

Prevention of Mother-to-Child Transmission of HIV



Generic Training Package Participant Manual



WHO Library Cataloguing-in-Publication Data

World Health Organization.

Prevention of mother-to-child transmission of HIV generic training package: participant manual.

1. Acquired immunodeficiency syndrome - therapy 2. HIV infections - therapy 3. Disease transmission, Vertical - prevention and control 4. Teaching materials 5. Manuals I. Title.

ISBN 92 4 159205 2

(NLM classification: WC 503.2)

© World Health Organization 2004

All rights reserved. Publications of the World Health Organization can be obtained from Marketing and Dissemination, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel: +41 22 791 2476; fax: +41 22 791 4857; email: bookorders@who.int). Requests for permission to reproduce or translate WHO publications—whether for sale or for noncommercial distribution—should be addressed to Publications, at the above address (fax: +41 22 791 4806; email: permissions@who.int).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

The WHO/CDC Prevention of Mother-to-Child Transmission of HIV Generic Training Package is a comprehensive approach to the training of healthcare workers. The other components in this package are

- Training Programme and Course Director Guide
- Trainer Manual
- Presentation Booklet
- Pocket Guide
- Wall Charts
- CD-ROM containing MS® Word and Adobe Acrobat® (PDF) files for each programme component

Acknowledgment

This package was prepared by the Department of HIV/AIDS, World Health Organization (WHO) in collaboration with the United States Department of Health and Human Services, Centers for Disease Control and Prevention (HHS-CDC), Global AIDS Program (GAP), and is jointly published by WHO and HHS-CDC. Tin Tin Sint (WHO) and Omotayo Bolu, Cristiane Costa, Cheryl Mayo, and Andrea Swartzendruber (CDC) were the primary team responsible for supervising the development and field testing of the curriculum. René Ekpini and Isabelle de Zoysa (WHO) and Nathan Shaffer (CDC) provided overall guidance and support for this project.

WHO and CDC would like to thank Matthew Chersich, Inam Chitsike, Halima Dao, Ian Grubb, Peggy Henderson, Yvan Hutin, Rafael Lopezolarte, David Miller, Nozighu Tatiana Ndong, Kevin O'Reilly, Constanza Vallenias and Mayada Youssef Fox (WHO); George Bicego, Tracy Creek, Beth Dillon, Chris Galavotti, Joan Kraft, Joel Kuritsky, Michelle McConnell, Dorothy Mbori-Ngacha, Jan Moore, Serigne Ndiaye, Monica Nolan, Joseph Petraglia, Rose Pray, RJ Simonds, Monica Smith (CDC); and Ellen Piwoz (AED) for their review of draft materials.

Acknowledgments are also due to Thurma Goldman, from HHS-HRSA, and Estelle Quain (USAID) for their support and to UNICEF and UNFPA for their technical contributions.

WHO and CDC would like to thank the Ministries of Health and the CDC/GAP offices in Guyana, Ethiopia, Mozambique, and Cambodia for hosting the field tests.

WHO and CDC would also like to acknowledge the significant contribution of the François-Xavier Bagnoud (FXB) Center at the University of Medicine and Dentistry of New Jersey, who led this project from initial development through field tests and revisions along with JHPIEGO, an affiliate of Johns Hopkins University, through the University Technical Assistance Program (UTAP) with CDC. In addition to the curriculum development role, the FXB Center provided essential support for overall project coordination and final production of the training package. The FXB Center group include Mary Boland, Virginia Allread, Karen Forgash, Magaly Garcia, Nancy Lerner-Weiss, Nancy Paradis, Linda Podhurst, Anne Reilly, Monica Reiss, Natalia Rivera, and Deborah Storm. JHPIEGO staff who contributed to this project includes Jean Anderson, Linda Fogarty, Emmanuel Otolorin, and Kai Spratt.

Table of Contents

ABBREVIATIONS AND ACRONYMS	iii
INTRODUCTION	v
MODULE 1	Introduction to HIV/AIDS
Appendix 1-A	WHO staging systems for HIV infection and disease in adults, adolescents, and children 1-14
Appendix 1-B	CDC AIDS surveillance case definitions for adolescents, adults, and children 1-16
MODULE 2	Overview of HIV Prevention in Mothers, Infants, and Young Children
Appendix 2-A	MTCT services for the woman who is HIV-2 infected 2-14
MODULE 3	Specific Interventions to Prevent MTCT
Appendix 3-A	Antiretroviral prophylaxis regimens to prevent MTCT 3-19
Appendix 3-B	Clinical situations and recommendations for the use of antiretroviral drugs in pregnant women and women of child-bearing potential in resource-constrained settings 3-21
MODULE 4	Infant Feeding in the Context of HIV Infection
Appendix 4-A	United Nations infant-feeding recommendations for mothers who are HIV-infected 4-19
Appendix 4-B	Advantages of cup feeding 4-20
Appendix 4-C	Feeding from 6-24 months 4-21
MODULE 5	Stigma and Discrimination Related to MTCT
Appendix 5-A	International Guidelines on HIV/AIDS and Human Rights 5-18
MODULE 6	HIV Testing and Counselling for PMTCT
Appendix 6-A	Training, roles, and responsibilities of HIV counsellors 6-20
Appendix 6-B	Talking with parents about their child's HIV test results 6-21
Appendix 6-C	Basic counselling skills 6-23
Appendix 6-D	Providing pre-test information, exercise 6.3 6-25
Appendix 6-E	Post-test counselling checklist, HIV-negative result 6-30
Appendix 6-F	Post-test counselling checklist, HIV-positive result 6-31
Appendix 6-G	Role play scenarios for post-test counselling, exercise 6.4 and counselling checklist 6-32
MODULE 7	Linkages to Treatment, Care, and Support for Mothers and Families with HIV Infection
Appendix 7-A	Tuberculosis (TB) 7-14
Appendix 7-B	Community resource information worksheet 7-16
Appendix 7-C	<i>Pneumocystis carinii</i> pneumonia prophylaxis in adults and infants 7-17
Appendix 7-D	Suggestions to maximise food intake for PLWHA 7-18
Appendix 7-E	WHO immunisation recommendations 7-19

MODULE 8	Safety and Supportive Care in the Work Environment	
Appendix 8-A	Guidelines for cleaning, sterilisation, and disposal of infectious waste materials	8-18
Appendix 8-B	Managing occupational exposure to HIV: a sample protocol	8-21
MODULE 9	PMTCT Programme Monitoring	
Appendix 9-A	Examples of PMTCT performance indicators	9-11
Appendix 9-B	Sample PMTCT columns to add to standard ANC and maternity ward registers	9-12
THE FIELD VISIT (OPTIONAL)		Field Visit-1
GLOSSARY & RESOURCES		
	Glossary	Glossary-1
	Resources	Resources-1

Abbreviations and Acronyms

AIDS	Acquired immunodeficiency syndrome
ANC	Antenatal care
ARV	Antiretroviral
ART	Antiretroviral therapy
CDC	United States Centers for Disease Control and Prevention
CMV	Cytomegalovirus
ELISA	Enzyme-linked immunosorbent assay
FAO	United Nations Food and Agricultural Organisation
HAART	Highly active antiretroviral therapy
HIV	Human immunodeficiency virus
IMCI	Integrated management of childhood illness
MAC	<i>Mycobacterium avium</i> complex
MCH	Maternal and child health
MTCT	Mother-to-child transmission of HIV
NGO	Non-governmental organisation
NVP	Nevirapine
OI	Opportunistic infection
PCP	<i>Pneumocystis carinii</i> pneumonia
PEP	Post-exposure prophylaxis
PLWHA	People living with HIV/AIDS
PMTCT	Prevention of mother-to-child transmission of HIV

RCHS	Reproductive and child health services
STD/I	Sexually transmitted disease/infection
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
VCT	Voluntary Counselling and Testing
WHO	World Health Organization
ZDV	Zidovudine, the generic name for azidothymidine (AZT)



Introduction: Prevention of Mother-to-Child Transmission of HIV

Background on mother-to-child transmission (MTCT) of HIV programmes

Of the 40 million people living with HIV/AIDS worldwide at the end of 2003, 2.5 million were children under 15 years old. Last year alone, 700,000 children were newly infected with the AIDS virus, or about 2,000 new infections in children each day. Most of these infections (90%) occurred in sub-Saharan Africa. The most significant source of HIV infection in children and infants is transmission of HIV from mother-to-child during pregnancy, labour and delivery, or breastfeeding. By integrating comprehensive Prevention of Mother-to-Child Transmission of HIV (PMTCT) programmes—including prevention and treatment interventions—as an essential part of maternal-child health (MCH) programmes, the PMTCT programme may significantly reduce the number of infants who are HIV-infected and promote better health for their mothers and families.

Unprecedented commitment by international organisations and national governments—and the availability of effective short-course and longer combination antiretroviral regimens—are now making effective national PMTCT programmes possible, even in countries most burdened by the HIV epidemic.

Because PMTCT programmes have broad access to the sexually active adult population and address key issues of family health, they provide an important foundation for national HIV prevention and treatment programmes. Beginning with primary prevention, PMTCT programmes recognise the importance of knowing one's HIV status and keeping parents-to-be HIV-negative. Testing and counselling in antenatal clinics and maternities allows for early identification of HIV infection. These settings serve as a gateway to comprehensive PMTCT services, including ARV treatment and prophylaxis, safer delivery practices, and safer infant-feeding practices for mothers who are HIV-exposed and their infants, who are also HIV-exposed.

National scale-up

Pilot projects in multiple countries have demonstrated the feasibility of implementing various PMTCT interventions, including ARV prophylaxis in resource-constrained settings. Most countries are now shifting from pilot projects to national programmes and are integrating PMTCT interventions as a component of standard antenatal care (ANC) and maternal and child health (MCH) services.

There is an increasing range of PMTCT interventions, based on capacity and policy at the country level. Policymakers must determine which PMTCT programme interventions can be supported for national scale-up and ensure that guidelines are in place to promote the success of implementing the programme. A coordinated, national plan for building capacity to train and strengthen maternal and child health services at the local level will ensure beneficial outcomes for communities and the people they serve.

International support

PMTCT remains central to global HIV/AIDS initiatives. Currently, scale-up of PMTCT programmes is recognised as an important gateway for scale-up of broader HIV prevention and care programmes. With the commitment of the international community to increasing access to treatment for persons living with HIV/AIDS, PMTCT programmes are seen as a central rallying point for enhanced treatment, care and support services for women, their children and families. This has resulted in growing support for PMTCT and new international initiatives to combat HIV/AIDS. The Global Fund for AIDS, TB and Malaria (GFATM) is providing significant international support for HIV/AIDS country programmes. The "3 by 5" World Health Organization (WHO)-led UNAIDS initiative aims to treat 3 million people in developing countries by 2005. In addition, the U.S. government now offers unprecedented support in the fight against HIV/AIDS with the President's Emergency Plan for AIDS Relief. The Emergency Plan provides large-scale funding to treat 2 million people, prevent 7 million infections, and provide care for 10 million people.

Key programme elements for all of these international efforts include increasing access to HIV testing and counselling, strengthening prevention interventions linked to treatment services, enhancing access to PMTCT programmes, and fostering community participation.

Training and capacity development

To achieve their goals, initiatives to combat HIV/AIDS need to address the challenge of human capacity building at all levels of the health system. Globally, up to 100,000 people need to be trained for the "3 by 5" initiative to reach the target. Meeting that training goal will require strong collaboration among communities, nations, and international organisations.

The rapidly growing HIV/AIDS pandemic requires global and in-country collaborative efforts to maximise the use of existing human resources and develop strengthened human capacity. Training is a key part of this strategy.

This generic PMTCT training package is designed to provide a template for the development of a national training plan and an appropriate national curriculum, based on a rapid adaptation process. For countries that already have begun PMTCT training and have draft materials, this generic training package can be used to update and strengthen the national curriculum and training plan. Providing appropriate information and training for the cadres of health workers at provincial, district, and local level is an important step for scale-up and sustainability of PMTCT programmes.

Overview of the PMTCT generic training package

This training package is an evidence-based course on PMTCT and is targeted to resource-constrained settings. It is intended to be one component of a training plan that reflects the policies and priorities of national strategies for combating HIV/AIDS.

The package content, provided in modular format, presents the basic components of PMTCT programming. The time frames suggested for each module are intended to be flexible to meet the requirements of each country or region.

PMTCT refers to a comprehensive, family-centred spectrum of clinical and supportive services—provided in conjunction with public health initiatives—to prevent the transmission of HIV from a woman to her infant.

Development of the PMTCT generic training package

The development of this package involved several activities:

- WHO conducted a systematic inventory of MTCT training materials, strategies, and plans for scale-up in East, Central, and Southern Africa.
- In 2001, visits were made to review pilot project sites, training strategies, and scale-up plans. PMTCT trainers, staff from the Ministry of Health, national AIDS programme, local NGOs, and funding agencies provided valuable input.
- In 2002, a WHO interregional workshop brought consultants together to arrive at a consensus on package components and implementation of training strategies, including in-country roles for the scale-up process.
- In November 2002, WHO invited the U.S. Centers for Disease Control and Prevention (CDC) to collaborate on the development of a comprehensive training package.¹ CDC asked two university technical assistance partners to help with the development of materials and field testing: the François-Xavier Bagnoud Center at the University of Medicine and Dentistry of New Jersey and JHPIEGO, an affiliate of Johns Hopkins University.
- Field tests were conducted in Guyana, Ethiopia, Mozambique, and Cambodia to evaluate the package and gauge its adaptability for use in resource-constrained settings.
- The package was reviewed by PMTCT and training experts from WHO, CDC, and country programmes.
- The package will be updated on an ongoing basis to reflect the most current information from WHO and CDC about PMTCT.

¹ A training package consists of a range of complementary components on a selected topic that serves as a resource for training. The components may include, for example, participant materials, slide sets, treatment guidelines, clinician support tools (eg pocket guide, wall charts), patient information materials, case studies, and trainer support materials.

Target audience

This training course is targeted to staff working in (or intending to work in) PMTCT programmes or healthcare settings that provide PMTCT services:

- Doctors
- Nurses
- Midwives
- Social workers
- Outreach workers
- Counsellors
- Programme managers

Every setting that provides PMTCT services can maximise the effectiveness of their programmes by involving staff in specialised training and encouraging other healthcare workers to expand their existing knowledge, defining them as key members of the PMTCT programme team.

Hands-on clinical training is strongly recommended. Where feasible, complementary onsite or offsite clinical training—especially in HIV testing and counselling and infant-feeding counselling—will greatly improve the capacity of healthcare workers to use their new knowledge.

A word on terminology

In these course materials, the term “healthcare worker” is intended to be synonymous with “healthcare provider.” It includes all staff working in the PMTCT service system (doctors, nurses, midwives, social workers, outreach workers, counsellors, programme managers). “Maternal and child health” (MCH) is used to refer to a variety of services, including maternal and newborn child health services and reproductive and child health services (RCHS). MCH encompasses the system of treatment, care, and support that aims to protect and improve the health of women of reproductive age and their infants, as well as young and adolescent children, and families.

Expectations for the course

This course offers basic information and introductory skills development in the following areas:

- Module 1 Introduction to HIV/AIDS
- Module 2 Overview of HIV Prevention in Mothers, Infants, and Young Children
- Module 3 Specific Interventions to Prevent MTCT
- Module 4 Infant Feeding in the Context of HIV Infection
- Module 5 Stigma and Discrimination Related to MTCT
- Module 6 HIV Testing and Counselling for PMTCT
- Module 7 Linkages to Treatment, Care, and Support for Mothers and Families with HIV Infection
- Module 8 Safety and Supportive Care in the Work Environment
- Module 9 PMTCT Programme Monitoring

This PMTCT training course is designed to provide healthcare workers with the information and introductory skills necessary to deliver core PMTCT services in an integrated manner.

Healthcare workers are encouraged to pursue additional training to expand the expertise available in their region or facility.

There is no substitute for hands-on experience when providing both clinical and social support. All participants are encouraged to view this curriculum as providing a foundation on which to build and develop additional skills.

This can be done through specialised training in areas such as HIV counselling, infant feeding, or networking within local communities. Many of these skills require practice to develop proficiency and participants can benefit by actively seeking opportunities for becoming comfortable with all aspects of programme implementation.

Structure of the training package

The training package, available in printed form and as a CD-ROM, consists of the following components:

- The **Training Programme and Course Director Guide** is divided into two sections. **Section 1: Training Programme Guide** is targeted to those with overall responsibility for developing the PMTCT National Training Plan, adapting the generic PMTCT curriculum, and developing the plan to evaluate training efforts. **Section 2: Course Director Guide** is a resource document targeted to the individual or team responsible for organising and conducting the PMTCT training courses.
- The **Trainer Manual** outlines the entire curriculum, describes the trainer role in course planning and offers the trainer directions to conduct each session.
- The **Participant Manual** is the main reference document for course participants. It includes an Introduction, nine content modules, each with a summary, clearly stated objectives, technical information, and exercises. It also contains a **Glossary** and a **Resources Guide**.
- The **Presentation Booklet** includes slides/overheads that summarise the main content areas of each module.
- The **Pocket Guide** provides clear, concise information to support the delivery of services and is a handy reference for healthcare workers.
- The **Wall Charts** can be posted in the health centre or facility and are a reference on key PMTCT content areas.

Course schedule

Although this PMTCT generic training programme was developed to be 6 days long including the optional field visit, it may be expanded or shortened, depending on the target population's learning needs, priorities, and resources. The syllabus for the generic course is presented below.

Course syllabus for PMTCT Generic Training Package

Day	Content
Pre-course session (2 hours)	Opening Ceremony and Introductions
Day 1	Module 1 Introduction to HIV/AIDS Module 2 Overview of HIV Prevention in Mothers, Infants, and Young Children
Day 2	Module 3 Specific Interventions to Prevent MTCT Module 4 Infant Feeding in the Context of HIV Infection
Day 3	Module 5 Stigma and Discrimination Related to MTCT Module 6 HIV Testing and Counselling for PMTCT
Day 4	Module 7 Linkages to Treatment, Care, and Support for Mothers and Families with HIV Infection Module 8 Safety and Supportive Care in the Work Environment
Day 5	Module 9 PMTCT Programme Monitoring Closing the Course
Day 6 (Optional half day session)	Field Visit and de-briefing

Ice Breaker and Ground Rules

Introduction Exercise 1: “Getting to know each other” card game	
Purpose	To explore concerns about taking care of women with HIV and objectives for this training and to provide an opportunity to get to know each other
Duration	30 minutes
Instructions	<ul style="list-style-type: none"> ▪ Review the card you have just received; the card has 3 columns labelled “Concerns,” “Objectives,” and “Strengths.” ▪ Think for a few minutes about your responses to each of the following questions: <ul style="list-style-type: none"> Concerns: What concerns you about taking care of women or children with AIDS? Objectives: What do you want to ensure you learn about PMTCT before the end of this course? Strengths: What three strengths do you bring to your work as a healthcare worker? ▪ Write your responses in the appropriate columns. ▪ Share your responses in the large group discussion.
Introduction Exercise 2: Determining the ground rules for the course	
Purpose	To develop and agree on a set of ground rules that will guide the development of an environment that facilitates learning.
Duration	20 minutes
Instruction	Participate in a discussion on the ground rules necessary to ensure a training environment that would make you feel more comfortable talking about the prevention of mother-to-child transmission of HIV. These ground rules will help guide the development of norms within this training.

