

Prevention of Mother-to-Child Transmission Toolkit

An estimated 3.2 million children under 15 years of age worldwide are living with HIV. Ninety percent of these children become infected with HIV by mother-to-child transmission (MTCT). Without intervention, the risk of MTCT among infants born to women who are HIV positive ranges from 15% to 45%. Effective interventions can bring this rate to below 5%.

Despite tremendous achievements over the past decade in the reduction of maternal to child transmission of HIV, persistent unmet need exists for preventing MTCT. In low- and middle-income countries especially, too few women are receiving HIV prevention and treatment services to protect themselves or their children. The global community has committed itself to accelerate progress and scale up prevention of MTCT efforts with the goal of improving maternal, newborn, and child survival and health in the context of HIV.

The global strategic response for preventing MTCT involves a four-pronged strategy:

- Prevent primary HIV infection among girls and women.
- Prevent unintended pregnancies among women living with HIV.
- Reduce MTCT of HIV through ART or ARV prophylaxis, safer obstetrical practices, and safe infant feeding.
- Provide care, treatment, and support to women living with HIV and their families.

This Toolkit for health policy makers, program managers, and service providers presents links to guidelines and tools to help plan, manage, evaluate, and support programs working towards preventing and eliminating MTCT. Links to resources on these topics can be found under the main navigation to the right.

If you have an experience to share about the introduction or provision of services to eliminate MTCT, we invite you to tell us about it through the [feedback form](#), where you can also suggest new resources. To find out if a resource has already been included in this toolkit, click on the [Site Map](#) link at the top of this page or type the resource title in the search box. For more detailed information about this and other K4Health Toolkits go to the [About](#) link at the top of this page.

Learn more about Prevention of Mother-To-Child Transmission. Take the [Global Health eLearning Course](#) (registration required).

What are K4Health Toolkits?

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Who developed this Toolkit?

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What are K4Health Toolkits?

K4Health Toolkits are electronic collections of carefully selected information resources on a particular topic for health policy makers, program managers, and service providers. They are based on a continuous publishing principle that allows them to evolve after publication to capture additional resources and to identify and fill remaining information gaps.

What is the purpose of the PMTCT Toolkit?

This toolkit contains resources selected by the staff of FHI to help policy makers, program managers, service providers, and other audiences improve programs to assist in the prevention of mother-to-child transmission (PMTCT), to help prevent the spread of HIV infection.

What types of resources are included in this Toolkit?

This toolkit provides a one-stop source for reliable, relevant, and usable information about the prevention of mother-to-child transmission. The resources were selected with health policy makers, program managers, and service providers in mind. For example, the toolkit contains:

- Up-to-date background and reference materials to design evidence-based, state-of-the-art programs
- Job aids and other tools to increase the effectiveness and quality of program activities and services
- PowerPoint presentations and other quality information resources that can be downloaded and adapted to better serve local circumstances and languages
- Various publication formats: books, manuals, briefs, case studies, fact sheets, newsletters, pamphlets, posters, project reports, reviews, teaching and training materials, photographs, and other tools

Who should use this Toolkit?

- **Policy makers** will find research and information to help set national guidelines for programs on the prevention of mother-to-child transmission.
- **Program managers** will find information and job aids to help them conduct qualitative assessments and gather epidemiological data to support the design of effective PMTCT

activities.

- **Health care providers** will find information and job aids to help them counsel clients effectively about PMTCT.
- **Communication professionals** can use the toolkit's resources to explore strategies, media, and messages about PMTCT and HIV for policy makers, advocates, program managers, communities, and clients of health care services.
- **Trainers** can review the latest training techniques and curricula to help researchers and program managers who are involved in PMTCT research programs.
- **Researchers** can create customized searches for scientific articles, reports, photographs, and other materials relating to PMTCT of HIV.

How should this Toolkit be used?

The prevention of mother-to-child transmission of HIV requires a holistic approach: accurate information; up-to-date policies and guidelines; quality training, supervision, and services; and effective communication and marketing. This Toolkit provides information on all these elements and contains tools and resources to help you implement a variety of PMTCT intervention strategies.

To browse the content of this Toolkit, use the navigation to view resources related to key program topics. You can also use the search box if you know what you are looking for or have a specific item in mind.

Resources in this Toolkit can be downloaded and adapted for teaching and training, research, advocacy, policy-making, and program management purposes. Some of the tools are readily available in adaptable formats (for example, Microsoft PowerPoint presentations or Word documents). We encourage you to alter and personalize these tools for your own use. (Please remember to credit the source.) If you do use these tools or adapt them, we would love to hear from you. Please e-mail us at toolkits@k4health.org and include the name of the Toolkit in the subject line of your message.

Who developed this Toolkit?

FHI 360 staff selected the resources based on a search for relevant published and grey literature, and on staff experience working with ministries of health and partner organizations to conduct HIV prevention research and implement HIV prevention programs around the world.

How can I suggest a resource to include in this Toolkit?

We invite you to participate in the evolution and enhancement of this Toolkit. If you have developed or use quality resources that you think should be included, please use the [feedback form](#) to suggest them. The Toolkit collaborators will review and consider your suggestions.

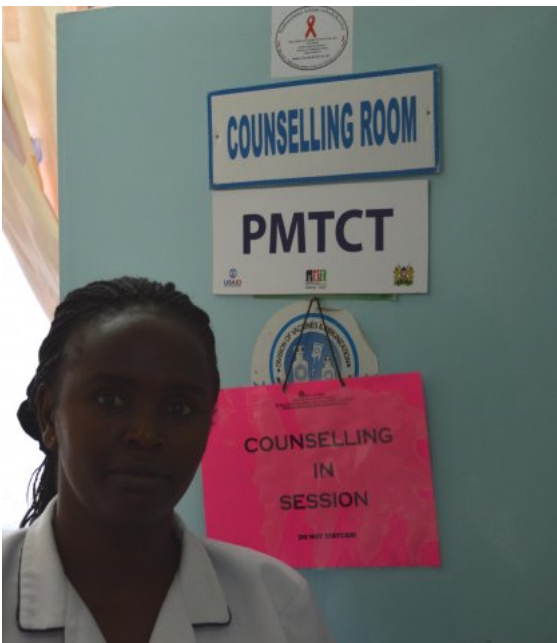
How can I make a comment or give feedback about this Toolkit?

If you have comments about the Toolkit, please use the [feedback form](#). Your feedback will help to ensure that the toolkit remains up-to-date and is continually improved. For example, you can share ideas about how you have used the Toolkit in your work so that others can adapt what they learn from your experiences.



Related eLearning Courses:
[Mother-to-Child Transmission of HIV](#)

Essential Knowledge



The Essential Knowledge section of this Toolkit provides

policy makers, program managers, and service providers with key background and reference materials on the prevention of mother-to-child transmission (PMTCT) of HIV. These essential resources are up-to-date, accurate and evidence-based, and they include materials such as fact sheets, reports, and information briefs.

Visit [POPLINE](#) to [review the latest research published on PMTCT](#).

This section of the Toolkit will be updated periodically to reflect new programmatic knowledge. To suggest a resource or share a comment about this section of the Toolkit, please visit our [feedback form](#).

Overview of PMTCT



The transmission of HIV from a mother to her child during

pregnancy, labor, delivery, or breastfeeding is called mother-to-child transmission. In the absence of any interventions, transmission rates range from 15-45%. Despite significant efforts and achievements in PMTCT over the past decade, approximately 240,000 children worldwide become newly infected with HIV in 2013.

In this section of the Toolkit you'll find resources that provide an overview of the burden of PMTCT worldwide, setting the context for policies, programs and services intended to address the need for PMTCT. Also included here are reports and briefs highlighting progress made and challenges that remain in scaling up services as well as reports on global initiatives and goals to eliminate mother-to-child transmission of HIV.

Resources:

- **2015 Progress Report on the Global Plan Towards the Elimination of New HIV Infections Among Children and Keeping Their Mothers Alive**

This is the fourth annual report of the Global Plan, and it summarizes the progress made through December 2014. The final accountability report of the Global Plan will be issued in 2016 when data for the end of 2015 will be available. The Global Plan was developed during 2010 by a Global Task Team (GTT) co-chaired by UNAIDS and the Government of the United States. The GTT consisted of a consortium of stakeholders from 25 countries and 30 civil society groups, private sector partners, networks of people living with HIV and international organizations. The Global Plan was launched as a major new global initiative in 2011, but it uses 2009 as the baseline year against which to measure progress.

- **Towards An AIDS-Free Generation: Children and AIDS. Sixth Stocktaking Report**

This report highlights progress made and challenges that remain in scaling up services for women, children and young people affected by the epidemic, and it calls for concerted action and continued commitments amid economic difficulties that affect all countries.

- **Women Out Loud: How Women Living with HIV Will Help the World End AIDS**

Women Out Loud provides an in depth insight into the many challenges faced by women and particularly women living with HIV. It also offers a snapshot of how women are shaping the response to HIV and the importance of their active involvement in decision making and programming. The report includes the latest data and commentary from some of the leading advocates on women and HIV, and it includes the voices of some 30 women living with HIV who have given their personal insights into how the epidemic is affecting women and on how women are actively working to reduce the spread and impact of AIDS.

- **Preventing HIV and Unintended Pregnancies: Strategic Framework 2011 ? 2015**

This strategic framework offers guidance for preventing HIV infections and unintended pregnancies ? both essential strategies for improving maternal and child health, and eliminating new pediatric HIV infections.

- **Toward Elimination of New HIV Infections in Children:**

Progress, Challenges, and Opportunities (Haba Na Haba Technical Bulletin)

This article in the July 2012 issue of the *Haba Na Haba Technical Bulletin* provides an overview of UNAIDS four-prong strategy to eliminate mother-to-child transmission of HIV and the factors needed to implement these strategies.

- ### **Eliminating Pediatric AIDS: What it Will Take and What it Will Bring**

Sustained research successes during the first two decades of the AIDS epidemic, an unprecedented expansion of HIV prevention and treatment programs during the last decade, and recent global attention and leadership have set the stage for the virtual elimination of new HIV infections in infants in the next decade. This brief presents an overview of the factors needed to eliminate pediatric HIV/AIDS.

- ### **Countdown to Zero: Global Plan Towards the Elimination of New HIV Infections Among Children by 2015 and Keeping Their Mothers Alive**

The goal of the Global Plan is to move towards eliminating new HIV infections among children and keeping their mothers alive. This plan focuses on reaching pregnant women living with HIV and their children from the time of pregnancy until the mother stops breastfeeding. Prior to pregnancy, and after breastfeeding ends, HIV prevention and treatment needs of mothers and children will be met within the existing continuum of comprehensive programs to provide HIV prevention, treatment, care and support for all who need it.

- Global Target #1: Reduce the number of new HIV infections among children by 90% .
- Global Target #2: Reduce the number of AIDS-related maternal deaths by 50%.

In addition to providing an overview on pediatric HIV infection, this report describes the goals, principles for success, challenges and strategies and framework for eliminating new HIV infections among children by 2015.

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HIV During Pregnancy, Labor and Delivery, and After Birth: Health Information for HIV Positive Pregnant Women

These fact sheets on HIV and pregnancy are intended especially for HIV-infected women who are pregnant or thinking about becoming pregnant. The fact sheets include information to help HIV-infected women stay healthy during pregnancy and reduce the risk of transmitting HIV to their babies. The information in these fact sheets is based on the Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV Transmission in the United States.

- ## **Why it Matters Infographic**

This infographic displays pertinent information on why prevention of mother-to-child transmission of HIV is important.

- ## **Mother to Child Transmission of HIV: Graphs and Tables**

Graphs and Tables included:

- Percentage of pregnant women who received an HIV test in low- and middle-income countries by region, 2005, 2008, 2009 (BAR CHART)
- Percentage of pregnant women living with HIV receiving antiretrovirals for preventing mother-to-child transmission of HIV in low- and middle-income countries by region, 2005, 2008 and 2009 (BAR CHART)
- Estimated number of women living with HIV needing and receiving antiretrovirals for PMTCT in low- and middle-income countries, 2009 (TABLE)
- Coverage of antiretrovirals to prevent mother-to-child transmission of HIV in low- and middle income countries, 2009 (MAP)
- Percentage of pregnant women living with HIV and infants born to them who received antiretrovirals for preventing mother-to-child transmission, 2004-2009 (LINE CHART)

PMTCT Strategies



The globally accepted strategy for comprehensive prevention

of mother-to-child transmission of HIV includes four elements or prongs:

- **Primary prevention of HIV infection.** Preventing HIV infection in women, including those who are pregnant or breastfeeding, is the most efficient way to avoid HIV infections in infants and it saves women's lives as well. Programs and policy makers can give attention to strengthening primary prevention services, such as counseling and testing, and condom provision to reduce the risk of sexual HIV transmission.
- **Preventing unintended pregnancies in women with HIV.** Family planning provides couples with HIV an opportunity to prevent unintended pregnancies and to avoid having children who are infected with HIV. Strengthening family planning programs for all women, especially in high prevalence settings, will reach many infected women who still do not know their status and need family planning.
- **Preventing vertical transmission or HIV transmission from women to their infants.** The risk that a woman with HIV will transmit the virus to her infant can be reduced in a number of ways: prophylaxis with ARVs during pregnancy and breastfeeding, cesarean-section delivery, and following safe infant feeding practices.
- **Providing care, treatment and support for mothers with HIV and their children.** Offering ongoing care, treatment, and support for mothers with HIV and their infants helps to ensure the mother's health and to protect the child's health and development.

Resources:

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Use of Efavirenz During Pregnancy: A Public Health

Perspective Technical Update on Treatment Optimization

This technical update reviews the evidence on the safety, tolerability and efficacy of Efavirenz (EFV), as well as the clinical and programmatic consequences of multiple algorithms due to uncertainty regarding the risk of teratogenicity from the use of EFV in pregnancy. Review of the available data and programmatic experience provides reassurance that exposure to EFV in early pregnancy has not resulted in increased birth defects or other significant toxicities.

- ## Use of Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection in Infants: Programmatic update

Recent developments suggest that substantial clinical and programmatic advantages can come from adopting a single, universal regimen both to treat HIV-infected pregnant women and to prevent mother-to-child transmission of HIV. This streamlining should maximize PMTCT program performance through better alignment and linkages with antiretroviral therapy (ART) programs at every level of service delivery. One of WHO's two currently recommended PMTCT antiretroviral (ARV) program options, Option B, takes this unified approach.

Now a new, third option (Option B+) proposes further evolution?not only providing the same triple ARV drugs to all HIV-infected pregnant women beginning in the antenatal clinic setting but also continuing this therapy for all of these women for life. Important advantages of Option B+ include: further simplification of regimen and service delivery and harmonization with ART programs, protection against mother-to-child transmission in future pregnancies, a continuing prevention benefit against sexual transmission to serodiscordant partners, and avoiding stopping and starting of ARV drugs. While these benefits need to be evaluated in program settings, and systems and support requirements need careful consideration, this is an appropriate time for countries to start assessing their situation and experience to make optimal programmatic choices.

- ## Options B and B+: Key Considerations for Countries to Implement an Equity-Focused Approach

This document contains considerations on key policy, programmatic and partnership issues that relate to implementation of Option B or B+. Planning well to address these key issues can hopefully help countries ?hit the ground running? and avoid unnecessary bottlenecks in rolling-out Option B or B+. This document does not provide new formal guidance, but rather discusses technical considerations that are relatively broad in scope, so that different country

contexts can adapt the advice to their more specific needs.

- **A Business Case for Options B and B+**

This document makes the case for options B and B+, explaining their benefits and their relative financial impact. The full model methodology used to determine the costs and benefits of options B and B+ is also available.

- **Preventing Unintended Pregnancies and HIV**

The dramatic expansion of HIV prevention and treatment services has significantly reduced the incidence of HIV among children and improved maternal health. These achievements contribute directly to the health-related and gender-related Millennium Development Goals (MDGs) 3, 4, 5 and 6. Stronger efforts to address the family planning rights and needs of women living with HIV are required to reduce pediatric HIV and keep mothers alive and healthy. This brief offers key strategies and actions to support the provision of high-quality family planning, reproductive health, and contraceptive services to women living with HIV.

- **Infant Feeding in the Context of HIV**

This slide presentation from the International Center for AIDS Care and Treatment Programs is an excellent summary of the most recent infant feeding information and data to support the 2010 WHO recommendations and strategies.

- **Technical Update to the Field: 2010 WHO Guidelines for Infant and Young Child Feeding in the Context of HIV**

In late 2009, WHO convened a series of technical consultations to update recommendations for treatment, prevention and infant feeding in the context of HIV. Based on the latest scientific evidence, these guidelines reflect continual progress in our knowledge of effective treatment and standards of care for persons infected with HIV. Officially released in July 2010, the recommendations have for the first time been organized as a set of linked guidelines for adult, adolescent and pediatric treatment, PMTCT and infant and young child feeding. The guidelines for infant and young child feeding are summarized here.

- **Technical Update to the Field: 2010 WHO Guidelines for Prevention of Maternal to Child Transmission**

In late 2009, the WHO released preliminary updated recommendations for treatment, prevention and infant feeding in the context of HIV. Based on the latest scientific evidence, these guidelines represent the continual progress in our knowledge of effective treatment and standards of care for persons infected with HIV. Officially released in July 2010, the recommendations have for the first time been organized as a set of linked guidelines for treatment of for adult, adolescent and pediatric treatment, PMTCT, and infant/young child feeding. The guidelines for prevention of maternal to child transmission are summarized here.

- **Technical Summary: 2010 Guidelines for Treatment of Pediatric HIV**

Effective treatment of pediatric HIV requires immediate diagnosis, early initiation of ART, and frequent monitoring. The updated (2010) WHO guidelines on antiretroviral therapy for infants and children are based on the most recent scientific research and reflect the most effective known regimens in a variety of clinical circumstances. Key highlights of the updated recommendations are summarized here.

- **Safer Infant Feeding for Prevention of Mother-to-Child Transmission of HIV**

In many contexts, exclusive breastfeeding combined with antiretroviral treatment ensures the best chance of HIV-free survival of infants exposed to HIV. Counseling, peer support, education and community awareness can increase uptake of exclusive breastfeeding. This brief provides an overview of the clinical evidence and international guidance regarding infant feeding and preventing mother-to-child transmission of HIV.

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Care and Treatment of HIV Infection in Infants and Young Children (Haba Na Haba Quarterly Technical Bulletin)

This issue of *Haba Na Haba Quarterly Technical Bulletin* spotlights the care and treatment of HIV infection in infants and young children, specifically addressing early infant diagnosis, pediatric antiretroviral therapy, and steps to increasing early identification and treatment of infants and children living with HIV.

- **Use of Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection in Infants (PMTCT ARV Guidelines): Towards the Virtual Elimination of MTCT**

This slide presentation provides an overview of the 2010 WHO revised recommendations related to PMTCT.

- **The Key Steps to Preventing Mother-to-Child Transmission**

This infographic outlines the key steps in preventing mother-to-child transmission including: testing, prenatal treatment, safe childbirth, child health visits, safe breastfeeding, early infant testing and care and treatment if a child is HIV positive.

Policies & Guidelines



Policies and guidelines on the prevention of mother-to-child

transmission of HIV (PMTCT) should support implementation of all four components of the World Health Organization and UNAIDS's comprehensive approach. These components are:

- Prevent primary HIV infection among girls and women
- Prevent unintended pregnancies among women living with HIV
- Reduce mother-to-child transmission of HIV through antiretroviral drug treatment or prophylaxis, safer deliveries, and infant-feeding counseling
- Provide care, treatment, and support to women living with HIV and their families

Policies and guidelines should also promote integration of PMTCT and links with maternal, newborn and child health, anti-retroviral therapy, family planning, and sexually transmitted infection (STI) services. This will help ensure delivery of a package of essential services for quality maternal, newborn, and child care that includes routine antenatal care for all women, additional comprehensive services for women living with HIV, and care for HIV-exposed infants and young children.

To suggest a resource or share a comment about this section of the Toolkit, please visit our [feedback form](#).

Resources:

- **Guideline on When to Start Antiretroviral Therapy and on Pre-Exposure Prophylaxis for HIV**

This early-release guideline makes available two key recommendations that were developed during the revision process in 2015. First, antiretroviral therapy (ART) should be initiated in

everyone living with HIV at any CD4 cell count. Second, the use of daily oral pre-exposure prophylaxis (PrEP) is recommended as a prevention choice for people at substantial risk of HIV infection as part of combination prevention approaches. The first of these recommendations is based on evidence from clinical trials and observational studies released since 2013 showing that earlier use of ART results in better clinical outcomes for people living with HIV compared with delayed treatment. The second recommendation is based on clinical trial results confirming the efficacy of the ARV drug tenofovir for use as PrEP to prevent people from acquiring HIV in a wide variety of settings and populations.

The recommendations in this guideline will form part of the revised consolidated guidelines on the use of ARV drugs for treating and preventing HIV infection to be published by WHO in 2016. The full update of the guidelines will consist of comprehensive clinical recommendations together with revised operational and service delivery guidance to support implementation.

- **Elimination of Mother-to-Child Transmission (EMTCT) of HIV and Syphilis: Global Guidance on Criteria for Processes and Validation**

This document outlines minimum global processes and criteria for validation of EMTCT of HIV and/or syphilis in a country; provides a description of global EMTCT validation targets and indicators; explains the operation of validation committees and secretariats; and reviews the validation procedure itself, including maintenance of validation status.

- **Option B/B+ Toolkit**

The toolkit is a collection of assessment tools and checklists that describe the key considerations to be taken into account when transitioning to Option B/B+. The toolkit provides a roadmap to support the planning and implementation of Option B/B+, and to help countries scale up more effective interventions and programs to achieve the goals of the Global Plan Towards the Elimination of New HIV Infections among Children by 2015 and Keeping their Mothers Alive.

The toolkit is divided into seven key sections

- Option B/B+: Key Considerations for Country Programmes (UNICEF) is an overarching guidance document which lays out key issues for implementation.
- Moving Toward Option B/B+: Readiness Assessment Checklist and Discussion Guide

(PEPFAR/OGAC) is a comprehensive checklist for national programmes to review as they plan for implementation of Option B/B+. The checklist covers a large number of key programme areas from political commitment to early infant diagnosis, posing critical questions to be addressed as well as indicating minimum readiness standards for implementing Option B/B+.

- Costing Tool describes the costing (FEWG) models that can be used to cost operational plans for Option B/B+ implementation including descriptions of programme inputs and outputs associated with each model.
- Human Resources for Health (HRH Task Team) tool outlines key considerations around HR capacity and task-shifting as an essential component for successful implementation of Option B/B+.
- Procurement and Supply Chain Management (SCMS Task Team) provides a list of key questions for the MOH to consider as they strengthen and adjust procurement and supply chain management systems to accommodate transition to Option B/B+, and includes links to resources and tools to assist with forecasting.
- Enhanced Monitoring and Evaluation Systems (MEWG) provides an overview of concepts and questions to guide national discussion of M&E issues specific to Option B/B+ implementation, as well as quality assurance methods and a list of potential topics for operational research.
- Community Engagement (CEWG): There are two tools on community engagement. The first consists of recommendations for Ministries of Health on involving communities in Option B/B+ planning and implementation discussions, while the second document is designed for civil society organisations to use in dialogue with the MOH to advocate for the rights of people living with HIV.

Policy Brief: Kesho Bora Study: Preventing Mother To Child Transmission of HIV during breastfeeding

New evidence published in *Lancet Infectious Diseases* shows safety and efficacy of combination antiretroviral drugs during pregnancy, delivery and breastfeeding and supports the 2010 revised WHO guidelines.

The Kesho Bora study ("A better future", Swahili) found that giving HIV positive mothers a combination of 3 antiretroviral drugs (ARVs) during pregnancy, delivery and breastfeeding cuts HIV infections in infants by 43% by the age of 1 year and reduces transmissions during breastfeeding by 54% compared with the previously recommended ARV drug regimen stopped at delivery.

The balance of risks and benefits of continuing ARVs during breastfeeding was not known prior to this study which was conducted in five sites in Burkina Faso, Kenya, and South Africa and coordinated by WHO's Department of Reproductive Health and Research.

This approach offers new hope for mothers with HIV infection who cannot safely feed their babies with infant formula. It will improve the chances of infants remaining healthy and free of

HIV infection as breast milk provides optimal nutrition and protects against other fatal childhood diseases such as pneumonia and diarrhoea.

Giving HIV-positive pregnant women (and those planning pregnancy) priority access to ARVs will help eliminate mother-to-child transmission of HIV.

- **Scaling Up Prevention of Mother-to-Child Transmission of HIV: What Will It Take?**

This report provides a current summary on preventing mother-to-child transmission of HIV (PMTCT) by addressing the continued need for financial investment and strategic programming to scale up PMTCT efforts.

- **Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection in Infants: Recommendations for a Public Health Approach**

Significant progress is being made in the global scale-up of prevention of mother-to-child transmission of HIV (PMTCT), including in high burden and resource-limited settings. To continue forward with the elimination of mother-to-child transmission of HIV (MTCT), it is critically important to provide the best evidence-based interventions to reduce the risk of transmission from an HIV-infected mother to her newborn child, while at the same time promoting the health of both the mother and the child.

Since WHO issued revised guidelines in 2006, important new evidence has emerged on the use of antiretroviral (ARV) prophylaxis to prevent MTCT, including during breastfeeding, on the optimal time to initiate antiretroviral therapy (ART) in individuals who need treatment, and on safe feeding practices for HIV-exposed infants. This evidence forms the basis for the new recommendations contained in the 2010 revised guidelines. The revised PMTCT recommendations are based on two key approaches:

1. Lifelong ART for HIV-infected women in need of treatment for their own health, which is also safe and effective in reducing MTCT.
2. ARV prophylaxis to prevent MTCT during pregnancy, delivery and breastfeeding for HIV-infected women not in need of treatment.

The revised recommendations emphasize the need to have a unified approach to preventing MTCT throughout pregnancy, labour and delivery, postpartum, and the breastfeeding period.

The revised recommendations are summarized in preliminary form in the 2009 [Rapid Advice: Use of antiretroviral drugs for treating pregnant women and preventing HIV infection in infants](#)

. The Rapid Advice document gives a list of the key recommendations whereas the [full guidelines](#) presents in detail the scientific evidence and rationale supporting these recommendations. Additionally, the full guidelines document provides the necessary information for countries to adapt the WHO recommendations to their local settings. The [Technical Update](#), a related resource published by USAID, provides a brief 2-page summary of the 2010 WHO guidelines for prevention of maternal to child transmission.

Guidelines on HIV and Infant Feeding 2010: Principles and Recommendations for Infant Feeding in the Context of HIV and a Summary of Evidence

Significant programmatic experience and research evidence regarding HIV and infant feeding have accumulated since WHO's recommendations on infant feeding in the context of HIV were last revised in 2006. In particular, evidence has been reported that antiretroviral (ARV) interventions to either the HIV-infected mother or HIV-exposed infant can significantly reduce the risk of postnatal transmission of HIV through breastfeeding. This evidence has major implications for how women living with HIV might feed their infants, and how health workers should counsel these mothers. Together, breastfeeding and ARV intervention have the potential to significantly improve infants' chances of surviving while remaining HIV uninfected.

While the 2010 recommendations are generally consistent with the previous guidance, they recognize the important impact of ARVs during the breastfeeding period, and recommend that national authorities in each country decide which infant feeding practice, i.e. breastfeeding with an ARV intervention to reduce transmission or avoidance of all breastfeeding, should be promoted and supported by their Maternal and Child Health services. This differs from the previous recommendations in which health workers were expected to individually counsel all HIV-infected mothers about the various infant feeding options, and it was then for mothers to decide between them.

Where national authorities promote breastfeeding and ARVs, mothers known to be HIV-infected are now recommended to breastfeed their infants until at least 12 months of age. The recommendation that replacement feeding should not be used unless it is acceptable, feasible, affordable, sustainable and safe (AFASS) remains, but the acronym is replaced by more common, everyday language and terms. Recognizing that ARVs will not be rolled out everywhere immediately, guidance is given on what to do in their absence.

The [full guidelines](#) on HIV and infant feeding developed by the WHO Guideline Development Group provides a thorough overview of how the revised principles and recommendations were developed, as well as information on the key principles considered and the research and evidence supporting each recommendation. The related resources included in this record are helpful as they summarize the revised recommendations. The [Rapid Advice](#) resource provides a summary of the revised principles and recommendations with an abbreviated rationale for each. Similarly, the Key Messages resource is a condensed version of the

summary and full guidelines. The [Key Messages](#) resource was published prior to the summary and full guidelines in an effort to expedite the dissemination of the revised principles and recommendations and set the stage for the forthcoming summary and full guidelines. Lastly, the [Technical Update](#) was published to provide a brief 2-page summary of the revised guidelines for infant feeding in the context of HIV.

- **Antiretroviral Therapy for HIV Infection in Infants and Children: Towards Universal Access, Recommendations for a Public Health Approach: 2010 Revision**

The WHO guidelines *Antiretroviral therapy for HIV infection in infants and children* are based on a public health approach to HIV care. The present guidelines are part of WHO's commitment to achieve universal access to the prevention, care and treatment of HIV infection in infants and children. These treatment guidelines serve as a framework for selecting the most potent and feasible first-line and second-line ART regimens for the care of HIV-infected infants and children.

These guidelines address the diagnosis of HIV infection and consider ART in different situations, e.g. where infants and children are coinfectd with HIV and TB, or have been exposed to ARVs, either for PMTCT or because of breastfeeding from an HIV-infected mother on ART. In addition, these guidelines address the importance of nutrition in the HIV-infected child and of recognizing the severity of malnutrition, especially in relation to the provision of ART. Adherence to therapy and resistance to ARVs are discussed. A section on ART in adolescents briefly outlines key issues related to treatment and care for this age group.

These guidelines are intended primarily for use by treatment advisory boards, national AIDS programme managers and other senior policy-makers who are involved in the planning of national and international HIV care strategies for infants and children in resource-limited countries. Elements of the guidelines such as the simplified dosing guidance ([Annex E](#)) are also designed for clinical implementation in the field.

The [Technical Summary](#), included here as a related resource, provides a brief 2-page summary of the key highlights of the updated recommendations.

- **Policy Requirements for HIV Testing and Counseling of Infants and Young Children in Health Facilities**

Identifying and testing HIV-exposed infants as early as possible is crucial, as timely diagnosis of HIV allows timely access to life-saving care, including antiretroviral therapy for those who are infected. Providing HIV testing for infants and children presents unique challenges for policy-makers, program managers and health-care providers. To address these challenges, WHO and the United Nations Children's Fund (UNICEF), in consultation with the Interagency Task Team on Prevention of HIV Infection in Pregnant Women, Mothers and their Children, developed this policy brief, which is in line with existing WHO technical recommendations. The brief outlines: key issues surrounding HIV counselling and testing in infants and children; issues that should be addressed within national policy guidance to support country programming; and special considerations such as informed consent, confidentiality and addressing stigma and discrimination. It is designed to be used by country programs and technical working groups as they review and develop policy and practice guidelines relevant to HIV testing for children.

- **WHO Recommendations on the Diagnosis of HIV Infection in Infants and Children**

Recently published data confirming dramatic survival benefits for infants started on ART as early as possible after the diagnosis of HIV, prompted a review of the World Health Organization (WHO) pediatric treatment guidelines. In June 2008, new guidance was issued, which recommends prompt initiation of ART in infants diagnosed with HIV infection. In order to identify those infants who will need immediate ART, early confirmation of HIV infection is required. In November 2008, a meeting was convened to review recommendations by WHO for the diagnostic testing of HIV infection in infants and children. The meeting brought together the guideline review group that had developed the initial recommendations in 2005. The guideline review group followed the grading of recommendations assessment, development and evaluation (GRADE) approach in reviewing the recommendations for early detection of HIV infection according to the current WHO Guidelines for Guidelines. This document contains the new recommendations.

Training



The HIV pandemic affects all levels of the healthcare system.

Global and in-country collaboration can maximize existing human resources and strengthen human capacity, and training of health care workers on prevention of mother-to-child transmission (PMTCT) of HIV is a key part of this strategy.

Training packages should be adapted to meet local circumstances, reflect national policies and priorities, and include key considerations like the following:

- Basic knowledge of HIV/AIDS
- HIV prevention in mothers, infants, and children
- Specific service delivery models or interventions
- Addressing stigma
- Counseling and testing
- Infant feeding
- Comprehensive care and support
- Monitoring and evaluation

To suggest a resource or share a comment about this section of the Toolkit, please visit our [feedback form](#).

Resources:

- **Infant and Young Child Feeding Integration Guide. Activity Based Workshop for Health Care Workers**

The purpose of this workshop is to equip facilitators with knowledge and skills to promote optimal practices in infant and young child feeding and maternal nutrition among mothers, their families and the community. Each session outlines:

- specific learning objectives

- activity details
- time allocations
- materials needed

Participant objectives of the workshop include: participants will be able to describe practices and key messages on infant and young child feeding, understand the benefits of breast feeding and risks of not breastfeeding within the context of HIV, and identify how to support mothers on optimal complementary feeding practices for young children.

- **Training module: Infant Feeding Counseling in the Context of Early Infant Diagnosis**

The Infant & Young Child Nutrition (IYCN) Project designed this three-day training module in French to train health workers in Haiti to counsel HIV-positive mothers on optimal infant feeding during the time their child receives his or her first HIV test and mothers learn the results. This document is a final draft and it reflects current policies on infant feeding and HIV in Haiti.

- **Integration of Family Planning Into HIV Counseling and Testing, Prevention of Mother-to-Child Transmission, and Antiretroviral Therapy Services**

This training package is designed to train practicing HIV service providers in FP counseling and service provision for FP integration in HIV Counseling and Testing, PMTCT and ART services. It has four parts, a Training Facilitator's Guide, a Participant Handbook, PowerPoint Slides that summarize training content, and a job aid (to guide HIV service providers when providing FP counseling and services to HIV-positive clients).

- **Online Training for Nurses and Midwives in Option B+**

ICAP has developed a new online training program for nurses and midwives in Option B+, a new approach recommended by WHO to prevent mother-to-child transmission of HIV(PMTCT). Free online registration required.

Program Management



Good management of programs that aim to prevent

mother-to-child transmission (PMTCT) of HIV requires special knowledge and skills. To ensure that programs are implemented effectively and provide quality care and services to those they serve, program managers must balance a variety of responsibilities and activities, such as:

- Managing logistics and commodities to ensure the supplies needed to provide services are always available
- Program monitoring and evaluation to assess the strengths, weaknesses, gaps and opportunities for improvement within a program
- Integrating health services

All of these core functions of PMTCT program management are addressed in this section of the Toolkit.

To suggest a resource or share a comment about this section of the Toolkit, please visit our [feedback form](#).

Implementation and Quality



Well functioning, efficient, accessible, affordable PMTCT programs

need to be evidence-based and carefully planned. That is, program planners should refer to the most current national and sub-national guidelines on PMTCT and guidelines for all related services that may be offered, such as family planning and reproductive health services. This section of the Toolkit includes resources that will provide program planners with guides and tools for PMTCT program planning and implementation.

Resources:

- **The Costs and Impacts of Scaling Up PMTCT in Nigeria**

This study, conducted by the USAID- and PEPFAR-funded Health Policy Project (HPP), assessed the costs and benefits of different prevention of mother-to-child transmission of HIV (PMTCT) treatment options (baseline treatment as currently offered, Option B, and Option B+). It is intended to inform the scale-up of PMTCT services in Nigeria's 13 high-burden states, which account for 70 percent of the mother-to-child transmission burden.

- **Option B/B+ Toolkit**

The toolkit is a collection of assessment tools and checklists that describe the key considerations to be taken into account when transitioning to Option B/B+. The toolkit provides a roadmap to support the planning and implementation of Option B/B+, and to help countries scale up more effective interventions and programs to achieve the goals of the Global Plan Towards the Elimination of New HIV Infections among Children by 2015 and Keeping their Mothers Alive.

The toolkit is divided into seven key sections

- Option B/B+: Key Considerations for Country Programmes (UNICEF) is an overarching guidance document which lays out key issues for implementation.
- Moving Toward Option B/B+: Readiness Assessment Checklist and Discussion Guide (PEPFAR/OGAC) is a comprehensive checklist for national programmes to review as they plan for implementation of Option B/B+. The checklist covers a large number of key programme areas from political commitment to early infant diagnosis, posing critical questions to be addressed as well as indicating minimum readiness standards for implementing Option B/B+.
- Costing Tool describes the costing (FEWG) models that can be used to cost operational plans for Option B/B+ implementation including descriptions of programme inputs and

outputs associated with each model.

- Human Resources for Health (HRH Task Team) tool outlines key considerations around HR capacity and task-shifting as an essential component for successful implementation of Option B/B+.
- Procurement and Supply Chain Management (SCMS Task Team) provides a list of key questions for the MOH to consider as they strengthen and adjust procurement and supply chain management systems to accommodate transition to Option B/B+, and includes links to resources and tools to assist with forecasting.
- Enhanced Monitoring and Evaluation Systems (MEWG) provides an overview of concepts and questions to guide national discussion of M&E issues specific to Option B/B+ implementation, as well as quality assurance methods and a list of potential topics for operational research.
- Community Engagement (CEWG): There are two tools on community engagement. The first consists of recommendations for Ministries of Health on involving communities in Option B/B+ planning and implementation discussions, while the second document is designed for civil society organisations to use in dialogue with the MOH to advocate for the rights of people living with HIV.

Standards of Care (SOC) for Programs on Prevention of Mother-to-Child Transmission (PMTCT) of HIV

In an effort to translate the goals for eliminating mother-to-child transmission of HIV into operational targets, FHI 360 has developed a set of program standards for preventing mother-to-child transmission (PMTCT) of HIV. The standards, built on scientific evidence and expert opinions, are coupled with PMTCT indicators, and are summarized in an action table to help program and technical managers monitor PMTCT activities and take appropriate actions as needed.

Options B and B+: Key Considerations for Countries to Implement an Equity-Focused Approach

This document contains considerations on key policy, programmatic and partnership issues that relate to implementation of Option B or B+. Planning well to address these key issues can hopefully help countries hit the ground running and avoid unnecessary bottlenecks in rolling-out Option B or B+. This document does not provide new formal guidance, but rather discusses technical considerations that are relatively broad in scope, so that different country contexts can adapt the advice to their more specific needs.

Preventing Mother-to-Child Transmission of HIV: Implementation Starter Kit

This kit describes and provides access to all the materials used in the Prevention of Mother-to-Child HIV Transmission (PMTCT) component of FHI 360's Zambia Prevention, Care and Treatment Partnership (ZPCT). The program resulted in a significant increase in the use of PMTCT services as well as significant reductions in the mother-to-child transmission of HIV among ZPCT clinic clients. It now serves as a model for other countries. This kit is designed to be used by program designers to replicate the success of the ZPCT PMTCT program in other settings.

- ## **Preventing HIV and Unintended Pregnancies: Strategic Framework 2011 ? 2015**

This strategic framework offers guidance for preventing HIV infections and unintended pregnancies ? both essential strategies for improving maternal and child health, and eliminating new pediatric HIV infections.

- ## **PEPFAR Guidance on Integrating Prevention of Mother to Child Transmission of HIV, Maternal, Neonatal, and Child Health and Pediatric HIV Services**

Supporting the integration of Prevention of Mother to Child Transmission (PMTCT) and pediatric HIV with Maternal, Neonatal, and Child Health (MNCH) services at the levels of policy, program administration, or service delivery, offers an opportunity for The President's Emergency Plan for AIDS Relief (PEPFAR) to use limited resources to leverage other key programs and strengthen the MNCH platform in each PEPFAR country through Partnership Frameworks. In so doing, PEPFAR aims to strengthen national ownership of programs, increase the coverage of quality PMTCT and pediatric HIV services, increase program sustainability, strengthen the health system, and improve MNCH health outcomes overall. The U.S. Global Health Initiative (GHI) also presents an opportunity to strengthen synergies between various health services in order to produce significantly improved HIV, MNCH and reproductive health (RH) outcomes and impact. Therefore, given the various benefits of integration outlined above, the objectives of this updated guidance are to:

- Highlight importance of integration for PEPFAR PMTCT, pediatric HIV, and MNCH program support.
- Identify an essential package of integrated PMTCT/pediatric HIV/ MNCH services and

health systems strengthening activities.

- Recommend possible action steps to operationalize and evaluate integration efforts.

Scaling Up Prevention of Mother-to-Child Transmission of HIV: What Will It Take?

This report provides a current summary on preventing mother-to-child transmission of HIV (PMTCT) by addressing the continued need for financial investment and strategic programming to scale up PMTCT efforts.

Care and Treatment of HIV Infection in Infants and Young Children (Haba Na Haba Quarterly Technical Bulletin)

This issue of *Haba Na Haba Quarterly Technical Bulletin* spotlights the care and treatment of HIV infection in infants and young children, specifically addressing early infant diagnosis, pediatric antiretroviral therapy, and steps to increasing early identification and treatment of infants and children living with HIV.

Preventing Mother-to-Child HIV Transmission through Family Planning in Maternal and Child Health Services: Kenya, Rwanda, and South Africa

Between 2007 and 2009, FHI 360 conducted three assessment studies of preventing mother-to-child transmission (PMTCT) services in Kenya, Rwanda and South Africa. Researchers considered whether HIV-positive pregnant and recently postpartum women with unmet contraceptive need could be reached with family planning services in facilities that offered antenatal care (ANC), postnatal care (PNC) and child welfare services/child health services. They also assessed provider readiness to offer family planning services. This publication highlights the findings of the study ? including those specific to South Africa.

Guidance on Supply Chain Planning for Implementation of Prevention of Mother to Child Transmission (PMTCT) of HIV Infection

This document outlines general principles for program and supply managers on which to

base supply planning for the implementation of WHO and national guidelines on the Prevention of Mother to Child Transmission (PMTCT) of HIV. It suggests a basic approach that can ensure effective and sustainable supply of PMTCT commodities.

Monitoring and Evaluation



Monitoring and evaluation is a critical component of

effective management of prevention of mother-to-child transmission (PMTCT) programs. In the context of PMTCT, M&E plays the following roles:

- Helps determine whether existing health services are adequately prepared for the introduction of PMTCT interventions;
- Identifies gaps for the integration of PMTCT services into antenatal care and maternal and child health services;
- Identifies weaknesses in the management information system (MIS) and tracking system of PMTCT services;
- Provides guidance on ways to provide and maintain high-quality services; and
- Supports implementation by providing ways to learn from experience, improve health activities, and promote better planning.

Resources:

- **Monitoring & Evaluation Framework for Antiretroviral Treatment for Pregnant and Breastfeeding Women Living with HIV and Their Infants**

The purpose of this framework is to provide operational guidance on monitoring and evaluation of pregnant and breastfeeding women receiving ART for life and their HEIs.

This document is organized around a series of recommendations for the operationalization of

monitoring, both routine (Section 1) and enhanced (Section 2), and the evaluation (Section 3) of programs implementing lifelong ART for pregnant and breastfeeding women and their infants.

- **Next Generation Indicators Reference Guide**

This indicator reference guidance document is not PEPFAR program guidance. It is meant to be used as a companion document to the various program-related guidance documents that will be released for PEPFAR this year, which may include:

- COP Guidance
- Technical Considerations
- PEPFAR Reporting Guidance (SAPR and APR)
- Partnership Framework Guidance

- **Three Interlinked Patient Monitoring Systems for HIV Care/ART, MCH/PMTCT and TB/HIV: Standardized Minimum Data Set and Illustrative Tools**

The three interlinked patient monitoring systems build and improve on the original 2006 patient monitoring tools by supporting integrated service provision, follow up of mother-infant pair and monitoring of key TB-related and paediatric variables. The MCH minimum data set includes all routine core maternal and infant variables plus key HIV-related variables. The generic ART cohort report has been simplified and the cross-sectional quarterly report is now integrated to collect not only HIV indicators, but also key PMTCT, MCH and TB/HIV indicators. The generic tools are illustrative, for country adaptation.

- **Global Monitoring Framework and Strategy for the Global Plan Towards the Elimination of New HIV Infections Among Children by 2015 and Keeping Their Mothers Alive**

Clear targets for 2015 and a clear framework for monitoring and measuring progress are necessary to support one monitoring & evaluation (M&E) system for the initiative, integrated into the national M&E system. The EMTCT initiative has 10 targets - 2 overall targets, 2 child health targets, and 6 targets related to the four prongs of PMTCT. The two overall global

targets are: reduce the number of new HIV infections among children by 90% by 2015; reduce the number of HIV-associated deaths to women during pregnancy, childbirth or puerperium by 50% by 2015.

This document outlines a common framework for tracking progress towards EMTCT as we move towards 2015, including explanation of the targets outlined in the *Global Plan*, essential M&E activities at the country level and plans for reporting. It is intended for policy-makers, program managers, M&E officers, and staff of technical agencies and international partners involved in supporting EMTCT.

- **Measuring the Impact of National PMTCT Programmes: Towards the Elimination of New HIV Infections Among Children by 2015 and Keeping their Mothers Alive. A Short Guide on Methods**

This short guide summarizes the different approaches to assessing specific outcomes of interventions to prevent mother-to-child transmission (PMTCT) of HIV. It can serve as a reference that provides an overview of methods to measure PMTCT impact. It also can be used when planning impact assessment activities because the description may support the selection of activities and estimation of the cost of a particular assessment method.

Different metrics can be used to assess the effectiveness and impact of national PMTCT programmes. These include the level of new paediatric HIV infections, the rate of mother-to-child transmission of HIV, maternal survival and health, child survival and health, HIV-free survival, effect on health services, and cost-effectiveness.

Service Delivery



The comprehensive approach to service delivery for

prevention of mother-to-child transmission (PMTCT) of HIV recommended by the World Health

Organization (WHO) and UNAIDS has four components:

1. Primary prevention of HIV among women of childbearing age
2. Prevention of unintended pregnancies among women living with HIV
3. Prevention of HIV transmission from a women living with HIV to her infant
4. Provision of appropriate treatment, care, and support to women living with HIV and their children and families

Service delivery issues are different for each intervention, but an optimal evidence-based PMTCT package can reduce the overall risk of maternal to child transmission to less than 2%. These interventions include:

- Optimal detection of HIV infection among pregnant women through effective testing and counseling
- Assessment of the eligibility of pregnant women living with HIV for lifelong anti-retroviral therapy (ART)
- Provision of highly active ART (HAART) to those eligible for lifelong ART
- Provision of the most highly feasible antiretroviral (ARV) prophylactic regimen
- Safe obstetrical practices, including Cesarean-section when indicated and feasible
- Safe infant feeding options, including complete avoidance of breastfeeding

The resources provided in this section of the PMTCT Toolkit will help providers offer quality services for the range of needs experienced by mothers, families and children infected with or at risk for HIV, including manuals to help with service provision and resources on counseling and testing, family centered care, antiretroviral treatment and prophylaxis for PMTCT, infant feeding in the context of HIV, and integrating delviery of services.

To suggest a resource or share a comment about this section of the Toolkit, please visit our [feedback form](#).

Resources:

- **Guideline on When to Start Antiretroviral Therapy and on Pre-Exposure Ppophylaxis for HIV**

This early-release guideline makes available two key recommendations that were developed during the revision process in 2015. First, antiretroviral therapy (ART) should be initiated in everyone living with HIV at any CD4 cell count. Second, the use of daily oral pre-exposure prophylaxis (PrEP) is recommended as a prevention choice for people at substantial risk of HIV infection as part of combination prevention approaches. The first of these recommendations is based on evidence from clinical trials and observational studies released since 2013 showing that earlier use of ART results in better clinical outcomes for people living with HIV compared with delayed treatment. The second recommendation is based on clinical trial results confirming the efficacy of the ARV drug tenofovir for use as PrEP to prevent people from acquiring HIV in a wide variety of settings and populations.

The recommendations in this guideline will form part of the revised consolidated guidelines on the use of ARV drugs for treating and preventing HIV infection to be published by WHO in 2016. The full update of the guidelines will consist of comprehensive clinical recommendations together with revised operational and service delivery guidance to support implementation.

- **Counseling Card: Risks of Infant Feeding Options for HIV-positive Mothers**

This counseling card was developed for use by health workers to help HIV-positive mothers visualize the relative risk of breastfeeding when both mother and infant are taking antiretroviral medications for 12 months compared with exclusive formula feeding from birth.

- **Helping an HIV-Positive Breastfeeding Mother Decide How to Feed her Child at 12 Months: A Checklist for Health Care Providers**

This checklist can be used to help health workers support HIV-positive breastfeeding mothers to decide if they can provide their child a nutritionally adequate and safe diet without breastmilk at 12 months. The checklist consists of two sets of questions: (1) questions on the child's health and household food security, and (2) questions on current practices related to a minimum replacement diet. Included are key points to counsel mothers on how to safely stop breastfeeding or to continue breastfeeding and antiretroviral medications, as well as instructions on how to use the checklist.

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Counseling Tool on Infant Feeding Options for Prevention of Mother-To-Child Transmission of HIV Sites

These counseling cards can be used to assist health professionals in counseling HIV-positive mothers on recommended infant feeding options that, if followed correctly, will promote infant health, growth, and development, and reduce the risk of mother-to-child transmission of HIV.

- ## Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection in Infants: Recommendations for a Public Health Approach

Significant progress is being made in the global scale-up of prevention of mother-to-child transmission of HIV (PMTCT), including in high burden and resource-limited settings. To continue forward with the elimination of mother-to-child transmission of HIV (MTCT), it is critically important to provide the best evidence-based interventions to reduce the risk of transmission from an HIV-infected mother to her newborn child, while at the same time promoting the health of both the mother and the child.

Since WHO issued revised guidelines in 2006, important new evidence has emerged on the use of antiretroviral (ARV) prophylaxis to prevent MTCT, including during breastfeeding, on the optimal time to initiate antiretroviral therapy (ART) in individuals who need treatment, and on safe feeding practices for HIV-exposed infants. This evidence forms the basis for the new recommendations contained in the 2010 revised guidelines. The revised PMTCT recommendations are based on two key approaches:

1. Lifelong ART for HIV-infected women in need of treatment for their own health, which is also safe and effective in reducing MTCT.
2. ARV prophylaxis to prevent MTCT during pregnancy, delivery and breastfeeding for HIV-infected women not in need of treatment.

The revised recommendations emphasize the need to have a unified approach to preventing MTCT throughout pregnancy, labour and delivery, postpartum, and the breastfeeding period.

The revised recommendations are summarized in preliminary form in the 2009 Rapid Advice: Use of antiretroviral drugs for treating pregnant women and preventing HIV infection in infants. The Rapid Advice document gives a list of the key recommendations whereas the full guidelines presents in detail the scientific evidence and rationale supporting these recommendations. Additionally, the full guidelines document provides the necessary information for countries to adapt the WHO recommendations to their local settings. The Technical Update, a related resource published by USAID, provides a brief 2-page summary

of the 2010 WHO guidelines for prevention of maternal to child transmission.

Guidelines on HIV and Infant Feeding 2010: Principles and Recommendations for Infant Feeding in the Context of HIV and a Summary of Evidence

Significant programmatic experience and research evidence regarding HIV and infant feeding have accumulated since WHO's recommendations on infant feeding in the context of HIV were last revised in 2006. In particular, evidence has been reported that antiretroviral (ARV) interventions to either the HIV-infected mother or HIV-exposed infant can significantly reduce the risk of postnatal transmission of HIV through breastfeeding. This evidence has major implications for how women living with HIV might feed their infants, and how health workers should counsel these mothers. Together, breastfeeding and ARV intervention have the potential to significantly improve infants' chances of surviving while remaining HIV uninfected.

While the 2010 recommendations are generally consistent with the previous guidance, they recognize the important impact of ARVs during the breastfeeding period, and recommend that national authorities in each country decide which infant feeding practice, i.e. breastfeeding with an ARV intervention to reduce transmission or avoidance of all breastfeeding, should be promoted and supported by their Maternal and Child Health services. This differs from the previous recommendations in which health workers were expected to individually counsel all HIV-infected mothers about the various infant feeding options, and it was then for mothers to decide between them.

Where national authorities promote breastfeeding and ARVs, mothers known to be HIV-infected are now recommended to breastfeed their infants until at least 12 months of age. The recommendation that replacement feeding should not be used unless it is acceptable, feasible, affordable, sustainable and safe (AFASS) remains, but the acronym is replaced by more common, everyday language and terms. Recognizing that ARVs will not be rolled out everywhere immediately, guidance is given on what to do in their absence.

The [full guidelines](#) on HIV and infant feeding developed by the WHO Guideline Development Group provides a thorough overview of how the revised principles and recommendations were developed, as well as information on the key principles considered and the research and evidence supporting each recommendation. The related resources included in this record are helpful as they summarize the revised recommendations. The [Rapid Advice](#) resource provides a summary of the revised principles and recommendations with an abbreviated rationale for each. Similarly, the Key Messages resource is a condensed version of the summary and full guidelines. The [Key Messages](#) resource was published prior to the summary and full guidelines in an effort to expedite the dissemination of the revised principles and recommendations and set the stage for the forthcoming summary and full guidelines. Lastly, the [Technical Update](#) was published to provide a brief 2-page summary of the revised guidelines for infant feeding in the context of HIV.

- **Integration of Family Planning Into HIV Counseling and Testing, Prevention of Mother-to-Child Transmission, and Antiretroviral Therapy Services**

This training package is designed to train practicing HIV service providers in FP counseling and service provision for FP integration in HIV Counseling and Testing, PMTCT and ART services. It has four parts, a Training Facilitator's Guide, a Participant Handbook, PowerPoint Slides that summarize training content, and a job aid (to guide HIV service providers when providing FP counseling and services to HIV-positive clients).

Country Experiences



This section of the Toolkit contains reports of

countries that have introduced, are implementing, or have scaled up services for prevention of mother-to-child transmission (PMTCT) of HIV. These country experiences can inform health policy makers, program managers, and service providers of the strategies, challenges, and lessons learned from initiatives that address PMTCT within programs and communities. The country-specific resources in this section of the Toolkit include:

- **Program Experiences**
- **National Experiences in Policy, Guidelines and Advocacy Addressing PMTCT**
- **Feasibility Studies**

Have a suggested resource or comment about this section? Please fill out our [feedback form](#).

Program Experiences



The reports available in this section of the Toolkit

shed light on particular countries' experiences in addressing PMTCT of HIV by implementing evidence-based strategies and guidelines. These reports offer valuable information and lessons learned on key programming considerations.

Resources:

- **The Costs and Impacts of Scaling Up PMTCT in Nigeria**

This study, conducted by the USAID- and PEPFAR-funded Health Policy Project (HPP), assessed the costs and benefits of different prevention of mother-to-child transmission of HIV (PMTCT) treatment options (baseline treatment as currently offered, Option B, and Option B+). It is intended to inform the scale-up of PMTCT services in Nigeria's 13 high-burden states, which account for 70 percent of the mother-to-child transmission burden.

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- **Strengthening Community and Health Systems for**

Quality PMTCT: Applications in Kenya, Nigeria, South Africa, and Ethiopia

Pathfinder has implemented PMTCT programming in countries across the globe, gaining insight into the barriers women face in access and adherence, and using these lessons to inform implementation of the global PMTCT strategy. This technical brief discusses implementation experience in four African countries, providing recommendations for future efforts to more holistically advance improved PMTCT outcomes in resource-limited settings.

- ### **End-Of-Project Report: 12 Years of Implementing PMTCT Services in Cameroon (2000-2012)**

The Elizabeth Glaser Pediatric AIDS Foundation partnered with the Cameroon Baptist Convention Health Services (CBCHS), a local nonprofit health-care organization in Cameroon, in initiating and implementing high-quality services for preventing mother-to-child transmission of HIV (PMTCT). In doing so, they (1) expanded and optimized PMTCT services and (2) strengthened the capacity and commitment of the existing health system at all levels to ensure a sustainable and cost-effective approach. This report provides an overview of the project and lessons learned.

- ### **Preventing Mother-to-Child Transmission of HIV: Implementation Starter Kit**

This kit describes and provides access to all the materials used in the Prevention of Mother-to-Child HIV Transmission (PMTCT) component of FHI 360's Zambia Prevention, Care and Treatment Partnership (ZPCT). The program resulted in a significant increase in the use of PMTCT services as well as significant reductions in the mother-to-child transmission of HIV among ZPCT clinic clients. It now serves as a model for other countries. This kit is designed to be used by program designers to replicate the success of the ZPCT PMTCT program in other settings.

- ### **APHIAplus Nuru ya Bonde Technical Brief PMTCT**

The APHIAplus project supports prevention of mother-to-child transmission (PMTCT) of HIV services throughout Kenya. This brief outlines the program's key activities and interventions for their PMTCT initiative.

Project HEART End of Project Report

Project HEART (Help Expand Antiretroviral Therapy to children and families), was an eight-year initiative to extend life-saving treatment to millions of people living with HIV. The project involved scaling-up antiretroviral therapy through existing organizations implementing prevention of mother-to-child transmission of HIV programs in Cote d' Ivoire, South Africa, Tanzania, Zambia, and Mozambique. This report provides an overview of the project, implementation strategies within the five countries, accomplishments, challenges, and lessons learned. Individual country reports for Cote d' Ivoire, South Africa, and Tanzania are also available.

Swaziland Program Brief: Addressing the Social and Behavioral Barriers to Prevention of Mother-to-Child Transmission of HIV Through Community Dialogue - An Implementer's Guide Based on the Elizabeth Glaser Pediatric AIDS Foundation's Swaziland Experience

The Elizabeth Glaser Pediatric AIDS Foundation uses a community dialogue approach in Swaziland to tackle the root social and behavioral barriers to enhanced uptake of critical prevention and care services. This approach is thought to be promising for helping HIV-affected communities confront and address the myriad social issues that inhibit optimal care-seeking behaviors as they pursue the elimination of new pediatric HIV infections. This brief provides:

- An overview of the community dialogue approach, including its theoretical underpinnings;
- A detailed description of the community dialogue methodology and its implementation in Swaziland;
- Insights from implementing this methodology in Swaziland;and
- Audience-specific tools that have been developed to guide the dialogue process.

Zimbabwe Program Brief: Implementing a District Focal Person Model to Strengthen PMTCT Service Delivery: Early Lessons

To address mother-to-child transmission of HIV in Zimbabwe, the Elizabeth Glaser Pediatric AIDS Foundation supported the Zimbabwe Family AIDS Initiative (FAI) consortium to adopt and nationalize a PMTCT district focal person (DFP) model to support Zimbabwe's national PMTCT program. DFPs are registered nurses and/or midwives with training in community health and extensive practical PMTCT and community nursing experience. This brief provides an overview of the DFP model implemented in Zimbabwe, its impact, and lessons learned.

- **Uganda Program Brief: Providing Comprehensive HIV Prevention, Care, and Treatment for Children and Adults at Primary Care Centers**

There are approximately 940,000 people living with HIV in Uganda, 130,000 of whom are children. Adult HIV prevalence is estimated at 5.4% and more than half of the people living with HIV in the country are women. Despite the availability of services to prevent mother-to-child transmission of HIV, only 50% of pregnant women are currently receiving this critical intervention, leaving an estimated 40,000 women at risk of transmitting the virus to their infants. And while antiretroviral therapy (ART) has become more widely available in recent years, an estimated 42,000 children in Uganda are still without access to these lifesaving medicines. The Elizabeth Glaser Pediatric AIDS Foundation (the Foundation) began working in Uganda in 2000. Since that time, the Foundation's work has primarily focused on the provision of prevention of mother-to-child HIV transmission (PMTCT) services, which the Foundation has rolled out to over 400 Ministry of Health (MOH) sites in 27 districts of the country. As a result of these efforts, PMTCT services are now being offered at all levels of Ugandan health facilities—from hospitals providing complex medical care to primary care centers staffed by one nurse. This roll-out effort was guided by the principle that in order to reach those most in need, services must be brought to the facilities that the majority of individuals are most likely to access.

- **Preventing Mother-to-Child HIV Transmission through Family Planning in Maternal and Child Health Services: Kenya, Rwanda, and South Africa**

Between 2007 and 2009, FHI 360 conducted three assessment studies of preventing mother-to-child transmission (PMTCT) services in Kenya, Rwanda and South Africa. Researchers considered whether HIV-positive pregnant and recently postpartum women with unmet contraceptive need could be reached with family planning services in facilities that offered antenatal care (ANC), postnatal care (PNC) and child welfare services/child health services.

They also assessed provider readiness to offer family planning services. This publication highlights the findings of the study ? including those specific to South Africa.

National Experiences in Policy, Guidelines and Advocacy Addressing Prevention of Mother-To-Child Transmission



As efforts are made at the national level to adopt

and implement international guidelines on the PMTCT, experiences and lessons learned from one country can be valuable to others initiating adoption and implementation. The resources included here are a collection of reports on several countries' experiences implementing international guidelines and recommendations at the national level.

Resources:

- **Operationalizing the WHO 2010 Guidelines on the Prevention of Mother-to-Child Transmission (PMTCT) of HIV and Infant Feeding in Three Health Care Facilities in Tanzania**

In July 2010, the World Health Organization (WHO) released new guidelines on the prevention of mother-to-child transmission (PMTCT) of HIV and infant feeding practices. These guidelines sought to enhance the effectiveness of PMTCT by optimizing anti-retroviral

(ARV) usage and infant feeding practices based on the latest scientific evidence on maximizing HIV-free survival. In August 2011, to align with the new guidance, the Ministry of Health and Social Welfare (MOHSW) in Tanzania adopted and revised their national PMTCT and infant feeding guidelines to reflect the 2010 WHO guidelines.

But successful large-scale implementation of the 2010 guidelines requires adaptation of existing services delivery systems to the updated guidelines. Between July 2011 and March 2012, the USAID Health Care Improvement Project (HCI) supported three health care facilities and the Njombe Town Council Health Management Team in Tanzania to transition to the 2010 guidelines and develop a prototype of how the 2010 guidelines could be successfully operationalized in one district of Tanzania. The goal of the activity was to generate lessons and recommendations that could be used to guide successful scale-up of the updated PMTCT and infant feeding guidelines in other settings.

This prototype demonstrated that implementation of Option A of the WHO 2010 PMTCT and infant feeding guidelines is feasible, but requires support from all levels of the health system for successful implementation. Facility staff demonstrated that they can monitor their monthly data to identify operational challenges and come up with local solutions to improve care. While this intervention examined operational challenges and solutions to implementing Option A of the 2010 WHO PMTCT and infant feeding guidelines, its findings are also applicable to Option B and B+. The report's recommendations are aimed at countries beginning Option B+ implementation.

- **Preventing Mother-to-Child Transmission (PMTCT) of HIV: Factsheets on the Status of National PMTCT Responses in the Most Affected Countries, 2012**

Each of these 22 country-specific factsheets sets out strategic information on the state of PMTCT service-delivery and policy development, while also highlighting bottlenecks that must be tackled to reach national targets.

- **Promoting Breastfeeding as an Option for HIV-Positive Mothers in Haiti**

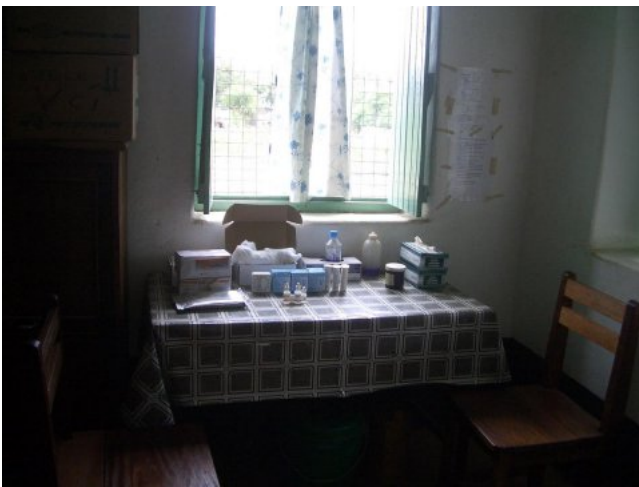
This document describes how the Infant & Young Child Nutrition Project strengthened the nutrition counseling skills of more than 300 health workers and trainers in Haiti, enabling them to provide appropriate infant feeding counseling during the critical time when an HIV-positive mother receives her child's first HIV test result.

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Expanding Breastfeeding by HIV-Positive Mothers in Nigeria: From Consensus to Action

This brief shares Nigeria's experience in adopting, adapting, and promoting the WHO 2010 guidance on breastfeeding in the context of HIV.

Feasibility Studies



This section of the Toolkit contains study reports

from various countries on the feasibility of their initiatives to address PMTCT, including integration of services and the provision of contraceptive services to prevent mother-to-child transmission of HIV/AIDS.

Resources:

- **The Costs and Impacts of Scaling Up PMTCT in Nigeria**

This study, conducted by the USAID- and PEPFAR-funded Health Policy Project (HPP), assessed the costs and benefits of different prevention of mother-to-child transmission of HIV (PMTCT) treatment options (baseline treatment as currently offered, Option B, and Option

B+). It is intended to inform the scale-up of PMTCT services in Nigeria's 13 high-burden states, which account for 70 percent of the mother-to-child transmission burden.

- **Prevention of Mother-to-Child Transmission in Kenya: Cost-Effectiveness of Option B+**

Like many sub-Saharan African countries, Kenya is exploring the adoption of the World Health Organization Option B+ strategy as the standard of care for its program to prevent mother-to-child transmission of HIV. The Health Policy Project (HPP) was invited by the National AIDS and STI Control Programme (NASCO) to help conduct a cost-effectiveness analysis of scaling up Option B+ versus other strategies. Results of the analysis suggest that implementing a scale-up of Option B+ will avert infant and adult infections but at a significant additional cost. Kenya should consider these results to assess whether Option B+ is affordable given the available resources.

- **Integration of Family Planning and Preventing Mother to Child Transmission Services in Kenya: Results of a Rapid Assessment**

This study assessed the feasibility of existing Kenyan health facilities to meet the family planning (FP) needs of HIV+ women by strengthening FP services in maternal and child health service delivery settings. Meeting unmet needs of contraception for HIV+ women is a highly effective PMTCT strategy that is often overlooked.

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