WOMEN'S HEALTH AND PAEDIATRICS
MATERNITY UNIT

Immediate care of the term newborn baby

Amendments			
Date	Page(s)	Comments	Approved by
Sept 2007		General review	Women's Health Guidelines Group
Nov 2009	Whole document	Re written and updated	Women's Health Guidelines Group
Nov 2010		Reviewed following publication of NICE complex social factors guidance and addition of monitoring section	Women's Health Guidelines Group
Nov 2012		Whole document reviewed	Women's Health Guidelines Group
Feb 2013		Monitoring table adjusted	
Nov 2014	Page 5	Prevention Detection and Management of Hypothermia in the Term Infant added	Women's Health Guidelines Group
June 2015	Page 6	Female/Male infant of mothers full name added to identification label Diagnosis of fracture	Women's Health Guidelines Group
Feb 2018		Whole document review – no changes	Head of Midwifery
Jan 2019	Page 3	Addition of body map use on Badgernet	

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Target audience: Staff working within Maternity

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Comments on this document to: Women's Health Guidelines Group

Immediate care of the term newborn baby

SEE ALSO

Guideline for:

- Neonatal resuscitation at birth
- Examination of the newborn (The first full physical examination)
- Hypothermia
- Prevention and management of hypoglycaemia
- Prevention of hypoglycaemia in the high risk infant
- Diabetic Guideline
- Meconium stained liquor
- Group B Strep
- Management of newborn babies at risk of bacterial infection
- The management of prelabour SROM at term
- Support for parents
- Referral when a fetal abnormality is detected antenatally
- Admission to the Neonatal Unit

RATIONALE

An assessment must be made within an hour of birth to establish that the transition from in-utero to ex-utero has been successful and that the newborn infant is healthy.[1]
This guidance sets out the care of the newborn for the first 24hrs hours of life

INITIAL MANAGEMENT

Using the Apgar score, the condition of the baby should be assessed at one, five and ten minutes after birth.

If the baby's breathing is not regular and/or the heart rate is <100 beats per minute, transfer the baby to the resuscitaire and initiate immediate newborn life support (see guideline for *Neonatal resuscitation at birth*).

If the baby has established spontaneous, regular respiration, the cord may be left to pulsate for up to three minutes prior to clamping and cutting and subsequent active management of the third stage.[7] If the mother has requested physiological management, the cord would usually be left unclamped until pulsation has ceased (see *Care of women in labour* guideline).
Heat loss should be avoided: The newborn baby is wet, cannot shiver, has a large surface area to body weight ratio and has an immature temperature regulating centre (see guideline for *The management of cold babies (hypothermia*). The baby should be dried thoroughly and given to its mother for skin-to-skin contact as soon as possible after birth.[2] This promotes effective temperature regulation, stabilisation of heart rate, the rooting reflex and establishment of early feeding (for breast and formula fed babies).[2,3,4] Skin-to-skin contact should be facilitated for a minimum of 30 minutes, or longer if the parents wish.[2] Ensure the baby is covered during this time and the mother herself is warm and not in a draft. Mothers who wish to breast feed should be encouraged and supported to do so as soon as possible after birth.[2,3] Most term, healthy babies can be generally observed by their parents. Babies who are considered to be 'at risk' e.g. where there has been significant meconium in the liquor, babies of group B strep positive mothers and following prolonged ruptured membranes must have observations recorded and documented in line with the appropriate guideline.

FIRST EXAMINATION OF THE BABY

Verbal consent must be obtained from the parents prior to any procedure involving the baby. The examination should be documented in mothers Badgernet Pregnancy records. Any marks/bruises noted should be recorded on the body map within Badgernet. The baby should remain in view of his/her parents throughout all procedures unless the parents request otherwise.

Any major abnormality should be identified at birth and the paediatrician should be informed and requested to review the baby as soon as possible.

Initially:

- Measure and record the head circumference
- Record the weight
- Assess the general condition of the baby, including colour and muscle tone
- Record axilla temperature

Head and neck:

- Observe skull for moulding or caput
- Observe ears for position, shape and skin tags
- Observe eyes for shape and position
- Observe nose for shape (nasal bridge) and flaring
- Observe mouth for cleft lip or palate and prenatal teeth
- Observe neck for shape, range of movement and webbing

Skin:

- Look for birthmarks, bruises and rashes. Any birth marks or minor abnormalities should be shown to the parents as soon as possible. The examination of the newborn guideline outlines the appropriate management of birth marks and minor defects.

Chest:

- Observe for any abnormalities
- Count the apex beat
- Observe breathing patterns.

Abdomen:

- Observe shape for symmetry
- Check that the cord is securely clamped

External genitalia:

- Observe the position of urinary meatus and testes (male), urethra and vagina (female)

Limbs:

- Observe for symmetry
- Count fingers and toes – observe for missing, or extra digits
- Check for talipes,
- Check palmar creases.

Back/buttocks:

- Check the vertebrae
- Check the anus – observe for signs of patency
- Observe for signs of spina bifida occulta e.g. sacral dimple

Administer Vitamin K to the baby in accordance with the Vitamin K guideline.[6]

SUBSTANCE MISUSE

Babies of mothers known to have misused substances during pregnancy will be assessed by a neonatal registrar shortly after birth. An individualised care plan including initial and ongoing care and required observations will be agreed and documented by the registrar in the baby's notes. Wherever possible, the baby should remain with his/her mother in the transitional care unit unless further observations and/or treatment are required in NICU.

GENERAL CARE

- Wash the baby's hair only if it is covered in blood and/or mucous
- Wash or bath the baby only if especially dirty
- Put baby skin to skin or if mother declines dress the baby in warm clothes
- Encourage all babies to attempt an early feed

PREVENTING HYPOGLYCAEMIA

Healthy term babies who breast feed well on demand have significantly lower blood glucose concentrations than formula fed babies in the first two to three days of life. They manage this safely by utilising fat from their stores to generate energy and heat. This is part of the normal physiological adaptation to extra-uterine life by the newborn. All babies should be encouraged to maintain skin-to-skin contact with their mother and have an early feed (see above). The baby should be observed for any signs of hypoglycaemia (see guidelines for prevention of hypoglycaemia care plan see appendix 1). For babies of diabetic mothers refer to the guidelines for the management of diabetes in the mother.

How do we aim to prevent hypoglycaemia in newborn babies?

Hypoglycaemia needs to be anticipated and prevented

- **Keep babies warm and dry**
- **Offer feeds early (high risk babies, within 30 minutes of birth)**
- Within 60 min after birth if breast feeding, within 3 hours for all babies
- 3 hourly for high risk babies
- If suck is poor consider EBM or formula feed via NGT / OGT / cup

High risk babies should be identified by the midwife on labour ward and the "Prevention of Hypoglycaemia Care Plan" commenced (printed out, filled in and placed in the notes)

Normally grown term infants on the postnatal wards who are well, not cold and feeding do not require blood sugar level (BSL) testing. Infrequent feeding in a well infant is not an indication for BSL testing – it is quite usual for a baby to feed as few as 4 times in the first 24 hours postnatally, but a baby should not go for longer than 8 hours between feeds. Good practice centres on the anticipation and prevention of hypoglycaemia and the early establishment of enteral feeds. If a baby becomes unwell, or there are signs such as:

- Poor tone
- Excessively sleepy
- Irritability
- Apnoea or seizure

The BSL should be tested and the Neonatal SHO should be called to review the baby.

General Instructions (see also guideline for <u>Prevention and Management of Neonatal Hypoglycaemia</u>)

- Dry the baby and keep warm.
- Always offer a breast feed preferentially unless contraindicated or declined by mother.
- Feed early (within 60 minutes of birth), repeating the feed if the first attempt is unsuccessful.

If referred to the neonatal SHO due to concerns about hypoglycaemia the following management is advised.

- Formula feed volumes are 90mls/kg/day on first day, 120mls/kg/day on 2nd day, 150 mls/kg/day on 3rd day
- Carry out pre-feed Blood Sugar Level (BSL) from 2nd feed onwards. Document details of the feed overleaf.
- Feed strictly every 3hrs with pre-feed BSL testing **until 2 consecutive readings are above 3.0mmol/L.**
- If any baby appears unwell, shows signs of hypoglycaemia (e.g. floppy, lethargic or pale) or has an unrecordable blood glucose call Neonatal SHO for an urgent review.

<u>Prevention Detection and Management of Hypothermia in the Term Infant</u>

Rationale

To ensure that immediate care of the new born is appropriate to prevent avoidable harm. It is important to provide a correct thermo-neutral environment so that the new born can maintain a normal body temperature and eliminate thermal stress.

Summary of Evidence

- Thermal stress is associated with increased mortality and morbidity.
- Sub optimal temperatures decrease surfactant production and therefore increase the risk of respiratory problems.
- Hypoglycaemia will occur if the baby uses nutritional reserves to maintain normal body temperature
- Thermal neutrality is defined as the environment at which minimal rates of oxygen consumption or energy expenditure occurs.
- Establishing and maintaining a stable and appropriate thermal environment is a vital prerequisite to the wellbeing of all infants.
- The optimum room temperature for delivery is 25° C (CESDI 2003) and should be free from draughts.

Prevention Detection and initial Management of Hypothermia in the Term Infant
At Delivery

- The babies' temperature should be taken post-delivery and documented on the care plan and evolution database.

- If the temperature is not between 36.5º c – 37.5ºc document management plan in the baby notes If resuscitation is required the infant should be received onto a previously warmed resuscitaire, dried thoroughly and wrapped in warm towels. The wet towel must be removed.

- Infants born by Caesarean section are more likely to encounter problems with respiration and thermoregulation due to the fact that they have not undergone stress at vaginal delivery.

- If the infant is not skin to skin it must be dressed in appropriate clothing to maintain a temperature of 36.5 – 37.5°C.

- If the temperature is <36.5°C add a hat and an extra layer of clothing or encourage skin to skin with their mother. Ensure the infant is covered whilst receiving skin to skin, and make sure the room is free from draughts. Recheck temperature in 1 hour.

- If the temperature is below 36°C place the infant in a heated cot in the delivery room. The infant should be nursed in the heated cot with one layer of clothing together with a hat.

- If the temperature is below 36°C the infant should be encouraged to feed immediately

- The infant's temperature should be increased gradually by 0.5 - 1° C per hour.

- All observations must be documented in the babies care plans.

IDENTITY LABELS

Two baby identity labels must be clearly written (see also *Newborn Security Policy incorporating Baby Abduction*)

Label 1 must show:

- Female/Male infant of Mothers full name
- Mother's hospital number
- Baby's date and time of birth

Label 2 must show:

- Female/Male infant of Mothers full name
- Mother's surname.
- Mother's hospital number.
- Baby's date and time of birth

The mother and/or partner should confirm that the information on the labels is correct prior to their being secured around the baby's ankles. When parents are unable to check the labels, checking will be carried out by two members of staff and shown to the parents as soon as possible. The first label should be applied before the midwife leaves the room after the birth. At least one label must be applied as a minimum prior to transfer of the baby to NICU if this is necessary. Label 2 is completed prior to weighing the baby. Ensure that both labels are fastened securely on the baby's ankles prior to leaving the labour ward. Baby's notes must be made up with mother's surname.

DIAGNOSIS OF FRACTURE

All babies with a suspected fracture must be seen and examined by a Consultant Neonatologist. When a fracture is unexplained the consultant **MUST** discuss with safeguarding team including named doctor for safeguarding children.

The Neonatal team are responsible for making a fracture clinic appointment.

If the fracture is confirmed inform the community team leader and complete an orange enhanced visit post natal care plan.

OTHER RELEVENT GUIDELINES

Management of Meconium-Stained liquor at delivery is in a separate guideline
Management of Group B haemolytic streptococcus is in a separate guideline

SECURITY

Ensure the parents are aware of the security system on the maternity unit. Demonstrate and ensure the mother knows how to use the security cot system prior to discharge from labour ward or the birth centre. This should be confirmed with the mother on arrival on Joan Booker ward.

COMMUNICATION WITH PARENTS

The findings of the examination should be explained to the parents at the time of the examination including follow up arrangements for any abnormalities identified.

DOCUMENTATION

Link the baby to his/her mother on the Evolution system. The midwife should record all findings of the initial examination and administration of Vitamin K in the hand held notes and on the Evolution system. Any abnormalities should be brought to the attention of the paediatric team and to the receiving midwife on the Joan Booker ward.

MONITORING

Compliance with this guideline will be monitored as detailed in the table below. Where monitoring has identified deficiencies, recommendations and an action plan will be developed.

Element to be monitored	Lead	Tool	Frequency	Reporting arrangement	Acting on recommendations and Lead(s)	Change in practice and lessons to be shared
a. prevention, detection and management of hypoglycaemia in the newborn b. prevention, detection and management of hypoglycaemia in the newborn of women with diabetes c. prevention, detection and management of hypothermia in the newborn d. ***management of a newborn with meconium-stained liquor present at delivery*** e. ***management of a newborn where there is known group B haemolytic streptococcus present in either mother or newborn*** f. management of the newborn of women known to have misused substances in pregnancy g. ***documentation of all of the above***	Deborah Parkinson	1% records of all babies using attached audit tool 1% health records audit or 10 records of babies with meconium-stained liquor at delivery and 1% or 10 records of babies where the mother or baby were known to be group B haemolytic streptococcus positive	Annually	Report to the Perinatal audit meeting or the Labour Ward Forum	Deborah Parkinson /Louise Emmett	To be disseminated through the Labour Ward Forum, maternity newsletter and staff meetings/ communication bulletin

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Immediate Care of the Newborn – Audit Tool

Q1, Was the Apgar Score recorded	☐ Yes	☐ No	
Q2, Was this baby offered skin to skin contact	☐ Yes	☐ No	
Q3, Was this baby at high risk of hypoglycaemia	☐ Yes	☐ No	
Q4, Was this baby fed within one hour	☐ Yes	☐ No	☐ NK
<u>If baby is considered high risk of hypoglycaemia/ Hypothermia</u>			
Q5a, Was this baby offered a feed within thirty minutes	☐ Yes	☐ No	☐ N/A
Q5b, Was hypoglycaemia feed chart started	☐ Yes	☐ No	☐ N/A
Q5c, Was the hypoglycaemia policy followed	☐ Yes	☐ No	
Q6, Was the temperature checked	☐ Yes	☐ No	
Q7, If temperature <u>less than 36.5</u>, what action was taken:			
Baby fed	☐ Yes	☐ No	☐ N/A
Skin to skin started	☐ Yes	☐ No	☐ N/A
Baby dressed	☐ Yes	☐ No	☐ N/A
Temperature rechecked in one hour	☐ Yes	☐ No	☐ N/A
Q8, Was there meconium in the liquor	☐ Yes	☐ No	
Was this	☐ Significant		☐ Light
Q9, If there was meconium was the observation sheet complete	☐ Yes	☐ No	☐ N/A
Q10, If the mother was known group B Strep did she Receive antibiotics IV more than 4 hours before delivery	☐ Yes	☐ No	☐ N/A
Receive antibiotics less than 4 hours before delivery	☐ Yes	☐ No	☐ N/A
Not given antibiotics	☐ Yes	☐ No	☐ N/A
Q11, If this baby was group B Strep positive was the observation sheet completed	☐ Yes	☐ No	☐ N/A
Q12, Was blood taken for FBC & CRP and blood cultures	☐ Yes	☐ No	☐ N/A
Q13, IV antibiotics given	☐ Yes	☐ No	☐ N/A
Q14, Four hourly observations done	☐ Yes	☐ No	☐ N/A

Q15, If this woman was known to have misused substances in pregnancy did she see an Obstetrician	☐ Yes	☐ No	☐ N/A
Q16, Was there a care plan in place	☐ Yes	☐ No	☐ N/A

REFERENCES

1. Sheliker, A. F. (1997) Changing Practice? A review of the neonatal examination. *Journal of Health Care* 1(4): 168-71
2. Ashmore S. Implementing skin-to-skin contact in the immediate postnatal period. *MIDIRS Midwifery Digest* Vol 11, no.2, 2001; pp247-50
3. UNICEF. Ten steps to successful breastfeeding. Available from: http://www.babyfriendly.org.uk/page.asp?page=60 (last accessed 27.10.09)
4. Enkin, M., Keirse, M. J. N. C. Renfrew, M. et al (2000) *Examination of the newborn in A guide to effective care and childbirth. 3 rd edn*, Oxford University Press, Oxford.
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7. National Institute for Health and Clinical Excellence (NICE). (2010). *Pregnancy and Complex Social Factors. A Model for service Provision For pregnant Women With Complex Social Factors.* London: NICE. Available at *www.nice.org.uk*
8. McDonald SJ, Middleton P. Effect of timing of umbilical cord clamping of term infants on maternal and neonatal outcomes. The Cochrane Library. http://cochrane.org/reviews/en/ab004074.html (last accessed 27.10.09)

   National Institute for Health and Clinical Excellence (2007) Intrapartum Care: Care of healthy women and their babies during childbirth. London. NICE www.nice.org.uk

Appendices

Hypoglycaemia management guidelines for neonates:

Guideline:
http://trustnet/docsdata/paed/Guidelines_Neonatal/Hypoglycaemia%20Guidelines.pdf

Care Plan:
http://trustnet/docsdata/paed/Guidelines_Neonatal/Hypoglycaemia%20Care%20Plan.pdf

How to take a capillary blood gas:
http://trustnet/docsdata/paed/Guidelines_Neonatal/How%20to%20take%20a%20CBG%20and%20run%20it%20for%20a%20glucose%20level%20only.pdf

EQUALITY IMPACT ASSESSMENT TOOL

Name: **Women's Health Guidelines Group**

Policy/Service: **Immediate Care of the Term Newborn**

Background • Description of the aims of the policy • Context in which the policy operates • Who was involved in the Equality Impact Assessment
An assessment must be made within an hour of birth to establish that the transition from in-utero to ex-utero has been successful and that the newborn infant is healthy. To ensure consistent and high standards of care within the maternity service unit Women's Health guideline group
Methodology • A brief account of how the likely effects of the policy was assessed (to include race and ethnic origin, disability, gender, culture, religion or belief, sexual orientation, age) • The data sources and any other information used • The consultation that was carried out (who, why and how?)
Impact assessment revealed no obvious impact on the above NA
Key Findings • Describe the results of the assessment • Identify if there is adverse or a potentially adverse impacts for any equalities groups

No adverse impacts identified
Conclusion • Provide a summary of the overall conclusions
No impact
Recommendations • State recommended changes to the proposed policy as a result of the impact assessment • Where it has not been possible to amend the policy, provide the detail of any actions that have been identified • Describe the plans for reviewing the assessment
Impact assessment will be reviewed at next policy review

Guidance on Equalities Groups

Race and Ethnic origin (includes gypsies and travellers) (consider communication, access to information on services and employment, and ease of access to services and employment)	**Religion or belief** (include dress, individual care needs, family relationships, dietary requirements and spiritual needs for consideration)
Disability (consider communication issues, access to employment and services, whether individual care needs are being met and whether the policy promotes the involvement of disabled people)	**Sexual orientation including lesbian, gay and bisexual people** (consider whether the policy/service promotes a culture of openness and takes account of individual needs
Gender (consider care needs and employment	**Age** (consider any barriers to accessing

issues, identify and remove or justify terms which are gender specific)	services or employment, identify and remove or justify terms which could be ageist, for example, using titles of senior or junior)
Culture (consider dietary requirements, family relationships and individual care needs)	**Social class** (consider ability to access services and information, for example, is information provided in plain English?)

If further assessment is required please see the Integrated Single Equality Scheme.

For advice in respect of answering the above questions, please contact Maria Crosbie, HR Manager, on extension 2552.

PROFORMA FOR RATIFICATION
OF POLICIES AND GUIDELINES BY RATIFYING COMMITTEE

Policy/Guidelines Name:	Immediate care of the term newborn baby
Name of Person completing form:	Women's Health Guidelines Group
Date:	June 2015
Author(s) *(Principle contact)*	Deborah Parkinson/Women's Health Guidelines Group
Name of author or sponsor to attend ratifying committee when policy/guideline is discussed	Women's Health Guidelines Group
	November 2015
Has this policy/guideline been thoroughly proof-read to check for errors in spelling, typing, grammar and consistency? *(delete as necessary)*	Yes
By whom:	Women's Health Guidelines Group
Is this a new or revised policy/guideline? *(delete as necessary)*	Revised
Describe the development process used to generate this policy/guideline. *Who was involved, which groups met, how often etc.?*	Guidelines group, neonatologists, senior obstetricians, senior midwives
Who is the policy/guideline primarily for?	Staff within the maternity unit at ASPH
Is this policy/guideline relevant across the Trust or in limited areas?	Trust-wide
How will the information be disseminated and how will you ensure that relevant staff are aware of this policy/guideline?	Guideline notice board, ASPMAT, staff meetings.
Describe the process by which adherence to this policy/guideline will be monitored. *(This needs to be explicit and documented for example audit, survey, questionnaire)*	Any congenital abnormality undetected at the first physical examination and identified later will be reviewed through the maternity risk management group.
Is there a NICE or other national guideline relevant to this topic? If so, which one and how does it relate to this policy/guideline?	UNICEF. Ten steps to successful breastfeeding: Informs the principles of initiation of breast feeding in the newborn.
What (other) information sources have been used to produce this policy/guideline?	See reference list
Has the policy/guideline been impact assessed with regard to disability, race, gender, age, religion, sexual orientation?	Yes
Other than the authors, which other groups or individuals have been given a draft for comment? *(e.g. staff, unions, human resources, finance dept., external stakeholders and service users)*	Guidelines group, neonatologists, senior obstetricians, senior midwives
Which groups or individuals submitted written or verbal comments on earlier drafts?	Guidelines group, neonatologists, senior obstetricians, senior midwives
Who considered those comments and to what extent have they been incorporated into the final draft?	Women's Health Guidelines Group
Have financial implications been considered?	Best practice guideline