

Antenatal Expressing Guideline

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The latest approved version of this document is online.
If the review date has passed, please contact the Author for advice.

Powys Teaching Health Board is the operational name of Powys Teaching Local Health Board
Bwrdd Iechyd Addysgu Powys yw enw gweithredol Bwrdd Iechyd Lleol Addysgu Powys

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ENGAGEMENT & CONSULTATION

Key Individuals/Groups Involved in Developing this Document

Role / Designation
Infant Feeding coordinator

Circulated to the following for Consultation.

Date	Role / Designation
02/02/2024	Women & Children's Policy and Procedures Oversight Group
02/02/2024	Maternity Policies and Procedures Group
02/02/2024	PTHB Midwifery Team
02/02/2024	PTHB Infant Feeding Strategic group

Groups Approved at

Date	Group
18/03/2024	Maternity Guidelines Group
18/03/2024	Women and Children's policies and procedures group
18/03/2024	Executive Director of Nursing & Midwifery

Evidence Base

Please list any National Guidelines, Legislation or Health and Care Standards relating to this subject area?

IMPACT ASSESSMENTS

Equality Impact Assessment Summary

	No impact	Adverse	Differential	Positive	Statement
					Please remember policy documents are published to both the intranet and internet .
Age	X				The version on the internet must be translated to Welsh.
Disability	X				
Gender reassignment	X				
Pregnancy and maternity				X	
Race	X				
Religion/ Belief	X				
Sex	X				
Sexual Orientation	X				
Marriage and civil partnership	X				
Welsh Language	X				
Human Rights	X				
Risk Assessment Summary					
Have you identified any risks arising from the implementation of this policy / procedure / written control document?					
No					
Have you identified any Information Governance issues arising from the implementation of this policy / procedure / written control document?					
No					
Have you identified any training and / or resource implications as a result of implementing this?					
No					

Antenatal Expression Guideline for Maternity Care in Powys

1. Policy Statement / Introduction

Antenatal expression refers to hand expressing colostrum during pregnancy from 36 weeks gestation.

Colostrum is the first stage/form of breastmilk. Colostrum production commences from around 16 weeks of pregnancy. Colostrum contains everything a neonate needs to protect and nourish them in their first few days of life, including proteins, fats and infection-fighting antibodies, and it will help stabilize the baby's blood glucose (sugar) levels.

Colostrum is normally produced in very small quantities and a newborn only needs small amounts (up to around 30mls per day) in the first day or two.

Antenatal expressing can be safely done from 36 weeks of pregnancy unless there are risk factors which for premature labour.

2. Objective/Aims

Aims of guideline:

- To identify the benefits of antenatal expression of colostrum.
- To identify women and families for whom it may be particularly beneficial and note contraindications.
- To provide guidance for appropriate timing and technique.
- To provide guidance on storage and use of expressed colostrum.
- To develop and promote expression pack for mums to be- including an information leaflet, syringes, and labels.

3. Definitions

PTHB- Powys Teaching Health Board
MW- Midwives
AN colostrum harvesting- Antenatal colostrum harvesting
PCOS- Polycystic ovary syndrome
BMI- Body Mass Index
BFI- Baby Friendly Initiative
AN – Antenatal
IFC- Infant Feeding coordinator

4. Roles & Responsibilities

4.1 Midwife Leads:

- Ensure that all midwives are aware of this guideline, and it is embedded in practice.

4.2 Midwives:

- Ensure antenatal conversations with all women are taking place around 16 weeks to discuss the benefits of colostrum.

- Ensure an antenatal conversation between 34-36 weeks is completed and documented to discuss AN hand expressing and provide the pack to all women who have additional risk factors for their baby requiring the hypoglycemia pathway/ or are likely to have birth or medical interventions which may impact on feeding.
- Teach all pregnant women how to hand express in pregnancy.

4.3 MSWs

- Ensure colostrum harvesting syringes, leaflets, and stickers (AN expressing packs) are readily available within the Birth Centre

4.4 Infant Feeding Co-Ordinator

- Ensure all staff are utilizing this guideline in practice.
- Continue to audit AN conversation in pregnancy.
- Provide 1-1 support for MW who need additional support with Infant feeding discussions/ clinical skills.

5 Information

5.1 Inclusion Criteria

All women who are planning to breastfeed or who wish to give colostrum as the ideal first feed may benefit from antenatal expressing. However, it may be particularly beneficial to express colostrum in situations when babies are likely to be at risk of hypoglycemia / feeding difficulty after birth or when mothers are known to be at risk of low supply.

These include:

- Diabetic mothers.
- Mothers on beta blockers.
- Babies small for gestational age.
- Likely early birth or planned elective caesarean.
- Multiple pregnancies.
- Women who have a BMI over 35
- Babies with congenital anomalies identified.
- Mothers with a history of breast surgery, hypoplasia or hormonal disorders e.g. PCOS, thyroid disorders.
- Strong family history of allergies (to reduce any potential need for early formula supplementation, which is known to increase the chance of allergic sensitization).

There are many reasons why expressing colostrum before your baby's birth in pregnancy can be useful. Research has shown that when pregnant women do express milk antenatally they:

- Gain more understanding about how the body prepares for nourishing a newborn baby
- Have increased confidence with establishing feeding Have increased confidence in the skill of hand expressing, which is a useful tool for infant feeding

5.2 Exclusion / Contraindications for AN hand expressing

Due to a theoretical risk of triggering preterm labour, antenatal expressing is not recommended (even for the above groups) in the following situations:

- Actual/threatened preterm labour (but see below, for exceptions for planned early birth). Cervical suture or history of cervical weakness.
- Antepartum hemorrhage.
- An increased chance of or history of premature labour
- A short cervix
- A cervical suture
- A multiple pregnancy before 36/40
- Any bleeding in pregnancy
- A low lying placenta
- Fetal compromise that may be exacerbated by uterine tightening.

Expressing should not be routinely recommended before 36 weeks, however if an early birth is planned then it can be discussed on an individual basis with obstetric/neonatal input as appropriate.

Examples:

- Where a multiple birth by caesarean is planned it may be appropriate to recommend antenatal expressing from a few days before birth.
- - Where a woman is admitted for a course of steroids prior to a planned preterm birth expressing may be appropriate at any gestation.

5.3 Technique for AN Colostrum Harvesting

All midwives and maternity staff should have completed two-day BFI training and be confident demonstrating hand expressing. Breast models are available in all clinical areas and should be used and all pregnant women should be shown this skill during pregnancy.

Before you start

- Wash your hand thoroughly prior to expressing.
- Ensure that you have a sterile container for collecting colostrum; a sterile syringe may be the most appropriate due to the small amounts of colostrum expected.
- Many people find that a warm, private, relaxing environment helps to facilitate oxytocin release, the hormone needed to help release colostrum.
- Gently massage all around your breasts for a few minutes prior to expressing. Warm flannels or the warm water from a shower/bath beforehand can help.
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Technique for hand expressing.

- Position your thumb and fingers in a 'C' shape at the milk ducts.
- To locate the milk ducts, either starting as far back on the breast as comfortable or from the base of the nipple, gently 'walk' your thumb and fingers until you feel a difference in texture of the breast. This is usually about 2-3cm from the base of the nipple.
- To express, gently compress and release, compress, and release and repeat until your colostrum begins to show- this will only be small beads at the end of the nipple. This should be done in a steady rhythmic motion- mimicking the suck pattern or a neonate. If no colostrum appears recommend the women move her fingers forwards or backwards slightly to see if that makes a difference.
- Avoid sliding fingers over the skin as this can cause damage.
- Collect the beads of colostrum in a sterile syringe. May be useful to include the partner to assist with this.
- Often women will only get one or two drops at a time, this is really normal and will be great practice for after baby arrives. Each drop of colostrum contains around 3 million antibodies.
- You can rotate the thumb and forefinger position to express the other areas in your breast.

<https://youtu.be/K0zVCwdJZw0>

5.4 Collection & Storage of Expressed Colostrum

- 1ml colostrum syringes should be provided for collection and storage. Gallipots can also be used (and sterilized and reused).
- Colostrum should be stored in the back of the fridge or freezer.
- Colostrum collected over a 24 hour period can be combined and frozen.
- Storage containers should be labelled with the mother's details and time and date of (earliest) expression (stickers included in AN expressing pack).
- Frozen colostrum should ideally be transported frozen in a cool bag with ice blocks if brought to hospital and should be stored in the freezer until required.
- Colostrum expressed in hospital can be stored in the fridge for up to 48 hours and fresh colostrum should be used before frozen.
- Frozen colostrum should be used within 12 hours of complete thawing (and within 24 hours of removal from freezer)
- Never refreeze previously frozen colostrum
- Colostrum can be used cold from fridge or warmed to body temperature by use of submersion in warm water – do not use a microwave.

6. Training & development

- All Midwives within PTHB have been trained in a BFI accredited in house training.
- All midwives have access to specialist support from the IFC if required.

7. Monitoring Compliance, Audit & Review

This document will be reviewed every three years or earlier should audit results or changes to legislation / practice within PTHB indicate otherwise.



8. References and useful links

[Advising women with diabetes in pregnancy to express breastmilk in late pregnancy \(Diabetes and Antenatal Milk Expressing \[DAME\]\): a multicentre, unblinded, randomised controlled trial - The Lancet](#)

Appendix A

Antenatal Colostrum Harvesting leaflet

What is colostrum?	How do I collect my colostrum?	Why?
<p>From around 16 weeks of pregnancy, your breasts will start to produce breastmilk for your baby. Colostrum, is the milk that is produced during your pregnancy and until your baby is around 3 days of age. It can vary in colour: from transparent to yellow in colour. Colostrum is a thick concentrated first milk which is the perfect first feed for your baby for multiple reasons. This includes:</p> <ul style="list-style-type: none"> • It encourages baby to pass their first poo (thick black meconium), this will reduce the risk of your baby developing jaundice • It coats your babies digestive tract, reducing their risk of things such as asthma, allergies, gastrointestinal infections • Microbiome development • Colostrum is very concentrated– packed with vitamins, minerals and nutrition. This is really important because it means baby only need very small amounts in the first few days after birth (their tummy is the size of a marble) • It contains antibodies which pass onto your baby! These include all the antibodies your body has produced in your life, the antibodies you have from vaccinations you have had but also any 'live' antibodies your body makes to the current environment you and your baby are in. This also encourages your baby to develop their own immune system. • Colostrum harvesting also helps prime the breasts and aids the development of the breasts & production of mature breastmilk. 	<p>You can start harvesting colostrum from 36 weeks gestation. It is recommended to start by doing a few minutes once a day from both breasts and gradually building up to 5-10 minutes, 2-5 times a day. This should then be often as necessary in the first few days after you give birth (at least 8 times in 24 hours).</p> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #f8d7da; margin-bottom: 10px;"> <p>Wash your hands, get your sterile syringe, or container, get comfortable and relax.</p> </div> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #d4edda; margin-bottom: 10px;"> <p>Gently massage the breast from the deep tissue, down to the nipple. Warmth can also help with oxytocin release or a warm flannel in the bath.</p> </div> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #fff3cd; margin-bottom: 10px;"> <p>Cup the breast with the thumb and fingers in a 'C' shape about 2-3 cm back from the base of the nipple.</p> </div> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #d4edda; margin-bottom: 10px;"> <p>Gently squeeze, bringing the fingers and thumb together in a rhythmic action (it may take a while for colostrum/milk to appear). If no milk appears after a few minutes, simply move the fingers a fraction forward or back to find the right spot.</p> </div> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #d4edda; margin-bottom: 10px;"> <p>Continue this action until no more milk drops come out and then, if necessary, move the fingers around to express from a different section of the breast. Avoid any sliding of fingers as this can cause damage to breast tissue.</p> </div> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; background-color: #f8d7da; margin-bottom: 10px;"> <p>Colostrum can be 'sucked up' in a small syringe or expressed onto a small sterile spoon or cup. The syringes should be labeled with your name and date/time & stored in freezer until birth.</p> </div> <p>Do not use a pump in pregnancy or for the first 3 days after birth. Hand expressing is the best way to gather colostrum.</p>	<p>There are different situations where we would advocate antenatal hand expressing. In the following situations, hand expressing would be beneficial for your baby and or your breast development.</p> <ul style="list-style-type: none"> • Babies who are expected to be under the 3rd centile or over the 97th centile • Multiple pregnancy– twins/ triplets • If your baby is known to have a Cleft Lip or palate • If your baby has been diagnosed with Downs – syndrome • Any Heart conditions or if your baby may require surgery shortly following birth • If you are taking beta blockers for high blood pressure • If you have Pre-eclampsia • If you have diabetes: Type 1/2 or Gestational • If you have PCOS or a hormonal imbalance • If you have Breast Hyperplasia or any previous breast surgery • If you have a raised BMI • You are having a caesarean section or induction of labour <p>Or it can be beneficial if you really wish to breastfeed</p> <p>Colostrum harvesting during the late weeks of pregnancy has a positive impact on your breast development, which means:</p> <ul style="list-style-type: none"> • It increases your chances of successfully breastfeeding • You will become confident and aware of how to hand express and handling your breasts • You will have a colostrum store for once baby is born.

<h3>Storage</h3> <p>You can store your colostrum in the syringes you expressed into or you can use any sterile container to store your milk.</p> <p><u>Timing and method of storing colostrum</u></p> <ul style="list-style-type: none"> • 6 hours out on the side • 3 days in fridge (5 days if your fridge is constantly under 4 degrees) • 6 months in the freezer <p>*If you store your breastmilk in the fridge, do not store in the door*</p> <p>Always ensure you label your breastmilk with your name, the date and time you expressed and amount expressed.</p> <p>If you are transporting your colostrum to the birth centre or hospital use a freezer bag/ box with ice packs and place in hospital fridge on arrival.</p> <p>You should defrost your milk naturally, just placing it out of freezer and use as soon as defrosted.</p>	<h3>Additional Support</h3> <p>Midwifery Team: 01874 622443</p> <p>National Breastfeeding Helpline: 0300 100 0121</p> <p>Posys Natures Nourishment–Facebook page</p> <p><i>“Imagine that the world had created a new ‘dream product’ to feed and immunize everyone born on earth. Imagine also that it was available everywhere, required no storage or delivery, and helped mothers plan their families and reduce the risk of cancer.” –Frank A. Oski</i></p> 	<div style="border: 2px solid black; border-radius: 50%; padding: 20px; text-align: center;"> <h2>Antenatal Colostrum Harvesting</h2> </div> <p>Harvesting Colostrum or Antenatal Hand expressing has many benefits for you and your baby. This information leaflet provides you with information with why, when and how you can safely harvest your colostrum.</p> 
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Appendix B

Expressing Labels

