

PEPFAR: From Emergency to Sustainability and Advances Against HIV/AIDS

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For Release upon Delivery Expected at 9:30 am September 29, 2010 Good morning, Chairman Berman, Ranking Member Ros-Lehtinen, and other distinguished members of the Committee. I am Dr. Tom Frieden, Director of the Centers for Disease Control and Prevention (CDC), an agency of the Department of Health and Human Services (HHS) and an implementing agency of the President's Emergency Plan for AIDS Relief (PEPFAR). I appreciate the opportunity to be here today alongside my colleagues Dr. Goosby and Dr. Fauci to discuss CDC's role in implementing and strengthening this critical, life-saving program.

HHS as a Department contributes to PEPFAR in many ways. In addition to CDC and NIH, significant contributions are being made every day by the Food and Drug Administration through expedited drug approval, the Health Resources and Services Administration, through delivery of medications and services, the Substance Abuse and Mental Health Administration in relation to substance abuse prevention, care and treatment, and the Secretary of HHS through the Office of Global Health Affairs, providing leadership and policy coordination.

Today, I would like to discuss: 1) the unique strengths that CDC contributes to PEPFAR and the Global Health Initiative; 2) some specific PEPFAR accomplishments; and, 3) some of the most promising tools on the horizon of the fight against HIV/AIDS.

GLOBAL HEALTH INITIATIVE

The Administration's Global Health Initiative (GHI) is a comprehensive, whole-of-government approach to global health that builds on the successes of existing programs to both achieve specific health outcomes and strengthen health systems to increase the sustainability of those improvements. This approach will maximize the health impact of every dollar the U.S. government (USG) spends on global health programs. GHI will, among other principles, encourage country ownership and invest in country-led planning; build sustainability through stronger health systems; improve metrics, monitoring, and evaluation, and accelerate research and innovation. To accomplish this, we will build

on the successful foundation of programs such as PEPFAR, which is a significant and successful platform for GHI. Through Partnership Frameworks with PEPFAR countries, the USG is already a leader in transitioning health programs to ownership and leadership by partner countries, building sustainable capacity in laboratory, workforce, and other critical elements of strong health systems, and conducting groundbreaking operations research in countries with the world's most significant health burdens.

Over the past few months, it has been my privilege to visit PEPFAR programs in several countries and see first-hand the dramatic results this program is achieving: nearly 2.5 million people alive and healthy today receiving life-saving treatment, and more than 100,000 infants born HIV-free last year who would otherwise have been infected. The success of PEPFAR is also measured by stronger health systems that can better support progress in years to come. GHI will build on PEPFAR's successes and encompass other areas of global health, as the USG continues to be a leader in the fight against HIV/AIDS around the world. Together, we are confident that our continued achievements in the fight against global HIV will reduce more infections and save more lives around the world.

GLOBAL HIV/AIDS CONTEXT

Substantial progress has been made in HIV prevention, care and treatment worldwide, under the leadership and coordination of the Office of the Global AIDS Coordinator (OGAC) and through USG implementing agencies. New HIV infections have been reduced by 17% over the past eight years¹, and at the end of 2009, more than 5 million adults and children were receiving antiretroviral therapy (ART) in low- and middle-income countries.² This ART expansion represents a 25% increase in one year and a 10-fold increase in 5 years, with the greatest expansions in sub-Saharan Africa where the need is greatest. In FY 2009 alone, PEPFAR supported HIV testing and counseling for nearly 29 million people and provided services to millions of women.

1

¹ Data from the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) 2009 AIDS epidemic update. http://data.unaids.org/pub/Report/2009/JC1700_Epi_Update_2009_en.pdf

² World Health Organization.

http://www.who.int/mediacentre/news/releases/2010/hiv_treament_20100719/en/index.html

Despite these tremendous achievements, AIDS remains a leading cause of death in many countries and the leading cause of mortality worldwide among women of reproductive age. According to UNAIDS, 33.4 million people are living with HIV worldwide, and approximately 2.7 million new infections occurred in 2008. It is estimated that more than 7,000 new HIV infections still occur every day. The vast majority of these new infections (97%) are in low- and middle-income countries, and women and girls are disproportionately impacted. Adding to the problem is the fact that most-at-risk populations - including men who have sex with men, sex workers, and injecting drug users - continue to face stigma that limit their ability to obtain treatment and prevention services, contributing to the wider transmission of HIV.

CDC'S UNIQUE ROLE IN GLOBAL HEALTH

CDC is a science-based public health agency that uses a government-to-government approach, both domestically and globally, to maximize public health impact. Here at home, CDC provides technical, financial, and programmatic service delivery support to State, tribal, local, and territorial health departments. Building upon this model globally, CDC has long-standing relationships with Ministries of Health in partner countries. Through these partnerships, we apply our expertise in translating and adapting scientific breakthroughs and research into program implementation. Directly funding Ministries of Health through cooperative agreements for specific projects and defined capacity-building, providing them with direct technical assistance, and embedding personnel within their offices for peer-to-peer mentoring and knowledge transfer has resulted in increased government performance, capacity development, country ownership and public health impact. CDC has for more than 50 years extended the impact of our technical assistance by also placing staff in multilateral agencies such as WHO, the World Health Organization (WHO), UNICEF and UNAIDS to apply CDC scientific and program implementation to help these agencies maximize the health impact of their programs.

Still, we can increase our global health impact by embracing more efficient and effective models of operation. We've recently created CDC's Center for Global Health (CGH), which consolidates many

of our global health programs, including our Division of Global HIV/AIDS, our Division of Parasitic Diseases & Malaria, our Division of Global Disease Detection & Emergency Response, and our Division of Public Health Systems & Workforce Development. Outside of the Center, there are still global activities in more than 100 branches throughout CDC, with more than 10,000 health professionals available to assist as needed. The new Center serves as a focal point for leveraging expertise from our domestic programs in infectious disease, chronic disease, injury prevention, prevention of birth defects, and other areas as needed in the global context, and will allow us to more efficiently achieve evidence-based global public health impact, global health security, and global capacity development.

CDC's guiding principles for our global health work are to: strengthen public health capacity; better use data to improve program performance and policy; and maximize sustainable health impact through the use of existing and new systems, cost-efficiencies, partner investments, and scale-up of the highest impact interventions with a focus on populations with the greatest need.

A SHARED APPROACH TO GLOBAL HIV/AIDS PREVENTION, CARE AND TREATMENT

CDC is dedicated to enhancing America's leadership in the fight against global HIV/AIDS. PEPFAR is the cornerstone of the Global Health Initiative, and the platform upon which many of our future health successes will be built. Under the coordination of Dr. Goosby and the Office of the Global AIDS Coordinator, CDC is committed to collaborative and complementary programming with other PEPFAR implementing agencies to achieve our common goals. Through these partnerships, we build on each other's unique strengths, and use research to constantly improve our effectiveness and efficiency. Some of the areas in which CDC provides key technical assistance to partner countries include surveillance, laboratory science, HIV/TB service delivery integration, capacity development, training, Prevention of Mother-to-Child Transmission (PMTCT) of HIV programs, and program evaluation and the development of standardized measures.

CDC's unique strengths include our historical partnerships with Ministries of Health and other local partners, our scientists and public health specialists in Atlanta and field offices in 41 PEPFAR-supported countries (including HIV clinicians, prevention specialists, epidemiologists, laboratory scientists, and public health advisors), our expertise in epidemiology, surveillance, laboratory systems, and facility-based health services, and our connection with other global health and domestic public health programs.

Build sustainable public health capacity, infrastructures, and systems

Our approach to strengthening public health systems is integrated, comprehensive and systems-wide.

CDC works to build and strengthen information systems to support disease surveillance, program monitoring and evaluation, and management systems necessary for data-driven programming. In addition, CDC supports workforce capacity building through our Field Epidemiology and Laboratory Training Program, and the development of laboratory networks in collaboration with Ministries of Health and their facilities.

The impact of quality laboratory systems cultivated by PEPFAR is significant. CDC has supported the development of more than 1,900 full and integrated, non-disease specific, clinical laboratories and more than 16,500 HIV testing sites throughout the world. These public health laboratory networks build the efficiency and augment the ability of countries to respond effectively to HIV and other diseases, including emerging health issues, such as H1N1. Further, we support the quality of laboratories through a novel accreditation program and a regional training facility and the development of innovative public health laboratory approaches such as HIV testing of infants.

Expand quality HIV/AIDS care and treatment services and transition these services to local host government ownership

PEPFAR's success in expanding the reach of antiretroviral therapy in resource-constrained countries is well documented. Through FY 2009, PEPFAR directly supported life-saving antiretroviral therapy for nearly 2.5 million people. CDC works with our country programs, partners, and Ministries of Health

to plan, implement, and evaluate strategies for HIV care and treatment services. A highly integrated approach is used to link these services with HIV prevention services and other mainstream health care services to leverage resources and promote universal access. This integrated approach strengthens a country's entire health care system and HIV service delivery effectiveness, efficiency and sustainability.

Two key focus areas are the transition of adult care and treatment services from USG agency implementation to country ownership and the integration of tuberculosis and HIV services.

<u>PEPFAR's Antiretroviral Therapy Program</u> – CDC has a central role in program service delivery for the care and treatment of people with HIV. CDC in collaboration with the Health Resources & Services Administration (HRSA) manage a substantial part of the Antiretroviral Therapy Program. which funds US-based implementing partners, including the Elizabeth Glaser Pediatric AIDS Foundation and Columbia University's International Center for AIDS Care and Treatment Programs (ICAP), Catholic Relief Services (CRS) and Harvard School of Public Health to rapidly scale-up treatment in PEPFAR countries. Through these partners, CDC and HRSA distributes funds and technical support to about half of all patients receiving PEPFAR-funded HIV care and treatment (with USAID supporting approximately the same number). Together, CDC and HRSA support more than 1.1 million patients at 1,250 facilities in 13 countries. CDC and other USG agencies work with Ministries of Health and other local partners including Faith Based Organizations, to increase care and treatment capacity, and to work toward the goal of transferring administrative and clinical responsibilities for ART services to host governments and other local partners, while ensuring quality care. As a concrete example of transitioning to greater country ownership, PEPFAR U.S.-based implementing partners are shifting their emphasis from direct service delivery to strengthening capacity at national, provincial, and district levels to deliver these same services.

<u>TB/HIV integrated care and treatment</u> – The prevention and control of HIV and tuberculosis (TB) are inextricably linked, particularly in sub-Saharan Africa, home to about 80% of the world's cases of HIV/TB co-infection. Among people living with HIV, TB is the most common opportunistic infection and one of the leading causes of death. CDC staff work closely with Ministries of Health to integrate TB and HIV programs. As a result of the combined efforts of CDC, other USG agencies, multi-lateral agencies, and partner countries, the majority of TB patients are now being tested for HIV in TB clinics in Botswana, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Uganda, and Zambia.

Additionally, CDC helped to establish and continues to advise the African Centre for Integrated Laboratory Training (ACILT) in partnership with USAID, WHO, the Government of South Africa, and private sector partners. The partnership improves the quality and availability of laboratory diagnostics for integrated control of TB, HIV, malaria, and other diseases. In addition, in support of multi-drug resistant TB surveillance and patient management, CDC has, through PEPFAR, strengthened TB laboratory capacity to diagnose drug-resistant TB by introducing rapid and more sensitive diagnostic methods.

CDC also plays a lead role in linking US government strategy and WHO policy to TB/HIV integration. In 2009, CDC scientists helped develop WHO's new ART guidelines which recommend immediate HIV treatment for all HIV-positive TB patients. CDC has also provided technical input to WHO's "Three I's Strategy" for global TB control - Intensified case finding, Infection control, and Isoniazid preventive therapy. Moving forward, the Global Health Initiative presents an opportunity for CDC and other USG agencies to further accelerate TB/HIV integration.

Implement effective and evidence-based HIV/AIDS prevention programs that build synergies between prevention and care and treatment programs

CDC supports the Office OGAC's vision of strengthening prevention programs through implementation of behavioral, biomedical, and structural interventions with known efficacy at a scale,

quality, and intensity to impact the epidemic. In the absence of an HIV vaccine, we believe that an aggressive, comprehensive package of prevention interventions at scale could approach moderate vaccine efficacy.

Such a comprehensive approach relies on the synergies between prevention and care and treatment programs and includes: 1) HIV testing and counseling of all adults; 2) Counseling and repeat testing of discordant couples (where one person is HIV-infected, and the other is not); 3) Circumcision of adult HIV-negative males; 4) ART for eligible HIV-infected persons and pregnant women; 5) PMTCT for pregnant women; 6) Condom promotion, distribution, and education (including female condoms); 7) Enhanced linkages among HIV testing and counseling, male circumcision, PMTCT, and HIV treatment services; 8) Availability of safe blood through strengthened, sustainable systems; 9) Availability of safe needles; and 10) Information platforms to monitor and evaluate interventions. A modeling exercise conducted by the Futures Group has looked at the impact of combination interventions on HIV infection rates, applying sophisticated modeling techniques to a generalized, high-prevalence context, and found that infections could be cut by more than half.³ Such impact could alter the course of this epidemic.

In addition to these proven strategies, we need to study promising practices, including promoting partner reduction and delay of sexual debut, interventions to decrease intergenerational (often forced) sex, antiretroviral microbicides, and oral pre-exposure prophylaxis (PrEP). For all of these strategies, even those proven to be effective, we must conduct thorough and aggressive monitoring and evaluations and improve how we implement these interventions. Together we are committed to optimizing all proven prevention modalities while continuing our promising search for an effective vaccine.

CDC's work in program monitoring and evaluation, surveillance and epidemiology and in building the capacity of Ministries of Health in these areas has been essential to PEPFAR's effective prevention

³ Unpublished modeling data from the Futures Group

programming. By tailoring prevention interventions to the country context and characteristics of the localized epidemic and through on-going surveillance, monitoring, and evaluation, these prevention strategies can remain effective through course corrections as the epidemic evolves.

One of the key prevention areas in which CDC has played a significant role is blood safety.

CDC works with Ministries of Health to develop and strengthen national blood transfusion services (NBTS), especially in countries with a high burden of HIV. Since 2004, CDC has provided ongoing technical assistance support to 14 countries with NBTS programs, with the goal of ensuring an adequate supply of safe blood through screening for transfusion-transmissible infections (HIV, syphilis, Hepatitis B, Hepatitis C). In 13 of these countries, the NBTS reported a decrease in the percentage of collected blood units reactive for HIV between 2003 and 2009-- for example, in Botswana the percentage from 7.5% in 2003 to 2.1% in 2007. In Zambia, CDC has supported the shift from a fragmented hospital-based system to a regionalized system under the control of the country's NBTS. Zambia has also eliminated risky family replacement donations, where family members donate blood to each other without testing or other safety measures. The program has increased the number of voluntary non-compensated donations (which are at less risk for HIV reactivity) from 40,600 in 2003 to 104,000 in 2009. These achievements were made by building sustainable capacity within the health system, which will continue to benefit the health of Zambians long into the future.

Conduct, translate, and operationalize research on program impact and cost effectiveness

Through PEPFAR, unparalleled scientific innovations in evidence-based interventions, technologies, and practices in global HIV/AIDS have contributed significantly to preventing infection and providing effective care and treatment. Clinical, operations, and impact evaluation research have contributed to this scientific evidence base. CDC translates and operationalizes research to promote the use of data to make programmatic decisions and improve performance. For example, in 1999, CDC led landmark clinical trials in Thailand and Cote d'Ivoire that demonstrated the efficacy of short-course zidovudine--a relatively simple, low-cost intervention-- to reduce the risk of HIV transmission from mother to baby.

Translating this science into action, CDC worked with PEPFAR implementing agencies and Ministries of Health to scale up PMTCT, allowing nearly 340,000 babies of HIV-positive mothers to be born HIV-free through FY2009.

The 2008 reauthorization of PEPFAR recognized CDC's unique contributions, and called for an enhanced role for the agency in "carrying out and expanding program monitoring, impact evaluation research and analysis, and operations research and disseminating data and findings." To this end, our research has included analyses of program impact, efficiency, and cost effectiveness to guide program planning and decision-making. Some of these key initiatives have focused on cost-efficient care and treatment, scaled-up PMTCT services, and aggressive analysis of programmatic cost efficiencies and impact:

- The Basic Care Package A novel approach to integrating evidence-based interventions, the Basic Care Package was developed by CDC to prevent the most debilitating opportunistic infections among people living with HIV. The Basic Care Package bundles high-impact, low-cost interventions that are easy to implement, and that are tailored to the local epidemic. These interventions can include: cotrimoxazole (a powerful antibiotic preventing opportunistic infections in persons living with HIV); insecticide-treated bed nets to prevent malaria; services for the screening and management of sexually-transmitted infections; PMTCT services; counseling services; and safe water systems. The services included in the Basic Care Packages are selected based on multiple CDC research studies that demonstrate that these interventions significantly improved health outcomes while remaining cost-effective. The Basic Care Package was scaled-up in Uganda and has been replicated in all of the original 15 PEPFAR focus countries and elsewhere.
- PEPFAR's Antiretroviral Therapy Costing Project Through PEPFAR, CDC and OGAC
 have led a study of ART costing to estimate the annual per-patient cost of outpatient HIV
 treatment and associated care. The study informed planning and resource requirements for
 treatment scale-up, identified the factors that drive costs, and created projection models for

use at both country and PEPFAR-wide levels. To date, this work has been conducted at 64 HIV treatment facilities across Nigeria, Uganda, Ethiopia, Botswana, Vietnam, Mozambique, and Tanzania. CDC and OGAC are currently planning to conduct similar evaluations for Kenya, Swaziland, and Guyana. Similar analyses are also being applied to other public health intervention strategies to ensure we maximize cost effectiveness in all public health efforts.

Together with OGAC, CDC also pioneered and successfully piloted routine expenditure analysis activities across all program areas, which provide PEPFAR country teams with regular, timely information on the total USG and unit costs for delivering a service, by program activity and partner. The expenditure analysis activities facilitate better program management and identification of efficient program models. Expenditure analysis has been embraced as a central component of PEPFAR's initiative to accelerate program impact and efficiency.

Using Data for Policy Change and Improved Performance

Perhaps one of the most significant examples of CDC's work with host country governments to build sustainable public health infrastructure, strengthen health systems, and use data to affect policy has been the Kenya AIDS Indicator Survey (KAIS), released last year by the Government of Kenya.

KAIS represents a significant milestone for Kenya in strategically targeting HIV resources and programming for maximum disease impact. With PEPFAR funding and technical assistance from CDC and USAID, the Government of Kenya implemented KAIS, the most comprehensive Kenyan national surveillance effort to date. The survey included serological testing for HIV, syphilis, HSV-2 infection and CD4 cell counts among HIV-infected participants, as well as direct questions about knowledge of self and partner HIV status. HIV-infected adults who knew their HIV status were also asked whether they were receiving treatment in order to assess coverage and unmet care and treatment needs. Nearly 18,000 adults aged 15-64 years completed an individual interview, 88% of whom consented to having blood drawn.

The findings of this survey emphasize the need for more comprehensive surveillance data to monitor the HIV epidemic and to inform HIV policies and resource allocation. A comparison of 2007 KAIS estimates to results from the 2003 Kenya Demographic and Health Survey found that only one in six (16.4%) of the estimated 1.4 million Kenyan adults aged 15-64 years living with HIV infection in 2007 knew their HIV status, suggesting that roughly 84% did not. A closer look at subpopulations also revealed important demographic and geographic patterns-- while urban HIV prevalence had stabilized or even declined, the burden of HIV in rural areas had increased. Additionally, young women aged 15-24 years were four times as likely to be infected compared to young men the same age, a pattern that had not changed since 2003.

As a result of such findings, Kenya's National AIDS Control Council changed their HIV/AIDS strategy emphasizing that HIV testing must be made more accessible through approaches such as provider-initiated testing and home-based testing. KAIS findings also prompted Kenyan policymakers to call for contraceptive services for women who do not desire children, the reduction of sexual partners of unknown HIV status, and primary prevention of sexually-transmitted infections known to increase the risk of HIV. In 2009, a new Kenya National HIV/AIDS Strategic Plan was released re-aligning program interventions and services in accordance with the KAIS findings and the evolution of the Kenya HIV/AIDS epidemic.

KAIS made it abundantly clear that an effective, sustainable public health system infrastructure and comprehensive national HIV surveillance system are critical to timely course correction in policy and strategy necessary to assure maximum health impact.

HIV/AIDS Science and Research - A Growing Body of Evidence

Many U.S. Government agencies continue to make significant contributions to the body of HIV/AIDS science and research. Each agency's contribution has been complementary to and has built upon the growing arsenal in the fight against global HIV/AIDS. CDC and other agencies have conducted significant research on HIV/AIDS domestically that has translated into important gains globally. This

important work continues and has recently yielded promising results on numerous fronts. In the last year alone we have seen several advances from both domestic and international clinical researchers, including results from research on antiretroviral-based prevention and HIV vaccine research.

- Microbicide Research Announced at the XVIII International AIDS Conference in Vienna in July 2010, the results of the Center for the AIDS Program of Research in South Africa (CAPRISA) trial showed that a vaginal microbicide gel containing an antiretroviral drug could reduce the risk of transmission of HIV from men to women. The CAPRISA study—jointly funded by the Government of South Africa through the Technology Innovation Agency and by the U.S. through USAID—proved it is feasible to develop a microbicide that could empower women to protect themselves from infection. Should other studies confirm these results, widespread use of microbicide gels could have a significant impact in reducing new HIV infections.
- Pre-Exposure Prophylaxis Research As part of its commitment to developing new HIV prevention strategies, CDC is sponsoring clinical trials of pre-exposure prophylaxis (PrEP), a potential strategy for HIV-negative individuals to reduce risk of infection through use of oral antiretroviral drugs. An ongoing Phase III study in Bangkok is testing the safety and efficacy of daily tenofovir in a population of 2,400 injection drug users uninfected by HIV. CDC supports one site in a multisite randomized, double-blind, placebo-controlled study in Kenya and Uganda that is testing the safety and efficacy of daily use of either tenofovir or tenofovir plus emtricitabine among 3,900 discordant couples. CDC just completed a PrEP safety trial among men who have sex with men and is supporting an additional safety trial in heterosexual young adults in Botswana, and is participating in planning a National Institutes of Health (NIH)-funded trial of intermittent antiretroviral dosing for PrEP in men who have sex with men. Results from PrEP trials will begin to be reported at the end of 2010 and discussions have already begun to address effective strategies for combining PrEP and current prevention strategies to provide the greatest protection to individuals at risk.

- transmission, and a growing body of research supports the concept that ART can reduce HIV transmission from infected persons by lowering their viral load;. A study of discordant couples showed a 92% reduction in transmission when the infected person was on antiretroviral therapy. In the August 14, 2010 edition of *The Lancet*, Canadian researchers published a study indicating that higher uptake of antiretroviral therapy might reduce HIV transmission considerably in some populations. These complementary findings reflect the evolution of treatment as a prevention intervention-- over time, efficacy in lowering viral loads has improved and the initiation of treatment has begun earlier. Early and widespread treatment ("test and treat") is emerging as a potential component of a comprehensive prevention approach that demands further investigation. Together, efforts on microbicides, PrEP, and treatment for prevention are priority topics for research to clarify optimal use of antiretroviral therapy for individual as well as for public health.
- HIV Vaccine Research Results from the first large-scale international HIV vaccine trial RV 144
 has shown the first evidence of efficacy from an HIV vaccine candidate. This trial began in
 Thailand in 2003 as a collaborative effort among the Thai Ministry of Public Health, the U.S. Army
 Surgeon General, the U.S. Military HIV Research Program, NIH's National Institute of Allergy and
 Infectious Diseases, and the U.S. Army Medical Research and Materiel Command. This study
 shows low level but statistically significant results that the HIV vaccine regimen was safe and
 modestly effective (the rate of new HIV infections was lowered by 31.2%, compared with placebo).
 Two additional clinical studies are planned that involve providing a booster (to previous RV144
 volunteers and new volunteers) to see if this will extend and increase the immune response, and
 future studies will likely involve populations in other parts of the world with different risk factors.
 While these studies will take much longer to plan and execute, they will provide important clinical data on how to develop a more effective vaccine that could be used globally.
- Male Circumcision Research Over the past fifteen years, evidence has accumulated that demonstrates the partial protective effect of male circumcision in reducing acquisition of HIV from

an HIV-infected female sex partner. In 2005-2006, three randomized controlled trials (two NIH-led and one led by France's National Agency for AIDS and Hepatitis Research) of medically supervised male circumcision involving more than 10,000 men in sub-Saharan Africa conclusively demonstrated a 60% risk reduction for men from acquiring HIV from women. Based on the cumulative evidence, WHO and UNAIDS are promoting male circumcision as a key HIV prevention strategy in generalized epidemics. PEPFAR is playing a lead role in scaling-up male circumcision programs, with CDC contributing to the rigorous evaluation of these interventions. Similar recommendations have not been made in the United States, although evidence regarding the role of male circumcision and the prevention of HIV/AIDS is under review by researchers.

CONCLUSION

PEPFAR's critical contributions to the monumental fight against global HIV/AIDS has made a tremendous difference in the lives of millions of men, women, and children who would have otherwise suffered. CDC is proud that our unique strengths and our long experience in global health have played a critical role in these achievements. We are committed to working with our U.S. government colleagues, partner governments, and other stakeholders around the world to continue this fight. The Global Health Initiative marks the next phase in this global fight, as we use new models to effectively, efficiently, and sustainably improve health by building on the incredible successes of programs like PEPFAR.

Together with our partner governments and other leaders around the world, we have transformed communities suffering from the effects of the HIV epidemic. If we refocus our efforts, we can greatly improve HIV prevention and treatment while improving health outcomes and building sustainable health systems through the Global Health Initiative. CDC is more committed than ever to working with our partners to achieve these goals.

Thank you again for the opportunity to appear before the Committee today, and I look forward to your questions.