Use and Storage of Expressed Breast Milk & Infant Formula

Please see related protocol – Clinical guidelines for the Use of Human Donor Milk

1. Administration of expressed breast milk & infant formula
To ensure safe practice within the nurseries it is necessary for all expressed breast milk including additives and formula to be "double checked" by two nurses, one of whom must be a registered nurse before administration.

All infant formula is to be checked by two nurses, one of whom must be a registered nurse during preparation in the case of powdered formula or for all formula with additives.

In the case of breast milk - viruses can be transmitted and therefore administration of the wrong milk to an infant is considered a serious clinical error and must be immediately reported to the neonatologist on 1st call and the registered nurse in charge of shift. An incident form must be completed. See policy - Error in Breast Milk Administration - for further information and guidance.

1.1 Identification of expressed breast milk and infant formula
- It is essential that all expressed breast milk / formula is labelled and stored correctly. See section two of this policy – Use and storage of expressed breast milk / formula.
- There is a separate storage bin in each fridge & freezer to store each infant’s expressed breast milk or specialised formula. All bins must be labelled with the infant’s MRN sticker attached.
- Expressed breast milk / formula in plastic bags or bottles must have an infant MRN sticker applied.
- At the bedside expressed breast milk / donor human milk / formula in syringes must be capped. The infant’s MRN sticker OR completed EBM / formula sticker if decanted, is to be attached to the barrel of each syringe signed by two RNs.
- Expressed milk may be checked against a maternal MRN sticker in the absence of baby MRN labels on the PNW. Two RNs must check the maternal MRN label against the baby MRN label (using details such as address and mother’s first name and/or ROL sheet as confirmation of correct mother-baby unit). The RN must either use the EBM immediately or replace the maternal label with baby MRN after checking the above details with two RNs.
- All stored EBM / specialised formula must have the baby MRN, type of milk, date of preparation sticker attached.
• **If there are two infants in the nursery with the same or similar last names**, a label stating – *special note there is another patient with the same or similar name CHECK!* - must be attached to:
  - both infants’ incubators / cots (blue laminated label)
  - both infants’ storage bins in the fridge (blue laminated label)
  - both infants’ enteral feed charts, HDU charts or intensive care charts for NICU babies (yellow sticky label)

N.B. **Please ensure all mothers are aware of the potential risk and all have an adequate number of labels to identify their milk.**

• Expressed breast milk / decanted / previously prepared formula should not be used if there is inappropriate identification and / or where infant records are incomplete
• The nurse caring for the infant must ensure the mother has enough infant MRN stickers to ensure correct labelling of her breast milk.

**Immediately before using breast milk / formula** –

- Check name, infant’s medical record number, additives, date and time of collection / defrosting on the breast milk container against infant's name-tag.
  
  **AND / OR**

- Check name, infant’s medical record number, type of formula, additives, date and time of preparation on the milk container against infant's name-tag.
- Prior to removing milk from the fridge it may be necessary to further decant the breast milk / specialised formula into a second container. This will also require an infant identification and completed EBM sticker and this procedure must be witnessed by a second nurse. Both nurses are then to sign the sticker, then apply to container.
- **Decanting** of EBM is a clean procedure, clean surface, place sterifield on surface and use gloves. Decant all breast milk at the infant’s cot.
- Decanting / preparation of infant formula is a clean procedure, prepare ingredients, wash hands & place sterifield on surface. This procedure may be performed at the infant’s cot or at feed trolley.
- **Immediately** before EBM or formula is given, the two signatories must sign the enteral feed chart, HDU chart or intensive care charts (NICU babies). Prepare enough breast milk for no more than 8 hours use. **All milk may be only left at room temperature for 4 hours.**
- **EBM is NOT TO BE REHEATED, IT MUST BE DISCARDED.**
- Prior to each feed two nurses (at least one a registered nurse) must check name and infant medical record number on the container against infant's name-tag and sign feeding chart.
1.2. Human Donor Milk

- Pasteurised HDM that is ready for use is stored in GREEN labelled containers in the HDM fridge.

- Do NOT use HDM from a RED container as this milk has NOT been released by a lactation specialist or CNC.

- All human donor milk is to be labelled and signed before administration and stored in the same way as mothers’ own milk (EBM).

- On commencement of HDM a Donor Milk Sticker (batch number, donor MRN, and expiry date) is to be placed on BOTH Problem Sheet and case history notes (MR 45).

- Commencement / cessation of HDM should be documented in the case history notes (MR 45) and ongoing use of HDM must be documented each time a nursing report is written.

- Human Donor milk must be documented as HDM on all feeding charts.

2. Use and storage of expressed breast milk

All midwives and nurses who handle breast milk should take care as it is body substance and as such can transmit disease (Dougherty & Giles, 2000; Ruff, 1994).

- Breast milk is stored in a sterile plastic sealed container / bag with the infant’s MRN sticker, date and time of collection clearly written on the lid.

- If syringes are used to store milk then the hub of the syringe must be sealed and infant’s MRN identification label attached to the barrel of the syringe.

- Mothers expressing for infants < 30 weeks should store their EBM in syringes until there are at least 20 x 2ml syringes available. This should reduce waste while minimal enteric feeding progresses.

- Any concerns about current maternal medication and use of EBM should be discussed with the neonatologist. Further information is available from the high-risk parenting and lactation nurse specialist (page 80354), RPA Drug Information Service (ext 58145) and resource material in the NICU including Medications and Mothers’ Milk (Hale, 2010).
Freshly expressed breast milk may be stored in the fridge proper (not the door) for up to 48 hours following collection provided temperature remains < 4°C (Binns & Davidson, 2003). If use within 48 hours is not anticipated then the milk should be frozen. Breast milk can be stored up to 6 -12 months in a deep freeze at -18°C and in a fridge freezer for up to three months (Lawrence, 1994). Frozen breast milk can be safely stored for two weeks in the freezer compartment of a bar fridge (Igumbor et al., 2000; Binns & Davidson, 2003).

Fortified EBM should be used within 8 hours and not frozen (Jocson et al., 1997).

Plan ahead as frozen breast milk should be thawed gradually, shake to mix separated components once thawed and use within 24 hours (Hamosh et al., 1996). Label on container must include date and time milk was removed from the freezer.

If milk is quickly thawed and heated for immediate use it must be used within 4 hours and any unused portion discarded.

If the infant is very premature advise mother to store her breast milk in small quantities so none is wasted when thawing and using.

Evidence suggests that fresh (unfrozen) breast milk should be used when available and used in preference to thawing frozen milk stocks (American Academy of Pediatrics, 1985; Hamosh et al., 1996; Williamson & Murti, 1996).

3. Infant transfer within RPA Newborn Care and safe management of EBM

It is the responsibility of the nurse looking after the infant to ensure all EBM is moved to the appropriate fridge / freezer for storage when the infant is transferred to NICU, high dependency or special care.

The EBM or formula milk must be checked with a second nurse. Both nurses must sign & print their name in the case history notes (MR 45) to confirm the following:

- All EBM or formula belonging to the infant has been removed from the fridges / freezers and transferred to the fridge freezer appropriate to that area where the infant is moved.
- Before transfer of the infant, two nurses must ensure that all containers of EBM / formula are correctly labelled and each one is checked against the infant’s name, MRN and address.
4. Excess stocks of EBM
The lactation specialists will identify those mothers with excess EBM in the freezer and ask parents to remove same in a timely manner.

Each container of EBM taken by parents must be checked and signed for by two nurses in the case history notes (MR 45.) EBM is to be placed in insulated containers with frozen blocks to maintain the cold chain during transport.

5. Infant transfer to another facility / discharge home and safe management of EBM
It is the responsibility of the nurse looking after the infant to ensure all EBM is sent with the infant (or taken by the parents) at transfer to another facility or when the infant discharged home. The EBM must be checked with a second nurse. Both nurses must sign & print their name on the Newborn Care Discharge Risk Form (MR46/5) to confirm the following:

- All EBM belonging to the infant has been removed from the fridges / freezers
- Before transfer / discharge of the infant, two nurses must ensure that all containers of EBM are correctly labelled and each one is checked against the infant’s name, MRN and address.
- Inform parents that any EBM left behind will be immediately discarded
- EBM is to be placed in insulated containers with frozen blocks to maintain the cold chain during transport.

6. Mothers in Adult Critical Care Area (main ICU / high dependency).
The RN in charge of the shift is responsible and will allocate the most appropriate RN to ensure these mothers are comfortable and expressed via hand or electric pump, their EBM is transferred to NICU and labelled correctly. Usually this should be the RN looking after the infant however this may not always be optimal, for example if the infant is very unstable.

The lactation specialists will document plan of management on the infant’s Individualised Baby care Plan (MR45/46) and the Handover Notes for discussion at clinical handover.
7. Routine audits

1. The temperature of all fridges / freezers storing EBM is monitored and the temperature is documented each day by the team leader or lactation specialists. The lactation specialists ensure this measurement is adequately documented and maintain the records.

2. Once a day (~ 13:30 hours) the team leader / nurse in charge checks that the storage bin for each infant is in the appropriate fridge / freezer. This is recorded on an audit form and on completion is filed by the clinical NUM for a period of three months.

References


