



**USAID**  
FROM THE AMERICAN PEOPLE

 **BASICS**

# **PEDIATRIC HIV AND AIDS**

## **BASICS III**

## Table of Contents

What is Pediatric HIV and why is it important to child survival.....	1
What is the implementation process for pediatric HIV?.....	1
USAID/BASICS' Involvement .....	3
Results .....	4
What we learned.....	6
Key recommendations .....	8

## **What is Pediatric HIV and why is it important to child survival?**

While HIV efforts have expanded and scaled-up in many countries globally, country assessments have consistently shown that even in countries with strong HIV treatment programs for adults, children are being left behind. More than 23 million children under the age of 15 are living with HIV worldwide, as of 2006, with 380,000 HIV infected children dying each year. So while child survival services have increased, few of those services provide diagnosis, treatment and care to HIV-exposed and infected infants. In the absence of treatment, 50% of all infants contracting HIV during pregnancy, birth, or through breastfeeding will die before the age of two. Similarly, randomized controlled trials in South Africa demonstrated that antiretroviral therapy (ART) begun for HIV-positive infants before 12 weeks of age reduces early mortality by 75%.

Identification and treatment of the infection in children is largely inadequate—only 8% of infants born to women with HIV in 2007 were tested for HIV within the first two months following birth. Some of the other findings from a BASICS assessment that clearly identified the missed opportunities to increase access to pediatric HIV care and treatment were:

- Only 4% of infants born to women living with HIV initiated cotrimoxazole prophylaxis, as recommended by the World Health Organization,
- Nearly 85% of HIV-exposed infants participating in PMTCT clinics are lost to follow-up by the age of 12 months,
- Few health care workers are trained in pediatric HIV,
- Routine HIV testing for infants and children is not offered, even in the presence of symptoms,
- Diagnostic HIV testing is not routine at MCH/RCH clinics, IPD and OPD.

Numerous existing opportunities in health systems to save the lives of infants and children with HIV are being missed. Hence, in 2006, USAID/BASICS initiated its pediatric HIV program as a response to the severe lag that care and support for HIV-exposed or -infected children suffers in comparison with services for adults; especially in sub-Saharan Africa.

## **What is the implementation process for pediatric HIV?**

The BASICS vision of how to promote improved care and support for pediatric HIV was that:

- All mothers with HIV have access to PMTCT programs;
- All infants born to mothers with HIV are diagnosed and receive the treatment they need within the first few weeks of birth;
- Children born to mothers with HIV who are not reached in the immediate postpartum period are found early enough to prevent unnecessary morbidity and mortality among these children; and

- The public health community takes up the needs of infants and children under five with HIV with the same vigor they have committed to universal testing, male circumcision and PMTCT.

BASICS sought to increase access, care and support for pediatric HIV by working with countries in three key areas:

- Improving early diagnosis and referral of infants and children to increase the number of HIV-infected children receiving HIV care and treatment services;
- Preventing pediatric mortality early in the HIV disease and in children receiving ART;
- Putting the “C” – the child – back into PMTCT.

USAID/BASICS’ strategies for promoting increased access to pediatric HIV prevention, care and support early identification and referral to care, and treatment support for infants and children exposed to HIV by:

1. Advocacy: Targeting advocacy to child health partners, policy makers and program planners;
2. Policies: Strengthening pediatric HIV and AIDS components in child health policies at the national level;
3. Integration: Integrating pediatric HIV prevention care and support into IMCI and PMTCT training manuals, curriculum and tools development, capacity building of health care workers, providing supportive supervision, and having monitoring and evaluation; and
4. Partnerships: Fostering partnership and collaboration with Ministries of Health, local NGOs and donors at country and international levels.

Tools for promoting these four components of the pediatric HIV strategy were developed and assembled by BASICS into a pediatric HIV toolkit. The tool kit components are in Table 1 with direct links for downloading each tool. The kit is targeted to health care workers who provide care to both sick and well infants and children at health facilities and in communities including doctors, nurses, midwives, clinical officers, counsellors, nurse assistants, community health volunteers, social workers, care providers at orphans and vulnerable children programs and home based care programs and all other personnel who provide any form of care to mothers and children at health facilities or in the communities.

**Table 1**  
**BASICS Pediatric HIV Toolkit**

Advocacy
Taking Every Opportunity: Ensuring Infant Access to Early HIV Diagnosis, Care and Treatment (Presentation)
Assessment Tools in Integrating Pediatric HIV into Child Health Programs
Guide for Interviews with Persons Living with HIV and AIDS
Guide for Interviews for Pediatric HIV Case Identification, Referral, and Care at the Community Level
Orphan and Vulnerable Children Situation Analysis: Interview Guide for Caretakers
Orphan and Vulnerable Children Situation Analysis: Interview Guide for Community Groups
Orphan and Vulnerable Children Situation Analysis: Interview Guide for OVC Center Staff
Orphan and Vulnerable Children Situation Analysis: Interview Guide for Social Welfare Officers
Orphan and Vulnerable Children Situation Analysis: Interview Guide for Health Care Workers
Job Aid and Tools
Pediatric HIV Algorithm for Children aged 0-9 Months using PCR-DBS
Pediatric HIV Algorithm for children aged 0-15 years where no HIV Testing is Available
Pediatric HIV Algorithm for children aged 9 months-15 years using a Rapid Test
Pediatric HIV Cotrimoxazole Prophylaxis Therapy Algorithm
Comprehensive Referral and Counter Reference Tool
Missed Opportunity Framework and Program Checklist
Key Pediatric HIV Messages for Caretakers
Strategic Action Planning
Action Planning Matrix for Pediatric HIV and AIDS
Pediatric HIV Orientation Manuals for Frontline Workers
Facilitator's Manual
Participant's Manual

**USAID/BASICS' Involvement**

Using the BASICS Pediatric HIV Toolkit (Table 1) and buy-in from Ministries of Health and USAID Missions, USAID/BASICS provided technical assistance in pediatric HIV in five countries: Kenya, Malawi, Rwanda, Tanzania, and Swaziland. Of those, program implementation was undertaken in Malawi and Rwanda.

BASICS served as a global leader in pediatric HIV by acting as an advocate for awareness-raising and making presentations at key international events, such as Global Health Council Annual Meeting, regional technical for a, CORE Group meetings and USAID Pediatric State of the Art meetings. Other advocacy and planning roles included BASICS participation in the UNICEF/WHO IATT Pediatric HIV Technical Working Group. This group informs international policy and improves access to quality pediatric HIV prevention, care and treatment services to children exposed and infected with HIV in collaboration with other organizations working in HIV and AIDS.

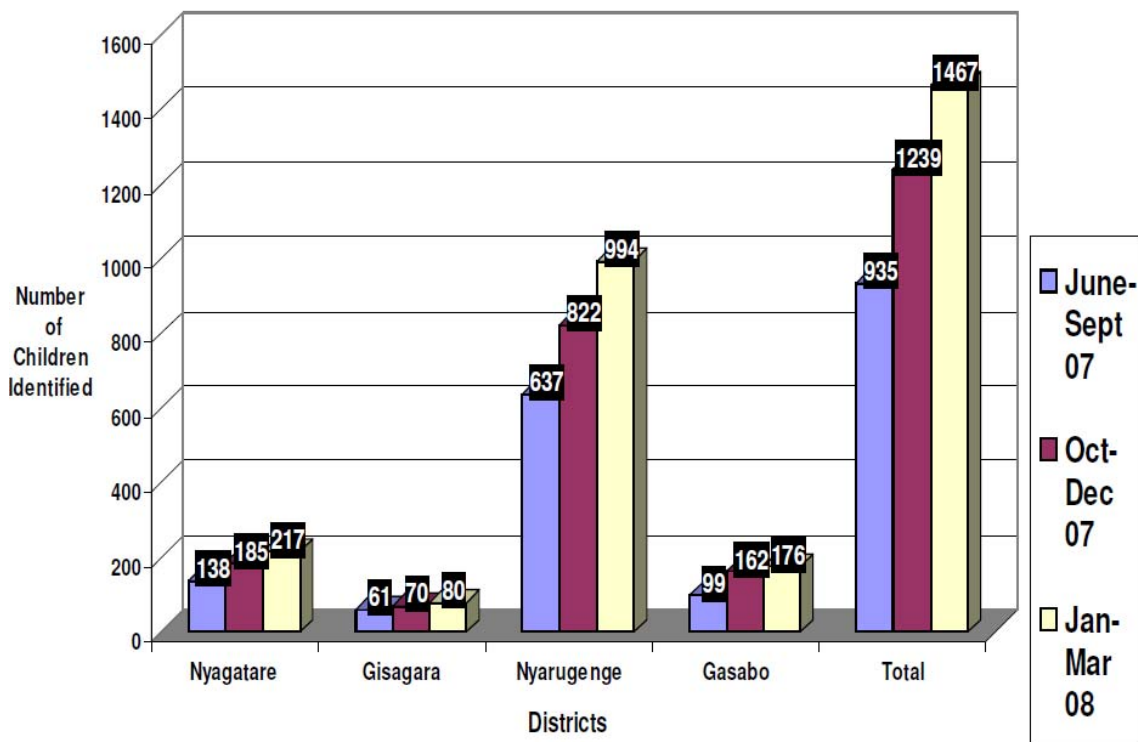
## Results

A key strategic element of BASICS' country-level implementation programs in Rwanda and Malawi was the placement of advisors in the Ministry of Health to provide full-time support.

### *Rwanda*

The BASICS MNCH Advisor at the Ministry of Health in Rwanda facilitated the integration of pediatric HIV with ongoing efforts to implement IMNCl. The results was 846 health care providers in 372 health facilities from 29 districts were trained in the integrated pediatric HIV package, achieving coverage for a population of 1,550,000 under-five children. The impact on children, as to HIV children being identified by the health care workers trained by BASICS is shown in Figure 1.

**Figure 1**  
**HIV Exposed Children Identified at Multiple Entry Points to Care by BASICS Trained Health Workers in 4 Districts in Rwanda**



Malawi

Similarly, the BASICS PMTCT Advisor supporting the Malawian Ministry of Health. The BASICS program accomplishments in Malawi were:

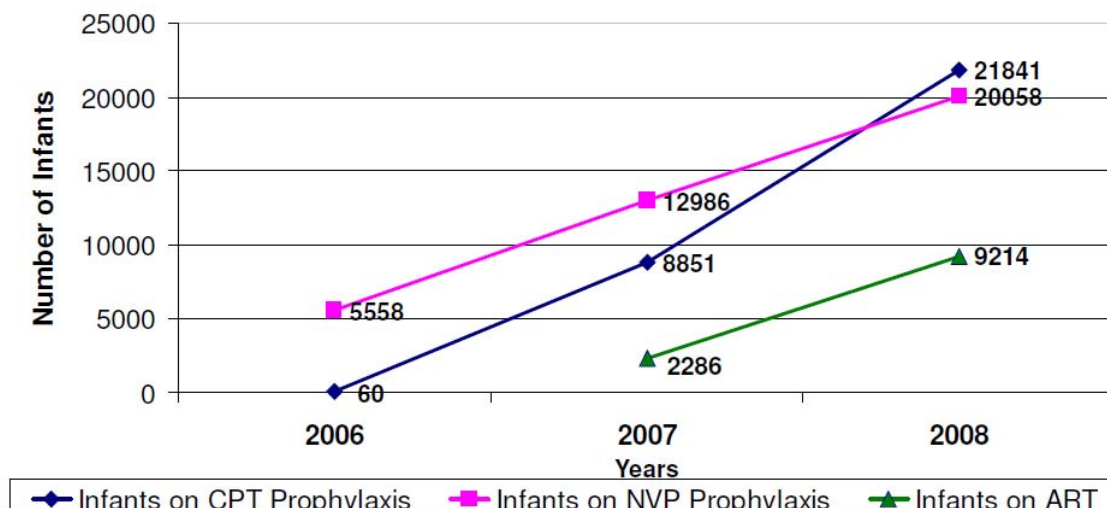
Strengthening policies in PMTCT/Pediatric HIV and AIDS

- Integrating Pediatric HIV Care in postnatal care, child health and family planning services to identify exposed infants;
- Early infant diagnosis - commenced DNA PCR testing;
- Introduced CPT for HIV exposed and infected infants from 6 weeks of age;
- Contributed to the development pediatric HTC guidelines;
- Updated PMTCT Five-Year Scale Up Plan 2008-2013. 3rd Edition;
- Training of health care workers in PMTCT/Pediatric HIV care;
- Regular meetings with PMTCT Coordinators and supportive supervision to selected districts.

The Ministry of Health with BASICS and its child health partners led to the scale up of PMTCT programs in 88% (499 out of 565) of all PMTCT sites in the country. The impact on children at these sites was impressive:

- The number of children who had early infant testing using DNA-PCR increased four-fold (from 1,540 to 6,285) between 2007 and 2008.
- Infants who received Nevirapine prophylaxis increased from 5,558 in 2006 to 12,986 in 2007 and 20,058 in 2008 (Figure 2)
- Children on ART increased from 2,286 in 2007 to 9,214 in 2008
- Pregnant women provided with CPT rose from 3,577 in 2007 to 30,545 in 2008.

**Figure 2**  
**Infants receiving care and treatment support in Malawi**  
**2006-2008**



## What we learned

Maternal and child health (MCH) services are an ideal entry point to HIV prevention, care and treatment for mothers and infants, and can serve as an excellent link to other services because MCH services are the most accessible health services in many countries. The MCH services and clinics are attended by most mothers and children, and provide a variety of services including family planning, antenatal care [ANC], immunization and well baby clinics, IMCI clinics for sick babies, outpatient department [OPD], often labor and delivery, prevention of mother to child transmission of HIV [PMTCT], and voluntary counseling and testing [VCT]) are also provided at these sites.

The key recommendation of BASICS for further advancing pediatric HIV in countries is to **continue** efforts in the health system at clinics, facilities and laboratories to find, treat and care for children with HIV and **increase** community mobilization, outreach and education.

The specific recommendations of BASICS are:

- Expand the use of all entry points of the health system to test infants and children for HIV
- Ensure policy guidelines support infant and child testing
- Use the child health platform to find and care for under 5s;
  - Introduce detailed guidelines for counseling and testing infants and children in OPD, IPD and MCH clinics
  - Use HIV positive parents as entry points to find exposed infants and children
  - Link MCH, PMTCT, ART, TB, and HBC programs through referral systems, training, etc.
- Strengthen follow-up of HIV-exposed infants:
  - Harmonize and institutionalize use of mother-infant cards
  - Establish facility-community linkages
  - Institute early virological HIV testing at 6 weeks wherever possible (including using DBS-PCR)
  - Introduce earlier antibody testing (9-12 months)
  - Institutionalize Co-trimoxazole prophylaxis as early as possible (4-6 weeks)
- Establish policy of a post partum follow up visit within 3 days of delivery (ideal with f/u at 2 and 4/6 weeks.
- Integrate pediatric HIV activities into regional and district health plans.
- Use NGOs, CBOs or CHWs to follow up mothers in the community after delivery automatically or at least when there is a no-show within x number of weeks post partum. support infant and child testing;
- Expand IMCI-HIV
- Support peer mother approach

- Train all providers who encounter infants and children (MCH, pediatrics inpatient) on pediatric HIV care and support.
- Use a phased approach --- scale up early identification, testing, CPT, etc. while expanding PMTCT and ART services.
- Educate parents and communities – address fear, stigma, access issues he child health platform to find and care
- Train HBC workers to identify and refer HIV exposed and infected infants and children
- Develop protocols and referral mechanisms for this
- Establish communication mechanisms between facility providers and community leaders, VHWs, TBAs, etc. regarding the needs of infants and children in the community, e.g., HIV testing, referral for care.
- Utilize community groups, VHWs to do follow-up of defaulters and provide psychosocial support and adherence counseling to families with infants/children w/ HIV.
- Assess the best strategy regarding HIV C and T and care and treatment for older children, and especially orphans.
- Develop mechanisms to link OVCs with care and treatment services
- There are multiple opportunities to identify and refer infants and children with HIV that should be more fully utilized. These occur at MCH visits for growth monitoring, immunization, and outpatient services, during hospitalization in pediatric inpatient wards, following deliveries by mothers who have attended/not attended PMTCT programs.
- Laboratory capacity is generally adequate at the regional and referral levels to do HIV tests, including ELISA and rapid tests, and to monitor patients on antiretroviral treatment (ART) using biochemistry measures and CD4 counts. But, these are limited at the more peripheral health facilities.
- Linkages between health facility and community services for children infected with HIV are most often weak or non-existent. There is also little systematic monitoring of whether or not mothers follow through on referrals for themselves and their infants, internally within department in the same health facility and externally with services in the community (e.g., from PMTCT to CTC).
- The health needs of children infected with HIV – especially those under the age of five years – were the most neglected aspect of care in many OVC programs. The educational, nutritional, and psychosocial needs of the orphans and vulnerable children were more often addressed in OVC programs than their health needs.
- Communities are not being reached with pediatric HIV/AIDS education and community mobilization activities. There are currently no clear messages reaching parents, caregivers, and community leaders to say that there is hope for children with HIV – that treatment works.

## **Key recommendations**

As is the case for any new child survival intervention, strong political will, leadership, and clear guidance for implementation are crucial to success in the identification and care of children affected by HIV. With this in mind, USAID/BASICS recommends 12 short- and long-term measures for implementing a comprehensive, national-level pediatric HIV program:

- Expand testing for infants and children for HIV by introducing detailed guidelines for counseling and testing infants and children in out patient and in-patient departments, maternal and child health units, and in orphans and vulnerable children programs.
- Integrate pediatric HIV activities into regional and district health plans with setting of specific targets and resource mobilization to finance the strategic plans and build capacity for its implementation with assistance from technical partners and donors.
- Maximize opportunities to identify exposed and infected infants and children at multiple entry points. Use the child health platform to find the children where they are, including MCH/RCH, PMTCT, CTCs, home-based care [HBC], and orphans and vulnerable [OVC] programs), nutrition programs and to provide or refer for necessary care and treatment.
- Train more health care workers at all levels in pediatric HIV and AIDS care and treatment, especially those who might encounter infants and children in their work. Teach them specifically about HIV in infants, feeding options, sources of care and treatment, and other support. Some health care workers will need training to become prescribers, but all must be sensitized to ensure that HIV-exposed and infected children are identified and ensured access to services.
- Provide cotrimoxazole prophylaxis at 6 weeks of age to all HIV-exposed infants and HIV-positive children. This may involve launching a massive effort to scale up use of cotrimoxazole prophylaxis, build capacity of health care providers to provide cotrimoxazole prophylaxis, address supply chain issues, the cost of drug to patient, knowledge and motivation of providers and promote advantages, dispel myths about disadvantages on the use of the drug;

- Care for HIV-exposed infants and children should include increasing entry points for children through PITC of sick children and others of unknown exposure status at facility and community based settings, strengthening infant follow up until HIV status is known and the child linked to care and treatment, if eligible. This may include harmonizing and instituting the use of mother – infant cards that document HIV status, expanded PMTCT coverage establishing links from the facility to the community; utilize community health workers for follow up of exposed infants after home delivery; link child to virologic HIV testing at 6 weeks, and introduce early antibody testing between 9-12 months of age and institutionalize the use of cotrimoxazole prophylaxis for all HIV exposed infants and children.

- Care for the HIV infected child should include promoting post partum follow up of mother-infant pairs at least within one week of delivery, expand the use of DNA PCR capacity for testing HIV in children through DBS, increase access to earlier treatment through training of ART providers in pediatric HIV clinical management, institutionalize the use of cotrimoxazole prophylaxis for all HIV exposed infants and children and other child health care for HIV negative children.
- Improve systems of identifying infants with HIV and following up mother-infant pairs through existing clinical and community services tracking mothers and infants prenatally and in the postpartum period.
- Provide chronic care of HIV exposed and infected children which should include the regular follow up children born to HIV positive women and children with suspected symptomatic HIV or confirmed HIV infection with principles of good chronic care, clinical staging of HIV disease, initiation of ART, adherence counselling and support pain management and other psychosocial support for child and caregivers.
- Establish linkages between MCH, PMTCT, ART, TB, and HBC programs through effective referral systems within and between facility and community services. This may include improving intra and inter departmental linkages and systematize referrals between all services that see mothers and children and services within the community.
- Educate parents and mobilize communities about pediatric HIV to address fear, stigma, access to care and best ways to link community and facility services for referrals, follow up, and adherence support to families.
- Establish communication mechanisms between facility providers and community leaders, VHWs, TBAs, etc. regarding the needs of infants and children in the community, e.g., HIV testing, referral for care. This may involve the use of community groups, village health workers to do follow up of defaulters and provide psychosocial support and adherence counseling to families with infants and children with HIV.