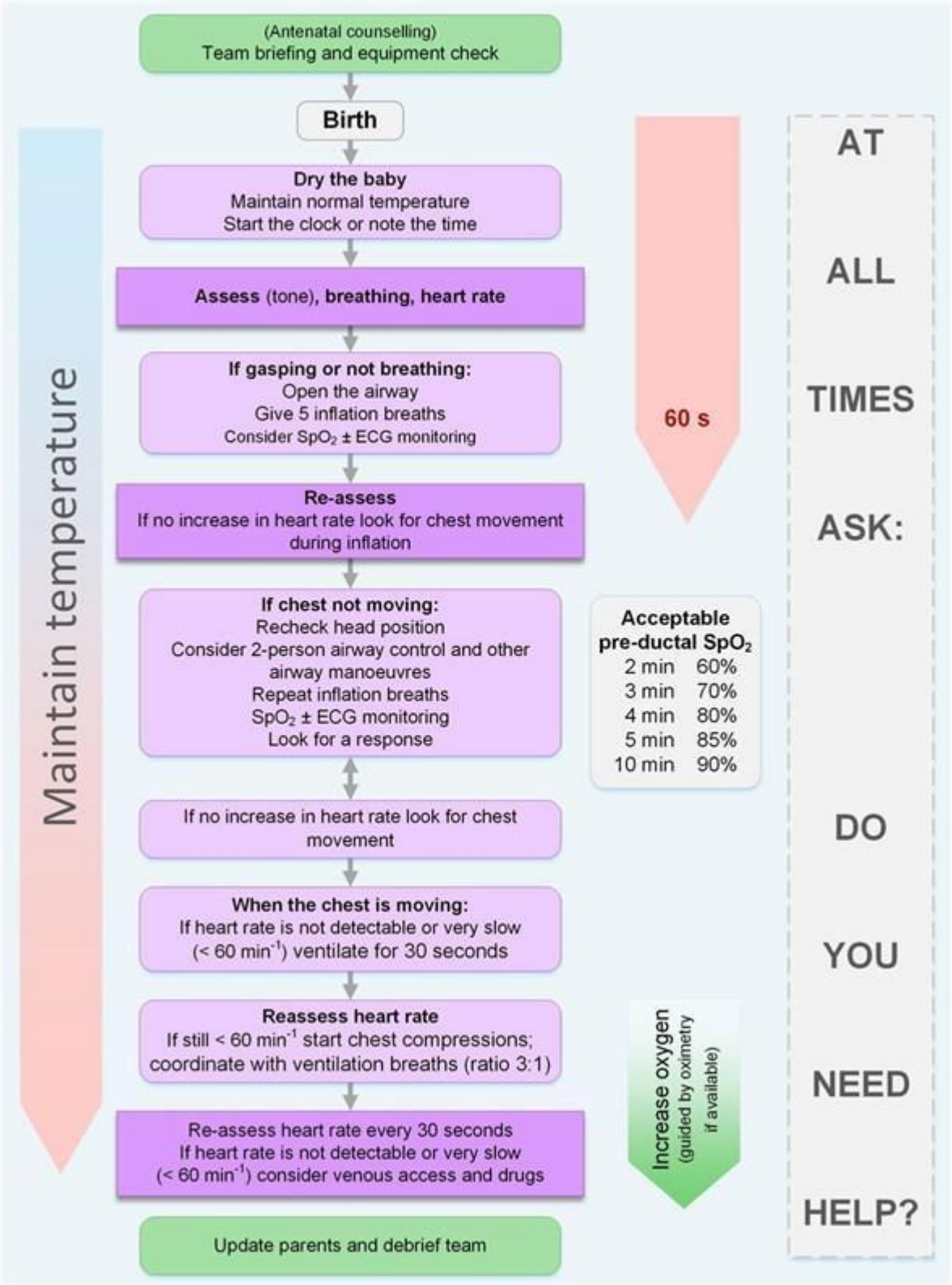
Resuscitation Council (UK)




**Appendix 6: Advanced Resuscitation Equipment Guide**

| | Under 1kg/≤28 weeks | Under 2kg/ ≤32 weeks | Over 2kg to term |
|---|---|---|---|
| **Put into plastic bag for thermal control** | √ | √ | **-** |
| **Airway size** | **000** | **00** | **0 -1** |
| **Laryngeal mask** | **Do not use** | **Do not use** | **Size 1 (pink)** |
| **Laryngoscope Blade size** | **00** | **0** | **0 - 1** |
| **ET Tube Diameter and approximate length** | **2.5mm**<br><br>**6.5-7cm** | **3.0mm**<br><br>**7.5-8cm** | **3.0 - 3.5mm**<br>[4.0mm post term/over 4kg]<br><br>**8.0-9.5cm** |