



OBSTETRICS AND GYNAECOLOGY DIRECTORATE
CLINICAL PRACTICE GUIDELINE

Newborn feeding and maternal lactation

Scope (Staff):	WNHS Obstetrics and Gynaecology Directorate staff
Scope (Area):	Obstetrics and Gynaecology Directorate clinical areas at KEMH, OPH and home visiting (e.g. Visiting Midwifery Services (VMS), Community Midwifery Program (CMP) and Midwifery Group Practice (MGP))

This document should be read in conjunction with this [Disclaimer](#)

Are you caring for a vulnerable newborn baby?

(e.g. preterm, SGA, LBW, early term)

- [Click here](#) to jump direct to the vulnerable baby chapter for care after birth



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Aims

- To guide WNHS maternity staff on newborn feeding including breastfeeding support, education and advice, management of breastfeeding challenges, formula feeding and suppression of lactation where indicated.
- This guideline supports and utilises principles within the Baby Friendly Health Initiative (BFHI) ten steps to successful breastfeeding.

Introduction to the BFHI 10 steps

Revisions to the Global Ten Steps to Successful Breastfeeding occurred in 2018. For a summary of changes, refer to BFHI Australia [Maternity Facility Handbook](#) (2021).

Click on an image below for more details

1 HOSPITAL POLICIES
Hospitals support mothers to breastfeed by...

- Not promoting infant formula, bottles or teats
- Making breastfeeding care standard practice
- Keeping track of support for breastfeeding

2 STAFF COMPETENCY
Hospitals support mothers to breastfeed by...

- Training staff on supporting mothers to breastfeed
- Assessing health workers' knowledge and skills

3 ANTENATAL CARE
Hospitals support mothers to breastfeed by...

- Discussing the importance of breastfeeding for babies and mothers
- Preparing women in how to feed their baby

4 CARE RIGHT AFTER BIRTH
Hospitals support mothers to breastfeed by...

- Encouraging skin-to-skin contact between mother and baby soon after birth
- Helping mothers to put their baby to the breast right away

5 SUPPORT MOTHERS WITH BREASTFEEDING
Hospitals support mothers to breastfeed by...

- Checking positioning, attachment and suckling
- Giving practical breastfeeding support
- Helping mothers with common breastfeeding problems

6 SUPPLEMENTING
Hospitals support mothers to breastfeed by...

- Giving only breast milk unless there are medical reasons
- Prioritizing donor human milk when a supplement is needed
- Helping mothers who want to formula feed to do so safely

7 ROOMING-IN
Hospitals support mothers to breastfeed by...

- Letting mothers and babies stay together day and night
- Making sure that mothers of sick babies can stay near their baby

8 RESPONSIVE FEEDING
Hospitals support mothers to breastfeed by...

- Helping mothers know when their baby is hungry
- Not limiting breastfeeding times

9 BOTTLES, TEATS AND PACIFIERS
Hospitals support mothers to breastfeed by...

- Counsel mothers on the use and risks of feeding bottles, teats, and pacifiers

10 DISCHARGE
Hospitals support mothers to breastfeed by...

- Referring mothers to community resources for breastfeeding support
- Working with communities to improve breastfeeding support services

Acknowledgement: This page is an adaptation of an original work “The ten steps to successful breastfeeding. Geneva: World Health Organization (WHO); 2018. Licence: CC BY-NC-SA 3.0 IGO”. This adaptation was not created by WHO. WHO is not responsible for the content or accuracy of this adaptation. The original edition shall be the binding and authentic edition.

Step 1: Hospital policies

Step 1a Comply fully with the International Code of Marketing of Breastmilk Substitutes and relevant World Assembly Resolutions

Step 1b Have a written infant feeding policy that is routinely communicated to staff and parents

Step 1c Establish ongoing monitoring and data management systems

The following guideline is to be read in conjunction with:

- WNHS [Breastfeeding Policy](#)
- NMHS [Employee Breastfeeding Policy](#)

Background

The WNHS newborn feeding guidelines endorse the [Innocenti Declaration \(external website\)](#) and address the principles and practices that enable implementation of each of the Ten Steps to Successful Breastfeeding as recommended by the World Health Organisation (WHO) and BFHI.“

The WHO international code of marketing breastmilk substitutes²

The code is not a regulation, but essentially a set of recommendations to governments on their own responsibilities and those of the relevant workers in public affairs, in the operation of the health care system and in overseeing of the substitute industry, so that breastfeeding is not undermined.

WNHS protects breastfeeding by addressing implementation of the WHO International Code. See WNHS [Breastfeeding Policy](#).

Health professionals and the WHO International Code³

The code directly impinges on those health professionals in contact with breastfeeding mothers.

- As responsible health professionals.
- As employees of healthcare institutions which may, knowingly or otherwise, bend to influences from the industry.
- As educators of parents, particularly mothers.
- As receivers of education towards and in their professional roles.
- As members of professional organisations in a position to react to aspects of the healthcare and education systems.
- As informed members of the public.

The WNHS BFHI [Breastfeeding policy](#) is accessible to all staff that provide care to mothers and babies, patients and visitors. The WNHS Breastfeeding policy is available via the WNHS website to all staff. The compulsory education for all WNHS employees to meet the requirements of BFHI can be accessed via [WNHS Mandatory Training Framework](#): BFHI Professional Development Requirements for Staff.

Staff are supported to continue to breastfeed after returning to work – refer to [NMHS Employee Breastfeeding Policy](#).

Step 2: Staff competency

Step 2 Ensure that staff have sufficient knowledge, competence and skills to support breastfeeding

Education and support

Refer to staff requirements and learning resources within these documents:

- WNHS staff [Breastfeeding education requirements](#) (via WNHS Education hub)
- [WNHS Education Hub](#): BFHI eLearning: Access through [NMHS Moodle](#)
- Website: [Breastfeeding Centre of WA \(intranet\)](#) and [BFC WA \(internet\)](#)
- Infographic: [BFHI 10 steps poster](#) (external website)

Step 3: Antenatal care

Step 3- Discuss the importance and management of breastfeeding with pregnant women and their families

Antenatal education and counselling

- WNHS is a BFHI accredited hospital
- During pregnancy all women are to be encouraged to attend breastfeeding education sessions with their support person / partner
- Breastfeeding is to be discussed during antenatal appointments, antenatal classes and with antenatal inpatients
- Antenatal breastfeeding information is to be tailored to the individual needs of the woman and her family. An interpreter service should be used at appointments for non-English speaking women, in addition to providing resources in the mother's own language where available.
- Antenatal information about breastfeeding is available in a variety of formats both printed and online.

- Women should be provided with the 'Pregnancy, Birth and Your Baby book' at their antenatal booking visit to assist with breastfeeding education and informed about the resources on the Breastfeeding Centre of WA (BFC) website
- The antenatal **discussion / education is to cover the following topics:**
 - That breastfeeding is the normal way to feed and is important for the health of the baby and mother
 - Reference to the [WNHS Breastfeeding Policy](#) that includes the Ten Steps of successful breastfeeding
 - Previous breastfeeding experience- women who have had significant breastfeeding challenges should be given the opportunity for referral to a lactation consultant
 - The benefits of breast milk to the mother and baby including the associated risks of formula feeds
 - The skill of hand expressing to be discussed, refer mother to [BFC website](#)
 - The importance of early uninterrupted skin to skin contact.
 - How to recognise early feeding cues and the significance of rooming in
 - Practical information on how to attach their baby to the breast using breast and doll model
 - Women should also be informed of the Positioning and Attachment breastfeeding group sessions available in the postnatal period
 - How to recognise the baby is feeding effectively and getting enough milk.
 - Importance of stimulating and protecting breast milk supply when baby unable to feed effectively
 - Common breastfeeding challenges and how to manage them
 - Why teats and dummies should be avoided while breastfeeding is being established
 - Why formula should be avoided in a breastfed baby unless medically indicated
 - Information regarding supports available following transfer into the community e.g. [Australian Breastfeeding Association \(ABA\)](#) (external website), [BFC](#)

Step 4: Care right after birth

Step 4 – Facilitate immediate and uninterrupted skin to skin contact and support mothers to initiate breastfeeding as soon as possible after birth

Recommendation:

- **All** women birthing at WNHS will be offered the opportunity for skin to skin contact with their baby / babies at birth, where clinically appropriate. Maintain uninterrupted skin-to-skin for at least one hour and until the baby has breastfed.

Skin to skin

1. Early and uninterrupted skin to skin contact between mothers and infants should be facilitated and encouraged as soon as possible after birth. It is recommended that skin to skin contact begins immediately regardless of mode of delivery. It should be uninterrupted for at least 60 minutes and until after the first breastfeed.
2. Refer to the following WNHS Clinical Guidelines that support this practice:
 - Obstetrics and Gynaecology: [Neonatal Care](#)
 - Obstetrics and Gynaecology: Postnatal Care: 'Postnatal: Immediate Care of the Mother in Labour and Birth Suite Following Birth'
 - KEMH Perioperative: [Caesarean Section: Roles of Staff Attending](#) and OPH Caesarean guidelines (available through HealthPoint to WA Health employees)
3. Neonates have a sequence of behaviours, the aim of which is to enable breastfeeding. Skin to skin contact with the mother facilitates this normal instinctive process.
4. Skin to skin, the normal mammalian postnatal state, has been found to have a positive impact upon breastfeeding in the first one to four months of life.

Skin to skin-

- Regulates- heart rate, respiratory rate, blood pressure, temperature, stress hormones
 - Thermoregulation- reduces energy use, stabilises Plasma Glucose Level
 - Breastfeeding- increases short- and long-term outcomes
 - Stimulates oxytocin- the hormones for calming and connection, facilitates the transition to mothering.
5. Skin-to-skin contact with another adult, such as the partner, is an alternative when skin-to-skin is not possible with the mother or has to be interrupted e.g. for maternal medical reasons. It will stabilise the baby's temperature and respiration and has other benefits. However, skin-to-skin with the mother remains the optimal practice for babies and is important for the establishment of breastfeeding. Skin-to-skin contact with another adult does not meet BFHI step 4 requirements.
 6. See also: Skin to skin explanations with images in the Breastfeeding chapter of the 'Pregnancy, Birth and Your Baby' book.

The first feed

Strategies to be implemented at birth: Applies to healthy term babies, regardless of the mode of birth, to facilitate breastfeeding

- The instinct to suck is especially strong soon after birth and it can establish a pattern for future feeds. When possible, the baby should be left undisturbed whilst skin to skin to facilitate the natural rooting reflex and to latch spontaneously within the first hour of life. This helps to imprint the breastfeeding behaviours and assists to populate the newborn baby's microbiome from the mother's skin.

- Delay cephalocaudal checks, Weighing, measuring and bathing the baby, and cuddles by others until after the first feed, most required medical procedures can be carried out with the baby on the mother's abdomen.
- The first breastfeed will occur when the baby is ready. Offer encouragement, reassurance and give guidance if necessary.
- Teach the mother to offer the breast when the baby demonstrates cues to feed. Refer to Chapter 7 within the WNHS 'Pregnancy, Birth and Your Baby' book.
- After an initial alert period some infants become sleepy for the next 24 hours or so.
- Some babies may take a few days to become interested in feeding. Until that happens, the colostrum/breast milk needs to be expressed regularly and given to the baby. Provide the mother with a full explanation of how to finger, cup or bottle feed according to her preference. Inform the mother why teats are best avoided in early lactation. If the mother chooses to give colostrum / expressed breast milk (EBM) via a bottle, use a slow flow teat.

Strategies to overcome a lack of neonatal interest in breastfeeding

Recommendations:

- If neonate is sleepy or lacks interest in breastfeeding, commence strategies within **Sleepy Newborn Infant form** (MR425.04 / MR(OPH)121.2)
 - **If by 6 hours the baby is not suckling effectively at the breast, request review by the paediatrician to assess neonatal well-being**
-
- If the baby does not show interest in suckling during the first few hours of birth:
 - Reassure the mother that, given time, the baby will usually become interested, but this may take a few hours longer
 - Keep the baby close to their mother, preferably skin to skin to stimulate natural breastfeeding reflexes of rooting and suckling
 - Show the mother how to express colostrum by hand and how to use the electric breast pump. See also resources (videos) on the [BFC website](#).
- Note: the amount of colostrum will increase gradually with frequent expression**
- Offer the EBM to the baby at least every 3 hours until the baby is ready to latch and feed effectively.
 - Avoid excessive handling of the baby by anyone other than the mother
 - Encourage the mother to offer breast every 3 hours (sooner if the baby is demonstrating feeding cues) and continue to express after feeds and offer all colostrum to the baby until the baby is feeding effectively.
 - If the baby is still unable to suckle, arrange paediatric review.

Step 5: Support mothers with breastfeeding

Showing the woman how to breastfeed

Step 5- Support mothers to initiate and maintain breastfeeding and manage common difficulties

Recommendations:

- All women to be taught the skill of hand expressing
- Use support tools and visual guides (such as doll and breast model, videos, 'Pregnancy, Birth and Your Baby book') when demonstrating positioning the baby at the breast. Show the woman how to access these resources.
- See sections within this document for guidance on specific breastfeeding challenges

1. In the antenatal period all women planning to breastfeed to be taught the skill of hand expressing:
 - See [Hand expressing video](#) on the [BFC WA website](#).
 - Positioning the baby at the breast can be demonstrated by using a doll and breast model. See also [Position and Attachment \(P&A\) video](#) on the [BFC WA website](#).
2. Supporting the baby correctly allows the baby to follow instinctive behaviours and attach well; taking a mouthful of breast tissue enables effective sucking and milk transfer to take place.
3. After the feed the nipple should look as it did before – not compressed, elongated or misshapen and feels comfortable for the mother.
4. Sometimes correct attachment takes more than one attempt.
5. If the baby is sleepy or disinterested in feeding, refer to section in this document: [Breastfeeding: First Feed](#): 'Strategies to overcome the lack of interest in breastfeeding'.
6. However, if the baby is unable to latch, the mother needs to initiate lactation by expressing and giving all EBM to the baby.

How a mother can assist her baby to attach to the breast

A healthy term baby is born with the ability to search for the breast. Allowing the baby to do the following will trigger baby's innate instincts and facilitate imprinting on how to latch effectively. Refer the woman to the Breastfeeding chapter of her 'Pregnancy, Birth and Your Baby' book for images showing baby feeding cues and breastfeeding.

Cradlehold- the natural less-complicated hold

- See [Position and Attachment video](#) on the BFC WA website.
- The mother is seated comfortably in an upright position allowing the breasts to fall naturally.
- The baby's body should be supported by firm contact with the mother's body, underneath the breasts.
- The baby's head should tilt over the wrist/forearm with his/her top lip in line with the nipple.
- The mother places the heel of her hand firmly between the baby's shoulders- not the back of his / her head.
- The mother holds the baby's chin and bottom lip- against the underside of her areola to stimulate the baby to open his / her mouth. The nipple is placed underneath the baby's nose on the philtrum.
- When the baby's mouth is wide open, the mother using her index finger can gently press and tilt the nipple and areola up and then the mother moves the baby quickly onto the breast folding a good amount of nipple and areola into the baby's mouth
- Remember the baby moves to the breast, not breast to the baby
- The baby needs to take the nipple and 2-3 cm of breast behind the nipple into his/her mouth. Less of the areola is visible below the bottom lip than the top lip.
- The lips form a seal. The nose is free.
- The baby's chin should be in contact or pressing into the breast.
- The baby will start with short quick sucks; this stimulates let down. Once let down occurs, the sucking changes to a slower rhythmic, suck-swallow pattern, with short resting pauses.
- Swallowing can be seen (and heard if secretory activation and letdown have occurred).
- Once the baby is attached and sucking effectively **there should be no nipple pain or trauma**
- **Sometimes correct attachment takes more than one attempt.**

Assessment of a breastfeed

1. When the baby is actively feeding there should be movement of the whole jaw and swallowing is observed. Non-nutritive sucking occurs in short sharp bursts, at the rate of 2-3 per second. Nutritive sucking occurs at a slower rate of about 1 per second^{4, 5}.
2. It is important to ensure the woman can differentiate the type of sucking to ensure her baby is feeding effectively. A sleepy baby may need encouragement to persist with a nutritive sucking pattern – this may be

achieved by gentle stroking and breast compression.

3. After the breastfeed, the breast/s should feel soft and light with no lumpy/heavy areas. Ensure the baby has softened the first breast before always offering the second breast.
4. The woman should be advised to alternate the side she offers first.
5. Until the milk 'comes in', the baby will not pass urine frequently. He / she may only void once or twice per day. There is no cause for concern in the first few days. By 96 hours (4 days), a baby would be expected to have at least 3 wet nappies of pale / clear urine a day. As the milk volume increases, so will the urine output.
6. A newborn baby will have at least 2-3 bowel movements a day. Milk stools (Yellow) should be seen by day 4-5 (96-120 hours). A baby should continue to have several bowel movements a day at least until 4-6 weeks of age⁶.
7. If the baby is unsettled or has lost greater than 10% of birth weight, or the woman has become engorged, the position, attachment and sucking technique of the baby should be rechecked with an experienced midwife / Lactation Consultant.
8. If the urine becomes scanty and strongly yellow in colour, suggesting the development of dehydration, feeding frequency, milk transfer and mother's breasts must be evaluated with an experienced midwife/lactation consultant and an appropriate plan implemented. The baby is to be reviewed by the paediatrician.

Breastfeeding after caesarean section⁷

- Caesarean birth will not directly affect the mother's ability to breastfeed. However, a mother who has given birth this way will require additional assistance to enable her to breastfeed e.g. lifting the baby out of the cot and adequate pain relief.

Breastfeeding multiples

- The mother will require additional assistance at each feed, with much reassurance and professional guidance throughout her hospital stay.
- Initially encourage singleton breastfeeds to achieve effective position and attachment.
- The mother may be shown various feeding positions to allow her to decide which methods suit her own and her baby's needs. Some mothers can twin feed the babies from birth, others will prefer single feeding until more confident. Support the mother in her decision.
- Babies from multiple births can often be preterm or small for gestational age (SGA). It is important that the mother be able to manage the breastfeeding plan independently prior to discharge. She may need to loan an electric pump on discharge to maintain her breast milk supply whilst the babies grow and learn to breastfeed.

Step 6: Supplementing

Formula feed when medical indication

Step 6 – Do not provide breastfed newborns any food or fluids other than breastmilk, unless medically indicated

Recommendations:

- Formula supplementation should only be given if there is an acceptable medical indication AND there is insufficient EBM available.
- If a supplement is given to a breastfed baby, it is:¹
 - a. For an acceptable medical reason (see examples in this guideline), which has been documented, or
 - b. At the mother's request, after she has made an informed decision which has been documented
- Document supplement amount, circumstances and reason/s, and the mother's request or consent (within WNHS, it is recommended that all mothers whose breastfeeding babies receive formula for medical indications should sign permission; use the consent stamp in the medical record).

Key points

1. Exclusive breastfeeding is the norm. In a small number of situations there may be a medical indication for supplementing breast milk or for not using breast milk at all.
2. Feed according to need approximately 8-12 times in 24 hours.
3. Each mother – infant pair shall be treated as individuals with their own particular needs and abilities.
4. Colostrum is the baby's first food. No other liquids are necessary for the healthy term breastfed infant.
5. The total intake of colostrum secreted in the first 24 hours is approximately 30mL in total. This gradually increases as secretory activation occurs.
6. Food or drink other than breast milk:
 - May interfere with newborn suckling
 - Reduces the frequency of breastfeeding
 - Reduces breast stimulation and therefore milk supply
 - Is known to reduce the duration of breastfeeding
 - May undermine the mother's confidence
7. Some infants take a few days to establish a good sucking technique. Until that occurs, the colostrum / breast milk needs to be expressed and given to the baby.

Infants who should not receive breast milk

- **Classic galactosemia:** a special galactose-free formula is needed as these babies are unable to metabolise lactose
- **Maple syrup urine disease:** a special formula free of leucine, isoleucine and valine is needed
- **Phenylketonuria:** a low-phenylalanine formula is needed in addition to breast milk

Supplementation

- Formula is not required in the first 24 hours in a healthy term breastfeeding newborn
- EBM is the first choice if supplementary feeds are required. See section in this document on '[Expressing](#)'.
- Supplementary feeds, if required, should be given by cup or finger feed (not formula)
- Formula supplementation should only be given if there is an acceptable medical indication AND there is insufficient EBM available
- Avoid the use of bottles and teats as these may negatively affect the establishment of breastfeeding

Acceptable medical reasons for supplement

Breastfeeding infants who may need supplementing in addition to breast milk for a limited period:

- very low birth weight (LBW) infants (those born weighing less than 1500g)
- very preterm infants, those born less than 32 weeks gestational age
- newborn infants who are very weak, have sucking difficulties or oral abnormalities, or are separated from their mother who is providing expressed milk
- newborn infants who are at risk of hypoglycaemia due to impaired metabolic adaptation or increased glucose demand- see CAHS Postnatal Ward [Hypoglycaemia](#) guideline for list of infants at increased risk, management of energy provision and monitoring
- the '[Vulnerable Baby](#)' – see section in this guideline for examples
- infants who have experienced significant intrapartum hypoxic/ischaemic stress, or are ill / unwell
- newborn infants for whom breast milk is not available.
- maternal conditions that affect breast feeding recommendation

Mothers who may need to avoid direct breastfeeding temporarily but continue expressing to avoid stasis and maintain supply

- severe illness
- herpes simplex virus type 1 (HSV-1): avoid direct contact between lesions on the mother's breasts and the infant's mouth until lesions have resolved
- maternal medication: refer to [WNHS pharmacy](#) (available through HealthPoint)

- radioactive iodine-131 is better avoided given that safer alternatives are available
- excessive use of topical iodine or iodophors (e.g., povidone-iodine), especially on open wounds or mucous membranes, may result in thyroid suppression or electrolyte abnormalities for the breastfed infant
- cytotoxic chemotherapy requires the mother to cease breastfeeding during therapy

Mothers who can continue breastfeeding, although health problems may be of concern

When breast feeding has to be temporarily delayed or interrupted, mothers should be helped to establish and /or maintain lactation, by hand expressing or use of an electric pump, to prevent milk stasis and maintain milk supply

- Hepatitis C: Breast feeding is considered safe; mothers should be warned of the increased risk of transmission if they have any inflammatory process, cracked nipples, engorgement and mastitis, mothers should not breast feed until these are resolved. Formula is required and the mother should express and discard her milk. See section in this document: [Expressing.](#)
- Mastitis: continue breastfeeding and express the breasts with a hospital grade electric pump. See section in this document: [Expressing.](#)
- Breast abscess: breastfeeding and expressing should continue whilst receiving treatment. See section in this document: [Expressing.](#)
- Breast surgery: Early effective breastfeeding and expressing to stimulate the milk supply, may find it necessary to use formula to supplement breast milk
- Bilateral breast hypoplasia: Early effective breastfeeding and expressing to stimulate the milk supply, the infant may need formula to ensure adequate nutrition.

Maintaining lactation

Note: When breast feeding has to be temporarily delayed or interrupted, mothers should be helped to establish and / or maintain lactation, by hand expressing and using an electric breast pump in preparation for the time when breast feeding may begin or be resumed.

Human immunodeficiency virus (HIV) infection

- Exclusive formula feeding commencing from birth, is the **recommended method of infant feeding in Australia as it** is acceptable, feasible, affordable, sustainable and safe. (AFASS) 1 and 4
- Although **exclusive formula feeding is always recommended**, in rare circumstances a mother may choose to breastfeed. In these cases, exclusive breastfeeding must occur. If a mother chooses to breastfeed, a referral to the BFC should be made in the antenatal period to provide **ongoing** lactation support
- **No mixed feeding** (breastfeeding while also giving other fluids, formula or foods). Mixed Feeding should **always** be avoided by HIV-infected mothers due to increased risk of mother to *child* transmission.

- **If an infant of a mother who is HIV positive needs to have formula for medical reasons, the mother must cease breastfeeding immediately. See section in this document: [‘Suppression of Lactation’](#).**
- The planned method of feeding, made in association with the mother, must be documented in the “Antiretroviral Regimen and Management Plan for Neonate” with the appropriate ART regimen, decided on by the allocated paediatrician.
- See also: [HIV Positive: Management of the Woman and her Neonate](#) guideline

Giving a formula feed to a breastfed baby

1. Formula feeds are not recommended for the well breast-fed newborn. Studies have shown that breast feeding a healthy term newborn on demand in the first 3 days, without giving formula:
 - encourages early milk production
 - supports appropriate weight gain
 - is associated with a longer and more successful lactation
2. If the mother wishes to give her well newborn a formula feed for personal reasons she must provide her own formula.
3. If a supplement is given to a breastfed baby, it is:¹
 - For an acceptable medical reason (see examples in this guideline), which has been documented, or
 - At the mother’s request, after she has made an informed decision which has been documented
4. Documentation of supplementation is to include:
 - Amount given¹
 - Circumstances and reason/s for supplementation¹
 - Mother’s request or consent for supplementation¹
 - Where signed consent is used, that should be included.¹
 - Within WNHS, it is recommended that all mothers whose breastfeeding babies receive formula for medical indications should sign permission.
 - If formula is ordered for medical reasons the ‘Mothers Consent Stamp’ (kept on the ward) should be used in the baby’s notes.

I GIVE PERMISSION FOR MY BABY TO HAVE INFANT FORMULA.	
I UNDERSTAND THE REASONS WHY IT IS BEST AVOIDED UNLESS MEDICALLY INDICATED.	
_____ PLEASE PRINT NAME	
SIGNATURE	DATE

Step 7: Rooming-in

Step 7: Enable mothers and their infants to remain together and to practice rooming –in 24 hours a day.

1. Babies will remain with their mothers 24 hours per day from birth until discharge. Mother's request or staff suggestion, without a justifiable reason, is not acceptable in the BFHI Global Standards.
2. All separations should be documented, including the time, duration and reason the baby was separated from the mother.
3. Rooming in allows unrestricted skin to skin contact and unrestricted breastfeeding. There is a strong correlation between rooming in and longer breastfeeding duration
4. Midwives should provide guidance to mothers to enable them to recognise their baby's feeding cues and behavioural patterns. Rooming in facilitates this process. See 'feeding cues' in the woman's WNHS 'Pregnancy, Birth and Your Baby book'.

Step 8: Responsive feeding

Feed according to need

Step 8: Support mothers to recognise and respond to their infant's cues for feeding

1. No restrictions should be placed on the frequency or length of a baby's breastfeeding if the baby is **healthy and born at term** and feeding effectively. Restricting breastfeeding frequency and duration are detrimental to establishing breastfeeding
2. Mothers should be advised to feed their baby whenever the baby is hungry or as often as the baby shows readiness to feed. Midwives guide mothers to identify early feeding cues before crying. See 'feeding cues' in the WNHS 'Pregnancy, Birth and Your Baby' book.
3. Observe for and educate the mother regarding effective sucking, swallowing and signs of milk transfer.
4. Length of feeds may vary greatly, and this does not indicate feeding effectiveness. Babies who are feeding effectively may be left to self-detach from the breast.
5. Long intervals (>6 hours) between feeds should be avoided as this may negatively affect the establishment of an adequate breast milk supply and contribute to weight loss, jaundice, lethargy or an unsettled baby.
6. Continued skin-to-skin contact during the postnatal stay can facilitate effective establishment of breastfeeding.
7. Formula supplementation is not required in the first 24 hours in the healthy term newborn.
8. Factors such as mother's milk supply, baby's position and attachment must be considered when assessing the frequency of feeds.
9. Offer both breasts at each feeding, particularly when establishing lactation; alternating the starting side. The baby may need a break before taking the second breast.
10. Many newborns have times when they wish to feed very regularly, particularly at night. This is **normal**, often referred to as cluster feeding and assists with increasing the mother's milk supply
11. If a baby does not show interest in suckling after birth, maintain skin to skin contact and commence expressing colostrum to give to the baby.
12. Advise mother of the position and attachment (P&A) workshop on the postnatal ward.

Step 9: Bottles, teats and pacifiers

Artificial teats and dummies

Step 9 – Counsel mothers on the use and risks of feeding bottles, teats and pacifiers

1. Guide mothers and the family with some of the reasons for caution about the use of bottles, teats and dummies including: interferes with recognition of feeding cues thus delaying feeding, hygiene, sucking physiology and oral development, faster flow from the bottle and teat, resulting in higher volumes of feed.
2. If expressed milk or other feeds are medically indicated for the term baby, alternative feeding methods such as finger feeding, cup feeding, bottles and teats can be used following counsel and guidance on the best option for the mother and baby.
3. In the newborn period using a dummy can reduce the number of breastfeeds and can affect the mothers supply so the advice is to avoid the use of dummies and teats, unless necessary, whilst baby is learning to breastfeed.
4. There should be no promotion of feeding bottles, teats and dummy use within WNHS.
5. The midwife must document if the mother has made an informed choice to use a bottle and teat or a dummy.

Step 10: Discharge

Discharge and beyond

Step 10 – Co-ordinate discharge so that parents and their infants have timely access to ongoing support and care

Key points

1. WNHS staff are required to facilitate the transition of care from inpatient to community-based care of mothers and babies ensuring they have continued access to skilled help with infant feeding concerns and challenges.
2. Any baby with breastfeeding problems prior to discharge should be referred to the VMS / MGP / CMP even if older than 5 days.
3. **Prior to going home ensure the mother:**
 - recognises her baby's feeding cues
 - has been shown how to position and attach her baby at the breast
Those women whose baby is not able to effectively attach and feed, or who have damaged nipples will need access to an electric breast pump and a written breastfeeding plan to take home. This plan will be updated by the visiting midwife at the home visit
 - Provide education on finger feeding or paced bottle feeding if required and
 - Referred to the VMS and contact details of the BFC given
 - has been shown how to hand express her milk (see [Expressing chapter](#)) and has written information in the form of Breastfeeding chapter of 'WNHS Pregnancy, Birth and Your Baby book'. Women can be shown how to access the booklet from the [WNHS website \(Patients-fact sheets\)](#).
 - understands the concepts of letdown reflex, baby led feeding, demand/supply and breastfeeding
 - understands that the baby should feed at least 8-12 times in 24 hours, including night-time
 - recognises effective nutritive sucking pattern of breastfed baby
 - recognises signs of adequate hydration of fully breastfed babies. For the first 1-2 days the baby only has 1-3 wet nappies per 24 hours and should pass several meconium stools.
 - is aware of settling techniques for her baby

4. Once the baby is receiving mature milk the mother should know to expect:

- 6-8 wet cloth nappies (or 5 disposable nappies)
- clear or pale urine
- soft, yellow bowel actions, 2-3 per day in the first 4-6 weeks.
- bright eyes that are alert and clear
- good skin tone
- a period of wakeful contentment during the day

5. Community support

Mother should be made aware of breastfeeding community supports:

<p>Breastfeeding Centre of WA WNHS counselling and appointment service Mon-Fri 8.00am – 4.30pm</p>	<p>(08) 6458 1844</p>
<p>Child Health Nurse / Community Nurse</p>	
<p>General Practitioner</p>	
<p>Health Direct 24-hour medical advice line</p>	<p>1800 022 222</p>
<p>Ngala Family Resource Centre Parenting help – 7 days 8.30 am to 9.00pm</p>	<p>(08) 9368 9368 ngala@ngala.com.au</p>
<p>Private Lactation Consultant</p>	
<p>Australian Breastfeeding Association (ABA) www.breastfeeding.asn.au Counselling service – 7 days a week</p>	<p>1800 686 268</p>
<p>Perth Children’s Hospital</p>	<p>(08) 6456 2222</p>
<p>WNHS Pharmacy- Medicines and Breastfeeding tab</p>	<p>(08) 6458 2723</p>

Breastfeeding challenges

BFHI Step 5 Support mothers to initiate and maintain breastfeeding and manage common difficulties

Neonatal challenges

The vulnerable baby (e.g. preterm, LBW, SGA, early term)

Background

Whilst breastfeeding is a normal physiological process for healthy term babies, there is increasing evidence that mother and baby dyads that include babies born at less than 39 weeks gestation, will require increased observation and breastfeeding support.

Also refer to Newborn Observation and Response Chart (NORC) 'Risk Assessment' to identify other infants who may have factors requiring increased surveillance and feeding support.

Key points

1. The babies identified above are at increased risk of ineffective breastfeeding as their subtle immaturity is often unrecognised. This may lead to the development of hypothermia, hypoglycaemia, dehydration, hyper bilirubinaemia and excessive weight loss.
2. When admitted to the postnatal ward these babies will be in good condition and have adapted to the extra uterine environment.
3. These babies are deceptively vigorous at the breast, but often suck poorly, leading to ineffective breast stimulation and milk transfer.
4. Increased breast stimulation from birth by hand expressing and subsequently with an electric breast pump will stimulate the mother's milk supply.
5. Midwife to provide and discuss 'Your vulnerable baby' pamphlet to parents to ensure they understand their baby's needs.

Management

1. **Commence variance form MR425.04 / MR(OPH)121.2: Vulnerable Baby.**
2. Keeping baby skin to skin and facilitating an early feed, within 60 minutes of birth is recommended.
3. Guide the mother to hand express after the breastfeed/attempted breastfeed and give colostrum to the baby.
4. Mother to continue to breastfeed, followed by expressing (hand and electric breast pump) each feed.

5. Discuss the frequency of feeding with the baby's mother (8 feeds in 24 hours) and ensure she recognises her baby's cues to feed. Document the baby's feeds, urinary output and bowel actions. Less than two bowel actions a day after 24-48 hours may be the first indicator of poor feeding.
6. Offer both breasts each feed with breast compression to aid nutritive sucking. It is important to limit the time at the breast as these infants often tire easily and suck ineffectively. The majority of these babies are unable to drain the breast adequately once the milk is in.
7. Commence expressing after feeds, hand expressing followed by electric breast pump.
8. Give all available EBM to baby, some of these babies may require formula if medically indicated.
9. Babies who are born at less than 37 weeks gestation and/or weigh less than 2500g should be weighed daily pre feed. Discuss discharge plans with the Paediatric Consultant and Senior Midwife prior to discharge. Criteria for discharge should be discussed with the Paediatric Consultant.

Discharge planning

1. Written breastfeeding / feeding plan given to the mother including continued regular expressing and EBM supplementation until the baby is able to feed effectively at the breast and is consistently gaining weight. (25-30gm per day).
2. Referral to VMS / MGP / CMP, who will update the plan as necessary.
3. Breast pump loan arranged. If mother not in the VMS area, discuss resources for hiring an electric breast pump e.g. websites to access breast pumps in the community. The mother requires a pump to establish and protect her milk supply.
4. Referral to Special Child Health Nurse if preterm, LBW or SGA- see section in Stork for other referral suggestions.
5. Discuss community and breastfeeding supports. Provide contact details of BFC for mother to access ongoing support.

For neonates at increased risk of hypoglycaemia

- Refer to CAHS Neonatal 'Postnatal ward' guideline: [Hypoglycaemia](#)

Weight loss >10%

Aims

- To avoid undetected illness for the baby
- To avoid hypernatraemic dehydration related to delay in onset of lactation
- To minimise further weight loss
- To implement strategies which will result in optimal maternal milk supply and the baby gaining weight appropriately

Procedure

In hospital

1. Review by an experienced midwife to assess positioning, attachment, suck, swallow, oral anatomy and feeding.
2. Review by paediatric resident, registrar or consultant to exclude any medical conditions.
3. **Commence variance sheet MR425.06 Infant Weight Loss Beyond 10% of Birth Weight.**
4. Advise the mother to breastfeed baby at least x 8 times in 24 hours by offering a breast feed - both breasts - every 3 hours (for a shortened increment of time as the mother needs to express and top up as well)
5. Express breasts post feed using both hand and electric breast pump. Double pump until the milk flow slows/stops, then single pump each breast using breast compression to assist letdown.
6. Initiate EBM supplementation following each feed. Discuss with the mother to the options of how to give the EBM supplemental feed i.e. finger feed or bottle.
7. Weigh the baby daily- 24 hours apart (expected gain 30 gm)
8. Review by Paediatric Consultant, Lactation Consultant/experienced midwife to assess the mother's lactation and feeding plan every 24 hours:
 - Until the baby has gained at least 30g on two consecutive days and
 - Weight loss is no longer >10% of birth weight
9. Formula supplementation may also be required following medical review or the mother may request formula to be given.

Discharge planning

1. Mother to continue the MR425.06 'Infant Weight loss beyond 10% of Birth Weight'
2. Arrange a hospital grade electric breast pump loan
3. Follow-up with the VMS, MGP or CMP midwife as appropriate
4. Refer mother to the BFC

Home visits (VMS / MGP / CMP)

1. Midwife to **commence variance sheet MR425.06 Infant Weight Loss Beyond 10% of Birth Weight.**
2. Visiting midwife reports >10% weight loss:
 - **(Baby born at KEMH):** to KEMH Paediatric Consultant on-call for birth suite / SCN 2 via switchboard during daytime hours. After hours and weekends, midwife to page SCN 2 Senior Registrar on page 3377 including vital signs, hydration, colour, activity and oral anatomy examination.
 - **(Baby born at OPH):** to OPH Paediatric Consultant on-call that the baby requires review (via switch 6457 8000). If the baby is coming to OPH for review, the midwife is to inform the OPH Shift Coordinator (6457 8021) and ask the parents / guardian to bring the baby to the OPH Maternity Assessment Unit.
3. Initiate supplementary feeding with EBM at each feed. Formula may be medically indicated if there is insufficient EBM; visiting midwife needs to obtain consent and the medical request/reason be documented. Mother may also request formula be given.
4. Progress and improve breast milk supply by hand and electric breast pump, expressing after all breastfeeds
5. Refer the woman to the BFC.
6. Arrange electric breast pump loan via the BFC or hire in the community if BFC have none available.
7. Continue to review the weight until there are 2 consecutive weight gains of 30g per day or more and weight is not >10% less than the birth weight.

Nipple shields

Aim

- To enable effective attachment of the baby to the breast

Key points

1. **Nipple shields should not be introduced until secretory activation has occurred.**
2. Research has shown that the use of silicone nipple shields for preterm babies or babies who are unable to maintain attachment, can greatly increase vacuum, milk transfer and duration of breastfeeding.
3. Beware that some babies can use the nipple shield ineffectively spending long periods of time at the breast without significant intake.
4. A nipple shield should only be introduced by an experienced midwife, following an assessment of the breastfeeding difficulty.
5. Nipple shields should NOT be introduced because of nipple trauma, as damage can continue to occur if the baby is not effectively attached.

Indications for use

Baby:

- Baby unable to maintain attachment, constantly slipping off the nipple and areola
- If the baby has tongue tie / high arched palate
- Baby has weak, disorganised or dysfunctional suck
- If the baby has difficulty handling the milk flow with strong milk ejection reflex
- To transition from prolonged bottle and teat use to direct breastfeeding

Mother:

- Flat, retracted or inverted nipples when attachment without a shield cannot be achieved (commence Breastfeeding Variance MR261.10 Flat Inverted Nipples)
- May be the solution for the mother who is unable to tolerate the intimacy of direct breastfeeding

Using a nipple shield:

1. Warm the shield to increase pliability.
2. Hand express to apply breast milk to the areolar portion of the shield.
3. To apply- roll the shield back on itself and stretch and roll onto the nipple/areolar complex.
4. The stretched nipple shield returns to normal shape drawing the nipple into the teat cavity. This reduces the initial exertion by the baby to draw the nipple into the teat cavity.

5. Present the nipple shield to the infant as you would with direct breastfeeding, tip of the nipple shield touching the philtrum to encourage a wide-open mouth.
6. Then bring the baby quickly onto the shield-to achieve a deep latch.
7. Correct position and attachment as required.
8. With firm shoulder girdle support the baby should be stable with no bouncing on the shield.
9. Listen for audible swallows.
10. Gentle stroking and breast compression is encouraged during the feed
11. Assess the breasts post feed for lumps/fullness
12. Thoroughly wash, rinse and dry the shield following the feed
13. Encourage expressing following the feed with the shield to top the baby up and ensure an empty breast
14. Close follow up care is vital to monitor effective milk transfer and monitor baby growth
15. Weight expectations remain the same
16. Continue to express to maintain the supply above the baby's needs until the baby is growing adequately
17. Document reason for and effectiveness of use in baby's notes

Discharge planning

The use of a nipple shield indicates there is a breastfeeding challenge and appropriate follow up is essential.

1. Loan of electric breast pump to drain breast thoroughly after feeds
2. Follow up by VMS if within the visiting area / Community Nurse
3. If a shield is being used at discharge, ensure follow-up is encouraged at the BFC.

Weaning from the nipple shield

1. Do not rush; the nipple shield will have been introduced for a valid lactation reason.
2. Very occasionally the nipple shield will be required for the duration of breastfeeding.
3. Growth and development of the oro-facial features- **May take 10-16 weeks to achieve effective direct attachment.**
4. When commencing the transition to direct breastfeeding, commence the feed with the nipple shield- this is familiar for the baby.
5. Approximately halfway through the feed remove the shield.
6. Exaggerate the tilt or sandwich the nipple areola and hold the nipple/areola until sucking well, stabilizing the breast tissue for the baby to achieve deep attachment

Neonate at increased risk of hypoglycaemia

- Refer to CAHS Neonatal 'Postnatal ward' guideline: [Hypoglycaemia](#)

Neonate of a mother with diabetes

- Refer to CAHS Neonatal 'Postnatal ward' guideline: [Hypoglycaemia](#)
- Other resources:
 - [WNHS consumer brochure](#): 'Breastfeeding- Antenatal Expression of Colostrum for the Vulnerable Baby'
 - WNHS O&G guideline: [Diabetes in Obstetrics and Gynaecology](#)

Formula feed when medical requirement

- See [BFHI step 6](#) in this document and formula feeding sections

Sleepy newborn baby

- **Refer to instructions within the Sleepy Newborn Infant form** (MR425.04 / MR(OPH)121.2)
- If the baby is sleepy or disinterested in feeding, refer to section in this document: [Breastfeeding: First Feed](#): 'Strategies to overcome the lack of interest in breastfeeding'

[Note- new content for the postnatal wards is currently under development]

Nipple concerns

Flat or inverted nipples

Postnatal management of nipple variation:

1. Keep mother and baby skin-to-skin for as long as possible after birth. Teach the mother to watch her baby for early feeding cues. See 'feeding cues' in the WNHS 'Pregnancy, Birth and Your Baby' book.
2. If baby is unable to attach effectively, **commence the variance sheet MR261.10 / MR(OPH)73.1 'Flat or Inverted Nipples'**.
3. Express the colostrum and feed the baby by cup or finger feeding. Regular expression 8-10 times (using hands, an electric pump or a combination of both) in 24 hours will be necessary to establish lactation. (See section on [Expressing](#)). Reassure the mother that with the onset of secretory activation she will start to collect breast milk.
4. Continue to offer both breasts regularly before expressing.
5. Continue to offer skin-to-skin. Use a combination of hand expressing, double pump action with an electric pump and correct sized breast shield to stimulate the breasts.

Nipple shield use

- Once secretory activation has occurred, a nipple shield may be effective in enabling breast attachment.
- An experienced midwife should review feeding prior to using/introducing nipple shield.
- See section in this document '[Nipple shields](#)'.

Discharge planning:

1. Continue the MR261.10 / MR(OPH)73.1 Flat or Inverted Nipples variance sheet and give to the mother to take home.
2. Arrange hospital grade breast pump loan via the BFC or hire in the community.
3. Refer to the VMS / MGP / CMP midwifery service who will update the breastfeeding plan on the breastfeeding variance at the home visit.
4. The nipple shield may to be introduced by the visiting midwife where appropriate. Ensure the breastfeeding plan is updated.
5. Continue regular breast milk expression and giving top ups after feeds until the baby can feed effectively.
6. Give the mother the BFC contact details to access breastfeeding advice and support.

Nipple trauma

Recommendations:

- Where nipple pain or trauma- **Commence the instructions within Nipple Pain/Trauma form** (MR261.11 / MR(OPH)73.2)

Aim

- Nipple trauma should be recognised and managed appropriately to ensure maintenance of breastfeeding.

Key points

1. During breastfeeding nipple pain is not normal and indicates tissue damage is occurring.
2. Correct positioning and attachment minimise the risk of nipple trauma.
3. Any nipple trauma should be documented in the mother's clinical pathway.
4. There are many causes of nipple trauma, incorrect positioning and attachment is the most common cause. Other causative factors include high arched palate, ankyloglossia (tongue-tie) and dermatological conditions.
5. Nipple trauma increases pain and predisposes the mother to other complications.
6. If pain free attachment cannot be achieved prior to discharge, a follow up appointment at the BFC is to be offered to the mother for assessment of the mother and baby once the nipples are healed.
7. Breast milk is a natural bacteriostatic lubricant. A little breast milk allowed to dry on the nipple can help prevent nipple soreness and promote rapid healing.⁸

Tender nipples

- It is common to experience an increase in nipple sensitivity in the first few days postpartum.
- Nipple pain, however, is not normal.
- If sucking is painful, the baby must be detached, by breaking suction before removing baby from the breast.
- If the nipple is misshapen, this indicates ineffective latch.
- Review positioning and reattach to achieve a deeper latch.
- The flow of milk can be stimulated by expressing a little before the baby is put to the breast.

- Check the baby's orofacial features for a possible cause of the trauma. See CAHS Neonatology 'Postnatal Ward' Clinical Guidelines: [Tongue Tie \(ankyloglossia\)](#).
- Careful supervision at each feed is required with the mother who has a tender nipple. Commence MR261.11/ MR(OPH)73.2 Nipple Pain / Trauma variance.

Damaged (grazed or cracked) nipples

- Commence the 'MR261.11 / MR(OPH)73.2 Nipple Pain / Trauma variance'.
- Mothers can continue to feed if attachment can be corrected and pain subsides.
- **If the mother is hepatitis C positive, she must express and discard the milk until the nipple is healed.** See also Department of Health WA consumer information https://healthywa.wa.gov.au/Articles/F_I/Hepatitis-C-and-breastfeeding (external webpage) and 'Hepatitis C and Breastfeeding' information sheet
- **If the mother is HIV positive and breastfeeding her infant, she must cease breastfeeding and commence full formula feeding. A review by a Lactation Consultant is required to discuss suppression of lactation in these instances.** See also [PCH Clinical Practice Manual: Protocol: HIV Prevention in Infants Born to HIV Positive Women](#).
- If despite optimal positioning, it is still painful for the mother to feed, gently express using an electric pump and feed this milk to the baby. Gentle suction by electric breast pump on low pressure may be more comfortable than hand expressing.
- If expression is painful ensure the correct sized expressing shield is used, this is vital to ensure thorough breast drainage and avoid further trauma.
- Only the nipple should be drawn into the funnel of the shield.
- Generally, the damaged nipple is rested until healed, then the baby should be reintroduced to the breast under supervision, checking the nipples before and after each feed.
- If the nipples are not healing with resting or appear to be inflamed and feel sore despite healing, a milk specimen and a nipple swab should be taken for MC&S as there may be infection present.

Discharge planning

- Complete the variance sheet MR261.11 / MR(OPH)73.2 Nipple Pain / Trauma and give it to the mother.
- Arrange MGP or VMS follow up.
- Ensure a follow up appointment at the BFC is offered to the mother.

Thrush in lactation

Aim

- To provide information on the diagnosis and management of thrush in lactation as detecting and diagnosing *Candida albicans* can be difficult and there are numerous nipple and breast pain causes.

Key points

1. Breast and nipple thrush are due to an overgrowth of *Candida* (there are many strains), on the nipples and in the breast ducts, which can cause significant breast and nipple pain. Without prompt diagnosis and treatment, the pain of maternal thrush infections may lead to early breastfeeding cessation.
2. **It is important to differentiate between thrush and a staphylococcal infection.** See section in this document Breastfeeding Challenges: [Nipple Trauma](#).
 - When nipple trauma is present, research suggests that a bacterial infection is more likely, and the mother may benefit from appropriate antibiotic management.
3. Thorough history and physical examination are required.
 - **The mother** may have a previous history of:
 - Nipple trauma
 - A predisposition to candida infections
 - Antibiotic treatment antepartum, intrapartum or postpartum
 - Vaginal thrush
 - The nipple/areola area may be burning or stinging during and after feeds.
 - The nipples may appear pink, shiny and are often tender to touch.
 - The areola may be red, dry or flaky.
 - The pain may be bilateral or localised to one nipple or breast
 - Shooting, stabbing or deep aching in the breast during and after feeds can be perceived as candidiasis, however it is vital to exclude staphylococcal infection.
4. **The baby** may have:
 - Recent use of antibiotics
 - Oral signs of thrush such as white plaques on the gums, cheeks and palate
 - A red papular rash with satellite lesions around the anus or genitals
 - A white appearance of the tongue is often a milk coating and may be indicative of poor tongue movement not thrush

Management

- Corrective position and attachment are important to resolve nipple pain and trauma and to ensure adequate drainage and an ongoing milk supply
- Expressing and giving EBM is an option if feeding is too painful.
- Nipple swabs and milk samples should be taken and sent to the laboratory for microscopy, culture and sensitivity to ensure there is no bacterial infection.
- If mother or baby have signs and symptoms of Candida growth, then both should be treated simultaneously.

Pharmacological treatment of nipple/breast pain

Apply miconazole **cream** to nipples after each feed. Removal is not indicated as this may cause further nipple trauma and the medication is compatible with breastfeeding (poor oral absorption).

Fluconazole can be purchased over the counter at retail pharmacies. A course of fluconazole 150mg (once every second day, until breast pain is resolved⁹) is recommended if:

- There is a history of persistent thrush
- A deep aching breast pain is present

Pharmacological treatment of baby

If mother has signs and symptoms of thrush but baby has none, probiotics can be used.

Miconazole oral gel (Daktarin)- see [Neonatal Medication Protocol: Miconazole](#)

Note: In May 2006 Janssen –Cilag issued an alert advising pharmacists not to supply Daktarin[®] oral gel for use in infants under 6 months of age. The medication itself was not the problem but the risk of a young baby choking when the gel was administered by teaspoon.

Healthcare providers must ensure that the client understands how to apply the product safely. If the client is unsure about the application, they can be advised to use nystatin oral drops. It should be noted that nystatin drops are not as effective for oral thrush as miconazole oral gel.

- Use for oral thrush or if the baby has a red papular nappy rash with satellite lesions.
- Administer a quarter of a teaspoon, 4 times a day:
 - apply with a clean finger or cotton bud, to the inside of the cheeks and over the tongue

Candida nappy rash treatment

- Miconazole (e.g. Daktarin[®]) or Miconazole with zinc (e.g. Resolve[®]) cream over the affected area.

Additional suggestions

- Treat any other site of fungal infection in the whole family, i.e. vagina, nappy rash, feet.
- To prevent the spread of thrush, wash your hands thoroughly after nappy changes and before and after applying any creams/lotions/gels.
- Clean expressing equipment, teats and dummies thoroughly after use and boil for 5 minutes or steam sterilize. Dummies should be replaced weekly.

Nipple and breast care

- Keep nipples dry by frequently changing breast pads
- Avoid the use of cloth breast pads
- Wash towels, bras, etc., in hot soapy water and air-dry outside

Dietary suggestions

- It is important to maintain a healthy, well balanced diet.
- Try to reduce the following foods:
 - Refined sugars and saturated fats
- Consider taking Probiotics, Garlic, Zinc and B vitamins. Probiotics have been demonstrated to reduce candidiasis in a variety of infections.

Breast concerns

Blocked ducts

Aims

- To provide WNHS staff with the appropriate information to manage blocked ducts promptly and effectively
- To prevent further blockages and mastitis due to milk stasis in the breast.
- To nurture a mother's confidence in her ability to breastfeed and correctly manage challenges associated with breastfeeding

Key points

1. A blocked duct presents as a tender breast lump, which may also include localised redness. The milk accumulates behind the blockage causing inflammation of the surrounding tissues
2. Blocked ducts that commonly occur around 3-4 months of lactation may be caused by a 'white bleb/spot' on the nipple.
3. Mothers with a large milk supply may be prone to blocked ducts or mastitis. It is especially important for these mothers to be aware of preventative measures including varying feeding positions to ensure each area of the breast is drained.

Prevention

- Unrestricted breastfeeding from birth i.e. feeding at least 8-12 times in 24 hours.
- Correct positioning and attachment and ensuring effective suck action is vital for good milk transfer.
- Complimentary feeds are not required for the healthy term breastfed infant
- Dummies are best avoided whilst breastfeeding is being established
- Avoid restrictive clothing or bras that place undue pressure on breast tissue
- Avoid long intervals between feeds.
- Guide the mother to assess her breasts before and after a feed to ensure adequate drainage-comfortable and no lumps

Management

1. **Commence variance sheet** 'MR261.15 Blocked milk ducts'.
2. Employ the above preventative measures and correct if necessary.

3. Applying cold before a breast feed will reduce inflammation and encourage milk flow
4. Gently stroke the breast towards the nipple before, and as, baby breastfeeds.
5. If the lump is still present after feeding, express breast with an electric pump, using a single pumping action to drain the breast. Check the pump equipment is correctly fitted, including the correct diameter breast shield.
6. Ensure only a gentle even pressure is exerted on the breast tissue by the breast shield of the electric pump.
7. Referral to a physiotherapist for ultrasound treatment has shown to be clinically effective if the problem is not resolved by the above measures. Drain the breast thoroughly within 20 minutes of the ultrasound therapy.
8. Commence anti-inflammatory medication e.g. Ibuprofen
9. If the breast becomes red, hot and painful and the mother becomes unwell, suspect mastitis. See Clinical Guidelines, O&G [Mastitis and Breast Abscess Management](#) (including management in the home).

Discharge planning

1. Variance sheet 'MR261.15 Blocked milk ducts' to be continued at home.
2. Arrange a breast pump loan.
3. Arrange a follow up appointment with the BFC.

Engorgement and full lumpy breasts

Aim

To prevent and resolve milk stasis within the breast and progression to engorgement which has a negative effect on milk production

Definition

Engorgement is a painful combination of increased milk volume, lymphatic and vascular congestion and interstitial oedema of the breasts following secretory activation. It is a preventable post-partum complication.

Key points

1. Milk stasis in the breast is the underlying aetiology of breast engorgement
2. If breast milk is not removed effectively, full and lumpy breasts progress to engorgement; the baby or the electric breast pump is not sufficiently draining the breast.

Background

Secretory activation is the onset of milk production occurring between 32- and 96-hours following birth, this is variable. With secretory activation the mother may present with breast fullness, heaviness and discomfort and there is often a milk supply above the baby's requirements.

Full and lumpy breasts and engorgement may be due to incorrect positioning and attachment, restricted access to the breast and/or feeding the baby other fluids decreasing the demand for breast milk.

Prevention

- Unrestricted breastfeeding or expressing from birth i.e. feed 8-12 times in 24 hours
- Correct positioning and attachment and good sucking action is vital for efficient milk transfer
- Dummies and complimentary feeds should not be used

Management

1. Frequent effective removal of milk to comfort/no lumps is the mainstay of management for full lumpy breasts.
2. Progression to engorgement is the result of inadequate milk removal prior to and at secretory activation.
3. **Milk removal above the infant needs at this stage does not cause an oversupply**

4. **Refraining from expressing milk because the mother “will just make more milk” cannot be justified.**
5. **Commence variation sheet Management of full or lumpy breasts’ (MR261.14 / MR(OPH)73.4).**
6. Cold application from the fridge/not freezer before feeding/expressing to reduce oedema, effect milk drainage and provide comfort.
7. Remove bra and restrictive clothing for feeds and expressing.
8. Very gentle stroking of the breast promotes the letdown reflex to encourage milk flow and sucking.
9. It is often necessary to guide the mother to hand express the breast to soften the areola to enable the baby to attach more effectively.
10. If there is areola oedema, reverse pressure softening can facilitate effective attachment at the breast (see below).
11. Correct and achieve optimal positioning and attachment.
12. Ensure the baby drains the first breast before offering the second side. If the first breast is still full, hard, red or has lumps (blocked ducts) after the baby has fed, it will need to be expressed to soften/no lumps.
13. If the baby refuses the second side and it is hard, red or has lumps (blocked ducts) it will also need expressing. Ensure the correct size breast shield is used for expressing.
14. Any red areas on the breasts should resolve after breast expression, otherwise suspect mastitis.
15. Guide the mother to assess her breasts for fullness/lumps before and after each feed.
16. Consider a non-steroidal anti-inflammatory medication e.g. Ibuprofen, to reduce inflammation and minimise pain which may interfere with letdown.
17. Simple analgesia i.e. paracetamol may be offered.
18. Review by an experienced midwife / Lactation Consultant if the problem persists.

Reverse pressure softening (RPS)

This is a simple technique to temporarily reduce peri-areolar oedema to achieve a more effective latch by moving interstitial fluid deeper into the breast away from the areola. RPS facilitates the flow of excess interstitial fluid to aid lymphatic drainage.

- The midwife may demonstrate the technique with a model of a breast
- Encourage the mother to wash and dry hands thoroughly
- The mother applies 1-3 minutes of steady, gentle, inward pressure at the base of the nipple with all 5 fingertips, pushing backwards towards her chest wall
- This will create indentations in the areola gradually moving outward from the base of the nipple to the edge of the areola to soften the nipple/areolar complex

- The mother is encouraged to bring the baby quickly to the breast following RPS whilst the areolar is softer and more pliable.

Discharge planning

1. Mother to continue the 'MR261.14 /MR(OPH)73.4 Management of full or lumpy breasts' variance sheet at home.
2. Arrange breast pump loan.
3. Encourage follow up with the BFC.

Mastitis and breast abscess

- See Breastfeeding Challenge: [Mastitis and Breast Abscess Management](#)

Supply

Expressing (Hand expressing and Electric breast pump expressing)

Step 6 – Do not provide breastfed newborns any food or fluids other than breastmilk, unless medically indicated

Aim

To show women how to hand express and use an electric breast pump when required to provide EBM for their baby.

Background

Exclusive breastfeeding is the biological norm. Giving healthy term babies foods or fluids other than breastmilk in the first few days after birth interferes with the establishment of breastmilk production. If formula is medically indicated and prescribed, efficient and effective removal of colostrum / milk from the breast is required to protect that mother's milk supply, provide EBM to supplement and to replace the formula over time.

Key points

1. **All** mothers who choose to breastfeed should be taught the skill of hand expressing during pregnancy.

2. All mothers should be provided with the WNHS Pregnancy, Birth and your Baby book and referred to the [BFC web page](#).
3. Long delays in initiating effective breast stimulation and milk expression will place the mother at risk of low milk production.
4. Mother's need to express milk on a regular basis if the baby is unable to feed effectively or supplementation is needed.
5. Breastmilk expressed in the hospital setting must be collected and stored in a single use sterile syringe/container/bottle. A new sterile syringe/container/bottle should be used each time a woman expresses breast milk. It should be emphasised to the mother that, prior to expressing, she should:
 - wash her hands with soap and water and dry on a clean paper towel before handling the breast.
 - when expressing is complete, the expressed milk may be stored at room temperature if the EBM is to be given at the next feed or labelled and stored in the refrigerator whilst the mother is in hospital. See section in this document: ['EBM Identification and Storage on the Postnatal Wards'](#)
 - For at home milk storage guide, see 'Pregnancy, Birth and your Baby' book
6. Mothers expressing for babies in the Special Care Nursery (SCN) should be given the booklet ["Expressing Breast Milk for Your Baby in the Neonatal Intensive Care Unit"](#) (PDF, 7.9MB). Midwives are required to familiarise themselves with information in this booklet.
7. Any woman whose baby cannot breastfeed or whose baby is too sleepy to take a full feed should be guided to hand express and use an electric breast pump.
8. Provision should be made for apprehended babies to have access to their mother's milk.
9. If the mother is using an electric breast pump, double pumping should be used until the milk flow slows or stops, followed by single pumping of each breast using breast compression to ensure thorough breast drainage.
10. Expressing for a preterm baby in SCN should commence within 1 hour of the birth. See CAHS Neonatology: ['Providing Breast Milk for Preterm and Sick Babies' brochure](#) (PDF, 325KB).
11. If a woman is discharged home and she is expressing at all feeds, she should be encouraged to loan / hire a hospital grade electric pump
12. All EBM should be labelled with the mother's name and UMRN applied directly to the container and the mother should confirm it is correctly labelled prior to storage in the fridge and / or given to the baby.
13. On removal from the fridge by midwifery staff the label should be checked and confirmed as correct by two staff members, and the label checked against the mother's name band.

Expressing by hand (See [hand expressing video](#))

1. The mother should wash her hands with soap and water and dry well prior to expressing.
2. Use a clean container, syringe/bottle.
3. Ensure the mother is comfortable.
4. Gently stroke the breast towards the nipple. This stimulates the let-down reflex.
5. Place the fingers underneath the breast, so the first finger is just below, and the thumb pad is just above about 3-4cm back from the nipple.
6. Gently **Press** the fingers and thumb pads back towards the chest.
7. Then **Compress** the breast tissue and hold briefly.
8. **Release** the breast tissue.
9. Do not squeeze or pinch the nipple.
10. Repeat the action in a rhythm like baby's sucking.
11. Rotate the position of the fingers and thumb around the breast to express the entire breast.
12. When colostrum is pearling or dripping easily, it is time to collect the colostrum.
13. Express both breasts in turn while the colostrum is dripping/ milk is flowing.
14. Unless the mother is expressing to soften the nipple/areola, she should always aim to express both breasts until they are soft comfortable and no lumps.



Expressing with a hospital grade electric breast pump (See [Breast Pump video](#))

1. The mother should wash her hands with soap and water and dry well.
2. Guide the mother to assemble the clean/sterilised expressing equipment ensuring secure connection for the pump to be effective.
3. Stimulate the let-down reflex by gently stroking the breast towards the nipple.
4. Ensure the correct size of breast shield-the nipple should move freely back and forth in the tunnel of the shield- tested only when expressing. Incorrect breast shields may cause nipple trauma and may interfere with adequate breast drainage.
5. Place the breast shield over the breast with the nipple in the centre and ensure only a gentle pressure is exerted on the breast tissue.
6. Set the pump to the lowest suction pressure
7. The mother may gradually increase the pressure to a level which is comfortable.
Note: Suction should **not** cause pain or nipple damage.
8. There is no advantage to be gained from using high pressure if the let-down occurs at a low pressure.
9. If expressing to increase milk supply, or for a baby unable to attach to the breast, continue to double pump until the milk flow slows.
10. Then express each breast singly, checking for lumps and fullness. To promote let down gently stroke and massage each breast while pumping.
11. Express the breasts until soft and light with no lumps.
12. Express breasts on a regular basis, like the baby's feeding pattern (approx. 8 times in 24 hours) including overnight to establish and maintain the milk supply
13. Check breasts after expressing, if nipple damage or lumps present commence appropriate variance sheet.
14. Single use bottles should be used.
15. Label and store breast milk in sterile container with mother's URN sticker, date, time and EBM sticker attached.
16. Always store breast milk in the refrigerator or freezer.
17. If expressing on discharge from hospital, ensure mother has a written plan.
18. Refer to the VMS / MGP / CMP to update and manage the feeding plan.

Antenatal expression of colostrum [NEW 2023]

Aim

For every mother to learn how to express milk by hand, develop familiarity with her own breasts and how they work and to have the option to express colostrum antenatally if appropriate.

Background

Antenatal hand expressing assists the mother to be able to confidently express

colostrum pre feeds to encourage the baby at the first feeds, to express colostrum if separated, to hand express to avoid problems with areola oedema, blocked ducts, engorgement and mastitis. Most importantly if a baby does not feed in the first few days, confidence with hand expressing enables the mother to express milk to stimulate supply and provide a mother's own milk for feeds rather than formula. There is increasing interest in antenatal expression of colostrum especially for the vulnerable baby however there is limited high quality evidence surrounding antenatal expression.

There is a wide variation in the amount of colostrum women can express antenatally. There is no evidence to suggest that a woman who expresses small amounts of colostrum antenatally is at risk of low breast milk supply. There is limited evidence on the impact of antenatal expression on the woman and potential for stimulating uterine activity.

Key points

1. All mothers who choose to breastfeed should be educated and guided with the skill of hand expressing during pregnancy to become familiar with their breasts, to understand how the breasts work and to develop confidence.

2. **Antenatal expressing is not suitable for all women. Women considering expressing colostrum antenatally, should discuss with their doctor, midwife, diabetes educator or lactation consultant.**

Special circumstances

Learning to hand express while pregnant and collecting and saving the colostrum may be advantageous in special situations, these include:

- babies born to a diabetic mother
- babies born less than 39 weeks gestation (may be started from 36 weeks)
- babies who are smaller or larger than expected for gestational age
- babies weighing less than 2500g at birth
- a planned caesarean section or induced birth
- babies with a cleft lip or palate
- mothers with breast abnormalities or who have had breast surgery

Avoid antenatal expression if:

- history of threatened premature labour
- cervical incompetence
- has been any bleeding in the pregnancy
- placenta praevia

How to hand express

See WNHS Breastfeeding Resources: [Hand Expressing](#) video

Commencing expressing antenatally

- Antenatal expressing conversations may occur at any time in the antenatal period and interested women provided with a pack containing: 1mL enteral (purple) feeding syringes (e.g. nutrisafe2), Expressed Breast Milk (EBM) labels, maternal labels (if available) and the "[Antenatal expression of colostrum for the vulnerable baby](#)" booklet (PDF, 921KB).
- Hand expressing may be started from 36 weeks gestation.
- Mothers of vulnerable babies need to be given the antenatal expressing pack and guided with how to hand express and store colostrum.
- Guide the mother to hand express for three to five minutes on each breast twice per day.
- The colostrum can be collected in the same clean container and stored in the fridge between expressions and then frozen at the end of the collecting day.
- All EBM should be labelled with the mother's name, UMRN number, date and time of expression; A UMRN label, if available, may be applied directly to the container.
- An ideal time to reinforce hand expressing is during induction and early labour if the woman is unfamiliar with the process.

Hand expressing needs to be ceased immediately if the mother is experiencing tightenings or contractions (unless $\geq 39^{+0}$ weeks gestation).

Expressed colostrum

- Antenatally expressed colostrum needs to remain frozen until the mother comes to hospital/ready for use.
- The frozen colostrum is to be transported from home in an insulated bag with a freezer block and then stored in the fridge/freezer at WNHS until ready for use.
- Once defrosted, colostrum should be used within 24 hours.
- Two midwives are to ensure correct labelling and identification on admission.
- Encourage the mother to discuss her colostrum stores with the admitting midwife.
- Clear documentation is required in the patient notes on the Obstetric Special Instruction Sheet-MR 004 and the birth plan of the available colostrum for use.
- If the baby is transferred to the ward/NICU the stored colostrum accompanies the mother/baby, clear handover of available colostrum is required.
- See also chapter below on: 'EBM Identification and Storage'

EBM identification and storage

Aim

- The appropriate identification and storing of EBM on the postnatal wards.

Procedure

1. All women who are expressing breast milk for their baby on the postnatal wards should be given a supply of their patient identification labels and yellow EBM stickers to place directly on their bottles, red tubes or purple syringe.
2. Storage:
 - a) If the EBM is to be given at the next feed it can remain in the mother's room (Refer parents to 'Storage of Breast Milk' in chapter 7 of 'Pregnancy, Birth and Your Baby' book)
 - b) If the baby is in the SCN, the EBM is sent directly to the SCN or stored in the ward fridge and delivered to the SCN within 48 hours of expression. (See CAHS Neonatology guideline: [Milk Room Protocol](#): and Neonatal Nutrition Room Protocol [Receipt of EBM \(MOM & PDHM\) into the Nutrition Room](#))
3. All EBM should be labelled with the mother's identification sticker and a yellow EBM sticker directly to the container prior to being placed in the fridge for storage if the baby is in SCN or EBM in excess of next feed requirements.
4. The identification sticker must be labelled with the date and time that the milk was expressed and applied directly to the syringe, red tube or bottle. Before storing the EBM in the fridge, midwifery staff should confirm with the mother that the EBM is correctly labelled and matches the woman's identification name band.
5. **On removal from the fridge by midwifery staff, the label shall be checked and confirmed as correct by:**
 - **two midwives and checked against the neonate's identification band**
6. EBM that is found to be incorrectly labelled or without a label must be discarded immediately and a clinical incident form completed.
7. EBM for a baby in SCN that is identified as having been expressed more than 48 hours previously must be discarded.

Related guidelines

- WNHS KEMH Infection Prevention and Management: [Incorrect Breast Milk Administered to a Baby](#)
- CAHS Neonatology (NICU): [Breastfeeding](#); [Milk Room Protocol](#)

Finger feeding

Step 9: Counsel mothers on the use and risk of feeding bottles, teats and pacifiers

1. Finger feeding is one alternative means of providing colostrum/EBM (not formula) to babies unable to attach and/or suck at the breast successfully or for babies who need supplementation of EBM. It is offered to a baby where a mother wishes to breastfeed.
2. Guide and support the mother for the first feed using this method, or until she is confident.

Equipment

1mL syringe, 10mL syringe or 5G feeding tube, subject to the volume to be given.

Procedure

1. Perform hand hygiene using soap and water. Ensure nails are short to prevent trauma.
2. Wrap the baby securely
3. Ensure the mother is in a comfortable position.
4. Support the baby with a pillow.
5. Whether a tube or syringe is used will depend on the volume of milk being offered. As a guide if volume is >10mL use a tube.
6. Using the index finger, encourage the mother to gently stimulate baby's lips until the baby opens his/her mouth- **finger pad uppermost**. Allow the baby to begin sucking the mother's finger.
7. If using a tube: Insert the large end of tube into the bottle below the milk line Ask the mother to gently insert tube alongside her finger to the fingertip and raise the bottle so that milk flows down the tube.
8. If using a syringe: The nozzle of the syringe should be gently inserted into the corner of the baby's mouth along the side of mother's finger and the plunger depressed slowly as the baby sucks.
9. Record the intake on the Care of the Newborn pathway (MR425.10).
10. If the baby is still being finger fed on discharge:
 - Written Breastfeeding Plan given
 - Breast pump loan arranged via BFC or hire in the community
 - Referred to VMS / MGP / CMP for follow up and update feeding plan
 - Contact details of the BFC given to access appointments advice and support

Cup feeding

Step 9: Counsel mothers on the use and risk of feeding bottles, teats and pacifiers

Key points

1. Cup feeding is an alternative means of providing colostrum / EBM (not formula) to babies unable to attach and/or suck at the breast successfully or for babies who need supplementation of EBM.
2. The procedure is most successful when the baby is wide awake and interested.
3. Guide and support the mother for the first feed using this method or until she is confident.

Equipment

- Small clean medicine cup
- Feed – EBM / colostrum - **not formula**

Procedure

1. Always wash hands with soap and water and dry on a clean towel.
2. Wrap baby securely. Prevent hands knocking/spilling the contents of the cup.
3. Support the baby in an upright sitting position
4. Fill the cup half full
5. Tip the cup so that the milk is touching the baby's lips. **Do not pour the milk into the baby's mouth.**
6. Tilt the rim of the cup touching the baby's bottom lip, towards the upper lips and gums.
7. As the baby's jaw is lowered, a small amount of feed will be taken and swallowed.
8. Leave the cup in the correct position during the feed. Allows the baby to self-regulate the feed as desired.
9. Record on the Care of the Newborn pathway (MR425.10).
10. After use, wash the cup with warm soapy water and rinse with warm water.
11. If baby is still requiring supplemental feeds on discharge, ensure a written plan is given
12. Refer to VMS / MGP / CMP to follow up and update feeding plan
13. Contact details of the BFC given for access to appointment, advice and support.

Increasing breast milk supply

Aims

- To assist the newborn baby to initiate effective breastfeeding, to gain weight daily from day 5 and to regain his/her birth weight by two weeks of age.
- To nurture a mother's confidence in her ability to breastfeed.

Background

Secretory activation, when the colostrum phase ends and milk supply increases, occurs 2-5 days following birth. It is therefore important to consider the number of days postpartum prior to determining if the woman has a low supply.

Low supply/insufficient milk production is the most common reason for parents to offer supplements or reduce the duration of breastfeeding.

It is vitally important to determine the factors/causative issues of low supply/suboptimal weight gains as the causes are often multi factorial involving maternal and baby factors.

Management

1. Adequate breast milk supply is achieved by early initiation of breastfeeding, optimal positioning and effective milk removal.
2. **Commence variance sheet 'MR261.19 / MR(OPH)73.9 Increasing Breastmilk Supply'.**
3. Improving milk supply commences with corrective position and attachment to achieve optimal positioning and effective milk removal
4. An experienced midwife to assess that baby is:
 - positioned correctly at the breast
 - attached well at the breast
 - sucking with a nutritive pattern
 - having unrestricted breast feeds 8-12 times in 24 hours
 - being offered both breasts each feed
5. Unrestricted breastfeeding. Avoid long periods between feeds. The sleepy newborn may need to be woken for some feeds.
6. Offer both breasts, using gentle breast stroking/compression to encourage let down.
7. After offering the breast express the breasts using hand expressing or an electric pump. Double pump until the milk flow slows or stops, then single pump each breast with gentle compression.
8. Feed all the EBM obtained to the baby by cup or finger feeding. If there is a medical indication for formula milk, feed all the EBM first.

9. Monitor baby's weight and output ensuring appropriate for the age of baby- see MR425.10 Care of the Newborn Clinical Pathway
10. Babies with a weight loss at or beyond 10% as well as those who have not regained their birth weight by two weeks are to be referred for medical assessment. **For at or beyond 10% weight loss, commence 'MR425.06 Infant weight loss beyond 10% of birthweight'**. See section in this document: [Weight loss beyond 10% of birthweight](#).
11. Avoid the use of **teats** for supplements, unless medically indicated. See Clinical Guidelines, for use of cup feeding, finger feeding or supply line as appropriate.
12. If supply remains insufficient after 48 hours of expressing after feeds, consider prescribing Domperidone. See [Pharmacy Adult Medication Monograph- 'Domperidone'](#).
13. Avoid the use of dummies, while the baby is learning to breastfeed.

Discharge planning

1. Ensure breast pump loan arranged
2. Complete the variance sheet MR261.19 / MR(OPH)73.9 and give to the mother
3. Ensure a follow up appointment with MGP midwife, VMS or the BFC

Supply line

Aims

- To nurture the mother's confidence in her ability to breastfeed
- To maintain baby's willingness to feed at the breast when supply is low, by delivering a supplemental feed, maintaining skin to skin and avoiding the use of artificial teats

Key points

1. The decision to use a supply line must be discussed with a Lactation Consultant to determine suitability of use.
2. The baby must be willing and able to attach and effectively breastfeed
3. The mother needs a positive attitude, a keen desire to breastfeed and support, as learning to use the supplementer can be challenging initially
4. Advantage of using a supply line is providing a supplemental feed whilst simultaneously stimulating the breast to produce more milk

Indications

Maternal

The supply line may be offered to women when:

- they wish to stimulate or supplement their lactation when breastfeeding
- lactation is compromised by low supply
- relactating after a separation or interruption to breastfeeding
- inducing lactation following adoption.

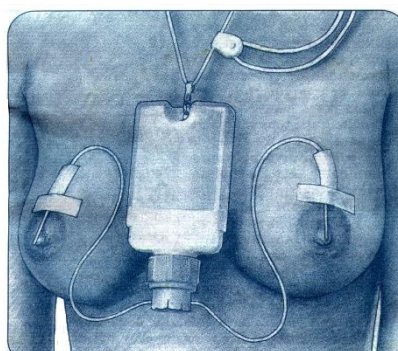
Baby

The supply line may benefit the baby who:

- is able to attach effectively at the breast but transfers suboptimal milk volumes
- is recovering from illness or surgery
- is adopted
- has lost weight or is slow to gain weight
- can attach and breastfeed but needs to be supplemented for medical reasons
- may need sucking organisation and patterns improved

Equipment and procedure

1. There are several commercial options available, follow the manufacturer's instructions for use
2. Discuss with the mother the options available
3. Wash and dry hands thoroughly
4. Prepare equipment and demonstrate the use of the supply line
5. Ensure privacy
6. Place the tubing onto the breast with the tip of the tubing slightly beyond the nipple, secure with tape avoiding both the nipple and the areola
7. Guide the mother with position and attachment to ensure the baby takes the nipple, areola and tubing into his/her mouth. The tubing should enter the side of the baby's mouth together with the nipple/areola
8. If the device chosen has a choice of tubing sizes the larger size is used for a preterm baby, a disorganised infant or one who requires an easier flow. As the sucking improves, decrease the sizes
9. The milk container can be elevated or lowered to adjust the milk flow speed



Care of equipment

1. At the completion of the feed disassemble and rinse all the equipment in cold water
2. Using hot soapy water clean all the parts, attention to forcing hot soapy water through the tubing and then rinsing well by again forcing cold tap water through the tubing.
3. Sterilisation is required if using formula

Follow up

- Encourage regular follow up to monitor growth and regulate / decrease supplement
- Some babies will require supplementation for the breastfeeding duration

Oversupply

Aims

- To provide healthcare providers with the appropriate information to manage breast milk oversupply effectively by reducing milk synthesis
- To ensure thorough drainage of each breast to prevent blocked ducts, engorgement and mastitis
- To nurture a mother's confidence in her ability to breastfeed

Definition

Milk supply persistently in excess of the baby's needs which may lead to pathology in the baby and/ or mother.

Background

During the onset of secretory activation, the mother often produces milk in excess of her baby's needs. As the breastmilk matures over the first 10-14 days postnatally, a local feedback mechanism within the breasts gradually calibrates the supply to better match the needs of the baby. This process may take up to 3 months.

However, following this period, some mothers continue to produce milk far in excess of their baby's needs, the mother's breasts are uncomfortably full, and their baby may also be unsettled.

Key points

1. If a baby is unable to drain the breast the mother is at increased risk of engorgement and mastitis.
2. Oversupply may lead to the following challenges for the mother and/or her baby:
 - The mother's breasts may feel overfull or engorged and may leak milk between feeds
 - The baby may have attachment difficulty
 - The baby often struggles to cope with the fast flow of milk and may choke or splutter at the breast. The baby may also have 'explosive' liquid stools, and experience either low or high weight gain, despite drinking large volumes of milk. This is due to the infant receiving high volume/low fat milk from a full breast, leading to an increased lactose intake.
 - These symptoms in the infant can mimic lactose intolerance. However, this lactose overload may be managed by reducing the oversupply.
3. Oversupply or hyperlactation can be caused by breastfeeding mismanagement, hyperprolactinemia or congenital predisposition.

Managing oversupply / hyperlactation

- Contact the BFC for advice before assuming oversupply and commencing measures to reduce a mother's milk supply.
- Oversupply often requires an individual dyad (two element- mother and baby) assessment and management plan.
- If the baby does not manage the initial milk ejection reflex remove from the breast and allow the flow to settle, then reoffer the breast.
- **See variance form MR261.18- Breastmilk Oversupply**
- To reset the amount of milk the breast produces, express to drain both breasts as completely as possible. Following this drainage offer a breast feed.
 - For less complex cases this one-time full drainage may be all that is required to reduce the milk supply. For others, further drainage or other measures may be required (see below).
- In addition, a short-term change from demand breast feeding to a breastfeeding routine may be required to reduce milk synthesis.
- Offer the initial breast, the aim is to offer one breast at a feed, reoffering this breast for a 3 hour period initially (timing is adjusted depending on the severity of the oversupply), i.e. every time the baby wants to feed this same breast is reoffered until the end of the 3 hours.
 - If the second breast is or becomes uncomfortably full before the time period is over it can be softened by expressing just enough to be comfortable.
 - The second breast is then offered at the next feed for this same 3-hour period.
 - Remember that breastfeeds are without restriction but the baby is kept to one breast for 3 hours before switching to the other side for 3 hours.
- As soon as the supply settles, and the mother's and baby's symptoms resolve, return to normal demand feeding, ensuring the first breast is drained before offering the second side.
- At all times the mother is encouraged to assess breasts carefully to avoid blocked ducts, engorgement and mastitis.

Discharge planning

1. Advise the mother to make an appointment with the BFC if the condition is not resolving.
2. Arrange breast pump loan.

Donor milk

[Note- this new content for the postnatal wards is under development]

For neonates in the KEMH Neonatal Intensive Care Unit (NICU), see CAHS guideline on [Pasteurised Donor Human Milk \(PDHM\)](#).

Formula feeding

- For breast fed baby requiring formula for medical indication- see also [step 6](#)

Formula (preterm, LBW, SGA) approximate fluid requirements

Please note: these volumes are a guide only; some babies will not be able to tolerate the upper volumes, and this is acceptable, provided they do not develop hypoglycaemia. Refer to the [Neonatal post-natal ward](#) 'Hypoglycaemia' guideline for more information.

- **Days 1 and 2:** 60-80mL per kilogram (birth weight) per day
- **Days 3-7:** 80-120mL per kilogram (birth weight) per day
- **Thereafter:** 120-150mL per kilogram (birth weight) per day

Small infants:

Calculation of fluid to be offered in 24 hours

$$\frac{\text{Baby's Weight}}{1000} \times \frac{\text{Amount per kg per day}}{1}$$

For example: 1st day 60mL per kg of body weight per day

Baby weighs 2000g

$$\frac{2000}{1000} \times \frac{60}{1} = 120 \text{ mL per day}$$

15mL every 3 hours
or 20mL every 4 hours

In the case of infants requiring fortified calorie feeding, a paediatrician must be consulted.

Formula (term baby) approximate fluid requirements

- **Day 1** 40-60mL per kilogram (birth weight) per day
- **Day 2** 60-80mL per kilogram (birth weight) per day
- **Day 3** 80-100mL per kilogram (birth weight) per day
- **End of first week** 120-150mL per kilogram per day

Estimation of fluid requirements:

Amount is calculated from baby's birth weight until the latter is regained. The actual weight is then used.

End of first week 120ml per kilogram of birth weight per day

- 3 hourly = 8 feeds/day
- 4 hourly = 6 feeds/ day

$$\text{Birth Weight } 3500\text{g} = \frac{3500}{1000} \times \frac{120}{6} = 70\text{mL per feed would be offered each feed.}$$

Formula preparation

Aim

To ensure the safe preparation of infant formula.

Key points

1. Breastfeeding has many health benefits for both infant and mother. WNHS staff have a responsibility to promote breastfeeding first and if infant formula is required, to educate and support parents about formula feeding.
2. Infant formula requires accurate reconstitution and hygienic preparation to ensure its safety, so it is important that WNHS staff know how to demonstrate the preparation of infant formula on an individual basis and how to feed an infant with a bottle.
3. Cow's milk-based formula is suitable for the first 12 months of life unless the infant is unable to tolerate cow's milk-based products for specific medical, cultural or religious reasons, in which case special formulas may be used under medical supervision
4. In the hospital setting preparation of formula should be demonstrated on an individual basis in a private area away from other mothers.
5. The National Health and Medical Research Council recommend that **all** equipment used both in the preparation and feeding of infant formula is sterilised prior to its use, furthermore they suggest that boiling is the preferred method to do this. Boiling gives consistent and reliable results at home if the following steps are followed:
 - Wash bottles, teats and lids in hot soapy water with a bottle/ teat brush before sterilisation
 - Place utensils, including bottles, teats and lids in a large saucepan
 - Cover utensils with water, making sure to eliminate all air bubbles from the bottle
 - Bring water to the boil and boil for 5 minutes. Turn off – do not allow it to boil dry
 - Allow equipment to cool in the saucepan until it is hand hot and then remove it.
6. If using a commercial home steriliser (e.g. electric, microwave steam steriliser or chemical steriliser) follow the manufacturer's instructions.
 - Store equipment that is not being used straight away in a clean container in the fridge.
7. The mother should be informed that she has to provide her own formula and follow the instructions on the back of the can to ensure the correct amount of water and powder-this may vary between different formulas. Guide to check the expiry date on the can of formula and discard if out of date. Discard any opened can of formula after one month.

8. Just before feeding formula should be prepared in the available sterilised single use bottles.
9. Ensure the mother always washes her hands before preparing formula and ensure that formula is prepared in a clean area
10. Boil fresh water and allow it to cool until lukewarm- at least 30 minutes.
11. Firstly, pour the correct amount of previously boiled (now cooled) water into a sterilised bottle and then add powder.
 - Note- If the cooled boiled water is stored in the milk fridge it must be warmed up prior to adding milk powder as the formula must be prepared with lukewarm water, not cold. Warm by standing bottle in a container of warm water and then adding formula.
12. Always measure the amount of powder using the scoop provided in the can, as scoop sizes vary between different formulas
13. Fill the measuring scoop with formula powder and level off using the levelling device provided or the back of a sterilised knife –the scoop should be lightly tapped to remove any air bubbles.
14. Take care to instruct the mother to add the correct number of scoops to the water in the bottle – do not add half scoops or more scoops than stated in the instructions.
15. Place the teat and cap on the bottle and shake it until the powder dissolves
16. Test the temperature of the milk with a few drops on the inside of the mother's wrist – it should feel just warm, but cool is better than too hot
17. Formula feeding should be a comfortable, relaxing and an enjoyable experience for the mother and infant. It is a time for closeness and cuddling and responding to infant cues
18. Guide the mother to hold the baby in a semi-upright position
19. Feed the infant
 - Any formula left at the end of the feed must be discarded
 - Any formula that has been at room temperature for longer than 1 hour should be discarded
20. The mother should be given both verbal and written instructions on how to safely make up formula and be able to demonstrate safe preparation. See [WNHS Patient Fact Sheets](#): 'Formula Feeding' (information on equipment required, cleaning and sterilising bottles and equipment, preparing formula and storing formula)

Sterilisation of equipment

Refer to WNHS Infection Prevention and Management policy: [Reprocessing of Infant Feeding Equipment](#)

Suppression of lactation

Suppression of lactation may be required for the following reasons:

- The mother has chosen to formula feed
- The mother has a medical condition that precludes breastfeeding
- The mother has experienced a stillbirth or neonatal death
- The baby has a medical condition that precludes breastfeeding

Milk suppression

1. The breasts need to be supported with a firm, supportive (but not tight) bra or crop top, worn both day and night.
2. Advise the mother to avoid stimulating her breasts, however, if the breasts become full and painful **express just enough milk for comfort only**, the milk supply will gradually decrease.
3. Relieve discomfort and oedema by placing cold packs from the fridge on the breasts and/or taking analgesics/anti-inflammatory medication i.e. paracetamol or ibuprofen
4. If lactation is already established, it may take longer to reduce the milk supply. It is best to reduce breast milk production over a week or longer if possible.
5. Observe breasts for lumps and inflammation.
6. Prescribed medication to suppress lactation works best in the early stages of lactation. [Cabergoline](#) may be prescribed for suppression of lactation.
7. Provide leaflet 'Suppression of Lactation' to mother prior to discharge

Avoid suppression of lactation when [mastitis](#) is present

- Advise the woman that this is not a good time to wean, as it increases the risk of breast abscess formation.
- Express until the mastitis resolves then the supply may be slowly reduced.
- Apply cold, take analgesic and/ or anti-inflammatory medication for comfort as required.
- Appropriate antibiotic cover for at least 10-14 days is necessary.
- When the mastitis is resolved gradually increase the length of time between expressions and reduce the amount of milk expressed.

Abbreviations

ABA	Australian Breastfeeding Association
AFASS	Acceptable, feasible, affordable, sustainable and safe
BFC	Breastfeeding Centre of WA
BFHI	Baby Friendly Health Initiative
CAHS	Child and Adolescent Health Service
CMP	Community Midwifery Program
EBM	Expressed breastmilk
HIV	Human immunodeficiency virus
HSV-1	Herpes simplex virus type 1
KEMH	King Edward Memorial Hospital
LBS	Labour and Birth Suite
LBW	Low birth weight
MGP	Midwifery Group Practice
NICU	Neonatal Intensive Care Unit
NMHS	North Metropolitan Health Service
NORC	Newborn Observation and Response Chart
O&G	Obstetrics and Gynaecology
OPH	Osborne Park Hospital
P&A	Position and attachment
PDHM	Pasteurised donor human milk
QRG	Quick reference guide
RPS	Reverse pressure softening
SCN	Special Care Nursery
SGA	Small for Gestational Age
VMS	Visiting Midwifery Service
WHO	World Health Organisation
WNHS	Women and Newborn Health Service

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Additional resources for specific chapters

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Blocked ducts

Wilson CB. **Breastfeeding Atlas**. 2018.

Engorgement and full lumpy breasts

Cotterman, K.J. (2004). Reverse pressure softening: A simple tool to prepare the areola for easier latching during engorgement. **Journal of Human Lactation**.

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Expressing- Antenatal expressing of colostrum

Cox (2010). An ethical dilemma: Should recommending antenatal expressing and storage of colostrum continue? **Breastfeeding Review**, 18(3), 5-7.

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Related legislation and policies

Department of Health WA: [Safe Infant Sleeping Policy](#) and consumer pamphlet
NMHS Policy: [Employee Breastfeeding](#)
WNHS Policy: [Breastfeeding](#)

Related WNHS and CAHS policies, procedures and guidelines

WNHS Clinical Guidelines

- **Obstetrics and Gynaecology guidelines:**
 - Breastfeeding Challenges: [Mastitis and Breast Abscess Management](#) (including management in the home)
 - [Caesarean Birth](#)
 - [Diabetes in Obstetrics and Gynaecology](#)
 - [HIV Positive: Management of the Woman and Her Neonate](#)
 - [Neonatal Care](#)
 - [Perinatal Loss](#) (relating to suppression of lactation)
 - Postnatal Care: Immediate Maternal Care in Labour and Birth Suite After Birth

- **KEMH Infection Prevention and Management Policies:**
 - [Incorrect Breast Milk Administered to a Baby](#)
 - [Reprocessing of Infant Feeding Equipment](#)

- **KEMH Perioperative:** [Caesarean Section: Roles of Staff Attending](#)

- **[OPH WNS guidelines](#):** Elective Caesarean and Non-Elective Caesarean

Medication

- [WNHS pharmacy](#) (available to WA Health employees through HealthPoint)
- [ADULT Medication Monographs](#)- Cabergoline ; Domperidone
- [NEONATAL Drug Protocol: Miconazole](#)
- Structured Administration and Supply Arrangements (SASA): [Cabergoline SASA](#) (available to WA Health employees through HealthPoint)

Staff education

- [WNHS Education Hub](#) BFHI Education Tools including 'Baby Friendly Health Initiative (BFHI): Professional Development Requirements for Staff'
- [NMHS Moodle](#)

CAHS Neonatology Clinical Guidelines

- **[Neonatology Postnatal Ward](#) guidelines:**
 - Hypoglycaemia
 - Jaundice (including management flowchart)
 - Tongue Tie (ankyloglossia)
- **[Neonatal Nutrition Room](#) guidelines**
- **[Neonatology](#) guidelines** on newborn feeding and formula preparation
 - [Breastfeeding](#)
 - [Milk Room Protocol](#)
 - [Pasteurised Donor Human Milk \(PDHM\)](#) (within NICU)
 - [Receipt of EBM \(MOM and PDHM\) into the Nutrition Room](#)
- [PCH Clinical Practice Manual: HIV Prevention in Infants Born to HIV Positive Women Protocol](#)

Useful resources (including related forms)**Health professional resources:**

- [Baby Friendly Health Initiative Australia](#) including re-accreditation requirements and [Maternity Facility Handbook](#) (2021) (external website, PDF, 1.63MB)

COAG Health Council: [Australian National Breastfeeding Strategy 2019 and Beyond](#) (external website, PDF, 5.8MB)

Department of Health Australia:

- [Infant Feeding Guidelines: Information for Health workers](#) (2012) (external website)
- [Marketing in Australia of Infant Formulas: Manufacturers and Importers Agreement](#) (external website)

UNICEF

- [Innocenti Declaration: On the Protection, Promotion and Support of Breastfeeding](#) (1990) (external website, PDF 1.6MB)

WHO: [Protecting, Promoting and Supporting Breast-feeding: The Special Role of Maternity Services](#) (1989) (external website, PDF, 1.93MB)

WHO / UNICEF: [BFHI 10 steps poster](#)

Patient brochures and consumer information:

- **Websites and supports**

- [Australian Breastfeeding Association](#) (external website)
- [Breastfeeding Centre of WA](#) (including access to [demonstration videos](#))
- Department of Health WA consumer information: HealthyWA website: [Hepatitis C and Breastfeeding](#) (external website) and 'Hepatitis C and Breastfeeding' information sheet
- UNICEF- [Baby friendly resources in other languages](#) (external website)
- **WNHS consumer brochures**
 - [Antenatal expression of colostrum for the vulnerable baby booklet](#) (PDF, 921KB).
 - [Formula Feeding](#) (PDF, 429KB)
 - [WNHS fact sheets](#): 'Pregnancy, Birth and Your Baby book'
- **CAHS Neonatology consumer brochures**
 - [Expressing Breast Milk for Your Baby in the Neonatal Intensive Care Unit](#) (PDF, 7.9MB).
 - [Providing Breast Milk for Preterm and Sick Babies brochure](#) (PDF, 325KB)
 - 'Hepatitis C and Breastfeeding' information sheet









Forms:

KEMH	OPH	Title
MR261.10	MR(OPH)73.1	Breastfeeding Minor Variance- Flat or Inverted Nipples
MR261.11	MR(OPH)73.2	Nipple Pain / Trauma
MR261.13		Breastfeeding Minor Variance- Expressing with an Electric Pump for Infant in SCN
MR261.14	MR(OPH)73.4	Breastfeeding Minor Variance- Management of Full or Lumpy Breasts
MR261.15		Breastfeeding Minor Variance- Blocked Milk Ducts
MR261.16	MR(OPH)73.6	Breastfeeding Minor Variance- Management of Mastitis
MR261.17		Breastfeeding Minor Variance- Breast Abscess
MR261.18		Breastfeeding Minor Variance- Breastmilk Oversupply
MR261.19	MR(OPH)73.9	Breastfeeding Minor Variance- Increasing Breastmilk Supply
MR425.04	MR(OPH)121.2	Sleepy Newborn Baby
MR425.05	MR(OPH)121.3	Vulnerable Baby
MR425.06		Infant Weight Loss Beyond 10% of Birth Weight

MR425.10	Care of the Newborn pathway
MR426	Newborn Observation and Response Chart

Stamps

- Formula Consent Stamp

Keywords:	Breastfeeding, breast feeding, breastfeeding centre, BFC, lactation, breastfeeding challenge, breastfeeding aids, breastfeeding assistance, formula, newborn, neonatal, early feed, alternative means of providing colostrum, breastmilk, newborn feeding, cup feeding, temporarily unable to breastfeed, EBM, expressed milk feeding, expressed, pump, finger feeding, finger feed using a fine tube or syringe, syringe feeding, expressing, BFHI, baby friendly, flat nipples, inverted nipples, nipple variation, postnatal management of nipple concerns, rooming in, postnatal, skin to skin, feeding according to need, breastfeeding on demand, feeding on demand, how to breastfeed, BFHI step, breastfeeding positioning, cradle hold, underarm hold, football hold, breastfeeding multiples, breastfeeding after caesarean, baby led breastfeeding, breastfeeding support, breastfeeding after discharge, using dummies in hospital, artificial teats, dummies, antenatal education, breastfeeding education, support for antenatal women, support for breastfeeding, breastfeeding small baby, breastfeeding preterm, low birth weight, vulnerable baby, early term, late preterm, preterm feeding, SGA, first feed, preterm neonate fluid requirements, formula feed calculations, LBW, SGA, preterm neonate feeding, formula, newborn feeding, preparing formula, making formula, suppression of lactation, suppress milk, FDIU, suppress, cabergoline, neonatal feed calculations, mls/kg/day, neonatal fluid requirements, nipple shield, maintaining attachment, slipping off nipple, breastfeeding aid, 10% weight loss, neonates, newborns, hyperlactation, lactation, oversupply, excess milk production, supply line, supplemental feed, feeding line, breastfeeding aids, breast milk, low supply, lactation consultant, weight loss, domperidone, increasing milk, expressed breast milk, stored EBM, labelling EBM, storing EBM, checking EBM, engorgement, lumpy breasts, full breasts, breastfeeding issues, breastfeeding challenges, blocked milk ducts, breast lump, breast redness, thrush, nipple pain, breast pain, candida, breast feeding, challenge, antibiotics, nipples, cracked, grazed, breastmilk, tender, sensitivity, mastitis, breast abscess, HIV		
Document owner:	Obstetrics and Gynaecology Directorate WNHS		
Author / Reviewer:	Clinical Midwifery Consultant (CMC) and Clinical Midwives Breastfeeding Centre of WA; CMC Maternity Wards; Neonatology Department, CAHS		
Date first issued:	Dec 2021	Version:	2
Reviewed dates:	Feb 2023 (added antenatal expressing chapter)	Next review date:	Feb 2026
Endorsed by:	Obstetrics and Gynaecology Directorate Management Committee	Date:	01/02/2023
NSQHS Standards (v2) applicable:	<input checked="" type="checkbox"/>  1: Clinical Governance <input checked="" type="checkbox"/>  2: Partnering with Consumers <input checked="" type="checkbox"/>  3: Preventing and Controlling Healthcare Associated Infection <input checked="" type="checkbox"/>  4: Medication Safety	<input checked="" type="checkbox"/>  5: Comprehensive Care <input checked="" type="checkbox"/>  6: Communicating for Safety <input type="checkbox"/>  7: Blood Management <input checked="" type="checkbox"/>  8: Recognising and Responding to Acute Deterioration	

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Version history

Version number	Date	Summary
1	Dec 2021	<p>First version. Full review of content in all chapters.</p> <ul style="list-style-type: none"> • Brought together content on newborn feeding from 29 guidelines. Full review of all content in line with the 2018 revised global ten steps to successful breastfeeding; recommendation summary boxes added to some chapters • Links to WNHS education hub for compulsory professional development requirements and e-learning • New medical record form has been developed for caring for the 'Vulnerable Baby' • Parent support- Links added to BFC website for demonstration videos; advise mother of P&A workshop on the postnatal wards • If expressing, finger/cup feeding on discharge from hospital, ensure mother has a written plan and refer to the VMS / MGP / CMP to update and manage the feeding plan. • Facilitate transition in care from inpatient to community-based care, to ensure there is continued access to skilled help with infant feeding concerns and challenges. Breastfeeding plans will be updated by the visiting midwife at the home visit. • Weight loss >10%- process added to describe how VMS inform and communicate to OPH paediatricians and staff for babies born at OPH <p>Amalgamated 29 individual guidelines on Newborn Feeding dating from May 2003 (Newborn feeding collection originally known as B8.1.1-15; B8.2.1-12, B8.3.1-2, B8.4 and B8.5.1-6)</p> <p>Supersedes:</p> <ol style="list-style-type: none"> 1. (B8.1.1) Breastfeeding: General Overview (dated Aug 2018) 2. (B8.1.3) Breastfeeding: Antenatal Education and Counselling (dated June 2021) 3. (B8.1.4) Breastfeeding: Skin to Skin Contact (dated Aug 2018) 4. (B8.1.5) Breastfeeding: First Feed (dated June 2021) 5. (B8.1.6) Breastfeeding: Showing a Woman how to (date links updated Oct 2019) 6. (B8.1.7) Breastfeeding: Expressing (dated Aug 2018) 7. (B8.1.8) Breastfeeding: Expressed Breast Milk (EBM) Identification & Storage on Postnatal Wards (dated Oct 2021) 8. (B8.1.9) Breastfeeding: Formula Feed when Medical Indication (dated July 2021) 9. (B8.1.10) Breastfeeding: Rooming in (dated June 2018) 10. (B8.1.11) Breastfeeding: Feed According to Need (dated Aug 2018) 11. (B8.1.12) Breastfeeding: Artificial Teats Dummies (dated June 2021) 12. (B8.1.13) Breastfeeding: Finger Feeding using a Fine Tube or Syringe (dated Sept 2018) 13. (B8.1.14) Breastfeeding: Cup Feeding (dated Sept 2018) 14. (B8.1.15) Breastfeeding: Discharge Home (dated Sept 2018)

		<p>15. (B8.2.1) Breastfeeding Challenges: Flat or Inverted Nipples (dated Sept 2018)</p> <p>16. (B8.2.2) Breastfeeding Challenges: Nipple Trauma (dated April 2021)</p> <p>17. (B8.2.3) Breastfeeding Challenges: Engorgement and Full, Lumpy Breasts (dated Mar 2020)</p> <p>18. (B8.2.4) Breastfeeding Challenges: Blocked Ducts (dated Jan 2019)</p> <p>19. (B8.2.5) Breastfeeding Challenges: Oversupply / hyper lactation (dated Nov 2019)</p> <p>20. (B8.2.8) Breastfeeding Challenges: Weight Loss Beyond 10% of Birth Weight (dated March 2021)</p> <p>21. (B8.2.9) Breastfeeding Challenges: Increasing Breast Milk Supply (dated Nov 2020)</p> <p>22. (B8.2.10) Breastfeeding Challenges: Thrush in Lactation (dated March 2019)</p> <p>23. (B8.2.11) Breastfeeding Challenges: The Vulnerable Baby (previously called 'Preterm, Late Preterm, Low Birth Weight (LBW) or Small for Gestational Age (SGA) Baby') (dated June 2021)</p> <p>24. (B8.3.1) Breastfeeding Aids: Supply Line to Supplemental Feeding (dated Nov 2019)</p> <p>25. (B8.3.2) Breastfeeding Aids: Nipple Shield (dated August 2020)</p> <p>26. (B8.4) Breastfeeding: Suppression of Lactation (dated April 2021)</p> <p>27. (B8.5.1) Formula Feed: Preparation (dated July 2021)</p> <p>28. (B8.5.3) Formula Feed: Approximate Fluid Requirements for Formula Fed Neonates (term baby) (dated March 2019)</p> <p>29. (B8.5.4) Formula Feed: Fluid Requirements for Low Birth Weight (LBW), Preterm & Small for Gestational Age (SGA) Baby (dated March 2019)</p>
2	Feb 2023	Added antenatal expression of colostrum chapter

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