

## **Interim BHIVA position statement on HIV and mixed infant feeding**

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### **Introduction**

This statement clarifies the position of BHIVA on mixed infant feeding, and specifically the supplementation of breast/chestfeeding with formula milk. Following a discussion on HIV and breast/chestfeeding at the 2022 BHIVA Spring Conference in Manchester, it was decided that an interim BHIVA position statement on mixed feeding was needed for healthcare providers and people living with HIV pending a full update of the BHIVA guidelines on the treatment of HIV in pregnancy and postpartum. This statement will be superseded by the pending full update.

In the context of pregnancy and/or breast/chestfeeding, current evidence indicates that undetectable on ART equals untransmittable is not applicable [1]. Therefore, in the UK and other high-income settings, the use of formula milk is the safest way to avoid postnatal HIV transmission to infants of women/birthing parents living with HIV. BHIVA continues to recommend that babies are fed exclusively with formula milk, and that formula milk and feeding equipment are provided free of charge, to minimise vertical transmission of HIV.

The aim of this statement is to provide guidance, should breast/chestfeeding be the chosen method, on when and how breast/chestfeeding may be supplemented with formula milk. This statement is based on expert opinion following a review of data from low- and middle-income countries.

Since 2010 it has been BHIVA's position that women/birthing parents who are virologically suppressed on ART with good adherence during pregnancy and who choose to breast/chestfeed should be supported to do so, if they:

- Have been on ART for >10 weeks [2] AND
- Have two documented HIV viral loads <50 HIV RNA copies/mL during pregnancy at least 4 weeks apart AND
- Have an HIV viral load <50 HIV RNA copies/mL at >36 weeks.

Breast/chestfeeding should be for a maximum of 6 months as HIV transmission risk increases with longer duration of breastfeeding, even on suppressive ART [3-5]. Parents should be informed about the low estimated risk of transmission of HIV through breastfeeding on effective ART (3 per 1000 infants at 6 months, 95% confidence interval [CI] 1–8 per 1000 infants; 7 per 1000 infants at 12 months, 95% CI 3–14 per 1000 infants) [3] and the requirement for monthly clinical and laboratory monitoring for both mother or birthing parent and infant during breast/chestfeeding, and for 2 months thereafter.

### **Why have we clarified the guidance?**

Although BHIVA continues to recommend that where a person with HIV chooses to breast/chestfeed they should do so exclusively, there may be times when supplementation with formula milk is necessary to ensure the baby receives adequate nutrition and hydration.

In a combined analysis of studies of breastfeeding women in Africa who were not on ART, duration of breastfeeding and rates of HIV transmission were investigated in exclusively breastfed babies, versus those also fed other water-based drinks and those given solid food [4]. HIV acquisition rates did not differ between infants exclusively breastfed and those predominantly breastfed (breast milk plus other water-based drinks, including formula milk). However, for women who breastfed and introduced *solids* before the infant was 6 months old, the risk of HIV transmission to the infant significantly increased (from 9 to 40 per 100 person-years). Mixed formula and breast feeding has not been shown to increase the risk of transmission in women who breast fed for 4 months or less.

It is important to note that the mixing of breast/chestfeeding and formula feeding by women/birthing parents who are virologically suppressed on ART may potentially increase the risk of HIV transmission, but that this risk is unquantifiable based on current evidence.

**Therefore, breast/chest and formula milk should only be mixed in certain situations**, as described below, and based on the hydration and nutritional needs of the infant.

Mixing breast/chestfeeding and solids before 6 months of age is **never recommended** due to the significantly increased HIV transmission risk. In addition, it must be noted that this

statement does not apply to the mixing of breast/chest milk with any milk other than recommended infant formula.

## **Situations in which supplementing breast/chestfeeding with formula feeding may be supported**

### **1. Establishing breast/chestfeeding**

The most important benefits of breast/chestfeeding for an infant are in the first weeks of life. Therefore, extra support for people who choose to breast/chestfeed to do so exclusively is recommended. If an infant requires the occasional formula feed to support establishment of breast/chestfeeding, this is considered acceptable.

### **2. When switching from breast/chest milk to formula milk**

It is recommended that the breast/chestfeeding period should be as short as possible, and ideally less than 6 months. By 6 months, the infant should be established on formula milk, and solids can be introduced without risking HIV transmission. It is advisable to change from breast/chest milk to formula milk as quickly as possible. Bottles of expressed breast/chest milk may be introduced early on so that the infant becomes used to sucking from a bottle as well as the nipple. This also gives the co-parent the opportunity to feed and bond with the infant.

### **3. Mastitis**

When experiencing mastitis, it is recommended that the breast/chestfeeding mother or birthing parent expresses and discards breast/chest milk and uses formula milk exclusively until symptoms resolve. It is reasonable to consider re-establishing breast/chestfeeding after mastitis has fully resolved, but this must be done on a case-by-case basis in consultation with a healthcare professional experienced in HIV care. Whether there is any increased risk of HIV transmission when experiencing mastitis in resource-rich settings in the context of fully suppressive maternal or parental ART is not known.

### **4. Gastroenteritis in the feeding mother or birthing parent**

In the case of gastroenteritis in the breast/chestfeeding mother or birthing parent, recommendations are the same as for mastitis.

#### 5. Gastroenteritis in the infant

Gastroenteritis in the infant may be associated with loss of integrity of the gut lining, which may take some time to fully recover. This may be associated with an increased risk of HIV transmission. It is difficult to establish clinically when there is full resolution of the infant gut lining. We therefore recommend that breast/chestfeeding should be stopped in the event of infant gastroenteritis, and not resumed thereafter.

In addition to these recommendations, breast/chestfeeding women/birthing parents must remain on and be fully adherent to ART, and both the woman or birthing parent and infant should have monthly HIV viral load monitoring to ensure that breast/chestfeeding is supported as safely as possible.

Rapid text/phone access to support and advice from the HIV multidisciplinary team (MDT) is important for breast/chestfeeding women/birthing parents. We also recommend peer support which can be accessed locally or nationally via the 4M Mentor Mothers network (<https://4mmm.org>) as well as the clinical network.

We recognise the potential emotional, social and financial impacts of not breast/chestfeeding. We continue to advise HIV MDT support (including peer support) for women/birthing parents living with HIV who choose to exclusively formula feed. We acknowledge that provision of free formula for women/birthing parents living with HIV remains inconsistent across the UK. We advise clinics and voluntary sector organisations to map local services. Some foodbanks may be able to provide free formula to women/birthing parents living with HIV (e.g. The Food Chain in London: <https://www.foodchain.org.uk/>).

Further information on the recommendations in this statement will be available in the pending full update of the BHIVA guidelines on the management of HIV in pregnancy and postpartum.

The BHIVA leaflets to support breast/chestfeeding have been updated in line with this statement (<https://www.bhiva.org/pregnancy-guidelines>).

## References

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3. Flynn PM, Taha TE, Cababasay M *et al.*; the PROMISE Study Team. Prevention of HIV-1 transmission through breastfeeding: Efficacy and safety of maternal antiretroviral therapy versus infant nevirapine prophylaxis for duration of breastfeeding in HIV-1-infected women with high CD4 cell count (IMPAACT PROMISE): a randomized, open label, clinical trial. *J Acquir Immune Defic Syndr* 2018; **77**: 383–392.
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5. Bispo S, Chikhunga L, Rollins N *et al.* Postnatal HIV transmission in breastfed infants of HIV-infected women on ART: a systematic review and meta-analysis. *J Int AIDS Soc* 2017; **20**: 21251.