

Session 15: Overview of HIV and infant feeding

Learning objectives

After completing this session, participants will be able to:

- Explain the risk of mother-to-child transmission (MTCT) of HIV at each stage.
 - Describe factors that influence MTCT.
 - List approaches that can reduce the risk of MTCT during breastfeeding through safer infant feeding practices.
 - State infant feeding recommendations for women who are HIV positive, for women who are HIV negative, or women who do not know their status.
 - Describe the current situation of HIV and prevention of mother-to-child transmission (PMTCT) in Lesotho.
 - Use Counselling Card 1: Risk of mother-to-child-transmission of HIV during a counselling session.
-

Most HIV-infected children become infected through their mothers. MTCT can take place during pregnancy, during labour and delivery, and through breastfeeding.

The best way to prevent infection of children is to help their fathers and mothers to avoid becoming infected in the first place. Men's responsibility for protecting their families must be emphasised.

However, many women are already infected, and it is important to try to reduce the risk to their babies. This chapter will focus on reducing the risk during the postpartum period. You as a health worker can help an HIV-positive woman decide on the best way to feed her baby in her particular circumstances.

- HIV, or human immunodeficiency virus, is the virus that causes AIDS.
- AIDS, or acquired immunodeficiency syndrome, is the active pathological condition that follows the earlier, non-symptomatic state of being HIV positive.
- People infected with HIV feel well at first and usually do not know they are infected. They may remain healthy for many years as the body produces antibodies to fight HIV.
- But the antibodies are not very effective. The virus lives inside the immune cells and slowly destroys them. When these cells are destroyed, the body becomes less able to fight infections. The person becomes ill and after a time develops AIDS. Eventually he or she dies, unless there are interventions.
- A blood test can be done to determine if people have HIV antibodies in their blood. A positive test means that the person is infected with HIV. This is called HIV positive or seropositive.
- Once people have the virus in their bodies, they can pass the virus to other people.
- HIV is passed from an infected man or woman to another person through:
 - Exchange of HIV-infected body fluids such as semen, vaginal fluid, or blood during unprotected sexual intercourse.
 - HIV-infected blood transfusions or contaminated needles.
 - HIV can also pass from an infected woman to her child. This is called MTCT.

Most children who get HIV are usually infected through their mother:

- During pregnancy across the placenta.
- During labour and delivery through blood and secretions.
- Through breastfeeding.

About 27%⁴ of pregnant women in Lesotho are HIV positive. This means that out of 100 women who come in for antenatal care services, 27 test positive for HIV. Not all babies born to HIV-infected mothers become infected with HIV.

Slide 15/1. Estimated risk and timing of MTCT without interventions.

15/1	
Estimated risk and timing of mother-to-child transmission of HIV without interventions	
Timing of MTCT of HIV	Transmission Rate
• During pregnancy	5-10%
• During labour and delivery	10-15%
• During breastfeeding	5-20%

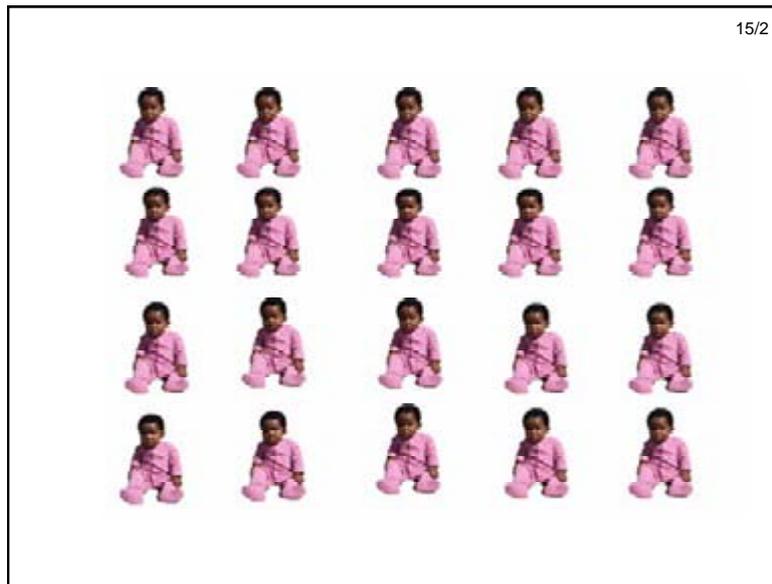
*World Health Organization/United Nations Children's Fund
International Technical Working Group; 2006 Guidelines.*

About two-thirds of infants born to HIV-infected mothers will not be infected with HIV, even without interventions such as antiretroviral (ARV) prophylaxis or caesarean section. About 15–25% will be infected during pregnancy and birth. About 5–20% of infants born to HIV-infected mothers will get the virus through breastfeeding. The risk continues as long as the mother breastfeeds, and is more or less constant over time. Exclusive breastfeeding during the first 6 months of life carries a lower risk of HIV transmission than mixed feeding. Research has shown that the transmission risk at 6 months in exclusively breastfed babies is lower than in mixed-fed babies.

The factors that influence the risk of MTCT relate to the virus itself, to the mother herself, to obstetrics, to the foetus, and to the newborn.

⁴ Government of Lesotho Ministry of Health and Social Welfare. PMTCT and Paediatric HIV Scale Up Plan 2007–2011.

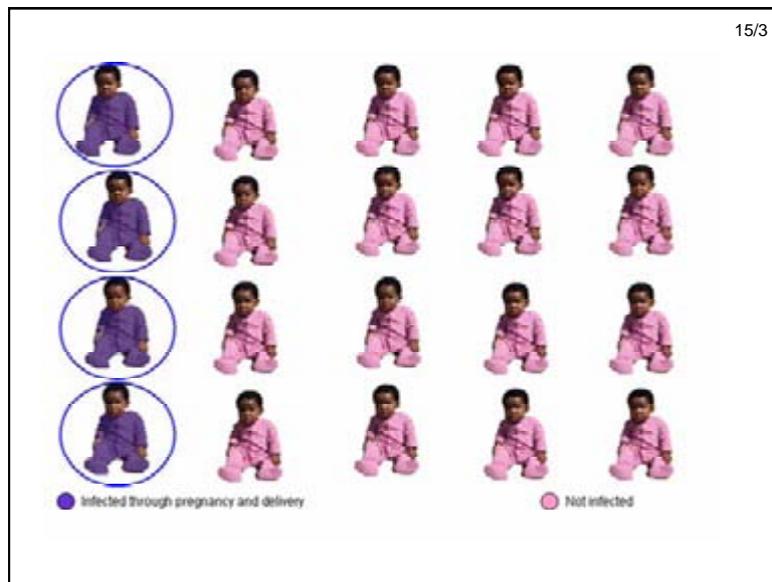
Slide 15/2. Estimated rates of MTCT.



In this slide, you see 20 babies. All of them were born to mothers who were tested for HIV and had a positive result.

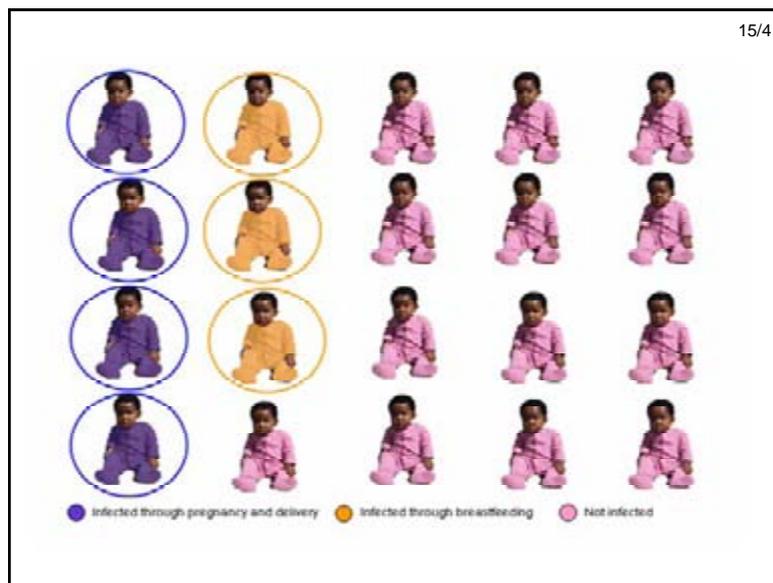
The rate of transmission during pregnancy and delivery is around 20% without intervention.

Slide 15/3.



The rate of transmission during breastfeeding can vary from 5 to 20% depending on how long a mother breastfeeds and whether or not she breastfeeds exclusively. We will use 15% for this example.

Slide 15/4.



If all HIV-positive mothers exclusively breastfed, the number of infected infants would be less.

65% of the 20 babies, or 13 infants, who receive no PMTCT intervention will **not** be infected during pregnancy, labour, delivery, or breastfeeding.

Slide 15/5.

15/5

Factors that affect MTCT

- Recent infection with HIV
- Severity of disease
- Sexually transmitted infections
- Obstetric procedures
- Duration of breastfeeding
- Exclusive breastfeeding or mixed feeding
- Condition of the breasts
- Condition of the baby's mouth

Some of these factors affect transmission of HIV through breastfeeding. Sexually transmitted infections and obstetric procedures only affect transmission during pregnancy or delivery. We will discuss the factors related to HIV transmission through breastfeeding.

Recent infection with HIV: If a woman becomes infected with HIV during pregnancy or while breastfeeding, she has higher levels of virus in her blood, and her infant is more likely to be infected. It is especially important to prevent an HIV-negative woman from becoming infected at this time because then both the woman and her baby are at risk. All sexually

active people need to know that unprotected sex exposes them to infection with HIV. They may then infect their partners, and their babies too will be at high risk, if the infection occurs during pregnancy or while breastfeeding. For women who are already infected it is important to protect against re-infection as this can also cause a high viral load, increasing the risk of HIV transmission to the baby.

Severity of HIV infection: If the mother is ill with HIV-related disease or AIDS and is not being treated with drugs for her own health, she has more virus in her body and transmission to the baby is more likely.

Duration of breastfeeding: The virus can be transmitted at any time during breastfeeding. In general, the longer the duration of breastfeeding, the greater the risk of transmission.

Mixed feeding versus exclusive breastfeeding: There is evidence that the risk of transmission is greater if an infant is given any other foods or drinks at the same time as breastfeeding in the first 6 months. The risk is less if breastfeeding is exclusive. Other food or drinks may cause diarrhoea and damage the gut, which might make it easier for the virus to enter the baby's body.

Condition of the breasts: Nipple fissure (particularly if the nipple is bleeding), mastitis, or breast abscess may increase the risk of HIV transmission through breastfeeding. Good breastfeeding technique helps to prevent these conditions, and may also reduce transmission of HIV.

Condition of the baby's mouth: Mouth sores or thrush in the infant may make it easier for the virus to get into the baby through the damaged skin.

This list of factors suggests several strategies that would be useful for all women, whether they are HIV positive or HIV negative. They provide ways to reduce the risk of HIV transmission, which can be adopted for everyone, and they do not depend on knowing women's HIV status. Other strategies, such as the avoidance of breastfeeding, can be harmful for babies, so they should only be used if a woman knows that she is HIV positive and has been counselled.

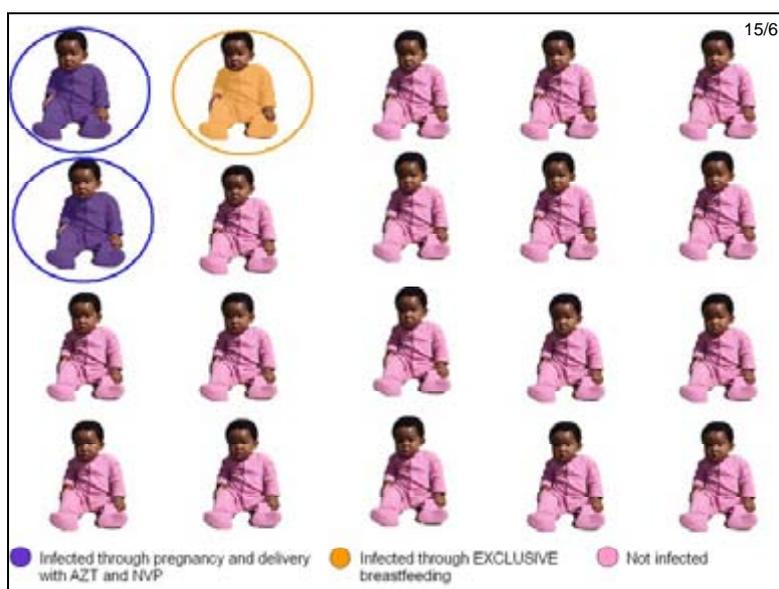
ARV drugs are used to reduce the amount of HIV in the body. Some ARVs you may have heard of are AZT, 3TC (lamivudine), Combivir (3TC + AZT), and Nevirapine (NVP).

HIV-positive pregnant women in Lesotho are given AZT, 3TC, and NVP at different times during pregnancy and labour and after delivery depending on when they access services to prevent MTCT. Infants receive single-dose NVP and AZT for 1 or 4 weeks, depending on the duration of AZT during pregnancy.

It has been shown that if a short course of ARV is given to the mother at the end of pregnancy and at the time of delivery, the risk of transmission at that time can be reduced by about half. There are several short ARV regimens, which can be used in different ways. The baby is also given one or more of the ARVs for a short time.

There are indications that maternal highly active antiretroviral therapy (HAART) for treatment-eligible women may reduce postnatal HIV transmission, based on program data from Botswana, Mozambique, and Uganda; follow-up trial data on the safety and efficacy of this approach, and on infant prophylaxis trials are awaited. However, there are currently no recommendations related to how effective or safe ARVs are in preventing transmission through breastfeeding when given to either the baby or mother over a longer time period.

Slide 15/6.



This slide shows the risk of transmission is much lower when mothers and infants receive ARV prophylaxis (represented by the babies dressed in purple) and when women breastfeed exclusively for the first 6 months (represented by the baby dressed in yellow).

Approaches to prevent mother-to-child transmission through breastfeeding

Reducing HIV transmission to pregnant women, mothers, and their children, including transmission by breastfeeding, should be part of a comprehensive approach both to HIV prevention, care, and support and to antenatal, perinatal, and postnatal care and support.

The *National Infant and Young Child Feeding (IYCF) Policy* addresses the best interests of the mother and infant as a pair, in view of the critical link between survival of the mother and that of the infant.

Prevention of HIV transmission during breastfeeding should consider the need to promote breastfeeding in the general population.

Women who are HIV negative should be encouraged and supported to exclusively breastfeed and remain negative.

Women of unknown status should be encouraged to be tested. If they are not tested, they should be counselled to exclusively breastfeed.

We will now look at the situation where a woman has been tested and knows she is HIV positive.

An HIV-positive mother has two options for feeding her baby during the first 6 months of life: exclusive breastfeeding or exclusive replacement feeding with commercial infant formula.

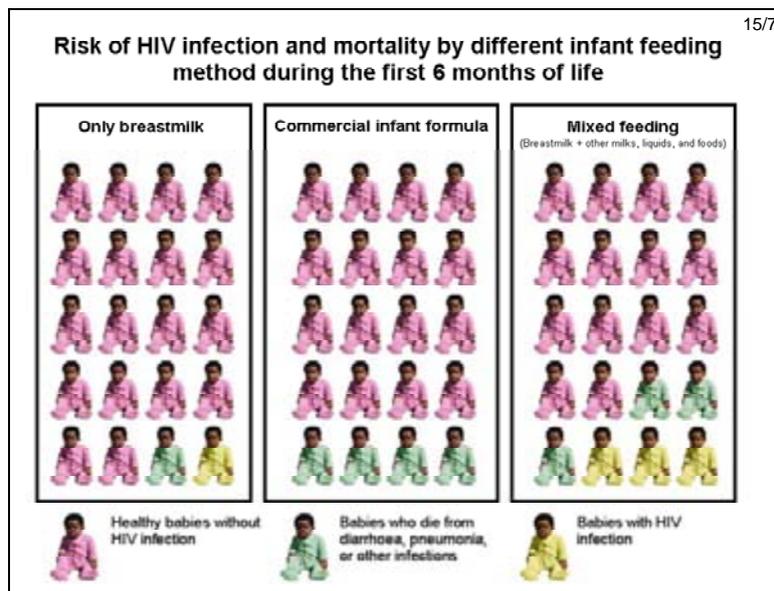
Counsellors should help each mother decide the appropriate feeding option for her individual situation by taking into account the advantages and disadvantages of the two options:

- There is risk of HIV transmission during breastfeeding, but exclusive breastfeeding increases a baby's chance of survival.

- There is less risk of HIV transmission if the infant does not breastfeed, but the risk of morbidity (especially from diarrhoea) and mortality is much higher among non-breastfed infants.
- If the mother mix-feeds—breastfeeds and gives other foods or liquids, including water—during the first 6 months, this increases the risk of MTCT of HIV.
- Exclusive breastfeeding for up to 6 months decreased the risk of HIV transmission by three to four times compared to non-exclusive breastfeeding in studies in Côte d'Ivoire, South Africa, and Zimbabwe.

Counsellors should help each mother to evaluate her options and her situation thoroughly and to choose the appropriate feeding option for her situation by taking into account the risks and benefits of each available option.

Slide 15/7.



This slide shows the risks of HIV infection and death to children born to HIV-positive mothers during the first 6 months of life by different feeding methods. This slide does not consider PMTCT services. In our country, PMTCT services are available, so the number of babies infected would be even less.

Even among women who know they are HIV positive, most of their infants will not be infected through breastfeeding. There are risks of HIV transmission if a mother who is HIV positive decides to breastfeed her infant. However, there are also risks if a mother decides not to breastfeed. In some situations, the risk of illness and death from not breastfeeding may be greater than the risk of HIV infection through breastfeeding.

Infants who are not breastfed are at increased risk of gastroenteritis, respiratory infections, and other infections.

We used the figures of 20% for transmission rates of HIV during pregnancy and delivery and 15% for the rate during breastfeeding for the purposes of the exercise. These sound like very exact figures, but they are only averages from several research studies. Rates vary because of differences in population characteristics, such as how ill the mothers are, how much virus is in their blood, and how long the mothers breastfeed.

Since several factors affect these rates, understanding them may help us to find ways to reduce transmission.

Slide 15/8. Recommendations for feeding an infant exposed to HIV.

15/8

Recommendations for feeding an infant exposed to HIV

The most appropriate infant-feeding option for an HIV-positive mother should continue to depend on her individual circumstances, health status, and local situation, including health services and counselling and support available.

Exclusive breastfeeding is recommended for HIV-positive women for the first 6 months of life unless replacement feeding with commercial infant formula is acceptable, feasible, affordable, sustainable, and safe (AFASS) for them and their infants.

When replacement feeding is AFASS, avoidance of all breastfeeding by HIV-positive women is recommended.

At 6 months, if replacement feeding is still not AFASS, continuation of breastfeeding with additional complementary foods is recommended, while the mother and baby continue to be regularly assessed. All breastfeeding should stop once a nutritionally adequate and safe diet without breastmilk can be provided.

The recommendations on the slide reflect the *National IYCF Policy* and the most recent recommendations from the World Health Organization—based on the HIV and Infant Feeding Update from October 2006.

For an HIV-positive woman, there are now only two recommended options for feeding her baby during the first 6 months: exclusive breastfeeding and exclusive replacement feeding with commercial infant formula.

The individual infant's risk of HIV infection and death can vary according to the mother/family's circumstances, the health of the mother, and the counselling and support she is able to receive.

The best feeding choice for a baby and a young child is the one that maximises health, nutrition, growth, and development.

All HIV-infected mothers should receive counselling, which includes provision of general information about the risks and benefits of various infant feeding options, and specific guidance in selecting the option most likely to be suitable for their situation. Exclusive breastfeeding during the first 6 months is recommended unless replacement feeding (with infant formula) is acceptable, feasible, affordable, sustainable, and safe (AFASS). If replacement feeding is not AFASS at 6 months, continued breastfeeding with complementary foods is recommended.

Between 6 and 24 months, if replacement feeding becomes AFASS, cessation of breastfeeding is recommended.

Whatever a mother decides, health personnel should monitor all babies exposed to HIV and continue to offer infant feeding counselling and support, particularly at key moments, and up to 24 months.

A baby who tests positive in the first 6 months should be exclusively breastfed for the first 6 months. HIV-positive children should continue breastfeeding for as long as possible.

Among infected infants, studies have shown that continued breastfeeding slows the progression of HIV and decreases the risk of mortality.

Each of the options—exclusive breastfeeding or exclusive replacement feeding—has its own risks. A mother who breastfeeds risks transmitting HIV to her child. Meanwhile, a mother who replacement feeds risks having a child who dies from illness or malnutrition.

The most dangerous way to feed an infant is mixed feeding (breastmilk plus other foods and liquids) during the first 6 months of life. Mixed feeding during the first 6 months can irritate the mucosal membrane of the intestines, creating entry points for HIV into the infant's body. It can also cause diarrhoea. It is very important for mothers who choose breastfeeding to follow exclusive breastfeeding for the first 6 months, and for those who choose replacement feeding to follow exclusive replacement feeding for the first 6 months.

In this course, we will learn how to help a mother decide the best way to feed her baby from birth to 2 years—both to reduce the risk of HIV transmission and better guarantee the baby's survival. In the upcoming sessions, we will discuss how to counsel a mother on the two infant feeding options for babies exposed to HIV during the first 6 months of life: exclusive breastfeeding and exclusive replacement feeding. Later, we will also discuss feeding options for infants 6–24 months of age.

Session 16: Counselling for infant feeding decisions— Part 1

Learning objectives

After completing this session, participants will be able to:

- Describe the elements to be considered for counselling on infant feeding in relation to HIV.
- List the different feeding options available to HIV-positive mothers.
- Demonstrate effective listening and learning skills within the context of infant feeding counselling for women who are HIV positive.

Counselling for infant feeding in relation to HIV

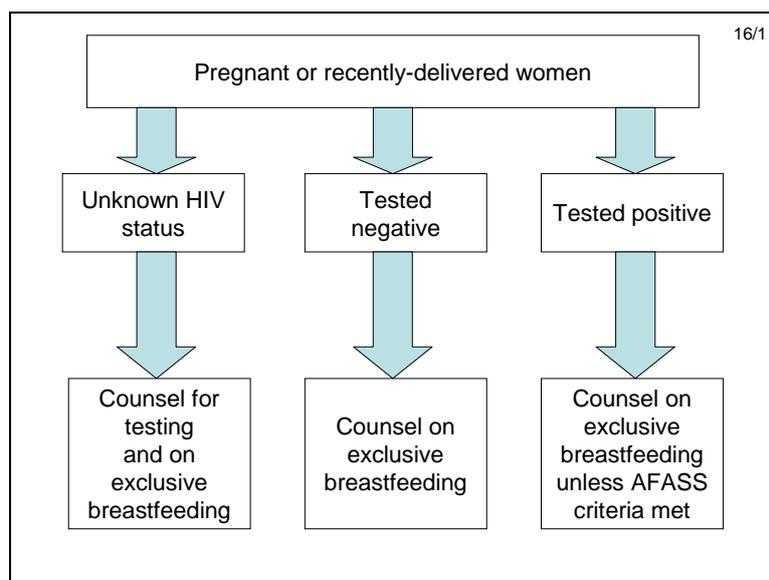
As infant feeding counsellors, you will explain the different feeding options available to HIV-positive mothers.

You will not be expected to give general counselling for HIV unless you have special training to do this. If you have not been trained, you need to know where to refer women for this service, and you should refer mothers to counselling rather than try to counsel them without training.

Although ideally most women in the country will have been tested for HIV during pregnancy, it is possible that you may be giving infant feeding counselling to women who may or may not know their HIV status.

Slide 16/1.

Women need different information about feeding their children during the first 6 months, depending on their HIV status, their individual situation, and the age (and HIV status) of their baby.



<p>For women who have not been tested or do not know their status:</p>	<ul style="list-style-type: none"> • Talk with them about the advantages of HIV testing for them and their families. • Refer them to a convenient HIV testing and counselling centre if they would like a test or for Know Your Status (KYS) testing in their community. Pregnant women can be tested in their own homes by KYS counsellors. If they test positive, they are referred to health facilities for services. For women who do not want to be tested at home, KYS counsellors can give information and refer them to the facility for testing and further management. • Recommend the systematic use of condoms and explain how to use them. • Explain why it is important that partners be involved and be tested. • In the absence of a test result, provide counselling about their concerns, and encourage them to feed their babies as if they were HIV negative—to breastfeed exclusively for 6 months and to continue breastfeeding with adequate complementary feeding until 2 years or beyond. • If a woman does not know her HIV status, it is usually safer for her baby if she breastfeeds exclusively. Babies who do not breastfeed are at greater risk of illness. • When you counsel women who do not know their HIV status about infant feeding, they may need reassurance that breastfeeding is the safest option for their babies. • Talk with each woman about the risks of becoming infected during pregnancy or while breastfeeding and review ways to stay negative. It is important that women remain negative (through condom use, abstaining from sex, or a mutually faithful relationship with a negative partner).
<p>For women who have been tested and are HIV negative:</p>	<ul style="list-style-type: none"> • Talk with them about the risks of becoming infected during pregnancy or while breastfeeding, and review ways to stay negative. It is important that women remain negative (through condom use, abstaining from sex, or a mutually faithful relationship with a negative partner). • Explain why it is important that partners be involved and be tested. • Some women may believe they are HIV positive despite a negative test. They need counselling to discuss their worries, and generally should be encouraged to exclusively breastfeed. • Suggest that they have a repeat test if they think they have been exposed to HIV since the last test. • Encourage exclusive breastfeeding for the first 6 months (as per the general population recommendation), since this is the best for babies' health and development. • From the age of 6 months, introduce a variety of complementary foods that are safely prepared and continue breastfeeding until the age of 2 years and beyond. • Avoid mixed feeding during the first 6 months. Mixed feeding increases the risk of diarrhoea, infections, and malnutrition of all infants.
<p>For women who have been tested and are HIV positive:</p>	<ul style="list-style-type: none"> • Recommend the consistent use of condoms to avoid re-infection and explain how to use them. • Explain why it is important that partners be involved and be tested. • Make sure that mothers meet with personnel and receive the services appropriate for their care.

- Discuss infant feeding options from birth to 6 months. Exclusive breastfeeding is recommended for HIV-positive mothers for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable, and safe (AFASS) for them and their infants before that time.
- The choice of the best feeding option for infants born to HIV-positive mothers depends on each mother's situation. This choice ought to take into account the availability of health services and the counselling and support each is likely to obtain.
- You will need to counsel mothers again as their children approach 6 months of age, to discuss feeding options from 6 months onward.
- At 6 months, introduce complementary foods, and if breastfeeding, continue until replacement feeding becomes AFASS.
- After 6 months, if and when replacement feeding is AFASS, HIV-positive mothers ought to avoid any breastfeeding of their infants.
- All HIV-positive mothers should receive advice that includes general information on the risks and advantages of different feeding options for the baby, as well as assistance in choosing the most appropriate option in their case.
- Whatever her choice, each mother ought to be supported.

If the infant has tested positive, the mother should be encouraged to continue breastfeeding. In this way, the infant can benefit from the good effects of breastmilk.

Slide 16/2.

16/2

HOW TO USE THE FLOW CHART

1. IF THIS IS THE FIRST INFANT FEEDING COUNSELLING SESSION:

And she is pregnant:

- Follow steps 1-4. If she needs time to decide which feeding option to choose, follow steps 1-3 and ask her to return to discuss step 4
- If she is early in her pregnancy ask her to return again closer to her delivery date to review how to feed her baby.

If she already has a child:

- Follow steps 1-3. If the mother is not breastfeeding at all, however, do not discuss the advantages and disadvantages of breastfeeding.
- Continue with steps 5.

2. IF THE MOTHER HAS ALREADY BEEN COUNSELLED AND CHOSEN A FEEDING METHOD, BUT SHE HAS NOT YET LEARNED HOW TO PRACTICE IT:

And she is pregnant

- Do step 4 only.

And she already has a child:

- Begin with step 4 and continue with step 5

3. IF THIS IS A FOLLOW-UP VISIT:

- Begin with step 5
- Review how to practice the feeding method.

REMEMBER:

- Use "listening and learning skills" and skills for building confidence and giving support.
- Check to ensure that the mother understands what you have discussed
- Arrange for follow up or referral as needed.

COUNSELLING FLOW CHART

STEP 1

Explain the risks of mother-to-child transmission

STEP 2

Explain the advantages and disadvantages of different feeding options starting with the mother's initial preference

STEP 3

Explore with the mother her home and family situation and help the mother choose an appropriate feeding option

STEP 4

Explain how to practice the chosen feeding option and give her the appropriate take-home pamphlet

<p>How to practice exclusive breastfeeding for the first 6 months</p>	<p>How to give only formula Remind the mother that she can never breastfeed if chooses formula</p>
---	--

STEP 5

Follow-up with the mother and baby

- Monitor growth
- Check feeding practices
- Check for signs of illness
- Discuss feeding for infants 6 to 24 months

Most HIV-positive women are not ready to discuss infant feeding options at their first post-test counselling session. They will need to be referred specifically for that later. The infant feeding counsellor may be a different person from the person who gives general post-test counselling.

In order to help the woman without telling her what to do, you will need to follow a step-by-step process for providing information and support. We will look at the basic steps that should be followed. In further sessions, you will learn the relevant information required and how to apply your counselling skills during the process.

The flow chart included in the flip chart helps you to work through options with a woman in a logical way. It is important that a woman is not overwhelmed with many choices and is given time to express her own feelings.

Infant feeding counselling for HIV-positive women may be needed:

- Before a woman is pregnant.
- During her pregnancy.
- Soon after her baby is born.
- Soon after receiving the first and final results of her baby's HIV test.
- Before her baby completes 6 months and she introduces complementary foods.

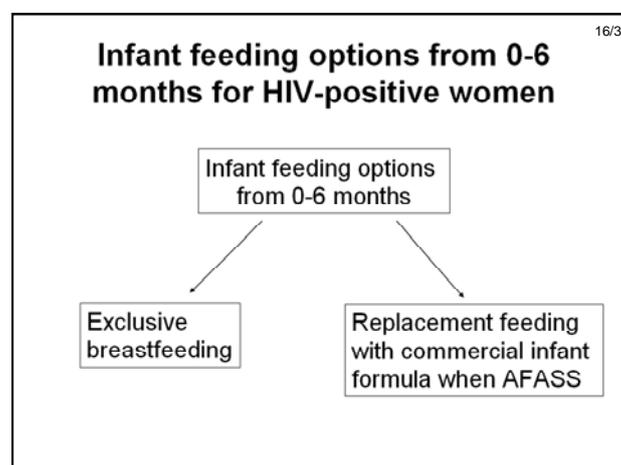
Infant feeding counselling is needed at every contact with a facility until a baby is 24 months old. As her baby gets older, an HIV-positive mother needs ongoing infant feeding counselling to support her chosen method during the first 6 months and to re-evaluate her situation at 6 months before introducing complementary foods. If her situation has changed, she may want to change her method of feeding and to discuss this with the infant feeding counsellor. Each woman's situation is different, so health workers need to be able to discuss all the various feeding options.

It is important for breastfeeding mothers to continue breastfeeding exclusively until their children complete 6 months. If a woman comes in with a 5-month-old, she may be counselled on introducing complementary foods, but it is important to emphasise that just because they discuss introducing new foods, it does not mean she should start before her child completes 6 months.

Infant feeding options should be discussed with women who are HIV positive. The Government of Lesotho now recommends two infant feeding options for HIV-positive women during the first 6 months: exclusive breastfeeding and exclusive replacement feeding with commercial infant formula. Remember we learnt in Session 2 that cow's milk is not appropriate for infants less than 6 months of age.

Slide 16/3.

This slide shows an HIV-positive woman's options for feeding her baby in the first 6 months. When counselling a woman, the advantages and disadvantages of both options should be discussed.



The World Health Organization has criteria to recommend when an HIV-positive mother should replacement feed. These criteria are called AFASS for acceptable, feasible, affordable, sustainable, and safe.

A counsellor needs to know about the family and economic circumstances to appropriately counsel women on how to feed their children.

Determining AFASS

Slide 16/4. Definitions of acceptable, feasible, and affordable.

16/4

**DEFINITIONS OF ACCEPTABLE, FEASIBLE,
AFFORDABLE, SUSTAINABLE AND SAFE
(AFASS)**

- **Acceptable:** The mother perceives no barrier to replacement feeding. Barriers may have cultural or social reasons, or be due to fear of stigma or discrimination.
- **Feasible:** The mother (or family) has adequate time, knowledge, skills and other resources to prepare the replacement food and feed the infant up to 12 times in 24 hours.
- **Affordable:** The mother and family, with community or health-system support if necessary, can pay for the cost of purchasing/producing, preparing and using replacement feeding, including all ingredients, fuel, clean water, soap and equipment, without compromising the health and nutrition of the family.

Slide 16/5. Definitions of sustainable and safe.

16/5

**DEFINITIONS OF ACCEPTABLE, FEASIBLE,
AFFORDABLE, SUSTAINABLE AND SAFE
(AFASS)**

- **Sustainable:** Availability of a continuous and uninterrupted supply, and dependable system of distribution for all ingredients and products needed for safe replacement feeding, for as long as the infant needs it, up to one year of age or longer.
- **Safe:** Replacement foods are correctly and hygienically prepared and stored and fed in nutritionally adequate quantities with clean hands and using clean utensils, preferably by cup.

When counselling an HIV-positive woman on infant feeding, it is important to:

- Talk about her individual circumstances to determine if she meets AFASS criteria.
- Explain to her the two infant feeding options and the advantages and disadvantages of each.
- Help her make the best decision on how to feed her infant.

Counselling job aids overview

The first tool we will look at is a counselling card flip chart that includes the flow chart illustrating the counselling process (that we discussed earlier in this session). The counselling cards are to be used during one-to-one sessions with pregnant women and/or mothers. The flow chart shows the recommended steps to follow for HIV and infant feeding counselling. On the left-hand side, there are some simple instructions for how to use the flow chart, depending on the type of session (first session, follow-up) and whether the woman is pregnant or her baby has already been born.

The second tool is a set of take-home flyers for mothers on how to safely practise the chosen feeding option.

Each of the cards we will now look at has a step number which fits in with the steps on the flow chart.

- Card 1 is called 'The risk of mother-to-child transmission'. Use this card to help you to explain to a woman the chances of her child being infected. Remember from Session 15, if all the mothers of the babies shown are HIV positive, three of the babies are likely to get HIV through breastfeeding.
- Card 2 lists the infant feeding options for the first 6 months for women who are HIV positive.
- Card 3 is called 'Benefits of exclusive breastfeeding'. Exclusive breastfeeding until a baby completes 6 months is recommended unless replacement feeding is AFASS.
- Card 4 is called 'Advantages and disadvantages of commercial infant formula'.
- Card 5 is called 'Helping a mother decide how best to feed her baby'. The table shown on this card should be used with mothers who are pregnant or have infants less than 6 months old. It helps the counsellor to explore the woman's living conditions in order to help her choose the most suitable feeding method for her situation.
 - The first step is to ask the woman about all of the things in the first column. For example: *Where do you get your drinking water?*
 - Remember the woman's responses to each question. You will use this information to help her choose a feeding option. This table is not designed as a scoring tool or to make the mother's choice for her. The mother should choose the method herself after learning the advantages and disadvantages of each method.
 - When you use the card, it is important to use your counselling skills and not to tell a woman what to do. Do not simply read out the points on the card. It is important to use open questions, to listen and learn from the woman, and to support her in the choice she makes.
 - It may take a woman more than one counselling session to make up her mind about the feeding option she will choose. It is important for you to give the woman as much time as she needs and not to force her to make a decision when she is not ready.
- Card 6 is called 'Understanding exclusive breastfeeding'. It is important to remember that during the first 6 months, a woman should be encouraged and supported to use the same infant feeding method she chose for the entire time.

Note that each card has several sections:

- 'Use with': This specifies the group of people with whom you should use this specific card. For example, Card 1 is to be used with 'All HIV-positive women who are being counselled for the first time'.
- 'Ask': This section gives a very specific question or questions that a counsellor can ask to start the conversation.

- 'Key Messages': This main section of the card provides the key messages that a counsellor should review with a mother.
- 'Ask': This second 'Ask' section provides questions for a counsellor to use in order to check for understanding.
- The table shown in Card 5 should be used with mothers who are pregnant or have infants under 6 months old. It helps the counsellor to explore the woman's living conditions in order to help her choose the most suitable feeding method for her situation.
- The first step is to ask the woman about all of the things in the first column. For example: *Where do you get your drinking water?*
- Remember the woman's responses to each question. You will use this information to help her choose a feeding option. This table is not designed as a scoring tool or to make the mother's choice for her. The mother should choose the method herself after learning the advantages and disadvantages of each method.
- When you use the cards it is important to use your counselling skills and not to tell a woman what to do. Do not simply read out the points on the card. It is important to use open questions, to listen and learn from the woman, and to support her in the choice she makes.
- It may take a woman more than one counselling session to make up her mind about the feeding option she will choose. It is important for you to give the woman as much time as she needs and not to force her to make a decision when she is not ready.

Session 17: Feeding options for HIV-positive mothers— Advantages of exclusive breastfeeding

Learning objectives

After completing this session, participants will be able to:

- List the advantages and the disadvantages of exclusive breastfeeding for HIV-positive women.
- Describe the factors that increase the risk of mother-to-child transmission (MTCT) of HIV during breastfeeding.
- Explain how to reduce the risk of MTCT of HIV during breastfeeding.
- Counsel a mother on the advantages and disadvantages of exclusive breastfeeding.
- Use Counselling Card 3: Benefits of exclusive breastfeeding during a counselling session.

According to the *National Infant and Young Child Feeding Policy*, there are two recommendations for how HIV-positive mothers should feed their babies during the first 6 months of life: exclusive breastfeeding and exclusive replacement feeding with infant formula.

In this session, we will discuss exclusive breastfeeding and the ways to reduce the risk of MTCT of HIV during breastfeeding.

All health workers who care for mothers and infants need to know how breastfeeding works, and how to help mothers to breastfeed. They need this competence to help both HIV-negative and HIV-positive mothers. Health workers are responsible for protecting, promoting, and supporting the feeding choice made by the mother.

In addition to helping mothers to breastfeed their infants properly, the health worker should refer the mother to other health services that support the growth and development of her baby during the first 2 years.

Advantages and disadvantages of breastfeeding for an HIV-infected mother

An HIV-positive mother needs to understand the advantages and disadvantages of exclusive breastfeeding before deciding if it is the best option for her specific situation.

The benefits of exclusive breastfeeding for women who are HIV positive include:

- Breastmilk is the ideal food for babies and protects them from many diseases, especially diarrhoea, malnutrition, and pneumonia, and the risk of dying from these diseases.
- Breastmilk gives babies all the nutrients and water they need in adequate amounts. Breastfed babies do not need any other liquid or food.
- Breastmilk is free, always available, and does not need any special preparation.
- Exclusive breastfeeding for the first 6 months lowers the risk of passing HIV, compared to mixed feeding.
- Many women breastfeed, so people will not ask why mothers are breastfeeding.
- Exclusive breastfeeding helps mothers to recover from childbirth and protects them from getting pregnant again too soon.

Disadvantages of breastfeeding for women who are HIV positive include:

- As long as the mother breastfeeds, her baby is exposed to HIV.
- People may pressure the mother to give water, other liquids, or foods to the baby while she is breastfeeding. This practice, known as mixed feeding, increases the risk of diarrhoea and other infections, and increases the risk of HIV transmission.
- It may be difficult (and potentially dangerous) to do if the mother gets very sick.

If a woman does breastfeed, it is important for her to breastfeed exclusively. This gives protection for the infant against common childhood infections and also reduces the risk of HIV transmission.

Counselling on infant feeding may need to take into account her disease progression. Recent evidence suggests a very high rate of postnatal transmission in women with advanced disease.

An HIV-positive mother who chooses to breastfeed needs to use a good technique to prevent nipple fissure and mastitis, both of which may increase the risk of HIV transmission. We have already learned how to manage these breast conditions.

Demonstration: Use of Counselling Card 3

Counselling cards can be used by health workers to explain advantages and disadvantages of exclusive breastfeeding by HIV-positive mothers.

Slide 17/1. Counselling Card 3: Benefits of exclusive breastfeeding.



Counsellor: 'Good morning, Me (name). How are you doing today? What can I do to help you?'

Mother: 'Oh, I am doing well, thank you. I am here today because I just tested positive for HIV, and I am pregnant. I want to get some information about how to feed my baby.'

Counsellor: 'That is good that you have come to talk about how to feed your baby.'
(Pulls out counselling cards and shows the mother Counselling Card 3. The photo faces the mother and the text faces the counsellor.) 'What do you think of breastfeeding?'

Mother: 'I think it's good.'

Counsellor: 'What do you understand by exclusive breastfeeding?'

Mother: 'Well, I know that it means giving my baby only breastmilk for the first 6 months.'

Counsellor: 'That's right. This means that you cannot give your baby other foods, liquids, or even water.'

Mother: 'Oh really? Even when it is very hot outside?'

Counsellor: 'Even then, you should only give breastmilk. Breastmilk has all of the water that your baby needs. Let's talk more about exclusively breastfeeding. What are the advantages?'

Mother: 'I was told that if I breastfeed exclusively, then it is safer for my baby, since I have HIV. And also, breastmilk is free and always available when I need it.'

Counsellor: 'That's very true. Also, breastmilk is the ideal food for babies. It has everything that your baby needs to grow healthy and strong. Exclusive breastfeeding for the first 6 months also protects you from getting pregnant again too soon after this baby. What do you think of these advantages? Are they important for you?'

Mother: 'Yes. I am very worried about giving HIV to my baby, but I know that I cannot afford to buy formula for my baby. Breastfeeding seems like the best option.'

Counsellor: 'What are the possible disadvantages of exclusive breastfeeding?'

Mother: 'I know that there is still a chance that my baby might get HIV.'

Counsellor: 'Do you have questions about the disadvantages? Do you think that these disadvantages apply to your situation?'

Mother: 'I am worried about making sure that other people do not feed my baby other foods. I would like to talk more about how to express my breastmilk so I can leave milk with my mother for the baby when I go back to work.'

Counsellor: 'Talking with your mother is a good idea. Remember to come back if you have any questions or problems feeding your baby after he or she is born. Also, be sure to come back when your baby is 6 months old so we can talk about how best to feed your baby when he or she starts to need other foods.'

Session 18: Feeding options for HIV-positive mothers— Advantages and disadvantages of exclusive replacement feeding with commercial infant formula

Learning objectives

After completing this session, participants will be able to:

- Explain to a mother the advantages and disadvantages of replacement feeding.
- List breastmilk substitutes that can be used for replacement feeding.
- Describe the approaches to minimise risk of infection and malnutrition of babies using replacement feeding.
- Use Counselling Card 4: Advantages and disadvantages of commercial infant formula during a counselling session.

Advantages and disadvantages of replacement feeding

HIV-positive women who have been counselled about infant feeding options may decide to replacement feed if they meet the AFASS (acceptable, feasible, affordable, sustainable, and safe) criteria.

Replacement feeding is the process of feeding an infant who is not breastfed with a food that provides all nutritional elements needed by the infant until the infant can begin a variety of foods at 6 months. Commercial infant formula is now the only recommended replacement feeding option for the first 6 months.

Replacement feeding must be AFASS. Adequate replacement feeding is needed until the infant is at least 2 years old, which is the time the infant is at the greatest risk of malnutrition.

If a mother chooses to replacement feed, commercial infant formula is needed **exclusively** for at least the first 6 months. After the first 6 months, it is also useful if some kind of milk is part of the diet for until 2 years of age or more.

Formula has a good proportion of nutritional elements and added micronutrients. Giving infant formula to the non-breastfed baby until the age of 24 months is encouraged.

Exclusive replacement feeding from birth protects the baby from the risk of mother to child transmission of HIV. However, there are important risks that must be considered when the mother chooses to give her infant formula. Replacement feeding should be given to the infant in a healthy and hygienic manner to avoid infections and malnutrition.

Since the risk of mother-to-child transmission is the highest when feeding other milk or solid foods, it is equally or even more important for mothers who use replacement milk during the first 6 months to be counselled about the dangers of mixed feeding, as should mothers who exclusively breastfeed.

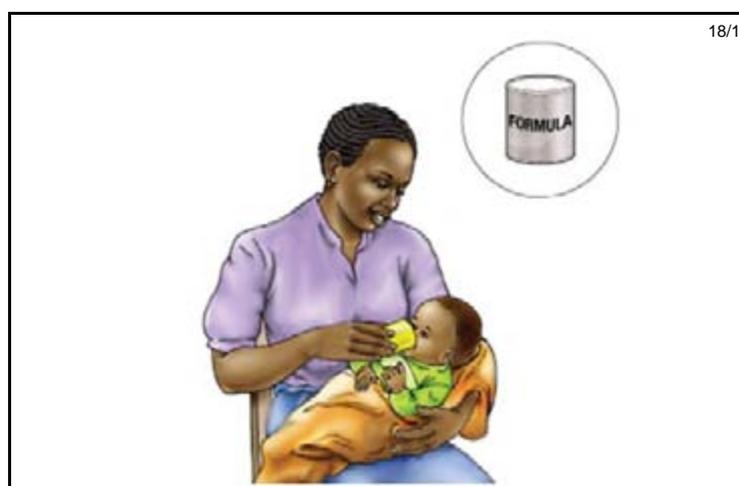
Replacement feeding	
<p style="text-align: center;"><u>Advantages</u></p> <ul style="list-style-type: none"> • Giving only replacement milk carries no risk of HIV transmission to the baby. • Other responsible family members can assist in feeding the baby. If the mother falls ill, other persons can nourish the baby while she recovers. 	<p style="text-align: center;"><u>Disadvantages</u></p> <ul style="list-style-type: none"> • Replacement feeding does not have the antibodies that protect the baby from infections. • A replacement-fed baby is at an increased risk of falling seriously ill from diarrhoea, pulmonary infections, and malnutrition. • A mother should never breastfeed once she begins replacement feeding; otherwise, the risk of transmitting HIV will continue. • A mother needs fuel and clean water (for boiling vigorously for 5 minutes) to prepare replacement milk, as well as soap to wash the baby's cup. • Infant formula requires preparation time and must be freshly prepared for each feeding (unless the mother has a refrigerator). • Infant formula is costly and you must always have it available. A baby needs 40 tins of 500 grams each for the first 6 months. • The family needs to have enough infant formula for at least the first 2 years of the infant's life. • Babies will need a cup for drinking. Babies can learn to hold the cup themselves when they are bigger, but that can take time. • People may wonder why a mother is giving formula instead of breastfeeding, and may suspect that the mother is HIV infected. • A mother can become pregnant sooner.

Demonstration: Use of Counselling Card 4

Turn to Counselling Card 4. This counselling card can be used by health workers to explain the advantages and disadvantages of replacement feeding to HIV-positive mothers.

There will first be a demonstration of the card's use, followed by time to practise using it during a role play.

Slide 18/1. Counselling Card 4: Advantages and disadvantages of commercial infant formula.



Counsellor: ‘Good morning, Me (name). How are you doing today?’

Mother: ‘I am doing well, but I am really worried about my baby. I just found out that I am HIV positive, and I need to find out about how to feed my baby. I would like to feed formula.’

Counsellor: ‘That is good that you have come to talk about how to feed your baby.’
(Pulls out counselling cards and shows the mother Counselling Card 4. The photo faces the mother and the text faces the counsellor.) ‘What do you think of infant formula?’

Mother: ‘I think formula can be used to feed my baby.’

Counsellor: ‘What does exclusive formula feeding mean to you?’

Mother: ‘Well, I know that I can give my baby only infant formula for the first 6 months.’

Counsellor: ‘That’s right. This means that you cannot give your baby other foods, liquids, or even water or breastmilk. Exclusive replacement feeding means giving commercial infant formula that is made especially for babies from birth until the age of 6 months. This also means that you cannot ever give breastmilk to your baby.’

Counsellor: ‘What are the advantages of exclusive replacement feeding?’

Mother: ‘I know that if I do this, then my baby will not be at risk at all for HIV. This is very important to me.’

Counsellor: ‘That’s true. It is important that you only use infant formula, as it is specially formulated for infants. Also, other family members can help you feed your baby. What are the possible disadvantages of exclusive replacement feeding?’

Mother: ‘It can be difficult to make, and I know that I need to make a fresh feed each time the baby needs to eat. I also know that it is expensive, but my husband has a steady job.’

Counsellor: ‘Those are both true, and it’s good that you are prepared for them. Also, remember that infant formula lacks the antibodies that are present in breastmilk, so your baby will be at a higher risk of diarrhoea, pneumonia, and even malnutrition. In addition, when preparing those feeds, it is very important that they be prepared hygienically, using boiled water and clean cups and utensils.’

Mother: ‘Okay, I will make sure that I do that.’

Counsellor: ‘Also, in some settings, feeding using infant formula may not be socially acceptable. May I ask if you have told your family?’

Mother: ‘Yes, I have. My husband and mother know about my status.’

Counsellor: ‘That’s good. That will be very helpful for you. Do you have any questions about any of the disadvantages? Do you think that certain disadvantages could apply to your situation?’

Mother: ‘Maybe, I’m not very sure. I think that I can do this, but I’d like to talk more about how to make sure that I’m preparing the formula properly. I don’t want my child to get sick.’

Counsellor: ‘I’d be happy to show you how to prepare infant formula properly. It is important to remember that if your baby falls ill, you should bring him to a health facility immediately. And remember, be sure to come back when your baby is 6 months old so we can talk about how to start giving other foods in addition to formula.’

Practise using Counselling Card 4

You will now do a role play similar to the one demonstrated using the counselling cards, based on the scenario below.

A pregnant woman named Lerato has tested positive for HIV, and is starting to be counselled on how to feed her baby. Practise using this card, which focuses only on the advantages and disadvantages of replacement feeding. Lerato is worried about passing HIV to her baby and wants to feed her baby with formula. She has no regular employment, but her husband is a taxi driver, and she has an aunt who gives her money from time to time.

Session 19: Counselling for infant feeding decisions— Part 2

Learning objectives

After completing this session, participants will be able to:

- Conduct an AFASS (acceptable, feasible, affordable, sustainable, and safe) evaluation with an HIV-positive woman using the counselling cards.
 - Describe all the conditions to fulfil before counselling the HIV-infected mother to avoid breastfeeding her infant when the conditions are AFASS.
 - Counsel HIV-positive women on infant feeding options, using the cards, flow chart, and take-home flyers.
 - Use Counselling Card 5: Helping a mother decide how best to feed her baby during a counselling session.
-

Understanding AFASS

In this session, we will discuss how to assist an HIV-positive mother to choose the safest option for feeding her baby during the first 6 months of life: exclusive breastfeeding or exclusive replacement feeding.

Understanding a woman's individual situation is important because it can help a mother and her family to:

- Choose the best infant feeding option for their circumstances.
- Prevent malnutrition.
- Prevent HIV transmission to the infant.
- Reduce the risk of infant mortality.

Later in this course, other aspects of the World Health Organization (WHO) Consensus for giving guidance about stopping breastfeeding after the first 6 months will be discussed. Criteria will now be examined that are used to assist a mother in deciding which feeding option is best for her baby from birth to when he or she completes 6 months.

Remember that the *National Infant and Young Child Feeding Policy* and WHO suggest that women who are HIV positive breastfeed their infants for the first 6 months unless AFASS criteria are met.

AFASS stands for:

- Acceptable
- Feasible
- Affordable
- Sustainable
- Safe

When talking with women, there are other questions that can be asked to help her and you understand her situation, rather than asking if replacement feeding is acceptable, feasible, affordable, sustainable, and safe.

Slide 19/1. Counselling Card 5: Helping a mother decide how best to feed her baby.



The answers a woman gives to these questions can help determine if she meets the AFASS criteria. In order for replacement feeding to be safe, **she must meet all of the criteria. Only meeting one or some of the criteria is not enough.**

Demonstration: A counselling session on infant feeding choices

We will now see a demonstration of how to use these tools. Imagine that a pregnant woman has recently tested positive for HIV. She has come to see the counsellor to discuss her options for feeding her baby.

Follow along with your counselling cards.

Step 1: Explain the risks of mother-to-child transmission

Counsellor: 'Hello, (woman's name). Thank you for coming to talk to me about ways you could feed your baby. We want to help you to make a choice which is best for you, in your situation, and which gives the best chance for your baby to remain healthy.'

Counsellor: 'What have you heard about the ways in which HIV can be transmitted from a mother to her baby?'

Woman: 'Well, I know that the baby can be infected during birth, and if I choose to breastfeed.'

Counsellor: 'It is true that babies may get HIV in these ways. Let me show you a picture which may help you to understand.' (Show Card 1 to the woman.)

Counsellor: 'What do you see in this picture?'

Woman: 'I see some babies, and some of them have different coloured shirts on.'

Counsellor: 'This card shows 20 babies born to HIV-positive women. As you mentioned, HIV can be passed to the baby at three stages: during pregnancy, during delivery, and during breastfeeding. The babies with pink shirts are the babies that will NOT be infected at all. The babies with blue shirts were already infected with HIV through pregnancy and delivery. The babies with orange shirts are the ones who may be infected with HIV through breastfeeding.'

Woman: 'So don't all babies get HIV through breastfeeding?'

Counsellor: ‘No—as you can see, most of them will not be infected. Some things can increase the risk of passing HIV through breastfeeding. For example, there is a higher chance if you have been recently infected with HIV or if you breastfeed for a long time. There are ways of reducing the risk of transmission by practising a feeding option that is appropriate for your situation. What other questions do you have about what I have just told you?’

Woman: ‘I think I understand. I am relieved to hear that not all babies are infected through breastfeeding.’

Step 2: Explain the advantages and disadvantages of different feeding options, starting with the mother’s initial preference

Counsellor: ‘There are various ways you could feed your baby. Is there any particular way you have thought of?’

Woman: ‘Well, now that I know not all babies are infected through breastfeeding, can we talk about that first, as I breastfed my other children?’

Counsellor: ‘Yes, what do you see in this picture?’ (Show Card 3 to the woman.)

Woman: ‘I see a mother breastfeeding her baby, and someone trying to give her baby a cup. The mother seems to be refusing.’

Counsellor: ‘Yes, this is about exclusive breastfeeding. What do you think exclusive breastfeeding means?’

Woman: ‘Well, I’m not sure, but I saw something about it on a poster once.’

Counsellor: ‘Yes, there are a lot of posters about exclusive breastfeeding these days. Exclusive breastfeeding means giving only breastmilk and no other drinks or foods, not even water.’

‘Exclusive breastfeeding for the first 6 months will lower the risk of passing HIV, compared to mixed feeding. Breastfeeding is an ideal food because it protects against many illnesses. Also, it prevents a new pregnancy. On the other hand, as long as you breastfeed, there is some chance that your baby might get HIV.’

Counsellor: ‘How do you feel about breastfeeding now?’

Woman: ‘Oh, well, I could think about it. I’d still be worried about the baby getting HIV, though. Could you tell me about formula feeding?’

Counsellor: ‘How do you feel about infant formula?’

Woman: ‘I’m not sure. My husband really wants me to breastfeed, but I think I would like to try formula. If I start formula could I change back later?’

Counsellor: ‘It can be difficult to do. It can be very dangerous for the health of your baby and can increase the risk of transmission.’

Step 3: Explore with the woman her home and family situation and help the mother choose an appropriate feeding option

Counsellor: ‘We have just discussed the advantages and disadvantages of different feeding methods. After hearing all of this information, which method are you most interested in trying?’

Woman: ‘I would like to use formula; I am worried about passing HIV to my baby.’

Counsellor: ‘Let’s think together about the things you will need in order for you to decide if formula is the best choice for you.’

Woman: ‘Yes, OK.’

Counsellor: ‘Where do you get your drinking water from?’

Woman: 'We have a tap in our kitchen with clean water.'

Counsellor: 'That's good—you need clean water to make formula. Can you prepare each feed with boiled water and clean utensils?'

Woman: 'That seems like too much work. Do I need to boil the water each time if we have clean water from the tap?'

Counsellor: 'Yes, it's recommended.'

Woman: 'OK, well then... I guess I could manage. I could ask my niece to help me.'

Counsellor: 'That's a good idea. What about preparing formula at night? Would you be able to do this two or three times each night?'

Woman: 'Can't I just prepare it before I go to bed and then just keep the bottle near the bed and use it all night?'

Counsellor: 'I understand why this might seem easier, but it's best to prepare the formula fresh for each feed. This will prevent your baby from getting sick... Perhaps we could talk about the cost of formula now?'

Woman: 'Oh, is it very expensive?'

Counsellor: 'Formula costs about 192 maloti per tin. For the first 6 months, you would need to buy around 40 tins, which would cost in total 8,000 maloti. Could you afford do to this?'

Woman: 'Yes, my husband has steady work. We could find the money.'

Counsellor: 'That's good that your husband is working. The cost of formula is likely to increase, so it is good to talk with your husband about how you plan to pay for the cost over the next 2 years. Does your husband know that you are HIV positive?'

Woman: 'Yes, he does. He's HIV positive, too.'

Counsellor: 'It must be difficult for you, but it can be helpful that you both know. What about the rest of your family?'

Woman: 'We haven't told anybody else. We are afraid of what they might say.'

Counsellor: 'Oh, that must be a worry. In this case, how will your family feel if you don't breastfeed?'

Woman: 'My mother-in-law might get upset, since she breastfed all her children. She really thinks it's the best thing to do.'

Counsellor: 'What reason do you think that you could give her for why you don't want to breastfeed?'

Woman: 'Maybe I could tell her that I am taking some medicine which will affect the breastmilk. That happened to our neighbour last year.'

Counsellor: 'Do you think that your mother-in-law would accept this explanation? Or would she insist that you breastfeed?'

Woman: 'I think that she would accept it. That neighbour is a friend of hers, and her baby is doing OK.'

Counsellor: 'Remember once you begin to give infant formula, you can never give your baby breastmilk. Giving both formula and breastmilk at the same time can increase the risk of passing HIV to your baby.'

Step 4: Explain how to practise the chosen feeding option and give her the appropriate take-home pamphlet

<i>Counsellor:</i>	'We have talked about many things today. After all we have discussed, what are your thoughts about how you might like to feed your new baby?'
<i>Woman:</i>	'I am so confused. There seem to be good things and bad things about each feeding option for me. What would you suggest that I do?'
<i>Counsellor:</i>	'Well, let's think through the different ways, looking at your situation. You have breastfed your other children and your mother-in-law wants you to breastfeed.'
<i>Woman:</i>	'Yes, she does.'
<i>Counsellor:</i>	'Also, your husband knows that you are HIV positive, so perhaps he could support you to exclusively breastfeed... On the other hand, you do have all the things needed for you to be able to prepare formula feeds safely. You have clean water, fuel, and money to buy the formula (1,400 maloti each month).'
<i>Woman:</i>	'That's right.'
<i>Counsellor:</i>	'As your husband knows your status, he could help to support and to formula feed and perhaps talk to his mother.'
<i>Woman:</i>	'Mmm. I would like to think more about this and discuss it with my husband. But I think I would like to give formula to this baby. I could explain to my husband about what you have said. I think he'll understand.'

Practise counselling skills

You will now use role plays to practise counselling women on feeding choices. You will work in groups of three or four, taking turns to be a 'mother' or a 'counsellor' or 'observer'.

When you are the 'mother', use the story on your card. The 'counsellor' counsels you about your situation. The other participants in the group observe.

When you are the 'counsellor': Greet the 'mother' and introduce yourself. Ask for her name and use it. Ask one or two open questions to start the conversation and to find out why she is consulting you. Use each of the counselling skills to encourage her to talk to you. Use the counselling cards to help you counsel the mother. Especially, use the table to help her make her feeding choice based on her circumstances. If you feel comfortable, also use the relevant cards and take-home flyers on how to practise the chosen feeding option. When you use a card, do not just read it. Use your skills to summarise the information without being prescriptive.

When you are the 'mother': Give yourself a name and tell it to your 'counsellor'. Answer the counsellor's questions from your story. Do not give all the information at once. If your counsellor uses good listening and learning skills, and makes you feel that she is interested, you can tell her more.

When you are the observer: Use your COUNSELLING SKILLS CHECKLIST. Observe which skills the counsellor uses, which she does not use, and which she uses incorrectly. Mark your observations on your list in pencil. After the role play, praise what the counsellor does right, and suggest what she could do better.

Counselling story 1:

- You are 28-weeks pregnant with your first baby. You are a teacher, married to a lawyer. You live in your own house which has running water and electricity.
- You were tested and found to be HIV positive. You have not told your husband yet, as you are worried about what he might think if you avoid breastfeeding. You are confused about what to do, as you think you could manage to formula feed.
- You will take 3 months maternity leave when the baby is born and then go back to work. You will employ a nanny to look after the baby.

Counselling story 2:

- You are 35-weeks pregnant with your second baby. You have been tested and found to be HIV positive. You have not told anyone else at home that you are HIV positive. You live with your partner, your sister, and your mother.
- You breastfed your first baby—giving him breastmilk and glucose water for the first 2 months of life. Then, at the suggestion of your mother, you introduced solids when he was 3 months of age, as he started to cry a lot.
- You have to walk half a kilometre to collect water from a well. You have a parafin stove, but sometimes use wood for fuel if you run out of money.
- Your mother receives a small pension. Your sister works part-time as a domestic worker. Neither you nor your partner is working.
- You are not sure how to feed this baby, but you are frightened to disclose your status to your family.

Counselling story 3:

- You are 39-weeks pregnant with your third baby. You found out you were HIV positive when you were 28 weeks pregnant.
- You work as a clerk in an office. You will be off work after you deliver for 6 weeks, and then you will return to your job. When you are working, you are away from the house for 10 hours each day, and your mother-in-law will look after the baby.
- You breastfed your other two children, giving them breastmilk only for the first 4 weeks and then giving them breastmilk and formula milk when you went back to work. You introduced solids at 3 months, whilst continuing to breastfeed at night until they were about 1 year of age.
- You are married and live with your in-laws. Everyone in the family will expect you to breastfeed this baby. Only your husband knows your status. You are worried about anyone else suspecting that you are HIV positive.
- Your husband works as a mechanic. You have piped water to your kitchen and electricity to your home.

Counselling story 4:

- You are 34-weeks pregnant. You have not been tested for HIV. This is your first visit to the antenatal clinic. Your husband has been very sick for a few months. You think that he may have AIDS, and you are worried that you may be infected, too. You have received information about preventing HIV infection and were encouraged to breastfeed.
- You have come to the infant feeding counsellor because you want to know how to get formula for your baby, as you think that it will be safer than breastfeeding.
- Statements that you might use:
 - 'My baby is due soon, and I want to find out about getting infant formula for him.'
 - 'I am really worried because my husband is ill—he has been sick for a long time now. I don't know what the illness is, but it might be HIV so I think that I had better give my baby formula.'
 - 'I think it would be better if I didn't breastfeed at all—then the baby would be protected.'

Session 21: Exclusive replacement feeding for the first 6 months

Learning objectives

After completing this session, participants will be able to:

- Describe breastmilk substitutes that can be used for replacement feeding.
 - List foods that are unsuitable in the first 6 months.
 - Describe how milks can be modified for infant feeding.
-

A mother who is HIV positive, and who has been counselled on infant feeding options, may decide to use replacement feeding. So, we need to discuss what this mother could use to feed her baby.

According to the new World Health Organization (WHO) recommendations and the *National Infant and Young Child Feeding (IYCF) Policy*, **only** commercial infant formula is recommended for replacement feeding during the first 6 months. Commercial infant formula is usually made from cow's milk that has had the fat removed and is dried to a powder. Another form of fat (often vegetable fat), sugar, and micronutrients are added. It needs only water added before use.

In this session, when we talk about replacement feeding, we are talking about commercial infant formula **ONLY**.

The following are **NEVER** suitable for infants during the first 6 months:

- **Skimmed milk** has the fat (cream) removed and therefore the energy level is low. Most of the vitamins A and D are also removed because they are in the milk fat.
- **Semi-skimmed milk**, which contains 2% fat, is sometimes available. Milk normally contains more fat than this—about 3.5–4%. A baby may need additional energy if semi-skimmed milk is used.
- **Condensed milk** has some of the water removed but a lot of sugar has been added. This extra sugar makes bacteria grow more slowly when the tin is opened. Also, the fat level may be reduced. This balance of fat and sugar in condensed milk make it very different from evaporated milk.
- **Dried skimmed milk** has the fat and fat soluble vitamins removed.
- **Most modified powdered milks**, such as 'creamers' used for 'whitening' tea or coffee or various filled milks, may have the animal fat removed and replaced with vegetable fat. Sugar may also be added, as well as ingredients to make it dissolve easily.
- **Other foods and drinks** are sometimes used to feed infants less than 6 months of age (for example, juices, tea, sugary drinks). These fill a child's stomach and may reduce his appetite for nutritious foods. They are not suitable as an alternative to food for any young child.

Around the world, WHO studies have shown that infants fed with replacement milk have six times greater chance of dying in the first month of life, and two times greater chance of dying between 4 and 6 months, compared with infants fed breastmilk. This risk continues until the second year of life (WHO HIV and Infant Feeding Technical Consultation, October 2006).

How to reduce the risk of infection, malnutrition, and death for infants who are fed with infant formula during the first 6 months

Ensure good personal and domestic hygiene (at home and in the kitchen)

This means washing all utensils and bowls with boiling water and soap. In addition, the kitchen must be kept clean. Always wash the hands with clean water and soap before preparing meals, serving meals, and after having been to the toilet or after changing bedding.

Avoid baby bottles and pacifiers (dummies)

Always use a cup and never use a baby bottle to feed the infant. Baby bottles are difficult to clean and tend to propagate bacteria more easily.

Plan in advance the purchase of infant formula

Always have at least one box of additional replacement milk at your house, and plan in advance the means to buy other boxes that will be needed.

Visit the health facility at least once a month (and immediately when the infant falls ill)

To ensure the baby's best health and its protection against HIV, regular monitoring of its growth, health, and feeding is needed. Mothers/caregivers should visit the health centre to receive assistance with questions or concerns. It is also necessary to ensure that the baby receives its vaccinations, cotrimoxazole, and other care, and to ensure that the seropositive mother receives appropriate treatment and care for her health. It is important also to check with the mother when she visits the clinic to ensure the correct preparation of infant formula.

Request community support

Mothers should be supported in their decisions for infant feeding, and one way that this can happen is if the community is involved. If there are IYCF (or other) support groups, mothers can be referred to them. They can also be referred to community health workers in order to ensure follow-up and continuous support.

Give only appropriate replacement milk (exclusive infant formula)—never breastmilk

If an infant is fed infant formula and also receives even a small amount of breastmilk, the baby will have a much higher risk of being infected with HIV (greater than if breastfed exclusively).

Request family support

Try to ensure that there will be at least one other person at the home who will support the decision to feed the baby infant formula exclusively. This will help you avoid family pressure to breastfeed the baby in front of other family members, in public, and during the night. The family should support the mother with food for her baby during the first 6 months.

Session 22: Hygienic preparation of feeds

Learning objectives

After completing this session, participants will be able to:

- Explain the requirements for clean and safe feeding of young children.
 - Demonstrate how to prepare a cup hygienically for feeding.
-

A baby who is not breastfed is at increased risk of illness for two reasons:

- Replacement feeds may be contaminated with organisms that can cause infection.
- The baby lacks the protection provided by the breastmilk.

After 6 months of age, all children require complementary feeds. Clean, safe preparation and feeding of complementary foods are essential to reduce the risk of contamination and the illnesses that it causes.

The main points to remember for clean and safe preparation of feeds are:

- Clean hands.
- Clean utensils.
- Safe water and food.
- Safe storage.

Slide 22/1. Clean Hands.



We should always wash our hands:

- After using the toilet, after cleaning the baby's bottom, after disposing of children's stools, and after washing nappies and soiled cloths.
- After handling foods which may be contaminated (for example, raw meat and poultry products).
- After touching animals.
- Before preparing or serving food.
- Before eating, and before feeding children.

However, it is not necessary to wash hands before every breastfeed if there is no other reason to wash them.

It is important to wash your hands thoroughly:

- With soap.
- With plenty of clean running or poured water.
- Front, back, between the fingers, and under the nails.

Let your hands dry in the air or dry them with a clean cloth. It is best not to dry them on your clothing or a shared towel.

Slide 22/2. Clean utensils.



When preparing feeds, it is important to keep both the utensils used and the preparation surface as clean as possible.

- Use a clean table or mat that you can clean each time you use it.
- Wash utensils with cold water immediately after use to remove milk before it dries on, and then wash with hot water and soap.
- If you can, use a soft brush to reach all the corners.
- Keep utensils covered to keep off insects and dust until you use them.
- Use a clean spoon to feed a baby complementary foods. Use a clean cup to give a baby milk or fluids.
- If a caregiver wants to put some of the baby's food into her mouth to check the taste or temperature, she should use a different spoon from the baby.

Safe water and food

Safe water and food are especially important for babies.

Slide 22/3.



Water can be made safe for feeding babies by bringing the water to a rolling boil before use. This will kill most harmful micro-organisms. A rolling boil is when the surface of the water is moving vigorously. It only has to 'roll' for a minute or two.

Put the boiled water in a clean, covered container and allow to cool. The best kind of container has a narrow top, and a tap through which the water comes out. This prevents people from dipping cups and hands into the water, which can make it not safe.

If the water has been stored for more than 48 hours, it is better to use it for something else (for example, cooking) or give to older children to drink.

Slide 22/4. Safe storage.



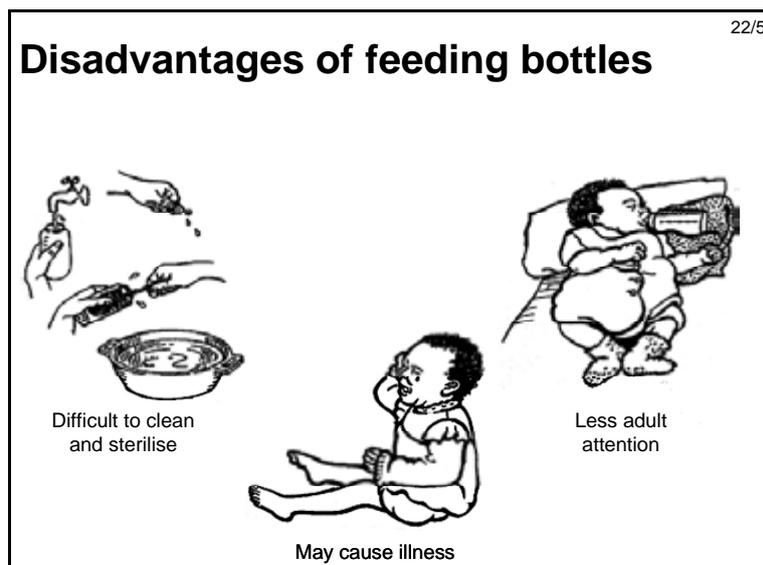
- Food should be kept tightly covered to keep insects and dirt from getting into it.
- Food can be kept longer when it is in a dry form, such as milk powder, sugar, bread, and biscuits, than when it is in liquid or semi-liquid form.

- Fresh fruits and vegetables keep for several days if they are covered, especially if they have a thick peel, like bananas.
- Fresh milk can be kept in a clean, covered container at room temperature for a few hours. Exactly how long depends on the condition of the milk when bought, and what the room temperature is. However, for an infant, **a prepared formula feed must be used within an hour.**
- If a mother does not have a refrigerator, she must make feeds freshly each time. When a feed has been prepared with formula or dried milk, it should be used within an hour, like fresh milk. If a baby does not finish the feed, the mother should give it to an older child or use it in cooking.
- Some families keep water hot in a thermos flask. This is safe for water. But it is not safe to keep prepared formula in a thermos flask. Bacteria grow when milk is kept warm.

When talking with a mother or other caregiver, ask about how the household routine works—whether the mother cooks once or twice a day, whether she can prepare feeds many times a day, how often she goes to the market, and what facilities she has for storage. Help her to find ways of preparing the baby’s food in a clean and safe manner.

Using cups to give feeds

Slide 22/5. Disadvantages of feeding bottles.



Earlier we talked about the advantages of cup feeding.

Bottles are difficult to clean and easily contaminated with harmful bacteria, particularly if milk is left in a bottle for a long time. Bottles and contaminated milk can make babies ill with diarrhoea.

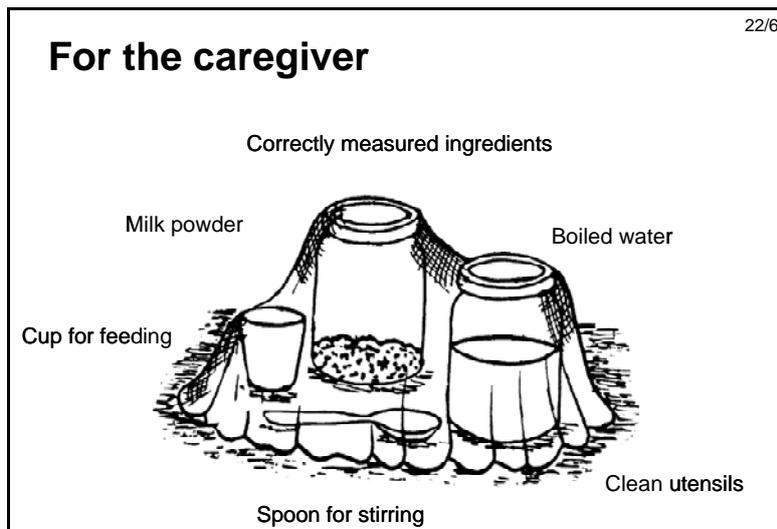
A bottle may be propped for a baby to feed itself, or given to a young sibling to feed the baby, so the baby has less adult attention and social contact. If a mother decides to use a feeding bottle, help her to do it in a way that ensures good contact with the baby, holding him close and making eye contact.

Mothers need to know how to clean cups.

Cleaning a cup

- A cup does not need to be boiled in the way that a bottle does.
- To clean a cup, wash it and scrub it in hot soapy water each time it is used.
- If possible, dip the cup into boiling water, or pour boiling water over it just before use, but this is not essential.
- An open, smooth-surfaced cup is easiest to clean.
- Avoid tight spouts, lids, or rough surfaces where milk could stick and allow bacteria to grow.

Slide 22/6.



A baby may be cared for by someone other than the mother for all or part of the time. A mother may feel it is safer to do as much of the preparation as possible herself, especially if the caregiver is young, inexperienced, or has difficulty measuring.

This picture shows what a mother has to prepare if she is going to leave feeds ready for a caregiver. She cannot mix up a feed, because it will not be safe to feed the baby after an hour. She will have to leave the ingredients for the caregiver to mix.

The mother still needs to leave clean utensils. She will have to boil and measure the water and the infant formula. She needs to cover them all and leave them in a cool, safe place, away from animals and insects. The mother must teach the caregiver to mix the ingredients just before she gives the feed, and to feed it from a cup.

Session 23: Preparation of commercial infant formula— Measuring amounts

Learning objectives

After completing this session, participants will be able to:

- Specify amounts of formula needed for an infant who is not breastfed.
- Make measuring utensils for liquids.

HIV-positive mothers who choose not to give breastmilk, and other caregivers, need to know how to prepare replacement feeds for their infants. Replacement feeds must be prepared in the safest possible way, to reduce the risk of illness. Mothers need to practise this skill with a health worker present, either in the health facility or at home, so they can do it easily and the same way every time.

When a mother makes replacement feeds, it is very important that the formula and water are mixed in the correct amounts.

Wrongly prepared feeds may make a baby ill, or he may be underfed. Repeated mistakes in measuring water or formula may have serious long-term consequences.

Amounts of formula needed

- In Session 13, we discussed cup feeding a baby. Remember that a baby who is cup fed can control how much he takes by refusing to take any more when he has had enough.
- The amount that a baby takes at each feed varies. But the caregiver must decide how much to put in a cup to offer the baby.

A term baby, weighing 2.5 kg or more, needs an average of 150 ml/kg body weight/day. This is divided into six, seven, or eight feeds according to the baby's age. The exact amount at one feed varies.

Slide 23/1. Approximate amount of formula needed to feed a baby each day.

Approximate amount of formula needed to feed a baby each day ^{23/1}			
Baby's age	Number of feeds per day	Amount of formula per feed	Total formula per day
Birth to 1 month	8	60 ml	480 ml
1 to 2 months	7	90 ml	630 ml
2 to 4 months	6	120 ml	720 ml
4 to 6 months	6	150 ml	900 ml

As you can see on the table, a newborn infant is fed small amounts frequently. The amount gradually increases as the infant grows.

If a baby takes a very small feed, offer extra at the next feed, or give the next feed earlier, especially if the baby shows signs of hunger.

Remember, if a baby is not gaining enough weight, he may need to be fed more often, or given larger amounts at each feed, according to his expected weight at that age.

Slide 23/2. Approximate amounts of commercial infant formula needed by month.

23/2

Month	Number of 500 g tins per month	Number of 450 g tins per month	Number of 400 g tins per month
First month	4	5	5
Second month	6	6	8
Third month	7	8	9
Fourth month	7	8	9
Fifth month	8	8	10
Sixth month	8	9	10
Total for 6 months	40	44	51

This table shows approximately how much commercial infant formula a baby needs in the first 6 months. The numbers are rounded rather than exact. An individual baby may need more or less than the amount listed. You will see that this table is also found on Counselling Card 12.

From the table, you can see that you need about 2 kg or four 500-gram tins of formula to feed an infant for the first month.

If you add up all these months, you will find that a baby needs about 20 kg (40 x 500-gram tins) to feed an infant for the first 6 months. (See the figures at the bottom of the table.)

A baby who is not breastfed needs a regular supply of commercial infant formula. A child continues to need infant formula after complementary foods are introduced, up to at least 1 year of age, and if possible, 2 years. So, the mother needs to consider how she can provide infant formula for all this time.

Demonstration: Making measures

Commercial infant formula comes with a special measure (called a scoop) in the tin of powder. This should be used only for that brand of infant formula. Different brands may have different size measures.

Scoops always have to be levelled. Use a clean knife or the handle of a spoon. Do not use heaped scoops.

You will have to show the mother how to measure water. If a mother does not have a measuring jug or other container marked with amounts, ask her to bring a container from home that you can mark for her as a measure. The container should be:

- Easily available.
- Easy to clean and sterilise.
- See-through.
- Able to be marked with paint, permanent marker, or by scratching a line on it.

Alternatively, the container could be used as a measure simply by filling it to the top.

Before a mother can use a container as a measure, you need to mark the amount on the container, or show her how full it needs to be to measure the amount that she has to use. You can measure the correct amount of water or milk in your own measure, put it into the mother's measure, and make a mark at the level it reaches. If you have a measuring jug, you can use that as your measure.

Step 1: Decide what volume you are going to measure. This will depend on the type of milk you are preparing and the volume of the feed. For this example, we will use 100 ml for a commercial infant formula feed for a baby during the first 2 weeks of life (the amount will continue to increase as the baby gets older).

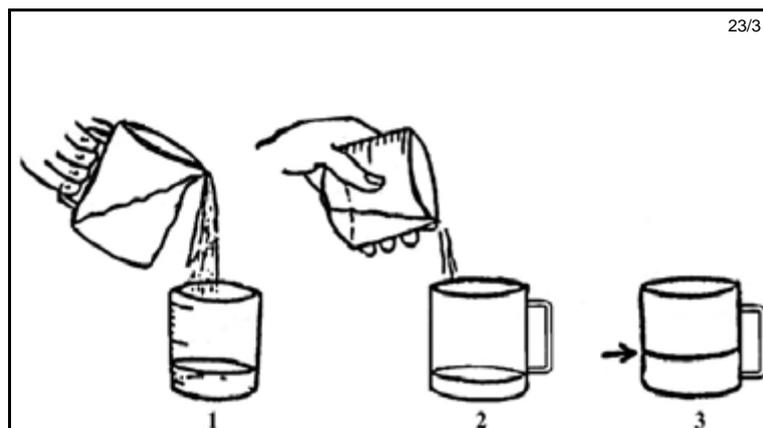
Step 2: Put water into your measure, to reach the 100 ml mark.

Step 3: Pour the 100 ml water from your measure into the mother's container.

Step 4: Help the mother to mark the level that the water reaches. For the measure to be accurate, the line should be thin and straight, not thick or sloped.

Explain to the mother that to make up a feed of 100 ml from commercial formula, she needs to measure this amount of water and add 4 scoops of commercial formula.

Slide 23/3. Making measures.



Session 24: Practical Session 2—Preparation of commercial infant formula

Learning objective

After completing this session, participants will be able to:

- Demonstrate how to prepare replacement milk to a mother or caregiver.
-

Helping mothers to prepare feeds is easier if you have done it yourself using equipment similar to what the mothers have at home.

When counselling mothers on replacement feeding, knowing what is needed and how long these different options take to prepare is part of the information that you will need to give them.

In this session, each participant in a small group will:

- Prepare one type of commercial infant formula that is available locally.
- Prepare a specific volume of feed.
- Use one kind of fuel appropriate locally.
- Give a clear demonstration to others in your group of what you do, as if you are demonstrating to a 'mother', and check the 'mother' understands by helping her to practise making the feeds.

You will also observe others preparing feeds, noticing what they do correctly (and praising them). If they do anything incorrectly, help them to improve their technique using your counselling skills.

Consider the following as you observe others preparing feeds:

- Are they preparing the feed in a clean and safe manner?
- Are they mixing the correct amounts?
- Are they heating and mixing the feeds correctly?
- Are they explaining what they are doing in a clear way?

Until now when we have talked about replacement feeding, we have talked about using only commercial infant formula. Animal milk, even if modified at home, is no longer recommended for replacement feeding during the first 6 months. This recommendation is based on studies and programs that have found that it is very difficult to prepare home-modified animal milk in a safe and nutritionally adequate way, and it can cause bleeding in the baby's gut that cannot be seen. Therefore, home-modified animal milk should not be recommended as a feasible and safe long-term replacement feeding option for infants younger than the age of 6 months.

The only time home-modified animal milk should be considered is when there is a temporary interruption (stock-out) in the supply of commercial infant formula; in addition, it should only be used for short-term feeding of non-breastfed infants younger than the age of 6 months. Messages about animal milk should only be given to women who have decided to give infant formula, and they should be encouraged to come in for additional counselling when their supply of formula is running low—before it runs out. At this time, they can be counselled on modifying animal milk for a short time until they have infant formula. Home-modified animal milk is not a replacement feeding option during the first 6 months.

If a family comes in with an infant whose mother has died, commercial infant formula is recommended. Refer the family to social welfare if they cannot afford to purchase infant

formula. In an emergency, home-modified animal milk can be considered, taking into account that it is very nutritionally challenged.

Home-modified animal milk is not recommended as a safe option. However, in an emergency (for example, if there is a brief stock-out of commercial infant formula), it can be used if no safe options are available. Normally, micronutrients must be added to animal milk to be safe for human infants. If a baby is fed home-modified animal milk for a few days while waiting for commercial infant formula to be available, it would be acceptable (though not ideal) for it to be prepared without micronutrients. However, it is important to remember that home-modified animal milk should never be used as a long-term strategy.

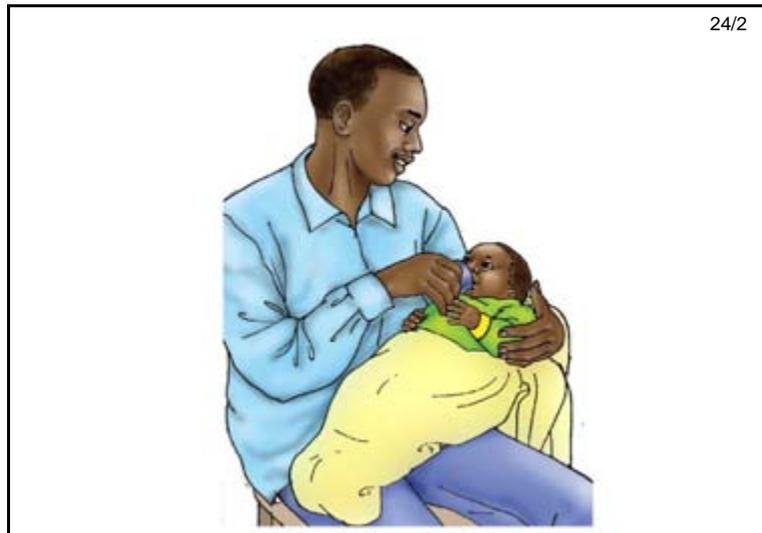
There are several counselling cards that can be used when talking with mothers who have decided to replacement feed.

Slide 24/1. Counselling Card 10: How to prepare formula in a hygienic way.



- Wash your hands with soap and water before preparing formula or before feeding your child and also after going to the toilet.
- Wash your child's cup thoroughly with soap and clean, warm water.
- Keep food preparation surfaces clean using water and soap or detergent to clean them every day.
- The baby's dishes and utensils should only be used for feeding the baby.
- Always use water that has been boiled for mixing formula. Boiled water can be stored in a thermos and used for other feeds later in the day.

Slide 24/2. Counselling Card 11: How to feed your baby formula with a cup.



If a mother decides to feed her baby only formula for the first 6 months, it is best to feed from a cup. This is better than bottle feeding because:

- It is harder to clean bottles and keep them clean, so they can have many germs that can make your baby sick.
- Other members of the family can help feed the baby.

How to feed a baby with a cup:

- Clean the cup with soap and water before filling it with formula.
- Make sure your baby is awake. Sit in an upright position holding your baby. Put a cloth underneath his/her chin to catch any spills.
- Hold the cup to the baby's lips and pour it carefully so that the milk touches the lips and the baby swallows.
- Do not pour the milk quickly or push on the baby's lower lip. Let the baby take the milk at his/her own speed.
- When the baby closes the mouth and turns away, she/he has had enough.
- If your baby does not drink very much, offer him/her more at the next feed or feed him/her earlier than usual.
- Talk to your baby and look into your baby's eyes to show your love.

Infants who receive home-prepared infant formula need to be given extra micronutrients. Be aware of the locally recommended micronutrient formulations, which will provide all the micronutrients needed for an infant aged 0 to 6 months. The recommended amounts of micronutrients are listed in this guide.

Some families keep water cool in a pottery jar, which allows evaporation of water from the surface. This method is not safe for milk storage.

If a mother is giving complementary foods, she should prepare them freshly each time she feeds the baby, especially if they are semi-liquid.

Recipes for modifying milk in emergencies

Note: Micronutrient supplements should be given with all kinds of home-prepared milks.

Fresh cow's or goat's milk

40 ml milk + 20 ml water + 1 tsp sugar = 60 ml prepared formula
60 ml milk + 30 ml water + 1½ tsp sugar = 90 ml prepared formula
80 ml milk + 40 ml water + 2 tsp sugar = 120 ml prepared formula
100 ml milk + 50 ml water + 2½ tsp sugar = 150 ml prepared formula

Sheep's milk

30 ml milk + 30 ml water + ¾ tsp sugar = 60 ml prepared formula
45 ml milk + 45 ml water + 1¼ tsp sugar = 90 ml prepared formula
60 ml milk + 60 ml water + 1½ tsp sugar = 120 ml prepared formula
75 ml milk + 75 ml water + 2 tsp sugar = 150 ml prepared formula

Micronutrients to give with home-modified animal milk per day

Minerals

Manganese	7.5 µg
Iron	1.5 mg
Copper	100 µg
Zinc	205 µg
Iodine	5.6 µg

Vitamins

Vitamin A	300 IU
Vitamin D	50 IU
Vitamin E	1 IU
Vitamin C	10 mg
Vitamin B ₁	50 µg
Vitamin B ₂	80 µg
Niacin	300 µg
Vitamin B ₆	40 µg
Folic acid	5 µg
Pantothenic acid	400 µg
Vitamin B ₁₂	0.2 µg
Vitamin K	5 µg
Biotin	2 µg

Session 25: Health care practices to support optimal infant feeding

Learning objectives

After completing this session, participants will be able to:

- List and describe the health care practices summarised by The Ten Steps to Successful Breastfeeding.
- Explain why the Baby-Friendly Hospital Initiative (BFHI) is important in areas with high HIV prevalence.

The Ten Steps to Successful Breastfeeding and the Baby-Friendly Hospital Initiative

Health care practices can have a major effect on breastfeeding. Poor practices interfere with breastfeeding, and contribute to the spread of artificial feeding. Good practices support breastfeeding, and make it more likely that mothers will breastfeed successfully, and will continue for a longer time.

In 1989, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) issued a Joint Statement called *Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services*. This describes how maternity facilities can support breastfeeding. The Ten Steps to Successful Breastfeeding is a summary of the main recommendations of the Joint Statement. It is the basis of the BFHI, a worldwide effort launched in 1991 by WHO and UNICEF. If a maternity facility wishes to be designated 'baby-friendly', it must follow all of the Ten Steps. There is clear evidence that where a combination of all of the Ten Steps are followed, the outcome is better than if only a few steps are followed.

Since the launch of the BFHI in 1991, the growing HIV/AIDS pandemic, especially in sub-Saharan Africa and parts of Asia, has raised concerns and questions about promoting, protecting, and supporting breastfeeding where HIV is prevalent. These concerns arise because breastfeeding is known to be one of the routes for infecting infants with HIV. However, baby-friendly practices improve conditions for all mothers and babies, including those who are not breastfeeding. It is especially important to support breastfeeding for women who are HIV negative or of unknown status.

The Ten Steps to Successful Breastfeeding

- Step 1:** Have a written breastfeeding policy that is routinely communicated to all health staff.
- Step 2:** Train all health care staff in skills necessary to implement this policy.
- Step 3:** Inform all pregnant women about the benefits and management of breastfeeding.
- Step 4:** Help mothers initiate breastfeeding within an hour of birth.
- Step 5:** Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.
- Step 6:** Give newborn infants no food or drink other than breastmilk, unless medically indicated.
- Step 7:** Practise rooming-in: allow mothers and infants to remain together 24 hours a day.
- Step 8:** Encourage breastfeeding on demand.
- Step 9:** Give no artificial teats or pacifiers (also called dummies and soothers) to breastfeeding infants.
- Step 10:** Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic.

Step 1: Have a written breastfeeding policy that is routinely communicated to all health staff

Slide 25/1. Step 1.

Having a breastfeeding policy helps establish consistent care for mothers and babies. It also provides a standard that can be evaluated.

The policy should cover:

- The Ten Steps to Successful Breastfeeding.
- An institutional ban on acceptance of free or low-cost supplies of breastmilk substitutes.
- A framework for assisting HIV-positive mothers to make informed infant feeding decisions that meet their individual circumstances and then support for their decisions.

Step 2: Train all health care staff in skills necessary to implement this policy

Slide 25/2. Step 2.

It is important that all staff members are trained to implement the breastfeeding policy. In hospitals where training is inadequate, health care practices do not improve.

Step 3: Inform all pregnant women about the benefits and management of breastfeeding

Slide 25/3. Step 3.

It is important to talk to all women about breastfeeding when they come to an antenatal clinic. Show that you support breastfeeding, and that you want to help them.

It is especially important to talk to young mothers who are having their first baby. They are the ones who are most likely to need help.

There are some things that you can discuss with a group of mothers together, in an antenatal class. There are other things that it is usually better to discuss with mothers individually.

Talking with pregnant women about breastfeeding

With mothers in groups:

- Explain the benefits of breastfeeding, especially exclusive breastfeeding.
- Most mothers decide how they are going to feed their babies a long time before they have the child—often before they become pregnant. If a mother has decided to use formula milk, she may not change her mind. But you may help mothers who are undecided, and give confidence to others who intend to breastfeed. You may encourage a mother to breastfeed exclusively instead of partially.
- Talk about early initiation of breastfeeding and what happens after delivery; explain about the first breastfeeds and the practices in hospital so that they know what to expect.
- Give simple, relevant information on how to breastfeed (for example, demand feeding and positioning a baby).
- Discuss mothers' questions.
- Let the mothers decide what they would like to know more about. For example, some of them may worry about the effect that breastfeeding may have on their figures. It may help them to discuss these worries together.

With each mother individually:

- Ask about previous breastfeeding experience. If she breastfed successfully, she is likely to do so again. If she had difficulties, or if she formula fed, explain how she could succeed with breastfeeding this time. Reassure her that you will help her.
- Ask if she has any questions or worries.
- She may be worried about the size of her breasts or the shape of her nipples. It is not essential to examine breasts as a routine if she is not worried about them.
- Build her confidence, and explain that you will help her.
- Mostly you will be able to reassure her that her breasts are all right, and that her baby will be able to breastfeed. Explain that you or another counsellor will help her.

Note: Antenatal education should not include group education on formula preparation.

Step 4: Help mothers initiate breastfeeding within an hour of birth

Slide 25/4. Step 4, and Slide 25/5. Early initiation.



This mother is holding her baby immediately after delivery. They are both naked, so they have skin-to-skin contact. Help mothers initiate breastfeeding within an hour of birth. A mother should hold her baby like this as much as possible in the first two hours after delivery.

To prevent a baby from getting cold:

- Dry the baby, and cover both him and his mother with the same blanket.
- The mother should let the baby suckle when he shows that he is ready. Babies are normally very alert and responsive in the first 1 to 2 hours after delivery. They are ready to suckle, and easily attach well to the breast.
- Most babies want to feed between 30 minutes and 1 hour after delivery, but there is no exact fixed time. Try to delay non-urgent medical routines for at least 1 hour.

If the first feed is delayed for longer than about an hour, breastfeeding is less likely to be successful. A mother is more likely to stop breastfeeding early.

Slide 25/6. Separation of mother and baby.



This baby was born about half an hour ago. He has been separated from his mother while she is resting and being bathed. He is opening his mouth and rooting for the breast. This shows that he is now ready to breastfeed, but he is separated from his mother so she is not there to respond to him.

Separating a mother and her baby in this way, and delaying starting to breastfeed, should be avoided. These practices interfere with bonding, and make it less likely that breastfeeding will be successful.

Remember, mothers who have chosen not to breastfeed (for example, mothers who are HIV positive) and have decided to formula feed need encouragement to hold, cuddle, and have physical contact with their babies from birth onward. This helps a mother to feel close and affectionate toward her baby. There is no reason that the baby of an HIV-positive mother should not have skin-to-skin contact after birth, even if the mother is not going to breastfeed.

Mothers who are HIV positive and who have decided to breastfeed should be assisted to put the baby to the breast soon after delivery in the usual way.

Step 5: Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants

Slide 25/7. Step 5.

Imagine a woman who has just delivered and the baby is having an early breastfeed. It is the first day of life. A midwife who has been trained in breastfeeding counselling has come to help the mother. Anyone competent at helping a mother to initiate breastfeeds could help a mother and baby with their first feeds.

This midwife could help the mother by observing a breastfeed, helping the mother to position the baby, and giving her praise and relevant information. Keep a baby with his mother, and let him breastfeed when he shows that he is ready.

Help his mother to recognize rooting and other signs that he is ready to breastfeed.

It is a good idea for someone skilled in breastfeeding counselling to spend time with each mother during an early breastfeed to make sure that everything is going well. This should be routine in maternity wards before a mother is discharged. It need not take a long time.

Slide 25/8. Expressing breastmilk.



Sometimes a baby has to be separated from his mother, because he is ill or of low-birthweight, and he needs special care. While they are separated, a mother needs a lot of help and support. She needs help to express her milk as you see a mother doing here. This is necessary both to establish and maintain lactation, and to provide breastmilk for her baby.

A mother may need help to believe that her breastmilk is important, and that giving it will really help her baby. She needs help to get her baby to suckle from her breast as soon as he is able.

A common reason for babies to be separated from their mothers in some hospitals is after a caesarean section. It is usually possible for a mother to breastfeed within about 4 hours of a caesarean section—as soon as she has regained consciousness. Exactly how soon depends partly on how ill the mother is, and partly on the type of anaesthetic used. After epidural anaesthesia, babies can often breastfeed within 30 minutes to 1 hour.

A healthy, term baby usually needs no food or drink before his mother can feed him.

Step 6: Give newborn infants no food or drink other than breastmilk, unless medically indicated

Slide 25/9. Step 6.

Any artificial feed given before breastfeeding is established is called a **prelacteal feed**. Prelacteal feeds replace colostrum as the baby's earliest feed. The baby is more likely to develop infections such as diarrhoea.

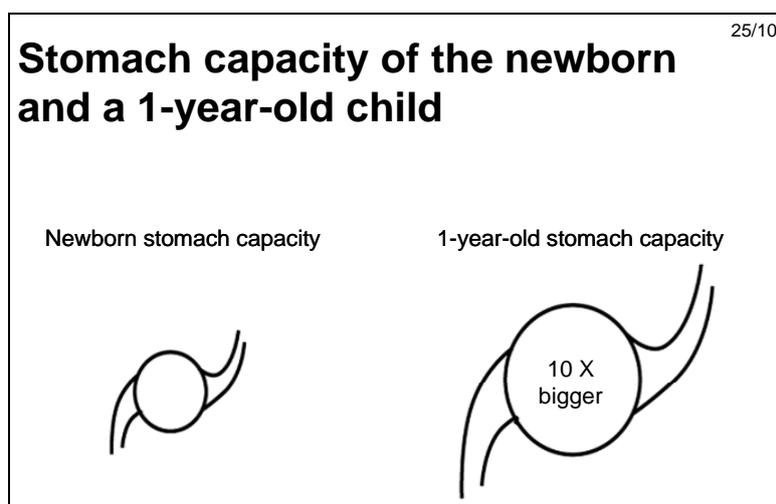
If milk other than human milk is given to the baby, he is more likely to develop intolerance to the proteins in the feed.

A baby's hunger may be satisfied by prelacteal feeds so that he wants to breastfeed less.

If a baby has even a few prelacteal feeds, his mother is more likely to have difficulties such as engorgement. Breastfeeding is more likely to stop early than when a baby is exclusively breastfed from birth.

Many people think that colostrum is not enough to feed a baby until the mature milk 'comes in'. However, the volume of an infant's stomach is perfectly matched to the amount of colostrum produced by the mother.

Slide 25/10. Stomach capacity of the newborn and a 1-year-old child.



This slide shows that the volume of a newborn's stomach is approximately 10 times smaller than that of a 1-year-old child. The newborn does not need large quantities of milk in the first few days. Colostrum is sufficient.

Step 6 says that no food or drink should be given to newborn infants unless medically indicated.

If a mother has been counselled, tested, and found to be HIV positive and has decided not to breastfeed, this is an acceptable medical reason for giving her newborn infant formula in place of breastmilk.

Even if many HIV-positive mothers are giving replacement feeds, this does not prevent a hospital from being designated as baby-friendly, if those mothers have all been counselled and offered testing, and have made a genuine choice.

Step 7: Practise rooming-in: allow mothers and infants to remain together 24 hours a day

Slide 25/11. Step 7.

The advantages of rooming-in are:

- It enables a mother to respond to her baby and feed him whenever he is hungry.
- This helps both bonding and breastfeeding.
- Babies cry less so there is less temptation to give bottle feeds.
- Mothers become confident about breastfeeding.
- Breastfeeding continues longer after the mother leaves hospital.
- All healthy babies benefit from being near their mother, rooming-in or bedding-in.
- Mothers who are HIV positive do not need to be separated from their babies. General mother-to-child contact does not transmit HIV.

Step 8: Encourage breastfeeding on demand

Slide 25/12. Step 8.

Breastfeeding on demand means breastfeeding whenever the baby wants, with no restriction on the length or frequency of feeds.

The advantages of breastfeeding on demand are:

- There is earlier passage of meconium.
- The baby gains weight faster.
- Breastmilk 'comes in' sooner and there is a larger volume of milk intake on day 3.
- There are fewer difficulties such as engorgement.
- There is less incidence of jaundice.

A mother does not have to wait until her baby is upset and crying to offer him her breast. She should learn to respond to the signs that her baby gives, for example rooting, which show that he is ready for a feed.

Let a baby suckle as long as he wants, provided he is well attached. Some babies take all the breastmilk they want in a few minutes; other babies take half an hour to get the same amount of milk, especially in the first week or two. They are all behaving normally.

Let her baby finish feeding on the first breast, to get the fat-rich hindmilk. Then offer the second breast, which he may or may not want. It is not necessary to feed from both breasts at each feed. If a baby does not want the second breast, his mother can offer that side first next time, so that both breasts get the same amount of stimulation.

This step is still important for babies who are receiving infant formula. Their individual needs should be respected and responded to for both breastfed and artificially fed infants. For example, rooting shows that he is ready for a feed.

Step 9: Give no artificial teats or pacifiers (also called dummies and soothers) to breastfeeding infants

Slide 25/13. Step 9, and Slide 25/14. Nipples, teats, and dummies.



Teats, bottles, and pacifiers (dummies) can carry infection and are not needed, even for the non-breastfeeding infant. Cup feeding is recommended, as a cup is easier to clean and also ensures that the baby is held and looked at while feeding. It takes no longer than bottle feeding. You will remember that we learnt about cup feeding in Session 13.

If a hungry baby is given a pacifier instead of a feed, he may not grow well.

In this picture, you see a low-birthweight baby being fed from a cup. We will discuss more about low-birthweight babies later in the course.

Step 10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic

Slide 25/15. Step 10, and Slide 25/16. Breastfeeding counselling and support.

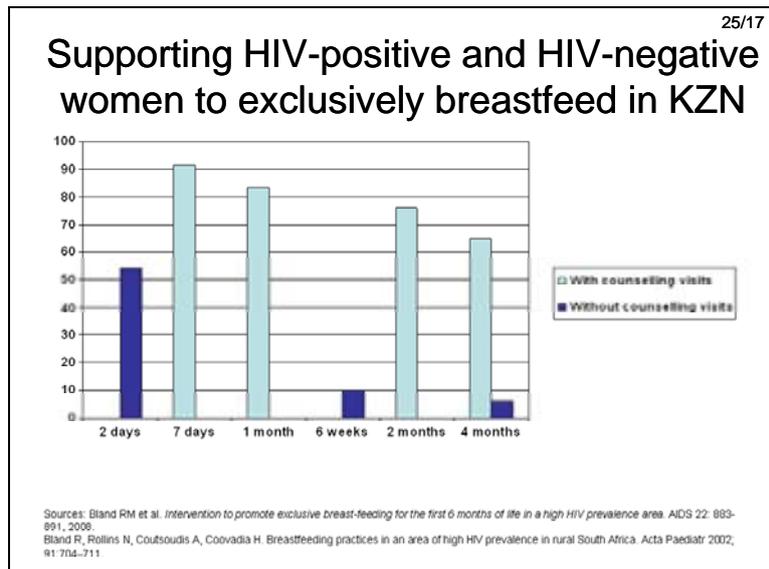


The key to best breastfeeding practices is continued day-to-day support for the breastfeeding mother within her home and community.

Those who support breastfeeding mothers in the community do not have to be medically trained personnel.

There is a lot of research which shows the effect of trained peer or lay counsellors on the duration of exclusive breastfeeding. These counsellors visit the mothers in their homes after discharge from the clinic or hospital, and support them to continue breastfeeding.

Slide 25/17. Supporting HIV-positive and HIV-negative women to exclusively breastfeed in Kwa Zulu Natal, South Africa.



This graph shows how trained lay counsellors in Kwa Zulu Natal, South Africa—an area with high HIV prevalence (roughly 40% among pregnant women) and low rates of exclusive breastfeeding—increased the proportion of infants of HIV-positive and HIV-negative mothers who were still exclusively breastfeeding at 4 months of age. The studied intervention significantly increased the likelihood of exclusive breastfeeding. At 4 months after birth, women who had received all of their scheduled counselling visits were more than twice as likely to be exclusively breastfeeding than those who had not.

The light-green bars show the exclusive breastfeeding rates among study participants, and the blue bars show the exclusive breastfeeding rates among participants in another study to assess breastfeeding practices that did not include an intervention.

The study with the intervention using trained lay counsellors demonstrated high rates of exclusive breastfeeding in both HIV-positive and HIV-negative women in a high HIV prevalence area. This study shows that it is feasible to promote and sustain exclusive breastfeeding for 6 months with home support from well-trained lay counsellors, and that resolving conflicting messages around the role of breastfeeding is an integral part of this work.

Lay counsellors were trained using the WHO Breastfeeding Counselling Course and the WHO Integrated Course (upon which this training is based). All participating women received one home counselling visit within 72 hours of delivery, and breastfeeding mothers received three more visits in the first 2 weeks and biweekly visits until 6 months after delivery. All infant feeding choices were discussed with the mothers during the visits, and the final choice of feeding method was up to the mothers themselves. Study nurses also supported the mothers at their regular clinic visits.

Many mothers need support regardless of their feeding method. Mothers with HIV who are not breastfeeding in a community where most mothers breastfeed may need extra support from a group especially concerned with HIV.

Session 26: International Code of Marketing of Breast-milk Substitutes

Learning objectives

After completing this session, participants will be able to:

- Explain how manufacturers promote formula milks.
 - Summarise the main points of the International Code of Marketing of Breast-milk Substitutes.
 - Describe how the International Code of Marketing of Breast-milk Substitutes helps to protect breastfeeding.
 - Explain the difficulties with donations of formula milk.
-

All manufacturers promote their products to try to persuade people to buy more of them. Formula manufacturers also promote their products to persuade mothers to buy more formula.

This promotion undermines women's confidence in their breastmilk and makes them think that it is not the best for their babies. This harms breastfeeding.

Breastfeeding needs to be protected from the effects of formula promotion. One essential way to protect breastfeeding is to regulate the promotion of formula, both internationally and nationally.

Individual health facilities and health workers can also protect breastfeeding, if they resist letting companies use them to promote formula. This is an important responsibility.

The government is in the process of finalizing the Lesotho Code of Marketing of Certain Foods for Infants and Young Children, and of Feeding Bottles, Teats and Pacifiers.

Ways manufacturers promote formula to the public:

- Manufacturers stock shops and markets with formula and feeding bottles, so that mothers can always see them when they go shopping.
- They give free samples of formula to mothers. Sometimes this is part of another gift. We know that even mothers who intend to breastfeed are more likely to give up if they receive a free sample.
- They give coupons to mothers for a discount on formula.
- They advertise on radio, television, videos for hire, billboards, buses, and magazines.

Ways manufacturers use health workers and health facilities to promote formula:

- They give posters and calendars to health facilities to display on the walls. These are very attractive and make the place look better.
- They give attractive informational materials to health facilities to distribute to families. Often there are no other materials to give to families, and some of the information is useful.
- They give useful bits of equipment, such as pens or growth charts, with the company logo on it. Sometimes they give larger items such as television sets or incubators to doctors or health facilities.
- They give free samples and free supplies of formula to maternity units.
- They give free gifts to health workers.
- They advertise in medical journals and other literature.

- They pay for meetings or conferences, workshops or trips, or they give free lunches for medical, nutrition, or midwifery schools.
- They fund and sponsor health services in many other ways, and give grants.

The International Code of Marketing of Breast-milk Substitutes

Slide 26/1. The International Code.

26/1

The International Code

- 1981 World Health Assembly adopted The Code, which aims to regulate promotion and sale of formula
- The Code is a code of **marketing**
- The Code covers all breastmilk substitutes – including infant formula, other milks or foods, including water and teas and cereal foods which are marketed for infants under 6 months, and teats and bottles

In 1981, the World Health Assembly adopted the International Code of Marketing of Breast-milk Substitutes, which aims to regulate promotion and sale of formula. This Code is a minimum requirement to protect breastfeeding.

The Code is a code of marketing. It does not ban infant formula or bottles, or punish people who bottle feed. The Code allows baby foods to be sold everywhere, and it allows every country to make its own specific rules.

The Code covers all breastmilk substitutes—including infant formula and any other milks or foods, such as water, teas, and cereal foods, which are sometimes marketed as suitable for infants less than 6 months of age, and also feeding bottles and teats.

Slides 26/2 and 26/3.

26/2

Summary of the Main Points of the International Code

- No advertising of breastmilk substitutes and other products to the public.
- No free samples to mothers.
- No promotion in the health service.
- No company personnel to advise mothers.
- No gifts or personal samples to health workers.

26/3

Summary of the Main Points of the International Code (cont.)

- No pictures of infants, or other pictures idealizing artificial feeding, on the labels of products.
- Information to health workers should be scientific and factual.
- Information on artificial feeding, including that on labels, should explain the benefits of breastfeeding and the costs and dangers associated with artificial feeding.
- Unsuitable products, such as sweetened condensed milk, should not be promoted for babies.

Some people are confused and think that the Code no longer applies where there are women living with HIV, who may choose to feed their infants artificially. However, the Code is still relevant, and it fully covers the needs of mothers with HIV.

If formula is made easily available, there is a risk that women who are HIV negative or who have not been tested will want to use it. They may lose confidence in breastfeeding and decide to feed their babies artificially. This spread is called 'spillover'.

So implementing the Code is in fact even more important, both to protect HIV-positive mothers and to help prevent spillover.

Supplies of breastmilk substitutes (where needed) should be distributed in a manner that is accessible and sustainable. They should be distributed in a way that avoids spillover to women who are breastfeeding.

Difficulties with donations of formula

You may have heard that some manufacturers, distributors, or other organisations have offered to donate formula for women who are HIV positive. Let us look at what the Code says.

Slide 26/4. Donated supplies.

26/4

Donated supplies

“ Where donated supplies of infant formula ... are distributed ... the institution or organization should take steps to ensure the supplies can be continued as long as the infants concerned need them ”

Under the Code and its subsequent resolutions, these donations cannot be given through the health care system—that is, through maternity or paediatric wards, maternal and child health or family planning clinics, private doctors’ offices, or child care institutions.

The health system, if it wishes, can provide free or subsidised formula to HIV-positive mothers, but the health service has to **buy** the formula to give to mothers, in the same way that it does most drugs and food for patients and other supplies.

In addition, the health service should ensure that the mother will have a supply of formula for as long as her infant needs it—that is, at least 6 months—and milk in some form after that.

If hospitals and health centres have to buy formula, as they usually buy drugs and food, it is more likely that they will ensure that it is given out in a carefully controlled way, and not wasted or misused. Formula is more likely to be given only to mothers who are HIV positive, who have been counselled, and who have chosen to use formula.

Me Mamotlatsi has been counselled about HIV and about infant feeding, and has decided to use formula. The counsellor has referred her to a charity organisation to obtain free supplies of formula. She is talking to the charity worker, who is **not** a counsellor.

Demonstration: Donations of infant formula

Charity worker: 'Good morning, Me. How can I help you?'

Me Mamotlatsi: (*Nervous and embarrassed—looks around to see if anyone is observing her. Gives charity worker a letter.*) 'Good morning, madam. The counsellor at the health centre gave me this letter to give you—she said that I can get some formula here to feed my baby, as I can't afford to buy any.'

Charity worker: 'Oh yes, I understand. Of course we can help you. I will give you these four tins of formula, which the company donated to us. This should be enough for 1 month. You learnt how to make it up in hospital, didn't you? Next time you go for the baby to be weighed, she will give you another note, and you can come back for more formula.'

Me Mamotlatsi: 'Thank you. I was so worried about how I would afford the tins. We have so little money. Now I know I will have enough to feed my baby.' (*Me leaves.*)

Me Mamotlatsi: 'Good morning—my baby is growing well on the formula that you gave me 1 month ago, but it is nearly finished, so I need some more.'

Charity worker: 'Oh dear, I am so sorry. I am afraid that we are out of stock at the moment, and we just don't have anything that we can give you. No more supplies have arrived—and all of the last delivery has been given out. I don't know what to suggest. I am really sorry, but there is nothing I can do. Can you come back next week? Perhaps some will have arrived.'

Me Mamotlatsi (crying): 'What can I do now? My breastmilk has dried up, and I have no money to buy milk. How can I feed my baby?'

Session 27: Importance of complementary feeding

Learning objectives

After completing this session, participants will be able to:

- Explain the importance of continuing breastfeeding.
- Define complementary feeding.
- Explain the optimal age for children to start complementary feeding.
- List the Key Messages from this session.
- Discuss related complementary feeding activities.

The period from 6 completed months of age⁵ until 2 years is of critical importance in the child's growth and development. You, as health workers, have an important role in helping families during this time. During the next few sessions, we will list Key Messages to discuss with caregivers about complementary feeds.

Sustaining breastfeeding

Starting at 6 completed months, a baby needs a variety of foods in addition to breastmilk because breastmilk alone no longer meets a baby's nutritional needs.

In Session 2, we discussed the importance of continued breastfeeding. From 6 to 12 months, breastfeeding continues to provide half or more of the child's nutritional needs, and from 12 to 24 months at least one-third of his nutritional needs. As well as nutrition, breastfeeding continues to provide protection to the child against many illnesses, and provides closeness and contact that helps psychological development. So remember to include this key point when talking about a baby older than 6 months.

Slide 27/1. Key Message 1: Breastfeeding.

27/1

Key Message 1

Breastfeeding for two years or longer helps a child to develop and grow strong and healthy

Infant and young child feeding (IYCF) counsellors can do a lot to support and encourage women who want to breastfeed their babies. You can help to protect good practices in a community. If you do not actively support breastfeeding, you may hinder it by mistake.

⁵ 6 completed months = 180 days, not the start of the sixth month.

Every time you see a mother, try to build her confidence. Praise her for what she and her baby are doing right. Give relevant information, and suggest something appropriate.

Children who are not receiving breastmilk should receive another source of milk and need special attention. There are special recommendations for feeding the non-breastfed child from 6 to 24 months. We will be looking at these recommendations in the following sessions.

Define complementary feeding

An age is reached when breastmilk alone is insufficient to meet the child's nutritional needs, and at this point, complementary foods must be added. Let us examine what complementary feeding means.

Slide 27/2. Definition of complementary feeding.

27/2

Definition of complementary feeding

- Providing other solid and semi-solid foods and liquids along with breastmilk or breastmilk substitute (e.g., commercial infant formula, animal milk) 6 to 24 months.

These additional foods and liquids are called **complementary foods**, as they are additional, or complementary, to breastfeeding, rather than adequate on their own as the diet. Complementary foods must be nutritious and in adequate amounts so the child can continue to grow.

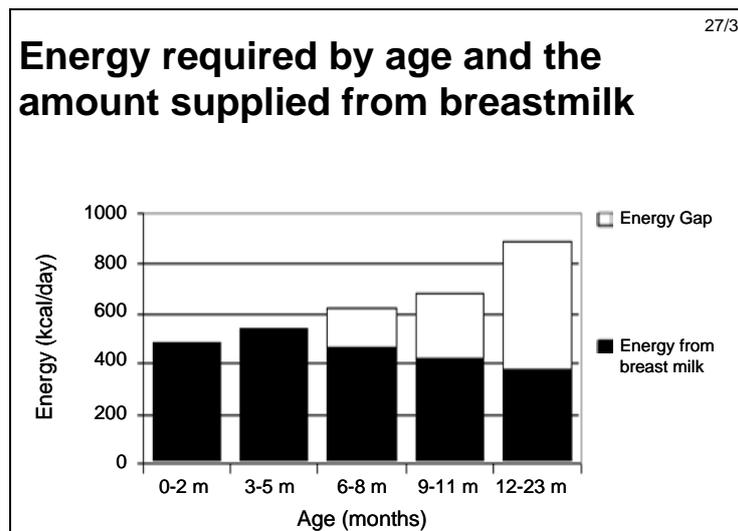
The term '**complementary feeding**' is used to emphasise that this feeding complements breastmilk rather than replaces it. Effective complementary feeding activities include support to continue breastfeeding.

During the period of complementary feeding, the young child gradually becomes accustomed to eating family foods. In addition to the nutritional importance, it also contributes to psychomotor and behavioural development. Feeding includes more than just the foods provided. *How* the child is fed can be as important as *what* the child is fed.

The optimal age to start complementary feeding

Our bodies use food for energy to keep alive, to grow, to fight infection, to move around, and to be active. Food is like the wood for the fire—if we do not have enough good wood, the fire does not provide good heat or energy. In the same way, if young children do not have enough good food, they will not have the energy to grow and be active.

Slide 27/3. Energy required by age and the amount supplied from breastmilk.



On this graph, each column represents the total energy needed at that age. The columns become taller to indicate that more energy is needed as the child becomes older, bigger, and more active. The dark part shows how much of this energy is supplied by breastmilk.

You can see that from about 6 months onward, there is a gap between the total energy needs and the energy provided by breastmilk. The gap increases as the child gets bigger.

This graph represents an 'average' child and the nutrients supplied by breastmilk from an 'average' mother. A few children may have higher needs and the energy gap would be larger. A few children may have smaller needs and thus a smaller gap.

Therefore, for most babies, 6 months of age is a good time to start complementary foods. Complementary feeding from 6 completed months helps a child to grow well and be active and content.

Slide 27/4. Key Message 2: When to start complementary feeding.

27/4

Key Message 2

- Starting when your child completes 6 months, give a variety of other foods in addition to breastmilk to grow well and be healthy.

A photograph showing a woman in a white long-sleeved shirt sitting at a table, feeding a baby with a spoon. The baby is wearing a white shirt and is looking towards the camera. There are some bowls and a plate on the table.

After 6 completed months, babies need to learn to eat thick porridge, puree, and mashed foods. These foods fill the energy gap more than liquids.

When a baby completes 6 months of age, it becomes easier to feed thick porridge and mashed food because babies:

- Show interest in other people eating and reach for food.
- Like to put things in their mouth.
- Can control their tongue better to move food around their mouth.
- Start to make up and down 'munching' movements with their jaws.

In addition, at this age, babies' digestive systems are mature enough to begin to digest a range of foods.

Slide 27/5. Starting other foods too soon.

27/5

Starting other foods too soon

Adding foods too soon may

- take the place of breastmilk
- result in a low nutrient diet
- increase risk of illness
 - less protective factors
 - other foods not as clean
 - difficult to digest foods
- increase mother's risk of pregnancy

Adding complementary foods too soon may:

- Take the place of breastmilk, making it difficult to meet the child's nutritional needs.
- Result in a diet that is low in nutrients if thin, watery soups and porridges are used.
- Increase the risk of illness because less of the protective factors in breastmilk are consumed.
- Increase the risk of diarrhoea because the complementary foods may not be as clean or as easy to digest as breastmilk.
- Increase the risk of wheezing and other allergic conditions because the baby cannot yet digest and absorb non-human proteins well.
- Increase the mother's risk of another pregnancy if breastfeeding is less frequent.

Slide 27/6. Starting other foods too late.

27/6

Starting other foods too late

Adding foods too late may

- result in child not receiving required nutrients
- slow child's growth and development
- risk causing deficiencies and malnutrition

Starting complementary foods too late is also a risk because the child:

- Does not receive the extra food required to meet his/her growing needs.
- Grows and develops more slowly.
- Might not receive the nutrients to avoid malnutrition and deficiencies such as anaemia from lack of iron.

Exploring feeding practices

Reasons a family might start to give foods before a baby completes 6 months:

- Families may decide a young child is ready for complementary foods because they notice certain developmental signs, such as reaching for food when others are eating or starting to get teeth.
- Families may decide the baby needs additional foods because the baby is showing what they believe to be signs of hunger. Signs such as the baby putting his hands to the mouth may be normal developmental signs, not signs of hunger.
- Sometimes a family may decide to start complementary feeding because they believe that the baby will breastfeed less and the mother will be able to be away from the baby more.
- Complementary foods may be started because a baby under 6 months of age is not gaining weight adequately.
- A family may be influenced by what other people say to them about starting complementary foods. They may listen to a neighbour, their mother, a health worker, or even advertisements for baby food products.

Knowing why families start complementary foods helps you to decide how to assist them. For example, a mother may give foods to a very young baby because she thinks she does not have enough breastmilk. Once you understand her reason, you can give her appropriate information.

Complementary feeding should be started when the baby can no longer get enough energy and nutrients from breastmilk alone. For all babies, this is 6 completed months of age.

Ensuring adequate complementary feeding

Adequate nutrition in early childhood is essential for development. Poor nutrition during the first 2 years of life can permanently impair physical and mental development.

Slide 27/7. Complementary foods should be....

27/7

Complementary foods should be

- Rich in energy and nutrients
- Clean and safe
- Easy to prepare family foods
- Locally available and accessible

Health workers and IYCF counsellors should help mothers understand the key factors that impact the quality of complementary feeding.

Slide 27/8. Key factors to ensure proper complementary feeding.

27/8

Key factors to ensure proper complementary feeding

- Amount of food consumed
- Consistency of food consumed
- Variety of food consumed
- Frequency of meals
- Safe and clean handling of foods
- Responsive feeding techniques

Examine the role of the health worker and the health facility

Slide 27/9.



Parents of young children may receive information about feeding their child from many sources, such as families, health facility personnel, and community members. Here is a picture of a mother with her 7-month-old daughter. She has brought her daughter to the health facility regularly for immunisations and health checks.

The nutritional status of a child affects overall health. Health is not only growth and development but also the ability to fight off illness and recover from illness. This means the nutritional status of children is important to all health staff, and that all health staff should promote good feeding practices.

Creating a health facility environment that gives importance to children's nutrition will go a long way in promoting healthy children.

HANDOUT: ASSESS YOUR PRACTICES				
Does this practice occur?	With all children	With some children	Does not occur	Comments
Weigh child				
Measure child's length				
Review child's growth chart and determine if the child is underweight or (if possible) growing inadequately				
Discuss how the child is feeding				
Note on child's chart that feeding was discussed				
Carry out demonstrations of young children's food preparations and feeding techniques				
Make home visits to assess foods and feeding practices				
Other activities				

Most frequent nutrition-related activities occurring in your health facility:

Least frequent nutrition-related activities occurring in your health facility:

