

NHS FORTH VALLEY

Antenatal Colostrum Harvesting Guidance



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Consultation and Change Record – for ALL documents

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27/1/25	ER/SW	Pg 8 syringe photograph updated without cap. Appendix 1 updated with new Parent Information Leaflet to reflect this change.	1.2

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1. Introduction

NHS Forth Valley is committed to supporting and promoting breastfeeding as the healthiest way for women to feed their babies. We believe breastfeeding should be recognised as a unique interaction between mother and baby which not only feeds and comforts but also helps prevent against infection and disease.

It is well researched and known that exclusive breastfeeding for around the first 6 months has many known health benefits. Risk factors in the early neonatal period can make supplementation with formula more common and it is the aim of this guidance document to reduce these supplements and increase the amount of breast milk given to at risk neonates.

Where a mother is unable to or does not wish to express in the antenatal period, discussion should take place surrounding the use of donor breast milk in the early neonatal period for supplementation.

2. Scope

This guideline will discuss how to support antenatal expressing of colostrum for pregnant women who meet eligibility criteria. Included is a list of women / babies who may benefit from antenatal expressing and a list of contraindications, along with the rationale for both. Within the appendices is a Patient Information Leaflet (PIL) for women which outlines how to express, how to collect their colostrum, safe storage advice and where to get further information.

3. Definitions

Colostrum is the first milk produced for the baby, from around 20 weeks of pregnancy until a few days after birth, after which the breast milk transitions to mature milk.

Antenatal expressing of colostrum is where a woman hand expresses her breast to obtain the first milk produced for her baby.

Colostrum harvesting is when a woman actively collects and stores this first milk, which may be used to supplement the baby after their birth.

A supplement is an additional feed to breastfeeding; it may be maternal expressed breast milk, donor expressed breast milk or formula milk. The use of formula milk as a supplement is known to undermine breastfeeding and reduce the likelihood of babies returning to exclusive breastfeeding.

EBM = Expressed Breast Milk

4. Detail of Document

4.1 Eligibility

Many women are able to express their colostrum from 36 weeks, provided they have guidance from a midwife or medical professional. This additional supply of expressed breastmilk (EBM) can be particularly beneficial if the baby is at an increased risk of requiring supplements after birth. Some examples where supplementation may be required are: management of a sleepy baby, reluctant to feed baby, a baby at risk of hypoglycaemia.

Antenatal EBM can be given to the baby alongside postnatal feeding and expressing support, reducing the need for supplementation with formula milk. Evidence suggests that early supplementation with formula milk increases the chance that a woman will stop breastfeeding.

The following table highlights some situations where antenatal colostrum may be beneficial:

Reason	Rationale
Mother has diabetes / gestational diabetes	Increased risk of infant hypoglycaemia after birth
Mother has had beta blockers during pregnancy (e.g. labetalol)	
Anticipated large for gestation babies (> 4.5 kg)	
Anticipated low birth weight babies (< 2 nd centile)	
Babies diagnosed antenatally as having conditions or abnormalities that make feeding more challenging, e.g. cleft lip / palate, Down's Syndrome, cardiac complications.	Increased risk of breastfeeding being more challenging
Previous breastfeeding challenges, poor milk supply or unsuccessful breastfeeding	
Where there is a strong family history of dairy intolerance or inflammatory bowel disease	Exclusive breastfeeding will reduce the risks of baby developing symptoms
Mother has breast hypoplasia (under developed breasts have one or more of the following features: wide space between breasts, asymmetry, tubular or cone shaped)	Increased risk of poor milk supply and mother may need additional support to achieve full lactation
Mother has history of PCOS	
Mother has had breast surgery	
Mother is having a planned caesarean section	Increased risk of large infant weight loss in the early days; increased risk of delayed lactation
Mother has an increased BMI	Risks are in line with associated conditions such as diabetes and PCOS

4.2 Contraindications and Precautions

All women should be advised that by hand expressing they may experience some uterine contractions or Braxton Hicks. If this happens, they should stop expressing and rest. If the contractions continue after a couple of hours or the woman has any concerns, she should contact a midwife for advice (e.g. maternity assessment).

Therefore, antenatal expressing is **NOT** recommended for the following situations:

- Women with a pregnancy is less than 36 completed weeks
- Women known to have cervical incompetence or cervical suture in place
- Women who have had threatened or actual preterm labour
- Women who have an ongoing multiple pregnancy
- Women who have polyhydramnios
- Women who have placenta praevia or placenta accreta
- Women who have had any vaginal bleeding or preterm rupture of membranes in current pregnancy

Additionally:

- Use of a breast pump is **not** recommended for antenatal expressing.
- Women should be advised about optimising hygiene during the expressing process, including the importance of hand hygiene and ensuring equipment is clean and sterile before expressing.
- Any expressed milk should be stored in the fridge or freezer as soon as possible after expressing to preserve the nutrients and minimise growth of bacteria.

4.3 Information for Women and Documentation of Discussion

Antenatal Colostrum Harvesting Pack

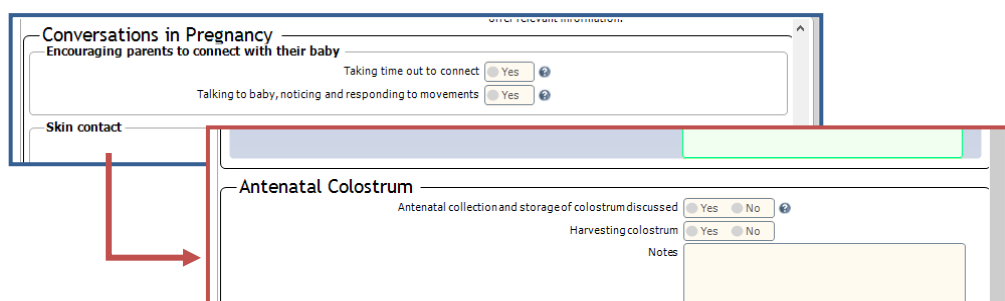
Any women who wish to start expressing colostrum antenatally and do not have any contraindications should be offered an “Antenatal Colostrum Harvesting Pack” which will include:

- 10 sterile syringes (as pictured),
- 10 sticky labels with enough space for name, date of birth / CHI number, and date of expressing,
- gallipot,
- patient information leaflet as per Appendix 1



Documenting Support and Discussions of Antenatal Colostrum Harvesting

There is a section in BadgerNet under “Conversations in Pregnancy” where antenatal colostrum harvesting conversations and advice can be recorded, along with any additional notes.



Discussion with Women

The advice for women should include:

- Start collecting colostrum from 36 – 37 weeks gestation,
- Express between 1 and 3 times per day, for up to 10 minutes per session,
- Women do not need to express every day – they can choose when suits them,
- Expressing technique is the same as postnatal hand expressing,
- EBM can be collected into the same syringe over a 24 hour period, as long as it is stored in the fridge between uses,
- At the end of the day, the syringe should be labelled and placed in a sealed bag in the freezer.

4.4 Storage of Antenatally Colostrum

Storage of Antenatal Colostrum at Home

Antenatally expressed colostrum should be stored in the fridge or freezer as soon as possible after expressing.

Women should ensure that:

- All syringes are appropriately labeled with their name, date of birth or CHI number and date expressed,
- Syringes are placed into a sealed plastic food storage bag, and stored:
 - in the **fridge** (0-4 °C) for up to 5 days,
 - in the **freezer compartment of a fridge** for up to 2 weeks,
 - in the **freezer** (-18 °C) for up to 6 months,

Note: Expressed milk is best preserved by storing in the freezer as soon as possible.

Bringing Expressed Colostrum to Hospital

Women may bring their expressed colostrum into FVRH when attending:

- in established labour or
- for elective caesarean section.

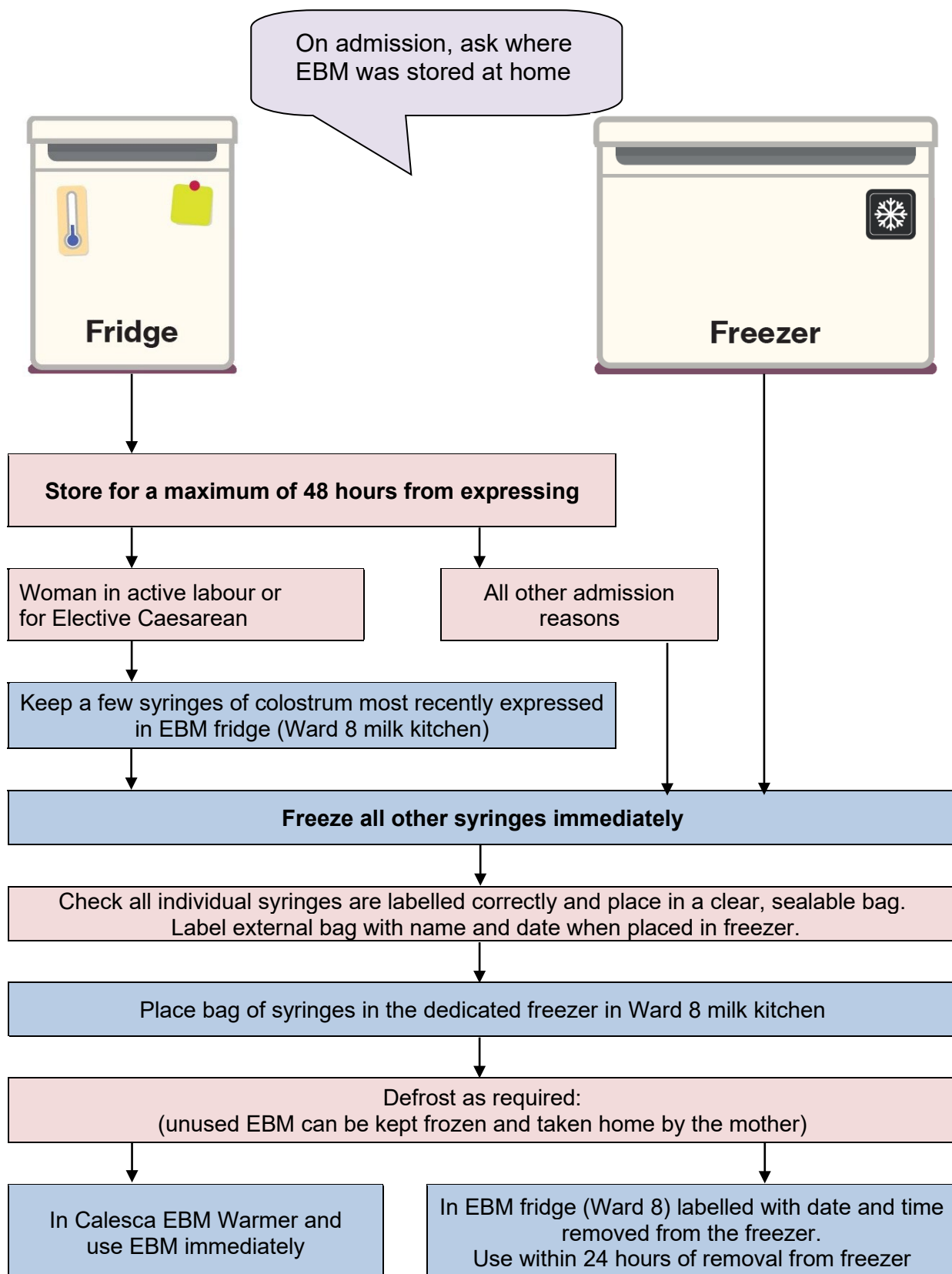
Women can opt to bring some or all of their antenatal colostrum to the hospital when they attend. Only bringing a handful of syringes helps to prevent contamination and accidental wastage; further syringes can be brought from home later, if it appears they will be required.

When transporting to hospital, a sealed food bag containing the syringes should be placed in a cool bag with freezer packs, cool blocks or ice. The woman should inform staff immediately when they arrive at the ward to ensure the milk is preserved effectively.

Women attending for induction of labour should be advised to keep their colostrum at home, if possible, until they are transferred to Ward 7, or their baby is born. This is because the process of induction of labour can take several days and precautions need to be taken to preserve the colostrum as far as possible.

Storage of Antenatal Colostrum within FVRH

If a woman attends FVRH with antenatally expressed colostrum, it should be stored in the fridge or freezer as soon as possible.



Thanks to NHS Highland for text and graphics

4.5 Associated Documents

NHS FV Infant Feeding Policy	Infant-Feeding-Policy-1.pdf (scot.nhs.uk)
Guidelines for Babies Reluctant to Breastfeed	Reluctant-Feeder-1.pdf (scot.nhs.uk)
West of Scotland Neonatal Guidelines, e.g. Hypoglycaemia of Term or Preterm Infants, Expressed Breast Milk (Maternal and Donor), Jaundice Management	Neonatology (scot.nhs.uk)

5. References

Auckland District Health Board (2019) 'Collecting Colostrum During Pregnancy (Harvesting)', *Auckland DHB Clinical Guideline*, 06 September. Available at: <https://nationalwomenshealth.adhb.govt.nz/assets/Womens-health/Documents/Policies-and-guidelines/Collecting-Colostrum-During-Pregnancy.pdf> (Accessed 13 August 2020).

Forster, D. A. *et al.* (2017) '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*, 389(10085), pp. 2204-2213.

Paterson, J. (2015) *Colostrum harvesting*. Available at: www.gestationaldiabetes.co.uk/colostrum-harvesting (Accessed: 13 August 2020).

Walker, M. (2015) 'Formula Supplementation of Breastfed Infants: Helpful or Hazardous?', *ICAN: Infant, Child, & Adolescent Nutrition*, 7(4), pp. 198–207.

Acknowledgements

- The Scottish Infant Feeding Advisors Network (SIFAN) Guidance on Antenatal Colostrum Harvesting (2018).
- Elaine Turnbull, Project Midwife (Breastfeeding), NHS Lothian

6. Appendices

Patient Information Leaflet

To print as a leaflet, specify print range to pages '12-13' with a 'short edge bind' on the double sided print selection.

Label each syringe with: your name, your CHI number (or date of birth if you don't know it) and the date you expressed.

Place labelled syringes into a plastic food storage bag and store:

- In the fridge (0-4°C) for up to 5 days.
- In the freezer compartment of a fridge for up to 2 weeks.
- In a freezer (-18°C) for up to 6 months.

Note: We recommend freezing your milk as soon as possible.

Bringing your colostrum into hospital

When transporting to hospital, place in a cool bag with freezer pack, cool blocks or ice. Inform staff immediately on your arrival so that it can be appropriately stored for you until required.

Further reading and information



How to Hand
Express Video



Gestational
Diabetes Website



Association of
Breastfeeding Mothers

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If you can't go let us know!

Every month around 2,000 people across Forth Valley fail to turn up for hospital appointments. This costs the NHS millions of pounds each year and increases waiting times. So if you are unable to attend or no longer require your hospital appointment please let us know so we can offer it to someone else.

Smoking is not permitted anywhere on our hospital grounds and it is now an offence to smoke within 15 metres of a hospital building. This can result in a fixed penalty notice of £50 or a fine of up to £1,000.



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NHS Forth Valley

Antenatal Colostrum Harvesting

A guide for women on hand expressing colostrum during pregnancy

Precautions to know before you start

It is not recommended to start colostrum harvesting before 36 weeks of pregnancy. This is because expressing could trigger some contractions or Braxton Hicks. If you experience any contractions while hand expressing, you should stop and rest. Contact maternity triage on 01324 567098 if the contractions do not stop after a couple of hours, or you have any other concerns.

You should not express if any of the following apply to you. If you are unsure whether it is safe for you to express your colostrum, check with your midwife first.

- You have ever had a cervical suture.
- You have ever had a preterm labour.
- You have a low lying placenta called placenta praevia.
- You are pregnant with twins, triplets, or more.
- You have polyhydramnios (too much fluid around the baby).

Colostrum is packed full of nutrients for your baby. It might be watery, or thick like syrup, and can be a range of colours from clear to cream to yellow or even brown.

When can I start to express?

It is recommended to start colostrum harvesting from 36-37 weeks. This can be done between one and three times per day for up to 10 minutes each time. You do not need to express every day.

Colostrum is produced in very small volumes. Some women don't see any droplets whilst others can get 2mls or more. Don't worry as this does not indicate how successful breastfeeding will be!

How do I express by hand?



Step 1

Wash your hands thoroughly.

Ensure you are in a private space and comfortable.

To encourage a milk flow, start by gently massaging your breast and nipple to stimulate the hormones needed to release milk.



Step 2

Position your thumb and fingers in a 'C' shape, 2 to 3cm back from the base of your nipple.



Step 3

Gently press and release, press and release, and keep repeating until your milk starts to flow. This may take a few minutes.

You may not see anything at all, or maybe just a glistening on the surface of your nipple.



Step 4

When the flow slows down, move your fingers round to a different part of your breast and start again.

Collecting and storing your expressed milk

Your expressing pack should include some sterile syringes, like the ones pictured. If you need more, please ask your midwife.



As you express, gently suck the droplets of colostrum into the syringe. Some women prefer to express into a sterile container or gallipot and then draw it up into the syringe for storing. You can add milk into the same syringe for 24 hours but keep the syringe in the fridge between uses and freeze at the end of the day.

Document Development and Approval Checklist

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Specify the rationale for the development of the policy, procedure or guideline

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Approval

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