

BREASTFEEDING – MANAGEMENT OF EXPRESSED BREAST MILK

PRACTICE GUIDELINE[®]

DOCUMENT SUMMARY/KEY POINTS

This document provides information on:

- Safe management of Expressed Breast milk- storage, handling and administering
- Strategies to reduce the risk of the misadministration of breastmilk
- Appropriate management if an infant is exposed to breastmilk from a non-birth mother

Points worth noting:

- If an infant who is normally breast fed requires infant formula, **written permission** should be sought from the breastfeeding mother, recorded on the **Consent form Formula/Complementary, Supplementary feeds** and placed in the infant's medical record. (http://intranet.schn.health.nsw.gov.au/files/scn020050_0.pdf)
 - Every ward should have a refrigerator and a separate freezer specifically for the storage of Expressed Breast Milk (EBM) and formula. Food should not be stored with EBM/Formula
 - EBM stored in ward refrigerators/ freezers must be in a labelled container and appropriately labelled.
- EBM fridge and freezers must have the temperatures checked and recorded twice daily
- All expressed breastmilk is required to be safely managed and education is to be provided to parents and carers about this management.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1 st June 2024	Review Period: 3 years
Team Leader:	Lactation Consultant	Area/Dept: GCNC

CHANGE SUMMARY

- This Breastfeeding: management of Expressed Breastmilk Practice Guideline replaces the previously titled Infant Feeding 0-12 months Breastfeeding Guideline
- The changes have been made throughout, to reflect the NSW Health Breastmilk: Safe management Guideline GL2023_021.
- Addition of resource - EBM Twice Daily Log Chart

READ ACKNOWLEDGEMENT

- This document is relevant for any NSW Health staff members who care for breastfeeding babies and their mothers.
- It is also relevant to any staff members who handle expressed breast milk.
- The above staff should read and acknowledge they understand the contents of this document.
- Mandatory SCHN learning module:
 - Safe Management of Expressed Breast Milk: <https://learning.schn.health.nsw.gov.au/safe-management-expressed-breast-milk>
 - SCHN Course Code: CSL 15875
 - Location Path: SCHN wide
 - Course Content Object ID: 522832144
 - Scheduled Offering Folder IS: 522834661
- Optional learning modules:
 - SCHN Child and Family Health Champions: [Module 1 – Breastfeeding](#):
 - Other HETI (State) modules:
 - Breastfeeding (module 1): 43888448
 - Breastfeeding (module 2): 255411256
 - Breastfeeding Promotion: 45338916

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1 st June 2024	Review Period: 3 years
Team Leader:	Lactation Consultant	Area/Dept: GCNC

TABLE OF CONTENTS

1	Introduction.....	4
1.1	Key Definitions.....	4
1.2	Related Documents	4
2	Identification	5
2.1	Identification of Patients	5
2.2	Separation of mothers and babies.....	5
3	Labelling.....	5
4	Transporting	5
5	Storage	6
6	Thawing and warming.....	6
	<i>Thawing frozen EBM:</i>	<i>6</i>
	<i>Warming EBM:.....</i>	<i>6</i>
7	Dispensing	7
7.1	Checks prior to feeding.....	7
8	Contra-indications to Breastfeeding	7
	<i>Absolute contra-indications to breastfeeding include:</i>	<i>7</i>
	<i>Relative contra-indications to breastfeeding may include:.....</i>	<i>8</i>
9	Pasteurised Donor Human Milk (PDHM) for Vulnerable Patients	9
10	Suppressing Lactation.....	9
11	Supplementary and Complementary Feeding	9
	<i>Fortification of Expressed Breast Milk</i>	<i>9</i>
12	Education and Communication.....	10
13	Management of the Misadministration of Breastmilk	10
	<i>Immediate response – Treatment of the infant</i>	<i>10</i>
14	Monitoring	11
15	Additional resources	11
16	References	11
	Appendix 1 - Contact points for specialised services	12

1 Introduction

Health Professionals at the Sydney Children's Hospitals Network (SCHN) encourage, support and promote breastfeeding and are committed to providing optimal health care to infants to ensure normal growth and development. This document relates to breastfeeding management during hospitalisation. This document provides advice on the safe management and handling of breastmilk and information on the management of the misadministration of breastmilk.

The World Health Organisation (WHO) recommends that pregnant women and new mothers be informed of the benefits of breastfeeding and that breastfeeding provides the best nutrition and protection from illness for babies. Mothers should be given guidance and support as required on the establishment and maintenance of lactation.

1.1 Key Definitions

Complementary feeding – infant is receiving both breast milk and formula or breast milk and semi-solid or solid food

Supplementary feeding – fluids given to replace a breastfeed or breast milk

EBM – Expressed breast milk

Birth mother – the term birth mother refers to the parent who gave birth to the infant.

Breastmilk – human milk, including colostrum. The definition specifically includes breastmilk given directly from the breast and expressed breastmilk given by other means.

Misadministration of breastmilk – the infant is fed with the wrong breastmilk.

Non-birth Mother – refers to a parent who did not birth the infant.

Pasteurised Donor Human Milk – donated human breastmilk that has been through a process of pasteurisation with the required safety and quality procedures.

1.2 Related Documents

- [NSW Health - Breastmilk: Safe Management GL2023 021](#)
- [SCHN Infant Feeding 0-12 months – Formula Feeding and Introduction of Solids](#)

2 Identification

2.1 Identification of Patients

Babies must always have secure identification bands in place as per NSW Health Policy Directive Patient Identification Bands.

2.2 Separation of mothers and babies

When babies must be separated from their mothers, two clinical staff, or one member of clinical staff and the mother if appropriate, must check the identification of both the mother and infant before breastfeeding or feeding expressed breastmilk (EBM) when they are reunited.

3 Labelling

All expressed breastmilk (EBM) containers (used in hospital or brought in from home) must be clearly labelled, with the following information:

- Patients name
- Patient DOB
- Patient's MRN
- Date and time expressed
- Date and time defrosted
- Any additives if required (such as milk fortifier)

4 Transporting

If EBM is to be transported (such as from the family home) NSW Health clinical staff will advise that:

- All feeding equipment, including pumps, must be cleaned according to the manufacturer's instructions.
- Frozen EBM must be maintained in a hard frozen state by using appropriate equipment such as an insulated portable container and a hard frozen freezer brick. If frozen milk has fully thawed it should be stored in the refrigerator and used within 24 hours. It should not be refrozen.
- Fresh EBM must be maintained cold by using appropriate equipment such as an insulated portable container and a hard frozen freezer brick. The EBM should be put into the infant's labelled container in the breast milk/formula refrigerator (or in the freezer if it is still frozen) immediately upon arrival.
- EBM brought in from home should be checked in to the milk fridge/freezer by two staff or one staff member and the parent if appropriate.

5 Storage

- Each ward should have an appropriately sized refrigerator and freezer with a dedicated section for the storage of breast milk and formula.
- Each patient must have a labelled storage container allocated for each individual patient for storage of breast milk and formula.
- In the hospital setting, fresh EBM may be left at room temperature for a maximum of 4-hours. If saving for later use, fresh EBM must be refrigerated as soon as possible and kept in the fridge at 4°C for up to 48-hours (as bactericidal capacity declines significantly after 48 to 72-hours) or stored in the freezer for 6 to 12-months at minus 18°C or lower.
- If all the expressed milk will not be consumed within 48 hours it should be stored in the freezer.
- Ensure frozen EBM remains hard frozen until required to be dispensed.
- Fortified or thawed EBM must be used within 24 hours.

In all wards, a member of clinical staff must be allocated to check the fridge twice daily, to check that EBM is labelled and stored correctly, and fridge and freezer temperatures recorded appropriately. Any problems should be reported to the NUM or Nurse in Charge. See the Resources tab for the [SCHN Twice Daily EBM Checklist](#).

6 Thawing and warming

Thawing frozen EBM:

- For immediate use, frozen EBM can be thawed by placing in a container of warm water or in a milk warmer.
- EBM can be thawed in the fridge, additionally labelled with date and time removed from fridge and used within 24-hours.

Warming EBM:

- Place in a container of warm water or in a milk warmer.
- Once warmed EBM must be used within 1-hour.
- EBM that has been administered to the infant must be consumed and any residual EBM discarded within 1-hour.
- Hang time for continuous enteral feeding of EBM at room temperature is a maximum of 4-hours.
- **Never** use a microwave to thaw or warm EBM.
- **Never** refreeze or rewarm EBM.

7 Dispensing

EBM that is dispensed into a second or additional container/ syringe must be checked at that time with the original EBM container.

It must be correctly labelled and signed by two clinical staff, or one clinical staff member and the mother if appropriate.

The additional containers of EBM must be labelled with all three of the following identifiers:

- Patient's name, and
- Patient's medical record number (MRN)
- Patient's DOB

Ensure that labelling is complete and correct for each EBM container before dispensing further EBM.

Following education by nursing staff and where appropriate, parents may access and dispense their own breast milk as part of family centred care and preparation for discharge.

7.1 Checks prior to feeding

Two clinical staff, or one clinical staff member and the mother if appropriate, must always perform the identification process.

The same clinical staff member must select, prepare, administer and record the feed or support the mother to feed their infant if they are present and able.

Ensure the following:

- Right Patient: by checking the infant's identification bands.
- Right EBM: by cross checking the details from the EBM label are a match with the infant's identification bands and
- The EBM has been stored and thawed within storage time limits.
- Right time, volume and route: by checking the infant's feed chart. If a feed is delayed, EBM must never be left at the bedside.

8 Contra-indications to Breastfeeding

Breastfeeding is rarely contra-indicated except in the following situations and special formulas may be required.

Absolute contra-indications to breastfeeding include:

- Galactosaemic and Maple Syrup urine disease - severely limits the infant's use of certain milk components and special formula is required.

- Some rare genetic metabolic disorders. It is important to note that for some of these disorders, breastfeeding can be continued in combination with a prescribed supplement under the supervision of a Paediatric Metabolic Physician.
- Recently acquired maternal syphilis. Mother-infant contact /breastfeeding may begin 24 hours after treatment commences, if there are no lesions on or around the breasts or nipples. If lesions are present, feeding can begin or resume once treatment is complete and the lesions are healed.
- Women who are Human-Immuno Deficiency Virus (HIV) positive or HTLV-1 or 2 seropositive
- Breast cancer detected during pregnancy if mother is having chemotherapy. If no chemotherapy is being given continuation of breastfeeding should be evaluated on an individual basis.
- Active Tuberculosis that has not yet been treated and until their sputum culture is negative. Any close contact with the infant, including breastfeeding, is not permitted, to prevent respiratory transmission (regardless of mode of infant feeding) until the mother has finished 2 weeks of treatment.

Relative contra-indications to breastfeeding may include:

- The infant of a mother who is **Hepatitis B positive** can only be breastfed once they have been immunised, although this is rarely an issue as most babies are immunised soon after birth. Should the situation arise where a parent who is Hepatitis B positive has refused the initial immunisation, an Infectious Disease consultation should be sought.
- Hepatitis C
- Specific illnesses in the infant – e.g. Phenylketonuria
- Maternal illness or malignancy, dependent on maternal health, her desire to continue breastfeeding and the medications used.
- Maternal psychiatric illness, particularly if there may be physical danger to the infant. In these cases, Psychiatric advice should be sought.
- Some maternal medications. Most medications are excreted into the breast milk, usually in concentrations similar to blood levels. Typically, this amounts to less than 1%–2% of the maternal dose, which rarely poses a danger to the infant. These can be checked by consulting with:
 - Child and Family Health CNC or the Lactation Specialist from GCNICU at CHW.
 - **Mother Safe** - the Statewide Medications in Pregnancy and Lactation Advisory Service can also provide information. They can be contacted on 02 9382 6539 or if calling from NSW country areas 1800 647 848.

For more information, refer to Appendix 1 in **NSW Health Guideline Breastmilk – Safe Management**, [Infectious Agents transmitted via Breastmilk](#).

9 Pasteurised Donor Human Milk (PDHM) for Vulnerable Patients

NSW Health is committed to the safe, equitable and ethical provision of pasteurised donor human milk (PDHM) to vulnerable infants in Neonatal Intensive Care Units (NICU).

Vulnerable infants refer to those infants at an increased risk of necrotising enterocolitis. This includes preterm infants, very low birth weight infants and other infants assessed as clinically high risk.

Read the NSW Ministry of Health Policy Directive Pasteurised Donor Human Milk for Vulnerable Infants: [PD2018_043](#)

10 Suppressing Lactation

It is important to advise and support a mother during the process of weaning and suppression of lactation.

Suppression of lactation may be necessary in the following situations:

- i. death of the infant
- ii. specific illness of the infant
- iii. maternal illness
- iv. mother decides to wean

It is best to suppress lactation slowly. The use of medication to suppress lactation is not recommended. Referral to a lactation consultant is recommended.

Refer to the SCHN Factsheet (in development)

11 Supplementary and Complementary Feeding

A supplementary feed is a feed given to replace a breastfeed. A complementary feed is given in addition to the breastfeed.

If a normally breastfed infant requires formula, written permission should be sought from the breastfeeding mother. A [Consent for Formula/Complementary, Supplementary Feeds](#) should be completed.

Fortification of Expressed Breast Milk

Some infants have higher nutritional requirements to support appropriate growth. As per the NSW Health Nutrition Care Policy, all inpatients should be screened for malnutrition within 24 hours of admission and then weekly during the patient's episode of care. Patients that are screened as at-risk of malnutrition must have a nutrition assessment completed by a dietitian. All inpatients must have a weight and length measured and documented within 24 hours of admission and weight must be measured and documented weekly during the patient's episode of care. These measures assist in early identification of infants who are at risk or

suffering from malnutrition. Infants who are breastfed or receive expressed breast milk may require fortification of breast milk with infant formula or modular calorie additives to increase their nutrition provision to support growth.

If an infant requires fortification of expressed breast milk, the parent(s) must be informed by the dietitian or other member of the treating team. A [Complementary Feeding consent form](#) must be signed by the parents and uploaded into the patient's medical record.

Expressed breast milk should be fortified in dedicated sterile spaces by trained health care professionals using calibrated equipment.

12 Education and Communication

SCHN ensures that:

- all staff working with breastmilk are aware of the current Guideline and practice in relation to the safe management of breastmilk and receive appropriate education.
- all mothers are provided with information regarding the collection, labelling, transporting and storage of breastmilk.
- staff and mothers are aware of the potential risks if the infant receives the wrong breastmilk.

13 Management of the Misadministration of Breastmilk

As per [NSW Ministry of Health Guideline, Breast Milk: Safe Management](#) all incidents must be reported to the Team leader and Medical officer and recorded in IIMS following the [potential] exposure of an infant or neonate to breast milk from a non-birth mother.

There is a small but possible risk of transmission of infectious agents from the ingestion of breast milk.

The exposure of an infant to breast milk from a non-birth mother may arise if the wrong EBM is given to another mother's infant in error.

Immediate response – Treatment of the infant

If the infant is being fed EBM via a nasogastric or orogastric tube and the incident is identified at the time of feeding, aspirate the stomach contents immediately. The feed can be aspirated up to 30 minutes after feeding but only if the nasogastric or orogastric tube is still in situ.

If the infant is not being fed EBM via a nasogastric or orogastric tube, proceed to a risk assessment of the source (non-birth) mother. Nasogastric or orogastric tubes must not be inserted for the purpose of aspirating EBM.

The NSW Health *Exposure of Infant to Breastmilk from a Non-birth Mother* form should be completed ([click here to see an image of the form in GL2023_021](#)).

Open disclosure to the birth mother and non-birth mother should occur (see NSW Health Policy Directive Open Disclosure Policy [PD2023_034](#)).

14 Monitoring

An annual audit to assess compliance with this Guideline must be undertaken by local health districts and specialty health networks. Ward/Department educators are responsible for the audit and ensuring staff have completed the appropriate education (SCHN Course Code CSL 15875).

15 Additional resources

Further information to assist in supporting breastfeeding mothers is available through the following webpages:

- SCHN Intranet (link once page created).
- [Australian Breastfeeding Association](#)
- [Raising Children Network](#)
- [NSW Health Breastfeeding your baby](#)
- [Karitane](#)
- [Tresillian](#)
- [Child and family health services](#)

16 References

1. NSW Health. (2018). Breastfeeding in NSW: Promotion, Protection and Support Policy Directive. PD2018_034. Retrieved from https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=PD2018_034
2. National Health and Medical Research Council (NHMRC). (2012). Eat for Health: Infant Feeding Guidelines, Information for Health Workers. Retrieved from https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n56_infant_feeding_guidelines.pdf
3. Baby Friendly Health Initiative Australia (BFHI). (2020). Maternity Facility Handbook. Retrieved from <https://bfhi.org.au/wp-content/uploads/2020/03/BFHI-HandbookMaternity-Facilities-2020.pdf>
4. McArthur, A., Peters, M. D. J., Munn, Z. & Chu, W. H. (2015) Evidence check: Safe management of expressed breast milk (EBM). Sax Institute for NSW Kids and Families. Retrieved from <https://www.saxinstitute.org.au/wp-content/uploads/Safemanagement-of-expressed-breastmilk.pdf>
5. Provincial Infectious Diseases Advisory Committee. (2015). Best Practices for Infection Prevention and Control in Perinatology: In all Health Care Settings that provide Obstetrical and Newborn Care. Retrieved from <https://www.publichealthontario.ca/-/media/documents/b/2015/bp-ipacperinatology.pdf?la=en>
6. Steele C. (2018). Best practices for handling and administration of expressed human milk and donor human milk for hospitalized preterm infants. *Frontiers in nutrition*, 5(76). doi:10.3389/fnut.2018.00076
7. Canadian Agency for Drugs and Technologies in Health. (2016). Storage, handling and administration of expressed human breast milk: A review of the guidelines. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK368240/>
8. Eglash, A., Simon, L., and the Academy of Breastfeeding Medicine. (2017). Clinical Protocol #8: Human Milk Storage Information for Home Use for Full-Term infants. doi:10.1089/bfm.2017.29047.aje
9. Centres for Disease Control and Prevention (CDC). (2020). Breastfeeding recommendations: What to do if an infant or child is mistakenly fed another woman's expressed breast milk. Retrieved from: https://www.cdc.gov/breastfeeding/recommendations/other_mothers_milk.htm
10. Lawrence R. M. (2011). Transmission of infectious diseases through breast milk and breastfeeding. *Breastfeeding*, 406–473. doi:10.1016/B978-1-4377-0788-5.10013-6
11. Jones C, A. (2001) Maternal transmission of infectious pathogens in breast milk. *Journal of Paediatrics and Child Health*, 37(6):576-82. doi: 10.1046/j.1440- 1754.2001.00743.x
12. Read J. S. (2008). Prevention of mother-to-child transmission of HIV through breast milk. *Pediatric Infectious Diseases Journal*, 27(7):649-50. doi: 10.1097/INF.0b013e318180b4b7

Appendix 1 - Contact points for specialised services

Organisation	Website	Contact	Additional Information
NSW Health Breastfeeding Your Baby	https://www.health.nsw.gov.au/breastfeeding		
Australian Breastfeeding Association	https://www.breastfeeding.asn.au/	1800 MUM 2 MUM (1800 686 268)	<p>The Australian Breastfeeding Association is Australia's peak body for breastfeeding information, education and support.</p> <p>Through the provision of practical mother-to-mother peer support, up-to-date and evidence-based information and continuing education for health care workers, ABA helps hundreds of thousands of families each year on their breastfeeding journey.</p>
NSW Health Child and Family Health Services	https://www.health.nsw.gov.au/child-family-health-services		Child and family health services are free for NSW parents and carers of children aged 0-5 years.
Raising Children Network	https://raisingchildren.net.au/		raisingchildren.net.au provides up-to-date, evidence-based, scientifically validated information about pregnancy, raising children from birth to 18 years and caring for parents or carers.
Mothersafe	https://www.seslhd.health.nsw.gov.au/royal-hospital-for-women/services-clinics/directory/mothersafe	02 9382 6070	<p>The MotherSafe service provides a comprehensive counselling service for women and their healthcare providers concerned about exposures during pregnancy and breastfeeding. Such exposures may include:</p> <ul style="list-style-type: none"> ▪ Prescription drugs

			<ul style="list-style-type: none"> ▪ Over-the-counter medications ▪ Street drugs ▪ Infections ▪ Radiation ▪ Occupational exposures
Australian Red Cross – Lifeblood. Donor Breast Milk	https://www.lifeblood.com.au/milk		
Tresillian	https://www.tresillian.org.au/	1300 272 736	
Karitane	https://karitane.com.au/	1300 CARING or 9794 2350 to speak with a Child and Family Health Nurse. 9794 2300 Head Office	

Copyright notice and disclaimer:

The use of this document outside Sydney Children's Hospitals Network (SCHN), or its reproduction in whole or in part, is subject to acknowledgement that it is the property of SCHN. SCHN has done everything practicable to make this document accurate, up-to-date and in accordance with accepted legislation and standards at the date of publication. SCHN is not responsible for consequences arising from the use of this document outside SCHN. A current version of this document is only available electronically from the Hospitals. If this document is printed, it is only valid to the date of printing.