

Handling and storage of Expressed Breast Milk (EBM) in the Maternity Department

Key Points

- To provide guidance on the correct procedures for the storage and handling of EBM within the maternity department.
- Provide guidance for the correct procedure for checking identity of the mother/baby when retrieving the EBM from the fridge or freezer.

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Abbreviations

DEBM	Donor expressed breast milk – Expressed breast milk from donor service
EBM	Expressed breast milk
NNU	Neonatal Unit

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1. Aim

To provide guidance on the correct procedures for the storage, handling and checking of expressed breast milk (EBM) within the maternity department.

2. Rationale

Mothers under the care of Frimley Health are encouraged to collect colostrum from 36 weeks gestation and once baby is born, it may be necessary for the mother to express her milk if her baby is either unable to attach due to reluctance to feed or separation of mother and baby. Breast milk is not sterile, microorganisms can multiply when milk is handled incorrectly which poses risks to the wellbeing of the newborn infant¹. It is imperative that there is strict hygiene and temperature control during collection, handling, transportation and storage of breast milk. This guideline is for use by staff to ensure the correct procedures are followed whilst the mother is storing her EBM as an inpatient.

This guideline should be used in conjunction with the following guidelines

- Term healthy infant who is reluctant to feed
- Hypoglycaemia guideline
- Antenatal expression of colostrum
- Care of the preterm and late preterm infant
- Infant feeding policy
- Policy on cleaning and storage of breast milk kits

3. Objectives

During the antenatal infant feeding conversation, community midwives should offer all mothers the advice and guidance on antenatal hand expression of colostrum. Postnatally, in keeping with BFI standards, all breastfeeding mothers must be shown how to hand express their breast milk prior to discharge from hospital because this skill helps the breastfeeding mother to recognise and manage many common complications of breastfeeding.

Staff should have the knowledge and skills to guide mothers on correct hygiene measures when hand expressing or pumping to minimise risk of contamination with microorganisms.

Fridge and freezer temperatures should be monitored daily to ensure they are remaining within the correct parameters and reporting processes followed (as per the process for reporting drug fridges) if these go out of range.

EBM **must** be correctly labelled with:

- Mothers full name
- MRN
- Date and time of collection

This is to ensure that the EBM is given to the correct baby.

4. Collection of EBM

Prior to either hand expressing or pumping, the mother should be advised to wash her hands with hot soapy water.

If hand expressing (including antenatal colostrum collection) the mother should be provided with sterile enteral syringes (purple) **Please note, syringe caps must not be used.**

If pumping, the mother should be provided with a new breast pump collection kit, this should be washed in hot soapy water prior to first use and between each use, in accordance with the manufacturer instructions. These should be washed in the ward kitchen sink and not the hand wash basins in the bays/rooms.

Communal electric breast pumps should have no visible signs of damage and should be cleaned externally before and after every use by each user. This is to remove milk splashes and contamination that results from general handling.

All EBM collected must be individually labelled when placed in the hospital fridge/freezer. (When collected at home, the mother should label the syringe packet with her full name, MRN, date and time of collection).

Mothers collecting colostrum antenatally should be provided with 5 x 1ml enteral (purple) syringes and an information sheet.

5. Transportation of EBM

When transporting frozen EBM from home into hospital it should be placed in an insulated box/bag with frozen packs to maintain the recommended storage temperature.

Once in hospital a member of staff should check that the EBM is correctly labelled and put into the freezer immediately.

Previously frozen EBM which has fully defrosted should be used immediately.

6. Storage of EBM in Hospital

There should be a designated clinical fridge and freezer for the storage of EBM. These are located in the milk kitchen which should be kept locked at all times and only accessed by staff¹. This is to minimise the risks of the wrong EBM being removed by members of the public and minimise risks of any tampering with the stored EBM.

The fridge and freezer temperatures should be recorded daily and this record should be stored for 2 years.¹

The process for reporting if these are out of range should be followed in the same way drug fridges are reported. Any stored EBM must be disposed of if the fridge/ freezer has been out of range and it is not known how long it had been out of range.

Fridge temperature should be maintained at 2-4°C.

Freezer temperature should be maintained <-20 °C.

Storage times for EBM in the hospital setting

The following times are appropriate for storage of EBM in communal fridges/freezers such as in the hospital setting¹. These are different to the recommended safe times for storage of EBM in the home setting due to the frequency of use of the communal fridges/freezers in the hospital setting. Parents can be advised to follow the Breastfeeding Network guidance on timings for storage of EBM once in the home setting².

Place	Maximum time
Room (up to 26°C)	6 hours
Fridge 2- 4°C	48 hours
Freezer <-20°C	3 months
Thawed in fridge 2-4 °C	Use within 12 hours

Some mothers may bring frozen donor expressed breastmilk (DEBM) into hospital with them. This should be labelled, stored and handled in the same way as any EBM.

1ml syringes can be thawed by holding the syringe in clean, warm hands.

Ensure EBM is given to parents on discharge from hospital as any EBM left behind will be discarded 48 hours following discharge.

7. Dispensing of EBM

The checking of EBM should be treated the same as the administration of medication

All EBM removed from the fridge/freezer **must** be checked with the mother and checked against both the mother's and baby's ID wristband at the bedside by 2 midwives.

All EBM dispensed to a baby must be documented on EPIC.

- **What to do if a baby receives the wrong EBM**

Dangers of babies receiving the wrong EBM mainly surround the risks of acquiring blood-borne viruses via the EBM given.

- Clarify the details of the error:
 - Which baby received which mother's EBM?
 - How did this happen?

- Inform the registrar/consultant on call and the nurse in charge
- It would be advisable to discuss individual cases with the microbiologist on call, especially in cases where there are concerns regarding the antenatal serology of the mother whose EBM has been given erroneously.
- Inform and apologise to the parents of the baby who has received the wrong EBM and to the parents whose EBM has been used in error.
- Explain the need to undertake the following blood tests on baby:
 - HIV Ag/Ab
 - Hep B sAg
 - Hep C Ab
- Discuss the error with the mother whose EBM has been erroneously given. Ask permission to check their antenatal serology results and consent for further serology to be taken.
- The following blood samples need to be obtained from this mother as soon as possible:
 - HIV Ag/Ab
 - Hep B sAg
 - Hep C Ab .
- Follow up/further serology may be required from the baby depending on the results of the serology from the mother whose EBM has been given in error.
- In all cases an Inphase Incident Form should be completed

8. Auditable standards

Fridge/freezer temperatures recorded daily and results stored for 2 years. The contents of the fridge/ freezer will be monitored against the log sheets to audit compliance with this guideline.

9. Implementation Plan

This guideline will be available on the trust intranet for viewing by the Midwifery team.

10. Monitoring compliance with guideline

Compliance will be monitored locally in the department.

11. Communication

If there are communication issues (e.g., English as a second language, learning difficulties, blindness/partial sightedness, deafness) staff will take appropriate measures to ensure the patient (and their partner, if appropriate) understand the actions and rationale behind them.

References

1. Royle J, Weaver G, (2016, updated 2019) Guidelines for the Preparation and Handling of Expressed and Donor Breast Milk and Specialist Feeds for Infants and Children in Neonatal and Paediatric Health Care Settings, The Association of UK Dietitians.
<https://www.bda.uk.com/static/55114cc1-17aa-45c6-b64d1b81089db1e3/BDA-guideline-for-storage-and-handling-of-EBM-and-DBM.pdf>
2. Hands A, Buchanan P, Jones W 2019 The Breastfeeding Network, Expressing and Storing Breastmilk information leaflet
3. Forster, Della A et al. (2017) Advising women with diabetes in pregnancy to express breastmilk in late pregnancy (Diabetes and Antenatal Milk Expressing [DAME]): a multicentre, unblinded, randomised controlled trial. The Lancet, Volume 389, Issue 10085, 2204 – 2213
4. UK Baby Friendly Initiative; Guide to the Baby Friendly Initiative Standards
www.unicef.org.uk/babyfriendly

Full version control record

Version:	2.0
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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	Oct 2021	Elizabeth Farrant, Hannah Holland, Claire Essery	Final	First cross site version. Approved at OCGC
2.0	Dec 2024	F Lewis, Joint Infant Feeding Lead Midwife, FPH A Matthews, Infant Feeding Lead Midwife, WPH	Final	Scheduled review, Approved at Cross Site Obstetrics Clinical Governance meeting, 16 th December 2024

Related Documents

Document Type	Document Name
Guideline	Expressing Colostrum in the Antenatal Period
Guideline	Term healthy breastfeeding infant who is reluctant to feed
Guideline	Neonatal Hypoglycaemia (Management on Maternity Wards)
Guideline	Management of Late Preterm and Low Birth Weight Babies on the Postnatal Wards and TCU
Guideline	Infant feeding
Guideline	Handling and Storage of Expressed Breast Milk