



AMERICAN INTERNATIONAL HEALTH ALLIANCE

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**CAPACITY BUILDING TO PREVENT  
MOTHER-TO-CHILD TRANSMISSION OF HIV  
IN UKRAINE  
2005-2007**

**FINAL REPORT**

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FROM THE AMERICAN PEOPLE

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AIHA also wishes to thank the United States Agency for International Development (USAID) for the opportunity and privilege of working on PMTCT capacity building in Ukraine and for its support of the project.

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**AIHA's mission is to advance global health through volunteer-driven partnerships that mobilize communities to better address healthcare priorities while improving productivity of care. Created in 1992 by a consortium of major healthcare provider associations and professional medical education organizations, AIHA establishes and manages programs and twinning partnerships between health-related institutions in the United States and their counterparts in Africa, Asia, Eurasia, and the Caribbean. The United States Agency for International Development (USAID), funded by the American people, provides economic and humanitarian assistance in more than 100 countries to provide a better future for all. Since 1992, USAID has provided more than \$1.6 billion worth of technical and humanitarian assistance supporting Ukraine's democratic, economic, and social transition.**

## ACRONYMS & ABBREVIATIONS

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AIDS	Acquired Immunodeficiency Syndrome
AIHA	American International Health Alliance
ARV	Antiretroviral
ART	Antiretroviral Therapy
CD4	Cluster of Differentiation 4
ELISA	Enzyme-linked Immunosorbent Assay
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GTP	Generic Training Package
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
IDUs	Injecting Drug Users
ICT	Information, Communication and Technology
MCH	Maternal and Child Health
MOH	Ministry of Health
MTCT	Mother-to-Child Transmission of HIV
NGO	Non-Governmental Organization
NIS	Newly Independent States
PCR	Polymerase Chain Reaction
PEPFAR	President's Emergency Plan for AIDS Relief
PLWH	People Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission of HIV
TOT	Training-of-Trainers
SUAEC	South Ukrainian AIDS Education Center
UNAIDS	Joint United Nations Program on HIV/AIDS
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USG	United States Government
VCT	Voluntary Counseling and Testing
WHO	World Health Organization
QA	Quality Assurance

## I. EXECUTIVE SUMMARY

Building on a highly successful model PMTCT-Plus program in Odessa funded by USAID and utilizing substantial local training capacity established in association with that effort, the USAID-funded **Capacity Building to Prevent Mother-to-Child Transmission Project** worked with the Ukrainian Ministry of Health (MOH) and departments of health administration of eight key oblasts in a 30-month human and organizational capacity building effort that will result in the reduction of HIV transmission to infants. The project was designed to contribute to USAID's overall goal of providing comprehensive PMTCT services to 90% of affected women in each oblast by 2008. Based upon interim indicators, we are confident that the project will achieve its ultimate outcome indicators of significantly reduced transmission rates. A preliminary estimation of the MTCT rate in the Phase 1 PMTCT Group, conducted in October 2007, demonstrated an average decrease of 75% compared to the Phase 1 baseline group (6.1% and 18.5% respectively). Given the eighteen-month delay in officially confirming HIV status of infants, however, reporting of final outcomes and whether the project achieved its overall target of a five to eight percent transmission rate will only occur in 2008.

The project involved thirty-two health care institutions and community-based NGO's in the eight oblasts. The project was implemented in close cooperation with other governmental and nongovernmental organizations, United States Government (USG)-funded PMTCT projects and other international agencies.

The project's human and organizational capacity building included:

- Technical assistance in the development of comprehensive community-based PMTCT operational plans for each project site that effectively organized the activities of all key stakeholders including the non-governmental sector and;
- Support for the development of model programs and methodological centers of excellence in each oblast that incorporated quality improvement processes and evidence-based practices, reached large numbers of women directly, and in turn served as replication and training sites for the development of affiliated programs in underserved areas.

The project's related workforce development included the following components:

- On-site knowledge-based training utilizing the WHO/USG PMTCT Generic Training Package (GTP) adapted for Ukraine (AIHA with USAID E&E Bureau funding) and endorsed by the Ministry of Health (MOH);
- Clinical skills-based training at the South Ukrainian AIDS Education Training Center (SUAEC) for targeted caregivers from each site using curricula developed in Odessa for region-wide replication;
- PMTCT organizational workshops for decision-makers from each of the target oblasts in Odessa;
- Several Training-of-Trainers (ToT) using the adapted Ukrainian version of the WHO/USG PMTCT GTP for new oblast faculty to help insure sustainability of training programs in each oblast.

Project implementation activities were staged in two phases of four target oblasts each. Project implementation activities for Phase 2 oblasts took into account challenges and lessons learned during Phase 1.

Through the AIHA project, the target sites developed new operational frameworks to address the problem of PMTCT in a comprehensive, multisectoral manner, gained new knowledge and skills, developed and implemented a case management system to monitor and improve quality of care delivery, and trained healthcare professionals. The project created local capacities that will not only serve as a foundation for continued improvement in the target areas, but also as a model that can be utilized and disseminated across other regions in Ukraine.

Specifically, this translated into:

- Strengthened ability of the Oblast Health Administrations to conduct PMTCT program assessments, establish task forces, and develop strategies and annual work plans.
- An expanded pool of trained healthcare providers, managers, and allied health staff providing quality, evidence-based PMTCT and related services. The pool was expanded to a total of 303 project caregivers who participated in 15 trainings.
- Strengthened the capacity-building infrastructure through project site support which established the Methodological Centers of PMTCT Excellence in each oblast.
- Improved early identification and referral of HIV-infected pregnant women (45% of HIV infected women were registered for prenatal care before the second trimester in the project PMTCT groups compare to 27% in baseline groups).
- Improved system of prenatal care to HIV+ women; decreased risk of MTCT HIV during labor and delivery; and improved post-natal care for infants and their HIV-infected mothers (84% of HIV infected women and 96% newborns received antiretroviral (ARV) prophylaxis in PMTCT groups compare to respectively 67% and 50% in baseline groups).
- Increased number of HIV-infected pregnant women receiving key non-medical services from non-governmental organizations (NGOs) (70% of HIV-infected pregnant women were referred to NGOs to receive non-medical care and support in PMTCT project groups compared to 7% in baseline groups).
- Wide dissemination of PMTCT results/lessons learned and coordination with broader maternal-and-child-health (MCH) and HIV/AIDS programs through regular meetings both locally and nationally.

While many challenges and health care system obstacles remain in Ukraine to implement a comprehensive PMTCT program across the country, the USAID-funded AIHA project developed capacities in eight key Ukrainian regions to address human and organizational needs related to providing high-quality PMTCT services to women with HIV and babies exposed to HIV. As a result, Ukrainian caregivers in these oblasts are well positioned to sustain their capacities and seek out new opportunities to improve care to women with HIV and their children in the coming years. The eight oblasts are also well positioned to serve as both models and resources for the rest of Ukraine. Their success in a relatively short period of time across a significant number and diversity of sites sets an important benchmark for the country as a whole. By working closely with the Ukrainian MOH and the National AIDS Center, the project has both demonstrated the ability and developed the capacity for Ukraine to significantly reduce

MTCT rates. Whether the tested approaches, organizational systems and training programs developed under the project are fully disseminated and scaled up nationally is dependent upon the commitment of the Ukrainian government and the donor community. The project also has important implications for other countries in the NIS region which face similar HIV/AIDS related challenges and have common health system structures. We urge Ministries of Health in those countries and the international community to carefully consider the results of this project and seek the adoption and replication of the methods employed as expeditiously as possible.

This final performance report is a comprehensive overview of the AIHA PMTCT project in Ukraine between 2005 and 2007. The report describes the program approach, goals and objectives, main project components, achieved results and challenges. Additional details and information can be found at [www.aiha.com](http://www.aiha.com).

## II. PROGRAM OVERVIEW

### Introduction

In February 2005, USAID awarded the Capacity Building to Prevent Mother-to-Child Transmission of HIV/AIDS project, under its program on Mitigating the Impact of Those Affected by HIV/AIDS, to AIHA. The project was implemented within the framework of a 30-month grant period from February 3, 2005, through August 2, 2007, and was designed to contribute to USAID's overall goal of providing comprehensive PMTCT services to 90 percent of affected women in eight selected oblasts by 2008.

The project focused on replicating the USAID funded Odessa PMTCT model program in eight targeted regions—Dnipropetrovsk, Kyiv, Mykolayv, Cherkassy, Donetsk, Odessa, Kherson and Crimea—to address their human and organizational capacity needs related to providing high-quality PMTCT services. AIHA's PMTCT project in Odessa, Ukraine, initiated in 2000 and funded by USAID's Europe & Eurasia Bureau as a regional pilot initiative, was designed to improve systems of referral, treatment, and counseling for HIV-positive women. The project was also designed to serve as a model for replication in other Newly Independent States (NIS) as well as in other regions of Ukraine. The project's success resulted in the creation of a center of programmatic excellence, the South Ukrainian AIDS Education Center (SUAEC) in Odessa. The center has played a leading role in developing PMTCT guidelines, protocols, and case management systems readily adaptable to the needs of other communities and regions of the NIS. The Odessa pilot project achieved significant success in reducing the rate of MTCT by more than 75 percent between 2002 and 2004 and in facilitating replication of the Odessa model through capacity building activities throughout the NIS.

The program was implemented in two phases. Phase 1 project sites included: Kyiv, Cherkassy, Dnipropetrovsk, and Mykolayv oblasts. The original phase 2 sites selected were Donetsk, Odessa, Kherson oblasts and Crimea. In December 2005, due to a request by the MOH and a high MTCT infection rate, USAID approved the replacement of Donetsk Oblast with Chernigiv Oblast in the project.

According to national and international experts, among all the countries of the former Soviet Union, Ukraine most vividly illustrates the speed with which the epidemic is moving beyond populations most at-risk and into the general population. The proportion of those infected through sexual transmission has increased from 14% of new cases (1999-2003) to over 35% (January-June 2006). Among newly reported cases in the first six months of 2006, 41.5% were women, most of them in their peak of reproductive age (GFATM Sixth Call for Proposals – Ukraine: HIV/AIDS Proposal). As a result, the numbers of children with AIDS and AIDS related deaths among children are continuing to grow: in 2003 these numbers were 68 and 38 respectively; in 2004 – 96 and 33 respectively, in 2005 – 143 and 36 respectively, in 2006 – 123 and 32 respectively (AIHA PMTCT final conference, May 15, 2007. National AIDS Center Presentation). (Please see Appendix D for more statistics on women and children and the HIV/AIDS epidemic in Ukraine).

The AIHA project focused on specific regions within Ukraine which are the most affected by the epidemic and require immediate assistance. At the beginning of the project in 2005 the epidemiological situation in the targeted regions was the following:

- Chernigiv Oblast had a prevalence rate of 70.35 per 100,000 (2005). The officially registered number of HIV cases is 843. The MTCT rate in the oblast is 25.6% (*Informational Bulletin #24* of Ukrainian National AIDS Center).
- Dnipropetrovsk Oblast had a prevalence rate of 380.2 per 100,000 (2005). The officially registered number of HIV cases by January 1, 2005 was 13,539. The MTCT rate in the oblast was 13% (2002).
- Mykolayiv Oblast had a prevalence rate of 385.00 per 100,000 (2005). According to the MOH, the officially registered number of HIV cases by January 1, 2005 was 4,864. In 2003, the number of HIV positive women who delivered babies was 108. In 2004 this number increased by 37% and was 148. According to the Oblast Health Administration data, the MTCT rate in the oblast is 10.5%.
- Cherkassy Oblast had a prevalence rate of 126.7 per 100,000 (2005). The officially registered number of HIV cases by January 1, 2005 was 1,771. Fifty seven HIV+ pregnant women were registered in 2004 in the oblast. The MTCT rate is 12% according to the Oblast Health Administration data.
- Crimea had a prevalence rate of 240.26 per 100,000 (2005). The officially registered number of HIV cases was 5,575 (November, 2005). The MTCT rate was 11.3% (Crimea AIDS Center, November 2005).
- Kherson Oblast had a prevalence rate of 161.6 per 100,000 (2005). The officially registered number of HIV cases was 1,855 (October, 2005). The MTCT rate in the oblast was 7.2% (Kherson AIDS Center, October 2005).
- Kiev Oblast has a prevalence rate of 88.1 per 100,000 (2005). The officially registered number of HIV cases by January 1, 2005 was 1,604. One hundred fifty seven HIV-positive pregnant women were registered in 2004. The MTCT rate is 8% according to the oblast health administration.
- Odessa Oblast had a prevalence rate of 295.87 per 100,000 (2005). The officially registered number of HIV cases was 7,157 (January 2005). The MTCT rate in the oblast was 9.7% (*Informational Bulletin #24* of Ukrainian AIDS Center, January 2005).

The project contributes to and is supportive of USAID/Ukraine's Special Objective 3 (SPO 3): "HIV Transmission Among High-Risk Groups Reduced and Impact on Those Affected Lessened," from USAID/Ukraine's *HIV/AIDS Strategy 2003-2008*. At the intermediate result (IR) level, the project contributes to IR 1: "Strengthened Delivery of HIV/AIDS Information and Services" and IR 3: "Reduced Stigma and Discrimination Associated with HIV Infection and AIDS."



## Project Overview

The *overall goal* of the project was to reduce HIV transmission from mothers to their infants in the target oblasts. Achievement of this goal will be measured by a decrease in the percent of infants born to HIV-positive mothers who test positive for HIV at 18 months. The overall target is to reach a five to eight percent transmission rate. While the project design includes systematic monitoring of a number of interim indicators and preliminary estimations of outcome indicators based upon the initial mother-child cohorts, Ukrainian health regulations only provide for confirmation of HIV status at 18 months of age and therefore reporting of final outcome results will occur at the end of 2008, after the project has ended. The project was designed to contribute to USAID's overall goal of providing comprehensive PMTCT services to 90% of affected women in each oblast by 2008. More specific goals and objectives of the project are outlined below.

*Goal #1: To strengthen human and organizational capacity to develop, deliver and sustain services to prevent mother-to-child transmission of HIV.*

### Objectives:

- Strengthen ability of eight target Oblast Health Administrations to conduct PMTCT program assessments, establish community-based PMTCT task forces, and develop comprehensive PMTCT strategies and related annual workplans.

- Expand the pool of trained healthcare providers, managers and allied professionals delivering quality, evidence-based PMTCT and related services.
- Strengthen the organizational and human resource capacity-building infrastructure of each oblast through establishment of a “methodological center of PMTCT excellence”<sup>1</sup> and affiliated centers that provide continuous training related to PMTCT.
- Establish quality improvement processes in each of the methodological PMTCT centers of excellence and affiliated centers.
- Increase awareness and knowledge among targeted healthcare workers of proper infection control procedures to prevent occupational exposure to HIV.

Goal #2: To facilitate the rapid scale-up of quality PMTCT and related services available to HIV-positive women in each of the eight target oblasts.

Objectives:

- Improve the early identification and referral of HIV-infected pregnant women to increase the numbers of identified HIV-infected pregnant women reached with case management services and involved in comprehensive PMTCT program activities.
- Improve the system of prenatal care and implement necessary drug regimens (based on the latest WHO protocols for Commonwealth of Independent States, 2004) that are possible in Ukraine to prevent HIV vertical transmission.
- Decrease the risk of HIV transmission from mother-to-child during labor and delivery, in accordance with WHO protocols.
- Improve post-natal care for newborns/infants and HIV-positive mothers through family planning services post-delivery and appropriate treatment and follow-up care according to WHO protocols, including referral to HIV/AIDS clinics for Highly Active Antiretroviral Therapy (HAART) where appropriate.

Goal #3: To improve and expand collaboration between the healthcare system and NGOs providing non-medical services to risk groups.

Objectives:

- Increase the participation in PMTCT-related activities of non-medical NGOs providing services to at-risk groups.
- Increase the number of HIV-positive pregnant women receiving key non-medical services from relevant NGOs.

Goal #4: To expand the potential impact of the PMTCT programs and avoid duplication of efforts through close coordination with related USG-funded and other donor-funded programs.

Objectives:

- Facilitate coordination with broader MCH and HIV/AIDS programs through regular strategy and coordination meetings with MOH, target oblasts, and key donors including USAID, WHO, UNICEF, GFATM sub-grantees, etc.

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<sup>1</sup> Terminology requested by Ministry of Health

- Increase dissemination of PMTCT results/lessons learned nationally, regionally and internationally.

**Technical Approach: PMTCT Capacity Building Roll-out Strategy for Eight Target Regions**

Over the project period of 30 months, AIHA assisted the eight target oblasts to address their human and organizational capacity needs related to providing high-quality PMTCT services to HIV-positive women in need of such services. The project was built upon the lessons learned in the highly successful, USAID funded, model PMTCT-Plus program previously developed by AIHA in Odessa and utilized the substantial local experience and training capacity developed at the South Ukrainian AIDS Education Center, in association with that effort. Key project elements included:

- Technical assistance and training in the development of comprehensive community-based PMTCT operational plans for each project site that effectively organized the activities of all key stakeholders including the non-governmental sector.
- Technical assistance and training in support of the development of model programs and methodological centers of excellence in each oblast that incorporated quality improvement processes and evidence-based practices, reached large numbers of women directly, and in turn served as a replication and training site for the development of affiliated programs in underserved areas.
- Organization of a quality improvement “collaborative” through a regular series of workshops and group trainings that allowed implementation teams from all project sites to work and learn together, thus allowing for more rapid adaptation and spread of lessons learned, the sharing of strategies for dealing with common challenges and development of experience that can be utilized by the Ministry of Health to further spread the PMTCT program to other sites in Ukraine. This “collaborative” was further enhanced by close cooperation with other international organizations and people living with HIV (PLWH)-NGOs implementing GFATM programs on psycho-social support to women with HIV and their babies in the target oblasts.
- Staging of project implementation activities in two phases of four target oblasts each. Phase 1 involved implementation of the project in four initial oblasts: Cherkassy, Dnipropetrovsk, Kyiv and Mykolayv. Phase 2 activities began one year later and included the following oblasts: Crimea, Chernigiv, Kherson and Odessa. Project implementation activities for Phase 2 oblasts took into account challenges and lessons learned during Phase 1.

The principal implementation steps for the project and its component elements are described below:

**Program Initiation**

Within 60 days of project award, AIHA held two meetings: (a) a coordination meeting with MCH/MOH, National AIDS Center representatives, and international and national organizations implementing PMTCT projects in Ukraine to develop collaborative linkages and synergy between programs so as to avoid duplication and build upon each other’s successes; and (b) a project launch meeting with key representatives (directors of regional AIDS Centers, chief oblast Ob/Gyns and pediatricians, representatives of key local NGOs) from Phase 1 participating

oblasts, MCH/MOH, Ukrainian National AIDS Center representatives to review the Ukraine PMTCT project and the key elements of implementation. Special attention was given to preparation for initiating base line data collection, organizing the initial community-based PMTCT task force and community meeting, identifying potential clinical sites for development as centers of excellence, and review of progress in the development of the oblast action plan to improve PMTCT services in their cities and oblasts. The workshop was built upon the considerable preliminary work that was achieved in AIHA's December 2003 workshop for policymakers from the MOH and eight target regions.

#### Comprehensive, community-based operational plans for PMTCT

Effective PMTCT programs require the coordination of a variety of MCH and HIV/AIDS-related services as well as significant outreach to high-risk populations (injecting drug users (IDU's) and commercial sex-workers) that are often difficult to reach. A community-based approach that engages key stakeholders, including the NGO community and advocacy groups for at-risk populations was an essential starting point for the development of a comprehensive strategy that in turn provided a road-map for the organization of care within each oblast. The following key action steps were formulated:

- In the beginning of the first project year key AIHA and Odessa staff conducted site assessment visits to each of the four Phase 1 oblasts and facilitated a community stakeholder workshop to discuss the importance of effective PMTCT, the potential for preventing transmittal, and the elements of a comprehensive, high-quality PMTCT program in close coordination with the MCH/MOH and other PMTCT projects. Community goals and objectives were developed. Following the stakeholder workshop, staff worked with oblast policymakers to finalize implementation plans for the project with specific goals, objectives and action steps regarding continuous outreach and engagement of the key stakeholders and the formation of a PMTCT community task force. Site assessment visits to Phase 2 sites took place in the beginning of the second project year.
- During the second project year project staff conducted mid-term visits to each of the target oblasts to meet with the PMTCT community task forces and to help with challenges they were encountering in implementing the local plans. In addition, the project staff followed-up with the local NGOs that participated in the initial workshop to ensure that outreach programs were improving early identification and referral of HIV-positive pregnant women, particularly from high-risk groups.
- At the end of the project, AIHA project staff facilitated final assessments in each oblast to review progress and discuss challenges, to share lessons learned from all the oblasts, and to identify future steps for covering gaps and sustainability approaches. The assessment provided an opportunity for community stakeholders to report on success stories and to discuss community concerns about and responses to the problem of MTCT. In addition, the assessment enabled local NGOs to inform the wider community of services they can provide and will in turn help the NGOs to disseminate information to the wider community. Assessments were planned and implemented in close coordination with the MCH/MOH and other international projects on PMTCT and related NGO programs.

### Model Programs, Methodological Centers of Excellence and Related Training

In order to contribute to increasing coverage in providing comprehensive services to HIV-positive women in Ukraine, the project developed a Methodological Center of PMTCT Excellence in each of the selected oblasts to serve the largest concentrations of women. Each center was comprised of both (a) the regional hospital that receives HIV-positive delivery referrals, and (b) a women's consultation center serving a district with a high percentage of high-risk women with close linkages to local NGOs, providing psychosocial support to women with HIV and their children. The hospitals have increasingly become the methodological centers of excellence for delivering babies of HIV-positive women and have assumed the role of a clinical training center for other professionals in the region. The women's consultation centers are becoming the key resource in the oblast on HIV counseling and testing and prenatal care. The hospitals and women's consultation centers work closely with the AIDS centers to ensure a continuation of case management services for women and babies. Each institution developed close working relationships with local NGOs to focus on vulnerable populations and coordinate early identification and referral to medical care of pregnant women from high-risk groups as well as ensure appropriate social support and follow up. Teams of healthcare workers from each center of excellence received extensive training under the project. AIHA provided technical support and workforce development for the establishment of centers and local governments assumed funding responsibilities, where available.

The key action steps in developing the Methodological Centers of Excellence and related human capacity building for each oblast are outlined below:

- During initial project site assessments AIHA staff, in close coordination with MCH/MOH and oblast health officials, conducted extensive site visits and staff interviews and identified Methodological Centers of PMTCT Excellence in each project oblast.
- After the institutions had been selected, AIHA and oblast health officials assessed the specific training and related needs of each site and identified key health professionals to participate in the knowledge based trainings in each oblast and to attend the skills-based clinical workshop programs at the SUAEC in Odessa.
- Equipment and supply needs were assessed and AIHA staff assisted the organizations to document their needs and identify both local and outside sources to fill these gaps.
- During the mid-term assessments, project staff provided targeted on-site mentoring to counselors, Ob/Gyn and pediatric teams; assisted each center to review guidelines and procedures; monitored PMTCT database entry and verification and identified areas for quality improvement.
- At the end of Year 1 (Spring 2006), a workshop was organized in collaboration with the MOH, the oblast health administrations from each of the selected oblasts and the international organizations and NGOs involved in the target regions in the PMTCT program implementation. Representatives from each oblast reported on replication, results and challenges at the workshop, which took place in Kiev. The workshop assessed the results of the first year of implementation and was a forum for discussing the lessons learned in the replication effort, and synergy between different PMTCT projects implemented in the target oblasts. The workshop also served as a forum for assessing the implications for national legislation and regulatory policy as it relates to HIV/AIDS and MTCT, and for taking stock and identifying the gaps and further training needs of all the sites.

- During Year 2, selected staff from each oblast received TOT training. During the final assessments, project staff discussed with local stakeholders how newly trained oblast faculty will start to act as trainers within their individual oblasts in order to meet the service coverage goals and provide sustainable capacity for each oblast.

### Training

An essential component of building capacity to provide PMTCT services is improving the PMTCT knowledge and developing the clinical skills of key healthcare workers from the replication sites. This component was carried out through a comprehensive training program that includes: (a) extensive knowledge-based training provided by SUAEC faculty in each oblast using the Ukrainian-adapted version of the WHO/USG PMTCT Generic Training Package; (b) skills-based workshops to observe and discuss clinical and practical excellence on obstetrics, pediatrics and counseling in Odessa; and (c) follow-up on-site assessments/mentoring during mid-term and final visits. Selected staff received additional TOT training in Year 2 to act as trainers within their individual oblasts in order to meet the service coverage goals and provide a local source for sustainable capacity building for each oblast.

The key action steps related to training are outlined below:

- In the beginning of the project, SUAEC pilot tested the Ukrainian adapted version of WHO/USG PMTCT GTP curriculum and then conducted one training in each oblast using the curriculum. The teams of key caregivers from the replication sites targeted for each training included: (a) a prenatal and delivery team (Ob/Gyns responsible for prenatal and post-partum care for women with HIV; Ob/Gyns, midwives and nurses who conduct labor and delivery for women with HIV); (b) a pediatric team (neonatologists, pediatricians and pediatric nurses, responsible for newborn/infant follow-up care); (c) an HIV testing and counseling team (healthcare workers doing HIV testing and counseling during prenatal care including Ob/Gyns, midwives, and NGO representatives); and (d) faculty/instructors from undergraduate and postgraduate medical institutes. Approximately 20-25 health professionals from each oblast received this knowledge-based training.
- In addition to the “knowledge-based” standard training package described above, 3-day “skills-based” clinical specialty workshops were held at SUAEC for members of multi-disciplinary teams from each project site (5-6 members in each team including: a prenatal/delivery physician and nurse; a neonatologist, pediatrician and pediatric nurse; and counselors). In addition, two 3-day workshops were conducted in Odessa on PMTCT “systems” organization for the decision makers from the target oblasts. The skills-based workshops and decision maker curricula are based on well-established and tested SUAEC training programs, and incorporate and build upon the main elements of the Ukrainian-adapted version of the WHO/USG PMTCT training package. The decision-makers included key administrators of MCH referral institutions and AIDS centers (head physicians of maternity hospitals, head physicians of women’s consultations from high risk catchment areas, pediatrician from AIDS centers and/or children’s hospitals, AIDS center representatives and NGO representatives). A separate training for decision makers was organized to bring representatives from all oblasts together to address common PMTCT needs and system organizational requirements. The

three-day training format has proven to be the most effective (and acceptable) methodology for the decision makers.

- In Year 2, SUAEC provided a TOT workshop for selected practitioners from each of the oblast centers of excellence (3-4 potential faculty from each oblast) to further develop their ability to initiate and conduct training, based on the Ukrainian version of the PMTCT GTP, for the affiliated centers.

### Annual Project Meetings

As an essential component of the project, AIHA regularly held project meetings to provide a forum for networking and sharing among implementing project sites, expand the potential impact of the PMTCT programs through active involvement of the MOH and avoid duplication of efforts with USG-funded PMTCT projects and other related donor-funded programs.

- Coordination Meeting “Mitigating the Impact of those Affected by HIV/AIDS. AIHA Capacity Building to Prevent MTCT in 6 Ukrainian Regions.” Kiev, Ukraine. March 21, 2005.

The meeting provided a venue to promote synergy between the AIHA PMTCT replication project in six Ukrainian regions, the national PMTCT strategy and other PMTCT projects implementing in Ukraine and to discuss collaboration between the Ukrainian Ministry of Health, National AIDS Center, international organizations and NGOs to implement national PMTCT best practices in Ukraine. Representatives from key donor and technical agencies, implementing PMTCT projects in Ukraine; key officials from the MCH department of Ukrainian MOH and National AIDS Center and NGO representatives, and implementing PMTCT-related projects under GFATM program attended.

- Project Launch Meeting “Mitigating the Impact of those Affected by HIV/AIDS. AIHA Capacity Building to Prevent MTCT in 6 Ukrainian Regions.” Kiev, Ukraine. March 22, 2005.

AIHA’s meeting brought together key MCH, AIDS system and NGO representatives from six project oblasts, officials from the MCH department of the Ukrainian MOH and National AIDS Center, USAID and AIHA staff. Participants convened to review the key elements of the project implementation plan with teams from six project oblasts, to discuss preparation for initiating base line data collection, organizing the initial community-based PMTCT task force and community meeting, to define criteria for identification of potential clinical sites for development as PMTCT centers of excellence and to discuss close coordination of project activities with other PMTCT programs working in the same oblasts (based on March 21 meeting discussions).

- Mid-Term Meeting “Mitigating the Impact of those Affected by HIV/AIDS. AIHA Capacity Building to Prevent MTCT in 8 Ukrainian Regions.” Kiev, Ukraine. February 28, 2006.

Representatives from eight project sites attended the meeting to analyze lessons learned during the first year of the project’s implementation and to discuss plans for the next year, including collaboration among the Ukrainian Ministry of Health, National AIDS Center, international organizations and NGOs in implementing national PMTCT best practices in Ukraine. Throughout the meeting, participants had opportunities to discuss mid-term results,

share implementation challenges, share effective methods to build collaboration between the health care sector and NGOs, discuss latest evidence-based information on PMTCT with key national officials, USAID, WHO and UNICEF representatives.

- Final Project Conference “Mitigating the Impact of those Affected by HIV/AIDS. AIHA Capacity Building to Prevent MTCT in 8 Ukrainian Regions.” Kiev, Ukraine. May 15, 2007.

As a culmination of the project, AIHA organized a conference to discuss the main achievements and lessons learned from the project, including sustainability of the PMTCT activities initiated within the project. Representatives from all eight project sites, USAID, key donor and technical agencies implementing PMTCT projects in Ukraine, key officials from the MCH department of Ukrainian MOH and National AIDS Center and NGO representatives implementing PMTCT-related projects under the GFATM program participated. The conference also showcased both the numerous sustainable project accomplishments as well as implementation challenges which need to be addressed on national and local levels and discussed possibilities for further cooperation with national and international agencies to ensure further progress toward successful PMTCT interventions.

In addition to project meetings, AIHA participated in USAID HIV/AIDS Implementing Partners Coordination Meetings in June 2005 and September 2006 in Kiev, Ukraine. In collaboration with other USG-funded PMTCT projects in Ukraine, AIHA participated in joint presentations to discuss the project approach and current results of the PMTCT project.

#### Monitoring, Evaluation and Reporting

The project’s monitoring and evaluation plan described below is consistent with the UNAIDS “Three Ones” principles (including “one agreed country-level monitoring and evaluation system”) and is designed to meet the data collection and reporting needs under USAID/Ukraine’s HIV/AIDS Strategy and the President’s Emergency Plan for AIDS Relief (PEPFAR). The monitoring and evaluation plan served to:

- Strengthen the capacity of health facilities providing PMTCT services to collect and use data;
- Promote the use of data for quality improvement and further planning of PMTCT interventions;
- Provide timely feedback about program performance;
- Monitor trends and explain changes in key indicators over time;
- Help identify specific successful interventions for replication in other areas.

Monitoring of the project occurred at several levels and in varying forms. These included regular site visits to the project sites by the Odessa AIHA staff, monthly reports by database managers in the participating oblasts, and regular review of output and outcome data. Monitoring activities assessed both process and outcomes and took into account both qualitative and quantitative data. Data was generated largely at the individual oblast level through a specially designed PMTCT database developed by AIHA for use in Odessa, and subsequently approved by the MOH for use nationally and adapted for the project sites. Baseline clinical and facility-related information was collected during the initial site assessment for each target oblast. Other sources of monitoring

and evaluation data included project management reports; training pre- and post-knowledge assessment tests; interviews and structured observations; and records of meetings.

Approximately midway through the project, AIHA staff conducted mid-term site assessments at each of the project sites to provide feedback on the level of clinical care being delivered. These site visits also provided an opportunity for AIHA staff to review the data collected through the PMTCT database and made recommendations to improve the process as necessary. As part of the site visits, AIHA staff also evaluated the need for follow-up training at the replication sites and will make recommendations.

*Quarterly progress reports:* AIHA reported to USAID on a quarterly basis, highlighting progress made to date, any problems encountered during the quarter and their solution or plan for resolution, and a detailed budget showing estimated expenditures during the quarter.

*Final report:* AIHA is submitting this final performance report containing a summary of project activities and outcomes, assessment of future needs, and conclusions.

#### Data Collection for Quality Improvement

A significant quality improvement challenge is lack of quality baseline data and consistent data on PMTCT interventions and outcomes with which health professionals can measure their progress. Introduction of a case management database based upon the monitoring and evaluation system developed in Odessa helped to address this issue. The database is designed to maintain service statistics on HIV-positive pregnant women and their babies, assist with case management, and enable analysis for project monitoring and evaluation purposes. *A Practical Guide on the use of the PMTCT Monitoring and Evaluation Database* was developed to provide a brief description of the database and step-by-step guidance on its installation, data entry and analysis with the help of Microsoft Access.

Each project site selected a data manager, who was responsible for data entry and analysis of each case and for managing the PMTCT monitoring and evaluation database. To facilitate data collection, AIHA provided each participating site in need with a computer (based on the assessment of needs conducted in May-June 2004), along with the database, available on CD-Rom. The data manager was responsible for entering and analyzing site-specific data. Data managers received on-site training from the Odessa training center's database manager who also served as the project's monitoring coordinator. The monitoring coordinator traveled to each project site to assist with set-up of the database and conducted periodic monitoring visits to troubleshoot and assist with continuous quality improvement issues.

- At each site, it was the responsibility of the PMTCT project site coordinator to ensure that by the end of each month the designated data manager transferred the information obtained on the client primary data collection forms to the PMTCT database.
- The PMTCT provider was responsible for entering information regarding HIV-positive status, ARV prophylaxis, delivery method and infant treatment onto the client data forms. They then ensured that the data manager transferred the information obtained on those forms to the database.
- The PMTCT provider was responsible for recording information regarding family planning counseling, infant feeding counseling, HIV follow-up care, and infant follow-up

testing and care on to the client data forms. The data manager then transferred this information to the PMTCT database.

- At the end of every month, the data manager analyzed the data and created a monthly report from the database and presented it to the project site coordinator for review.
- Finalized reports were sent to AIHA on a monthly basis. The data was included in the quarterly reports that AIHA submitted to USAID.

### III. PROGRAM RESULTS

In order to collect and analyze PMTCT clinical-related data and assist project sites with quality improvement tools, AIHA developed and installed the AIHA case based management PMTCT database in each project site. Respective staff were trained by an AIHA consultant on how to use and maintain the database and conduct initial analyses. The baseline data reflects information on PMTCT services provided to HIV positive women **prior** to the initiation of AIHA's project. The baseline data was collected from the PMTCT databases, installed at Oblast AIDS Centers according to the MOH Prikaz (#619, 12/29/2003) and additional AIHA PMTCT project indicators added to the national database. In Kryvoi Rig, the data was collected from patient charts directly, due to the fact that the national PMTCT database was not installed at the Oblast AIDS Center. The baseline data was verified by selected comparison of PMTCT database data and patient charts. This data is compared further with the PMTCT project data. The PMTCT project data shows the introduction of comprehensive PMTCT and related services and the subsequent strengthening of human and organizational capacity to deliver services to prevent mother-to-child transmission of HIV at each of the project replication sites.

In addition to clinical data collection, project staff visited each project site on a regular basis and met with the stakeholder group to discuss the importance of effective PMTCT efforts, the elements of a comprehensive, high-quality PMTCT project, to address challenges to provision of project activities, to evaluate progress achieved by partners at MCH institutions, AIDS centers and local NGOs, to provide feedback on the level of clinical care being delivered, to identify gaps in resources and services, review effectiveness of capacity building and training to review the data collected through the M&E database and make recommendations to improve the process as necessary, to coordinate AIHA project activities with other PMTCT-related programs in the target regions.

AIHA has regularly communicated these findings and related concerns regarding the implications for Ukraine's efforts to reduce pediatric HIV/AIDS to the appropriate governmental officials, USAID, and relevant international organizations.

#### **Summary of PMTCT interventions implementation in project sites:**

- The ability of Oblast Health Administrations to conduct PMTCT program assessments, establish task forces, and develop strategies & annual work plans was strengthened.
- The pool of trained healthcare providers, managers, and allied health staff providing quality, evidence-based PMTCT and related services was expanded (total 303 project caregivers participated in 15 trainings).

- The capacity-building infrastructure was strengthened through project site support to establish the Methodological Centers of PMTCT Excellence.
- Early identification and referral of HIV+ pregnant women was improved (45% of HIV infected women were registered for prenatal care before the second trimester in PMTCT groups compared to 27% in baseline groups).
- System of prenatal care to HIV+ women; labor & delivery practices; and post-natal care for infants and their HIV-infected mothers improved (84% of HIV infected women and 96% newborns received ARV prophylaxis in PMTCT groups compared to respectively 67% and 50% in baseline groups).
- The number of HIV-infected pregnant women receiving key non-medical services from NGOs increased (70% of HIV-infected pregnant women were referred to NGOs to receive non-medical care and support in PMTCT project groups compared to 7% in baseline groups).
- PMTCT results/lessons learned were disseminated and coordination with broader MCH and HIV/AIDS programs was implemented through regular meetings.
- A preliminary estimation of the MTCT rate in the Phase 1 PMTCT group demonstrated an average decrease of 75% compared to the Phase 1 baseline group (6.1% and 18.5% respectively).

<b>Main Indicators</b>	<b>Baseline Group (Average)</b>	<b>PMTCT Group (Average)</b>
HIV test result known before delivery	99%	99%
Prenatal registration during 1st trimester	27%	45%
ARV prophylaxis for HIV+ pregnant women	67%	84%
ARV prophylaxis for newborn	50%	96%
C-section	11%	37%
Replacement feeding	95%	96%
Family planning counseling	46%	98%
Referral to NGO/follow up care	7%	70%
MTCT rate	21%	N/A*

\* The MTCT rate is not available for the PMTCT group's babies due to the fact that HIV status of babies exposed to HIV can be confirmed only after 18 months of age according to national protocols. This data will start to become available after July 2007 for the first babies born within the PMTCT project group (January-February 2006). A preliminary estimation of the MTCT rate in the Phase 1 PMTCT Group, conducted in October 2007, demonstrated an average decrease of 75% compared to the Phase 1 baseline group (6.1% and 18.5% respectively). The complete data on the MTCT rate for the PMTCT project group will be available starting December 2008.

**Detailed analysis of PMTCT improvement trends by individual project sites including inputs, outcomes and areas requiring improvement:**

Information for the project site summaries below was drawn from quarterly reports as well as site trip reports and conference presentations from 2005-2007.

## PHASE I PROJECT SITES

### **Cherkassy:**

#### Key events:

Initial needs assessment (June 2005)

PMTCT for decision makers training course (June 2005)

PMTCT: General knowledge training course in Cherkassy (October 2005)

PMTCT: Clinical skills course at SUAEC (December 2005)

Mid-term assessment (June 2006)

PMTCT: TOT at SUAEC (January 2007)

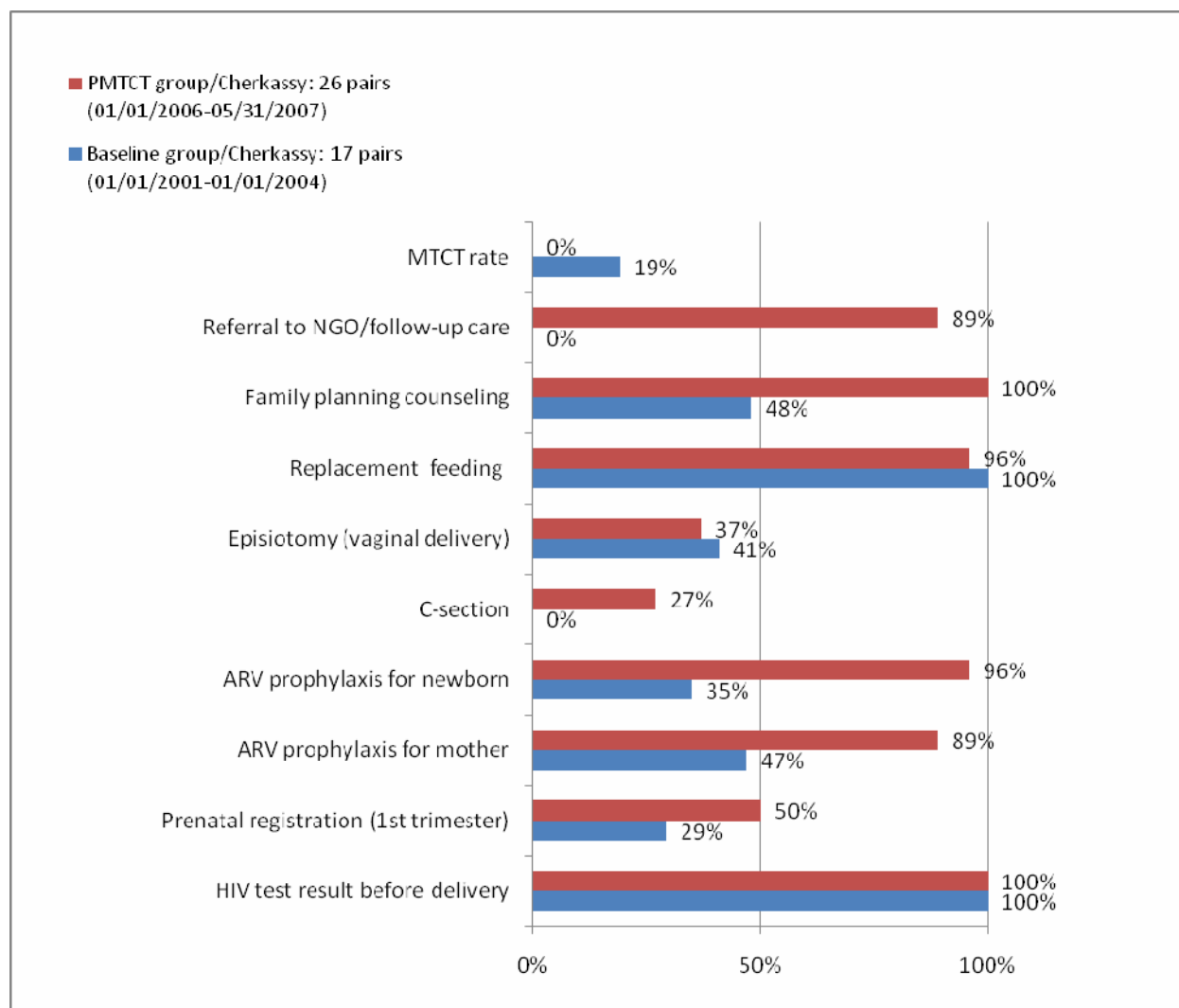
US and AIHA experts on-site mentoring (January 2007)

Final assessment (March 2007)

#### Achievements:

- A detailed operational plan and related monitoring and evaluation system to effectuate evidence-based practice interventions that reduce transmission rates was developed through a local quality assurance (QA) and stakeholder process;
- Formal coordination relationships/mechanisms were established between medical facilities (MCH and AIDS systems) and a HIV-service organization (Cherkassy branch of All Ukrainian Network of PLWH) for providing high quality medical care and services to HIV-positive pregnant women;
- 41 specialists working in the field of obstetrics and pediatrics and NGO representatives received extensive training through participation in 4 PMTCT training courses;
- PMTCT practices were introduced in maternity and antenatal services;
- Oblast Health Administration supports the need to develop Methodological Center of PMTCT Excellence as a result of the project;
- Increase of early prenatal registration of HIV-infected pregnant women (from 29% in baseline group to 50% in project group);
- Increase to 89% of ARV prophylaxis for mothers (compared to 47% in baseline group);
- Increase to 96% of ARV prophylaxis for newborns (compared to 35% in baseline group);
- Increase in elective C-section from zero (baseline group) to 27% in project group;
- Increase in family planning counseling from 48% in baseline group to 100% in project group;
- Increase in referrals to NGO/follow up care from zero to 89% in project group.

Clinical improvements demonstrated in the chart below:



Further areas for improvement:

- Adherence of women with HIV to ARV prophylaxis needs to be monitored,
- Regular supply of rapid tests and milk formula need to be addressed on state and regional levels,
- Free family planning supplies for women with HIV are not available,
- A strategy of collaboration with the narcology system to address the needs of women with HIV needs to be developed,
- Disposable supplies are needed for health care workers to implement comprehensive PMTCT services and prevent occupational exposure to HIV.

## **Bila Tserkva:**

### Key events:

Initial needs assessment (June 2005)

PMTCT for decision makers training course (June 2005)

PMTCT: General knowledge training course in Bila Tserkva (November 2005)

PMTCT: Clinical skills course at SUAEC (December 2005, December 2006)

Mid-term assessment (September 2006)

PMTCT: TOT at SUAEC (January 2007)

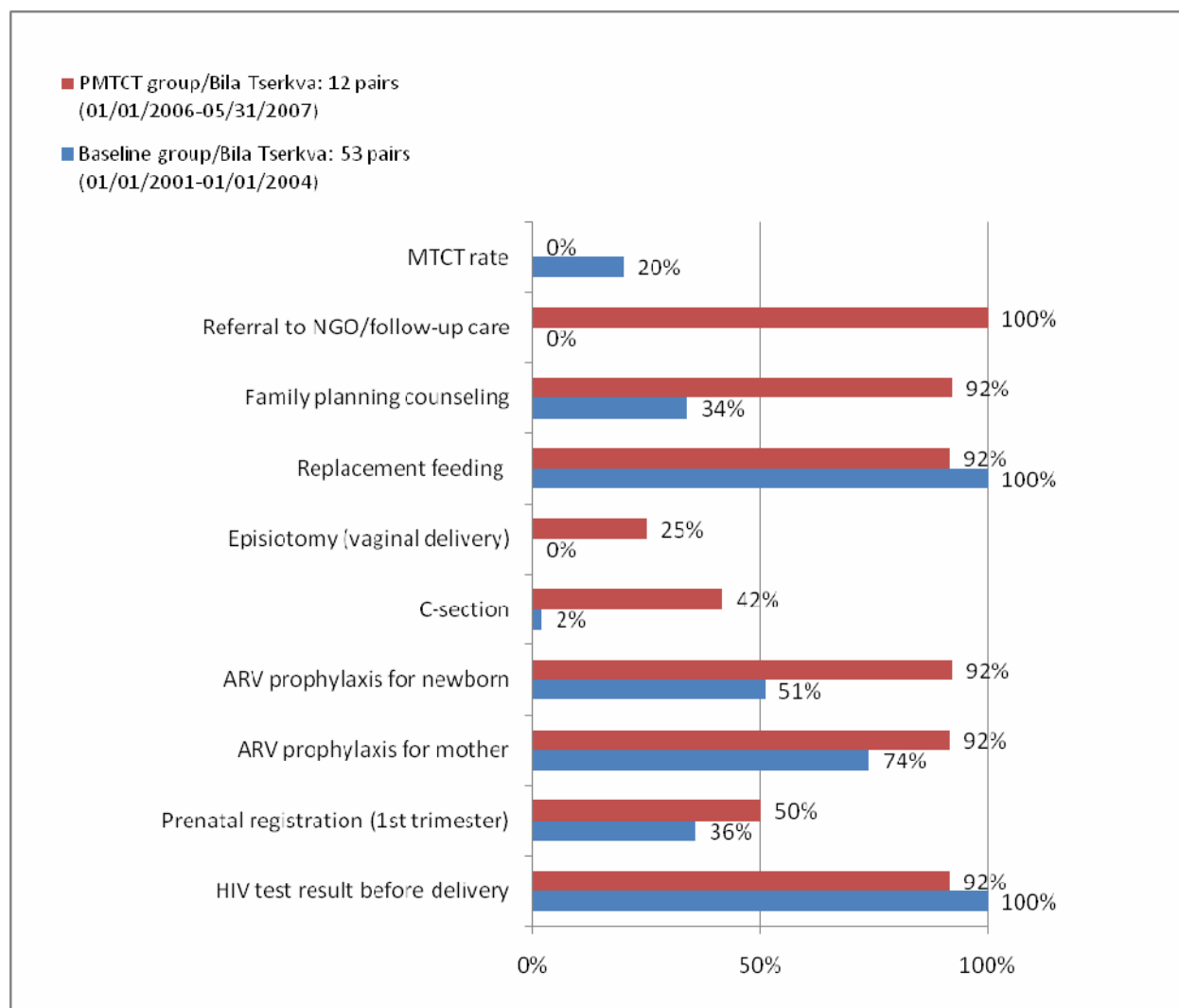
US and AIHA experts on-site mentoring (December 2006)

Final assessment (March 2007)

### Achievements:

- A detailed operational plan and related monitoring and evaluation system to effectuate evidence-based practice interventions that reduce transmission rates was developed through a local QA and stakeholder process;
- Formal coordination relationships/mechanisms were established between medical facilities (MCH and AIDS systems) and HIV-service organizations for providing high quality medical care and services to HIV-positive pregnant women;
- 36 specialists working in the field of obstetrics and pediatrics and NGO representatives from Bila Tserkva received extensive training through participation in 4 PMTCT training courses;
- Bila Tserkva's first HIV-service organization, "Alpha-Life," was established to provide peer-to-peer counseling at the Women's out-patient clinic;
- Recommendations were made regarding renovations at the maternity hospital that will help to avoid stigmatizing and discriminating practices during HIV-positive deliveries;
- The project site caregivers support the development of a Methodological Center of PMTCT Excellence and indicated their belief that city decision makers will allow caregivers to combine clinical work and educational activities;
- Increase of early prenatal registration of HIV-infected pregnant women (from 36% in baseline group to 50% on project group);
- Increase of ARV prophylaxis for mothers (from 74% in baseline group to 92% in project group);
- ARV prophylaxis for newborns increased from 51% in baseline group to 92% in project group;
- Elective C-section increased from 2% to 42% in project group;
- Data demonstrated further increase in family planning counseling from 34% in baseline group to 92% in project group;
- Increase of referral to NGO/follow up care from zero to 100% in project group.

Clinical improvements demonstrated in the chart below:



Further areas for improvement:

- Supplies of ELISA test-systems and rapid-tests for prenatal testing are often not available during delivery.
- Essential medications related to prophylaxis for mothers and newborns may either be unavailable or difficult to access. Because of the centralized distribution of medication for ARV-prophylaxis and HAART, patients (including HIV pregnant women) from Bila Tserkva are currently only able to receive such medications at the Oblast AIDS Center in Kyiv. This requires travel from Bila Tserkva to Kyiv, making adherence to prophylaxis and treatment a significant challenge for patients. In the case of newborns, infant dosages of ARV medication (such as syrup) are not available (especially *Calettra*), making compliance with needed dosages for newborns a particular challenge.
- Access to timely CD4 count testing of HIV-mothers and children is very limited. Currently, there is no financial support for delivering blood samples and performing polymerase chain reaction (PCR) tests for children born to HIV-positive mothers; parents/caregivers have to pay these expenses themselves on a fee for service basis.

- The decrease (from 100% to 92%) in availability of HIV test results before delivery was due to the fact that HIV enzyme-linked immunosorbent assay (ELISA) and rapid tests were not regularly available for prenatal testing.
- Extensive PMTCT capacity building of care providers continues to be a low priority resulting in considerable deficiency in the training and knowledge of caregivers outside of specific project areas. With the temporary closure of the local maternity hospital in Bila Tserkva for reconstruction, HIV-positive women from Bila Tserkva began to deliver in other Kiev Oblast facilities beginning in June 2006. A review of the results of these deliveries demonstrated that a lack of adequate training and PMTCT knowledge of Ob/Gyns from these other regions of Kiev oblast led to incorrect administration of ARV-prophylaxis during delivery in a number of instances -- it is especially alarming that 4 out of 6 children with confirmed HIV-status born in 2006 at regional obstetric departments – received *Nevirapine* prophylaxis according to the medical records. Cost-effective PMTCT training capacity exists in Ukraine but national and international donor plans to fund extensive training programs necessary to overcome the deficiencies of maternity house workers continue not to be implemented.
- Essential contraceptives for family planning are often not available to HIV-positive women. At the Bila Tserkva city family planning service no free contraceptives to HIV-positive women are provided after birth.
- Disposable supplies are needed for health care workers to implement comprehensive PMTCT services and prevent occupational exposure to HIV.

## **Mykolayv:**

### Key events:

Initial needs assessment (May 2005)

PMTCT for decision makers training course (June 2005)

PMTCT: General knowledge training course in Mykolayv (November 2005)

PMTCT: Clinical skills course at SUAEC (December 2005)

Mid-term assessment (June 2006)

PMTCT: TOT at SUAEC (January 2007)

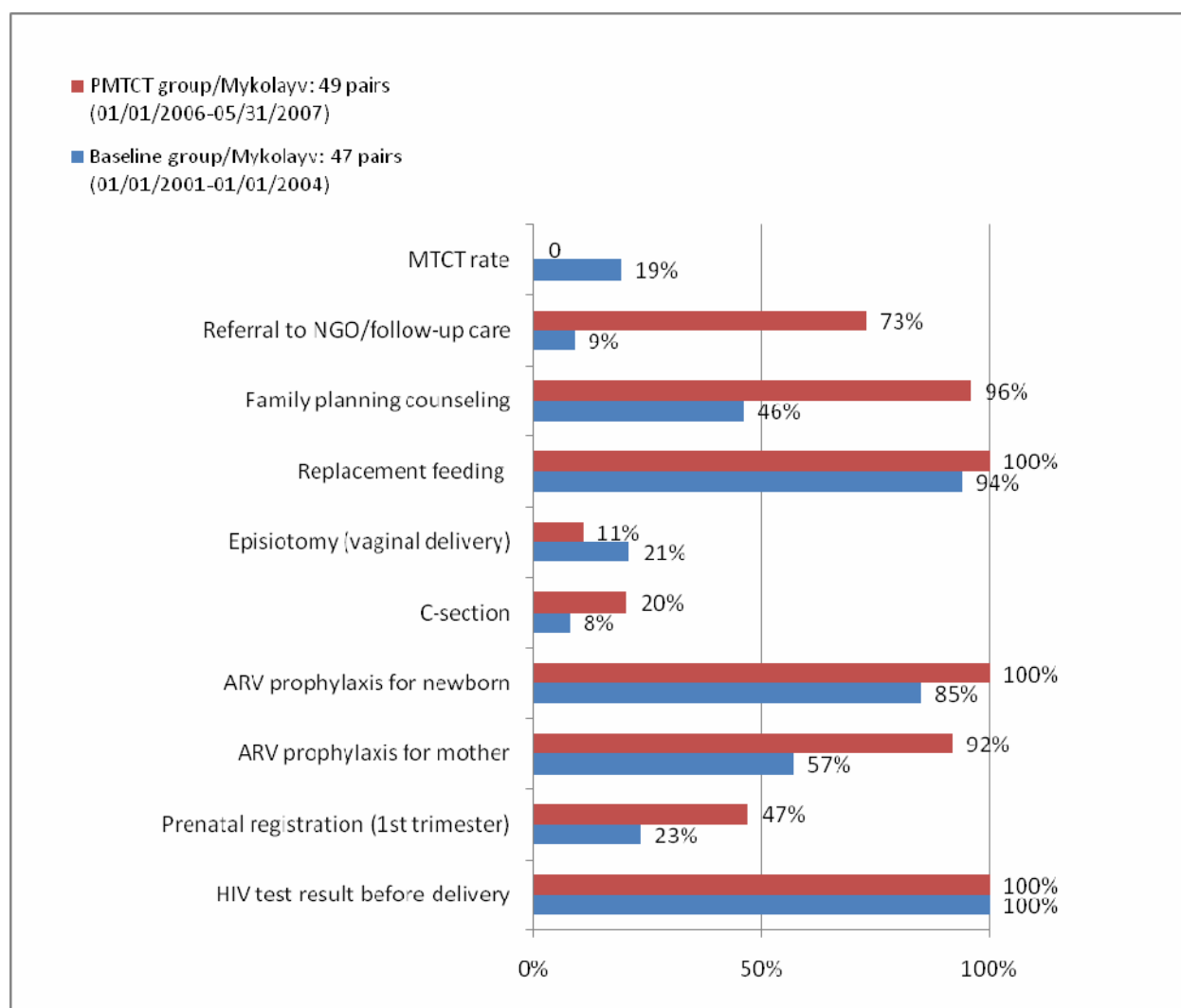
US and AIHA experts on-site mentoring (January 2007)

Final assessment (April 2007)

### Achievements:

- A detailed operational plan and related monitoring and evaluation system to effectuate evidence-based practice interventions that reduce transmission rates was developed through a local QA and stakeholder process;
- Formal coordination relationships/mechanisms were established between medical facilities (MCH and AIDS systems) and HIV-service organization (“Yunitus”) for providing high quality medical care and services to HIV-positive pregnant women;
- 30 specialists working in the field of obstetrics and pediatrics and NGO representatives received extensive training through participation in 4 PMTCT training courses;
- The project site caregivers support the development of a Methodological Center of PMTCT Excellence;
- Political understanding and support of PMTCT activities and availability of local funds to provide HIV testing, ARV drugs for MTCT prophylaxis and milk formula.
- Increase of early prenatal registration of HIV-infected pregnant women (from 23% in baseline group to 47% in project group);
- Increase of ARV prophylaxis for mothers (from 57% in baseline group to 92% in project group);
- ARV prophylaxis for newborns increased from 85% in baseline group to 100% in project group;
- Elective C-section further increased from 8% to 20%;
- Data shows increase in family planning counseling from 46% in baseline group to 96% in project group;
- Continuous increase of referrals to NGO/follow up care from 9% to 73% in project group.

Clinical improvements demonstrated in the chart below:



*Further needs for improvement:*

- Adherence of women with HIV to ARV prophylaxis needs to be monitored.
- The strategy of collaboration with the narcology system to address the needs of women with HIV needs to be developed.
- Access of HIV -infected women to family planning services needs to be addressed.
- Continuous education of medical staff on rapid tests and infection control is needed.
- City and Oblast decision makers need to consider the development of a long term program to improve obstetrical practice based on a friendly approach to mothers and newborns, training caregivers on HIV testing and counseling and continuous partnerships with NGOs.
- Disposable supplies are needed for health care workers to implement comprehensive PMTCT services and prevent occupational exposure to HIV.

## **Kryvoi Rig:**

### Key events:

Initial needs assessment (June 2005)

PMTCT for decision makers training course (June 2005)

PMTCT: General knowledge training course in Kryvoi Rig (October 2005)

PMTCT: Clinical skills course at SUAEC (December 2005)

Mid-term assessment (May 2006)

PMTCT: TOT at SUAEC (January 2007)

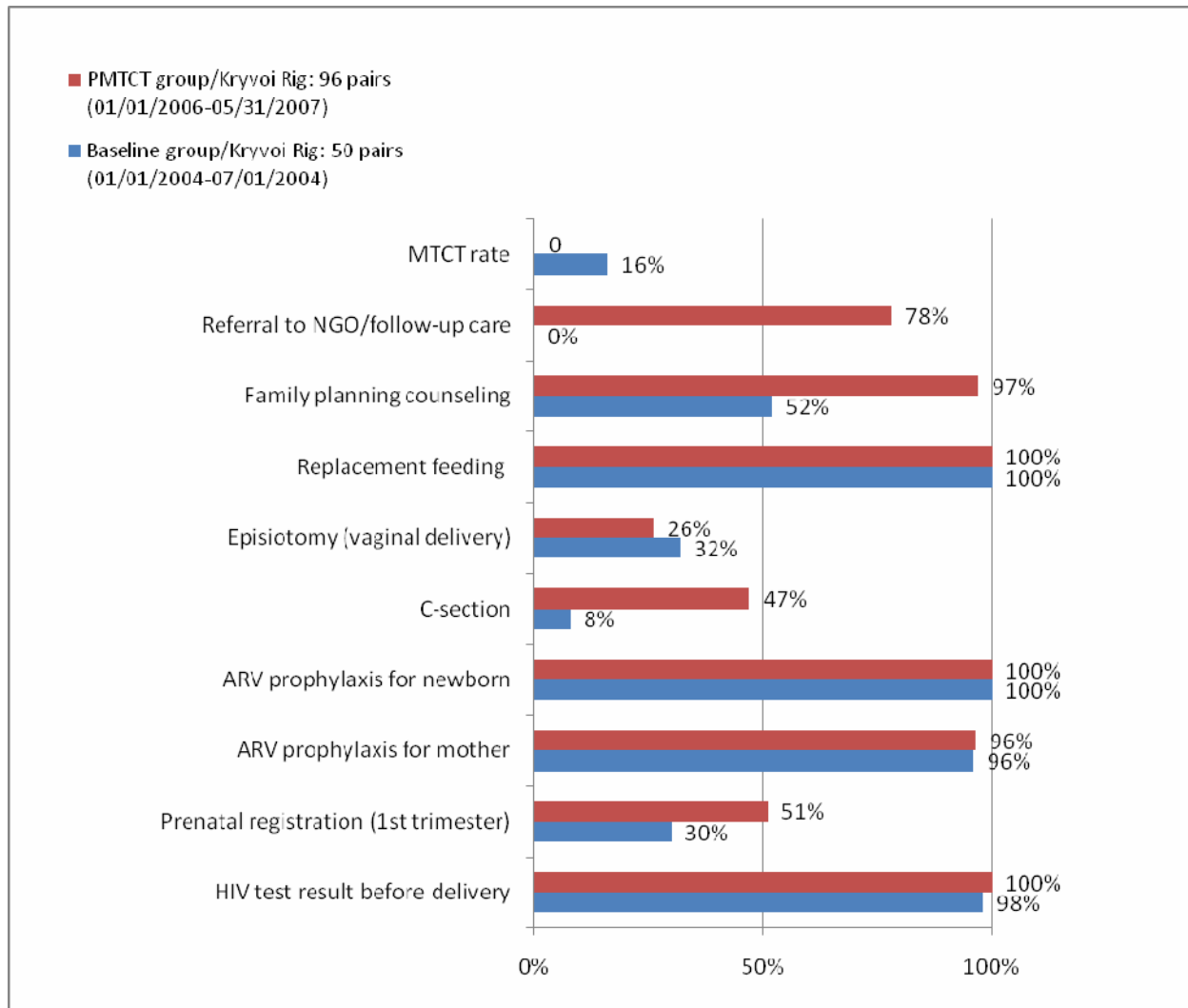
US and AIHA experts on-site mentoring (December 2006)

Final assessment (March 2007)

### Achievements:

- A detailed operational plan and related monitoring and evaluation system to effectuate evidence-based practice interventions that reduce transmission rates was developed through a local QA and stakeholder process;
- Formal coordination relationships/mechanisms were established between medical facilities (MCH and AIDS systems) and HIV-service organization (“With Hope”) for providing high quality medical care and services to HIV-positive pregnant women;
- 36 specialists working in the field of obstetrics and pediatrics and NGO representatives received extensive training through participation in 4 PMTCT training courses;
- Political leadership supports the development of Methodological Center of PMTCT Excellence in the region;
- Almost all newborns, exposed to HIV are registered for follow up care due to collaboration between NGO and MCH system.
- Increase of early prenatal registration of HIV-infected pregnant women (from 30% in baseline group to 51% on project group);
- Stable (100%) provision of ARV prophylaxis for newborns;
- ARV prophylaxis for mothers in baseline group and project group is the same (96%);
- Increase of elective C-section from 8% to 47% in project group;
- Increase of family planning counseling from 52% in baseline group to 97% in project group;
- Continuous increase of referrals to NGO/follow up care from zero to 78% in project group.

Clinical improvements demonstrated in the chart below:



*Further areas for improvement:*

- The strategy of collaboration with the narcology system to address the needs of women with HIV needs to be developed.
- Access of HIV-infected women to family planning services needs to be addressed.
- Continuous education of medical staff is needed.
- Disposable supplies are needed for health care workers to implement comprehensive PMTCT services and prevent occupational exposure to HIV.

**Phase 1 Project Sites: Preliminary estimate of MTCT rate**

In order to conduct a preliminary estimation of one of the main project indicators, in October 2007, after completion of the project, AIHA collected the most current available information on the HIV status of the babies born in the four Phase 1 Project Sites. The HIV status of all 49 babies, born to HIV positive women in the project group in Mykolayv was confirmed by PCR testing. The HIV status of 84 babies born to HIV positive women in the project group in Kryvoi

Rig was confirmed by PCR testing and 12 babies (out of a total of 96 pairs from the PMTCT project group) are under observation/follow up, but pediatric observations indicate that they are healthy. The HIV status for babies born to HIV positive women in the project groups in Cherkassy (26 babies) and Bila Tserkva (12 babies) was based on pediatric observations of the babies' development and health status.

The MTCT rate and related case management information is the following:

Mykolayv Project Site: The preliminary MTCT rate is 8.2%. The PMTCT project group has 49 babies. Four babies have confirmed HIV positive status. All newborns with confirmed HIV positive status received ARV prophylaxis and had replacement feeding. One mother was not registered for antenatal care and received ARV prophylaxis only during delivery. A second mother received ARV prophylaxis during pregnancy (at 28 weeks) and delivery. A third mother received ARV prophylaxis at 30 weeks of pregnancy and during delivery. A fourth mother received ARV prophylaxis at 37 weeks of pregnancy and during delivery.

Kryvoi Rig Project Site: The preliminary MTCT rate is 8.3%. The PMTCT project group has 96 babies. Eight babies out of 84 babies tested by PCR have confirmed HIV positive status. All babies with confirmed HIV positive status received ARV prophylaxis and had replacement feeding. Two mothers did not receive ARV prophylaxis; two mothers received ARV prophylaxis at 28 weeks and four mothers – from 32 weeks. Twelve babies from the project group were not tested by PCR yet, but according to pediatric observations they have normal growth and development.

Bila Tserkva Project Site: The preliminary MTCT rate is zero. The PMTCT project group has 12 babies. According to pediatric observations, all the babies have normal growth and development.

Cherkassy Project Site: The preliminary MTCT rate is 7.7%. The PMTCT project group has 26 babies. According to pediatric observations, two babies will have confirmed HIV positive status at 18 months of age. Both babies received ARV prophylaxis. Both mothers received ARV prophylaxis during delivery.

The preliminary average MTCT rate for Phase I Project Site groups is 6.1%. The average MTCT rate for Phase I baseline groups is 18.5%. Therefore, project activities aimed to prevent mother to child transmission of HIV resulted in an average estimated decrease of 75% of the MTCT rate.

## PHASE 2 PROJECT SITES

(Note: since the PMTCT workforce development for Phase 2 sites was initiated in December 2005 and was completed in September 2006, the Phase 2 sites started to collect PMTCT group data only in October 2006 and the number of pairs covered an 8-month period (October 2006 – May 2007).

### **Izmail:**

#### Key events:

Initial needs assessment (October-November 2006)

PMTCT for decision makers training course (December 2005)

PMTCT: General knowledge training course in Odessa (WHO/USG PMTCT GTP pilot training, July 2005)

PMTCT: Clinical skills course at SUAEC (September 2006)

Mid-term assessment (February 2007)

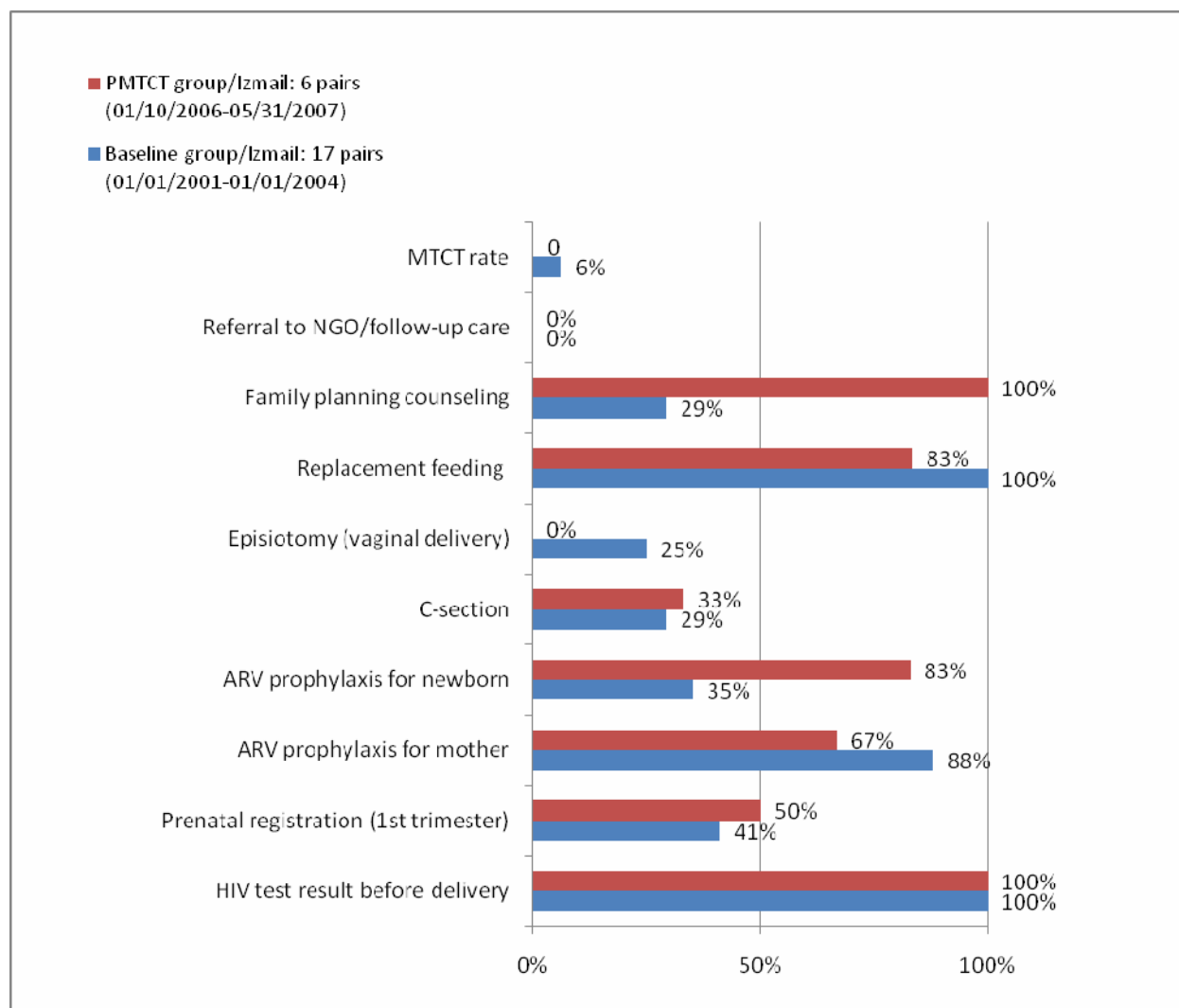
PMTCT: TOT at SUAEC (January 2007)

Final assessment (April 2007)

#### Achievements:

- A detailed work plan and related monitoring and evaluation system to effectuate evidence-based practice interventions that reduce transmission rates was developed through a local QA and stakeholder process;
- Formal coordination relationships/mechanisms were established between medical facilities (MCH and AIDS systems) for providing high quality medical care and services to HIV-positive pregnant women;
- 40 specialists working in the field of obstetrics and pediatrics received extensive training through participation in 4 PMTCT training courses;
- The project site caregivers support the development of Methodological Center of PMTCT Excellence;
- Increase in early prenatal registration of HIV+ pregnant women (from 41% in baseline group to 50% in project group);
- Case management analysis, using the installed PMTCT database tool, helped to analyze the decrease in ARV prophylaxis for mothers (67% in project group compare to 88% in baseline group), which was due to the fact that two women were diagnosed with HIV too late in their pregnancy to receive ARV drugs.
- Increase to 83% of ARV prophylaxis for newborns (compared to 35% in baseline group);
- Increase in elective C-sections from 29% to 33% in project group;
- Increase in family planning counseling from 29% in baseline group to 100% in project group.

Clinical improvements demonstrated in the chart below:



Further needs for improvement:

- Regular availability of HIV tests for prenatal testing and on-time information about test results to initiate ARV prophylaxis when needed;
- The strategy of collaboration with the narcology system to address the needs of women with HIV needs to be developed.
- Access of HIV -infected women to family planning services needs to be addressed.
- Continuous education of medical staff is needed.
- Disposable supplies are needed for health care workers to implement comprehensive PMTCT services and prevent occupational exposure to HIV.
- HIV-service NGO needs to be established.

## **Feodosia:**

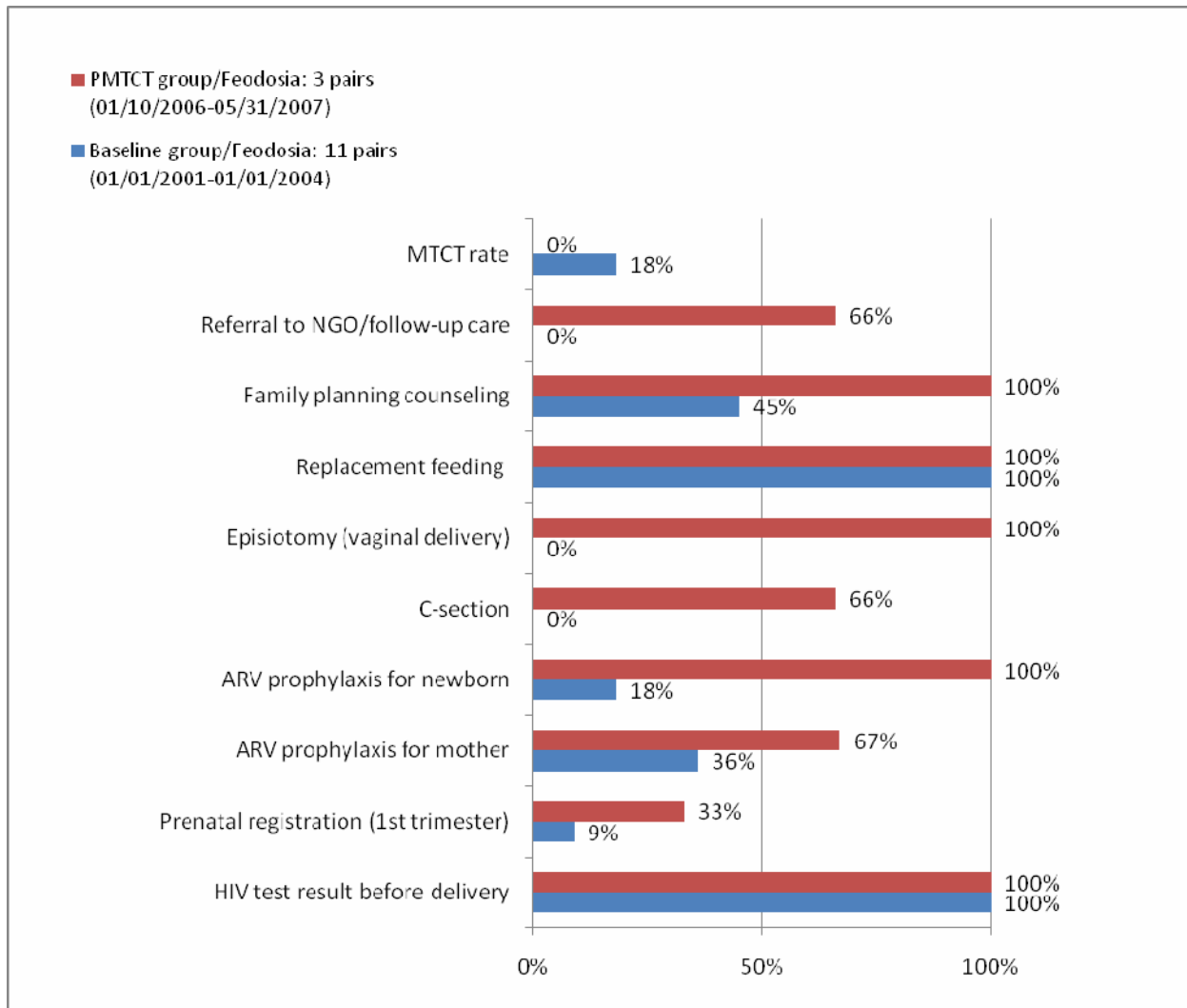
### Key events:

Initial needs assessment (June 2006)  
PMTCT for decision makers training course (December 2005)  
PMTCT: General knowledge training course in Feodosia (June 2006)  
PMTCT: Clinical skills course at SUAEC (September 2006)  
Mid-term assessment (November 2006)  
PMTCT: TOT at SUAEC (January 2007)  
Final assessment (April 2007)

### Achievements:

- A detailed work plan and related monitoring and evaluation system to effectuate evidence-based practice interventions that reduce transmission rates was developed through a local QA and stakeholder process;
- Formal coordination relationships/mechanisms were established between medical facilities (MCH and AIDS systems) and HIV-service organizations for providing high quality medical care and services to HIV-positive pregnant women;
- Forty-one (41) specialists working in the field of obstetrics and pediatrics and NGO representatives received extensive training through participation in 4 PMTCT training courses;
- The project site caregivers and political leadership support the idea of the development of Methodological Center of PMTCT Excellence in Feodosia for Eastern Crimea region;
- Increase in early prenatal registration of HIV-infected pregnant women (from 9% in baseline group to 33% in project group);
- Increase in ARV prophylaxis for mothers (from 36% in baseline group to 67% in project group);
- ARV prophylaxis for newborns increased from 18% in baseline group to 100% in the project group.
- Elective C-sections further increased from zero to 66%.
- Increase in family planning counseling from 45% in baseline group to 100% in project group;
- Increase in referrals to NGO/follow up care from zero to 66% in the project group.

Clinical improvements demonstrated in the chart below:



*Further needs for improvement:*

- The strategy of collaboration with the narcology system to address the needs of women with HIV needs to be developed.
- Access of HIV-infected women to family planning services needs to be addressed.
- Continuous education of medical staff is needed.
- Disposable supplies are needed for health care workers to implement comprehensive PMTCT services and prevent occupational exposure to HIV.

## **Kherson:**

### Key events:

Initial needs assessment (October 2006)

PMTCT for decision makers training course (December 2005)

PMTCT: General knowledge training course in Kherson (April 2006)

PMTCT: Clinical skills course at SUAEC (September 2006)

Mid-term assessment (February 2007)

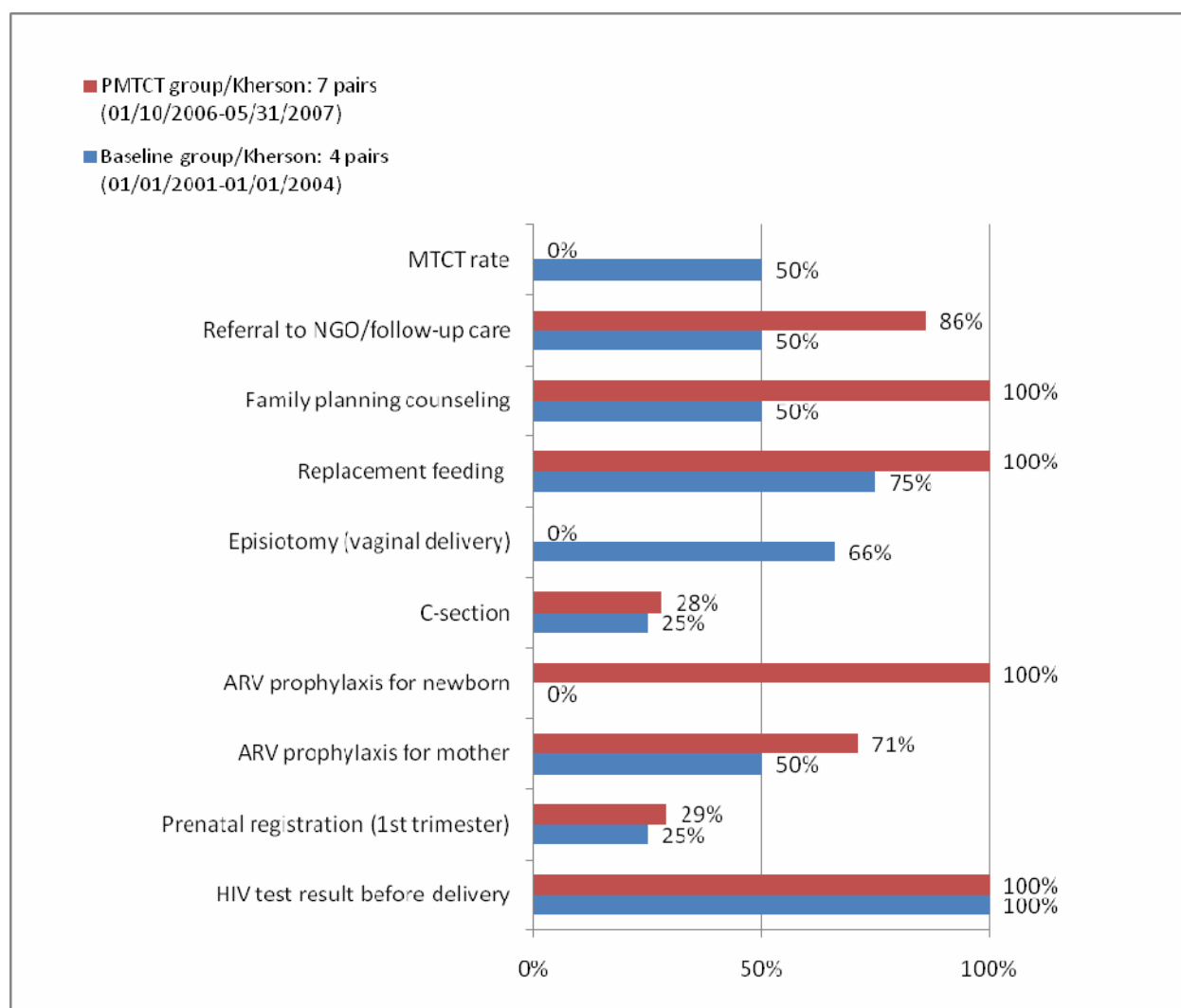
PMTCT: TOT at SUAEC (January 2007)

Final assessment (April 2007)

### Achievements:

- A detailed work plan and related monitoring and evaluation system to effectuate evidence-based practice interventions that reduce transmission rates was developed through a local QA and stakeholder process;
- Formal coordination relationships/mechanisms were established between medical facilities (MCH and AIDS systems) and HIV-service organizations for providing high quality medical care and services to HIV-positive pregnant women;
- 40 specialists working in the field of obstetrics and pediatrics and NGO representatives received extensive training through participation in 4 PMTCT training courses;
- The project site caregivers support the development of Methodological Center of PMTCT Excellence;
- Increase in early prenatal registration of HIV-infected pregnant women (from 25% in baseline group to 29% on project group);
- Increase in provision of ARV prophylaxis for newborns from zero to 100%;
- ARV prophylaxis for mother in project group increased to 71% compared to 50% in baseline group;
- Increase of elective C-sections from 25% to 28% in project group;
- Increase in family planning counseling from 50% in baseline group to 100% in project group;
- Increase of referrals to NGO/follow up care from 50% to 86% in project group.

Clinical improvements demonstrated in the chart below:



*Further needs for improvement:*

- The strategy of collaboration with the narcology system to address the needs of women with HIV needs to be developed.
- Access of HIV-infected women to family planning services needs to be addressed.
- Continuous education of medical staff is needed.
- Disposable supplies are needed for health care workers to implement comprehensive PMTCT services and prevent occupational exposure to HIV.

## **Chernigiv:**

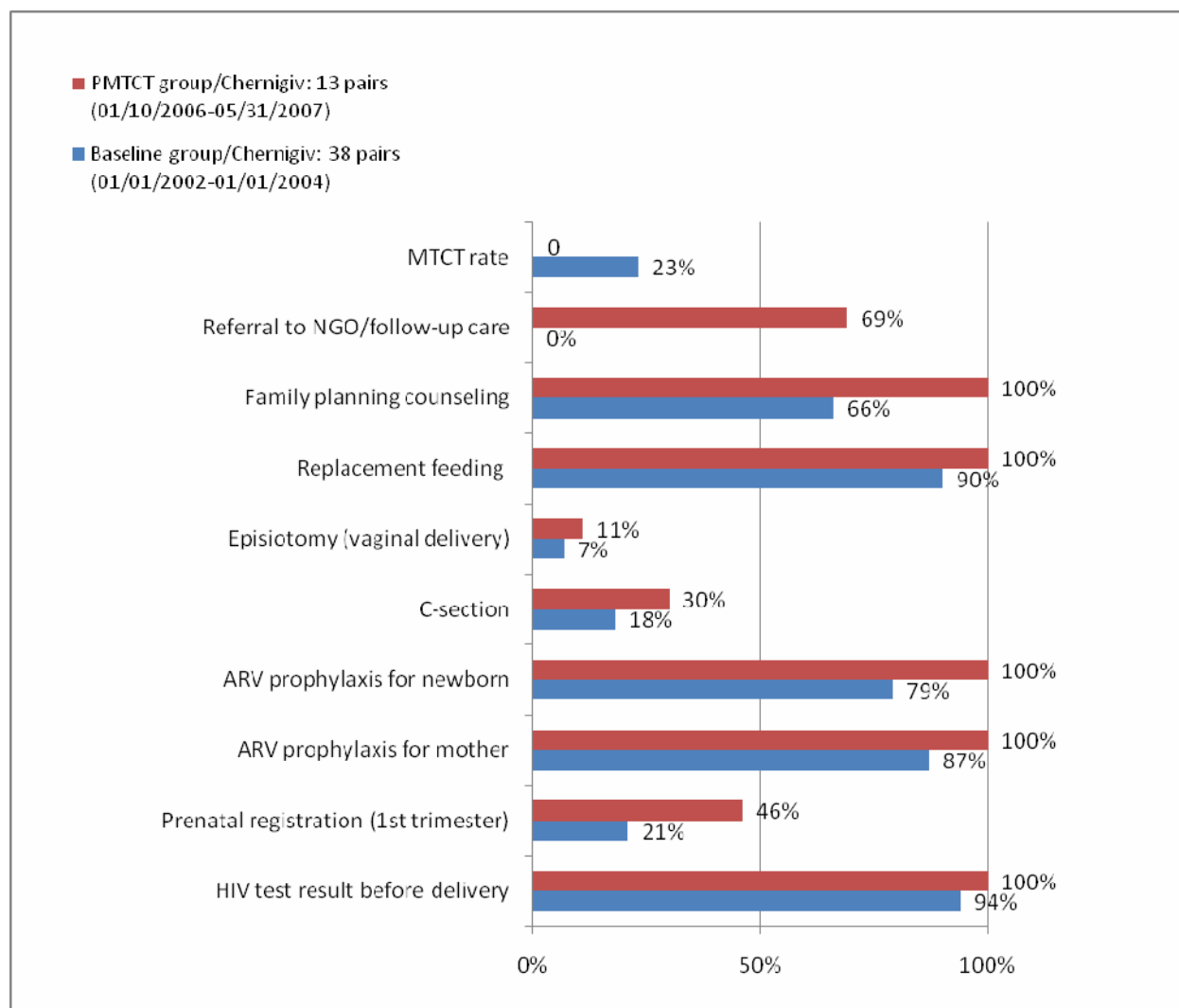
### Key events:

Initial needs assessment (June 2006)  
PMTCT for decision makers training course (December 2005)  
PMTCT: General knowledge training course in Chernigiv (June 2006)  
PMTCT: Clinical skills course at SUAEC (September 2006)  
Mid-term assessment (November 2006)  
PMTCT: TOT at SUAEC (January 2007)  
US and AIHA experts on-site mentoring (December 2006)  
Final assessment (April 2007)

### Achievements:

- A detailed work plan and related monitoring and evaluation system to effectuate evidence-based practice interventions that reduce transmission rates was developed through a local QA and stakeholder process;
- Formal coordination relationships/mechanisms were established between medical facilities (MCH and AIDS systems) and HIV-service organizations for providing high quality medical care and services to HIV-positive pregnant women;
- 39 specialists working in the field of obstetrics and pediatrics and NGO representatives received extensive training through participation in 4 PMTCT training courses;
- The project site caregivers support the development of Methodological Center of PMTCT Excellence;
- Increase in early prenatal registration of HIV-infected pregnant women (from 21% in baseline group to 46% in project group);
- Increase in ARV prophylaxis for mothers (100% in project group compared to 87% in baseline group);
- 100% of ARV prophylaxis for newborns (compared to 79% in baseline group);
- Increase in elective C-sections from 18% to 30% in project group;
- Increase in family planning counseling from 66% in baseline group to 100% in project group;
- Referrals to NGO/follow up care increased from zero to 69%.

Clinical improvements demonstrated in the chart below:



Further needs for improvement:

- The strategy of collaboration with the narcology system to address the needs of women with HIV needs to be developed.
- Access of HIV -infected women to family planning services needs to be addressed.
- Continuous education of medical staff is needed.
- Adherence of women with HIV to ARV prophylaxis needs to be monitored,
- Need for regular supply of rapid tests and milk formula need to be addressed on state and regional levels;
- Disposable supplies are needed for health care workers to implement comprehensive PMTCT services and prevent occupational exposure to HIV.

### **Summary of Remaining Challenges and Health Care System Obstacles:**

The major concerns and problems that impede the achievements of project results were described in quarterly reports during the project term. The key challenges that persist at project conclusion include:

- Shortage of essential supplies which are needed to implement a comprehensive PMTCT program, including HIV tests for prenatal testing;
- The national approach to MTCT data collection, reliability of data and calculation of PMTCT rate which tends to minimize the current problem in Ukraine and thus reduce the demand for action on the part of the MOH and oblast health authorities;
- Lack of donor or national funding for necessary expansion of training and continuing education programs for health care professionals and key stakeholders;
- A need for the official introduction of HIV diagnostic testing using PCR tests for infants to provide early confirmation of HIV status of babies born to HIV-positive women and, as a result, an earlier determination of the MTCT rate.

In addition to the above mentioned problems, there are the following health care system obstacles impeding the achievements of project results and influencing project sustainability, which were frequently observed and discussed during project staff assessments at the project sites:

- Limited state funding for maternity health care institutions to support essential services and disposable supplies;
- Unclear tender procedure of purchasing and distribution of test-systems for ELISA and express HIV testing for pregnant women which resulted in interrupted supplies of HIV tests kits;
- According to existing regulations, ARV prophylaxis drugs are only distributed to HIV+ pregnant women twice a month at AIDS centers, which creates a serious access problem for women living in remote areas;
- Needed improvement of collaboration with the narcology system to address the needs of women who use drugs;
- Lack of an effective MOH monitoring system and staffing to identify and resolve resource and access problems and insure a continuous quality improvement process.

## **IV. CONCLUSIONS**

AIHA's eight PMTCT project sites and related programs made significant contributions to improving services to women living with HIV and babies exposed to HIV in target regions in Ukraine. In addition to improving the healthcare delivery to HIV-infected pregnant women and their newborns, the project effected change on a more fundamental level. It enabled project participants to develop new operational frameworks to address the PMTCT problem in a comprehensive, multisectoral process in order to gain new knowledge and skills, develop case management systems to monitor and improve quality of care delivery, and train healthcare professionals. The Ukraine PMTCT Project created local capacities that not only serve as a foundation for continued improvement, but also as a model that can be utilized by the MOH and disseminated across other regions in Ukraine.

## **Summary of capacity building results on different health care system and related decision maker levels:**

### *Prenatal care:*

- Health care professionals received advanced knowledge and related skills on PMTCT during training sessions;
- Early identification and registration for prenatal care of HIV infected women increased;
- Partnership collaboration between AIDS center, Women's consultation and NGO established;
- Peer counseling offices were established at project sites women's consultations (Mykolayv, Bila Tzerkva, Cherkassy, Kryvoi Rig).

### *Delivery and Postpartum Care:*

- Health care professionals received advanced knowledge and related skills on PMTCT during training sessions;
- Individual delivery rooms and rooming-in with improved conditions created and became available for HIV-infected women (Feodosia, Cherkassy, Bila Tzerkva, Kryvoi Rig);
- NGO representatives started to be involved in providing peer counseling at the maternity hospital both before and after delivery (Cherkassy, Bila Tzerkva, Kryvoi Rig);
- Reduction of stigma and discrimination of HIV-infected women in obstetrical institutions (Cherkassy, Kryvoi Rig);
- Case management approach to PMTCT was introduced and on-site training of professionals on PMTCT database management provided;
- Access to family planning services after delivery for HIV-infected women improved.

### *Specialized HIV/AIDS Care (City and Oblast AIDS Center):*

- Health care professionals received advanced knowledge and related skills on PMTCT during training sessions;
- Coordinating role of AIDS centers (within the scope of local health care services activities) in providing PMTCT services was strengthen (Chernigiv, Cherkassy);
- Close collaboration with HIV-servicing NGOs in the area of pretest counseling, promotion of adherence to ART was established (Mykolayv, Cherkassy, Bila Tzerkva);
- Case management approach to PMTCT was introduced, needed ICT recourses provided with related on-site training of professionals on PMTCT database management.

### *Pediatric Care:*

- Health care professionals received advanced knowledge and related skills on PMTCT during training sessions;
- Collaboration with the local HIV-service NGOs was facilitated, particularly with regard to day care centers, supported by GFATM program and UNICEF (Cherkassy, Mykolayev, Kherson, Kryvoi Rig, Chernigiv).

### *Local Health Care Administration and Government:*

- Representatives from the pilot regions' health care administrations received knowledge about PMTCT problem during decision makers training sessions;

- Local PMTCT task force groups were established in the project regions/cities, related Orders (*Prikazu*) were approved to ensure implementation of the project;
- Increased understanding of PMTCT related local needs, approval of local funding to purchase equipment and supplies necessary for PMTCT program implementation in project sites (Mykolayv, Kryvoi Rig) and allocation of funds for renovation of health care institutions at project sites (Feodosia city maternity hospital, Cherkassy AIDS center);
- Ongoing monitoring of the PMTCT program implementation in the region and in the city through the activities of the Regional HIV/AIDS, Tuberculosis and Drug Use Coordination Boards provided.

*Ukrainian Ministry of Health:*

- On-going support of AIHA Ukraine PMTCT project through MCH/MOH officials participation in annual meetings, regular MOH officials briefings with AIHA Ukraine PMTCT Project Director, etc.;
- AIHA PMTCT project experience was introduced in several related national recommendations through regular participation of AIHA PMTCT staff in the development of Clinical protocols and Orders on PMTCT and Voluntary Counseling and Testing (VCT);
- Increased understanding of PMTCT challenges which need to be addressed on the national level;
- Approval of the postgraduate program and curriculum “Prevention of mother-to-child transmission of HIV” for Ob/Gyns, neonatologists, pediatricians and family doctors; curriculum is based on WHO/USG PMTCT Generic Training Package recommended for implementation into postgraduate education of physicians.

*Donor’s Organizations:*

- Regular coordination of PMTCT project activities through a series of meetings and annual conferences;
- Facilitation of cooperation between AIHA PMTCT project sites and international donor organizations (International HIV/AIDS Alliance, *Renaissance* Foundation, etc.) to obtain additional funding to implement PMTCT activities (Kryvoi Rig, Bila Tzerkva);
- Collaboration with USG-funded PMTCT projects on the development and implementation of the National protocol on counseling and testing (MOH Order #415) and National PMTCT protocol.

**Summary of remaining challenges:**

While AIHA and its implementing partners in project sites have made many important contributions to the efforts of USAID and Ukrainian Ministry of Health to improve PMTCT during the 30-month project period, the Ukrainian health delivery system continues to face serious challenges with respect to effectively reducing maternal-to-child transmission of HIV/AIDS:

- Ongoing review of national PMTCT protocols: national protocols on ARV prophylaxis and treatment during pregnancy require revision to incorporate new WHO guidelines for European region (2006) have yet to be completed;

- The process of incorporation of HIV/AIDS and PMTCT topics into the undergraduate and postgraduate medical education needs to be accelerated; quality training of postgraduate faculty should be ensured;
- Continuous on-site education of MCH caregivers on VCT and infection control is needed;
- Continuous education of PMTCT caregivers (AIDS center psychologists, social workers, NGO counselors, etc.) needs to be provided;
- PMTCT data collection and processing on the local level need to be improved and monitored by the MOH;
- The narcology system needs to be included in PMTCT activities to insure that women in the IDU risk group are adequately reached;
- Regular supply of rapid tests, *Nevirapine*, and disposables to maternity hospitals need to be secured;
- Free of charge access to contraceptives (preferably, condoms) for HIV+ patients, and pregnant women in particular, need to be provided;
- Capacity of the laboratory service of AIDS centers (viral load, CD4 count and PCR tests) to ensure access to timely evaluation of pregnant women and their newborns status need to be improved.

Notwithstanding these serious and continuing “systemic” challenges which characterize many aspects of the health system in Ukraine, the USAID funded AIHA project has successfully developed capacities in eight project sites in key Ukrainian regions to address critical human and organizational needs related to providing high-quality PMTCT services to women with HIV and babies exposed to HIV. As a result, Ukrainian caregivers in these regions are well positioned to sustain their capacities, seek out new opportunities to improve care to women with HIV and their children, and continue to reduce maternal to child transmission rates of HIV/AIDS in the coming years. Their success sets an important benchmark for the rest of Ukraine in particular and for the NIS region in general. Whether the tested approaches, organizational systems and training programs developed under the project are disseminated and scaled up nationally and adopted regionally are solely dependent upon the commitment of the Ukrainian government and their counterparts in other countries and the international community.

## **APPENDIX A:**

### **The Odessa Model for PMTCT**

Through its NIS region-wide cooperative agreement with USAID's Europe & Eurasia Bureau, AIHA initiated a model PMTCT-Plus project in Odessa, Ukraine in 2000. Incorporating both quality improvement processes and twinning methodologies, the project has focused on introducing systemic and institutional change related to HIV/AIDS prevention and treatment in general and MTCT in particular. The project's objectives include: reorganizing and strengthening the service delivery system to insure that PMTCT is well integrated into both maternal and child care and new family focused primary care; revising treatment protocols to ensure that they are evidence based and effective within the changing social and economic context; developing training materials and curricula for health professionals in important areas such as counseling, obstetrics, occupational health, pediatric care, women's health and family planning, and the development of a local capacity to train healthcare workers and trainers to replicate the model throughout the region.

Through a twinning relationship with a consortium of Colorado healthcare institutions led by Boulder Community Hospital (a sole community provider with extensive community-based HIV ambulatory services), key health professionals from Odessa received extensive training in Colorado and health professionals from Colorado in turn regularly traveled to Odessa to work side-by-side with their counterparts in implementing new practices and skills.

The pilot program developed a monitoring and evaluation database system to track project outcomes and facilitate the quality improvement process. Results indicated a 75% reduction in the rate of vertical HIV transmission from 24 to 6 percent in two years in the catchment area (pop. approximately two million). In 2004 65% of HIV-positive women from Odessa oblast delivered at the Odessa Oblast Hospital compare to 52% in 2002 and received full scale comprehensive PMTCT services which include: HIV counseling and testing, prenatal care including ARV prophylaxis and counseling, family planning and condom use promotion, safe infant feeding counseling, elective C-section and safer delivery practices, ARV prophylaxis and opportunistic infection prevention to babies, and referral to follow up care at a Satellite HIV Clinic on the same campus. Significant improvements in practice have also been tracked through the database including: a 41 percent increase in the number of cases where the HIV status of women was known before delivery; a 23 percent increase in the number of women whose first prenatal visit occurred before the second trimester of pregnancy; a 96 percent increase in HIV-positive pregnancies and deliveries treated for PMTCT in accordance with WHO guidelines; and a 98 percent increase in babies treated for PMTCT in accordance with WHO guidelines. One-hundred percent of mothers, babies and partners were referred to the Satellite HIV Clinic (situated on the same campus as the Odessa Maternity Hospital) for follow-up care and to local NGOs for support.

A number of PMTCT-Plus strategies developed through the pilot project have proven to be especially effective in the Odessa region. These include: (a) strong linkages with local NGOs to reach women from high-risk groups; (b) coordination with local health personnel serving the catchment areas with high-risk populations to ensure that services are easily accessible; (c) new referral protocols, effective resource allocation and continuing education of community

healthcare workers in the key high-risk catchment areas; and (d) partnerships with other international organizations, health care institutions, local communities and NGOs.

Having demonstrated success in preventing MTCT among participating women, the project was increasingly focused on systematically identifying all women in the city and oblast who are at risk, enrolling them in family planning and prenatal services, and ensuring close to 100 percent case management through delivery and post-delivery. In addition, several new oblast-wide strategies have been initiated to reach women in the oblast that remain without easy access to comprehensive PMTCT services, with the aim of achieving coverage of over 90 percent of HIV-percent women in coming years:

- The Oblast Health Administration has taken steps to ensure that all HIV-positive pregnant women are referred to the Odessa Oblast Hospital (OOH) for PMTCT counseling even if they live too far away to deliver at the OOH.
- To further insure that all women in the oblast receive comprehensive PMTCT medical care during delivery, the oblast administration is working on improving basic PMTCT clinical skills of healthcare workers at other maternities and women consultative centers. At the end of the project OOH faculty was reaching approximately 80 percent of ob/gyns in the city of Odessa and 70 percent of ob/gyns in the oblast with the PMTCT trainings.

The project also strives to provide all mother/child pairs with high-quality family care and, where appropriate, specialized HIV/AIDS treatment through the addition of HAART for selected women, children and family members, in close cooperation with MSF/Ukraine and Odessa Oblast AIDS Center. Under the GFATM-funded project, “Overcoming HIV/AIDS Epidemic in Ukraine,” treatment (with ART) and care is increasingly being made available in the oblast. Close coordination is promoted between AIHA’s PMTCT project and the delivery of treatment and care services by the Odessa AIDS clinic.

The longer-term result of AIHA’s pilot project has been to establish systems and processes for addressing care and treatment of HIV/AIDS more broadly in Ukraine and throughout Eurasia. The Odessa program was designated as a clinical center of excellence by the Ukrainian MOH and WHO in mid-2003. From its inception, the program was designed to contribute to program dissemination and scale-up: (a) workplans included a detailed evaluative framework; (b) key national stakeholders, including the director of Ukraine’s National Aids Center, participated in the program exchanges and extensive collaborative efforts with the MOH facilitated by AIHA staff, thereby assuring necessary regulatory changes; (c) the partners developed/field-tested practice manuals, hosted workshops for representatives from other AIHA partnerships and for UNICEF, WHO and UNAIDS-sponsored professionals from around the region; (d) emphasis was placed on training-of-trainers and establishment of a training center. As a result, the Odessa model has not only been endorsed by the Ukrainian MOH as the model for replication, but the Odessa partners and their training center have begun to play an active role as second-generation “East-to-East” partners to counterparts in Russia, Kazakhstan, Georgia, Azerbaijan and Moldova seeking to replicate the model with AIHA/USAID support.

To disseminate the Odessa model of healthcare delivery reorganization using the PMTCT-Plus approach to other resource-limited settings in Eurasia, AIHA and the Odessa Oblast Hospital established a South Ukrainian AIDS Education Center in June 2003. SUAEC’s current training

offerings include didactic-clinical courses in obstetrics/ gynecology, VCT, and pediatrics as well as a PMTCT organization course for decision makers. These training courses have been conducted for healthcare professionals from Kazakhstan, Moldova, Georgia, Azerbaijan and Russia since its opening with funding from USAID, UNICEF and others. SUAEC was also one of four participating sites in the NIS for adaptation and piloting of the WHO/USG-CDC Generic Curriculum in PMTCT. SUAEC faculty was the first to begin large-scale training using the Generic Curriculum in summer 2005 under contract between UNICEF/Russia and the WHO Knowledge Hub for HIV/AIDS Care and Treatment in Eurasia. SUAEC is the primary PMTCT-related training center for the Kiev-based Knowledge Hub for Care and Treatment, supported by WHO and UNAIDS and managed by AIHA.

## APPENDIX B:

### LIST OF PROJECT INSTITUTIONS

#### Crimea:

City Maternity Hospital, 51 Ayvazovskogo Street, Feodosia;  
Women Polyclinic, 51 Ayvazovskogo Street, Feodosia;  
Republican AIDS Center, 27A Rosa Luxemburg Street, Simferopol;  
NGO "Center+", 9 Zemskaya Street, Apt. #7, Feodosia

#### Dnipropetrovsk Oblast:

Maternity Hospital #7, 1A Marshaka Street, Kryvoi Rig;  
Women's Polyclinic, 1A Marshaka Street, Kryvoi Rig;  
City AIDS Center, 4 Nikopol Shosse, Kryvoi Rig;  
NGO "With hope", 4 Musorgsky Street, Kryvoi Rig,

#### Kyiv Oblast:

City Maternity Hospital, 7 Semashko Street, Bila Tserkva;  
Women Polyclinic, 44 Yaroslav Mudry Street, Bila Tserkva;  
City AIDS Center, 12 Karbishev Street, Bila Tserkva;  
Oblast AIDS Center, 1 Bogovutivska Street, Office 501, Kyiv;  
NGO "Alpha Life," 44 Yaroslav Mudry Street, Bila Tserkva (located at Women Polyclinic, Office # 17)

#### Mykolayv Oblast:

Maternity Hospital #3, 3 Kiev Street, Mykolayv;  
Women Polyclinic, 3 Kiev Street, Mykolayv;  
Oblast AIDS Center, 4 Volodarskogo Street, Mykolayv;  
NGO "Yunitus," 138 Potemkintsev Street, Mykolayv (located at Oblast AIDS Center)

#### Odessa Oblast:

City Maternity Hospital, 111A Lenin Street, Izmail;  
Women Polyclinic, 111A Lenin Street, Izmail

#### Kherson Oblast:

Maternity Hospital #1, 1 Gogolya Street, Kherson;  
Women Polyclinic, 1 Gogolya Street, Kherson;  
Oblast AIDS Center, 3 Beregovoy Proezd, Kherson;  
Regional Department of All Ukrainian Network of PLWH, 89/2 Komkov Street, Apt. #133, Kherson

#### Cherkassy Oblast:

Maternity Hospital #1, 101 Chekhov Street, Cherkassy;  
Women Polyclinic #1, 101 Chekhov Street, Cherkassy;  
Oblast AIDS Center, 2 Zolotonozhska Street, Cherkassy;  
Regional Department of All Ukrainian Network of PLWH, 50 Mozhaisky Street, Cherkassy

Chernigiv Oblast:

Chernigiv Maternity Hospital, 172 Pervogo Maya Street, Chernigiv;

Women Polyclinic, 172 Pervogo Maya Street, Chernigiv;

Oblast AIDS Center, 16 Shchors Street, Chernigiv;

Regional Department of All Ukrainian Network of PLWH, 22 Murinson Street, Chernigiv.

## APPENDIX C:

### LIST OF TRAINING COURSES PARTICIPANTS (2005-2007)

#### **PMTCT organization training for decision makers, June 29 – July 1, 2005, Odessa**

#	Name	Facility	Position
1	Irina Kochergina	Oblast AIDS Center, Mykolayv	Chief Physician
2	Victor Malyuck	Mykolayv branch of department of obstetrics and gynecology of Odessa Medical University	Assistant
3	Tetyana Rogozhynskaya	NGO «Unitus», Mykolayv	Volunteer
4	Valentina Ginsburg	Dnepropetrovsk Oblast Health Administration	Deputy Head
5	Alexandr Panasenko	Hospital №7, Kryvoi Rig	Deputy Chief Physician on Maternity
6	Rayisa Rudinskaya	City AIDS Center, Kryvoi Rig	Epidemiologist
7	Mykola Krasulya	Charity Foundation «Gromads'ke zdoroviya», Kryvoi Rig	Psychologist
8	Andrey Ustinov	Maternity Hospital, Bila Tserkva	Ob/Gyn
9	Olga Get'man	Women's Polyclinic, Bila Tserkva	Head
10	Larisa Rosenko	Cherkassy Oblast Health Administration	Inspector
11	Olga Vakulyuck	Oblast AIDS Center, Cherkassy	Chief Physician
12	Vladimir Zelen'ko	Maternity Hospital #1, Cherkassy	Chief Physician
13	Anatoliy Guliy	Cherkassy Oblast Health Administration	Oblast Chief Ob/Gyn
14	Olena Zelick	Regional Branch of PLWA, Cherkassy	Volunteer

#### **Seminar “Prevention mother-to-child HIV transmission” July 5-8, 2005 (pilot of Ukrainian adapted version of WHO/USG PMTCT GTP)**

#	Name	Facility	Position
1	V.Alekseenko	Maternity Hospital, Izmail	Head of Observation Department
2	Oksana Bandura	Territorial Medical Joint Unit, Bila Tserkva	Head of Polyclinic Department
3	Violetta Barakina	Maternity Hospital, Cherkassy	Head of Family Planning Center

4	Vitaliy Glushko	Maternity Hospital, Bila Tserkva	Ob/Gyn
5	G.Gordenyuck	Belgorod-Dnestrovskiy, Odessa oblast	District Ob/Gyn
6	Victoriya Goryuchaya	Maternity Hospital #1, Odessa	Ob/Gyn
7	Gennadiy Grinchenko	Oblast AIDS Center, Cherkassy	Ob/Gyn
8	L. Zorun'ko	Maternity Hospital #1, Odessa	Head of Observation Department
9	O.Malyarchuck	Maternity Hospital #2, Odessa	Head of Observation Department
10	G.Matlakhova	Maternity Hospital #5, Odessa	Head of Observation Department
11	I.Mogilevkina	PATH	Project Director
12	Y.Perets	Maternity Hospital #7, Kryvoi Rig	Ob/Gyn
13	Nadiya Primack	City AIDS Center, Kryvoi Rig	Pediatrician
14	Anzhelica Rozen	Maternity Hospital, Izmail	Deputy Chief Physician
15	Zinaida Ruban	Oblast AIDS Center, Mykolayv	Infection Specialist in Pediatrics
16	V.Ryzhkova	City AIDS Center, Odessa	Ob/Gyn
17	O.Svyataya	Women's Polyclinic, Ilyichivsk, Odessa oblast	Head
18	Igor Semenenko	JSI	Expert on PMTCT
19	Tatiana Tarasova	UNICEF	HIV/AIDS Project Coordinator
20	G. Teplyakova	Maternity Hospital #4, Odessa	Deputy Chief Physician
21	Rostislav Tereschenko	Oblast AIDS Center, Odessa	Ob/Gyn
22	F.Udovichenko	Maternity Hospital, Belgorod-Dnestrovskiy, Odessa oblast	Chief Physician
23	N.Furmanchyuck	Maternity Hospital, Ilyichivsk, Odessa oblast	Head of Labor/Delivery Department
24	Tatiana Chuyeva	Maternity Hospital #7, Odessa	Deputy Chief Physician
25	E.Shamick	Central District Hospital, Belgorod-Dnestrovskiy, Odessa	Ob/Gyn

**PMTCT knowledge based training, October 8-11, 2005, Bila Tserkva**

#	Name	Facility	Position
1	Olga Get'man	Women's Polyclinic, Bila Tserkva	Head

2	Marina Petrenko	Women's Polyclinic, Bila Tserkva	Ob/Gyn
3	Klavdiya Atamanenko	Women's Polyclinic, Bila Tserkva	Ob/Gyn
4	Olena Shelist	Women's Polyclinic, Bila Tserkva	Ob/Gyn
5	Alesya Mel'nichenko	Women's Polyclinic, Bila Tserkva	Ob/Gyn
6	Alesya Mironyack	Women's Polyclinic, Bila Tserkva	Ob/Gyn
7	Maryana Pogoretskaya	Women's Polyclinic, Bila Tserkva	Ob/Gyn
8	Olena Divnich	Women's Polyclinic, Bila Tserkva	Ob/Gyn
9	Vitaliy Glushko	Maternity Hospital, Bila Tserkva	Ob/Gyn of Pregnancy Pathology Department
10	Maksim Maksimov	Maternity Hospital, Bila Tserkva	Ob/Gyn of Labor/Delivery Department
11	Olena Chaykovskaya	Maternity Hospital, Bila Tserkva	Ob/Gyn of Pregnancy Pathology Department
12	Olena Prokopenko	Maternity Hospital, Bila Tserkva	Ob/Gyn of Post-Delivery Department
13	Nataliya Tischenko	Maternity Hospital, Bila Tserkva	Neonatologist
14	Mykola Marchenko	Maternity Hospital, Bila Tserkva	Head of Observation Department
15	Galina Morskaya	Women's Polyclinic, Bila Tserkva	Senior Midwife
16	Tetyana Miynya	Women's Polyclinic, Bila Tserkva	Midwife
17	Yevdokiya Lyubchenko	Women's Polyclinic, Bila Tserkva	Midwife
18	Irina Artamonova	Women's Polyclinic, Bila Tserkva	Midwife
19	Galina Kardash	Women's Polyclinic, Bila Tserkva	Midwife
20	Zoya Kuznetsiva-Soboda	Maternity Hospital, Bila Tserkva	Nurse of Neonatal Department
21	Nataliya Zadorozhna	Charity Organization «Alpha- life», Bila Tserkva	Volunteer
22	Vicoriya Grigorenko	Charity Organization «Alpha- life», Bila Tserkva	Volunteer
23	Olena Ganichenko	Charity Organization «Alpha- life», Bila Tserkva	Volunteer
24	Olena Drabinko	City AIDS Center, Bila Tserkva	Infection Specialist
25	Oksana Bandura	City AIDS Center, Bila Tserkva	Pediatrician

**PMTCT knowledge based training, October 11-14, 2005, Kryvoi Rig**

#	Name	Facility	Position
1	Larisa Patsyuck	Hospital №7, Women's Polyclinic	Ob/Gyn
2	Tatian Gerts	Hospital №7, Maternity Department	Head of Pregnancy Pathology Unit
3	Svetlana Sakharova	Hospital №7, Maternity Department	Ob/Gyn
4	Liliya Khorunzhaya	Hospital №7, Maternity Department	Ob/Gyn from labor/delivery unit
5	Valentina Khlybna	Hospital №7, Maternity Department	Pediatric gynecologist
6	Leonid Ganoshenko	Hospital №7, Women's Polyclinic	Head
7	Ekaterina Kravets	Hospital №7, Maternity Department	Ob/Gyn
8	Oleg Krut'ko	Hospital №7, Maternity Department	Ob/Gyn
9	Olena Sakovskaya	Hospital №7, Maternity Department	Ob/Gyn
10	Alexandr Shishov	Hospital №7	Acting Head of Neonatal Unit
11	Margarita Fedyaeva	Hospital №7	Infection Specialist
12	Victoriya Zverkovska	Maternity Hospital #1, Women's Polyclinic	District Ob/Gyn
13	Liliana Kvasha	AIDS Center	Ob/Gyn
14	Tatiana Chepil'	Maternity Hospital # 2	Ob/Gyn
15	Ludmila Sahadzhan	Maternity Hospital # 2	Neonatologist
16	Olena Stakhova	Maternity Hospital # 2, Women's Polyclinic	Ob/Gyn
17	Svetlana Strel'nikova	City Hospital # 4, Women's Polyclinic	Ob/Gyn
18	Irina Sorokina	Regional branch of PLWA	Social Worker
19	Yuliya Lukashenko	NGO "Z nadiyeyu"	Consultant
20	Tamila Sotnick	NGO "Z nadiyeyu"	Consultant
21	Olena Vaschenko	City Hospital # 9, Women's Polyclinic	Ob/Gyn
22	Yuriy Zarechniy	City Hospital # 5, Women's Polyclinic	Ob/Gyn
23	Lidiya Bondarenko	City Hospital # 4, Women's Polyclinic	Ob/Gyn

**PMTCT knowledge based training, October 25-28, 2005, Cherkassy**

#	Name	Facility	Position
1	Alexandr Salyuck	Maternity Hospital #1, Cherkassy	Ob/Gyn
2	Nataliya Krizhnya	Maternity Hospital #1, Cherkassy	Neonatologist
3	Olena Strizhack	Cherkassy regional branch of All- Ukrainian network of PLWA	Head
4	Lidiya Krutin'	Cherkassy Children's Polyclinic #2	Head of Pediatric Department
5	Valentina Selyanko	Women's Polyclinic of Maternity Hospital # 1, Cherkassy	Midwife
6	Lina Kravets	Maternity Hospital #1, Cherkassy	Ob/Gyn
7	Nataliya Kasperska	Maternity Hospital #1, Cherkassy	Ob/Gyn
8	Zhanna Gut	Maternity Hospital #1, Cherkassy	Ob/Gyn
9	Victoriya Zaruba	Maternity Hospital #1, Cherkassy	Midwife
10	Svetlana Prudnick	Maternity Hospital #1, Cherkassy	Midwife
11	Ol'ga Garkavenko	Maternity Hospital #1, Cherkassy	Head of Pregnancy Pathology Department, Chief Ob/Gyn of Cherkassy
12	Ludmila Tronts	Maternity Hospital #1, Cherkassy	Ob/Gyn
13	Tetyana Tronts	Maternity Hospital #1, Cherkassy	Chief Midwife
14	Ludmila Galagan	Maternity Hospital #1, Cherkassy	Midwife
15	Tamara Schitchenko	Maternity Hospital #1, Cherkassy	Chief Nurse of Pediatric Department
16	Tamila Zaviryukha	Maternity Hospital #1, Cherkassy	Head of Neonatal Department
17	Ludmila Jolos	Maternity Hospital #1, Cherkassy	Infection Specialist, Head of Infection Unit
18	Ludmila Strelkova	Children's Polyclinic №3	District Pediatrician
19	Oksana Malaschyuck	Cherkassy Regional Hospital	Ob/Gyn of Labor/Delivery Department
20	Ol'ga Valashenko	Cherkassy Regional Hospital	Chief Midwife of Labor/Delivery Department

21	Valentina Dragan	Maternity Hospital #1, Cherkassy	Ob/Gyn
22	Dmytro Vitrenko	Maternity Hospital #1, Cherkassy	Ob/Gyn
23	Irina Boychenko	Children's Hospital, Cherkassy	Head of Neonatal Pathology Department
24	Irina Belous	Women's Polyclinic #1	Midwife

**PMTCT knowledge based training, November 22-25, 2005, Mykolayv**

#	Name	Facility	Position
1	Oksana Zhelova	Oblast AIDS Center, Mykolayv	Midwife
2	Ludmila Kuz'menko	Regional Hospital, Mykolayv	Regional Pediatrician
3	Nina Eyrikh	Oblast Family planning center, Mykolayv	Pediatric Nurse
4	Irina Vivchar	Center "Mother and Child"	Social Worker
5	Vita Kyriy	Zhovtnevaya Central Regional Hospital, Mykolayv	Midwife of Labor/Delivery Department
6	Volodymir Ostapenko	Zhovtnevaya Central Regional Hospital, Mykolayv	Ob/Gyn of Labor/Delivery Department
7	Oksana Bondarchuck	Zhovtnevaya Central Regional Hospital, Mykolayv	Pediatrician
8	Nataliya Kravchenko	Regional Hospital, Mykolayv	District Pediatric Nurse
9	Nadiya Arkhipova	Maternity Hospital # 3, Mykolayv	Head of Neonatal Department
10	Oksana Kravchenko	Maternity Hospital # 3, Mykolayv	Chief Nurse of Neonatal Department
11	Svetlana Sapiton	Oblast Family Planning Center, Mykolayv	Ob/Gyn
12	Tamara Beregovaya	Maternity Hosptail # 3, Mykolayv	Chief Midwife
13	Hanna Tatarenko	Maternity Hosptail # 3, Mykolayv	Midwife
14	Svetlana Aldoshina	Women's Polyclinic # 6, Maternity Hosptail # 3, Mykolayv	Ob/Gyn
15	Vadim Yastremskiy	Maternity Hosptail # 3, Mykolayv	Head of Obstetrical Department
16	Irina Izmaylova	Oblast Family Planning Center, Mykolayv	Psychologist
17	Liliya Yablunovskaya	Children's Polyclinic of Zhovtnevaya Central Regional Hospital, Mykolayv	Nurse

18	Tetyana Rogozhynskaya	Charity Organization «Yunitus»	Project Coordinator, Psychologist
19	Marina Kuznetsova	Central Regional Hospital, Mykolayv	Ob/Gyn
20	Rayisa Malyshevskaya	City Children's Hospital # 2, Mykolayv	Specialist of Infection Disease Unit
21	Nataliya Slepova	Children's Polyclinic of Zhovtnevaya Central Regional Hospital, Mykolayv	Specialist of Infection Disease Unit
22	Hanna Petrova	City Children's hospital # 2, Mykolayv	Infection Specialist
23	Victor Krizhanovskiy	Oblast AIDS-center, Mykolayv	Ob/Gyn

**PMTCT organization training for decision makers, December 13-15, 2005, Odessa**

#	Name	Facility	Position
1	Galina Vasil'kova	Oblast Health Administration, Chernigiv	Oblast Ob/Gyn
2	Olena Litvinenko	Maternity Hospital, Chernigiv	Chief Physician
3	Hanna Metla	Maternity Hospital, Chernigiv	Ob/Gyn
4	Ludmila Mazur	Social Service Center for Family, Youth and Children, Chernigiv	Head of Social Work Department
5	Galina Lisenko	Oblast AIDS Center, Chernigiv	Internal Diseases Specialist
6	Sergey Kondratyiev	City Health Administration, Izmail, Odessa oblast	Head of City Health Administration
7	Tamara Ivanova	Obstetrical Joint Unit, Izmail, Odessa oblast	Head of Women's Polyclinic
8	Yana Kalnin'sh	Social Service Center for Family, Youth and Children, Izmail, Odessa oblast	Social Worker
9	Sergey Liskovskiy	Head of Infection Control Commission, Maternity Hospital, Izmail, Odessa oblast	Ob/Gyn
10	Yaroslav Zhyatyuk	Oblast AIDS Center, Kherson	Chief Physician
11	Yuriy Ostapchuk	Maternity Hospital of Suvorovskiy region, Kherson	Chief Physician
12	Galina Golub	Maternity Hospital of Suvorovskiy region, Kherson	Head of Neonatal Department
13	Yuriy Tyopliy	Maternity Hospital of Suvorovskiy region, Kherson	Ob/Gyn
14	Victoriya Savchenko	Oblast AIDS Center, Kherson	Pediatrician

15	Nina Gordeyeva	Regional branch of PLWA, Kherson	Chairman of Board
16	Tayisiya Litvintseva	Crimean Republican Ministry of Health	Acting Republican Ob/Gyn
17	Valentin Lepikhov	Maternity Hospital, Yalta, Crimea	Chief Physician
18	Tetyana Sharova	Crimean Republican AIDS- center	Deputy Chief Physician
19	Gleb Shepel	Maternity Hospital, Feodosia, Crimea	Chief physician
20	Tetyana Zuyok	Regional branch of PLWA, Chernigiv	Consultant on HIV/AIDS

**Clinical skills based training on “Prevention mother-to-child HIV transmission” for  
Dnipropetrovsk oblast and Cherkassy oblast, December 19-21, 2005, Odessa**

#	Name	Facility	Position
1	V.Fedan	Maternity Department of City Hospital # 7, Kryvoi Rig	Head of Labor/Delivery Department
2	I.Sukhina	Maternity Department of City Hospital # 7, Kryvoi Rig	Head of Observation Department
3	T.Gerts	Maternity Department of City Hospital # 7, Kryvoi Rig	Head of Pregnancy Pathology Department
4	O.Onuphriyeva	Maternity Department of City Hospital # 7, Kryvoi Rig	Chief Midwife
5	I.Korotkova	Maternity Department of City Hospital # 7, Kryvoi Rig	Chief Nurse of Neonatal Department
6	I.Yevtushenko	Maternity Department of City Hospital # 7, Kryvoi Rig	Chief Midwife of Observation Department
7	N.Deyneka	Maternity Hospital # 1, Cherkassy	Deputy Chief Physician
8	D.Vitrenko	Maternity Hospital # 1, Cherkassy	Ob/Gyn
9	N.Kryzhnya	Maternity Hospital # 1, Cherkassy	Neonatologist
10	V.Zaruba	Maternity Hospital # 1, Cherkassy	Midwife of Labor/Delivery Department
11	M.Mosyundz’	Maternity Hospital # 1, Cherkassy	Nurse of Neonatal Department
12	T.Zubchenko	City Sanitary Epidemiological Station, Cherkassy	Epidemiologist

**Clinical skills based training on “Prevention mother-to-child HIV transmission” for Kyiv oblast and Mykolayv oblast, December 21-23, 2005, Odessa**

#	Name	Facility	Position
1	N.Braychenko	Maternity Hospital, Bila Tserkva	Ob/Gyn
2	O.Mazhara	Maternity Hospital, Bila Tserkva	Ob/Gyn
3	G.Kardash	Women Polyclinic of Maternity Hospital, Bila Tserkva	Midwife
4	Cherepakhina	Maternity Hospital, Bila Tserkva	Chief Midwife
5	N.Olekseenko	Maternity Hospital, Bila Tserkva	Chief Midwife of Observation Department
6	N.Luk’yanenko	Maternity Hospital, Bila Tserkva	Nurse of Neonatal Department
7	N.Arkipova	Maternity Hospital # 3, Mykolayv	Neonatologist
8	T.Beregovaya	Maternity Hospital # 3, Mykolayv	Chief Midwife
9	O.Kravchenko	Maternity Hospital # 3, Mykolayv	Nurse of Pediatric Department
10	A.Titarenko	Maternity Hospital # 3, Mykolayv	Midwife
11	T.Rogozhinskaya	Charity organization Yunitus», Mykolayv	Psychologist

**PMTCT knowledge based training, April 25-28, 2006, Kherson**

#	Name	Facility	Position
1	Veronica Bakhurtsova	Hospital of Dnipropetrovsky region, Kherson	Head of Neonatal Department
2	Olena Burenko	Children’s Polyclinic of Hospital of Dnipropetrovsky region, Kherson	Head of Pediatric Department
3	Ol’ga Budovskaya	Hospital Tropinikh, Kherson	Ob/Gyn
4	Garry Zubris	Hospital Tropinikh, Kherson	Ob/Gyn
5	Andrey Vedeneyev	Hospital Tropinikh, Kherson	Ob/Gyn
6	Karina Porubchishina	Maternity Hospital # 1 of Suvorovskiy region, Kherson	Midwife of Post-Partum Unit
7	Nadiya Schennikova	Clinical Hospital of Suvorovskiy region, Children’s Polyclinic, Infection disease unit	Medical Assistant

8	Oksana Ponomarenko	Maternity Hospital # 1 of Suvorovskiy region, Kherson	Ob/Gyn
9	Svetlana Ostaphy	Maternity Hospital # 1 of Suvorovskiy region, Kherson	Ob/Gyn
10	Oksana Timchenko	Maternity Hospital # 1 of Suvorovskiy region, Kherson	Ob/Gyn
11	Tetyana Berichanskaya	Maternity Hospital # 1 of Suvorovskiy region, Kherson	Ob/Gyn
12	Sergey Kachan	Hospital of Dnepropetrovsky region, Kherson	Head of Labor/Delivery Department
13	Irina Starodumova	Hospital of Dnepropetrovsky region, Kherson	Head of Women's Polyclinic
14	Oksana Negotyuck	Maternity Hospital # 1 of Suvorovskiy region, Kherson	Midwife of Observation Department
15	Tetyana Bondarenko	Medical-sanitary unit of Cotton Factory	Ob/Gyn
16	Oksana Kiriyyenko	Hospital of Suvorovsky region, Children's Polyclinic # 1, School # 27,	Nurse
17	Lubov Tsokurenko	Hospital of Suvorovsky region, Children's Polyclinic # 1	Nurse
18	Larisa Osipkina	Hospital Tropinikh, Women's Polyclinic, Kherson	District Ob/Gyn
19	Vira Ruban	Hospital Tropinikh, Children's Polyclinic # 1, Kherson	District Pediatrician
20	Ludmila Samoylenko	Hospital of Suvorovskiy region, Children's Polyclinic #1, Kherson	Pediatrician
21	Nataliya Grigoriyeva	Hospital of Suvorovskiy region, Children's Polyclinic #1, Kherson	Pediatric Ob/Gyn
22	Ol'ga Rezanova	Hospital of Suvorovskiy region, Children's Polyclinic #1, Kherson	Head of Pediatric Department
23	Alevtina Shumilova	Hospital of Suvorovskiy region, Kherson	Ob/Gyn
24	Nataliya Vasneyeva	Hospital of Suvorovskiy region, Children's Polyclinic #1, Kherson	Pediatrician
25	Olena Rackul	Hospital of Suvorovskiy region, Kherson	Pediatrician
26	Antonina Doroshenko	Hospital of Suvorovskiy region, Children's Polyclinic #1, Kherson	Pediatrician

**PMTCT knowledge based training, June 6-9, 2006, Chernigiv**

#	Name	Facility	Position
1	T.Smagina	Women's Polyclinic #1, Chernigiv	Head
2	V.Kuchkova	Women's Polyclinic #2, Chernigiv	Head
3	L.Pogorela	Women's Polyclinic #1, Chernigiv	District Ob/Gyn
4	V.Romanyuck	City Maternity Hospital, Chernigiv	Ob/Gyn of Observation Department
5	I.Vorona	City Maternity Hospital, Chernigiv	Head of Neonatal Intensive Care Unit, Neonatologist
6	L.Dudko	City Maternity Hospital, Chernigiv	Head of Neonatal Department
7	S.Tkachenko	City Maternity Hospital, Pediatric department, Chernigiv	Senior Nurse
8	O.Skorokhod	City Maternity Hospital, Pediatric department, Chernigiv	Nurse
9	K.Kuts	Women's Polyclinic #2, Chernigiv	Chief Midwife
10	O.Tupikova	Women's Polyclinic #1, Chernigiv	Chief Midwife
11	O.Smurigin	City Maternity Hospital, Chernigiv	Deputy Chief Physician, Project Coordinator
12	N.Mikitenko	Central Regional Hospital, Chernigiv	Neonatologist
13	A.Sen'ko	Central Regional Hospital, Chernigiv	Ob/Gyn
14	O.Volkova	Central Regional Hospital, Labor/Delivery Department Chernigiv	Senior Midwife
15	L.Stepanenko	Oblast AIDS Center, Chernigiv	Acting Chief Physician
16	R.Kondratenko	Women's Polyclinic #1, Chernigiv	Ob/Gyn
17	A.Postolyako	City Children's Polyclinic #2, Chernigiv	Infection Specialist
18	O.Voytekh	City Children's Polyclinic #2, Chernigiv	Nurse of Infection Disease Unit
19	A.Moiseenko	Regional branch of PLWA, Chernigiv	Deputy Director, Program Coordinator
20	T.Zuyock	Regional branch of PLWA, Chernigiv	Consultant

21	L.Mazur	City Center of Social Services for Families, Youth and Children, Chernigiv	Head of the Department
22	Y.Yevchuck	Rehabilitation Center “Stupeni”	Social Worker
23	V.Oleksiyenko	Family Planning Center, City Maternity Hospital, Chernigiv	Psychologist
24	I.Korol’	Women’s Polyclinic #1, Chernigiv	Midwife
25	I.Potapov	Center for Resocialization of Drug Addicts “VedIs”	Consultant

**PMTCT knowledge based training, June 20-23, 2006, Feodosia**

#	Name	Facility	Position
1	I.Makarova	City Health Administration, Feodosia, Crimea	Deputy Head
2	D.Tsiperson	City Maternity Hospital, Feodosia, Crimea	Head of Labor/Delivery Department
3	V.Talabishka	City Maternity Hospital, Feodosia, Crimea	Head of Gynecological Depa
4	E.Trombachova	Women’s Polyclinic, Feodosia, Crimea	Head
5	L.Khromova	City Maternity Hospital, Feodosia, Crimea	Head of Neonatal Department
6	T.Levutska	City Maternity Hospital, Feodosia, Crimea	Neonatologist
7	I.Kharitonova	City Maternity Hospital, Feodosia, Crimea	Neonatologist
8	V.Nirtsova	City Maternity Hospital, Feodosia, Crimea	Ob/Gyn
9	O.Savina	City Maternity Hospital, Feodosia, Crimea	Ob/Gyn
10	O.Mulenkova	Women’s Polyclinic, Feodosia, Crimea	Ob/Gyn
11	S.Grabchack	Women’s Polyclinic, Feodosia, Crimea	Ob/Gyn
12	T.Usmanova	Women’s Polyclinic, Feodosia, Crimea	Ob/Gyn
13	T.Moskalenko	City Maternity Hospital, Feodosia, Crimea	Deputy Chief Physician
14	N.Kireyeva	City Substance Addiction Dispensary	Substance Addiction Specialist

15	I.Komarnitskaya	City Administration of Social Services	Coordinator on HIV/AIDS Issues
16	G.Bariyeva	City Administration of Social Services	Social Worker
17	S.Ivanov	City Administration of Social Services	Social Worker
18	I.Pinyugina.	City Health Center	Medical Assistant
19	A.Solonova	City Health Center	District Pediatrician
20	N.Fedorina	City Health Center	Pediatrician-Specialist on Infection Diseases
21	A.Ligov	NGO “Center+”	Head
22	N.Povzun	NGO “Center+”	Social Worker
23	I.Dyachkova	NGO “Center+”	Social Worker
24	G.Shepel’	City Maternity Hospital, Feodosia, Crimea	Chief Physician, Project Coordinator
25	A.Panova	City Health Center	District Pediatrician

**Clinical skills based training on “Prevention mother-to-child HIV transmission” for Kherson oblast and Odessa oblast, September 18-20, 2005, Odessa**

#	Name	Facility	Position
1.	Alexandr Mazepin	Central Hospital of Kakhovka region, Kherson oblast	Chief Ob/Gyn of Kahovka region
2	Anastasiya Ryabokon’	Hospital Tropinikh, Labor/delivery Department, Kherson	Ob/Gyn
3	Veronica Bakhurtsova	Hospital of Dnepropetrovsky region, Neonatal Department Kherson	Head
4	Hanna Chernova	Hospital of Dnepropetrovsky Region, Labor/Delivery Department, Kherson	Ob/Gyn
5	Mykola Butock	Oblast Clinical Hospital, Labor/Delivery Department, Kherson	Ob/Gyn
6	Ruslan Golovaty	Maternity Hospital of Suvorovsky Region, Kherson	Ob/Gyn
7	Sergey Liskovsky	Maternity Hospital, Izmail	Ob/Gyn
8	Tamara Ivanova	Women’s Polyclinic, Izmail	Head
9	Inna Petrenko	Maternity Hospital, Izmail	Ob/Gyn
10	Victor Kovalyov	Maternity Hospital, Izmail	Ob/Gyn
11	Ludmila Berlinova	Women’s Polyclinic, Izmail	Ob/Gyn

**Clinical skills based training on “Prevention mother-to-child HIV transmission” for  
Crimea, Bila Tserkva and Chernigiv oblast, September 20-22, 2005, Odessa**

#	Name	Facility	Position
1.	Ludmila Pogorelaya	Maternity Hospital, Chernigiv	Ob/Gyn
2	Ivan Lisenko	Maternity Hospital, Chernigiv	Ob/Gyn
3	Olena Tupikova	Women’s Polyclinic #1, Chernigiv	Chief Midwife
4	Katerina Kuts	Women’s Polyclinic #2, Chernigiv	Chief Midwife
5	Svetlana Tkachenko	Maternity Hospital, Neonatal Department Chernigiv	Chief Nurse
6	Olena Parkhomenko	Maternity Hospital, Chernigiv	Neonatologist
7	Gleb Shepel’	Maternity Hospital, Feodosia	Chief Physician
8	Dmytro Tsiperson	Maternity Hospital, Labor/delivery department Feodosia	Head
9	Tetyana Bolotina	Maternity Hospital, Feodosia	Ob/Gyn
10	Ol’ga Bolotina	Maternity Hospital, Feodosia	Ob/Gyn
11	Mykola Phomich	Maternity Hospital, Feodosia	Ob/Gyn
12	Ludmila Khromova	Maternity Hospital, Feodosia	Neonatologist
13	Galina Muzichenko	Children’s Polyclinic, Bila Tserkva	Head of Polyclinic

**TOT training, January 15-17, 2007, Odessa**

#	Name	Facility	Position
1	Oleg Krut’ko	Maternity Department of Hospital #7, Observation Unit, Kryvoi Rig	Ob/Gyn
2	Katerina Kravets	Maternity Department of Hospital #7, Pregnancy Pathology Unit, Kryvoi Rig	Ob/Gyn
3	Liliana Kvasha	City AIDS Center, Kryvoi Rig	Ob/Gyn
4	Ol’ga Grabar	Maternity Hospital #1, Cherkassy	Ob/Gyn
5	Victoriya Zaruba	Maternity Hospital #1, Cherkassy	Midwife
6	Nataliya Dudka	Women’s Polyclinic of Maternity Hospital #1, Cherkassy	Midwife
7	Zinayida Ruban	Oblast AIDS Center, Mykolayv	Pediatrician

8	Svetlana Sapiton	Family Planning Center, Mykolayv	Pediatrician
9	Valentina Kozul'ko	Women's Polyclinic#6 of Maternity Hospital #3, Mykolayv	Head
10	Gleb Shepel'	Maternity Hospital, Feodosia	Chief Physician
11	Dmitriy Tsiperson	Maternity Hospital, Labor/Delivery Department, Feodosia	Head
12	Ludmila Khromova	Maternity Hospital, Neonatal Department, Feodosia	Head
13	Oksana Bandura	Territorial Medical Joint Unit, Polyclinical Department, Bila Tserkva	Head
14	Ludmila Il'chenko	Maternity Hospital, Observation Department, Bila Tserkva	Head
15	Oksana Novokhatskaya	Women's Polyclinic, Bila Tserkva	Midwife
16	Anzhelika Rozen	Maternity Hospital, Izmail	Deputy Chief Physician
17	Tamara Ivanova	Women's Polyclinic, Izmail	Head
18	Ol'ga Bratu	Children's Polyclinic, Izmail	Pediatrician, Specialist on HIV/AIDS
19	Alexandr Smurigin	Maternity Hospital, Chernigiv	Deputy Chief Physician
20	Mykola Boyko	Maternity Hospital, Observation Department, Chernigiv	Ob/Gyn
21	Irina Vorona	Maternity Hospital, Neonatal department, Chernigiv	Head
22	Volodymir Gorbachevskyy	Maternity Hospital #1, Kherson	Ob/Gyn of Observation Department
23	Cvetlana Ostaphiy	Women's Polyclinic of Maternity Hospital #1, Kherson	Ob/Gyn
24	Ludmila Gubenya	Maternity Hospital #1, Kherson	Neonatologist

## APPENDIX D:

According to Information bulletin #27 "HIV-infection in Ukraine" (2007), an official state statistical report (form #2/HIV/AIDS "Report on individuals with illnesses and conditions caused by HIV" for year 2006 (annual)), the number of new cases of HIV infection, registered in 2006, which were attributed to MTCT, were 2,822 and respectively, the number of AIDS cases were 122. A total of 650 children (people younger than 15 years old) started to receive ART in 2006. Five hundred forty eight children who received ART in 2006 were infected through vertical transmission of HIV (National AIDS Center, statistical reporting form #55 on ART progress. Data available only for patients receiving ART through GFATM grant). In 2006 a total of 95.1% of pregnant women in Ukraine received counseling on HIV and they were offered HIV testing. A

total of 551,669 pregnant women were tested on HIV and 3,207 received positive results. A total of 450 pregnant women with HIV had abortions and 2,158 pregnant women with HIV received ARV prophylaxis during pregnancy (including ART). A total of 359 pregnant women received ARV prophylaxis only during labor and delivery. HIV infected women delivered a total of 2,822 live babies in 2006 and 2,723 babies exposed to HIV received ARV prophylaxis in 2006. A total of 168 babies born to HIV infected women were confirmed as HIV positive in 2006 (their date of birth may have been before 2006).