



**Ministry of Health**

**National Maternal and Child Health Center**

**National Guidelines for  
the Prevention of  
Mother-to-Child Transmission of HIV**

2<sup>nd</sup> Edition

September 2005

Sponsored by





**Ministry of Health**

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## ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal care
ARV	Antiretroviral
CMS	Central Medical Store
CoC	Continuum of Care
CoC-CC	Continuum of Care Coordination Committee
ELISA	Enzyme Linked Immunosorbent Assay
GFATM	Global Fund to Fight AIDS, TB and Malaria
HC	Health Center
HAART	Highly Active Antiretroviral Therapy
HBC	Home-based care
HIV	Human Immunodeficiency virus
IEC	Information, Education and Communication
IMCI	Integrated management of childhood illness
MCH	Maternal and Child Health
MMM	Mondul Mit Chuoy (HIV/AIDS support group)
MoH	Ministry of Health
MTCT	Mother-to-child transmission of HIV
NCHADS	National Centre for HIV/AIDS, Dermatology and STD
NMCHC	National Maternal and Child Health Centre
NVP	Nevirapine
OD	Operational District
OI	Opportunistic Infection
OPD	Outpatient Department
PMTCT	Prevention of mother-to-child transmission of HIV
PHD	Provincial Health Department
RH	Reproductive Health
STI	Sexually Transmitted Infection
SD	Single dose
TWG	Technical Working Group
TB	Tuberculosis
ZDV	Zidovudine
VCCT	Voluntary and Confidential Counselling and Testing



## FOREWORD


Cambodia is currently facing the most serious generalized HIV/AIDS epidemic in Asia. While the prevalence of HIV in Cambodia has declined among high-risk groups, it has remained relatively stable among women who attend ANC (2.2% in 2003). As the number of HIV positive women of reproductive age increases, it is crucial to expand the National Prevention of Mother-to-Child Transmission of HIV (PMTCT) Program to cover the entire country.

The National Maternal and Child Health Center (NMCHC), under the Ministry of Health (MoH) of Cambodia, is collaborating with other MoH Departments and local and international organizations to respond to the evolving needs of pregnant women and their partners. The PMTCT Program is integrated into the existing health system and not only aims to prevent new HIV infections, but also to improve the overall quality of health services for pregnant women, and offer care and support services to HIV positive women, their infants and family.

NMCHC is working collaboratively with the National Center for HIV/AIDS, Dermatology and STD (NCHADS) in order to ensure that PMTCT teams and Continuum of Care teams work together to ensure the best quality of care and support options available for people living with HIV/AIDS.

These Guidelines replace the previous *Expansion Guidelines for PMTCT in Cambodia* produced in 2002 and have been mainly written for the use of health care providers. This document provides guidance on how to initiate, implement, and monitor PMTCT services at health facilities.

Phnom Penh, 20 October 2005



Prof. **Eng Huot**  
Secretary of State for Health



## ACKNOWLEDGEMENTS

The National Prevention of Mother-to-Child Transmission of HIV Program would not be possible without the doctors, nurses and midwives working throughout the country to improve the quality of maternal and child health services. I would first like to thank the staff of the PMTCT Program, at the health center, operational district, provincial and national levels, for their determination and dedication to stemming the HIV/AIDS epidemic in Cambodia.

These guidelines have been revised by the Technical Working Group (TWG) for PMTCT and I would like to thank each member for their valuable time and technical advice. I appreciate the TWG's commitment to improving the National PMTCT Program.

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Phnom Penh, 20 October 2005

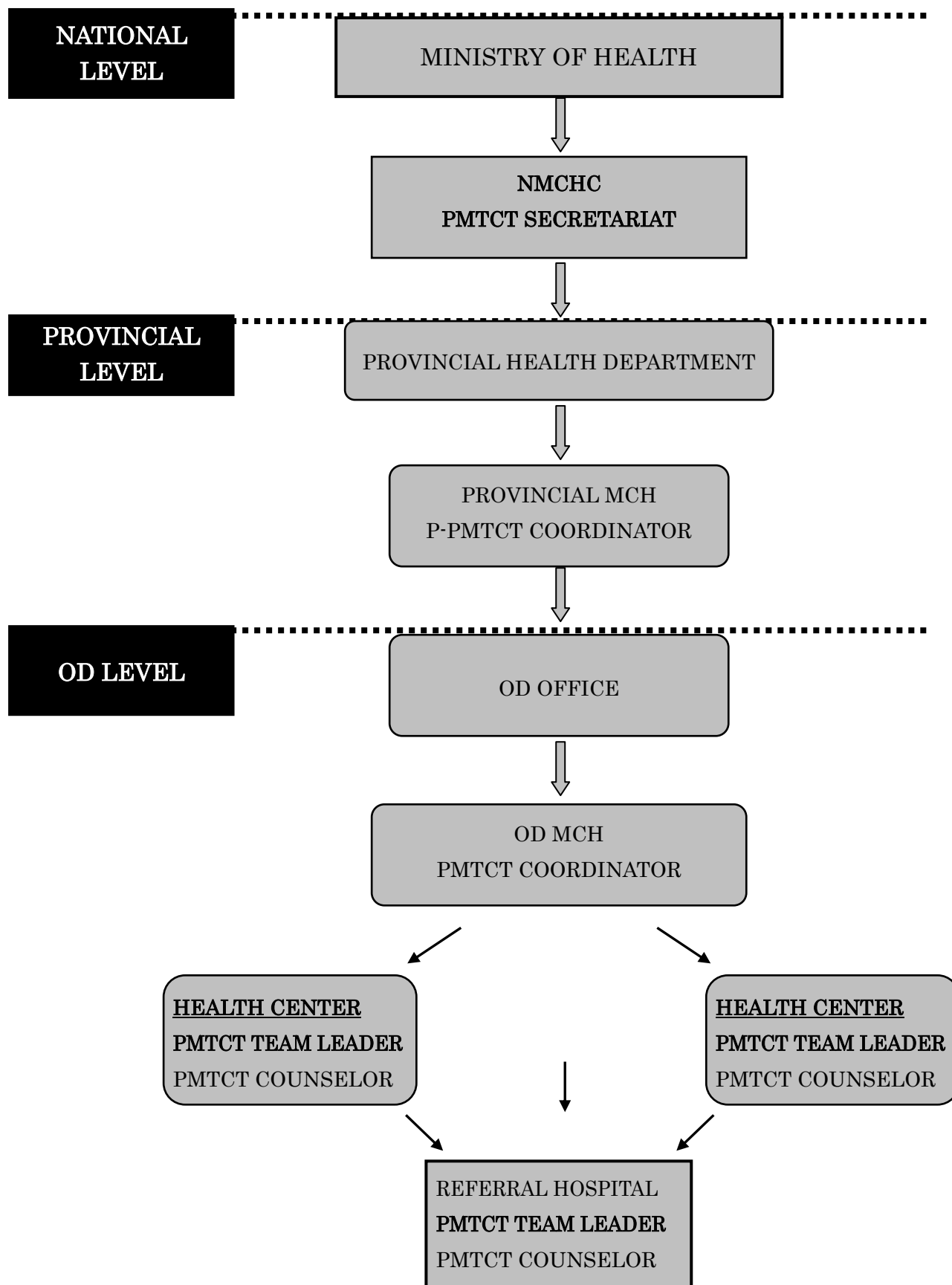


Prof. **Koum Kanal**  
Director of NMCHC





# NATIONAL PMTCT PROGRAM: ORGANIZATIONAL CHART





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## Chapter 1: Introduction

These guidelines provide the basis for national standards to prevent mother-to-child transmission of HIV in all PMTCT sites within Cambodia. They aim to further equip personnel working in PMTCT sites with essential knowledge and detailed guidance on counseling, infant feeding, obstetric care, laboratory services, ARV drug regimens, program management and the monitoring process of the PMTCT program. These guidelines also reinforce the importance of raising public awareness about PMTCT and basic HIV/AIDS information. They are based on the experiences from existing PMTCT sites in Cambodia, international recommendations, and the National policy on PMTCT. These guidelines are complemented by a number of other documents, which health care workers should consult for more in-depth information and guidance (see references).

### 1.1 Objectives of National policy on PMTCT

The National policy on PMTCT states “the main objectives of PMTCT are to prevent women, their partners and newborns from HIV infection; prevent stigma and discrimination; provide and improve access to care and support services; and to contribute to the improvement of the acceptability, accessibility and quality of health services and information on reproductive health and HIV/AIDS/STIs. PMTCT is one critical element in the overall HIV prevention and control strategy, focused primarily within the reproductive health sector of health care services.”

### 1.2 The 'package of activities'

A package of prevention and care activities for PMTCT should be integrated into existing MCH and HIV/AIDS health services in order to avoid further stigmatization. This package of activities is based on the following four prongs:

1. Primary prevention of HIV among women and their partners
2. Prevention of unwanted pregnancy among HIV-infected women
3. PMTCT through MCH/RH/IMCI/STI services, including:
  - Antiretroviral drugs
  - Safe delivery practices
  - Safe infant feeding practices
4. Access to HIV/AIDS care and support for HIV-infected women, their infants and family

A full package of activities includes:

- Voluntary and Confidential Counseling and Testing for pregnant women
- ARV prophylaxis to prevent mother-to-child transmission
- Safe delivery practices
- Counseling and support for safe infant feeding practices
- Family planning counseling or referral to family planning services
- Referral to care and support services for HIV-infected women, their infants and family.

## Chapter 2: Counseling, Testing and Education

### 2.1 Counseling

The success of a PMTCT program depends on whether a woman knows her HIV status. Thus, counseling and testing play a vital role at every PMTCT site. All women receiving antenatal care are introduced to the PMTCT program and offered confidential counseling and testing for HIV with informed consent (see Appendix A). Counselors encourage the partners of pregnant women to participate in counseling and testing services.

If the number of mothers at ANC is large enough, mother's class could be conducted before pre-test counseling to introduce information about HIV and PMTCT along with other health education topics. Pre-test and post-test counseling, however, should be provided in a room that ensures confidentiality and should be given individually.

Pre-test Counseling provides women and their partners with basic HIV/AIDS information, informs them of the testing process and helps them to explore personal HIV risk behaviors. Pre-test counseling should cover the following topics:

- Basic HIV/AIDS information
- Assessment of client's understanding of STIs, including HIV/AIDS
- STI and HIV transmission and prevention
- Assessment and discussion of client's risk of contracting HIV
- HIV risk reduction options and risk reduction plan
- MTCT and available options for prevention
- HIV testing process and confidentiality
- Benefits and risks of HIV testing
- Implications of positive and negative test results, including explanation of the "window period"
- Identification of HIV care and support services

Post-test counseling should be provided to *all* clients, regardless of HIV status, when they return for their test results. The goals of post-test counseling are to:

- Provide the client with their HIV test result.
- Ensure that the client understands the meaning of the result.
- Provide appropriate PMTCT information.
- Offer support, information and referral.
- Encourage risk-reducing behavior and partner testing.

*Adapted from: WHO/CDC. 2004. Prevention of Mother-to-Child Transmission of HIV Generic Training Package*

Counselors should provide women that are HIV-negative with the following additional information during post-test counseling:



- Summarize client's plans for risk reduction when appropriate, including information on how to prevent future HIV infection.
- Explain the high risk of transmitting HIV to the infant if she becomes HIV positive during pregnancy or breastfeeding.
- Inform her that counseling is available in the future if needed.
- Ensure understanding of the "window period" and the possible need to have another test in three months.

Counselors should provide women that are HIV-positive with the following additional information during post-test counseling:

- Discussion of the meaning of the test result and initial feelings and emotions.
- Answer any questions or concerns the client may have regarding the test result.
- Counsel the client on possible ways to deal with immediate problems and/or concerns.
- Inform her about available TB, ARV, OI and PMTCT services.
- Discuss the risks and benefits of disclosure and partner testing.
- Explain the importance of delivering in a PMTCT facility.
- Provide counseling on living and coping with HIV.
- Clearly explain infant feeding options.

Patient documents revealing their HIV status are to be kept in a confidential and secure place at all times.

## 2.2 Testing

All laboratory staff responsible for conducting HIV tests must complete the HIV testing training course provided by NCHADS. The Ministry of Health's Policy, Strategy and Guidelines for HIV Testing and Counseling are laid down by NCHADS and should be followed. HIV testing by non-laboratory personnel, such as counselors, is prohibited at this time.

VCCT for pregnant women should be integrated with counseling at ANC. PMTCT counselors should follow the following blood collection process:

1. Obtain informed consent at the end of the pre-test counseling session.
2. Properly label the blood tube and necessary log books with the client's code number and date of visit.
3. While wearing latex gloves, safely draw blood from the client into appropriate tube. *A pair of gloves should not be used on more than one patient.*
4. Send blood sample to the lab as soon as possible for HIV testing.

Feasible ways for transporting samples and results between the health center (HC) and the laboratory must be determined for each PMTCT site by the PMTCT team leader and the VCCT lab supervisor. Test results should be given in the same day whenever possible. Frequent communication between the HC and the laboratory is crucial.

Testing protocols have been developed by NCHADS to determine whether blood samples should be considered HIV negative or positive.

The following testing protocol is currently used in Cambodia:

- All serum/plasma is first tested with a simple/rapid assay.
- Serum that is non-reactive on the first test is considered HIV antibody negative.
- Serum found reactive on the first assay is re-tested with another rapid assay or ELISA.
- Serum that is reactive on both tests is considered HIV antibody positive.
- Serum that is reactive on the first test, but non-reactive on the second test, must be re-tested with the two assays, on the same serum sample.
- Concordant results after repeat testing will indicate a positive or negative result.
- If the results of the tests remain discordant the serum is considered indeterminate, and a new sample should be taken and the testing procedure repeated.

*Source: NCHADS. 2002. Policy, Strategy and Guidelines for HIV Counseling and Testing.*

When it is available, acceptable, feasible, and with patient's consent, a syphilis test (RPR) should be conducted using the same blood sample given for the HIV test. If a patient has been diagnosed with an STI, using diagnostic or syndromic approach, they should be referred to an STI clinic for treatment.

Quality control procedures established by NCHADS should be followed at all times. These include quality control for specimen collection, storage and testing. The lab supervisor at the referral laboratory is responsible for monitoring the quality of test results on a quarterly basis.

## **2.3 IEC**

Information, education and communication (IEC) messages and campaigns help to improve the acceptability of PMTCT services and aid in preventing stigma and discrimination. Communication strategies aimed at providing adequate and accurate information on HIV/AIDS needs to include an emphasis on PMTCT. Appropriate IEC materials such as posters, leaflets, and videos aimed at positively changing knowledge, attitudes and practices of clients and service providers will be distributed as developed.

## Chapter 3: ARV Prophylaxis

### 3.1 Drug regimens to prevent MTCT

ARV prophylaxis has been shown to be extremely effective in preventing mother-to-child transmission of HIV. The following procedures regarding the administration of ARV prophylaxis should be followed for all HIV positive pregnant women.

If a pregnant woman tests positive for HIV she should be **immediately** referred to an OPD clinic that offers ART/OI services and assessed for rapid initiation of highly active anti-retroviral treatment (HAART) eligibility.

**Situation A:** Pregnant woman is assessed for HAART eligibility at an OPD clinic that offers ART/OI services

**Algorithm 1:** Mother eligible for HAART (WHO Clinical Stage 4 or CD4 < 250)

- Mother (if not anemic) starts ZDV + 3TC + NVP as soon as possible (rapid initiation). If anemic, the mother starts D4T + 3TC + NVP as soon as possible.
- Mother continues HAART regimen during labor.
- Infant receives:
  - SD NVP (2 mg/kg) within 72 hours of birth.
  - Zidovudine (ZDV) (4mg/kg) twice a day for one week.
  - *If the mother received less than four weeks of HAART during pregnancy, the infant should receive ZDV (4mg/kg) twice a day for **four** weeks.*

**Algorithm 2:** Mother not eligible for HAART (WHO Clinical Stage 1,2 or 3 or CD4 > 250) or PMTCT sites where OI/ART services are not yet available

- Mother receives:
  - ZDV (300 mg) twice a day starting at 28 weeks of pregnancy or as soon as feasible thereafter.
  - ZDV (300 mg) at the onset of labor and every three hours until delivery.
  - Single dose NVP (200 mg) at the onset of labor.
  - ZDV (300mg) and 3TC (150mg) twice a day for seven days after delivery (can be considered to reduce the emergence of NVP resistance).
- Infant receives:
  - SD NVP (2 mg/kg) within 72 hours of birth.
  - ZDV (4 mg/kg) twice daily for one week.
  - *If the mother received less than four weeks of ZDV during pregnancy, the infant should receive ZDV (4mg/kg) twice a day for **four** weeks.*

**Situation B:** Mother did not receive ARV prophylaxis (including SD NVP and/or ZDV) while pregnant or in labor (i.e. mother did not attend ANC and arrived at the health facility within two hours of delivery)

- Infant receives:
  - SD NVP (2mg/kg) within 72 hours of birth.
  - ZDV (4 mg/kg) twice a day for four weeks.

Appendix B presents these ARV prophylaxis options in a table for quick reference.

### **3.2 Feasibility**

When administering ZDV the following must be assured:

- The PMTCT site has a physician or secondary mid-wife that has been trained on the use of ZDV, its side effects, the importance of adherence and/or compliance and the need for follow-up of the mother.
- The laboratory used by the PMTCT site is able to accurately conduct hemoglobin or hematocrit tests.
- The pregnant woman is willing to have a baseline hemoglobin or hematocrit test to rule out anemia, and is willing and able to return to the site every two weeks for the first month of taking ZDV to have follow-up hemoglobin or hematocrit tests. After the first month of taking ZDV the pregnant woman is willing and able to return to the site every four weeks until delivery to have follow-up hemoglobin or hematocrit tests. If hemoglobin is  $< 9$  or hematocrit is  $< 33\%$  then ZDV should not be given until the anemia is treated.
- The PMTCT site has access to iron and folate supplementation and is educated on the administration of both for the purposes of preventing and/or controlling anemia.
- The pregnant woman understands the importance of adherence and compliance and is willing and able to take ZDV twice a day, everyday, until delivery.
- The pregnant woman is willing and able to deliver at a maternity ward that provides ARV prophylaxis for the purpose of PMTCT.

## Chapter 4: Safe Delivery

### 4.1 Universal Precautions

Health workers should follow universal precautions on all women in labor irrespective of their HIV status.

Universal precautions include the following practices:

- Washing hands with soap and water after contact with blood and body fluids.
- Disinfecting or sterilizing all devices and equipment used during invasive procedures.
- Avoiding needle recapping to reduce needle stick injuries.
- Using needles or scalpel blades on one patient only.
- Safely disposing of needles in puncture- and leak-proof safety boxes.
- Wearing gloves when in contact with body fluids, non-intact skin, or mucous membranes.
- Covering your own broken skin or open wounds with waterproof dressing.
- Wearing impermeable plastic apron and eye shields during operations and deliveries.
- Promptly and carefully clean spills involving blood or other body fluids.
- Using systems for safe waste collection and disposal.

*Adapted from: WHO/CDC. 2004. Prevention of Mother-to-Child Transmission of HIV Generic Training Package*

### 4.2 Caesarean Section

Elective caesarean section can reduce the risk of MTCT as compared to vaginal delivery; however, this procedure carries the risk of surgical complications, including infection and premature delivery. **Caesarean section is therefore not recommended on a routine basis and should only be performed for standard obstetric indications.**

Alternative activities to help ensure a safe delivery include the following:

- Avoid artificial rupture of membranes, unless necessary.
- Avoid episiotomies unless absolutely necessary.
- Minimize the use of forceps or vacuum extractors.
- Minimize the risk of postpartum hemorrhage.
- Practice universal precautions.

*Adapted from: WHO/CDC. 2004. Prevention of Mother-to-Child Transmission of HIV Generic Training Package.*

### **4.3 Post-delivery counseling**

After delivery, mothers are to be counseled by trained midwives on how to appropriately feed their infants based on the infant feeding method previously chosen (see Infant Feeding section). All women, regardless of HIV status, should receive postpartum education regarding the nutritional needs of children and the need for infant immunizations.

Family planning services are also provided after delivery to avoid future unwanted pregnancies among all women, including HIV positive women. Counselors should also use this time to remind HIV positive women where they can access HIV care and support services, including MMM, HBC and OPDs offering OI prophylaxis and ART.

## Chapter 5: Infant Feeding and Follow-up

### 5.1 Infant feeding

Mother-to-child transmission of HIV can occur during breastfeeding. However, infants who are not breastfed may be at risk of severe diarrhea, malnutrition, and/or respiratory infection due to unsafe preparation of formula milk or complementary foods. Therefore, HIV-infected mothers need to be counseled by skilled counselors in order to help them to make an informed infant feeding choice.

All women, regardless of HIV status are encouraged to exclusively breast-feed their infants for the first six months of life. Exclusive breastfeeding is achieved when mothers give their infants only breast milk. Children should not receive any other food or drink, including water, during the six months of exclusive breastfeeding.

Women who are not HIV-infected and women of unknown HIV status are further encouraged to continue breastfeeding their children with the addition of complementary foods for up to two years. All couples are encouraged to use condoms while the infant is breastfeeding. Women of unknown HIV status are also encouraged to be tested for HIV.

HIV-infected women are encouraged to exclusively breastfeed their infants for the first six months of life and then abruptly wean. HIV-infected women should be given detailed information about infant feeding options. Formula feeding can only be promoted when it is acceptable, feasible, affordable, sustainable and safe.

In order to meet these criteria the following conditions must be met:

- Acceptable in a particular society or culture.
- Feasible- meaning that the family can understand and follow instructions for preparing infant formula and is available to do so at least eight times per day.
- Affordability- meaning that the family can pay for baby formula without sacrificing the needs of their other children. It also means that, beside milk, other items such as sugar, micro-nutrient supplements and fuel for cooking are continuously available.
- Sustainable- meaning that the family has a long-term, reliable supply of infant formula that is enough to meet the baby's food needs.
- Safe- meaning that the family has access to a reliable supply of safe water for mixing food and washing feeding utensils; that the replacement food is nutritious and free of germs; that the food can be stored safely or made up one meal at a time; and that affordable health care is nearby.

*Adapted from: UNICEF. 2004. "WHAT RELIGIOUS LEADERS CAN DO ABOUT HIV/AIDS: Action for Children and Young People".*

For those mothers who choose to give alternative feeding, the importance of complete avoidance of breastfeeding should be explained, as mixed feeding increases the risk of HIV transmission from mother-to-child (Iliff PJ et al, 2005).

If the mother chooses to exclusively breastfeed her infant, she must be counseled on correct management of the breast to minimize the risk of HIV transmission during feeding. Stopping breastfeeding early reduces the risk of transmission of HIV by reducing the length of time the infant is exposed to the virus in breast milk. Therefore it is recommended that HIV-infected mothers discontinue breastfeeding at six months. Before a mother stops breastfeeding she needs counseling about complementary feeding and how to abruptly wean the infant at six months. Trained midwives should give this counseling during ANC and again after delivery.

## 5.2 Infant Follow-up

Children born to HIV infected mothers need to be followed-up until 18 months of age by staff of the pediatric section of the nearest OPD that offers ART/OI services. With the mother's consent, all children born to HIV infected mothers should be tested for HIV at 18 months of age. Opportunistic infection (OI) prophylaxis is to be provided to these children as needed by the Pediatric Hospital or by local health facilities offering OI/ART services. As stated in the National Guidelines for Pediatric ARV, Cotrimoxazole should be provided to exposed children at six weeks of age and continued until the child is either HIV negative or asymptomatic at 12 months of age. Please refer to the table below for more detailed information on the administration and dosing of Cotrimoxazole in children.

### Cotrimoxazole for OI prophylaxis in Children exposed to and/or living with HIV (Tablet 480mg, Syrup 240mg/5ml)

Weight of child and dose of Cotrimoxazole: Given once a day	OI prevented	When to start	When to stop
<b>5-9kg:</b> 1/2 tab or 5ml  <b>10-14kg:</b> 1 tab or 10ml  <b>15-24kg:</b> 1 1/2 tab or 15ml  <b>&gt;25kg:</b> 2 tabs	PCP, Cerebral toxoplasmosis, some bacterial infections	<u>Primary prophylaxis:</u> <b>1.</b> Exposed children at 6 weeks <b>2.</b> HIV positive with CD4<15% <u>Secondary prophylaxis:</u> if history of PCP	<b>1.</b> If HIV negative or <b>2.</b> at 12 months <u>and</u> asymptomatic <b>3.</b> CD4>15% on 2 consecutive occasions 6 months apart <u>Secondary prophylaxis:</u> continue lifelong

Source: NCHADS. 2004. National Guidelines for the use of Pediatric ARV.

HIV-exposed infants will be given the same routine immunizations as all other children. Please refer to the National Immunization Program's Vaccination Policy Recommendation's for a complete schedule of immunizations.



## **Chapter 6: Family Planning**

### **6.1 Family Planning and HIV**

Consistent and correct use of modern methods of contraception can prevent unwanted pregnancies. Preventing unwanted pregnancies can reduce maternal and infant mortality. Condoms are one modern contraceptive method. If condoms are used consistently and correctly, they can prevent mothers from sexually transmitted diseases, including HIV/AIDS. Restrictions on women's access to Family Planning at service delivery and community levels must be prevented.

To meet the growing demand for access to Family Planning information, counseling, and services, health care workers must mobilize and provide sufficient family planning resources. Family planning resources should include a wide range of safe, effective, affordable and acceptable family planning and contraceptive methods, including new options and underutilized methods.

All stakeholders must take part in improving access for men, women, unmarried individuals, and adolescents to high quality, client-centered information and services that offer a range of methods appropriate for people at different stages of their lives.

HIV-infected women with unwanted pregnancies should be offered reliable information and compassionate counseling, including information on where and when a pregnancy may be terminated legally. Such information and services need to be made more broadly available as part of comprehensive reproductive health care. Where abortion services are available, they should be safe. It is essential that all providers of care have the necessary medical supplies, technical skills, and information to offer high quality care.

All women identified through the PMTCT Program should be referred to family planning services and counseled on the risks and benefits of all available contraceptive methods.

### **6.2 Methods of Family Planning**

Complete information regarding the risks and benefits of various methods of contraception should be given to all women regardless of HIV status. HIV positive women are encouraged to use condoms to ensure simultaneous prevention of STIs and infections with other strains of HIV, as well as unintended pregnancies. All women should be taught about correct use of condoms and condom negotiation skills to use with her partner.

Suitable contraceptive methods for HIV positive women are:

- Male and female condoms
- Oral contraceptives (if not on HAART)
- Injectable progestagen
- Sterilization
- Contraceptive implants

Spermicides can cause vaginal irritation and epithelial inflammation and are therefore not recommended for use by HIV positive women, as it may increase the risk of transmission to partners. IUDs are also not recommended for HIV positive women because of the risk of pelvic inflammatory disease and increased blood loss due to heavier menstrual flow.

## **Chapter 7: Access to Care Network**

### **7.1 Integration of PMTCT into existing health system**

The PMTCT Program utilizes the existing health system in an effort to increase the quality of existing health care services with specific emphasis on maternal and child health services. In order for the PMTCT program to succeed there must be strong linkages to and coordination between already existing programs, such as, the family planning, nutrition and infectious disease (including malaria, TB, and HIV) programs.

PMTCT sites will continue to be implemented in already existing health centers and referral hospitals. Trained and experienced staff currently working for the health system will continue to be utilized.

### **7.2 Referral mechanisms**

To ensure a continuum of care it is crucial to develop strong and effective referral mechanisms at the OD level between health facilities, PMTCT services, VCCT services, OI/ART services, TB/HIV services, malaria programs, HBC teams and support organizations. Referral mechanisms are to be developed for each OD by the CoC coordination committee. All HIV positive pregnant women identified are to be informed about and referred to all HIV/AIDS care and support services offered in the area. The referral forms developed by NMCHC should be used to refer pregnant women at ANC to the nearest OPD with ART/OI services (see Appendix C). OPDs should also use the referral card developed by NMCHC to refer pregnant women to ANC and maternity wards that offer ARV prophylaxis (see Appendix D).

Placental malaria does contribute to a higher transmission rate of HIV. Therefore all HIV positive pregnant women in malaria-infected areas should be referred to the nearest malaria program and encouraged to use mosquito nets.

### **7.3 CoC coordination committee**

PMTCT Operational District Coordinators should be core members of the CoC coordination committee. The coordination committee, as outlined in the Continuum of Care Framework, will "ensure that all stakeholders at OD level work together for the optimum use of resources available. The committee will identify needs, gaps and areas of collaboration and coordination among the partners involved in HIV/AIDS care in the OD. It will help define referral mechanisms between institutional care, home and community based care and will provide a regular forum for the discussion of issues relating to the continuum of care".

According to the Continuum of Care Framework for provinces with only one OD, the coordination of activities could be achieved through a provincial level coordination committee. In larger provinces where coordination committees will be OD based, mechanisms to ensure communication from one OD to another and from OD to province need to be in place.

## **CHAPTER 8: Supervision and Quality Control**

### **8.1 Supervision**

Supervision is a vital part of monitoring the program performance and providing useful, objective feedback for program improvement. In order to ensure the quality of the PMTCT program, supervision will be conducted on a local, provincial and national level. Supervision visits should not only aim to mitigate problems occurring but also identify strengths and successes. Supervisors should be supportive and offer positive advice and encouragement when necessary. The key issues for supervision are:

- Facilitating a supportive environment.
- Ensuring that proper counseling is given to women and their partners.
- Ensuring confidentiality of HIV test results.
- Ensuring that ARV prophylaxis is available and administered correctly.
- Ensuring that mothers and babies are properly referred to a functioning care network.
- Improving skills of staff.
- Mitigate problems and effect solutions.

It is imperative that each PMTCT site maintains a continuous stock of supplies and offers appropriate ANC services to all pregnant women. A checklist has been created by NMCHC to assist PMTCT Coordinators at the Operational District level in conducting monthly monitoring of supplies and services (see Appendix E). This checklist should be completed monthly and sent to the PMTCT Provincial Coordinator.

PMTCT Provincial Coordinators and/or PMTCT Provincial Managers should supervise each PMTCT site in their province once every quarter. Staff from the National Program, accompanied by the PMTCT Provincial Coordinator, will conduct supervision visits every 6 months. National Program staff may conduct additional supervision and/or monitoring visits as needed. The supervision checklist developed by the PMTCT Secretariat (see Appendix F) should be used and fully completed for each supervision visit. All completed checklists are to be sent to the PMTCT Secretariat.

PMTCT Provincial Coordinators/Managers and National PMTCT staff should provide feedback to the PMTCT site and the Provincial Health Director after each supervision visit. Feedback should not only include what needs to be improved at the site but also what is working well.

### **8.2 Quality Control**

All quality control for HIV and syphilis testing will be scheduled and conducted by NCHADS.

## CHAPTER 9: Monitoring and Evaluation

### 9.1 Data Collection and Reporting

PMTCT sites are responsible for compiling monthly data into a site report. Site reports are to be sent to the PMTCT Provincial Coordinator each month. The Provincial Coordinator is responsible for aggregating all PMTCT site reports into one provincial report that will be sent to the PMTCT Secretariat each month. PMTCT sites may collect additional information if necessary, but all PMTCT sites should complete the monthly PMTCT data form developed by the PMTCT Secretariat. The following data should be included:

#### Pregnant women ANC/VCCT

1. # of ANC clients
2. # of first ANC
3. # of pre test counseling
4. # of pre test counseling (Husband)
5. # clients that consulted with their husband before HIV test
6. # of HIV tested
7. # of HIV tested (Husband)
8. # of posttest counseling
9. # of posttest counseling (Husband)
10. # of HIV positive
11. # of HIV positive (Husband)
12. # of client second test
13. # of client second test (Husband)
14. # of client second test positive
15. # of client second test positive (Husband)
16. # of clients HIV positive transfer from...
17. # of clients HIV positive referred to CoC/ART/OI....
18. # of clients HIV positive referred to CoC/ART/OI site (husband)
19. # of pregnant women started ZDV
20. # of pregnant women receiving HAART

#### Deliveries

21. Total # of deliveries this month
22. # of unknown HIV status cases
23. # of HIV negative cases
24. # of HIV positive cases

#### Mother - ARV regimen and/or prophylaxis

- 25. # of mothers received HAART for four or more weeks
- 26. # of mothers received HAART for less than 4 weeks.
- 27. # of mothers received ZDV for four or more weeks.
- 28. # of mothers received ZDV for less than 4 weeks.
- 29. # of mothers that received ZDV for four or more weeks and SD NVP during labor.
- 30. # of identified HIV positive women that did not receive ARV prophylaxis during labor

#### Infants born to HIV Positive Mothers

- 31. # received SD NVP and one week of ZDV
- 32. # received SD NVP and four weeks of ZDV
- 33. # started breastfeeding from birth
- 34. # started replacement feeding from birth

#### Infant Follow-up

- 35. # of exposed children return for follow-up
- 36. # of infected children registered in PMTCT service referred to HIV pediatric care
- 37. # of exposed children started Cotrimoxazole prophylaxis
- 38. # of infants tested at 18 months
- 39. # of infant boys tested HIV positive at 18 months
- 40. # of infant girls tested HIV positive at 18 months
- 41. # of HIV positive infants on ART

## 9.2 Regular monitoring

The PMTCT program should be monitored and supervised by PMTCT Managers and Coordinators (see Chapter 8). Monthly PMTCT data should also be reviewed by the PMTCT team and used as a monitoring tool for the PMTCT site.

A set of indicators has been developed in order to track achievements of the National PMTCT Program. These indicators will be calculated by using PHD monthly PMTCT reports, as well as, reports from the PMTCT Secretariat and NCHADS. In addition to use within the program, this data will be reported to NCHADS and the MoH either directly, or through the TWG. Indicators to be used at the central level are shown below.

<b>National PMTCT Indicators</b>	
<b>Indicator 1</b>	<b>The % of operational districts (ODs) that have at least one facility offering the minimum package of PMTCT services.</b>
Type	Outcome
Definition	This indicator is a measure of PMTCT national coverage. It measures the percentage of operational districts that have at least one facility offering the minimum package of PMTCT services. A minimum

	package of PMTCT services includes: <ol style="list-style-type: none"> <li>1. Counselling and testing for pregnant women</li> <li>2. ARV prophylaxis to prevent MTCT</li> <li>3. Counselling and support for safe infant feeding practices</li> <li>4. Family planning counselling or referral</li> </ol>
Numerator	The number of ODs which have at least one facility offering the minimum package of PMTCT services
Denominator	The total number of ODs
Method of M/E	Report
Frequency	Quarterly
Source	Report from PMTCT secretariat
Notes	GFATM Coverage Indicator #1; PEPFAR Indicator

<b>Indicator 2</b>	<b>The % of ANC 1 women who received HIV testing</b>
Type	Outcome
Definition	This indicator is a measure of HIV testing participation rates. It measures the % of pregnant women who come for first ANC in target health facilities and receive HIV testing.
Numerator	The number of pregnant women who received testing
Denominator	The number of pregnant women who came to target health facilities for the first ANC visit.
Method of M/E	Provincial Health Department Monthly Report
Frequency	Quarterly
Source	Report from PMTCT secretariat

<b>Indicator 3</b>	<b>The % of ANC 1 women who receive post-test counselling</b>
Type	Outcome
Definition	This indicator is a measure of the participation rate for women who come for first ANC, agree to an HIV test and return to receive their HIV test result. It measures the % of pregnant women in target health facilities who receive post-test counselling and thus their HIV test results.
Numerator	The number of pregnant women who received test results with appropriate post-test counselling.
Denominator	The number of pregnant women who came to target health facilities for

	the first ANC visit.
Method of M/E	Provincial Health Department Monthly Report
Frequency	Quarterly
Source	Report from PMTCT secretariat
Notes	GFATM coverage indicator #2; PEPFAR Indicator

<b>Indicator 4</b>	<b>The % of husbands and/or partners that receive post-test counselling through the PMTCT program.</b>
Type	Outcome
Definition	This indicator is a measure of partner participation. It measures the percentage of husbands and/or partners that receive post-test counselling and thus their HIV test results through the PMTCT program.
Numerator	The number of husbands/partners who attended post-test counselling.
Denominator	The number of pregnant women who come to target health facilities for 1st ANC visit.
Method of M/E	Provincial Health Department Monthly Report
Frequency	Quarterly
Source	Report from PMTCT secretariat

<b>Indicator 5</b>	<b>The % of children born to HIV positive mothers, identified through the PMTCT program that received a complete course of antiretroviral prophylaxis to reduce the risk of MTCT of HIV.</b>
Type	Outcome
Definition	This indicator measures the percentage of women and their infants that completed the PMTCT program by receiving ARV prophylaxis to prevent the transmission of HIV from mother to child.
Numerator	Number of infants that received ARV prophylaxis
Denominator	Number of HIV positive women identified at delivery
Method of M/E	Provincial Health Department Monthly Report
Frequency	Quarterly
Source	Report from PMTCT Secretariat
Notes	GFATM Coverage Indicator #3



<b>Indicator 6</b>	<b>The # and % of children born to HIV infected mothers who received ARV prophylaxis at birth and are HIV infected at 18 months.</b>
Type	Impact
Definition	This indicator measures the transmission rate of HIV from mother to child after PMTCT prophylaxis.
Numerator	The number of children born to HIV infected mothers, who received ARV prophylaxis at birth, and test positive for HIV at 18 months of age.
Denominator	The number of children born to HIV infected mothers, who received ARV prophylaxis at birth, and had an HIV test at 18 months of age.
Method of M/E	Provincial Health Department Monthly Report and/or External Survey
Frequency	Annually
Source	Report from PMTCT Secretariat
Notes	UNGASS Impact Indicator/GFATM impact indicator.

<b>Indicator 7</b>	<b>The number of health care workers, counsellors and PLHA trained in PMTCT in the past 12 months.</b>
Type	Output
Definition	This indicator is a capacity building measurement. It measures the number of health care workers, counsellors, and PLHA trained in PMTCT in the past 12 months.
Method of M/E	Training Report
Frequency	Annually
Source	Report from PMTCT secretariat
Notes	GFATM Main Activity Indicator #2; PEPFAR Indicator

### 9.3 Evaluation

NMCHC, NCHADS and the MoH will evaluate the national PMTCT program annually. Evaluations will be based on existing data, reports and experiences.

## **CHAPTER 10: Preparation for New PMTCT sites**

### **10.1 Site selection**

The health facilities to be involved in the PMTCT program need to be identified and selected through, or with the support of, the Provincial Health Department and concerned OD. Each PMTCT site requires the following:

- Capacity for antenatal and postnatal care including Family Planning services
- Counseling and testing services (linkages with VCCT lab)
- Capacity for delivery and newborn care
- Links with OI/ART services

Preference will also be given to sites with existing MMM, HBC teams and community care and support services.

NMCHC staff will conduct a site assessment for all proposed PMTCT sites. The site assessment is used to inspect the facilities and determine whether or not renovation is needed; to assess current human resources; to better understand the utilization rates of services at the facilities; and to analyze any remaining strengths or barriers to implementing PMTCT services at the location. The site assessment checklist can be found in Appendix G.

All health centers involved with the PMTCT program must have a separate room for HIV counseling that ensures privacy and confidentiality before launching the PMTCT site. Renovation will be arranged by NMCHC when necessary.

### **10.2 Human resources**

Selecting appropriate staff to work for the PMTCT Program is an important managerial task. The provincial PMTCT Coordinator should have previous experience working in maternal and child health and should be selected by the Provincial Health Director. The Director of the Operational District should appoint a PMTCT OD Coordinator and PMTCT Team Leaders at the health center level. All staff that comprise the PMTCT Team should be selected based on knowledge and experience working with HIV/AIDS and/or maternal and child health services. The PMTCT team should include:

- PMTCT Provincial Program Manager
- PMTCT Provincial Coordinator
- PMTCT OD Coordinator
- PMTCT Team Leader at Health Center and/or Referral Hospital Level
- PMTCT Counselors at ANC and Maternity

The PMTCT team should regularly work together in planning, preparation, implementation, and monitoring. These components are key factors for the successful implementation of the PMTCT program. Please see Appendix H for the Terms of Reference for the PMTCT counselors, PMTCT Provincial Coordinator, PMTCT Provincial Manager and PMTCT OD Coordinator.

### **10.3 Training**

PMTCT staff at all PMTCT sites should receive training on Basic HIV/AIDS and PMTCT, Counseling, Infant and Complementary feeding, Universal precautions, and Birth Spacing. Other trainings may be provided as needed. Trainings will be conducted collaboratively by NCHADS and NMCHC.

Laboratory staff will receive HIV testing training from NCHADS. These trainings follow the standard curriculum developed by NMCHC and NCHADS.

### **10.4 Logistics and supplies**

Logistic systems have been developed to ensure a consistent and continuous supply of materials and equipment needed to maintain a PMTCT site. Such materials include those used for universal precautions; blood drawing materials; necessary drugs (including those used for prophylaxis); and other supplies (see Table below). All supplies should be obtained through either CMS, VCCT services under NCHADS, or from support by partners. The Provincial PMTCT Coordinator is responsible for ensuring that all PMTCT sites in the province maintain a constant supply of necessary materials and equipment.

The following supplies are needed for all PMTCT sites:

<b>Office Equipment</b>	
Medical Record Cabinet	Rubbish bin
Counseling Chairs	Referral forms
Cupboard for supplies	Consent forms
Office desk	Logbooks
<b>Personal Protective Equipment</b>	
Gloves - various sizes	Footwear
Aprons	Waterproof dressings
Eyewear	
<b>Other Materials</b>	
IEC materials (when available)	
Alcohol 95%	Equipment for sterilization
Blood collection tubes	Needles and syringes
Disinfection soap	Sharps disposal container
Bandage gauze	Nevirapine syrup
Penis model	Nevirapine tablets
Condoms	Zidovudine syrup (optional)
Waterproof waste containers for contaminated items	Zidovudine tablets (optional)

**Prepared by Technical Working Group on PMTCT  
August 2002**

**Revised by Technical Working Group on PMTCT  
September 2005**

## Appendix

### Appendix A: Consent Form for HIV Testing



Ministry of Health  
NMCHC

KINGDOM OF CAMBODIA  
NATION-RELIGION-KING

#### PMTCT Program Consent Form

I am \_\_\_\_\_ Code Number \_\_\_\_\_

Address: \_\_\_\_\_

I affirm that:

1. I have received information on PMTCT by counselor.
2. I agree to have HIV test voluntarily.
3. The test result will be confidential.
4. I have a right to file a complaint against anyone who discloses my HIV status without my permission.
5. I have the right to deny any points in this consent form.

Day \_\_\_\_\_ Month \_\_\_\_\_ Year \_\_\_\_\_

Signature of client \_\_\_\_\_

Signature of counselor \_\_\_\_\_

Name.....

Name.....

## Appendix B: ARV Prophylaxis Regimens for PMTCT

Course	Antenatal	Intrapartum	Postpartum	Postnatal
<b>HAART (mother)</b>	<b>Mother:</b> HAART	<b>Mother:</b> HAART	<b>Mother:</b> HAART	<b>Infant:</b> NVP (2 mg/kg) oral suspension immediately after birth and ZDV (4 mg/kg) twice a day for seven days*
<b>Zidovudine (ZDV) and Nevirapine (NVP)</b>	<b>Mother:</b> ZDV (300 mg) twice a day starting at 28 weeks or as soon as feasible thereafter	<b>Mother:</b> ZDV (300 mg) at onset of labor and every 3 hours until delivery and single-dose NVP (200 mg) at onset of labor	<b>Mother:</b> ZDV (300 mg) and 3TC (150 mg) twice a day for seven days	<b>Infant:</b> NVP (2 mg/kg) oral suspension immediately after birth and ZDV (4 mg/kg) twice a day for seven days**
<b>ZDV and/or NVP for Infant</b> (when mother has received no ARV prophylaxis)	None	None	None	<b>Infant:</b> NVP (2 mg/kg) oral suspension immediately after birth and ZDV (4 mg/kg) twice a day for four weeks.

\* If the mother received HAART less than 4 weeks during pregnancy the infant should receive **four** weeks of ZDV.

\*\* If the mother received less than 4 weeks of ZDV during pregnancy the infant should receive **four** weeks of ZDV.

*Adapted from: WHO/CDC. 2004. Prevention of Mother-to-Child Transmission Generic Training Package*

## Appendix C: Referral Slip for ANC-OPD

### PMTCT Program Referral slip

Center:.....District.....Province.....

Patient ID # \_\_\_\_\_

Responsible Person:	Signature:
Patient's Name and Address:	
<div style="display: flex; justify-content: space-between;"> <div> Date of Last Period: <span style="border: 1px solid black; padding: 0 5px;">  </span><span style="border: 1px solid black; padding: 0 5px;">  </span><span style="border: 1px solid black; padding: 0 5px;">  </span><span style="border: 1px solid black; padding: 0 5px;">  </span><span style="border: 1px solid black; padding: 0 5px;">  </span> </div> <div> Estimated Date of Delivery: <span style="border: 1px solid black; padding: 0 5px;">  </span><span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span><span style="border: 1px solid black; padding: 0 5px;">  </span> </div> </div>	
ARV Treatment/Prophylaxis received during pregnancy: Starting date:.....	
Notes:	

This patient has also been referred to:

Service:	Address:
OI/ART <input type="checkbox"/>	.....
TB/HIV <input type="checkbox"/>	.....
MMM <input type="checkbox"/>	.....
HBC <input type="checkbox"/>	.....
FBO <input type="checkbox"/>	.....
OTHERS <input type="checkbox"/>	.....

## Appendix D: Referral Slip for OPD-ANC-Maternity

### PMTCT Program

#### Referral slip

OPD.....District.....Province.....

Patient ID # \_\_\_\_\_

Date: .....

Patient Name: .....Age:.....

Patient Address:.....

.....

#### Clinical Observations:

.....

.....

.....

#### Lab tests results:

Date tests were performed: .....

Hb .....Platelet .....Hep. B&C.....

CD4..... Others:.....

#### Patient taking ARVs:

Triple Therapy Yes (specify drugs) \_\_\_\_\_ No \_\_\_\_\_

Date ARVs were initiated: Day \_\_\_\_\_Month \_\_\_\_\_Year \_\_\_\_\_

Notes: .....

.....

.....

.....

Link with other NGO: Yes (specify) \_\_\_\_\_No \_\_\_\_\_

Date of Next Appointment: .....

Responsible physician.....



## Appendix E: Monthly PMTCT Checklist for Local Level

### Monthly PMTCT Checklist for Local Level

*To be completed by PMTCT Coordinators at the Operational District level*

1. Date of Supervision:.....
2. Location:(Phnom Penh/Province) .....
  - a. Name of the District:.....
  - b. Name of the Health Center: .....
  - c. Name of the Hospital: .....
3. Name of PMTCT Team Leader.....
4. Please check whether or not the following materials are currently available in the ANC at this PMTCT site:

Nº	Materials	Yes	No
1	Registration book		
2	Consent Forms		
3	Counseling Card		
4	Code stickers		
5	Slip for Lab technician		
6	Referral slip		
7	Materials for blood testing		
8	Gloves		
9	Penis model		
10	Condom		
11	IEC materials to show the patient		
12	Safe needle disposal box		

5. Mother's class and ANC observations: Please check whether or not the following topics and/or procedures were explained and/or performed during the mother's class or ANC visit:

Nº	Mother education	Yes	No
1	Welcome and greeting		
2	General health education		
3	Birth spacing		
4	Nutrition		

5	Breastfeeding		
6	STI/HIV/AIDS		
7	PMTCT Program and VCCT		

Nº	Health assessment	Yes	No
1	Measured height and weight of pregnant woman		
2	Took patients blood pressure		
3	Asked about problems related to pregnancy		
4	Conducted high risk assessment		
5	Conducted STI assessment		
6	Provided Tetanus immunization to pregnant woman		
7	Performed fetal heart check		
8	Checked for fetal position		

6. Please check whether or not the following materials are currently available at the maternity ward of this PMTCT site:

Nº	Materials	Yes	No
1	Registration book		
2	Documents in locked cabinet		
3	ARV prophylaxis for mother		
4	ARV prophylaxis for baby		
5	Gloves		
6	Boots		
7	Apron		
8	Goggles		
9	Disinfection solution		
10	Sterilization materials		
11	Sterile room for delivery (i.e.: disinfectant used)		
12	Safety box		

7. Are the data and information in the registration books at ANC and maternity accurately consistent and updated daily? .....
8. What is the expiration date on the Nevirapine syrup bottle? .....
9. What is the expiration date on the Nevirapine tablet bottle?.....
10. What is the expiration date on the ZDV syrup bottle?.....
11. What is the expiration date on the ZDV tablet bottle?.....

**Other issues:**.....

.....

.....

.....

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## Appendix F: Checklist for PMTCT Supervision

### Checklist for PMTCT supervision

#### Part I:

1. Date of Supervision: From: .....To: .....
2. Location: (Phnom Penh/Province).....  
District: .....Health Center: .....Hospital: .....
3. Name of Supervisor:  
a. ....  
b. ....  
c. ....
4. Working time:  
a. Morning: Clock-in.....Clock-out.....  
b. Afternoon: Clock-in.....Clock-out.....
5. Counseling room arrangement and Educational materials:

Nº	Room arrangement	Yes	No	Comments
1	Private room for counseling			
2	Locked cabinet for storing test results			

Nº	Materials	Yes	No
1	Registration book		
2	Consent Forms		
3	Counseling Card		
4	Identification Card		
5	Code stickers		
6	Slip for Lab technician		
7	Referral slip		
8	Materials for blood testing		
9	Gloves		
10	Penis model		
11	Condom		
12	IEC materials to show the patient		
13	Safety Box		
14	ARV Drug		

6. Counseling observation: If yes, please rank the quality of counseling on a scale of 1 to 5 for each area; 1 being very poor and 5 being excellent.

Nº	Mother Education	Yes	Ranking	No
1	Welcome and greeting			
2	General health education			
3	Birth spacing			
4	Nutrition			
5	Breastfeeding			
6	STI/HIV/AIDS			
7	PMTCT Program and VCCT			

No	Health assessment	Yes	Ranking	No
1	Measured height and weight of pregnant woman			
2	Took patients blood pressure			
3	Asked about problems related to pregnancy			
4	Conducted high risk assessment			
5	Conducted STI assessment			
6	Provided Tetanus immunization to pregnant woman			
7	Performed fetal heart check			
8	Checked for fetal position			

7. If patient has problems relating to their pregnancy what procedures are followed?

.....  
.....  
.....

8. Please check the tests that are available at the Referral Hospital.

Hb	Ht	Syphilis	CBC	Urine (Alb and Glucose)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liver Function		Ultrasound		
<input type="checkbox"/>		<input type="checkbox"/>		

9. Are HIV test results provided in an envelope? Yes\_\_\_\_\_ No\_\_\_\_\_

10. Are there any markings on the envelope that reveal the HIV status of the patient? Yes (explain) \_\_\_\_\_ No\_\_\_\_\_

11. How long does it take to get HIV test results? If not given the same day please explain why.

.....

.....

.....

.....

12. How far away is the lab? .....

#### REFERRAL:

13. If patient is diagnosed with an STI are they asked to refer their husbands for testing and treatment? Yes \_\_\_\_\_ No \_\_\_\_\_

14. Are women who test HIV positive referred to HBC teams? Yes \_\_\_\_\_ No \_\_\_\_\_

15. Are women who test HIV positive referred to MMM group? Yes \_\_\_\_\_ No \_\_\_\_\_

16. Are women who test HIV positive referred to OI/ART services at OPD?  
Yes \_\_\_\_\_ No \_\_\_\_\_

17. Are women who test HIV positive referred for TB testing? Yes \_\_\_\_\_ No \_\_\_\_\_

#### MATERNITY:

Nº	Materials	Yes	No
1	Registration book		
2	Documents in locked cabinet		
3	ARV prophylaxis for mother		
4	ARV prophylaxis for baby		
5	Gloves		
6	Boots		
7	Apron		
8	Goggles		
9	Disinfection solution		
10	Sterilization materials		
11	Sterile room for delivery (i.e.: disinfectant used)		

18. Are records for HIV positive pregnant women properly completed and placed in the appropriate patient folders? Yes \_\_\_\_\_ No \_\_\_\_\_

19. Are the data and information in the registration books at ANC and maternity accurately consistent and updated daily? .....

20. Has this PMTCT site ever run out of universal precaution materials such as gloves, aprons, eye goggles, boots and disinfection solution? If so how often? .....
21. Has this PMTCT site ever run out of ARV Prophylaxis? If so how often?.....
22. What is the expiration date on the Nevirapine syrup bottle?.....
23. What is the expiration date on the Nevirapine tablet bottle?.....
24. What is the expiration date on the ZDV syrup bottle?.....
25. What is the expiration date on the ZDV tablet bottle?.....
26. Explain how you know whether or not the HIV positive pregnant woman is receiving HAART?  
.....  
.....  
.....
27. Explain in detail how and when NVP and ZDV are used in the PMTCT Program?  
.....  
.....  
.....  
.....
28. If the mother is receiving HAART, does she receive NVP at delivery?  
Yes \_\_\_\_\_ No \_\_\_\_\_
29. If the mother is receiving HAART, does her baby receive ARV after birth?  
Yes\_\_\_\_ No\_\_\_\_ (If yes) What ARV?.....  
When and How often?.....
30. Please answer the following?
- What lab tests are required before ZDV can be administered?.....
  - When does the pregnant woman begin taking ZDV?.....
  - How often is the pregnant woman supposed to take ZDV?.....
  - Does the mother still receive SD NVP at delivery if she is taking ZDV?  
Yes \_\_\_\_\_ No \_\_\_\_\_

- e. If the mother received SD NVP but was in false labor, does she receive an additional dose at delivery? Yes \_\_\_\_\_ No \_\_\_\_\_
- f. How long and how often is ZDV given to the newborn? .....
- g. Does the infant still receive SD NVP if they receive ZDV? Yes \_\_\_\_\_ No \_\_\_\_\_

31. Who gives the ARV prophylaxis to the mother and baby? .....

32. How are HIV positive mothers and their children followed up?

.....

.....

.....

.....

33. Are babies born to HIV positive mothers given OI prophylaxis? If so, who gives the medicine?

.....

.....

.....

34. When there is a problem involving PMTCT services what is the process of getting it solved?

.....

.....

.....

35. *This question is to be asked by National Program Staff Only:* How often does the Provincial PMTCT Manager and/or Coordinator visit this PMTCT site?

.....

36. Complete attached Counselor Supervision Checklist for each counselor you observe.

<p><b>To Be Completed by PMTCT Provincial Coordinator of National Program Staff:</b></p> <p>Please write down any remaining comments and/or recommendations:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
---



## Checklist for PMTCT Supervision: Part II – Counselor Observation

List all the trainings that the counselor has attended or received since the last supervision.

.....  
.....

1. Counseling observation: If yes, please rank the quality of counseling on a scale of 1 to 5 for each area; 1 being very poor and 5 being excellent.

Nº	Pre-test counseling	Yes	Ranking	No
	Information Covered during session			
1	Performed welcome and greeting			
2	Counselor introduced themselves			
3	Explained about confidentiality			
4	Discussed the reason for HIV testing			
5	Assessed client's knowledge on HIV/AIDS and STIs, including routes of transmission			
6	Corrected any misunderstanding			
7	Completed a risk assessment			
8	Discussed options in reducing risky behavior			
9	Discussed a risk reduction plan			
10	Performed condom demonstration			
11	Discussed testing process and the window period			
12	Discussed HIV transmission from mother to baby and options for prevention			
13	Discussed the benefits and risks of testing			
14	Identified HIV support services			
15	Summarized the conversation			
	<b>Counselor Behavior</b>			
16	Counselor interrupted client while talking			
17	Counselor allowed time for client to think through feelings and/or issues			
18	Counselor showed empathy toward client			
19	Counselor encouraged client to ask questions			
20	Counselor's overall behavior toward client			
21	Counselor paid attention during the counseling session and listened to client.			
22	Counselor provided adequate time for client during the counseling session			

2. Duration of counseling:    5-10 minutes                      10-15 minutes                      > 15 min.

☐    ☐    ☐

3. Registration of patient:                      correct                                      incorrect

☐    ☐

4. Post-test session: If yes, please rank the quality of counseling on a scale of 1 to 5 for each area; 1 being very poor and 5 being excellent.

Nº	Before open the envelop	Yes	Ranking	No
1	Performed welcome and greeting			
2	Reviewed information given in pre-test counseling session, including knowledge on HIV/AIDS and PMTCT			
3	Discussed the meaning of a positive or negative result, including the meaning of the window period			
4	Assessed client's feelings regarding a negative result			
5	Assessed client's feelings regarding positive result			
6	Respected the patient's feelings			

Nº	If the result is negative	Yes	Ranking	No
1	Allowed time for client to express emotions / feelings			
2	Discussed the window period and possible need for retesting			
3	Discussed ways to remain negative			
4	Discussed the risks and benefits of partner testing.			
5	Encouraged woman to breast-feed the baby			
6	Discussed importance of remaining negative during pregnancy and breastfeeding.			
7	Encouraged the patient to use birth spacing services.			
8	Encouraged mother to bring baby for immunizations			
9	Discussed hygiene and nutrition			
10	Provided IEC materials to mother			
11	Encouraged client to come again as needed.			

Nº	If the result is positive	Yes	Ranking	No
1	Allowed time for client to express emotions / feelings			
2	Ensured client understood results			
3	Answered clients questions and concerns			
4	Counseled client on possible ways to deal with immediate problems and/or concerns			
5	Discussed the Pros and Cons of disclosure			
6	Reviewed risk-reduction plan			
7	Referred client to OPD for HAART screening.			
8	Referred client to other care and support services for HIV positive mothers and their children.			
9	Discussed infant feeding options, including the risks and benefits of formula feeding.			
10	Discussed the risks and benefits of partner testing.			
11	Encouraged the patient to use birth spacing services.			
12	Encouraged mother to bring baby for immunizations and infant follow-up			
13	Discussed hygiene and nutrition.			
14	Explained the PMTCT Program, including ARV Prophylaxis.			
15	Provided IEC materials to mother.			
16	Discussed the importance of delivering in a PMTCT health facility			
17	Encouraged client to come again as needed			

5. Duration of counseling      5-10 minutes      10-15 minutes      > 15 min.  
☐      ☐      ☐

6. Registration of patient:      correct      incorrect  
☐      ☐

7. What are the biggest problems that you face with the PMTCT Program?  
.....  
.....

8. Are there any problems with filling in the data forms? If so explain.  
.....  
.....

9. Do you have any suggestions for improving PMTCT services at this site?  
.....  
.....

## Appendix G: PMTCT Site Assessment Form

**Ministry of Health**  
National Maternal and Child Health Center  
PMTCT PROGRAM

**Kingdom of Cambodia**  
Nation Religion King

Date: from: Day.....Month.....Year..... to: Day.....Month.....Year.....

Province/Municipality:.....

OD:.....RH:.....HC:.....

Assessment Team: .....

Funded by:.....

### ***Objectives:***

- To assess human resources and health service sites at referral hospitals and health centers making preparation for PMTCT program.
- To understand PMTCT-related network

### ***Please answer the following questions:***

#### **PHD Level:**

1- Is there a PMTCT Program in your province? Yes ☐ No ☐

2- If yes, How many sites do you have? (If no, go to question # 4)

- OD.....HC.....funded by.....
- OD.....HC.....funded by.....
- OD.....HC.....funded by.....
- OD.....HC.....funded by.....

3-Is the technical support group of PMTCT in your province a member of the COC Coordination Committee? Yes ☐ No ☐

If not , why?.....

4-Do you have enough staff to work for the PMTCT Program? Yes ☐ No ☐

5- If yes, do they have any background in Maternal and Child Health and/or HIV/AIDS? Yes ☐ No ☐

**Operational District Level:**

6- Do you have CoC Coordination Committee? ☐ Yes ☐ No

7- If no, when do you expect to have it?.....

8- Do you have HBC/FBO services in your community? ☐ Yes ☐ No

9- On average, How many pregnant women are there per year in your district?.....

**Referral Hospital:**

10. Are there OI/ART services in the hospital? ☐ Yes ☐ No

11. Is there MMM service in the hospital? ☐ Yes ☐ No

12. Is there pediatric care for HIV exposed children? ☐ Yes ☐ No

13. On average, how many women deliver babies per month? .....

14. How many pregnant women come to ANC per month? .....

15. Have TBAs ever referred pregnant women for delivery ? ☐ Yes ☐ No

16. How many staff work in the maternity ward? ....MD?\_\_ MW1?\_\_ MW2?\_\_ NS?\_.

17. How many duty days do they have?.....and How many staff per duty?.....

18. Do you have enough materials for universal precautions? ☐ Yes ☐ No

19. If no, please explain why?.....

20. If yes, how do you get them?.....

21. How often has the RH run out of clean water? \_\_\_\_\_Electricity?\_\_\_\_\_

**Health Center Level:**

22-How many clients on average come for ANC per month?.....

23 -Do you have delivery services? ☐ Yes ☐ No

24- If yes, how many pregnant women on average deliver at the health center per month?.....

25-How many pregnant women come from VCCT per month?.....

26-How many staff are there at the HC?.....

MD?.....MW1?.....MW2?.....Nurse?.....Others?.....

27- How many duty days do you have?.....How many staff per duty?.....

28-Is there Birth Spacing services? ☐ Yes ☐ No

29-In case of emergency, where do you refer the patient?.....

30-Do you have a spare room that could be used for individual counseling?

Yes \_\_\_\_ No \_\_\_\_

31- If yes, are renovations needed?.....

32-Do you have a spare room that could be used for group counseling?

Yes ☐ No ☐

33-If yes, are renovations needed?.....

34-How far is the VCCT service from ANC services?.....

35-How long does it take to get the HIV result? .....

36-Is there any communication with TBAs in your health center?

Yes ☐ No ☐

37- How often has the HC run out of clean water? \_\_.\_\_\_\_ Electricity? \_\_\_\_\_

Comments from the site assessment team:.....

.....

.....

.....

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Signature and Name of the assessment team leader

## Appendix H: Job Descriptions and TOR for PMTCT Staff

Kingdom of Cambodia

Ministry of Health

Nation-Religion-King

NMCHC

PMTCT Program

*PMTCT counsellor (ANC services)*

**Accountable to:** PMTCT Manager/Coordinator

### **Job Summary:**

To manage satisfactory pre- and post-test counseling for pregnant women; ensure high quality services; and administer ARV prophylaxis until delivery.

Specific Responsibilities for those who work in ANC services:

1. To provide counseling to all pregnant women who attend ANC.
2. To draw the patient's blood test and send the blood sample to the VCCT Lab.
3. To provide comprehensive care and education to all pregnant women who attend ANC.
4. To refer HIV positive pregnant women to care and support services.
5. To provide ARV counseling and prophylaxis to HIV positive pregnant women identified at ANC services.
6. To record and report all activities related to PMTCT and CoC.

General Responsibilities:

1. To work with diligence in carrying out the tasks of the position
2. To cooperate helpfully within HC to strengthen the performance of tasks
3. To ensure regular, punctual and full-time attendance to duties during official working hours.
4. To co-operate constructively with other programs and services.
5. To participate in regular meetings with the counselor team and the team leader.

6. To draw the attention of the Manager or coordinator immediately to any irregularity or other matters that may be affecting the efficient functioning of the program.
7. This job description may be modified at any time after consultation and agreement between the post holder, the Director and the Manager of the program.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_



Ministry of Health

NMCHC

Kingdom of Cambodia

Nation-Religion-King

### **PMTCT Program**

#### ***PMTCT counsellor (Maternity/Delivery service)***

**Accountable to:** PMTCT Manager/Coordinator

#### **Job Summary:**

To use safe delivery practices and universal precautions during all deliveries and to give the appropriate ARV prophylaxis regimen to identified HIV positive mothers and their newborns.

#### **Specific Responsibilities for those who work in Delivery/Maternity services:**

1. To provide counseling to all mothers who delivered the babies in the hospital on infant feeding, vaccination, and other information related to health.
2. To provide special counseling to HIV infected mothers to better understand about health care, infant feeding options and family planning. .
3. To provide ARV prophylaxis to HIV positive mothers and their exposed children as indicated.
4. To care for mothers and infants regardless of their HIV status.
5. To record and report all activities related to PMTCT and CoC.
6. To refer HIV-infected mothers and their children to care network services.

#### **General Responsibilities:**

1. To work with diligence in carrying out the tasks of the position in addition to its actual task
2. To cooperate helpfully within HC to strengthen the performance of tasks
3. To ensure regular, punctual and full-time attendance to duties during officials working hours.
4. To co-operate constructively with other programs and services.

5. To participate in regular meetings with the counselor team and the team leader.
6. To draw the attention of the Manager or coordinator immediately to any irregularity or other matters that may be affecting the efficient functioning of the program.

This job description may be modified at any time after consultation and agreement between the post holder, the Director and the Manager of the program.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

**National Maternal and Child Health Center**  
***Terms of Reference for PMTCT Provincial Coordinator***

- To assist the manager to set annual target and priorities for implementation within the province to help achieve the national goal.
- To assist the manager to prepare budget proposal and liquidation to any organization who support the program.
- To assist the manager to ensure drug and test kit supplies requested for the PMTCT program.
- To assist the manager to arrange PMTCT meeting, workshop, training and other events organized in its own province.
- To coordinate with all partners at provincial, operational district and health center level to ensure the PMTCT program runs smoothly.
- To closely coordinate with NCHADS, in particular with the CoC team, in order to help women and children have opportunities to receive care, treatment and psychological support.
- To collect data at all PMTCT sites and prepare monthly, quarterly and annual reports for provincial and National program.
- To monitor all activities done by the counselors to ensure the quality of PMTCT services and maternal and child health services.
- To ensure good communication with staff at the National Program.

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Name

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Signature

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Date:

**National Maternal and Child Health Center**  
***Terms of Reference for PMTCT Provincial Manager***

- To set annual target and priorities for implementation within the province to help achieve the national goal.
- To prepare budget proposal and liquidation to any organization who supports the program.
- To ensure continuous supply of drugs and test kits requested for the PMTCT program.
- To arrange PMTCT meeting, workshop, training and other events organized in the province.
- To coordinate with all partners at provincial, operational district and health center level to make the PMTCT program run smoothly.
- To closely coordinate with NCHADS, in particular with the CoC team, in order to help women and children have opportunities to receive care, treatment and psychological support.
- To collect data at all PMTCT sites and prepare monthly report to the provincial and National program.
- To monitor PMTCT activities in order to ensure the quality of PMTCT services and maternal and child health services.
- To ensure good communication with National Program staff, Coordinator and staff at grassroots' level.

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Name

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Signature

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Date:

**National Maternal and Child Health Center**  
***Terms of Reference for PMTCT District Coordinator***

- To assist the OD director in managing the PMTCT services in the OD.
- To facilitate and coordinate with the supervisory group from provincial and national level.
- To involve strongly in follow-up of mothers and children, especially children born to HIV positive mothers.
- To ensure drug and test kits for the purposes of PMTCT are available when needed.
- To arrange PMTCT meetings, workshops, trainings and other events organized in the OD.
- To coordinate with all partners at provincial, operational district and health center level to make the PMTCT program work smoothly.
- To closely coordinate with NCHADS, in particular with the CoC Coordinating Committee, in order to help women and children have opportunities to receive care, treatment and psychological support.
- To collect monthly data at all PMTCT sites.
- To ensure that PMTCT reports are sent regularly and on time to PMTCT Provincial Coordinator and National program.
- To monitor all activities done by the counselors to ensure the quality of PMTCT services and maternal and child health services.
- To ensure good communication with involved partners.
- To participate in regularly meetings with the CoC Coordination Committee and update them on information pertaining to PMTCT in the OD.

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Name

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Signature

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Date:

## References

1. Coutoudis A, et al. 2001. Method of feeding and transmission of HIV-1 from mothers to children by 15 months of age: prospective cohort study from Durban, South Africa. *AIDS*; 15: 379-87.
2. Guay L.A., et al. 1999. Intrapartum and neonatal single-dose nevirapine compared with zidovudine for prevention of mother-to-child transmission of HIV-1 in Kampala, Uganda: HIVNET 012 randomized trial, *Lancet*, 354, 795-802.
3. Iliff Peter J et al. 2005. Early exclusive breastfeeding reduces the risk of postnatal HIV-1 transmission and increases HIV-free survival. *AIDS* 19: 699-708.
4. Koum Kanal, et al. 2004. Impact of Husband participation in VCT for Prevention of Mother to Child Transmission (PMTCT) National Programme in Cambodia. XV International AIDS Conference, Bangkok, Thailand.
5. Maman S et al., Sweat M. 2001. Women's barriers to HIV-1 testing and disclosure: challenges for HIV-1 voluntary counseling and testing. *AIDS Care*. 13(5): 595-603.
6. Ministry of Health Cambodia. 2003. National Immunization Program: Vaccination Policy Recommendation.
7. NCHADS. 2003. Continuum of care for people living with HIV: Operational Framework.
8. NCHADS. 2003. National Guidelines for the use of Antiretroviral Therapy in Adults and Adolescents.
9. NCHADS. 2004. National Guidelines for the use of Pediatric ARV.
10. NCHADS. 2002. Policy, Strategy and Guidelines for HIV Counseling and Testing.
11. NCHADS. 2004. Voluntary Confidential Counseling and Testing for HIV (VCCT): A Guide for Implementation
12. Nduati R., et al. 2000. Effect of Breastfeeding and Formula Feeding on Transmission of HIV-1, *JAMA* 283 (9): 1167-1174.
13. Newell ML. 2001. Prevention of mother-to-child transmission of HIV: challenges for the current decade, *Bull WHO*, 79(12), 1138-1144.
14. NMCHC. 2005. National Policy on the Prevention of Mother-to-Child Transmission of HIV.
15. The European Mode of Delivery Collaboration. 1999. Elective caesarean-section versus vaginal delivery in prevention of HIV-1 vertical transmission: a randomised clinical trial, *Lancet*, 353, 1935-39.

16. Tan Vuoch Chheng et al. 2002. Acceptance of Voluntary Counseling and Testing for Pregnant Women in New National Program in Cambodia. Abstract D11227, XIV International AIDS Conference Barcelona, Spain.
17. UNAIDS. 2002. VCT within MTCT programming, Report on the global HIV/AIDS epidemic, 130-131.
18. WHO/CDC. 2004. Prevention of Mother-to-Child Transmission of HIV Generic Training Package.
19. WHO. 2004. Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection in Infants: Guidelines on Care, Treatment and Support for Women Living with HIV/AIDS and their Children in Resource-Constrained Settings.
20. WHO. 2005. Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection in Infants: Guidelines on Care, Treatment and Support for Women Living with HIV/AIDS and their Children in Resource-Constrained Settings: Recommendations for a Public Health Approach (2005-2006 Revision). Guidelines Development Group: Brief Meeting Report.
21. WHO. 2003. HIV and infant feeding.
22. WHO. 2003. Nevirapine for the Prevention of Mother to Child Transmission of HIV. Nevirapine statement.
23. WHO. 2002. Prevention of HIV in infants and young children.
24. WHO. 2003. Scaling up antiretroviral therapy in resource-limited settings: Treatment guidelines for a public health approach.
25. UNICEF. 2004. WHAT RELIGIOUS LEADERS CAN DO ABOUT HIV/AIDS: Action for Children and Young People.