



FAQ SHEET

Frequently Asked Questions on: BREASTFEEDING AND HIV/AIDS

FAQ SHEET 1

From the LINKAGES Project

REVISED
OCTOBER 1998

HIV passes via breastfeeding to about 14 percent of infants born to HIV-infected women. HIV virtually always results in death. But in many situations where there is a high prevalence of HIV, the lack of breastfeeding is also associated with a three- to five-fold increase in infant mortality. Infants can die from either the failure to appropriately breastfeed or from the transmission of HIV through breastfeeding. These risks cannot be separated. We need to discover methods to support breastfeeding while reducing mother-to-child transmission of HIV.

Furthermore, in most settings, testing for HIV is not available. In fact, less than 5 percent of adults have access to HIV testing. In many countries with high prevalence of HIV, many uninfected women think they have the virus. Therefore, an additional concern is that many women without HIV may follow infant feeding advice not intended for them.

This FAQ sheet provides recommendations on breastfeeding and HIV. It reviews the latest information on the transmission of HIV via breastfeeding and provides programmatic guidance for field activities. Further information is available in publications listed at the end of this FAQ sheet.

How does mother-to-child transmission of HIV occur?

Approximately 20 percent of infants of HIV-infected mothers are infected before or during delivery. HIV can also be transmitted through breastfeeding. If all HIV-infected mothers breastfeed, an additional 14 percent of their infants would be infected through breastfeeding. This means that about two-thirds of children of HIV-infected women will **not** become infected.

How many infants are at risk of HIV?

Although the percentage of mothers infected with HIV approaches 40 percent in some African cities, it generally is much lower, rarely above 20 percent (1 in 5). In a community in which 20 percent of children are born to HIV-infected women and 14 percent of these infants are infected by breastfeeding, about 3 percent of all infants in the community would be infected through breastfeeding (20 percent at risk x 14 percent infected through breastfeeding = 2.8 percent).

Should mothers with HIV be advised not to breastfeed?

It might seem logical to advise a mother with HIV not to breastfeed. If a mother knows she is infected, if breastmilk substitutes are affordable and can be fed safely, and if adequate health care is available and affordable, then the infant's chances of survival are greater if fed artificially. Wet nursing is another alternative if a suitable uninfected woman is available. USAID and other partners are engaging in research to develop realistic options for mothers infected with HIV.

Unfortunately, alternatives to breastfeeding are often neither affordable nor safe. In many countries, where the cost of locally available formula exceeds the average household's income, families cannot buy sufficient supplies of breastmilk substitutes, leading to over-dilution, under-feeding, or substitution with dangerous alternatives. In the 50 poorest developing countries, infant mortality averages over 100 deaths per thousand live births. Artificial feeding roughly triples the risk of infant death in such environments, where most infant deaths are due to infectious diseases such as diarrhea and pneumonia, where hygiene and sanitation are often poor, and where access to adequate health care is limited. In these conditions, breastfeeding may be the safest feeding option even when the mother is HIV-positive.

If a mother with HIV breastfeeds, how can she reduce the risk of transmission?

Many experts believe that the safest way to breastfeed in the first six months is to do so exclusively, without adding any other foods or fluids to the infant's diet. Such additions are not needed and may cause gut infections that could increase the risk of HIV transmission.

There is evidence that the risk of transmission continues as long as the infant is breastfed. The risk of death due to replacement feeding is greatest in the first few months and becomes lower later on. In some cases, the best strategy may therefore be to stop breastfeeding early and introduce breastmilk substitutes as soon as an available replacement method becomes safer. The optimum time for introducing substitutes is not known and varies with the situation.

Can anti-retroviral drugs help reduce mother-to-child transmission of HIV?

Anti-retroviral drugs, such as AZT, also known as zidovudine (ZDV), are somewhat effective in reducing the risk of mother-to-child transmission. In a 1994 trial in San Francisco, AZT taken during the last trimester and during delivery reduced transmission by two thirds. In Thailand, a shorter course of AZT (taken from the 36th week of pregnancy and during delivery) reduced transmission by half. Combinations of anti-retroviral drugs are even more effective. However, all AZT trials so far have paired this therapy with breastmilk substitutes. The effectiveness of AZT in breastfeeding populations is not yet known but results from several trials in progress should be available by the end of 1998. Unfortunately, even the short course of AZT is prohibitively expensive for most poor households, and several times greater than the per capita health expenditure of most governments.

What if the mother is not infected?

Breastfeeding should continue to be encouraged among women who are not infected. Breastfeeding remains one of the most effective strategies to improve the health and chances of survival of both the mother and child. It provides a complete and hygienic source of the infant's fluid and nutritional requirements through the first six months of life, as well as growth factors, and antibacterial and antiviral agents that protect the infant from disease for up to two years and more. Breastfeeding also contributes to child spacing and women's long-term health.

What are the current international recommendations on breastfeeding and HIV?

In May, 1997, a policy statement was issued by UNAIDS, the United Nations system's joint program on HIV/AIDS, whose sponsors include the World Health Organization and UNICEF. The statement, which is supported by technical advisers within USAID and LINKAGES, emphasizes supporting breastfeeding in all populations; improving access to HIV counseling and testing; providing information to empower parents to make fully informed decisions; reducing women's vulnerability to HIV infection; and preventing commercial pressures to provide artificial feeding. It also recommends weighing the rates of illness and death from infectious diseases and the availability of safe alternatives to breastfeeding, against the risk of HIV transmission when recommending feeding practices. The policy emphasizes the need for women to make their own choices based on the best available information.

Subsequently, in 1998, the UN agencies published guidelines for policy makers and for health care managers to help countries implement this policy. Several groups are planning pilot projects in many countries to offer voluntary counseling and testing as a part of antenatal services. Pregnant women who test positive for HIV will receive counseling on infant feeding options, among other things. To fully understand the positive and negative effects on feeding practices and infant health in the general population, it is important that these efforts are adequately monitored and evaluated.

The International Code of Marketing of Breastmilk Substitutes was introduced by the World Health Organization in 1981 to counter the negative effects of the introduction of breastmilk substitutes in developing countries. The Code's provisions should continue to be promoted and observed. The effects of a general reduction in breastfeeding practices would be disastrous for child health and survival.

What are the policy and program needs?

Promote safe sexual behavior. The best way of protecting children from HIV is to help women avoid HIV infection. Most infection is through unprotected sexual intercourse and the risk of infection can be decreased by the use of condoms. Methods of protection that women themselves can control are urgently needed. Treating and preventing other sexually transmitted diseases can also help decrease the risk of HIV transmission. Improving the economic and social conditions of women and girls also would reduce their vulnerability to coercive and other unsafe sexual situations.

Provide universal access to voluntary and confidential HIV testing and counseling for both men and women. Many of the strategies proposed for reducing mother-to-child transmission assume that the

mother's HIV status is known. At present this is true for only a tiny fraction of mothers at risk because testing is not generally available. In other cases, mothers do not want to know their status or cannot be assured that test results will be confidential.

Communicate the advantages of knowing one's HIV status. If a mother knows she is infected, she can try to minimize the risk of transmission to her partners and children and, if she chooses, avoid further pregnancies. As part of her counseling, she should be given information on the risks and benefits of infant feeding options. If she knows she is not infected, she should be counseled to breastfeed, knowing that there is no risk of infecting her child. She should also be motivated to protect herself from further risk of infection. Stimulating demand for testing by emphasizing these advantages along with ensuring the availability of confidential testing is essential in order to increase the number of women who are tested.

Provide technical information to opinion makers. Groups with public influence, such as the media, policy makers, and health advocates need accurate technical information on this issue to prevent the spread of misinformation and to maintain the strength and credibility of breastfeeding promotion activities.

Provide counseling guidelines to health workers. UN agencies are developing counseling guidelines for health workers and policy makers that address the risks and benefits of available infant feeding methods and how to make the chosen method of infant feeding as safe as possible. However, until testing programs that help women know their HIV status are available, such guidelines are of limited use.

Continue to promote, protect, and support breastfeeding. In the absence of breastfeeding promotion, there is a danger that information about HIV transmission during breastfeeding will result in inappropriate discontinuation of breastfeeding among both infected and uninfected mothers. Breastfeeding promotion should include continued efforts to monitor the observance of the provisions of the International Code of Marketing of Breastmilk Substitutes and the use and misuse of information on breastfeeding and HIV.

Support research. Policies and programs remain hampered by uncertainty. We need to know more about factors that influence transmission rates and about the risks associated with different feeding alternatives in poor environments. Currently, the stage of infection, breastfeeding patterns and duration, related lesions and illness, antiviral therapies, vitamin A, and nutritional status are all being explored as possible influences on transmission. We also need to translate this information into knowledge that the mother can use to make the best infant feeding decision for herself, her baby, and her family.

What advice can health workers give mothers?

The guidelines on the following page are based on estimates of the risks of transmission due to breastfeeding and the risks of death due to artificial feeding in different situations, using the best available information in a decision-making model. Each situation is unique, however, and health workers must tailor their advice to the individual needs of each mother. Ultimately, the choice of infant feeding method is the mother's but this decision should be based on the best information available. The role of the health worker is to provide this information and the support needed to make the mother's choice as safe as possible.

HIV and Infant Feeding Counseling Guidelines

Situation	Health Worker Guidelines
Confidential testing not available or not used (mother's HIV status not known)	<ul style="list-style-type: none"> ■ promote availability and use of confidential testing ■ promote breastfeeding as safer than artificial feeding* ■ teach mother how to avoid exposure to HIV
<p>Mother HIV+</p> <p>Breastmilk substitutes available, affordable, and safe</p> <p>Adequate health care available and affordable</p>	<ul style="list-style-type: none"> ■ treat with AZT, if feasible ■ promote artificial feeding as safer than breastfeeding ■ help mother choose and provide safest available alternative feeding method ■ protect and promote breastfeeding among the rest of the population ■ teach mother how to avoid transmission of HIV
<p>Mother HIV+</p> <p>Breastmilk substitutes not available, not affordable, or not safe</p>	<ul style="list-style-type: none"> ■ promote breastfeeding as safer than artificial feeding ■ teach mother how to avoid transmission of HIV
Mother HIV-	<ul style="list-style-type: none"> ■ promote breastfeeding as safest infant feeding method ■ teach mother how to avoid exposure to HIV

** Where testing is not available and where mothers' HIV status is not known, widespread use of artificial feeding would improve child survival only if the prevalence of HIV is high and if the risk of death due to artificial feeding is low, a combination of conditions that does not generally exist.*

Further Reading

Dunn DT, Newell ML, Ades AE, Peckham CS. Risk of human immunodeficiency virus type 1 transmission through breastfeeding. *The Lancet* 340:585–8, 1992.

Ekpini E, Wiktor S, Satten G, et al. Late postnatal mother-to-child transmission of HIV-1 in Abidjan, Cote d'Ivoire. *The Lancet* 349:1054–59, 1997.

Khun L, Stein Z. Infant survival, HIV infection, and feeding alternatives in less-developed countries. *Am J Public Health* 87:926–931, 1997.

Nduati RW, John GC, Richardson BA, Overbaugh J, Welch M, Ndinya-Achola J, Moses S, Holmes K, Onyango F, Kreiss JK. Human immunodeficiency virus type 1-infected cells in breast milk: Association with immunosuppression and vitamin A deficiency. *Journal of Infectious Diseases* 172:1461–1468, 1995.

Nicoll A, Newell ML, Van Pragg E, Van de Perre P, Peckman C. Infant feeding policy and practice in the presence of HIV-1 infection. *AIDS* 9:107–119, 1995.

Preble EA, Piwoz, EG. HIV and Infant Feeding: A Chronology of Research and Policy Advances and their Implications for Programs. A joint publication of the LINKAGES and Support for Analysis and Research in Africa (SARA) Projects. Academy for Educational Development: Washington, DC: 1998.

Semba RD, Miotti PG, Chipangwi JD, Saah AJ, Canner JK, Dallabatta GA, Hoover DR. Maternal vitamin A deficiency and mother-to-child transmission of HIV-1. *The Lancet* 343:1593–1597, 1994.

UNAIDS. HIV and Infant Feeding. <http://www.us.unaids.org/highband/document/epidemiology/infant.html>

WHO. Recommendations on the safe and effective use of short-course ZDV for prevention of mother-to-child transmission of HIV. *Weekly Epidemiological Record* 73:313–320, 1998.

WHO/UNAIDS/UNICEF. HIV and Infant Feeding: Guidelines for Decision-makers. World Health Organization: Geneva, 1998.

WHO/UNAIDS/UNICEF. HIV and Infant Feeding: A Guide for Health Care Managers and Supervisors. World Health Organization: Geneva, 1998.

For additional information or questions, please contact the LINKAGES Project or Dr. Miriam Labbok, Chief, Nutrition and Maternal Health Division, Office of Health and Nutrition, United States Agency for International Development, (202) 712-4915.



FAQ Sheet is a publication of LINKAGES: Breastfeeding, LAM, Complementary Feeding, and Maternal Nutrition Program. LINKAGES is supported by G/PHN/HN, Global, the United States Agency for International Development (USAID) under the terms of Grant No. HRN-A-00-97-00007-00 and is managed by the Academy for Educational Development. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID.

