

Document Control

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1. Background

This document sets out Northern Devon Healthcare NHS Trust's system for the handling, storage and feeding of expressed breast milk (EBM). This standard operating procedure (SOP) replaces all existing guidance/superseded procedures.

2. Purpose

2.1. The Standard Operating Procedure (SOP) has been written to:

- Ensure the safe handling, storage and administration of EBM.
- Minimise risks in handling, storage and administration of EBM.

3. Scope

3.1. This Standard Operating Procedure (SOP) relates to all members of the Multi-Disciplinary Team who may be involved with the handling and storage of expressed breast milk.

4. Location

This Standard Operating Procedure for the handling, storage and feeding of expressed breast milk can be implemented in all clinical areas where competent staff is available to undertake this role.

Staff handling expressed breast milk must be able to demonstrate attendance at relevant in-house training as per the Trust's [Newborn Infant Feeding Policy](#). Staff should demonstrate continued competence as per the Trust's [Assessment and Maintenance of Clinical Competence in Nurses, Midwives and Support Workers Policy](#).

5. General expressed breast milk handling, storage and feeding procedures

- Decontaminate your hands prior to handling EBM (please refer to the Trust's [Standard Infection Control Precautions Policy](#)).
- Wear [protective] non-sterile gloves and handle all EBM using a clean non-touch technique.
- Follow the Trust's guidelines for infection control and waste management procedures.
- Microbial testing of mother's own milk should be considered if there is a clinical indication e.g. concern over infection risk.

6. Patient Identity checks

From birth and throughout inpatient stay the baby wears 2 ID name-bands (see the Trust's [Patient Identification Policy](#)).

Premature/sick infants may not have an attached ID band.

Some infants are handled minimally and not disturbed for their feed.

In this instance:

- The identity band/addressograph label should be attached to head of incubator/cot.
- An addressograph label may be attached to the gastric tube.
- ID added to the oxi-wrap.

7. Labelling of EBM containers

Staff to give verbal and written instructions to mother on the labelling, handling and storage of EBM and infection issues related to this (see [Breastfeeding, expressing and storage Patient Information leaflet](#)).

- Staff give a set of mother's (if antenatal harvesting) or infants addressograph labels to mother.
- All labels must include 3 identifiers.
- If there are no addressograph labels available, the mother hand-writes a label which includes the infant's:
 - Name
 - Date of birth
 - Hospital / NHS number or if hospital ID not known
- For multiple births mother writes names of all babies on each label.
- Mother and staff confirm accuracy of labels together.
- The mother applies a label to the container of EBM immediately following expressing.
- Mother writes date and time of expressing.
- Mother writes EBM on label.
- If EBM is decanted into another container for storage/use, the mother and a member of staff/2 members of staff to label and check this new container as above.

Please find further information regarding the labelling of expressed breast milk in the antenatal period in the [Antenatal Harvesting of Colostrum for diabetic mothers](#) guideline.

7.1 Labelling of EBM containers

- Parents re-label EBM as point 7 (above)
- If an addressograph label will not stick to the EBM container(s) then place it in a correctly labelled sealed plastic bag.
- If multiple EBM containers are transported from another hospital/home:
 - Confirm with transfer staff identity/contents of containers.
 - Place all containers in a large bag. Identify with the signed addressograph label until parent/carer can confirm and label them individually.
- EBM containers can be identified / used if 3 identifiers are confirmed.
- Discard EBM if 3 identifiers cannot be confirmed. (See section 12).

7.2 Labelling of defrosting EBM

Staffs label all EBM taken from the freezer with a defrosting sticker and record date and time of removal.

Removal from Freezer
Date: _____
Time: _____

8. Handling of EBM

The mother hands the labelled EBM container to staff for safe storage where her baby's tray is located. Or the mother could put her labelled EBM bottle into the correct tray of hers in the Milk fridge. Staff must explain the importance of correctly labelling and double checking EBM when removing it from the fridge before giving it to the baby.

Alternatively staff will transport EBM to the ward where the baby is located. It is the receiving staff's responsibility to:

- Recheck and confirm the identifiers on the label.
- Store the EBM safely (see section 10).
- Administer EBM to correct infant.
- Transfer EBM to location of baby.
- Discard EBM (see section 12).

9. Checking of EBM

Always check EBM containers with 2 people (staff / parent / carers) (see labelling section 7) and sign documentation.

Check EBM:

- On receipt from mother/ staff.
- During daily checks (see section 10).
- On transfer of EBM to another location e.g.
 - Transfer to another ward / hospital
 - Surplus EBM sent home
 - At baby discharge
- Before administration:
 - Correct identifiers.
 - Check date and time of expressing / defrosting.
 - Identity of receiving infant (see section 6).
- When decanted and container relabelled.
- Before discarding.

10. Storage of EBM

- Store EBM at the same location as the infant.
- Store EBM in the milk fridge on SCBU/ locked freezer (freezer is only accessed by staff).

10.1 Containers

EBM is contained in securely labelled:

- Sterile plastic bottles
- Sterile oral syringes with sterile stoppers
- Parents own containers e.g. EBM plastic storage bags
- All EBM containers used in hospital are single use.
- Store EBM in the equivalent amounts required for each feed whenever possible.

10.2 Storage times for EBM

Fresh EBM

- Use within 4 hours if left at room temperature.
- EBM must be used by 48hours after expressing either as:
 - 48 hours in fridge, or
 - 24 hours in fridge + 24 hours in fridge once taken from freezer.
- Store in a fridge if:
 - To be used within 48 hours.
- Freeze:
 - Immediately if not to be used within the next 24 hours.
 - At 24 hours after expressing if not to be used in next 24 hours.

Do NOT freeze after 24 hours of expressing.

Frozen EBM may be stored in a freezer for up to:

- 3 months if given to a premature/sick infant.
- 6 months if given to a well term infant.

Defrosted EBM

- Is labelled (see section 7), stored in the fridge after removal from freezer and **used within 24 hours**
 - Is never refrozen.
 - Is kept:
 - In a fridge.
 - At room temperature for up to 4 hours and discard any remaining EBM.
 - In a jug of cold water to quick defrost in emergencies only.
- Ensure container neck is above rim of water and use immediately. Discard remaining EBM.

Do not defrost in microwave.
Or you can use the Medela Milk warmer and use the defrost setting.

10.3 Fridge storage of EBM

- Temperature between 2°C - 4 °C (with a tolerance range from 1°C - 5°C).
- Each infant has its own named container/tray for separate storage.
- EBM is arranged by placing the newly expressed breast milk behind the supply of EBM already stored.

10.4 Freezer storage of EBM

- Temperature between 20°C to - 23°C (with a tolerance -18°C to - 25°C).
- Each infant has own named shelf for separate storage.
- Do not freeze overfull bottles - allow room for expansion.

Thermometers are placed in the centre of the fridge/freezer and preferably display maximum/minimum temperature ranges over 24 hours.

Note: If the temperature is outside the normal tolerance range, EBM inside the fridge or freezer may need to be discarded. This should be considered for each individual case, following discussion with the Mother and infection control.

10.5 Daily fridge/freezer checks for EBM

EBM in the fridge/freezer is checked daily to ensure that it is:

- Stored in a clean environment.
- Stored at the correct temperature.
- Labelled correctly.
- In the correct trays/shelves which are labelled with the infant's name.
- Arranged in order of use in trays/shelves.
- In time / date.
- Frozen if cannot be used within next 24 hours.

10.6 Fridge/Freezer general notes

- Fridge is cleaned daily/weekly (as per manufacturer's instructions).
- Freezer is cleaned/defrosted (as per manufacturer's instructions).
- Defrosting occurs preferably when no EBM is in storage. If EBM is in storage it is either taken home or stored in cool bags during this process.

All checks/maintenance are documented and initialled by staff on a daily checking chart, (see Appendix A).

10.7 Access to the milk kitchen

- Parent/carers have access to the shared milk kitchen, but the EBM freezer is locked in it.

- Staff only have access to the EBM freezer.

11. Administration of EBM

- EBM is administered to the mother's baby only.
- EBM is checked by two staff or staff with parent/carer before administration (see section 9).
- Shake container of EBM before use
- Use EBM:
 - In date order for the first 14 days.
 - Write day 14 date on fridge tray label.
 - Fresh in preference to frozen after 14 days.
- Check EBM labels against infant's ID bands using 3 patient identifiers.

These can be:

- Name (name is not changed during hospital stay).
- Date of Birth.
- NHS number / hospital number.
- Address. The address is not a true identifier and therefore should not be used unless there is no alternative.

If infant is too premature or sick for ID bands (see section 6).

EBM taken from the fridge prior to administration may be:

- Warmed in a container in the milk warmer
- Warmed in a container in warm water to body temperature. Ensure the container neck is above rim of water.
- Taken from fridge up to 4 hours before administration to be allowed to reach room temperature

12. Discarding EBM

EBM should be discarded if:

- Out of date/time.
- Incorrectly labelled.
- Incorrectly stored.
- EBM was left behind when the infant has been discharged / transferred.
Mother's choice.

Used EBM containers are placed in tiger stripe non-infected wasted disposal bags in accordance with [Waste Management Policy](#)

13. Transported EBM from home / another hospital / ward

- Staff give verbal and written instructions to mother on infection issues, labelling, handling and storage of EBM

- Staff give parents/carers a supply of infant's addressograph labels for labelling EBM (see section 7).
- Fresh or frozen EBM is transported in a cool bag/box with ice packs.
- Staffs receiving EBM confirm with the parent / carer that the EBM is labelled correctly (see section 7).
- If parent/carers visit daily she may bring in her EBM fresh. Calculate the expected volume of EBM required for the next 24 hours and freeze the excess, (see section 10)
- If parent / carer do not visit daily she may bring her EBM frozen.
- Thawed EBM is used within 24 hours of thawing.

14. Transfer and discharge

- Parent/carers take excess stored EBM home prior to discharge.
- On infant transfer/discharge all EBM accompanies baby.
- All EBM is double checked with parent/staff that the correct milk is taken, (see section 9)

15. Procedure for incorrect administration of expressed breast milk.

- Aspirate the milk feed via the naso-gastric tube if possible/appropriate.
- Inform medical staff immediately.
- Inform the parents/carers of the incident
- Follow the Trust's Standard Infection Control Precautions Policy.
- Contact Infection Control or the on-call microbiologist for advice.

Further action for consideration:

- A clotted blood sample for testing will be required from the donor mother for HIV 1 & 2 antibody, Hep B surface antigen, Hepatitis C antibody, HTLV I & II and syphilis.
- A clotted blood sample will also be required from the infant for storage. In some circumstances it may be appropriate, following discussion with the on-call microbiologist, to take a clotted blood sample from the recipient's mother for storage as representative bloods for the infant.
- Complete incident form.
- Document incident in the baby's medical notes.

16. Harvesting colostrum in the antenatal period and storage

Please see link to [Antenatal Hand Expressing of Colostrum in pregnancy](#) leaflet and [Antenatal Expressing of Colostrum Guideline](#)

17. References

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Nursing and Midwifery Council (2007) Record keeping. London, NMC.

St Michael's Hospital guidelines for Storage and Administration of Expressed Breast Milk

Sydney West Area Health Service (2007). Expressed Breast Milk. Storage and Administration of. Protoc

UNICEF UK Baby Friendly Initiative – <http://www.unicef.org.uk/babyfriendly/>

18. Associated Documentation

18.1. Northern Devon Healthcare NHS Trust Policies for :

[Donor Breast Milk Guidelines](#)

[Breastfeeding, expressing and storage leaflet](#) (parent information)

[Antenatal Harvesting of Colostrum for diabetic mothers](#)

[Management of Inoculations Injuries Policy](#)

[Moving and Handling Policy](#)

[Newborn Infant Feeding Policy](#)

[Patient Identification Policy](#)

[Assessment & Maintenance of Clinical Competence in Nurses, Midwives and Support Workers Policy](#)

[Standard Infection Control Precautions Policy](#)

[Waste Management Policy](#)

['Off to the best start' leaflet](#)