

## **Standard Operational Procedure:** For incorrect Expressed Breast Milk administration

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**For use in:** EoE Neonatal, Maternity and Paediatric Wards.  
Guidance specific to the care of neonatal patients.

**Used by:** MSW, HCA, NN, Nurses, Midwives, ANNPs, Doctors, PA

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<b>Date of meeting</b>	
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## Purpose of the Guide

Guideline for Outlining the Process to follow if the incorrect Expressed Breast Milk (EBM) has been given to a baby on the Maternity Wards, NICU or Paediatric Ward.

## Background

Frequency of Occurrence: Research suggests the incidence of incorrect EBM administration, though rare, can range from 1 in 7,500 feeds to 1 in 500 feeds. Misadministration of EBM can be a deeply distressing experience for parents, causing anxiety and impacting trust in healthcare providers. Effective protocols and support mechanisms are essential to mitigate these effects<sup>1,2,3&4</sup>.

The major parental concern when the wrong milk is administered to the wrong baby relates to possible transmission of infection. However in practice the risk of infection from incorrect EBM administration is often low due to the small volume of milk often received during these incidents<sup>11</sup>.

Hepatitis B and C, CMV, Syphilis, HIV, and HTLV testing following an EBM administration error is often performed, as seen in many EoE Provider Guidance.

National Milk Bank Guidance by NICE (2010)<sup>9</sup> states that all Milk Banks should “Undertake Serological testing of all potential donors for the following and exclude women from donating who test positive for:

- HIV 1 or 2,
- Hepatitis B or C,
- HTVLV I or II
- Syphilis.”

Which suggest that these are the infections transmissible through human milk. However, this donor testing protocol is designed with the assumption that recipients may receive large volumes from each donor. Clinicians should therefore carefully weigh the level of exposure against the relative risk of transmission, before deciding on invasive procedures in cases of EBM misadministration.

**The US Centre for Disease and Prevention (2023)<sup>11</sup> Guidance for ‘Breast Milk Mix Up States ‘Any decision about medical management and diagnostic testing of the infant who received another mother's milk should be based on the details of the individual situation. These decisions should be made by the infant's physician (Doctor) and parent(s) or guardian(s) working together.’**

## Evidence of Transmission

### **Human immunodeficiency virus (HIV)**

Routine prenatal care in the United Kingdom includes laboratory testing for sexually transmitted infections (STIs) and HIV (NHS, 2024). Most UK women living with HIV are identified prior to or during their maternity hospital stay and most have been on antiretroviral therapy (ART). For mothers with HIV on ART with a sustained undetectable HIV viral load, the risk of transmission through breastfeeding their infant is less than 1%. Additionally, most women with HIV in the United Kingdom do not breastfeed if their viral load is detectable (BHIVA, 2020). So, the risk of transmission of HIV to an infant to whom a single bottle of another mother's milk was fed is very low. There is no evidence of transmission of HIV to a child via a single exposure to another mother's milk (CDC, 2023).

### **Hepatitis B and C viruses**

Hepatitis B and C cannot be spread from a woman to a child through breastfeeding or close contact unless there is exposure to blood. CDC (2023)<sup>11</sup> state it is very unlikely that a child would be at risk for hepatitis B or C by receiving another mother's breast milk.

### **Cytomegalovirus (CMV)**

CMV commonly transmits via breast milk, although the act of freezing EBM destroys many of the viral particles, which will significantly reduce the risk of infection. Should CMV be contracted in this way, it may cause acute infection, but is very unlikely to have any long term detrimental effects (in contrast to prenatal infection). Infants contracting CMV postnatally are not offered any antiviral medication (except in the rare instance of a significant systemic infection). Incubation period for CMV is 28-60 days. If a postnatal infection with CMV were to occur it is more likely that the infection would have originated from the baby's own mother rather than from a small aliquot of donor milk<sup>12</sup>.

### **Syphilis**

Prenatal bloods include syphilis<sup>10</sup>. The National Institute of Health (2024)<sup>7</sup> states that syphilis spread by milk will occur only when sores are present on the breast and come into contact with breast milk. Therefore the risk of spread to the donor when no sores are present is low.

### **Human T-cell leukaemia virus type 1 (HTLV)**

HTLV-1 infects at least 5 million to 10 million people worldwide, although information is unavailable for many countries, so this figure is likely to be an underestimate. The virus is endemic in:

- Caribbean
- South America
- Romania
- Iran
- much of Africa
- Japan

- Melanesia
- indigenous population of Australia

In England and Wales, an estimated 22,000 people are living with the virus, mainly those who have migrated from endemic countries, or their descendants.

It is the causative agent of a form of blood cancer (adult T-cell leukaemia or lymphoma, called ATL) and of a progressive disease of the nervous system (HTLV-1 associated myelopathy, or HAM, also known as tropical spastic paraparesis (TSP) <sup>5</sup>. Research has shown it is transmitted in breast milk. Risk of transmission increases with the duration of breastfeeding<sup>6</sup>.

HTLV-II, until recently, has been challenging to differentiate from HTLV-I. It is found more frequently among drug users in Europe and the United States and is considered more transmissible through blood than other routes. Evidence suggests that the risk of transmission through stored blood decreases over time. Currently, no data exists regarding the likelihood of HTLV-II transmission to infants via breastfeeding.

There is no effective treatment for either HTLV-I or HTLV-II beyond advising against breastfeeding if the mother is infected. Due to its low prevalence, HTLV screening is not currently part of routine prenatal testing in the UK<sup>10</sup>.

### Counselling Donor Mother

The consultant/Senior Clinician/Senior ANNP/Senior Nurse should speak to the parents and apologise for the error in an appropriate manner.

The following questions should be asked during this consultation to assess the risk to the recipient infant:

- Does the donor consent to sharing information about her medication use, recent infectious disease history, and presence of cracked or bleeding nipples during milk expression <sup>11</sup>

It's important that the donor mother knows that this request is so that the risk can be assessed for the recipient infant and reassurance be given to the recipient infant's mother. The donor mother should be reassured that identity details will never be shared with the recipient infant's mother. The conversation should be documented in the donor mother's notes.

### Counselling Recipient Mother

A consultant, senior clinician, or senior ANNP\* should meet with the parents to acknowledge and apologise for the error in a sensitive and appropriate manner. During this discussion, the following points should be covered with the parent(s) or guardian(s) of the child who received another mother's milk:

- Inform them that their child was inadvertently given another mother's expressed breast milk.
- Reassure them that the risk of infectious disease transmission is small, particularly if reassuring information has been obtained during the donor mother's counselling.

This apology and reassurance may suffice for some parents. (Note: This aligns with advice from the Centers for Disease Control and Prevention (CDC) Guidance.)

However, some parents may request further reassurance, such as additional virological testing of the donor, which would require the donor's consent.

If reassuring information cannot be obtained from the donor mother's counselling for any reason, parents should be informed, and the infection diseases team should be consulted to determine appropriate next steps.

In cases where blood tests are requested, ensure that follow-up measures are in place to provide timely feedback on results, as the waiting period can be distressing for families. Informing families of the estimated timeframe for test results can also offer reassurance.

In the unlikely event of a positive test result, consult the infectious diseases team to discuss appropriate post exposure prophylaxis and arrange specialist counselling for the family.

The conversation should be documented in both the recipient mother's and infant's notes.

\*In the event that a Consultant, Senior Clinician or ANNP is unavailable for a period of time, duty of candour can be carried out by the Nursing team before Counselling is conducted by the medical team

#### **Other information required from the practitioner involved in the incorrect administration of EBM**

The consultant, senior clinician, or senior ANNP should speak with the practitioner involved in the incident to gather the following essential information:

- The timing of the event
- The amount of milk administered
- Whether the milk was aspirated or replaced
- Verification that the family/guardian has been informed and that the duty of candour has been fulfilled
- Confirmation that documentation of the incident has been completed in the donor mother's, recipient mother's, and infant's notes (with confidentiality maintained) and that an incident report has been filed.

### The Role of this Standard Operating Procedure:

This document aims to provide comprehensive guidance for healthcare professionals in maternity wards, NICUs, and paediatric wards to outline the governance process and minimise the risks associated with incorrect EBM administration.

### Standard Operating Procedure for the practitioner involved in the incorrect administration of EBM

EBM should immediately be aspirated from the stomach by a competent practitioner.

\*If milk has been delivered by tube feed

The amount aspirated should be replaced by the correct EBM.

Report the error to the Nurse/Midwife in charge and the medical team immediately.

Both the donor mother and the mother of the recipient baby must be informed of the incident but should not be told names (Duty of Candour).

An incident form must be completed and IPC team notified.

Document the episode in the recipient baby health care record including a record of the incident number.

## References

1. Wolford, E., et al. (2014). Retrospective analysis of 10 years of breast milk medication errors at a large tertiary neonatal intensive care unit. *Breastfeeding Medicine*, 9(4), 215-218.
2. Hurst, N. M., & Meier, P. P. (2015). Best practices for handling and administration of expressed human milk and donor human milk in the NICU. *Journal of Human Lactation*, 31(4),
3. Tully, L. M., et al. (2015). Parent misidentification leading to the breastfeeding of the wrong baby in a neonatal intensive care unit. *Breastfeeding Medicine*, 10(4), 225-227.
4. Dodrill, P., et al. (2017). A quality improvement initiative to reduce breastmilk administration errors in the neonatal intensive care unit. *Journal of Perinatology*, 37(12), 1354-1360.
5. UK Health Security Agency (2023) Human T-cell lymphotropic virus (HTLV) types 1 and 2, GOV.UK. Available at: <https://www.gov.uk/guidance/human-t-cell-lymphotropic-virus-htlv-types-1-and-2> (Accessed: 31 October 2024).
6. World Health Organization (2022) Human T-lymphotropic virus type 1, [www.who.int](http://www.who.int). Available at: <https://www.who.int/news-room/fact-sheets/detail/human-t-lymphotropic-virus-type-1> (Accessed: 31 October 2024).
7. NIH Office of Research on Women's Health (ORWH) (2019) Sexually Transmitted Infections, Pregnancy, and Breastfeeding | Office of Research on Women's Health, [orwh.od.nih.gov](http://orwh.od.nih.gov). Available at: <https://orwh.od.nih.gov/research/maternal-morbidity-and-mortality/information-for-women/sexually-transmitted-infections>.
8. British HIV Association (BHIVA) (2020) British HIV Association guidelines for the management of HIV in pregnancy and postpartum 2018 (2020 third interim update). Available at: <https://www.bhiva.org/file/5f1aab1ab9aba/BHIVA-Pregnancy-guidelines-2020-3rd-interim-update.pdf> (Accessed: 31 October 2024).
9. NICE (2010) Recommendations | Donor milk banks: service operation | Guidance | NICE, [www.nice.org.uk](http://www.nice.org.uk). Available at: <https://www.nice.org.uk/guidance/cg93/chapter/Recommendations> (Accessed: 31 October 2024).
10. NHS (2024) Screening for hepatitis B, HIV and syphilis, [nhs.uk](http://nhs.uk). Available at: <https://www.nhs.uk/pregnancy/your-pregnancy-care/screening-for-hepatitis-b-hiv-and-syphilis/> (Accessed: 31 October 2024).
11. CDC (2023) Breast Milk Mix-Up, Breastfeeding. Available at: [https://www.cdc.gov/breastfeeding/php/guidelines-recommendations/other-mothers-milk.html?CDC\\_AAref\\_Val=https://www.cdc.gov/breastfeeding/recommendations/other\\_mothers\\_milk.htm](https://www.cdc.gov/breastfeeding/php/guidelines-recommendations/other-mothers-milk.html?CDC_AAref_Val=https://www.cdc.gov/breastfeeding/recommendations/other_mothers_milk.htm) (Accessed: 31 October 2024).

12. NHSGGC Guidelines (2019) Expressed breast milk (maternal and donor), [www.clinicalguidelines.scot.nhs.uk](http://www.clinicalguidelines.scot.nhs.uk). Available at: <https://www.clinicalguidelines.scot.nhs.uk/nhsggc-guidelines/nhsggc-guidelines/neonatology/expressed-breast-milk-maternal-and-donor/> (Accessed: 31 October 2024).
13. Care Quality Commission (2022) Regulation 20: Duty of candour | Care Quality Commission, [www.cqc.org.uk](http://www.cqc.org.uk). CQC. Available at: <https://www.cqc.org.uk/guidance-providers/all-services/regulation-20-duty-candour> (Accessed: 31 October 2024).

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## Exceptional Circumstances Form

Form to be completed in the **exceptional** circumstances that the Trust is not able to follow ODN approved guidelines.

Details of person completing the form:	
Title:	Organisation:
First name:	Email contact address:
Surname:	Telephone contact number:
Title of document to be excepted from:	
Rationale why Trust is unable to adhere to the document:	
Signature of speciality Clinical Lead:	Signature of Trust Nursing / Medical Director:
Date:	Date:
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