Ashford and St. Peter's Hospitals
NHS Foundation Trust

Enabling Expressing of Breast Milk and Cleaning and Storage of Breast Milk Collection Kits

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Guideline History		
Date	**Comments**	**Approved By**
September 2016	Policy written by Emily Wilkins, Deputy Sister – NICU	Sara Robertson, Matron, NICU – September 2016
February 2018	Reviewed and additions applied	Sara Robertson, Matron NICU & Neonatal Consultants – February 2018

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1. Introduction

This Policy relates to enabling and expressing of breast milk and cleaning and storage of breast milk collection kits whilst in hospital.

Expressing Breast Milk

1.1 Support mothers to express at the cot side. This will reduce the time they are separated from the baby's and can help to promote lactation.

1.2 Encouraging skin to skin contact will help with expressing and milk supply.

1.3 When the mother feels able double pumping will save time and increase her milk supply.

1.4 Additionally, a comfortable dedicated room equipped with electric breast pumps should also be made available for mothers to express their milk.

1.5 Provide written and verbal instructions to each mother explaining how to express breast milk by hand as well as how to use and decontaminate the expressing equipment and how to label and store breast milk.

1.6 Encourage and advice all lactating mothers to take multivitamin supplements as it helps with having a good nutrition both for mum and baby through her milk content. This is particularly important for mums of preterm babies. Also encourage them to eat good amounts of protein and drink plenty of water.

1.7 Demonstrate effective hand washing techniques and provide written and illustrated guidance for mothers. Explain that hand washing prior to and after expressing breast milk is an effective means of minimising contamination of the milk with harmful micro-organisms. In additions, washing the breasts daily and a daily change of bra that has been washed using a hot machine cycle or in hot water is recommended.

1.8 The availability of a range of sized of breast pump shields will help to ensure mothers receive optimal support for expressing and prevent nipple trauma caused by ill-fitting equipment. A mother may need different shield sizes as her lactation progresses

1.9 Provide sufficient electric breast pumps for use in hospital so that mothers can express breast milk whenever they need to or are ready to. Suitable locations for electric breast pumps will include all postnatal facilities, neonatal and paediatric unit wards and family overnight rooms as well as dedicated expressing rooms.

1.10 Ensure electric breast pumps are routinely checked and maintained by clinical engineering staff in accordance with manufacturers' instructions and local equipment

protocols to ensure they are working safely and effectively and that milk has not been allowed to enter the pumps casing or its mechanism.

1.11 Initially provide sterile expressing equipment (collecting set and tubing) to all new mothers wishing to express their milk. This will be:

A new sterile set for a single user with cleaning / decontamination between each use followed by disposal once no longer required by the user.

1.12 Adhere to the manufacturers' instructions for decontaminating or sterilising all parts that come into contact with the mother and with her milk as long as they are in accordance with locally agreed infections control protocols. The use of the wash, rinse, dry method is appropriate in most circumstances.

1.13 The cleaning and storage of breast pump expressing kits within the home environment should continue to be disinfected in line with current advice from the Department of Health (NHS 2011). Follow the instructions supplied with chosen sterilising equipment

1.14 The cleaning and storage of bottles, cups and teats for feeding should continue to be disinfected and sterilised in line with current advice from the Department Of Health (NHS 2011)

1 15 It is not possible to prevent some microorganisms getting into expressed breast milk. However if the decontamination instructions are followed, any bacterial load should be reduced to an acceptable level.

2 Background for choice of cleaning breast kits

2.1 Milton hypochlorite solution does not provide sterilisation of equipment merely a high level of disinfection

2.2 The product has been marketed in such a way as to persuade users that sterilisation is achieved

2.3 In the ***clinical setting***, soaking equipment is discouraged as there is often no record of the time the items have been soaking (Atkinson, 2001)

2.4 Milton solution is often left within the breast pump kit at the time of assembly

2.5 The effect on the infant of this solution on colostrum and ultimately the infant is not known

2.6 The process of the mother expressing breast milk increases the risk of bacterial contaminants coming in contact with expressed breast milk (EBM)

2.7 With correct hand washing, cleaning of equipment and storage of equipment such as a breast pump collection kits, bacterial contamination is unlikely (Pittard et al 1991)

2.8 The manufacturers advise disinfection of the breast pump collection set, Medela does not recommend the use of Milton or hypochlorite solution as the chemicals involved can damage parts causing them to become brittle

2.9 Leaving equipment submerged in the hypochlorite solution increases the risk of pathogenic bacterial contamination

2.10 Washing with hot soapy water using a neutral detergent, followed by dry storage offers the safest option (Medela, D'Amico et al 2003)

2.10 Possible concerns with using Milton solution within the clinical setting-

- Equipment is not always fully immersed in the solution
- Used equipment may be returned to the Milton solution without pre-cleaning
- Milton solution may be left longer than the recommended 24 hours between cleaning the container and changing the solution
- Milton solution may remain in the collection kit on assembly, possible effect on colostrum itself or a preterm infants digestive system is not known
- Damage to clothing, fabrics and working surfaces if spillage occurs
- Financial cost of solution and containers
- Staff time involved for daily cleaning of containers and changing of the solution

2.11 Washing with hot soapy water using a neutral detergent, followed by dry storage offers the safest option (Medela, D'Amico et al 2003)

2.12 Additional decontamination precautions to washing, rinsing and drying may be used if indicated by local risk assessment. The microbiological quality of the rinse water is an important consideration particularly for those infants on neonatal units.

3. Equipment

3.1 Mothers who need to express will be supplied with a sterile breast pump collection set (breast shield, white membrane, yellow valve, plastic container- for storing)

3.2 Mothers will need to be asked to supply a clean undamaged plastic container to store decontaminated kits in.

3.3 A new sterile bottle will be used for every milk expression

3.4 The breast expressing kit is for one person use so can be discarded on discharge. Sets can be replaced every 4 1 weeks or sooner if parts look damaged and worn.

3.4 A sterisac will be provided to sanitise kits before every expression.

4 Method

4.1 Before and after expressing

4. 2 Wash hands for 20 secs and dry hands thoroughly using the hand basin designated for hand washing

4.3 Using the sink in the milk kitchen, disassemble and wash breast pump shield, white membrane and yellow valve thoroughly using detergent- use fingers to clean the parts, not a bottle brush

4.4 Rinse under warm running water

4.5 Shake off excess water droplets

4.6 Dry thoroughly with clean white paper towels

4.7 Once dry, store in the clean plastic container. The lid should be securely placed on to prevent air born infections entering the kit when clean.

4.8 Where possible keep the kit at the cot side or labelled well in the milk kitchen with date 1st used and name of the baby

4.9 This should only be carried out for breast milk collection kits; bottles for feeding should continue to be sterilised in the same way unless a new sterile bottle is used with each feed

4.10 Before pumping sanitise the kit using the sterisac provided in the microwave

4.11 After sanitising the kit wash hands for 20 secs and carefully remove the contents from the bag to avoid scalding

4.12 Shake off any excess water, dry thoroughly with a clean paper towel , then assemble the breast kit ready for use

2. Supporting References

- Atkinson, A (2001) Decontamination of breast milk collection kits: a change in practice. MIDIRS Midwifery Digest September 2001: 383-385
- Boswell, L. (2013) Guideline for cleaning and storage of breast milk collection kits, Frimley Park Hospital FPH
- Pittard, WB. Geddes, KM. Brown, S. Mintz, TC. (1991) Bacterial contamination of human milk: container type and method of expression. American Journal Perinatol. January 8 (1): 25-27 D'amico, CJ. Dinardo, CA. Krystofiak, S. (2003) Preventing contamination of breast pump kit attachments in NICU. Journal of Perinatal and Neonatal Nursing 17 (2): 150-157
- NHS (2011) Guide to bottle feeding. NHS http://www.babyfriendly.org.uk/pdfs/guide_to_bottle_feeding.pdf
- Unicef Baby Friendly Initiative October 2017
- Medela, Cleaning and Sanitising your breast kits , 2018. https://www.medela.co.uk/breastfeeding/mums-journey/cleaning-breast-pump
- Journal of Infection Prevention 2016 March . Decontamination of breast pump milk collection kits and related items in the home and hospital.

3. Supporting relevant trust guidelines

4. Guideline Governance

a. Scope

This guideline is relevant to all staff caring for babies across neonatal intensive care, transitional care and maternity.

b. Purpose

i. This guidelines aims to facilitate a common approach to the management of babies admitted under neonatal care. At times deviation from the guideline may be necessary, this should be documented and is the responsibility of the attending consultant.

ii. This guideline is subject to regular review to ensure ongoing evidence based practice.

c. Duties and Responsibilities

All staff members involved in supporting parents with expressing should be familiar with this guidance.

d. Approval and Ratification

This guideline will be approved and ratified by the Neonatal Guidelines Group.

e. Dissemination and Implementation

i. This guideline will be uploaded to the trust intranet 'Neonatal Guidelines' page and thus available for common use.
ii. This guideline will be shared as part of ongoing education within the Neonatal Unit for both medical and nursing staff.
iii. All members of staff are invited to attend and give comments on the guideline as part of the ratification process.

f. Review and Revision Arrangements

a. This policy will be reviewed on a 5 yearly basis.
b. If new information comes to light prior to the review date, an earlier review will be prompted.
c. Amendments to the document shall be clearly marked on the document control sheet and the updated version uploaded to the intranet. Minor amendments will be ratified through the Neonatal Guidelines Group. A minor amendment would consist of no major change in process, and includes but is not limited to, amendments to documents within the appendices.

g. Equality Impact Assessment

Background • Who was involved in the Equality Impact Assessment
Neonatal guidelines 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?)
All staff and patient groups considered
Key Findings • Describe the results of the assessment • Identify if there is adverse or a potentially adverse impacts for any equalities groups
No evidence of discrimination
Conclusion • Provide a summary of the overall conclusions
No evidence of discrimination
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
Guideline to be implemented

h. Document Checklist

To be completed (electronically) and attached to any document which guides practice when submitted to the appropriate committee for approval or ratification.

Title of the document:

Policy (document) Author:

Executive Director:

		Yes/No/ Unsure/NA	Comments
1.	**Title**		
	Is the title clear and unambiguous?	**Y**	
	Is it clear whether the document is a guideline, policy, protocol or standard?	**Y**	
2.	**Scope/Purpose**		
	Is the target population clear and unambiguous?	**Y**	
	Is the purpose of the document clear?	**Y**	
	Are the intended outcomes described?	**Y**	
	Are the statements clear and unambiguous?	**Y**	
3.	**Development Process**		
	Is there evidence of engagement with stakeholders and users?	**Y**	
	Who was engaged in a review of the document (list committees/ individuals)?	**Y**	**NGG**
	Has the policy template been followed (i.e. is the format correct)?	**Y**	
4.	**Evidence Base**		
	Is the type of evidence to support the document identified explicitly?	**Y**	
	Are local/organisational supporting documents referenced?	**Y**	
5.	**Approval**		
	Does the document identify which committee/group will approve/ratify it?	**Y**	
	If appropriate, have the joint human resources/staff side committee (or equivalent) approved the document?		
6.	**Dissemination and Implementation**		

		Yes/No/ Unsure/NA	Comments
	Is there an outline/plan to identify how this will be done?	**y**	
	Does the plan include the necessary training/support to ensure compliance?	**Y**	
7.	**Process for Monitoring Compliance**		
	Are there measurable standards or KPIs to support monitoring compliance of the document?	**Y**	
8.	**Review Date**		
	Is the review date identified and is this acceptable?	**Y**	
9.	**Overall Responsibility for the Document**		
	Is it clear who will be responsible for coordinating the dissemination, implementation and review of the documentation?	**Y**	
10.	**Equality Impact Assessment (EIA)**		
	Has a suitable EIA been completed?	y	

Committee Approval (Neonatal Guidelines Committee)			
If the committee is happy to approve this document, please complete the section below, date it and return it to the Policy (document) Owner			
Name of Chair	**M. S Edwards**	**Date**	**Dec 2020**
Ratification by Management Executive (if appropriate)			
If the Management Executive is happy to ratify this document, please complete the date of ratification below and advise the Policy (document) Owner			
Date: n/a			