



# Going to Scale: The Power of Partnerships

*The U.S. President's Emergency Plan for AIDS Relief  
Botswana*

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FY2006 Annual Report

In FY2006, the U.S. President's Emergency Plan For AIDS Relief supported our partners in going to scale with key life-saving interventions. Find out what our partners accomplished, from early testing of HIV-exposed infants to ensuring ARV treatment for all who need it.



## The U.S. Country Team in Botswana



**USAID**  
FROM THE AMERICAN PEOPLE



This report was prepared by BOTUSA, a partnership between the U.S. Centers for Disease Control and Prevention (CDC) and the Government of Botswana, in collaboration with the U.S. Embassy, the Agency for International Development, Peace Corps, the Department of Defense and the Office of the U.S. Global AIDS Coordinator.

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## Acronyms and Abbreviations

<b>AB</b>	Abstinence, Be faithful
<b>ABC</b>	Abstinence, Be faithful, and correct and consistent use of Condoms
<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>ANC</b>	Antenatal Clinic
<b>ART</b>	Antiretroviral Therapy
<b>ARV</b>	Antiretroviral drug
<b>AZT</b>	Azidothymidine (also Zidovudine)
<b>BBCA</b>	Botswana Business Coalition on HIV/AIDS
<b>BCC</b>	Behavior Change Communication
<b>BHRIMS</b>	Botswana HIV/AIDS Response Information Management System
<b>BOCAIP</b>	Botswana Christian AIDS Intervention Programme
<b>BONELA</b>	Botswana Network on Ethics, Law and HIV/AIDS
<b>BONEPWA</b>	Botswana Network of People Living With AIDS
<b>BOTUSA</b>	Botswana-United States of America Collaboration
<b>BNYC</b>	Botswana National Youth Council
<b>CCD</b>	Community Capacity Development
<b>CBO</b>	Community Based Organization
<b>CCM</b>	Country Coordinating Mechanism
<b>CDC</b>	Centers for Disease Control and Prevention (U.S.)
<b>COP</b>	Country Operational Plan
<b>CRS</b>	Catholic Relief Services
<b>CY</b>	Calendar Year
<b>DBS</b>	Dried Blood Spot
<b>DoD</b>	Department of Defense (U.S.)
<b>DRA</b>	Drug Regulatory Authority
<b>FHI</b>	Family Health International
<b>FY</b>	Fiscal Year
<b>GAP</b>	Global AIDS Program (Centers for Disease Control and Prevention)
<b>GOB</b>	Government of Botswana
<b>HAART</b>	Highly Active Antiretroviral Therapy
<b>HBC</b>	Home Based Care
<b>HHS</b>	Department of Health and Human Services (U.S.)
<b>HIV</b>	Human Immunodeficiency Virus
<b>HRSA</b>	Health Resource and Services Administration
<b>IDM</b>	Institute of Development Management
<b>IEC</b>	Information, Education and Communication
<b>IPT</b>	Isoniazid Preventative Therapy
<b>IT</b>	Information Technology
<b>I-TECH</b>	International Training and Education Center for HIV/AIDS
<b>JSI</b>	John Snow Incorporated
<b>KITSO</b>	Botswana's national HIV/AIDS training program
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MoE</b>	Ministry of Education

<b>MoH</b>	Ministry of Health
<b>MLG</b>	Ministry of Local Government
<b>NAC</b>	National AIDS Council
<b>NACA</b>	National AIDS Coordinating Agency
<b>NASTAD</b>	National Alliance of State and Territorial AIDS Directors
<b>NBTS</b>	National Blood Transfusion Service
<b>NGO</b>	Non-Governmental Organization
<b>NSF</b>	National Strategic Framework for HIV/AIDS
<b>OGAC</b>	Office of the U.S. Global AIDS Coordinator
<b>OI</b>	Opportunistic Infection
<b>OVC</b>	Orphans and Vulnerable Children
<b>PEPFAR</b>	President's Emergency Plan for AIDS Relief (Emergency Plan)
<b>PLWHA</b>	Person Living with HIV/AIDS
<b>PMTCT</b>	Prevention of Mother-To-Child Transmission of HIV
<b>PSI</b>	Population Services International
<b>RHT</b>	Routine HIV Testing
<b>SBFA</b>	Safe Blood For Africa
<b>SMDP</b>	Sustainable Management Development Program
<b>STI</b>	Sexually Transmitted Infection
<b>SI</b>	Strategic Information
<b>TB</b>	Tuberculosis
<b>TOT</b>	Training of Trainers
<b>UNDP</b>	United Nations Development Programme
<b>UNICEF</b>	United Nations International Children's Fund
<b>USAID</b>	United States Agency for International Development
<b>USG</b>	United States Government
<b>VCT</b>	Voluntary Counseling and Testing
<b>WHO</b>	World Health Organization
<b>YOHO</b>	Youth Health Organization

## Message from the U.S. Ambassador

In 2006, there was more encouraging news about HIV/AIDS than ever coming from Botswana: HIV prevalence appeared to be on the decline, especially among the youth; more than 80 percent of patients eligible for ARVs were receiving treatment; and an evaluation of the Prevention of Mother to Child Transmission program found that less than 7 percent of infants enrolled were infected with HIV.



Ambassador Canavan with Minister of Health Prof. Sheila Tlou

This good news was due mostly to outstanding efforts by the Government of Botswana, which has been increasingly gaining attention at international conferences and elsewhere as a world leader for its multisectoral response to the epidemic.

The U.S. Government, through the President's Emergency Plan for AIDS Relief (PEPFAR or the Emergency Plan), has recognized these efforts by closely aligning itself with Botswana's National Strategic Framework for HIV/AIDS. In 2006, the U.S. Mission dedicated \$54.9 million (P330 million) to this partnership with Botswana to strengthen existing prevention, care and treatment programs, as well as other cross-cutting initiatives.

The theme of the FY2006 Annual Report on the Emergency Plan in Botswana is "Going to Scale: The Power of Partnerships" – a reference to working together to help government and non-government organizations scale-up delivery of key services and improve the lives of Botswana. Included in the report is an overview of the PEPFAR program, a list of partners, areas of support and success stories where we feel the support has made a significant difference.

The positive news in Botswana brings us hope that we are approaching a turning point in this epidemic. But with infection rates still very high, now is not the time to rest on our laurels. We must double our efforts to scale up successful programs, with a special focus on prevention and on those most vulnerable to the epidemic (such as orphans and people living with HIV/AIDS), in order to meet Botswana's national vision of "no new HIV infections by 2016."

On behalf of the entire U.S. Mission, I wish to thank the Government of Botswana and all our partners working here to ensure the implementation of the President's Emergency Plan. Let's continue to work together and "go to scale" to achieve our ultimate goals.

Thank You.

Katherine Canavan  
U.S. Ambassador



## Message from His Excellency Festus G. Mogae President of the Republic of Botswana

It is with a deep sense of appreciation that I take this renewed opportunity to acknowledge the invaluable assistance my country is currently receiving from the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). For over a decade the U.S. Government has remained a steadfast partner in helping us to meet the challenge of HIV/AIDS.



I am happy to report that, through such help, we in Botswana have been making modest progress in our struggle. Recently reported achievements include:

- The roll out of anti-retroviral therapies to over 82,500 individuals, or close to 90% of those in immediate need;
- The relative success of the Prevention of Mother to Child Transmission program, which has reduced HIV transmission to infants from affected mothers from about 40% to about 6%; and
- A reduction in HIV prevalence among youth, as well as women attending ante-natal clinics.

Notwithstanding these accomplishments, there is still much more that needs to be done. I am therefore pleased to here associate myself with this report's theme "Going to Scale: The Power of Partnerships". Clearly there is a need for all of us to work together in the scaling up our public delivery of interventions that have already proved their effectiveness, while remaining open to new and promising initiatives.

I am further encouraged by PEPFAR's focus on the prevention of new infections and provision of assistance to those who are especially vulnerable in our community, such as orphans and those already living with the virus.

Finally, on behalf of the Government and people of Botswana, I wish to reassure the Government and people of the United States of our own unwavering commitment towards the realization of our common goal of achieving zero new HIV transmission by 2016.

Festus G. Mogae  
President of the Republic of Botswana  
and Chairman of the National AIDS Council

## **Overview**

### **Botswana National Response to HIV/AIDS**

Botswana is experiencing one of the most severe HIV/AIDS epidemics in the world. HIV prevalence in the general population is estimated to be 17 percent, and among adults ages 15-49 is 25 percent (BAIS II 2004), among the highest rates in Sub-Saharan Africa. Prevalence among pregnant women 15-49 is estimated to be 32 percent (Sentinel Surveillance 2006).

For several years now, Botswana has been at the forefront of the response to the HIV/AIDS pandemic. Treatment, biomedical prevention and testing programs pioneered here have served as examples for other developing nations, and the Botswana government has demonstrated a strong political commitment to a comprehensive plan of action.

The national response is led by the National AIDS Council (NAC) which is chaired by President Festus Mogae. Through its secretariat, the National AIDS Coordinating Agency (NACA), NAC has developed the National HIV/AIDS Strategic Framework 2003-2009 (NSF), which articulates Botswana's priorities and strategies for addressing the epidemic. The framework serves as a guide for all sectors, private and public, to work collaboratively to reduce HIV infection and mitigate the effects of HIV/AIDS.

Beginning in 2002, Botswana was one of the first countries on the continent to provide free anti-retroviral therapy (ART) to its citizens with advanced HIV disease through the national program referred to as "*Masa*" (a Setswana word meaning "hope"). The program has been one of the world's most successful – reaching more than 80 percent of those estimated to need treatment by the end of 2006.\*

In 2004, the government introduced routine, opt-out HIV testing to all who seek medical care. The policy is widely supported by people in the country and, according to the Ministry of Health, 94 percent of those offered routine testing in 2006 accepted.

The country's Prevention-of-Mother-to-Child Transmission program (PMTCT), which was launched in 1999, is available to Botswana women in all public health facilities with the goal of reducing HIV passed from mother to child. Program uptake by HIV-positive pregnant women was at 83 percent in 2006.

In addition to these programs, Botswana offers its citizens a range of other free national programs for prevention, care and treatment, including Home Based Care, Orphan Care, male and female condom distribution, treatment for STIs, and TB prevention and treatment services.



With support from non-government and faith-based organizations, and from development partners like the U.S. Government, Botswana is mounting one of Africa's most comprehensive programs of HIV/AIDS prevention, treatment and care.

*\*A key assumption regarding the use of ART, is that 270,000 people in Botswana are living with HIV/AIDS (UNAIDS/WHO), and that one-third of them (90,000) are in immediate need of treatment. There were approximately 74,500 patients accessing ART through public and private clinics by the end of September 2006 (Masa).*

## The U.S. President's Emergency Plan For HIV/AIDS Relief (PEPFAR)

*"Our work in the world is also based on a timeless truth: To whom much is given, much is required. ... We must continue to fight HIV/AIDS."* – **President George W. Bush, State of the Union (January 2007)**

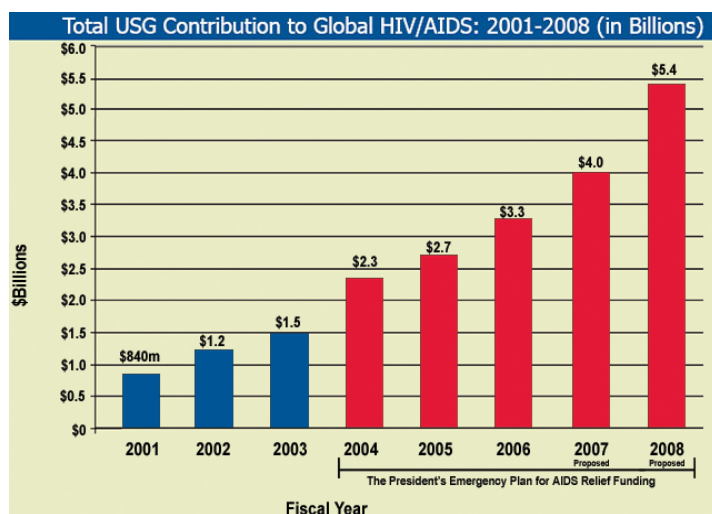
### What is PEPFAR?

The U.S. President's Emergency Plan for AIDS Relief, also called PEPFAR or the Emergency Plan, is the largest commitment ever by a single nation toward an international health initiative – a 5-year, \$15 billion approach to combat HIV/AIDS in more than 120 countries around the world.

Recognizing the global HIV/AIDS pandemic as one of the greatest health challenges of our time, President George W. Bush announced the Emergency Plan in 2003 during his State of the Union Address. The goals of the plan are to provide:

- Support for prevention of 7 million new infections;
- Support for treatment for 2 million HIV-infected people; and
- Support for care for 10 million people infected and affected by HIV/AIDS, including orphans and vulnerable children.

During the U.S. Government's fiscal year 2006 (Oct. 1, 2005 to Sept. 30, 2006), the Emergency Plan provided approximately **\$3.3 billion** to the fight, and for fiscal year 2007 the U.S. commitment has grown to **\$4.6 billion**. President Bush has requested **\$5.4 billion** for fiscal year 2008.





*"When the history of global public health is written, the launch of the President's Emergency Plan for AIDS Relief will be remembered as one of the boldest and most important actions – ever."*

**U.S. Global AIDS Coordinator, Ambassador Mark Dybul**

## **Focus Countries**

Botswana is one of 15 focus countries in the Emergency Plan. More than 60 percent of all PEPFAR funds are supporting bilateral programs here and in these other countries: *Cote d'Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, Vietnam and Zambia.*

The 15 focus countries are among the world's most severely affected nations. Collectively, they are home to approximately half the world's 39 million HIV-positive people and to almost 8 million children orphaned or made vulnerable by HIV/AIDS.

## **PEPFAR in Botswana**

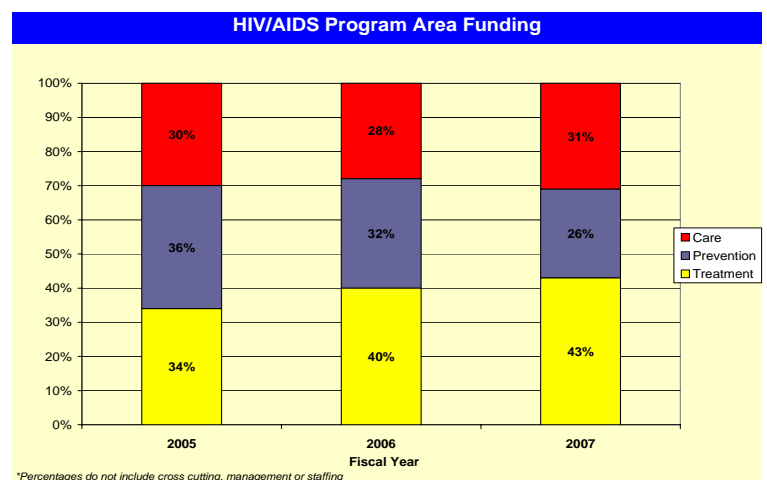
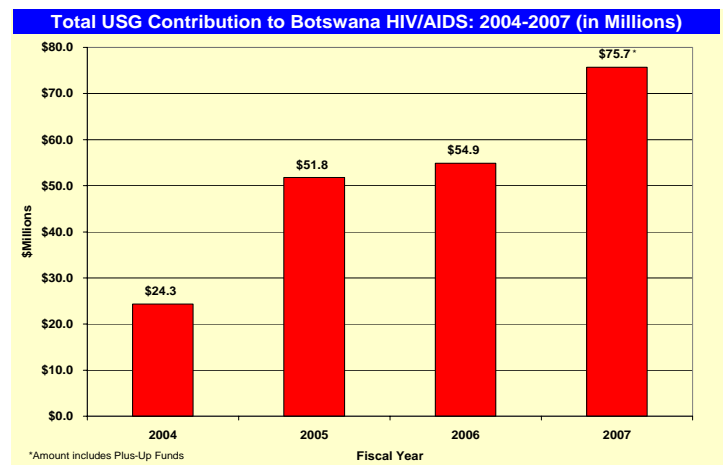
The Government of Botswana has mounted an exceptional response guided by clear national priorities and strategies to fight the HIV/AIDS epidemic. Through the Emergency Plan, the U.S. Government brings technical expertise and financial support to maximize the quality, coverage and impact of Botswana's own national response.

The HIV/AIDS Sub-Committee of the Country Coordinating Mechanism (CCM) helps guide the planning process for the Emergency Plan in Botswana. Committee members include representatives from the U.S. Mission; Ministries of Education, Finance & Development Planning, Health, Local Government, and Labor and Home Affairs; several UN agencies; and key civil society organizations.

Several principles guide the PEPFAR planning process in Botswana. Those principles include:

- Strongly aligning with Botswana’s National Strategic Framework (2003-2009) and the Botswana Five-year Emergency Plan Strategy Document;
- Leveraging the national response by strengthening capacity and quality, and providing training, technical assistance, infrastructure, human resources and commodities to ensure that interventions complement and build on existing programs; and
- Providing Botswana’s faith-based organizations, community-based organizations and other non-governmental organizations (NGOs) with technical assistance, capacity building and key resources to help them develop and maintain the ability to provide high-quality HIV/AIDS-related services.

As one of the Emergency Plan’s 15 focus countries, Botswana received **\$24.3 million** in FY2004, **\$51.8 million** in FY2005 and **\$54.9 million** in FY2006 to scale up successful programs and launch new HIV/AIDS prevention, care and treatment activities nationwide. This level of funding makes the U.S. Government the largest external contributor to HIV funding and technical assistance in Botswana.



## Who administers the Emergency Plan in Botswana?

Under the leadership of the U.S. Global AIDS Coordinator, USG agencies implement the Emergency Plan, working collaboratively through interagency country teams under the direction of the U.S. Ambassador. These teams capitalize on the expertise of each USG agency and leverage partnerships with the Botswana government, multilateral institutions, non-governmental organizations and the private sector to implement effective programs for combating HIV/AIDS and to ensure efficient use of USG resources.

- **Department of State (DOS)**: Through the U.S. Ambassador's leadership, the DOS functions as an interagency coordinator as well as managing diplomatic affairs. The Deputy Chief of Mission acts as an interagency coordinator and manages day-to-day responsibilities of the plan.
- **Department of Health and Human Services (HHS)**: The U.S. Centers for Disease Control and Prevention (CDC), operating within the HHS, serves as the lead technical agency for the plan through **BOTUSA**. BOTUSA is a longstanding collaboration of the Botswana Government and CDC that provides technical assistance, consultation and funding for the implementation of programs in prevention, care, treatment, surveillance of HIV/AIDS and TB as well as system-strengthening. Another agency involved under HHS, but not based in Botswana, is the Health Resources and Services Administration (**HRSA**).
- **U.S. Peace Corps**: Peace Corps volunteers provide human resources and organizational capacity building within local HIV/AIDS authorities, in addition to many non-Emergency Plan activities including community development work within the PMTCT and Home Based Care programs and planning at the district level.
- **U.S. Agency for International Development (USAID)**: USAID provides technical assistance in the area of services to orphans and vulnerable children (OVCs), palliative care and NGO development and strengthening.
- **Department of Defense (DOD)**: DOD collaborates with Botswana Defense Force to implement prevention and HIV-testing programs with the military, as well as constructing facilities for VCT and day care centers for OVCs with non-PEPFAR support.

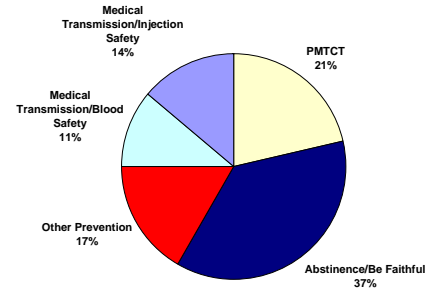
## What did PEPFAR support in Botswana in FY2006?

Emergency Plan activities center around several program areas. Each program area emphasizes capacity building on all levels, sustainability and innovation. The Emergency Plan seeks to support implementation of evidence-based programs and activities.

FY2006 funding by program area:

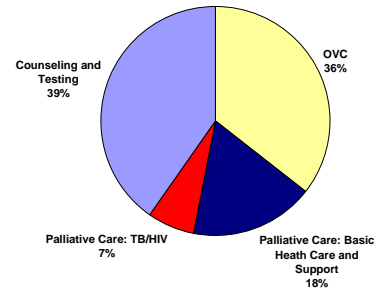
### Prevention (\$15,187,413):

- PMTCT: \$3,241,238
- Abstinence/Be Faithful: \$5,626,043
- Other Prevention: \$2,528,695
- Medical Transmission/Blood Safety: \$1,676,437
- Medical Transmission/Injection Safety: \$2,115,000



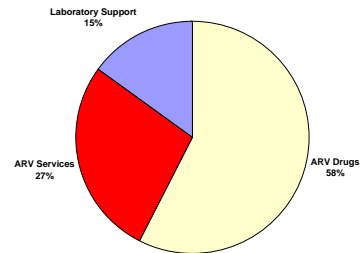
### Care (\$13,236,431):

- OVC: \$4,709,126
- Palliative Care, Basic: \$2,324,725
- Palliative Care, TB/HIV: \$880,826
- Counseling and Testing: \$5,321,754



### Treatment (\$18,527,498):

- ARV Drugs: \$10,669,409
- ARV Services: \$5,068,089
- Laboratory Support: \$2,790,000



### Cross-Cutting Programs (\$5,400,748):

- Strategic Information: \$2,562,500
- Systems Strengthening: \$2,838,248

**Management and Staffing:** \$2,572,932

## Prevention “ABC” activities

### Life Skills Training

PEPFAR supported the printing of student and teacher curriculum materials developed in previous years by BOTUSA and the Ministry of Education. These materials are abstinence-focused, life skills materials for use in Botswana schools. Their use will help to move the country towards an HIV-free generation envisioned by the country by 2016.

*“Perhaps one of the greatest difficulties we face in confronting the virus is the fact that its defeat depends on us as individuals. Government cannot defeat the virus. Neither can civil society organizations nor our friends in the international community. In the end, we all must assume personal responsibility. Each of us must decide whether we are either going to be part of the problem, or its solution”* - President Festus Mogae opening the National HIV Prevention Conference in Francistown, 2005

Botswana’s Vision 2016 outlines an ambitious goal for the prevention of HIV: no new infections by 2016. In order to achieve this goal, Botswana faces one of its most formidable challenges – changing people’s behavior. The National Strategic Framework for HIV and AIDS (2003-2009) outlines the importance of behavior change to meet the set prevention goals and indicators.

In the past few years, Botswana has embarked on an impressive array of care and treatment initiatives in the fight against HIV and AIDS. However, despite the various impressive programs and policies, HIV prevalence remains high. Findings from the Botswana AIDS Impact Survey II (BAIS II) illustrated the need to revisit and revitalize current HIV prevention efforts.

One of the key elements of the Emergency Plan is to promote the prevention of sexual transmission of HIV by supporting programs that focus on delayed sexual debut and related life skills, abstinence, reduction of multiple partnerships, faithfulness to a partner of known HIV status, and correct and consistent condom use. This is being done through various community outreach programs and partners.

During the fiscal year 2006, USG provided technical and financial support for HIV/AIDS prevention that amounted to \$8,154,738 in support of projects including but not limited to the following:

- The localization of the *Makgabaneng* program into its own NGO and the continuation of the radio serial drama and related community level reinforcement activities. This program promotes behavior change by modeling behavior change, its barriers, and facilitators through realistic characters in the radio drama and by reinforcing such change through discussion and education at the community level;
- Providing financial and technical support to many local NGOs, CBOs, and FBOs to provide a range of prevention activities that mainly target youth in schools, churches and communities at large through workshops, peer education, door-to-door outreach, counseling centers and larger community events across the country;
- Starting a new project focused on youth and their parents as a comprehensive HIV prevention intervention, including mass media and interpersonal approaches in 2 districts. Also, supporting field work to assess women in prostitution in Botswana and beginning

- another project to assess and then strengthen and expand prevention services in clinical and community settings for people living with HIV/AIDS (PLWHA); and
- Supporting targeted condom promotion in high-risk establishments, such as bars, shebeens, and discos. Some DJ's and other entertainers were trained to promote HIV prevention in their shows, while some local theater was taken to community spaces in greater Gaborone.

### **YOHO's impact earns NPI status**

One of the local NGOs supported by PEPFAR to provide a wide range of prevention activities that mainly target youth in various settings is the Youth Health Organization (YOHO), whose headquarters is in Gaborone.

In 2006, YOHO was among 22 organizations announced as award winners under President Bush's New Partners Initiative (NPI), which builds the capacity of organizations at the community level while also building local ownership of HIV/AIDS responses for the long term. As an NPI partner, YOHO will receive \$3.4 million from PEPFAR over three years. The NPI grant will allow YOHO to expand its reach even further into the districts, mentor more affiliate youth groups across Botswana, and document its activities through video, which could later be used as a training tool.

"What an incredible honor it was to be there in the White House. It was my first trip to the U.S. and there I was taking pictures and shaking hands with the President. I was honored and it re-confirmed my commitment in the fight against AIDS in Botswana and showed the American people's commitment to the fight as well," Vuyisile Otukile, YOHO Director, said after meeting President Bush and the First Lady at the White House.

YOHO is a youth-run organization which aims to promote positive behaviors among Botswana youth aged 14-24 through creative activities including "jam sessions" with group discussions, peer education, radio shows, music, theater and the visual arts. Since its inception in 1999, it has been led by and for youth to promote healthy behavior among them.

Themes addressed through these sessions include prevention messages focused on abstinence and safer sex, promotion of VCT, PMTCT, safe blood, gender-based violence, alcohol's relation to HIV/AIDS, and support for people living with HIV/AIDS.

The U.S. Government continues to support the growth and development of YOHO through on-going collaboration and technical assistance. YOHO has received over \$500,000 in USG support over the last 4 years.



## **Prevention of Mother-to-Child HIV Transmission Program (PMTCT)**

### **Infant diarrhea controlled, early infant testing piloted**

In 2006, the USG assisted the GOB to investigate and bring an infant diarrhea outbreak under control, and assisted in a pilot program for testing infants for HIV as early as six weeks using dried blood spots.

One of the critical strategies for HIV prevention in Botswana has been through collaboration in rolling out and strengthening the national prevention of mother-to-child HIV transmission (PMTCT) program.

PMTCT is important because almost half of the people living with HIV/AIDS are women in their reproductive years. It is the main mode of infection in children and is responsible for 5-10 percent of the total of new HIV infections each year in many developing countries.

In Botswana, 32 percent of pregnant women who are 15-49 years old are HIV-infected (2006 Sentinel Surveillance Report). Without PMTCT, it is estimated that 30 to 40 percent of babies born to HIV-infected women could be infected. With PMTCT, this has been reduced to less than 7 percent, thus preventing thousands of babies from being HIV infected annually. Transmission from mother to child takes place during pregnancy, labor and delivery, and breastfeeding and can now be dramatically reduced.

The PMTCT program in Botswana has been well established in all public health facilities and accessible to the entire population since November 2003. The PMTCT services are integrated into maternal-child health services in all 248 clinics, 349 health posts, and 33 hospitals providing public health care in Botswana. All pregnant women are provided standardized HIV information, education and communication, as well as routine (opt-out) rapid HIV testing.

Uptake of PMTCT services, though low in the early years of the program, is nearly 100 percent, due largely to the 2004 introduction of routine HIV testing and lay counselors in the health system. In FY2006, 48,000 pregnant mothers were seen in antenatal clinics and offered an HIV test, and 43,800 of them were tested.

During the 2006 fiscal year, the USG provided technical and financial (\$3,241,238) support to the national PMTCT program in the following activities:

- Building general capacity and strengthening systems through national and regional human resource support; training activities; and strengthening information, education and communication for women, partners and families. This included providing technical assistance through the BOTUSA field office in Francistown to 14 public health facilities in northern Botswana;
- Developing a comprehensive PMTCT training strategy through the University of Medicine and Dentistry in New Jersey (UMDNJ);
- Expanding psychosocial support services and developing peer counseling programs for HIV-infected women and their families through Pathfinder International in collaboration with BONEPWA and BOCAIP; and

- Improving infant feeding safety through UNICEF in collaboration with the PMTCT program in the Ministry of Health. This includes assessment of infant formula supply chain and training of health workers and women in basic tenets of formula preparation , feeding and storage.

### **PMTCT offers HIV infected mothers hope**

A pilot program for early testing of HIV-exposed infants in Botswana has found that less than 7 percent of the 1,917 infants enrolled were infected with HIV.

The results offer new evidence about the effectiveness of the PMTCT program, giving HIV infected mothers hope that their babies might be able to live a life free of HIV.

The data were collected by BOTUSA during a pilot program from June to December 2005. The pilot was conducted in Francistown and Gaborone.

BOTUSA launched the pilot program to determine the feasibility of rolling out early infant testing across the country. Due to the program's success, the rollout began in October 2006 and is expected to take eight to ten months to reach all of the districts in Botswana.

Early infant testing allows babies infected with HIV to be identified soon after birth and placed on life-saving treatment. Using the early infant testing method, health care providers can diagnose infants with HIV by collecting dried blood spots as early as six weeks after birth and sending them to Gaborone for testing. These dried blood samples are stable, do not require refrigeration, and can be transported whenever practical.

Previously, infants were tested using an ELISA (Enzyme-Linked Immunoabsorbent Assay) or rapid test. While these tests produce accurate results, the approach was inadequate for program monitoring and clinical purposes since health care workers had to wait until the infant was 18 months old to be tested. By this time, many infants had been moved from the areas where they were delivered and were lost to follow-up, or already had advanced AIDS.

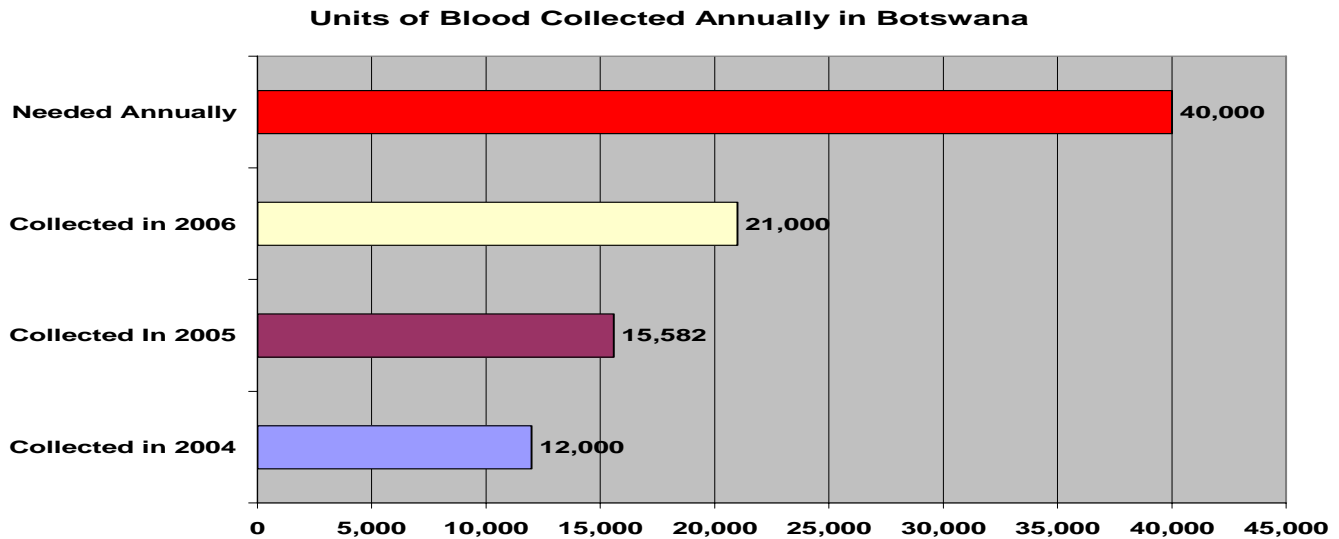
"The benefits in the short term are of course medical -- less sick infants," said Dr. Molly Smit of the BOTUSA team in Francistown.

She added that the social benefits to families are even greater. "The relief of knowing that they have negative infants should give mothers hope for the future and to raise their babies with motivation," she said.

Balekanye Mosweu, a 25-year-old HIV-positive mother in Francistown, worried her twins would be born HIV positive. However, because of early infant testing, she learned her babies were HIV negative six weeks after giving birth to them.

"It was a miracle," Mosweu said. "At the end of the day, the results came so fast that it was so much easier to relax and enjoy bringing up my children."

## Medical Transmission: Blood Safety and Injection Safety



### **Blood Safety**

We all expect safe blood to be there for us if we are ever in need, but only a fraction of those who can give blood do so. In fact, just half of the 40,000 units required annually in Botswana are donated, according to the National Blood Transfusion Services (NBTS).

The President's Emergency Plan is supporting a strategy in Botswana that includes focused recruitment efforts and pre-donation counseling to establish a national system that meets the need for safer blood. The strategy appears to be working: Safe blood collected from low-risk donors in 2006 was nearly double that collected two years before, and risk of HIV infection through blood transfusions has become negligible.

PEPFAR has invested in safe blood by supporting improved training of health care professionals, procurement of new equipment and ensuring that all donated blood is tested for transfusion transmissible infections like HIV, hepatitis B and C, and syphilis. NTBS has reported that the amount of HIV-infected blood collected has dropped from 9 percent several years ago to just 2.3 percent in 2006.

In FY2006, the Emergency Plan provided \$1,676,437 in financial and technical support to blood safety programs, including:

- The Safe Blood for Africa Foundation, which developed materials to promote blood donation, conducted quality evaluation visits to 28 hospital blood banks, and trained more than 90 health professionals in skills like project management, donor recruitment, advanced trauma life support and blood transfusion;
- The Botswana NBTS program, which conducts workshops on new testing strategies in blood transfusion, supports the “Pledge 25” donor program targeting youth, and holds in-service trainings at various hospitals to reduce unnecessary transfusions. PEPFAR supported 19 technical positions at NBTS; and
- Botswana’s blood banks and transfusion centers through procurement of new equipment, including blood bank refrigerators, plasma freezers and platelet incubators.

### **Injection Safety**

Unsafe injection practices throughout the world result in millions of infections which may lead to serious diseases and death. The World Health Organization estimates that each year overuse of injections and reuse of dirty syringes and needles combine to cause an estimated 8 to 16 million hepatitis B virus infections, 2.3 to 4.7 million hepatitis C virus infections, and 80,000 to 160,000 infections with HIV/AIDS worldwide.

Making injections safer is one of the key strategies under the Emergency Plan. It has supported local efforts to introduce standard disposable injection equipment, puncture-proof sharps and incineration for the treatment of sharps and infectious waste, all of which has tremendously improved injection safety.

In FY2006, PEPFAR provided \$2,115,000 in financial and technical support to John Snow, Inc., to implement the Making Medical Injections Safer Project (MMIS). MMIS began as a pilot project covering the Lobatse and Kgatleng districts, Gaborone, and Kanye/Moshupa, with plans to roll out to the rest of the country.

Among other achievements in 2006, MMIS accomplished the following:

- Training of 3,130 healthcare workers, including nurses, doctors, laboratory and dental staff, in injection safety;
- Production of Behavior Change Communication (BCC) materials for health facilities and staging community awareness campaigns to increase the public’s knowledge on injection safety;
- Publicizing the appropriate practices for clinical waste management leading to cleaner and safer working environments for health care providers; and
- Developing a draft National Policy on Injection Safety and Sharps Waste Management.

## **Young People Keep Blood Pumping In Botswana**

GABORONE – The elderly may be considered the backbone of Botswana, but it's the youth who keep the blood pumping.

The amount of donated blood has nearly doubled (from 12,000 units to 21,061 units) in the last two years, thanks to increased recruitment and pre-counseling efforts in schools and elsewhere led by the National Blood Transfusion Services (NBTS) with support from the U.S. President's Emergency Plan.

According to NBTS, nearly 60 percent of all donated blood in the country comes from students and out-of-school youth.

"If it wasn't for the youth, we would be in trouble. When schools close we struggle getting enough blood to supply the hospitals," says Catherine Pule of the NBTS program. "But our recruiters have built up a base of young Botswana who have pledged to become regular donors." In 2006, PEPFAR worked with NBTS and Safe Blood for Africa to educate and mobilize voluntary donors through programs like "Pledge 25," which encourages students to donate HIV-free blood 25 times throughout their lifetime. It provides HIV prevention counseling which serves to protect the blood supply and also promotes low-risk lifestyles among the donors.

"After being a member of Pledge 25, I have changed my bad habits to good habits and into focusing on the reality of a healthy lifestyle," Ditshebo Kgamanyane, a 23-year-old female participant told Safe Blood For Africa. "Now I also educate my friends on the importance of donating blood and on who a blood donor is."

Pule believes this pre-donation counseling is what has led to a decrease in the amount of HIV-infected blood collected from 9 percent several years ago to just 2 percent in 2006.

In addition to recruiting efforts, PEPFAR has supported the National Blood Transfusion Services in its quest for quality assurance with equipment like blood bank refrigerators, platelet incubators/agitators, and fresh frozen plasma freezers, as well as many workshops and in-service trainings in quality management.

## Palliative Care

**In FY2006, the Emergency Plan helped establish a referral TB/HIV clinic at Princess Marina Hospital to care for complicated TB and HIV co-infection cases and train health care workers in the management of such cases.**

Out of a population of 1.7 million people, there are an estimated 270,000 Batswana living with HIV/AIDS. Most of them are likely to suffer from chronic, debilitating illnesses as a result of infection. Apart from ART, they need care and support services to maintain a high quality of life.

Palliative care no longer means only “end-of-life” care, but refers to holistic care provided throughout the course of the disease. It is patient- and family-centered, serving adults and children infected and affected by HIV/AIDS alike. Palliative care aims to improve patients’ lives, as well as support their family members and caregivers along the way.

Botswana has provided strong ART, TB programs and home-based care services, and is now working to ensure that a comprehensive palliative care package is integrated into the health care system. The first major training of health care workers in palliative care was held in mid-2005 with the aim of rapidly scaling-up services that include:

- **Clinical Care:** Routine HIV testing and counseling, and routine follow up to determine the best time for PLWHAs to start ART, Isoniazid Prevention Therapy (IPT) or TB treatment;
- **Spiritual Care:** Counseling services provided to PLWHA to address fears and instill hope, and address misconceptions related to cultural beliefs/barriers;
- **Psychological Care:** Addressing “status disclosure” related issues, establishment and strengthening of support groups and bereavement care; and
- **Social Care:** Social welfare services, i.e. food baskets, transport to health facilities, and establishment of support systems to support treatment adherence and prevent further re-infection among PLWHA.

In FY2006, the Emergency Plan committed \$3,205,551 to support Botswana in a variety of settings, including community home-based care, hospice care, clinics, hospitals, day care centers, VCT centers, PLWHA support groups, school-based clinics and workplace clinics.

Accomplishments supported by the Emergency Plan include:

- Supporting six full-time University of Pennsylvania physicians in Botswana to provide inpatient care at Princess Marina and Nyangabgwe Hospitals, HIV care in the outpatient clinics and outreach care at nine surrounding district hospitals. In

addition, the physicians run a referral clinic for complicated HIV/TB co-infected patients;

- Training of public health care workers nationwide through the MoH's Palliative Care Unit and supporting three consultant positions to develop training modules; and
- Supporting the national Isoniazid Prevention Therapy (IPT) program, which helps prevent TB in those already infected with HIV, by covering costs of salaries, training and supervisory visits. The USG also provided technical and financial support for a national TB program review and to conduct a number of TB/HIV surveillance trainings.

### **TB Prevention Program Making Strides**

GABORONE – There was a time when TB was nearly under control in Botswana; then along came HIV and everything changed.

In the 1990s, the TB case rate shot up by 162 percent. Botswana now has one of the highest rates of TB in the world with 10,000 to 12,000 cases recorded per year. Not surprisingly, an estimated 80 percent of them are co-infected with HIV.

Because of high rates of both TB and HIV, Botswana has rolled out an Isoniazid Prevention Therapy (IPT) program with the aim of preventing active TB among people living with HIV/AIDS.

The IPT program is a collaboration between the Ministry of Health and the U.S. Centers for Disease Control (salaries and training costs are covered through PEPFAR). By the end of September 2006, the four-year-old program had screened 55,941 patients and enrolled 42,184 people on prophylaxis treatment, according to Mma Oaitse Motsamai, coordinator of the Botswana IPT Program.

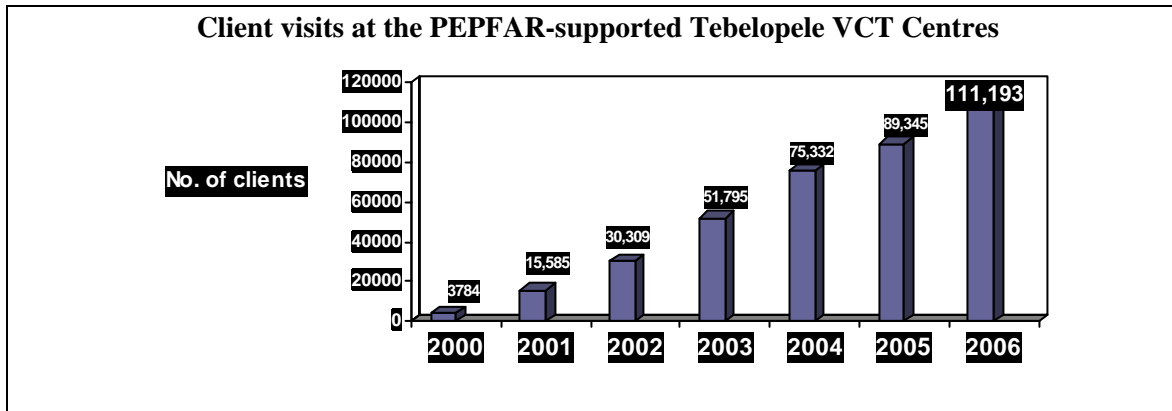
The program had its share of problems in the beginning, including poor record keeping and follow-up of clients. But PEPFAR provided technical and financial assistance in setting up a computer application that provides more efficient and useful collection, compilation, and analysis of IPT data. Individual client records are entered into a district-based data entry system that provides interactive guidance and support. The application then generates various reports for district and national use, which identify data quality issues and support IPT programme management. There were 44,200 client records in the database by the end of 2006.

“Before this, all of the reporting was done on paper and none of the districts were giving us information on time,” Motsamai says. “But since the installation of the computers and training, at least 50 percent of the districts are now up to date.”

It's still too early to calculate the success of the IPT program, but Motsamai says that with TB notification rates in Botswana increasing 10 to 15 percent each year since 1989, the need for such programs is becoming increasingly evident.

Meanwhile, Motsamai says that everyone with HIV should get screened for TB and everyone with TB should get an HIV test. With this approach, TB patients with HIV can access free and life-saving ARVs and people living with HIV/AIDS can benefit from isoniazid TB preventative therapy or be treated for TB if found to have active TB.

## Counseling and Testing



*“I encourage you to accept being tested. It is in your interest to know. Knowledge of your HIV status will empower you to take care of your destiny”* – Botswana President Festus Mogae

The numbers of Botswana testing for HIV have dramatically increased in the last few years thanks to government and non-government efforts. Through USG support to the Tebelopele VCT network and national HIV routine testing, 189,300 people were tested in FY2006. This is a much higher number in relation to the population than seen in other African countries.

With more than \$5.3 million from the Emergency Plan, the U.S. Government is doing what it can to ensure even more people are reached. In FY2006, the Emergency Plan supported outreach testing to remote villages using mobile testing caravans; it supported efforts by a faith-based organization and others to do counseling and testing in non-traditional settings such as churches and in the workplace; and it supported training of chiefs, councilors and village leaders to encourage their communities to test and use HIV/AIDS services.

The introduction of Routine HIV Testing (RHT) in Botswana has dramatically increased the number of people testing at public hospitals and clinics. A total of 110,558 patients were routinely tested for HIV in FY2006, according to the Ministry of Health. The Emergency Plan supported the Government of Botswana’s efforts to scale up routine HIV testing by supporting training, policy development and the purchase of rapid HIV test kits.

Testing at the non-governmental Voluntary Counseling and Testing (VCT) centers has also increased. Tebelopele, a network of 16 centers throughout Botswana which is fully funded by PEPFAR, saw its number of clients expand from 89,000 in 2005 to 111,000 by the end of calendar year 2006. “Some people believed that the introduction of Routine Testing would make VCT in non-clinical settings obsolete. But that just hasn’t



happened,” says Mary Grace Alwano, the HIV Counseling and Testing program officer at BOTUSA. “They are complementary to each other.”

Counseling and testing are considered the gateway to prevention, care and treatment. Therefore, in FY2006, the Emergency Plan helped strengthen the way clients are referred from VCT centers like Tebelopele to the government programs providing services such as ART and PMTCT through the formation of referral directories and networks.

Other accomplishments supported by the Emergency Plan in FY2006 include:

- Technical support in the development of national guidelines for CT at voluntary testing sites and public health facilities doing routine HIV testing;
- Training of more than 125 health care workers and HIV counselors from public, private and civil society sectors in Couples HIV Testing and Counseling (CHTCT);
- Continued support to the Botswana Defense Force in increasing access to CT by the military and civilian population in their neighborhoods; and
- Training of over 1,350 local leaders from grassroots organizations by Humana People for People to improve their understanding of HIV counseling and testing and to promote referral of people to counseling and testing services.

### **Couples Testing**

GABORONE – Ashanti and Tebogo can’t seem to stop smiling at each other. The young couple who live together in Gaborone have big plans to get married and grow old together, and so they have much to smile about. With such big plans, they say, it only made sense to start their journey together by getting tested for HIV as a couple.

“If we go together we get the results together, and that way we know the truth from the start,” says Tebogo, a 24-year-old policeman. “It’s a way of showing your commitment to one another.”

The young lovers aren’t alone in their sentiments. An unprecedented 4,503 clients were counseled and tested at the Tebelopele Voluntary Counseling and Testing Centres in Botswana during a Valentine’s promotion dubbed the “Week of Love 2006” which targeted couples. That’s double the number normally served in a week and the highest number of clients served for that time period in the history of the six-year old program.

“You can really only know your partner when you know each other’s HIV status,” says Innocentia Puso, the southern regional director for Tebelopele, a non-governmental VCT program that is fully supported by PEPFAR. “Testing is an act of love for each other.”

On Valentine’s Day alone, when the Tebelopele centers extended their opening hours by an hour, a total of 636 couples were counseled and tested. The highest number of couples served were in Gaborone (293) followed by Francistown (211). “The numbers of couples we had testing in one day were normally what we’d see over two months time,” Puso said.

Tebelopele, which means “look into the future” in the Setswana language, became an independent non-governmental organization in 2004. It has grown from two centers into a national network of 16 freestanding centers, eight satellite centers, four mobile VCT units and more than 120 staff.

## Care of Orphans and Vulnerable Children (OVCs)

### **Supporting civil society to scale up OVC programs**

PEPFAR funding has been instrumental in supporting local faith-based, community-based and other non-governmental organizations and their networks in scaling-up orphan and vulnerable children (OVC) programs to address AIDS-related challenges like providing financial, material and technical resources to caregivers and engaging government to develop appropriate strategies and policies that address the needs of OVCs.

Globally, an estimated 15.2 million children under the age of 18 have lost one or both parents to AIDS. Nearly 80 percent of them are in sub Saharan Africa, including Botswana – a region of Africa which is widely regarded as the epicenter of the epidemic. According to UNAIDS, the numbers of orphans worldwide will continue to rise, reaching more than 20 million by 2010.

By definition, an orphan is a child under 18 years who has lost one or both parents. In Botswana an orphan is a child who has lost one (single) or both parents (married couples), either biological or adoptive. Married couples include those married in civil or traditional marriages and there is also provision for social orphans: those abandoned or dumped or whose parents cannot be traced.

In Botswana, orphans account for 19 percent of all children aged between 0 to 18 years and it is estimated that more than 20 percent of all children in Botswana will be orphaned due to HIV/AIDS by 2010, according to a UN report “Children Affected by AIDS,” (2006). The Department of Social Services in the Ministry of Local Government estimates that out of 118,000 orphans in Botswana, 80 percent of them are as a result of AIDS.

In FY2006, the Emergency Plan provided \$4,709,126 in financial and technical support to assist Botswana on a number of fronts, including assisting the Department of Social Services (DSS) conduct a national situational analysis on OVC to determine the impact and nature of the orphan situation. The analysis will help inform policy formulation and serve as evidence for an enhanced national OVC response. The Emergency Plan has also supported trainings for social workers on caring for OVCs, and helped strengthen the DSS through various trainings in the use of documents and protocols.

At the moment in Botswana, up-to-date, high-quality and relevant data on the OVC program is not available to the extent needed. Work is being done to develop a national monitoring and evaluation framework for the Botswana OVC Program. This is expected to eventually assist government, non-governmental and international agencies to monitor the effectiveness of services.

Other PEPFAR support in the last financial year has included:

- Development of the National OVC Guidelines on the Care and Support of OVCs. Additional support has also been provided towards the formulation of a National OVC Policy. These will contain a set of relevant programs, policies/protocols and laws on OVC, the relevant standards and guidelines, referral mechanisms and important legislative requirements on OVCs in Botswana;
- Supporting local NGOs/CBOs/FBOs and their networks to scale up OVC programs and to address AIDS-related challenges like providing financial, material, and technical

resources to caregivers and engaging government to develop appropriate strategies and policies that address the needs of OVCs; and

- Supporting organizations such as PACT, Marang, and UNICEF to mobilize communities around issues of orphan care and psychosocial support.

### **New spin to Peace Corps mission**

For three decades, the work of Peace Corps volunteers touched nearly all aspects of Botswana's development with assignments as diverse as teacher trainers, nursing tutors, game wardens and small business advisors.

Now, with AIDS threatening to reverse the strides made in this small southern African country, Peace Corps has put a new spin on its mission here.

Volunteers like Cucharras Martin are now helping build capacity in a support group for women living with HIV/AIDS, and Ray Domire counsels street children on the importance of staying healthy.

Both are part of the new network of Peace Corps volunteers working solely on HIV/AIDS activities in Botswana with support from President Bush's Emergency Plan for AIDS Relief. By mid-2006, 15 PEPFAR-funded volunteers had been assigned to non-governmental AIDS service organizations. Their work includes focusing on organizational development, financial management, fundraising and proposal writing, among other things.

"The NGOs here are not well developed. The volunteers are helping to get them organized," said Ken Puvak, former director of Peace Corps Botswana.

Martin, 46, who is from South Carolina, was assigned to work with the Pelegano Support Group in Makaleng, a village of less than 1,000 people in northeastern Botswana. Her task was to build capacity in a group that had a big heart but few administrative skills.

Pelegano, which in Setswana means "I carry you on my shoulders and you carry me on yours," was formed in 1999 by a few people concerned about the lack of resources and the stigma against the growing number of people living with HIV in their community.

Its first meetings were held under a tree, but the group now has its own centre with a regular attendance of women who come for individual counseling, group counseling and transportation to their doctor appointments.

In the last few months, Martin has helped the group register as a community organization, form a board of trustees and develop a system for tracking clients. The group also holds regular education sessions for women on topics such as how to give breast examinations and caring for HIV-positive patients in the home.

"We are making great progress," says Martin. "The organization had been stigmatized at first because of the fact that clients are mostly HIV positive. But we have worked hard in getting the community involved, and now people are less reluctant to just stop by and see what's happening here."

## Antiretroviral Therapy

### **Treatment for All**

In FY2006, PEPFAR supported the purchase of ARV drugs and training of health workers in the rollout of anti-retroviral therapy to the entire country. Currently, more than 80 percent of those eligible for treatment are receiving it.

It is estimated that 70,000 to 100,000 HIV-infected Botswana need antiretroviral therapy (ART) to live longer, healthier and more productive lives. In response, the Emergency Plan is helping to strengthen one of the most inspired treatment programs in the world.

The Government of Botswana initiated Africa's first national ART program at the beginning of 2002, and by the end of September 2006 there were around 74,500 patients accessing free treatment in Botswana. To put it another way, more than 80 percent of those needing ARVs are now receiving them.

The U.S. Government (USG) through the Emergency Plan provided \$15,737,498 in FY2006 in financial and technical support to ART services. The majority (nearly 80%) of the support went to the Ministry of Health to strengthen the 'Masa' program through purchasing antiretroviral drugs, developing national treatment guidelines, training health care workers at treatment sites, monitoring and evaluation, and implementing a national laboratory quality assurance system.

Now that anti-retroviral treatment is available in all 32 primary hospitals around Botswana, help is being brought even closer to the communities with the rollout of ART to local clinics. The USG is supporting security upgrading of more than 100 clinics, and the hiring of public health specialists to boost the effort.

In many countries, pediatric ART care has lagged behind in providing treatment to HIV-positive children. The exception has been Botswana, where 85% of the estimated 6,400 children living with HIV and needing treatment are receiving it, according to UNICEF. In 2006, the Emergency Plan helped strengthen this initiative by supporting staff positions at the Botswana-Baylor Children's Clinical Center of Excellence, which provides care and treatment to HIV-infected infants and their families. PEPFAR provided four pediatric nurses to the program in 2006, in addition to one pediatrician and a training coordinator.

Other accomplishments supported by the USG in FY2006 included:

- Procuring of ARV drugs, including pediatric formulations;
- Supporting continuous medical education for private practitioners in HIV/AIDS care and treatment;
- Collaboration with Botswana Harvard Partnership, including support of clinical master training activities to clinics that deliver ARV services;
- Supporting technical positions at Masa, including the director, M&E officer, data manager and several data clerks; and

- Supporting the training of 1,066 health professionals through the KITSO AIDS Training program. Courses included clinical care fundamentals, medical adherence counseling and advanced HIV/AIDS care and treatment.

### **ARV Program Keeps Current with Help from Master Trainer Program**

GABORONE – As Botswana scales up HIV care and treatment programs, the great challenge now is to ensure that patients here continue to receive quality services from the best trained doctors, nurses and pharmacists available.

The Master Trainer Program, an initiative fully supported by the President’s Emergency Plan, was created as part of an approach to help health care workers in the national ARV Therapy Program (ART or ‘Masa’) keep up-to-date in all aspects of HIV/AIDS treatment and care.

In 2006, more than 380 doctors, nurses and pharmacists received on-going training and more than 570 lay counselors and family welfare educators were mentored by the staff of the Master Trainer Program.

Dr. Tendani Gaolathe, director of Master Trainer, says the secret to the success of the program lies in a long-forgotten practice in the medical field: making house calls. In this case, the “house calls” are being made by Gaolathe and her staff who spend the majority of their time on the road visiting primary hospitals and clinics where the life-saving ARV drugs are dispensed.

“What’s unique about our training is that it’s on-going. We go to the sites and we make it a point to go back and visit each site at least every three months,” Gaolathe says.

When they aren’t physically at the clinics, the team stays busy providing telephone support to the 32 ARV sites around the country. In 2006, the trainers logged more than 200 calls per month from doctors and nurses needing advice.

“We get calls at all hours asking anything from questions about adherence to treatment options for complicated patients,” says Gaolathe. “Sometimes these doctors are way out in the bush with no colleagues around to offer a second opinion, so it’s nice to be able to call someone for advice.”

The Master Trainer training staff includes six physicians (one is a pediatrician), four nurse-midwives and five laboratory technicians who are all highly experienced in HIV/AIDS treatment and care of adults and children. The team handles assessments of ARV sites, gives lectures, advice and suggestions on enrollment procedures, adherence counseling and data management, as well as hands-on support with problematic or difficult patient cases.

The staff also includes four monitoring & evaluation officers who are helping develop a computerized patient tracking system. So far, 60,000 patient records, 1.3 million pharmacy records, and 4 million lab records have been loaded into a central ARV data warehouse.

With demand for ARV therapy increasing, the goal of the national program is to upgrade satellite clinics to give them the capacity to prescribe and dispense ARV therapy in remote areas. In FY2006, the Master Trainer program helped upgrade 10 satellite clinics.

“Sometimes people in remote areas don’t have money to transport themselves to the hospital for treatment, or sometimes transport isn’t even available,” says Dr. Phillip Mwala, coordinator of the Clinical Master Trainer Program. “There is a need to take services out to the people.”

## Laboratory Infrastructure

### **More laboratories working on HIV/AIDS**

In FY2006, PEPFAR helped decentralize the provision of CD4 testing to eight satellite laboratories, viral load testing to four satellite laboratories and technical support to all government labs in the country and improving space capacity to seven of them.

With an increasing number of people on ARV treatment in Botswana, the two national laboratories in Francistown and Gaborone have felt the pinch. Patients were waiting up to three months to receive CD4 and viral load counts, equipment would often break down, and the laboratory space proved inadequate.

With help from the President's Emergency Plan in FY2006, many of the laboratory infrastructure challenges have been met. USG funding assisted in setting up or upgrading laboratories in Botswana with capacity to perform HIV tests, CD4 counts and lymphocyte tests. Support to laboratories has also come in the form of technical advice and training, helping to raise the quality and speed of results.

The U.S. Government provided \$2,790,000 in FY2006 to support:

- Expanding the capacity of laboratories to perform HIV testing, TB diagnostics, syphilis testing and to support early infant HIV testing;
- Developing and implementing a quality control manual for Botswana to provide external quality assessments of laboratories, and training technicians in laboratory quality assurance;
- Customizing a rapid HIV test training manual for use in Botswana, training of master trainers and provision of equipment to 12 laboratories in the country; and
- Renovation and refurbishment of the Jubilee HIV reference laboratory in Francistown, turning it into the second largest laboratory in the country for this work. This has allowed the country to double the number of people monitored for HIV/AIDS treatment and care.

## Strategic Information

### **Survey shows Botswana has Good Health Infrastructure**

PEPFAR supported a national assessment in 2006 to determine the quality of HIV/AIDS services in public and private health settings. Results showed that Botswana has good infrastructure and human resources to provide basic HIV/AIDS services (PMTCT was available in 66% of facilities and ART-related services in 78%). However, there is a need to improve infection control and drug management.

In order for the Botswana government and its development partners to mount a national response to HIV/AIDS and other diseases in the country, there is a need for a comprehensive view of the informatics capacity of the health sector. There is also a need to gather important information regularly.

The Botswana HIV/AIDS Response Information Management System (BHRIMS) Informatics Subcommittee was established in 2004 by the BHRIMS Technical Working Group to provide direction and support for a national M&E database called “eBHRIMS.” To ensure proper implementation of the eBHRIMS, a comprehensive view of the informatics capacity of the health sector was required.

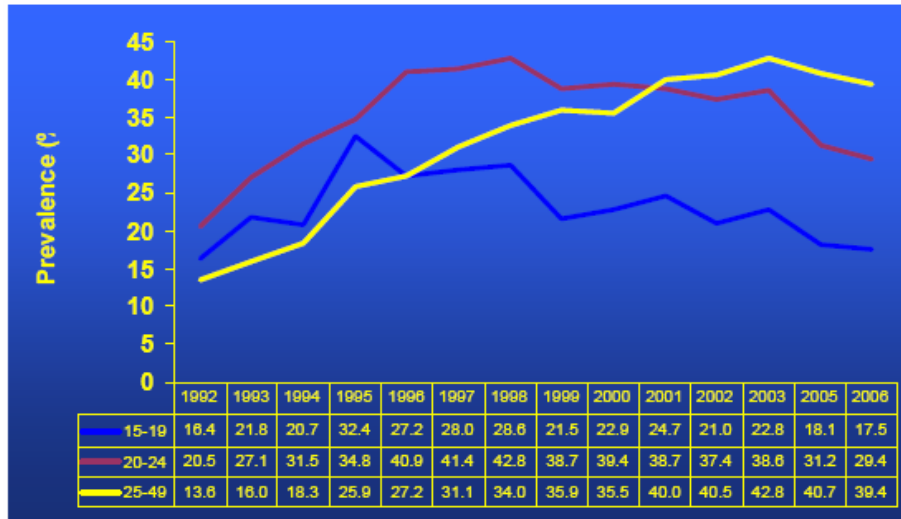
In FY2006, the Emergency Plan supported a nationwide assessment of each health district’s information and communications technology (ICT) infrastructure, and to determine the computer literacy level of key health officers. Results from the assessment will be used to plan computer training for district personnel and enhance the ICT infrastructure to support eBHRIMS and other health information systems.

The U.S. Government also provided technical and financial support (\$2,562,500) to strategic information in 2006 for the following:

- Monitoring and Evaluation (M&E) training for PEPFAR partners in Botswana. About 30 attendees from government sectors and civil society took part. This initiative was an immediate response to the acute shortage of appropriate M&E knowledge and skills in HIV/AIDS response noted at the beginning of the Emergency Plan implementation in Botswana in 2004;
- Conducting an annual sentinel HIV surveillance among pregnant women in Botswana (see graph) that provides information on the prevalence of HIV infection in sentinel populations in different geographic locations. HIV surveillance is an important source of information necessary to formulate prevention and impact mitigation strategies across the districts;
- Deployment of the “eBHRIMS” prototype, which is based on the indicator module of the UNAIDS Country Response Information System (CRIS), to the District AIDS Coordinators for use in entering data for OVC, district management, financial and administrative management, and health; and

- Collaboration between the BHRIMS Informatics Subcommittee and the Department of HIV/AIDS Prevention and Care to work towards integrating HIV health information and monitoring systems across Botswana.

**Sample graph from the 2006 Sentinel Surveillance Survey: Shows trends in age-specific HIV prevalence rate among pregnant women 1992-2006 in Botswana**



### **M & E curriculum gets a boost**

Accountability is a key word in the area of development work, and within accountability lies monitoring and evaluation. Without them, there is no way to determine if the chosen responses to the HIV/AIDS epidemic have been the correct ones.

By developing a national M&E training curriculum in FY2006, PEPFAR, in collaboration with NACA and other stakeholders, has funded a long-term solution to the problem of M&E capacity in Botswana.

USG funds were provided to NACA, who in turn contracted the Institute of Development Management (IDM), a regional NGO, to prepare and pilot the national curriculum. In addition to the contextualization of M&E training curriculum for the country, the project intends to build capacity of local institutions to take lead in the actual training work. IDM and NACA were assisted by Measure Evaluation through USG support in this effort.

By the end of FY2006, the curriculum blueprint and course materials were finalized and the first round of pilot training was completed with 20 people selected from the districts and central government.



## Systems Strengthening and Capacity Building

### **Workplace Training**

In FY2006, PEPFAR supported the development of HIV/AIDS policies and workplace programs for private businesses in Botswana. One partner, the Botswana Business Coalition on HIV/AIDS (BBCA), trained more than 160 peer counselors to help sensitize co-workers on HIV/AIDS issues in the workplace.

With hospital admissions in Botswana currently dominated by patients with HIV/AIDS-related illnesses, the burden of AIDS and TB on an already stressed health care system is enormous. And Botswana, like many other developing countries, has experienced the same medical “brain drain” that has seen medical professionals leaving for greener pastures.

Filling the human resource gap and strengthening health systems in government and non-governmental organizations (NGOs) is a priority of the Emergency Plan. Through ongoing technical assistance, the U.S. Government supports endeavors to strengthen local partners at every level – national, district and community.

PEPFAR support does not end at the hospital doors; systems strengthening is found improving efforts of private businesses, District Multi-Sectoral AIDS Committees (DMSACs) and human rights groups. The areas of focus include development of human resources, organizational capacity, leadership and community participation, collaboration and coordination, and HIV/AIDS policy.

In 2006, the Emergency Plan provided \$2,838,248 to support projects aimed at system strengthening. At the national level, the USG supported:

- The Ministry of Health (MOH) in strengthening both human resource planning (recruitment, management, retention) and service delivery planning. The general strengthening of the health service will result in better service delivery at all facilities for all health services, including HIV/AIDS programs;
- The Ethics, Law and Human Rights Sector of the National AIDS Council (NAC), through its secretariat, BONELA, to step up HIV/AIDS policy development and legislative reform. BONELA launched a successful media campaign aimed at raising public awareness on HIV/AIDS and human rights; and
- PACT to strengthen the capacity of the Botswana Network for AIDS Service Organizations (BONASO) to administer small grants to civil society and support them in their response to the epidemic.

At district level, PEPFAR supported:

- A professional placed in the Ministry of Local Government (MLG) working through peer support to help with district work plans and expanded use of evidence-based planning for HIV programs.

At the community/village level, PEPFAR supported:

- MLG to roll out the Community Capacity Enhancement Program (CCEP) with the aim of empowering community leaders and residents to respond to the epidemic in their villages and to tackle stigma, discrimination and women's rights. The program was expanded to five districts in 2006.

### **Success Story: SMDP Training**

MAUN – The white sand and palm trees at the edge of the Okavango Delta give the landscape outside the Maun hospital an almost dreamlike quality. The reality inside has been more of a nightmare.

HIV-infected patients were waiting an average of 10 hours to get their ARV medications. Employees were putting in 15-hour work days. Everyone was tired and angry with the long queues and inefficiencies.

“You can imagine someone who is very sick having to spend their entire day here before they get help.

Some were leaving before receiving their medications,” says Elizabeth Peacock, the chief pharmacy technician at the hospital's Infectious Disease Care Clinic (IDCC).

A two-week management training course funded by the President's Emergency Plan for AIDS Relief (PEPFAR) has helped change all of that. Now, Peacock says, patient wait time has been reduced to an average of four hours, staff is properly allocated and people are generally happier.

“A few small management changes have made a world of difference, and people are starting to feel good about coming here again,” she said.

Peacock took part in the Sustainable Management Development Program (SMDP), a course developed by the Centers for Disease Control and Prevention in Atlanta and used in countries throughout the world with an aim of improving the way AIDS-related services are delivered.

Since 2000, SMDP trainings have been facilitated by the Institute of Development Management (IDM), a regional program that serves Botswana, Lesotho and Swaziland. The training curriculum includes Total Quality Management (TQM), team building, patient flow analysis and evaluation.

Results have been promising:

- A counseling center in Molepolole increased the number of counseling sessions by 40 percent, resulting in more clients testing for HIV and accessing HIV/AIDS services.
- A voluntary testing center in Jwaneng increased the number of mobile outreach visits to rural villages by 35 percent.
- A primary hospital in Tutume improved on the collection of blood samples from outlying clinics and wards. Late arriving samples dropped from 64 percent to 15 percent.

Between May and June of 2005, a team at the IDCC in Maun handed out time cards to 300 random patients to determine how much time they spent in each department – from reception to doctor consultation to pharmacy. From the analysis it was determined that patients spent an average of 10 hours at the IDCC, with the majority of time spent waiting at pharmacy.

Using techniques learned at the SMDP training, Peacock and her team determined the roots of the problem and developed countermeasures. Among other things, the team established an appointment system for returning patients, started adherence counseling in group sessions, developed a new staff allocation system and assigned someone to coordinate patients at check-in.

By April 2006, wait time at the Maun IDCC had been reduced by 52.5 percent – well beyond the set target of 30 percent, says Peacock.

“The rapport between patients and staff has improved as well as the overall staff morale. The future is a little brighter,” Peacock says.

## **PARTNERS**

FY2006 Botswana Partners

<b>Prime Partner</b> Program Areas	<b>Academy for Educational Development</b> Condoms and Other Prevention Counseling and Testing
<b>Prime Partner</b> Program Areas	<b>Associated Funds Administrators</b> Treatment: ARV Services
<b>Prime Partner</b> Program Areas	<b>Association of Public Health Laboratories</b> Laboratory Infrastructure PMTCT
<b>Prime Partner</b> Program Areas	<b>Axiom Resources Management</b> Abstinence/Be Faithful Condoms and Other Prevention
Sub Partner	Media Support Solutions (Makgabaneng)
<b>Prime Partner</b> Program Areas	<b>Baylor University</b> Treatment: ARV Services
<b>Prime Partner</b> Program Areas	<b>Blossom Counseling Centre</b> Condoms and Other Prevention
<b>Prime Partner</b> Program Areas	<b>Botswana Business Coalition on AIDS (BBCA)</b> Policy and Systems Strengthening
Sub Partners	Chevril
<b>Prime Partner</b> Program Areas	<b>Botswana Defense Force</b> ARV Services Condoms and Other Prevention

	Counseling and Testing Laboratory Infrastructure
Sub Partners	Population Services International (PSI)
<b>Prime Partner</b> Program Areas	<b>Botswana Network on Ethics, Law and HIV/AIDS (BONELA)</b> Policy Analysis and Systems Strengthening
<b>Prime Partner</b> Program Areas	<b>Catholic Relief Services</b> OVC
<b>Prime Partner</b> Program Areas	<b>Educational Development Center</b> Abstinence/Be Faithful
<b>Prime Partner</b> Program Areas	<b>Family Health International (FHI)</b> Abstinence/Be Faithful
Sub Partners	Botswana Christian AIDS Intervention Programme (BOCAIP) Botswana National Youth Council (BNYC) Botswana Network of People Living With AIDS (BONEPWA) Makgabaneng
<b>Prime Partner</b> Program Areas	<b>Harvard University</b> Treatment: ARV Services
<b>Prime Partner</b> Program Areas	<b>Hope Worldwide</b> Abstinence/Be Faithful Orphans and Vulnerable Children (OVC)
<b>Prime Partner</b> Program Areas	<b>Humana People to People Botswana</b> Counseling and Testing
<b>Prime Partner</b> Program Areas	<b>Institute of Development Management, Botswana (IDM)</b> Counseling and Testing Policy Analysis and System Strengthening
<b>Prime Partner</b>	<b>I-TECH</b>

Program Areas	Condoms and Other Prevention
Sub Partner	Matshelo Community Development Association
<b>Prime Partner</b> Program Areas	<b>JPHIEGO</b> Condoms and Other Prevention
<b>Prime Partner</b> Program Areas	<b>John Snow, Inc.</b> Medical Transmission: Injection Safety
<b>Prime Partner</b> Program Areas	<b>Ministry of Education, Botswana</b> Abstinence/Be Faithful
<b>Prime Partner</b> Program Areas	<b>Ministry of Health, Botswana</b> Abstinence/Be Faithful Condoms and Other Prevention Counseling and Testing Laboratory Infrastructure Medical Transmission: Blood Safety OVC Palliative Care: Basic health care and support Palliative Care: TB/HIV Policy Analysis and Systems Strengthening PMTCT Treatment: ARV Drugs Treatment: Pediatric ARV
<b>Prime Partner</b> Program Areas	<b>Ministry of Labour and Home Affairs</b> Abstinence/Be Faithful
<b>Prime Partner</b> Program Areas	<b>Ministry of Local Government, Botswana</b> Condoms and Other Prevention OVC Policy Analysis and Systems Strengthening Strategic Information Treatment: ARV Services
<b>Prime Partner</b> Program Areas	<b>National AIDS Coordinating Agency, Botswana</b> Abstinence/Be Faithful

Condoms and Other Prevention  
Counseling and Testing  
Strategic Information

**Prime Partner**  
Program Areas

**National Association of State and Territorial AIDS Directors**  
Policy Analysis and System Strengthening

**Prime Partner**  
Program Areas

**Pact, Inc.**  
Abstinence/Be Faithful  
Condoms and Other Prevention  
OVC  
Palliative Care: Basic health care and support  
Policy Analysis and System Strengthening

Sub partners

African Methodist Episcopal Services Trust  
Bakgatla Bolokong  
Botswana Association for Psychosocial Rehabilitation  
Botswana Christian AIDS Intervention Programme (BOCAIP)  
Botswana Network of AIDS Service Organizations (BONASO)  
Botswana Network of People Living with AIDS (BONEPWA)  
Botswana Retired Nurses  
Botswana Young Women's Christian Association (YWCA)  
Evangelical Fellowship of Botswana  
Flying Mission  
Holy Cross Hospice  
House of Hope  
Humana People To People Botswana  
Kgothatso AIDS Care and Prevention Programme  
Lesedi Counseling Centre  
Masedi HIV/AIDS Abstinence and Empowerment Project  
Metsimotlhabe  
Mother's Union Orphan Care Centre  
Nkaikela Youth Group  
Otse Home Based Care  
Population Services International (PSI)  
Silence Kills  
True Love Waits  
Tsholofelo Trust  
Youth Health Organization of Botswana (YOHO)  
Young Women's Friendly Centre

<b>Prime Partner</b> Program Areas	<b>Pathfinder International</b> Abstinence/Be Faithful Condoms and Other Prevention PMTCT
Sub Partners	Botswana Christian AIDS Intervention Programme (BOCAIP) Botswana Council of Churches Botswana Network of People Living with AIDS (BONEPWA) Humana People To People Botswana True Men
<b>Prime Partner</b> Program Areas	<b>Population Services International (PSI)</b> Condoms and Other Prevention
<b>Prime Partner</b> Program Areas	<b>Safe Blood for Africa</b> Medical Transmission: Blood Safety
<b>Prime Partner</b> Program Areas	<b>Tebelopele, Botswana</b> Counseling and Testing
Sub Partners	Institute of Development Management (IDM) The Dialogue Group
<b>Prime Partner</b> Program Areas	<b>The Futures Group International</b> OVC
<b>Prime Partner</b> Program Areas	<b>United Nations International Children's Fund (UNICEF)</b> OVC PMTCT
Sub Partners	Bona Lesedi Community Project Botshelo Community Project Botswana Christian AIDS Intervention Program (BOCAIP) Hope Mission Project Mankgodi Holy Spirit Church Salvation Army Psychosocial Support Initiative (SAPSSI) Tirisanyo Catholic Commission

Tshireletso AIDS Awareness Centre

**Prime Partner**  
Program Areas      **United Nations Development Programme (UNDP)**  
Human Resources

**Prime Partner**  
Program Areas      **University of Botswana**  
Abstinence/Be Faithful

**Prime Partner**  
Program Areas      **University of Medicine and Dentistry, New Jersey**  
PMTCT

**Prime Partner**  
Program Areas      **University of Pennsylvania**  
Palliative Care: Basic health care and support  
Palliative Care: TB/HIV

**Prime Partner**  
Program Areas      **Youth Health Organization of Botswana (YOHO)**  
Abstinence/Be Faithful  
Condoms and Other Prevention

**Definitions**

**1. Prime partner:** The entity which received funding directly from, and has a direct contractual relationship (contract, cooperative agreement, grant, etc.) with, the USG Agency.

**2. Sub-partner:** The entity to which a prime partner provides funds and technical assistance.