Lactational Amenorrhea Method

A Reference Manual for Service Providers
Lactational Amenorrhea Method

A Reference Manual for Service Providers
# Table of Contents

**Acknowledgments** iii  
**Abbreviations and Acronyms** iv  
**Introduction** 1  
**Basic Information about LAM** 2  
Mechanism of Action for LAM 2  
Effectiveness of LAM 3  
The Three LAM Criteria 4  
“Transition”: Another Essential Component of LAM 5  
Advantages and Limitations of LAM 6  
**Counseling in LAM** 7  
Components of LAM Counseling 7  
Providing LAM-Specific Counseling 8  
Ensuring Transition to Another Method of Family Planning 9  
Family Planning Methods for Breastfeeding Mothers 9  
Supporting Effective Breastfeeding 11  
Following-Up LAM Users 12  
**LAM Services** 12  
Opportunities to Introduce and Offer LAM Counseling/Services 12  
Attitudes of Health Care Providers about LAM 13  
**LAM and HIV** 13  
LAM and Breastfeeding in the HIV-Positive Mother 14  
HIV Counseling and Testing 15  
Considering Benefits and Risks 15  
**Appendix A: Healthy Timing and Spacing of Pregnancy** 17  
The Importance of HTSP 17  
HTSP and the Postpartum Woman 18  
**Appendix B: LAM Counseling Guide for Family Planning Service Providers (Job Aid)** 19  
**Appendix C: LAM Client Education Card** 21  
**Appendix D: LAM Counseling Checklist for Family Planning Service Providers** 23  
**Appendix E: Additional Breastfeeding Support** 25  
Effective Breastfeeding Positions 25  
Effective Attachment of Infant to Breast 26  
Managing Common Breastfeeding Difficulties 26  
**Appendix F: LAM Frequently Asked Questions (FAQs)** 28  
**Bibliography** 32
# LIST OF EXHIBITS

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How LAM Works</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Effectiveness of LAM in Four Studies</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Simplified LAM Messages</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Advantages and Limitations of LAM</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>General Counseling Principles</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>Thumbnail of LAM Counseling Guide</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Thumbnail of LAM Client Card</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>Initiation of Postpartum Contraception</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>Ruling Out Pregnancy</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>AFASS Criteria for Replacement Feeding</td>
<td>14</td>
</tr>
<tr>
<td>A1</td>
<td>Birth Spacing Saves Lives</td>
<td>17</td>
</tr>
<tr>
<td>E1</td>
<td>Four Effective Breastfeeding Positions</td>
<td>25</td>
</tr>
<tr>
<td>E2</td>
<td>Managing Sore or Cracked Nipples</td>
<td>26</td>
</tr>
<tr>
<td>E3</td>
<td>Managing Engorgement/Blocked Ducts</td>
<td>27</td>
</tr>
<tr>
<td>E4</td>
<td>Managing Maternal Concerns About Insufficient Milk Supply</td>
<td>27</td>
</tr>
<tr>
<td>F1</td>
<td>Pregnancies per 100 Women During the First Year of Using Different Contraceptives</td>
<td>29</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

This publication was made possible through support provided by the United States Agency for International Development (USAID), under the terms of the Cooperative Agreement No. GPO-A-00-07-0003-00. The contents of this document do not necessarily reflect the views or policies of USAID, Johns Hopkins University or Georgetown University.

Prepared by:
Barbara Deller
Marcos Arevalo
Jeannette Cachan

Reviewers:
Holly Blanchard
Maryanne Stone-Jimenez
Virginia Lamprecht

Editor:
Rebecca Chase Fowler

Graphic Designer:
Youngae Kim

Desktop Publisher:
Renata Kepner

Cover photos (reference manual and CD-ROM) by Jhpiego.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFASS</td>
<td>Acceptable, feasible, affordable, sustainable and safe</td>
</tr>
<tr>
<td>ARV</td>
<td>Antiretroviral [medications/therapy]</td>
</tr>
<tr>
<td>COC</td>
<td>Combined oral contraceptive</td>
</tr>
<tr>
<td>FSH</td>
<td>Follicle-stimulating hormone</td>
</tr>
<tr>
<td>GnRH</td>
<td>Gonadotropin-releasing hormone</td>
</tr>
<tr>
<td>HTSP</td>
<td>Healthy timing and spacing of pregnancy</td>
</tr>
<tr>
<td>IUD</td>
<td>Intrauterine contraceptive device</td>
</tr>
<tr>
<td>LAM</td>
<td>Lactational amenorrhea method</td>
</tr>
<tr>
<td>LH</td>
<td>Luteinizing hormone</td>
</tr>
<tr>
<td>MTCT</td>
<td>Mother-to-child transmission [of HIV]</td>
</tr>
<tr>
<td>PITC</td>
<td>Provider-initiated testing and counseling [for HIV]</td>
</tr>
</tbody>
</table>
INTRODUCTION

The Lactational Amenorrhea Method (LAM) is a highly effective, temporary family planning method for breastfeeding women. LAM provides natural protection against pregnancy for up to six months after birth and—while the woman continues breastfeeding, as she desires—encourages the timely transition to other modern methods of contraception.

Lactational = Related to breastfeeding
Amenorrhea = No vaginal bleeding (after two months postpartum)
Method = A temporary (up to six months postpartum) family planning method

LAM is based on a woman’s natural infertility resulting from breastfeeding only1 (i.e., breastfeeding the baby as often as s/he wants, day and night, and not giving any other food, water or other liquids), along with an absence of menstrual bleeding during the first six months after the baby is born. Although its use is limited to the first six months postpartum, LAM provides a woman with very effective contraception (more than 98% as commonly used) and contributes to the health and nutrition of her baby.

The period of time preceding and immediately following the birth of a woman’s child, and up to six months postpartum, represents a valuable opportunity for the woman/couple to learn about and take advantage of LAM to prevent pregnancy. This time period also represents a critical entry point, or “gateway,” to the initiation of other modern methods of family planning, extending continuous contraceptive protection for as long as the woman/couple chooses.

LAM’s strategic imperative is its position as a “gateway” to other modern methods of family planning. The six-month window when LAM can be practiced provides time and opportunity for the woman/couple to choose and begin using another modern method of contraception—once they are no longer eligible for LAM use (i.e., any of the three LAM criteria is no longer met, as discussed on page 4) or they decide to switch to another method.

Family planning—by enabling women/couples to space their pregnancies at healthy intervals or avoid unintended pregnancy—and breastfeeding help to ensure child survival, health and development, as well as maternal survival and health. Whether through LAM or another modern method, the couple who chooses to space/avoid pregnancy should start using contraception.

---

1 The terms “breastfeeding exclusively,” “breastfeeding fully” and “breastfeeding only” are often used interchangeably, referring to the same set of breastfeeding practices and behaviors. In this learning resource package, the term “breastfeeding only” (or “breastfeeding only/exclusively”) is used, consistent with current recommendations for simpler, more user-friendly LAM messaging.
during the postpartum period, while the mother is breastfeeding. And the method should be selected with continued breastfeeding in mind, as the woman desires.

**BASIC INFORMATION ABOUT LAM**

**Mechanism of Action for LAM**

Frequent and intense breastfeeding protects the woman from becoming pregnant by preventing ovulation, as shown in **Exhibit 1** and further described below.

**Exhibit 1: How LAM Works**

![Exhibit 1](image)

**First, the baby’s suckling stimulates the mother’s nipple.** When breastfeeding, the baby squeezes and rubs the nipple with his/her gums and palate, causing pressure on—or “mechanical stimulation” of—the nipple.

**Second, this stimulation of the nipple sends a signal to the mother’s brain.** The nipple stimulation triggers a neural signal to the mother’s pituitary gland, which produces and secretes hormones related to many bodily processes—including ovulation.

---

2 Adapted from: Hatcher et al. 2007.
Third, this signal to the mother’s brain disrupts the production of hormones that would normally stimulate the ovary. In response to the suckling stimuli and the resulting neural signal:

- There is increased production by the pituitary of the hormone prolactin;³
- This increased level of prolactin inhibits the normal secretion of gonadotropin-releasing hormone (GnRH) by the hypothalamus; and
- This disruption in the release of GnRH, in turn, disrupts the pituitary’s production and release of follicle-stimulating hormone (FSH) and luteinizing hormone (LH), both directly responsible for ovulation.

Fourth, ovulation is prevented. Disruption in the release of FSH impedes the normal maturation of the egg by the ovary; disruption in the release of LH impedes the release of a mature egg by the ovary.

**Effectiveness of LAM⁴**

LAM is 99.5% effective when used correctly (i.e., when all three LAM criteria are met, as further discussed below) and more than 98% effective as commonly used. These efficacy rates resulted from aggregating data from several studies conducted worldwide. As Exhibit 2 shows, the six-month failure rate of LAM was found to be less than 1% to 2% in each of four studies.

**Exhibit 2: Effectiveness of LAM in Four Studies**

<table>
<thead>
<tr>
<th></th>
<th>Multi-Center Study⁵</th>
<th>Chile⁶</th>
<th>Pakistan⁷</th>
<th>Philippines⁸</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Women Using LAM</td>
<td>519</td>
<td>422</td>
<td>391</td>
<td>485</td>
</tr>
<tr>
<td>Pregnancies among LAM Users</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>98%</td>
<td>99.5%</td>
<td>99.42%</td>
<td>99.04%</td>
</tr>
</tbody>
</table>

³ Prolactin controls the rate of milk production, but it is not believed to play a major role in suppressing ovarian function.

⁴ After review of extensive data, the Bellagio Consensus Meeting in 1988 reported that there is a risk of pregnancy of 2% for women using LAM (i.e., who were fully or nearly fully breastfeeding, amenorrheic and less than six months postpartum). A subsequent Bellagio meeting in 1995, which assessed prospective clinical studies of LAM, found that, in practice, the risk was frequently lower. Source: Kennedy, Labbok and Van Look 1996.

⁵ Ten countries contribute to this multi-center study (Source: Labbok et al. 1997).


⁷ Source: Kazi et al. 1995.

The Three LAM Criteria

LAM effectively protects a woman from pregnancy as long as she meets the following three criteria or conditions:

- The woman’s menstrual bleeding has not returned since her baby was born; and
- The baby is only/exclusively breastfed, meaning the woman breastfeeds her baby “on demand,” day and night, and does not give any other food, water or liquids; and
- The baby is less than six months old.

When any one of these three criteria is not met, or the woman wishes to begin using another modern method of contraception, she should start on that next method immediately if she does not want to become pregnant. Counseling about the woman’s next method, to which she will transition from LAM, should begin as early as possible, such as when LAM counseling is initiated (ideally before the baby is born). Waiting until one of the three criteria is no longer met to begin considering the next method of contraception will be too late—leaving a “gap” in contraceptive protection and greatly increasing the woman’s risk of becoming pregnant.

The rationales for the three LAM criteria follow:

1. **The woman’s menstrual bleeding has not returned since her baby was born**—After childbirth, the return of menses is a significant signal that a woman’s fertility has returned. Once a woman starts to menstruate again, it is likely that ovulation has also resumed. Note that vaginal bleeding during the first two months postpartum is not considered menstrual bleeding.

2. **The baby is only/exclusively breastfed**—This means that breast milk is the only food or fluid given to the baby (other than occasional vaccines, medication or ritual drops/sips). The baby should be breastfed “on demand,” which means that whenever the baby shows signs of wanting to be fed, whether day or night, the mother breastfeeds the baby. The baby is not given artificial teats, nipples or pacifiers. All of a baby’s nutritional, hunger, thirst and sucking needs are met with breastfeeding.

3. **The baby is less than six months old**—At six months of age, the baby should begin receiving complementary foods, while continuing to breastfeed. Introduction of complementary food and/or fluids can reduce suckling, allowing the hormonal mechanism that causes ovulation and menses to resume.

Again, if any one of these conditions changes, the woman can no longer rely on LAM for protection from pregnancy and should immediately transition to another method of contraception.

---

Breastfeeding alone cannot be relied upon to prevent pregnancy. Rather, it is the period of lactational amenorrhea, together with effective breastfeeding practices, that provides this protection.

---

*Bleeding within the first two months postpartum is not considered menstrual bleeding.*
The LAM criteria are scientifically based and have not changed over the years. However, in order to facilitate programmatic implementation of LAM, the LAM Interagency Working Group\textsuperscript{10} has simplified key LAM messages to help “operationalize” the criteria (Exhibit 3)—that is, to make them easier for providers, clients and the community to understand, discuss and use effectively.

### Exhibit 3. Simplified LAM Messages\textsuperscript{11}

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Message</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menstrual bleeding has not returned</td>
<td>Breastfeeding will protect you from pregnancy as long as your menstrual bleeding (period) has not returned.</td>
<td>The return of menstrual bleeding after birth is a sign that a woman’s fertility has returned.</td>
</tr>
<tr>
<td>Breastfeed only/exclusively</td>
<td>Your baby should not receive any food or liquids other than breast milk (except for medicines, vitamins and vaccines).</td>
<td>The nipple stimulation caused by suckling interferes with the release of hormones that trigger ovulation.</td>
</tr>
<tr>
<td>Baby is less than six months old</td>
<td>LAM is effective until your baby is six months old. At six months, your baby should begin to receive complementary foods.</td>
<td>The probability of ovulation increases after the sixth month postpartum, when the mother is no longer breastfeeding only/exclusively.</td>
</tr>
</tbody>
</table>

**“Transition”: Another Essential Component of LAM**

*Transition* = Starting the use of another method of contraception by the time any one of the three LAM criteria is no longer met, or the woman/couple wishes to stop using LAM. Effective transition, so that there is no “gap” between LAM and the next method, ensures that the woman has continuous, uninterrupted contraceptive protection.

Key concepts that support and help facilitate transition are as follows:

- LAM is a “gateway” to other modern methods of contraception—while using LAM, a woman/couple has time to discuss, choose and adopt the next family planning method that they will use.
- Another family planning method should be started as soon as any one of the three LAM criteria is no longer met, but never later than six months after the birth of the baby.

\textsuperscript{10} The mission of this group is to promote the use of LAM as a highly effective, temporary family planning method for breastfeeding women, and as a gateway to continuing contraception through timely transition to other modern methods.

\textsuperscript{11} Adapted from: LAM Interagency Working Group 2009.
LAM counseling is a good opportunity to provide a woman with information about other family planning methods available to her, and to help her decide to which she will transition.

**Advantages and Limitations of LAM**

As with all contraceptive methods, the use of LAM has both advantages and limitations. These are described in Exhibit 4.

**Exhibit 4: Advantages and Limitations of LAM**

<table>
<thead>
<tr>
<th>Family Planning Advantages of LAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitates transition to other modern contraceptive methods by allowing time for the woman/couple to choose another method (once one of the LAM criteria is no longer met)</td>
</tr>
<tr>
<td>Effectively prevents pregnancy for up six months</td>
</tr>
<tr>
<td>Does not require supplies or procedures</td>
</tr>
<tr>
<td>Has no hormonal or other major side effects (for mother or infant of breastfeeding mother)</td>
</tr>
<tr>
<td>Facilitates modern contraceptive use by previous non-users</td>
</tr>
<tr>
<td>Is provided and controlled by the woman</td>
</tr>
<tr>
<td>Can be used immediately after childbirth</td>
</tr>
<tr>
<td>Is universally available to postpartum women</td>
</tr>
<tr>
<td>Is economical</td>
</tr>
<tr>
<td>Motivates users to exclusively breastfeed for six months</td>
</tr>
<tr>
<td>Supports global infant feeding recommendation to only/exclusively breastfeed for six months</td>
</tr>
</tbody>
</table>

**Benefits to Child**

- Decreases exposure to contaminants in water, in other milk or formulas, or on utensils
- Adapts to nutritional needs of growing infant
- Is more easily digested than other milk or formulas
- Promotes optimal brain development
- Provides passive immunity and protects against infections
- Provides some protection against allergies
- Strengthens mother–baby bond

**Benefits to Mother**

- Stimulates uterine contractions in the early postpartum and may reduce postpartum blood loss
- Lessens iron depletion by suppressing menses
- Promotes involution (return of uterus to pre-pregnancy state)

**Limitations of LAM**

- Is only effective for six months
- May be inconvenient or difficult for some women, such as working mothers
- Offers no protection against sexually transmitted infections (STIs)/HIV
- If the mother has HIV and is not only/exclusively breastfeeding (i.e., is “mixed feeding”/alternating breastfeeding with other foods or fluids), increases the risk that HIV will be transmitted to the baby through breastfeeding

**IMPORTANT**: The chance of passing HIV to a breastfeeding child is extremely small if the baby is breastfed only. And the encouragement of only/exclusive breastfeeding for HIV-positive women for whom replacement feeding is not a viable option (does not meet AFASS criteria, as further discussed on page 13) helps to normalize the practice—reducing the stigma for those who choose to breastfeed or use LAM.
COUNSELING IN LAM

As starting on LAM does not require a procedure or special equipment, counseling is the main and most critical component of LAM services. Good counseling, as described in Exhibit 5, helps family planning clients understand their contraceptive options and make an appropriate choice, as well as encourages successful initiation and continuation of their chosen method. For breastfeeding women who choose LAM, good counseling also supports their transition to another modern method of contraception once any one of the LAM criteria is no longer met.

Exhibit 5: General Counseling Principles

Any health care counseling should be based on the following principles:

- Show every client respect, and help her to feel at ease.
- Respect the client’s decisions.
- Encourage clients to express concerns and ask questions. Respond to concerns respectfully and answer questions accurately and appropriately.
- Listen carefully—Learning about the client helps determine what information is relevant to her needs.
- Use simple language and give only key information. Too much information or information that is too technical can overwhelm the client, limiting her ability to remember key messages.
- Assess client’s understanding by asking questions and having her repeat key instructions and messages.

Remember: Clients and their situations differ and so—to be most effective—counseling must be tailored to the individual client.

Components of LAM Counseling

Comprehensive LAM counseling should include the following:

- **General counseling** about the woman’s reproductive goals and fertility intentions, as well return to fertility and methods that are suitable for postpartum women—including those who are breastfeeding.

- **Counseling about the health benefits—for mothers and their children—of spacing pregnancies.** This should include the message that following the birth, the woman/couple should wait at least two years to try to become pregnant again. (More information on Healthy Timing and Spacing of Pregnancy is presented in Appendix A.)

- **LAM-specific counseling** for breastfeeding mothers who are interested in using LAM to ensure their eligibility (i.e., does she meet the three criteria?) and proper use of the method.

- **Assistance in transition** from LAM to another family planning method, as desired, to ensure that the woman has continuous/uninterrupted contraceptive protection.

- **Support for optimal breastfeeding behaviors,** including effective breastfeeding positions, proper attachment of the infant to the breast and management of any breastfeeding difficulties.

- **Follow-up** to ensure that all three LAM criteria are still being met, to continue assessing for breastfeeding difficulties and to help facilitate transition to another modern method when appropriate.
Providing LAM-Specific Counseling

A LAM Counseling Guide for service providers to use is included as Appendix B (see also Exhibit 6). This job aid contains basic information that the provider should cover during a LAM counseling session with a woman/couple.

After the provider has assessed their needs and given them a brief overview of appropriate family planning methods (depending on whether the woman is breastfeeding, as well as other factors), and after the woman has chosen LAM, the provider would:

- **Give** the woman a LAM Client Education Card (included as Appendix C; see also Exhibit 7) to refer to during the LAM-specific portion of counseling.
- **Screen** the woman to verify that the woman meets the three LAM criteria.
- **Explain** the three conditions that must be met for LAM to work as a family planning method.
- **Advise** her to return to the clinic/provider immediately if any of the following occurs:
  - If her menstrual bleeding returns; OR
  - When the baby starts receiving other food, water or liquids (i.e., is no longer breastfeeding only); OR
  - By the time the baby turns six months old
- **Ask** the woman to start thinking about which family planning method she will start using immediately after LAM.
- **Reinforce** appropriate breastfeeding practices and behaviors.
- **Remind** her when to return to the clinic/provider and of the need for timely transition to another family planning method.
- **Have** her take the LAM Client Card with her to remind her of important points concerning the effective use of LAM.

A LAM Counseling Checklist for Family Planning Service Providers is included in **Appendix D**. It covers the basic steps involved in general family planning and LAM-specific counseling, and may be helpful to trainers/facilitators, participants and providers in learning about and providing LAM services.

---

**Ensuring Transition to Another Method of Family Planning**

By the time any one of the three LAM criteria is no longer met, the woman/couple should be using another modern method of family planning if they do not want to become pregnant. Therefore, counseling to support effective transition to another modern method must begin before the woman starts using LAM, such as when LAM counseling is initiated.

The woman who is using LAM needs to know that she may become pregnant even when she is breastfeeding:

- If she has had any vaginal bleeding after two months postpartum,
- If she is no longer breastfeeding only/exclusively, or
- If the baby is six months of age or older.

A woman can ovulate, and therefore become pregnant, even before her menses return. The woman who meets all three LAM criteria, however, can transition to another family planning method with confidence that she is not pregnant (discussed further on page 11, Exhibit 9).

A woman transitioning from LAM should be encouraged to continue breastfeeding her baby even after she begins using another method of contraception, as appropriate. Continued breastfeeding should be kept in mind when choosing the next method.

**Family Planning Methods for Breastfeeding Mothers**

Several contraceptive methods can safely be used by breastfeeding women. LAM is one such method, and LAM facilitates transition to other modern methods by allowing time for the woman/couple to decide to use/adopt another method. Here are other methods that can be safely used by the breastfeeding mother.

- **Condom**
- **Copper-containing intrauterine contraceptive device (IUD)—insert within 48 hours or after four weeks postpartum**\(^\text{13}\)
- **Combined oral contraceptives (COCs)—after six months**\(^\text{14}\)
- **Progestin-only methods (pills, injectables, implants)—after six weeks**

---

\(^\text{13}\) Insertion of a copper-containing IUD is not recommended between 48 hours and four weeks postpartum because of the increased risk of infection and perforation of the uterus.

\(^\text{14}\) COCs are not recommended for the breastfeeding mother during the first six months postpartum because they may decrease production of breast milk during this time.
- Abstinence
- Natural methods, if method-specific criteria are met\(^\text{15}\)
- Tubal ligation—within seven days or after six weeks postpartum
- Vasectomy

Note that the breastfeeding mother should not use COCs before the baby is six months old, because COCs may decrease the woman’s breast milk supply. However, progestin-only oral contraceptives, as well as progestin-only injections or implants, may be used any time after the first six weeks postpartum. The IUD is another useful method for the breastfeeding mother; it can be inserted within 48 hours of the birth of the baby or after four weeks postpartum.

**Exhibit 8** provides an overview of when various methods can be initiated during the postpartum period, as well as which are appropriate for breastfeeding versus non-breastfeeding women. As explained in **Exhibit 9**, women who are using LAM can begin a new method at any time—there is no need for additional evidence that she is not pregnant.

**Exhibit 8. Initiation of Postpartum Contraception**

\(^{15}\) For example, in order to use the Standard Days Method of contraception, a postpartum or breastfeeding woman must have completed three menstrual cycles (i.e., had four consecutive periods), and their most recent cycle must have been between 26 and 32 days long.
See *Family Planning: A Global Handbook for Providers* for extensive practical information on all modern methods of contraception. This valuable resource is available online at: www.infoforhealth.org/globalhandbook

**Exhibit 9. Ruling Out Pregnancy**

While some family planning providers enforce menstrual bleeding requirements (i.e., require that the woman be currently menstruating) in order to start methods such as pills or the IUD, the woman who is using LAM can begin a new method at any time; she does not need to have a pregnancy test or menstrual bleeding to initiate another method. A provider can be reasonably sure that a woman is not pregnant if she has been using contraception. And because LAM is contraception, the provider can be confident in starting the LAM user on another modern contraceptive method, such as pills, an IUD or any other method, even though her menses have not yet returned.

**Supporting Effective Breastfeeding**

Because exclusive breastfeeding is essential to LAM, the provider should ensure effective breastfeeding practices and manage any breastfeeding difficulties that arise. Breastfeeding support is important for all women who plan to breastfeed (especially new mothers), not only those who are using LAM.

The following guidelines for optimal breastfeeding help to ensure that breastfeeding is successfully instituted and continued. First, the newborn should be allowed to breastfeed as soon as possible after birth, and to remain with the mother after birth. The mother who chooses to breastfeed should then be advised as follows:

- Breastfeed only/exclusively for the first six months, giving no food, water or other liquids to the baby. (Breast milk gives your baby everything s/he needs to be healthy.)
- Breastfeed frequently “on demand,” whenever the baby is hungry, for as long as s/he wants, both day and night.
- Continue breastfeeding even if you or your baby becomes ill.
- Do not use bottles, pacifiers or other artificial nipples. These discourage your baby from breastfeeding as frequently.
- Offer the second breast after the baby releases the first.
- After the first six months, when complementary foods are introduced, breastfeed each time before the baby eats during the first year.
- Continue to offer complementary breastfeeds up to two years of age.
- Eat and drink more than usual.

(More information on Additional Breastfeeding Support is presented in **Appendix E**.)

---

*WHO/RHR and JHU/CCP, INFO Project 2007.*
**Following-Up LAM Users**

As with any contraceptive method, follow-up helps the client to continue to use the method successfully. In the case of LAM, follow-up also helps to facilitate transition to another modern method. Here are some guidelines to ensure effective follow-up.

- A follow-up visit before six months postpartum is necessary to determine the woman’s plans for transitioning to another modern method. In addition:
  - The woman should know that she can contact the health care provider at any time if she has a question or concern.
  - She should also know to contact the health care provider immediately if any one of the three LAM criteria is no longer met, OR if she has a breastfeeding difficulty. (More information on Additional Breastfeeding Support is presented in Appendix E.)
  - The woman should understand that she can transition to another modern method at any time, even if all three criteria are still being met.

Effective follow-up is tailored to the unique needs and concerns of each client. Many returning clients will have little need for counseling. Clients who are having difficulties or who have not yet decided to which method they will transition will require more time and attention. What is most important is that every client is given the counseling and support she needs to continue correct use of LAM, start another modern method as needed/desired, and achieve her reproductive goals and fertility intentions.

**LAM SERVICES**

**Opportunities to Introduce and Offer LAM Counseling/Services**

All pregnant or postpartum women should be informed about LAM and offered the opportunity to use it as a highly effective, temporary method of contraception. Opportunities to inform women about LAM and counsel them on its use include:

- Antenatal clinic
- Immediate postpartum ward (or home visit)
- All services related to children under six months, including well-baby, nutrition and immunization visits
- Postpartum clinic
- Family planning clinic
- Labor ward (during early labor or after birth)
- Community health visits
The immediate postpartum visit is especially important to the successful implementation of LAM. This may occur at home or in a clinic, hospital or other health care setting. Likewise, a later postpartum visit at the time of transition (i.e., when a woman no longer meets all three LAM criteria or wants to begin using another method) is essential to facilitate the successful transition to another modern method of contraception.

**Attitudes of Health Care Providers about LAM**

Experience in numerous countries has shown that many health care workers—including doctors, nurses, midwives and others—do not consider LAM to be an effective means of contraception. This attitude may result from the common misconception that LAM is breastfeeding alone. For example, a woman may believe that she is practicing LAM simply by breastfeeding her baby, but unless her situation fulfills all three LAM criteria, she is not truly practicing LAM and may therefore become pregnant. As a result, the woman who is breastfeeding but not fulfilling the three LAM criteria could—if she becomes pregnant—mistakenly consider “LAM” to be ineffective.

Many health care workers believe that the use of LAM discourages the use of other modern methods of contraception after six months postpartum. On the contrary, a study in Jordan found that women who were intentionally using LAM (i.e., practicing LAM with an awareness of and in accordance with the three LAM criteria) were more likely to be using modern contraceptives at 12 months postpartum than women who did not know the three LAM criteria, were using traditional methods or were using no methods at all during the first six months postpartum.  

The LAM advocate must address such concerns among the policymakers and health care providers with whom they work.

**LAM AND HIV**

Mothers who are HIV-positive for whom replacement feeding (feeding with a breast milk substitute) is Acceptable, Feasible, Affordable, Sustainable and Safe (collectively known as the AFASS criteria, Exhibit 10) should avoid breastfeeding their infants. However, all women for whom replacement feeding is not a viable option (i.e., does not meet AFASS criteria) or whose infants are HIV-positive are encouraged to only/exclusively breastfeed their infants for six months.  

Therefore:

- **All mothers are eligible for LAM use**, provided they meet the three LAM criteria.
- **A woman should be supported** in her infant feeding decision and contraceptive choice.
- **The choice is hers.**

---

18 If AFASS criteria are still not met at six months, continuation of breastfeeding while introducing complementary foods is recommended, along with regular assessment of both the HIV-positive mother and her baby. Breastfeeding should stop when a diet that is nutritionally adequate without breast milk and safe can be provided. Source: WHO 2006b.
Breastfeeding has numerous nutritional benefits for the baby. But while the risk of mother-to-child transmission of HIV (MTCT) is significantly reduced by only/exclusively breastfeeding, it can be totally eliminated only by not breastfeeding. These issues should be discussed with the mother during counseling, as she considers the AFASS criteria and her individual circumstances and decides what is best for her and her baby.

**Exhibit 10. AFASS Criteria for Replacement Feeding**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable:</td>
<td>Is replacement feeding acceptable to the mother and in the community?</td>
</tr>
<tr>
<td>Feasible:</td>
<td>Does the family have adequate time, knowledge, skills and other resources to prepare the replacement feed and feed the infant?</td>
</tr>
<tr>
<td>Affordable:</td>
<td>Can the family pay for the costs of purchase and preparation of the replacement feed, including equipment, ingredients, fuel and clean water?</td>
</tr>
<tr>
<td>Safe:</td>
<td>Can replacement feeds be correctly and hygienically prepared and stored?</td>
</tr>
<tr>
<td>Sustainable:</td>
<td>Will the supply of all ingredients be continuous, uninterrupted and in sufficient quantities, and will the baby receive replacement feeding only day and night?</td>
</tr>
</tbody>
</table>

**LAM and Breastfeeding in the HIV-Positive Mother**

The woman whose HIV status is unknown and chooses to breastfeed (or use LAM):

- Should only/exclusively breastfeed her baby for six months, before introducing complementary food or fluids.
- Can use LAM if the criteria are met.

The woman who is HIV-positive and chooses to breastfeed (or use LAM):

- Should only/exclusively breastfeed her baby for six months, before introducing complementary food or fluids. **Important:** The mother infected with HIV should understand that mixed feeding (alternating breastfeeding with anything else, including a breast milk substitute) carries a higher risk of mother-to-child transmission of HIV (MTCT) than does either breastfeeding only or replacement feeding only.
- Can use LAM if the criteria are met.
- Should also:
  - Be on antiretroviral (ARV) therapy if eligible. The breastfeeding HIV-infected mother who is being successfully treated with ARVs has much less risk of MTCT than the breastfeeding HIV-infected mother who is clinically eligible for treatment with ARVs, but is not being treated.

---

19 Adapted from: WHO 2007.
Feed only from the unaffected breast if experiencing problems such as mastitis, cracked nipples or breast abscess (and express and discard milk from the affected breast).

Seek immediate care for a baby with thrush or other lesions in the mouth.

In addition, all women who are HIV-positive should be receiving care for themselves and using condoms consistently.

**HIV Counseling and Testing**

Provider-initiated testing and counseling (PITC) for HIV is recommended for all potential family planning or LAM clients. In PITC:

- The provider recommends HIV testing to all clients, being respectful of the client’s rights:
  - For confidentiality
  - For counseling
  - To give consent—The client has the option to “opt in” (i.e., choose to be tested for HIV) or “opt out” (i.e., choose not to be tested for HIV)

- HIV testing is voluntary. The client may not be ready to be tested today and may opt out. It is the client’s choice. “Provider-initiated” means that testing is only recommended by the provider, not mandated.

- HIV testing is linked to appropriate HIV prevention, treatment, care and support services.

- Pre-test information and post-test counseling remain integral parts of the HIV testing process.

**Considering Benefits and Risks**

In considering the benefits and risks of breastfeeding for HIV-positive women and their infants, emphasis should be placed on HIV-free survival of the infant into childhood—rather than on avoidance of HIV alone. According to a review of relevant studies, HIV-free survival of infants of HIV-positive mothers who breastfed only/exclusively was greater at 18 months than that of those who did not breastfeed only/exclusively. Other highlights from this review include the following:

- A study in Durban, South Africa, found that infants who were breastfed by HIV-infected mothers for up to three to six months of age were no more likely to have HIV infection at six months compared to infants who were not breastfed. However, infants who received other food or fluids in addition to breast milk (i.e., were not only/breastfed) had increased risk of transmission.

- Cessation of breastfeeding before six months of age was associated with an increased risk of infant morbidity (especially diarrhea) and mortality in HIV-exposed children in completed (Malawi) and ongoing studies (Kenya, Uganda, Zambia).

---

In preliminary data from Zambia, breastfeeding cessation before four months of age was associated with reduced HIV transmission, but it was also associated with increased child mortality from four to 24 months.

LAM Frequently Asked Questions (FAQs) are included in Appendix F. This covers many of the questions that providers and clients may have about LAM, how it works and how to use it effectively. It may be helpful to trainers/facilitators, participants and providers in learning about and providing LAM services.
APPENDIX A: HEALTHY TIMING AND SPACING OF PREGNANCY

Healthy timing and spacing of pregnancy (HTSP) is a term applied to a set of messages concerning the optimal time intervals for delaying and spacing pregnancy to achieve the best health outcomes for mothers and their children. According to recent recommendations by an expert committee to the World Health Organization, couples should not begin trying to get pregnant again until:

- At least 24 months after a birth, or
- At least six months after a miscarriage or abortion.\(^{21}\)

The Importance of HTSP

Benefits of waiting at least two years after delivery to become pregnant again include:

- Reduction in numbers of maternal deaths (maternal mortality)\(^{22}\)
- Dramatic reduction in neonatal, infant and under-five/child mortality\(^{23}\) (Exhibit A1)
- Less stunting of children under five years of age
- Improvement in nutritional status of children
- Economic benefits for the woman and her family

Exhibit A1: Birth Spacing Saves Children’s Lives\(^{24}\)

Pregnancy intervals of less than six months (i.e., 15-month birth intervals) are associated with a 150% increased risk of maternal death. These intervals are also associated with increased morbidity during the next pregnancy, including: 70% elevated risk of third-trimester bleeding,

---

\(^{21}\) Source: WHO 2006c.

\(^{22}\) Postpartum contraception reduces the numbers of women who become pregnant and are therefore at risk of dying from pregnancy-related complications.

\(^{23}\) Fewer newborns, infants and children die if they have been conceived at least two years after their sibling was born. Source: WHO 2006b.

\(^{24}\) Source: Rutstein 2003.
70% increase of premature rupture of membranes, 30% increase of anemia and 30% increased risk of postpartum endometritis in the next pregnancy.  

**HTSP and the Postpartum Woman**

To achieve HTSP outcomes, women should receive counseling about their reproductive health goals and fertility attentions, be presented with a range of family planning options and be assisted in choosing a method that is best for them—all within the context of free and informed choice.

The postpartum period represents an important opportunity to bring family planning to women. Studies have shown that women want such information and services during this time, and that there is an “unmet need” for contraception among postpartum women. Almost 65% of women want to wait two years after delivery to become pregnant but are not using any method of contraception.

The postpartum period is also a critical time given that a woman’s fertility can return unexpectedly, sometimes before menstrual bleeding has resumed. Thus, postpartum women are vulnerable to unintended pregnancy. In one study:

- Two thirds of women ovulated before their first vaginal bleeding, although 47% of these cycles were characterized by decreased pregnadieol—a hormone necessary to support a viable pregnancy—after ovulation (in the luteal phase).
- Breastfeeding frequency and suckling duration were significant predictors of the risk of ovulation, while supplementation with bottle feeding was associated with a reduction in breastfeeding.
- All non-breastfeeding mothers menstruated within the first 12 weeks postpartum, compared with just 20% of breastfeeding mothers. On average, first ovulation occurred 45 days after delivery among non-breastfeeding mothers compared to 189 days after delivery among breastfeeding mothers.

---

26 More than 100 million women in less-developed countries would prefer to avoid pregnancy, but are not using any form of contraception. These women are considered to have an "unmet need" for family planning. Source: Ross and Winfrey 2002.
27 Source: Campbell and Gray 1993.
APPENDIX B: LAM COUNSELING GUIDE FOR FAMILY PLANNING SERVICE PROVIDERS (JOB AID)

Explain Who Can Use LAM

You can use LAM if you meet ALL 3 of these criteria:

1. Your menstrual bleeding has not returned since your baby was born.
   Why? When you begin menstrual bleeding you are fertile again. You can get pregnant even if you continue to breastfeed.

2. You breastfeed your baby day and night and do not give any other food, water or liquids.
   Why? When your baby receives any food, water or other liquids besides breast milk, your baby will not nurse as often. This will cause you to be fertile again. You can get pregnant.

3. Your baby is less than 6 months old.
   Why? When your baby turns 6 months old you may be fertile again. You can get pregnant, even if you continue to breastfeed.

Explain How to Use LAM

Breastfeed Regularly
- Breastfeed as often as your baby wants, day and night.
- Continue to breastfeed even when you or your baby is sick.

Breastfeed Only
- Do not give your baby any foods, water, or other liquids before 6 months of age.
- Medicines, vitamins and vaccines are okay.
- Breastfeeding provides your baby with everything she/he needs to be healthy for the first 6 months.
- Do not use bottles, pacifiers or other artificial nipples. These discourage your baby from breastfeeding as frequently.

Begin Thinking About Another Method Now
- When your menstrual bleeding returns, start using another method.
- If your baby receives other food or liquids besides breast milk, start using another method.
- When your baby reaches 6 months old, start using another method.

Breastfeeding alone is not enough to protect you from pregnancy. All 3 criteria must be met.

Encourage the woman to start thinking about other methods now, to be ready when LAM no longer works for her.

Review other methods.

About this tool: This job aid provides a convenient reminder to the provider when counseling a LAM client. Following this job aide will help ensure that all important points have been included in the counseling. See the Resources section of the CD-ROM for an individual, print-ready version of this document.
Explain Who Can NOT Use LAM

These women are fertile again and need to start using another family planning method immediately:

- A mother who has begun her menstrual bleeding cannot use LAM. Bleeding after the baby is 2 months old is considered menstrual bleeding.
- A mother whose baby receives other foods or liquids cannot use LAM. Even if the baby is still breastfeeding.
- A mother whose baby is 6 months or older cannot use LAM.

NONE of these women can use LAM.

Counsel the Woman Who Cannot or Chooses Not to Use LAM

1. Encourage her to start using another method now.
2. Help her choose another method.
3. Encourage her to continue breastfeeding her baby.
4. Encourage her to wait until her baby is at least two years old before getting pregnant again.

Other Family Planning Methods for Breastfeeding Women

Methods women can use any time:
- Condoms
- Vasectomy

Methods women can start using 6 weeks after giving birth:
- Progestin-only pills, injectable, implants
- IUD*
- Tubal ligation**

Methods women can use 6 months after giving birth:
- Combined pills (with estrogen)
- Combined injections (with estrogen)
- Natural methods (if specific criteria are met)

*An IUD can be inserted up to 48 hours after giving birth or after 6 weeks postpartum.
**Tubal ligation can be performed up to 7 days after giving birth or after 6 weeks postpartum.

Encourage the woman to wait at least 2 years before getting pregnant again. Waiting 2 years is best for the health of the baby and the woman.
LAM can help you prevent pregnancy if you are breastfeeding and meet ALL these criteria.

1. No menstrual bleeding since your baby was born

2. You only breastfeed your baby (no other food or liquid is given)

3. Baby is less than 6 months old

Do YOU meet all 3 of these criteria? If yes, you can use LAM to prevent pregnancy.

When you no longer meet ALL these criteria, begin using another family planning method immediately.

---

About this tool: Use this client education card when counseling clients. While showing the client the card, or letting the client hold the card, point to each counseling point as you discuss it. The card can then be given to the client to take home as a reminder and to share with her partner or others. See the Resources section of the CD-ROM for an individual, print-ready version of this document.
While You Are Using LAM:

- Breastfeed as often as your baby wants, day and night.
- Do not give any foods or other liquids (not even water). Breast milk is all your baby needs to grow and be healthy for the first 6 months.
- Continue to breastfeed even when you or your baby is sick.
- Begin thinking about a new method while still using LAM.

Be ready to switch to a new method immediately, when you no longer meet ANY of the 3 LAM criteria.

The best methods for breastfeeding women are condoms, IUD, tubal ligation, vasectomy, and some pills and injections.

A health care provider can help you choose the best method for you.

When you start using another method, continue to breastfeed. Breast milk is the best food for your baby!

Wait 2 years after your baby is born before getting pregnant again. It is good for the health of your baby and you.
**APPENDIX D: LAM COUNSELING CHECKLIST FOR FAMILY PLANNING SERVICE PROVIDERS**

**Note:** In reality, LAM counseling will not occur in isolation but will be integrated with family planning, antenatal, postpartum or child health services.

- **Items 1 through 15** of this checklist relate to the broader context in which LAM counseling might be initiated, as part of these other services.
- **Items 16 through 25** relate specifically to LAM—guiding the interaction that would occur between a couple/woman interested in using LAM and a family planning service provider.

**INSTRUCTIONS:** Place a “✓” in the box beside each step/task that is accomplished. Place a “NA” in the box for each step/task that is not applicable/relevant to the specific client encounter. Leave box blank if task/step was appropriate but not completed.

<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Collects the necessary job aids, client education materials and client record.</td>
<td></td>
</tr>
<tr>
<td>2. Greets the woman respectfully and with kindness. Introduces her/himself.</td>
<td></td>
</tr>
<tr>
<td>3. Asks the client what services she is seeking.</td>
<td></td>
</tr>
<tr>
<td>4. Listens to the woman attentively, and responds to her questions and concerns.</td>
<td></td>
</tr>
<tr>
<td>5. Assures confidentiality and maintains privacy.</td>
<td></td>
</tr>
<tr>
<td>6. Respects the client’s right to make an informed decision</td>
<td></td>
</tr>
<tr>
<td>7. Asks the woman if and when she plans to have another baby.</td>
<td></td>
</tr>
<tr>
<td>8. Asks about previous contraceptive use. (What was her experience?)</td>
<td></td>
</tr>
<tr>
<td>9. Discusses return to fertility – If not breastfeeding, first ovulation occurs on average 45 days postpartum. In breastfeeding women not using LAM, two-thirds ovulate before their first menses.</td>
<td></td>
</tr>
<tr>
<td>10. Discusses benefits of waiting at least two years after birth to try to become pregnant again.</td>
<td></td>
</tr>
<tr>
<td>11. Asks woman if she is breastfeeding. If she is not, discusses contraceptive options other than LAM.</td>
<td></td>
</tr>
<tr>
<td>• Discusses advantages and limitations of each available method</td>
<td></td>
</tr>
<tr>
<td>• Helps client decide which option is best for her</td>
<td></td>
</tr>
<tr>
<td>12. Provides, or refers for, contraceptive method, along with instructions on how to use and management of possible side effects.</td>
<td></td>
</tr>
<tr>
<td>13. If woman is breastfeeding but does not choose to use LAM, advises the woman:</td>
<td></td>
</tr>
<tr>
<td>• That breastfeeding alone (without the three LAM criteria) will not protect her from pregnancy</td>
<td></td>
</tr>
<tr>
<td>• Regarding methods that are compatible with breastfeeding and the woman’s medical history</td>
<td></td>
</tr>
<tr>
<td>• That breast milk gives her baby all the nutrition s/he needs for the first six months</td>
<td></td>
</tr>
</tbody>
</table>

---

**About this tool:** This tool can be used by the learner for self-assessment, by colleagues for peer assessment and/or by the trainer or supervisor for comprehensive skills assessment. See the Resources section of the CD-ROM for an individual, print-ready version of this document.
<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Counsels client concerning STI/HIV history, sexual behavior and reduction of risks. (Note: If the woman’s HIV status is unknown or she is HIV-positive, counsel as appropriate.)</td>
<td></td>
</tr>
<tr>
<td>15. Ensures that woman/couple knows when and where to return if complications or other problems develop.</td>
<td></td>
</tr>
<tr>
<td>16. If woman is breastfeeding and is interested in using LAM, provides the following counseling. (Note: Use the LAM Job Aid [Appendix B] to assist in providing counseling.)</td>
<td></td>
</tr>
<tr>
<td>17 Encourages the client to follow along with the LAM Client Education Card (Appendix C) provided.</td>
<td></td>
</tr>
<tr>
<td>18. Determines whether the woman meets all three LAM criteria:</td>
<td></td>
</tr>
<tr>
<td>• Her menstrual bleeding has not returned since her baby was born; and</td>
<td></td>
</tr>
<tr>
<td>• She breastfeeds only (i.e., breastfeeds her baby day and night and does not give any other food, water or liquids); and</td>
<td></td>
</tr>
<tr>
<td>• Her baby is less than six months old</td>
<td></td>
</tr>
<tr>
<td>19. Explains that if she breastfeeds only/exclusively and her menses have not returned, she is practicing contraception that is more than 98% effective until the baby turns six months old.</td>
<td></td>
</tr>
<tr>
<td>20a. Gives the client advice on how to maintain only/exclusive breastfeeding:</td>
<td></td>
</tr>
<tr>
<td>• Breastfeed as often as your baby wants, day and night</td>
<td></td>
</tr>
<tr>
<td>• Continue to breastfeed even when you or your baby is sick</td>
<td></td>
</tr>
<tr>
<td>• Do not give your baby any foods, water or other liquids before six months of age</td>
<td></td>
</tr>
<tr>
<td>• Do not use bottles, pacifiers or other artificial nipples, which discourage your baby from breastfeeding as frequently</td>
<td></td>
</tr>
<tr>
<td>20b. Reassures her that breast milk gives her baby everything s/he needs to be healthy.</td>
<td></td>
</tr>
<tr>
<td>21. Discusses the importance of transitioning to another method immediately if any of the three LAM criteria is not met or if she no longer wants to use LAM.</td>
<td></td>
</tr>
<tr>
<td>22. Discusses the method of family planning she would like to use when no longer using LAM (the method to which she will transition).</td>
<td></td>
</tr>
<tr>
<td>23. Discusses the importance of continuing to breastfeed after the LAM criteria are no longer met, when she is using another method of contraception. Includes discussion of appropriate methods for the breastfeeding mother.</td>
<td></td>
</tr>
<tr>
<td>24. Ensures that the woman knows to where to go if she has a question/concern or problem or if any danger signs arise.</td>
<td></td>
</tr>
<tr>
<td>25. Advises the woman to return to the provider/clinic immediately to start on another family planning method when any one of the three LAM criteria is no longer met, or if she has breastfeeding difficulties. Have the woman take the LAM Client Education Card (Appendix C) and any other educational material with her.</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E: ADDITIONAL BREASTFEEDING SUPPORT

Effective Breastfeeding Positions

Breastfeeding positions that are comfortable for mother and baby (Exhibit E1) ensure effective breastfeeding and support LAM.

Exhibit E1: Four Effective Breastfeeding Positions

Side-Lying

Cradle Hold

“Football” Clutch

Cross-Cradle Hold
Effective Attachment of Infant to Breast

The mother should receive counseling and support to achieve effective attachment of her infant to the breast. Guidelines to ensure effective attachment include:

- Ensure that the areola, not just nipple, is in the baby’s mouth.
- More areola should be seen above the baby’s mouth than below.
- The baby should compress the areola against the roof of the mouth with his/her tongue, not just by sucking.
- The baby’s mouth should be wide open when attaching to the breast.
- The baby’s chin should touch the breast.
- There should be alignment of the baby’s ear, shoulder and hip (when in the cradle hold).
- The baby’s lips should be everted (look like fish lips) when attached to the breast.

Managing Common Breastfeeding Difficulties

To ensure continued effective breastfeeding, which is essential for LAM, the provider should assess for and manage any difficulties that may arise, or refer the woman to a maternal and child health worker as appropriate. Guidelines for treating some common difficulties are presented in Exhibits E2 to E4.

Exhibit E2: Managing Sore or Cracked Nipples

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess</td>
<td>for more serious problems/danger signs (e.g., breasts are red, warm or extremely painful or woman develops fever or chills).</td>
</tr>
<tr>
<td>Provide reassurance and advise</td>
<td>the woman as follows:</td>
</tr>
<tr>
<td>- Do not stop breastfeeding.</td>
<td>The baby can suck from a nipple that is bleeding unless the mother is HIV-positive. (If the mother is HIV-positive, the baby can suck from the unaffected nipple, while the mother expresses and discards milk from the effected breast.)</td>
</tr>
<tr>
<td>- Be sure that the baby is properly attached when feeding and that his/her mouth encircles the whole areola.</td>
<td></td>
</tr>
<tr>
<td>- Start feeding on the side that is less sore.</td>
<td>If cracking is severe on only one nipple, breastfeed using only the other breast for 1–2 days. Express milk regularly from the affected breast.</td>
</tr>
<tr>
<td>- When removing the baby from the breast, break the suction gently by gently:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Pulling down on the baby’s chin or corner of the mouth, OR</td>
</tr>
<tr>
<td></td>
<td>- Placing one finger inside the corner of the baby’s mouth.</td>
</tr>
<tr>
<td></td>
<td>Rub breast milk on the nipple and areola after each feed and allow to air-dry.</td>
</tr>
<tr>
<td></td>
<td>Wash breasts only once per day, and do not use soaps or alcohol.</td>
</tr>
<tr>
<td></td>
<td>Wear a bra that is well-fitting and supportive, but not tight.</td>
</tr>
<tr>
<td></td>
<td>If still no relief, take 500 mg paracetamol (acetaminophen) 30 minutes before breastfeeding.</td>
</tr>
<tr>
<td></td>
<td>Return for care if the pain or discomfort persists or worsens or danger signs arise.</td>
</tr>
</tbody>
</table>

31 Adapted from: Beck et al. 2004.
Exhibit E3: Managing Engorgement/Blocked Ducts

**Assess** for more serious problems/danger signs (e.g., breasts are red, warm or extremely painful or woman develops fever or chills).

**Explain** to the woman that breast engorgement is normal when the milk starts to come in, around 2–3 days after birth, and that it will gradually decrease.

**Provide reassurance and advise** the woman as follows:
- Use the following methods to help empty the breasts:
  - Use warm compresses 5–10 minutes before feeding and gently massage the breast to allow milk to empty more easily.
  - Express a small amount of milk before feeding to soften the breast and make it easier for the baby to attach.
  - Feed the baby as frequently as every two hours.
  - At each feed, empty the first breast completely before offering the other breast.
  - Let the baby suckle as long as s/he wants at each breast.
  - Change positions each time the baby nurses so that all ducts will be emptied.
- Apply cool compresses to breasts between feeds to relieve pain.
- Wear a bra that is well-fitting and supportive, but not tight.
- **If still no relief,** take 500 mg paracetamol (acetaminophen) 30 minutes before breastfeeding.
- **Do not stop breastfeeding.**
- **Return for care** if the pain or discomfort persists or worsens or danger signs arise.

Exhibit E4: Managing Maternal Concerns about Insufficient Milk Supply

**Note:** Usually the milk supply is sufficient, despite the mother’s concerns.

**Explain** that almost all women produce enough milk for one or two babies. If the baby is not getting enough milk, it is usually because she/he is not suckling enough, not because the mother is not producing enough milk.

**Provide reassurance and advise** the woman that:
- Colostrum is sufficient for the first three days.
- If the baby is urinating six or more times/day, s/he is getting enough breast milk.
- If the baby is urinating fewer than six times/day, drink more, get more rest/sleep, and encourage more frequent suckling.
- Facilitate let-down reflex by ensuring a relaxing environment when feeding.
- **Do not stop breastfeeding.**
- **Return for care** if problem persists or worsens or danger signs arise.
APPENDIX F: LAM FREQUENTLY ASKED QUESTIONS (FAQS)32

Q-1. What is the Lactational Amenorrhea Method (LAM) of family planning?
LAM is a modern method of contraception that is based on the natural postpartum infertility
that occurs when a woman has not yet resumed menstrual bleeding (is amenorrheic) and is
only/exclusively breastfeeding her baby (i.e., breastfeeding the baby day and night, not giving
any other food, water or liquids except for medicine, vitamins or vaccines). It may be effective up
to six months after the birth of the baby.

Q-2: How does LAM work (mechanism of action)?
The infant’s suckling triggers a signal to the mother’s brain that interferes with the production of
the hormones needed for ovulation. Ovulation is necessary for pregnancy to occur.

Q-3: What are the criteria that must be met to use LAM?
The three criteria for LAM effectiveness are:

- The woman’s menstrual bleeding33 has not returned since her baby was born; and
- The baby is “only/exclusively breastfed,” meaning the woman breastfeeds her baby day and
  night and does not give any other food, water or liquids (except for medicine, vitamins or
  vaccines); and
- The baby is less than six months old.

Q-4: How do you determine whether postpartum vaginal bleeding is menstrual bleeding?
For the purpose of determining whether the first LAM criterion is met (i.e., the mother’s
menstrual bleeding has not returned), consider any bleeding after two months postpartum to be
menses/menstrual bleeding. Bleeding that occurs before two months postpartum may be
considered normal postpartum discharge.

Q-5: How effective is LAM as a method of contraception (to prevent pregnancy)?
LAM is a very effective method of contraception. As commonly used, it is more than 98%
effective for the first six months postpartum. Compare LAM to other modern methods in the
Exhibit F1 below.

32 These FAQs cover many of the questions that providers and clients may have about LAM, how it works and
how to use it effectively. It may be helpful to trainers/facilitators, participants and providers in learning about
and providing LAM services. See the Resources section of the CD-ROM for an individual, print-ready version
of this document.
33 Bleeding in the first two months postpartum is not considered menstrual bleeding.
### Exhibit F1: Pregnancies per 100 Women during First Year of Using Different Family Planning Methods

<table>
<thead>
<tr>
<th>Contraceptive</th>
<th>As Commonly Used</th>
<th>Correct Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper IUD</td>
<td>&lt;1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Progestin-Only Injectables</td>
<td>3</td>
<td>.05</td>
</tr>
<tr>
<td>LAM</td>
<td>2 (6 months)</td>
<td>&lt;1 (6 months)</td>
</tr>
<tr>
<td>Oral Contraceptives</td>
<td>8</td>
<td>0.3</td>
</tr>
<tr>
<td>Progestin-Only Pills (if breastfeeding)</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Progestin-Only Pills (if not breastfeeding)</td>
<td>3–10</td>
<td>0.9</td>
</tr>
<tr>
<td>Male Condom</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Standard Days Method</td>
<td>12</td>
<td>5</td>
</tr>
</tbody>
</table>

Q-6: How does LAM serve effectively as a “gateway” to the use of other modern methods of contraception?

LAM provides the couple time to decide on another modern method to use after LAM. LAM counseling should include information about other methods, as well as reinforce the need for a timely transition to another method after LAM can no longer be used or the couple has chosen to stop using it.

Q-7: How can a provider assist the woman in “transitioning” from LAM to another method when needed?

The provider can assist the woman in several ways:

- Begin discussion of transition when LAM counseling is initiated.
- Assist the woman in deciding on a method to which she should transition.
- Incorporate the issue of “transitioning” and available contraceptive methods into each LAM counseling session.
- Counsel the woman that if she does not want to become pregnant, another method should be started immediately as soon as any one of the three LAM criteria is not met, or she decides she no longer wants to use LAM.
- Ensure that contraceptive services are readily accessible to the woman when she needs them.

Q-8: What are some key advantages of using LAM?

Key advantages of using LAM include the following:

- Prevents pregnancy effectively for the first six months postpartum
- Is provided and controlled by the woman
- Can be used immediately after childbirth
- Is universally available to postpartum women
- Requires no supplies or procedures

---

- Is economical
- Is often acceptable to women who have never used contraception previously
- Has no hormonal or other major side effects (for mother or infant)
- Raises no religious objections
- Facilitates transition to other modern methods by allowing time for:
  - The provider to give family planning information and support to the couple; and
  - The couple to decide to use/adopt another modern contraceptive method
- Facilitates modern contraceptive use by previous non-users
- Supports and builds on infant feeding recommendations for only/exclusively breastfeeding for six months
- Provides health benefits for mother
- Provides health benefits for baby

**Q-9: What methods of contraception can a breastfeeding mother safely transition to from LAM?**
Contraceptive methods to which a breastfeeding mother can safely transition are:
- Condom
- IUD—within first 48 hours or after four weeks postpartum
- Progestin-only methods (pills, implants, injections) – after the first six weeks postpartum
- Tubal ligation – within first seven days or after six weeks postpartum
- Vasectomy (for her partner)
- Natural methods (if criteria are met)
- Combined oral contraceptives – after the first six months postpartum

**Q-10: What are some best practices for breastfeeding?**
Best practices for breastfeeding include the following:
- Allow newborn to breastfeed as soon as possible after birth, and to remain with the mother after birth.
- Breastfeed only/exclusively for the first six months. During this time, do not give any foods, water or other liquids. Medicines, vitamins and vaccines can be given.
- Breastfeed as often as the baby wants “on demand,” day and night.
- Continue breastfeeding even if the mother or infant becomes ill.
- Do not use bottles, pacifiers, “dummies” or other artificial nipples. These discourage the baby from breastfeeding as frequently.
- After the first six months, when complementary foods are introduced, breastfeed each time before the baby eats during the first year.
- Continue to offer complementary breastfeeds until the baby is two years of age.

**Q-11: Can a woman who is HIV-positive use LAM?**

- Women who are HIV-positive and who choose to breastfeed can use LAM if they meet the three LAM eligibility criteria.
- All HIV-positive women should be counseled about the risks and benefits of breastfeeding (and LAM), as well as about other feeding options if a breast milk substitute meets AFASS criteria. If AFASS criteria are met, the HIV-positive woman should avoid breastfeeding. If AFASS criteria are not met, the woman should be counseled to breastfeed only/exclusively for six months; after that she should continue to breastfeed (in addition to complementary food/fluids), until AFASS criteria are met.
- All HIV-positive women should be supported in their infant-feeding decision and contraceptive choice.

**Q-12: Can a woman who is separated from her baby use LAM?**

The effectiveness of LAM depends on breastfeeding only/exclusively. This means as often as the baby is hungry “on demand,” day and night, with no long intervals between feeds. Even if a woman expresses breast milk, if she is separated from her baby by more than a few hours, she cannot expect a high level of contraceptive protection. In one study on LAM for working mothers, the pregnancy rate increased by five percent. Women who are able to keep their baby with them at the worksite or can have their baby brought to them at least once every four hours can rely on LAM.

---

35 AFASS criteria are met when a breast milk substitute is Acceptable, Feasible, Affordable, Sustainable and Safe. This issue is discussed in greater detail on page 14 (Exhibit 10).


