

## TECHNICAL ISSUE BRIEF

# CONDOM USE: HOW IT RELATES TO HIV AND STI PREVENTION

### Introduction

The U.S. Agency for International Development (USAID) has been a leader in HIV prevention and is fully committed to doing its part to make an AIDS-free generation a reality. The U.S. President's Emergency Plan for AIDS Relief's (PEPFAR's) combination HIV prevention strategy comprises a core set of interventions that, particularly when pursued in concert, provide us with the potential to end the epidemic: prevention of mother-to-child transmission (PMTCT) of HIV; antiretroviral treatment (ART) for people living with HIV; voluntary medical male circumcision for HIV prevention; and HIV testing and counseling (HTC), condoms and other evidence-based prevention activities.

Condom use is a critical element in a comprehensive, effective and sustainable approach to HIV across the continuum of response to all HIV epidemic types.

### The Effectiveness of Condoms in Preventing HIV and Sexually Transmitted Infections

While no barrier method is 100 percent effective, correct and consistent use of latex condoms can reduce the risk of transmission of HIV, some other sexually transmitted infections (STIs) and unintended pregnancy. The use of condoms has been an important and successful intervention in many places for sexually active people, particularly when targeted at commercial and other casual sexual encounters.

*Correct and consistent use of condoms can aid in the prevention of HIV and AIDS, other STIs and unintended pregnancy.*

### HIV

While laboratory research has demonstrated that latex condoms provide an essentially impermeable barrier to particles comparable in size to or smaller than STIs, including HIV, studies have shown that correct and consistent use is essential to realize the full benefits provided by condoms in reducing the risk of HIV infection. The body of research demonstrating the effectiveness of latex condoms in reducing sexual transmission of HIV is both comprehensive and conclusive.

In heterosexual serodiscordant relationships in which condoms were consistently used, HIV-negative partners were 80 percent less likely to become infected compared with persons in similar relationships in which condoms were not used. However, failure to use condoms correctly with every act of intercourse has been shown to increase the risk of HIV transmission.



An educator demonstrates female condoms with students from the University of Yaoundé, Cameroon.

ASSOCIATION CAMEROUNAISE POUR LE MARKETING SOCIAL (ACMS)

### Other STIs

Condoms serve as a barrier that can protect both genders from exposure to genital secretions that transmit HIV and STIs. Gonorrhea, chlamydia and trichomoniasis, like HIV, are transmitted by genital secretions. Scientific studies have shown that latex condoms, when used consistently and correctly, can reduce the risk of gonorrhea and chlamydia infections in both women and men.

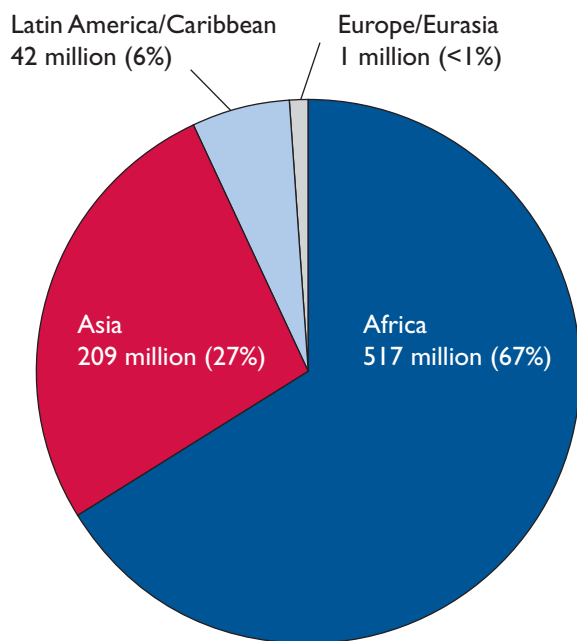
Genital ulcer diseases (such as genital herpes, syphilis and chancroid) and human papillomavirus (HPV), which is the main cause of cervical cancer, are transmitted primarily through contact with sores/ulcers or with infected skin in areas that may or may not be covered by a condom. Recent studies have shown that correct and consistent condom use reduces the risk of herpes, syphilis, chancroid and HPV only when the infected area or site of potential exposure is protected by a condom.

Additional research is needed to assess more accurately the degree of risk reduction latex condoms can provide to women and men for trichomoniasis and other STIs transmitted by genital secretions as well as whether and to what degree latex condoms may reduce the risk of acquiring the few types of HPV that are associated with cervical cancer.

### Providing Condoms Worldwide

USAID has provided commodities for family planning and reproductive health activities since the mid-1970s and for HIV prevention since the 1980s. Since then, contraceptive and condom use rates around the world have increased, in part thanks to USAID

## Condom Shipment Quantities by Region, FY 2012



and other international donors. However, the need for foreign assistance continues to grow, and in the FY 2012, USAID continued to respond to this need by providing condoms and other reproductive health commodities to countries in four of the Agency's five regions: Africa, Asia, Europe and Eurasia and Latin America and the Caribbean.

USAID has developed an operational plan for its HIV and AIDS strategy. One aspect of this plan includes a Commodity Fund to centrally finance male and female condoms for nonfocus PEPFAR countries' HIV and AIDS programs and ensure their expedited delivery to countries. Through this fund, USAID has made male and female condoms and lubricants available to dozens of countries at little or no cost.

In FY 2012, the value of USAID condom shipments worldwide reached \$33.3 million. Shipments reached 37 countries in Africa, Asia, Europe and Eurasia and Latin America and the Caribbean.

### USAID's Development Approach to Condom Promotion

USAID-funded condom programs assist countries in articulating a strategy for condom programming that addresses key supply and demand issues related to increasing condom use. USAID condom programs have adopted a Total Market Approach to condom programming. A Total Market Approach engages the public, social marketing and private sectors in segmenting condom distribution and promotion according to income level, and in planning for increased sustainability of condom programming by reducing reliance on donor subsidies. Within a Total Market Approach, "free" public sector condoms will primarily be distributed to population segments lacking disposable income and those most at risk of HIV transmission or acquisition. Socially marketed condoms are sold to individuals

with some ability to pay but who are not yet able to afford a more expensive, private sector condom, while private sector condoms are available to higher income segments of the population.

When possible, social marketing programs adopt a phased process of gradually increasing cost recovery of social marketing products while simultaneously working with the private sector to improve the market share of sustainable, private sector condoms.

USAID-funded condom programs distribute high-quality condoms through traditional outlets, such as health clinics and pharmacies, and through nontraditional outlets, such as kiosks, bars, hotels and brothels.

USAID-funded condom programs include programs to create demand for condoms as experience has demonstrated that these can increase condom sales and use. USAID programs design high-quality behavior change communication and social marketing campaigns based on evidence-based theories relevant to a given setting and target population. For demand creation among sub-groups, programs use a variety of formats, from individual to peer to community behavior change interventions. In general, multiple channels are deployed to reinforce key messages and in generalized epidemics, to ensure that all people receive motivational messaging to use condoms.

### Female Condoms

The female condom, a woman-initiated contraceptive, was first launched by the Female Health Company (FHC) in 1993 as the FC1, or the Reality FC. Since then, it has undergone changes, and FHC released the second generation of female condoms, the FC2. This less expensive and more user-friendly redesigned female condom was approved for U.S. marketing by the U.S. Food and Drug Administration in March 2009. The FC2 has been reviewed by many agencies and, in 2006, the World Health Organization (WHO) recommended the FC2 to be purchased by U.N. agencies.

The FC2 should provide the same level of protection from HIV, STIs and unintended pregnancy as male condoms, with some advantages. Female condoms give women more control in a sexual relationship, as it can be inserted up to 8 hours before intercourse. It offers more protection than a male condom because it covers both internal and some parts of the external genitalia. Men may also find it more comfortable because there is less of a decrease in sensation than with the male latex condom.

FHC created the FC2 from synthetic nitrile, as opposed to polyurethane like the FC1, to reduce cost and maintain effectiveness. In many parts of the world, the original FC was found to be too costly, and the FC2 is 30 percent less expensive. A more affordable female condom allows for increased accessibility. However, it is still 16 to 20 times more expensive than the male latex condom. Since 2007, USAID has distributed more than 66.9 million female condoms.

### Condom-Compatible Lubricant

Condom-compatible lubricant reduces the risk of condom breakage during sexual intercourse. Self-reported condom breakage

# Social Marketing of Male and Female Condoms in Zimbabwe



## BACKGROUND

The HIV epidemic has taken its toll on Zimbabwe. UNAIDS estimated a 13.1 percent HIV prevalence rate among adults in 2011. Currently, there are roughly 1,159,000 adults and children living with HIV and AIDS in Zimbabwe. HIV transmission is predominately sexually driven, accounting for over 90 percent of new infections. In 2010, low-risk sex among the general population contributed to 57.6 percent of all new infections. A majority of new infections occur among 20 to 29 year olds.

Despite presently having one of the highest HIV prevalence rates worldwide, HIV prevalence rates have declined considerably from a high of 23.7 percent in 2001. This decline has been attributed to a number of factors, including the successful implementation of behavior change prevention strategies resulting in high condom use and a reduction in multiple sexual partners.

## PROTECTOR PLUS CONDOMS

The Protector Plus condom, introduced in 1997, is the premiere brand of male condom in Zimbabwe due to the social marketing campaign of a USAID-funded partner, Population Services International (PSI). Protector Plus sales increased from approximately 9.2 million in 2000 up to a high of approximately 70 million in 2008. In 2012, roughly 90 million male condoms were distributed through the public sector and social marketing distribution system combined. In 2013, for many Zimbabweans the term “Protector Plus” is synonymous with “condom” due to PSI’s intensive brand marketing efforts.

## DELIVERY TEAM TOPPING-UP (DTTU) SYSTEM

To ensure availability of condoms and other contraceptives in public and nongovernmental organization facilities, the Government of Zimbabwe, supported by the USAID | DELIVER PROJECT, implemented the Delivery Team Topping-Up (DTTU) system in 2003. Based on past consumption patterns, DTTU delivery trucks are filled with a predetermined quantity of a product and driven to each health facility. DTTU staff then calculates current consumption and then tops up inventory at each facility with quantities needed until next delivery. The DTTU system services over 1,600 facilities that include hospitals, clinics, youth centers, and mines, and uniformed services. Coverage of male condom distribution through the DTTU system is about 99.8 percent of recipients, resulting in stockouts of male condoms that are below 1 percent.

## FEMALE CONDOMS & HAIR DRESSERS

PSI’s hair salon initiative, launched in 2001, has since recruited over 1,500 hair dressers to educate women on condom use, with a specific focus on the female condom. Based on research showing that approximately 97 percent of Zimbabwean women visit a hair salon at least once a month and that 49 percent visit a salon at least once a week, and that women often visit the same stylist, this initiative utilizes the strong customer-client personal relationship to discuss sensitive issues, including contraception and HIV prevention in a popular yet safe environment. The initiative has helped to demystify the female condom by allowing clients to touch and feel the product, see product demonstrations, discuss condom negotiation techniques, and an opportunity to ask personal questions. Research shows that women who are exposed to product demonstrations are 2.5 times more likely to use the female condom than those who are not exposed. Sales of female condoms through PSI’s social marketing increased from about 900,000 in 2005 to more than 2.1 million in 2009. Simultaneously, female condom distribution through the public sector increased sixfold from about 400,000 in 2005 to more than 2.5 million in 2009.

during anal intercourse was found by Golombok, Harding & Sheldon (2001) to be 21.4 percent when lubricant was not used versus 3 percent when used. For vaginal intercourse, the association in condom breakage was smaller and only seen with condoms older than 1 year from 4.5 percent down to 2.1 percent (Steiner M, et al., 1994). Other studies have found no effect.

Condom-compatible lubricants consist of silicone and water-based lubricants that are manufactured for use with condoms. Lubricants that are not compatible, for example baby oil, palm/coconut oil,

cooking oil and petroleum jelly, contribute significantly to increase risk of condom failure.

Since condom-compatible lubricants improve lubrication, moisture and comfort during intercourse, condom-compatible lubricants could potentially reduce vaginal and anal trauma, further reducing opportunity for infection.

Recently, some laboratory and animal studies have indicated that some lubricants may cause cell inflammation and affect tissues in

the vagina and rectum, raising the possibility that some lubricants might make individuals more vulnerable to HIV infection and other STIs. It is important to note that none of these studies were done as part of randomized controlled trials in humans, and it remains unclear whether these studies have any implication for the safety of lubricants in humans.

For now, the available evidence clearly suggests that use of water-based lubricants with condoms during anal sex should be strongly encouraged. More research is urgently needed to explore if there is a link between lube use and acquiring HIV and STIs in the absence of a condom.

USAID has supplied condom-compatible lubricant through the Central Contraceptive Procurement project since 2008 at a cost to USAID of 0.045¢ per packet.

### Combination Protection

Given sustained high rates of HIV infection in southern Africa, in conjunction with continuing challenges in microbicide and vaccine development, it is necessary to reassess current condom promotion strategies. The international community, led by UNAIDS, has advocated for widespread scale-up of combination prevention, which includes structural, behavioral and biomedical interventions. Therefore, condom promotion must be reconceptualized as a key component of a larger package of services that addresses medical male circumcision, PMTCT, provision of ART, HTC and the promotion of correct and consistent use of condoms.

### Seeing Results

#### Cambodia

The potential impact of condom promotion on the spread of HIV has been demonstrated in Southeast Asian countries where commercial sex work has contributed substantially to new HIV infections. In recent years, several countries have succeeded in increasing consistent condom use among commercial sex workers and their clients. By promoting 100 percent condom use in brothels, Cambodia has seen a significant reduction in HIV prevalence from a high of 1.5 percent in 1998 to 0.6 percent in 2011.

To ensure that all Cambodians have access to high-quality condoms, USAID, in conjunction with the British Department for International Development, has partnered with Population Services International (PSI) to distribute socially marketed condoms at 1/4th the cost of privately manufactured and distributed condoms. Condoms are now available throughout Cambodia's pharmacies, guesthouses and entertainment venues.



© 2004 REBECCA CALLAHAN, COURTESY OF PHOTOSHARE

Women in Nepal receive a condom demonstration.

In 2008, USAID launched an outreach program where male peer educators engage male clients of sex workers attending beer gardens and other high-risk settings in 5-minute discussions about HIV and AIDS and sexual health. The program has reached over 350,000 men, and since its inception, consistent condom use has dramatically increased.

#### Malawi

Chishango, meaning "shield" in the local language, is the premier brand of condoms in Malawi due to the social marketing campaign of USAID-funded partner PSI. Chishango sales have increased from approximately 1 million in 1994, when first launched, to 8.7 million in 2009. This growth occurred simultaneously with an increased distribution of free condoms, which barely existed in the 1990s, to more than 12 million in 2009.

With USAID funding, PSI/Malawi targets key populations (men who have sex with men and sex workers) and other vulnerable populations in 20 priority prevention areas with the goal of reducing high-risk sexual behaviors as well as increasing uptake of condoms. To meet this goal, PSI/Malawi has implemented a Rapid Outlet Creation (ROC) initiative, allowing any commercial outlet within a priority prevention area to sell socially marketed condoms. Outlets include bars, hotels, lodges and night clubs. It is estimated that there are now 1,928 outlets selling condoms within priority prevention areas. As a result of PSI's social marketing efforts, Chishango has become the preferred brand of condoms in Malawi.

September 2013