# **ABC Guidance #1**

For United States Government In-Country Staff and Implementing Partners Applying the ABC Approach To Preventing Sexually-Transmitted HIV Infections Within The President's Emergency Plan for AIDS Relief



The President's Emergency Plan for AIDS Relief Office of the U.S. Global AIDS Coordinator

**Final** 

#### Introduction

With the President's Emergency Plan for AIDS Relief U.S. Five-Year Global HIV/AIDS Strategy as its starting point, this document provides further guidance on implementing the "ABC" - Abstinence, Be Faithful, and correct and consistent Condom use—approach to HIV/AIDS prevention, including definitions, implementation considerations, and clarification of activities the Emergency Plan will fund.

To limit the progression of the HIV/AIDS pandemic, there must be a dramatic reduction in new infections. The Emergency Plan is committed to evidence-based best practices in prevention interventions to achieve the Plan's prevention objectives. Interventions in countries such as Kenya, the Dominican Republic, Thailand, Cambodia, and most notably, Uganda, indicate that promoting behaviors aimed at risk avoidance and risk reduction will likely avert the largest proportion of new infections and reduce the spread of HIV. <sup>1,2</sup>

The measurable declines achieved through local behavior change efforts in these countries, and elsewhere, highlight another commitment of the Emergency Plan—that interventions be informed by, and responsive to, local needs, local epidemiology, and distinctive social and cultural patterns, as well as coordinated with the HIV/AIDS strategies of host governments. It is with these two principles in mind that the Emergency Plan applies the ABC approach in its HIV prevention strategy.

## **Defining the ABC Approach**

The ABC approach employs population-specific interventions that emphasize abstinence for youth and other unmarried persons, including delay of sexual debut; mutual faithfulness and partner reduction for sexually active adults; and correct and consistent use of condoms by those whose behavior places them at risk for transmitting or becoming infected with HIV. It is important to note that ABC is not a program; it is an approach to infuse throughout prevention programs. The ABC approach is distinctive in its targeting of specific populations, the circumstances they face, and behaviors within those populations for change. This targeted approach results in a comprehensive and effective prevention strategy that helps individuals personalize risk and develop tools to avoid risky behaviors under their control.

**Abstinence** programs encourage unmarried individuals to abstain from sexual activity as the best and only certain way to protect themselves from exposure to HIV and other sexually transmitted infections. Abstinence until marriage programs are particularly important for young people, as approximately half of all new infections occur in the 15- to 24-year-old age group.<sup>3</sup> Delaying first sexual encounter can have a significant impact on the health and well-being of adolescents and on the progress of the epidemic in communities.<sup>4</sup> In many of the countries hardest hit by HIV/AIDS, sexual activity begins early and prior to marriage. Surveys show that, on average, slightly more than 40 percent of women in sub-Saharan Africa have had premarital sex before age 20; among young men, sex before marriage is even more common. <sup>5</sup> A significant minority of youth experience first sex before age 15. Internationally, a number of programs have proven successful in increasing abstinence until marriage, delaying first sex, and achieving "secondary

abstinence"—returning to abstinence—among sexually experienced youth. These programs promote the following:

- Abstaining from sexual activity as the most effective and only certain way to avoid HIV infection;
- The development of skills for practicing abstinence;
- The importance of abstinence in eliminating the risk of HIV transmission among unmarried individuals;
- The decision of unmarried individuals to delay sexual debut until marriage; and
- The adoption of social and community norms that support delaying sex until marriage and that denounce cross-generational sex; transactional sex; and rape, incest, and other forced sexual activity.

Be faithful programs encourage individuals to practice fidelity in marriage and other sexual relationships as a critical way to reduce risk of exposure to HIV. Once a person begins to have sex, the fewer lifetime sexual partners he or she has, the lower the risk of contracting or spreading HIV or another sexually transmitted infection. Some of the most significant gains in Uganda's fight against HIV are a result of specific emphasis on, and funding of, programs to promote changes in behavior related to fidelity in marriage, monogamous relationships, and reducing the number of sexual partners among sexually active unmarried persons.<sup>6,7</sup> Uganda's President Museveni, along with local religious groups and other NGOs, promoted a consistent message of partner reduction and fidelity, which contributed to a significant decline in the number of sexual partners among both men and women in Uganda. Between 1989 and 1995 the proportion of men who reported one or more "casual" partners in the past year fell from 35 percent to 15 percent; the proportion of women with one or more casual partners in the past year fell from 16 percent to 6 percent, and the proportion of men reporting 3 or more "non-regular" partners in past year fell from 15 percent to 3 percent. This significant level of behavior change contributed to a reduction in estimated adult HIV prevalence in Uganda from 15 percent in the early 1990s to about 4 percent today. Be faithful programs promote the following:

- The elimination of casual sexual partnerships;
- The development of skills for sustaining marital fidelity;
- The importance of mutual faithfulness with an uninfected partner in reducing the transmission of HIV among individuals in long-term sexual partnerships;
- HIV counseling and testing with their partner for those couples that do not know their HIV status;
- The endorsement of social and community norms supportive of refraining from sex outside of marriage, partner reduction, and marital fidelity, by using strategies that respect and respond to local cultural customs and norms; and
- The adoption of social and community norms that denounce cross-generational sex; transactional sex; and rape, incest, and other forced sexual activity.

**Correct and consistent Condom use** programs support the provision of full and accurate information about correct and consistent condom use reducing, but not eliminating, the risk of HIV infection; and support access to condoms for those most at risk for transmitting or becoming infected with HIV. Behaviors that increase risk for HIV transmission include engaging in casual

sexual encounters, engaging in sex in exchange for money or favors, having sex with an HIVpositive partner or one whose status is unknown, using drugs or abusing alcohol in the context of sexual interactions, and using intravenous drugs. Women, even if faithful themselves, can still be at risk of becoming infected by their spouse, regular male partner, or someone using force against them. Other high-risk persons or groups include men who have sex with men and workers who are employed away from home. Existing research demonstrates that the correct and consistent use of condoms significantly reduces, but does not eliminate, risk of HIV infection. Studies of sexually active couples for example, in which one partner is infected with HIV and the other partner is not, demonstrate that latex condoms provide approximately 80-90 percent protection, when used consistently. 9,10,11 To achieve the protective effect of condoms, people must use them *correctly and consistently, at every sexual encounter*. Failure to do so diminishes the protective effect and increases the risk of acquiring a sexually transmitted infection (STI) because transmission can occur with even a single sexual encounter. Latex condoms, when used consistently and correctly, are highly effective in preventing transmission of HIV. In addition, correct and consistent use of latex condoms can reduce the risk of other sexually transmitted diseases (STDs), including gonorrhea, chlamydia, and genital ulcer diseases. <sup>12</sup> While the effect of condoms in preventing human papillomavirus (HPV) infection is unknown, condom use has been associated with a lower rate of cervical cancer. Persistent infection with "high-risk" types of HPV is the main risk factor for cervical cancer. Condom use programs promote the following:

- The understanding that abstaining from sexual activity is the most effective and only certain way to avoid HIV infection;
- The understanding of how different behaviors increase risk of HIV infections;
- The importance of risk reduction and a consistent risk-reduction strategy when risk elimination is not practiced;
- The importance of correctly and consistently using condoms during every sexual encounter with partners known to be HIV-positive (discordant couples), or partners whose status is unknown;
- The critical role of HIV counseling and testing as a risk-reduction strategy;
- The development of skills for obtaining and correctly and consistently using condoms, including skills for vulnerable persons; and
- The knowledge that condoms do not protect against all STIs.

## Implementing the ABC Approach

Overarching Considerations

Effective implementation of the ABC approach requires careful evaluation of risk behaviors that fuel local epidemics. Although prevention interventions are most successful when locally driven and responsive to local cultural values, epidemiological evidence can identify risky behaviors within populations and guide specific behavioral messages. For example, in some communities, as many as 20 percent of girls aged 15 to 19 are infected, compared to 5 percent of boys the same age. Coupled with high prevalence among older men, such data can point to transmission that is fueled by cross-generational sex. Prevention approaches must then address the risks of cross-generational and transactional sex through abstinence programs for youth and be faithful

programs for men that foster collective social norms that emphasize avoiding risky sexual behavior. 16

Every country program must include all three elements of the "ABCs," promoted strategically to appropriate populations and drivers of disease. Thus, the optimal balance of ABC activities will vary across countries according to the patterns of disease transmission, the identification of core transmitters (i.e., those at highest risk of transmitting HIV), cultural and social norms, and other contextual factors.<sup>17</sup> In addition, prevention messages are most effective when they are accurate and consistent, and all implementing partners must harmonize them at the community level. The A, B, and C components must not undermine or compete with each other, and therefore program partners must not disseminate incorrect information about any health intervention or device. Implementing partners must not promote condoms in a way that implies that it is acceptable to engage in risky sex. Whenever condoms are discussed, information about them must be accurate and not misleading, and must include both the public health benefits and failure rates of condoms as they apply to preventing HIV and other diseases. Likewise, abstinence and faithfulness programs and messages must be medically sound and based on best practices that indicate effectiveness.

Emergency Plan funds may be used for abstinence and/or be faithful programs that are implemented on a stand-alone basis. For programs that include a "C" component, information about the correct and consistent use of condoms must be coupled with information about abstinence as the only 100 percent effective method of eliminating risk of HIV infection; and the importance of HIV counseling and testing, partner reduction, and mutual faithfulness as methods of risk reduction. As stated above, ABC must be balanced at the portfolio level, i.e. all three components must be represented in the country's prevention strategy, but individual programs must be appropriately designed to meet the needs of the target audience.

## Priority Interventions: Abstinence and Behavior Change for Youth

Young people are the most important asset to any community or nation. Protecting them from contracting HIV is unquestionably one of the most important missions of the Emergency Plan. Young people who have not had their sexual debut must be encouraged to practice abstinence until they have established a lifetime monogamous relationship. For those youth who have initiated sexual activity, returning to abstinence must be a primary message of prevention programs. Implementing partners must take great care not to give a conflicting message with regard to abstinence by confusing abstinence messages with condom marketing campaigns that appear to encourage sexual activity or appear to present abstinence and condom use as equally viable, alternative choices. Thus, marketing campaigns that target youth and encourage condom use as the primary intervention are not appropriate for youth, and the Emergency Plan will not fund them. (For this same reason, Emergency Plan funds may not be used to actively promote or provide condoms in school settings, but may be used in schools to support programs that deliver age-appropriate "ABC" information for youth.) This means the following:

1. For 10-to-14-year-olds, the Emergency Plan will fund age-appropriate and culturally appropriate "AB" programs that include promoting (1) dignity and self-worth; (2) the importance of abstinence in reducing the transmission of HIV; (3) the importance of

- delaying sexual debut until marriage; and (4) the development of skills for practicing abstinence.
- 2. For older youth (above age 14) the Emergency Plan will fund ABC programs that promote (1) dignity and self worth; (2) the importance of abstinence in reducing the transmission of HIV; (3) the importance of delaying sexual activity until marriage; (4) the development of skills for practicing abstinence, and where appropriate, secondary abstinence; (5) the elimination of casual sexual partnerships; (6) the importance of marriage and mutual faithfulness in reducing the transmission of HIV among individuals in long-term relationships; (7) the importance of HIV counseling and testing; and (8) provide full and accurate information about correct and consistent condom use as a way to significantly reduce—but not eliminate—the risk of HIV infection for those who engage in risky sexual behaviors.

It must be recognized that certain young people will, either by choice or coercion, engage in sexual activity. In these cases an integrated "ABC" approach is necessary. When individual students are identified as engaging in or at high risk for engaging in risky sexual behaviors, they should be appropriately referred to integrated "ABC" programs. Such programs should have the following characteristics: (1) be located in communities where youth engaging in high-risk behaviors congregate; (2) be coordinated with school-based abstinence programs so that high risk in-school youth can be easily referred, and (3) be targeted to specific high-risk individuals or groups (i.e. not involve the marketing of condoms to broad audiences of young people). Again, for programs that include a "C" component, information about correct and consistent use of condoms must be coupled with information about abstinence as the only 100 percent effective method of eliminating risk of HIV infection; and the importance of HIV counseling and testing, partner reduction, and mutual faithfulness as methods of risk reduction. In summary:

- 1. Emergency Plan funds may be used in schools to support programs that deliver age-appropriate "AB" information to young people age 10-14;
- 2. Emergency Plan funds may be used in schools to support programs that deliver ageappropriate "ABC" information for young people above age 14;
- 3. Emergency Plan funds may be used to support integrated ABC programs that include condom provision in out-of-school programs for youth identified as engaging in or at high risk for engaging in risky sexual behaviors;
- 4. Emergency Plan funds may not be used to physically distribute or provide condoms in school settings;
- 5. Emergency Plan funds may not be used in schools for marketing efforts to promote condoms to youth; and
- 6. Emergency Plan funds may not be used in any setting for marketing campaigns that target youth and encourage condom use as the primary intervention for HIV prevention.

Priority Interventions: Promoting Healthy Norms and Behaviors

Communities must mobilize to address the norms, attitudes, values, and behaviors that increase vulnerability to HIV, including the acceptance or tolerance of multiple casual sex partnerships,

cross-generational and transactional sex, forced sex, the unequal status of women, and the sexual coercion and exploitation of young people. To stimulate such mobilization, there is an urgent need to help communities identify the ways in which they contribute to establishing and reinforcing norms that contribute to risk, vulnerability, and stigma, and to help communities identify interventions that can change norms, attitudes, values, and behaviors that increase vulnerability to HIV. In addition, mobilization and change are most likely when messages are reinforced through a variety of fora; social and cultural networks; leaders and personal relationships, including parents, grandparents, religious and other leaders, and peers.

Emergency Plan funds can be used to support activities that will generate public discussion and problem solving about harmful social and sexual behaviors through a variety of means at both the community and national levels. Suggested activities include the following:

- 1. Educating parents to improve parent-child communication on HIV, sexuality, and broader issues such as limit-setting through parent-teacher groups, local associations, and faith-based groups;
- 2. Training local religious and other traditional leaders in HIV concerns and supporting them in publicizing the risks of early sexual activity, sex outside of marriage, multiple partners, and cross-generational sex;
- 3. Supporting youth-led community programs to help youth, their parents, and the broader community personalize the risk associated with early sexual activity, sex outside of marriage, multiple partnerships, and cross-generational sex;
- 4. Supporting media campaigns that reinforce and make abstinence, fidelity, partner reduction, HIV counseling and testing, and other safer behaviors legitimate options and standards of behavior for both youth and adults;
- 5. Developing and training mentors for youth who lack sufficient parental or other adult supervision, including training in messages for HIV prevention;
- 6. Organizing campaigns and events to educate local communities about sexual violence against youth and strengthen community sanctions against such behaviors;
- 7. Implementing workplace programs for older men to stress male sexual and familial responsibility, and school-based programs for younger males to provide education about preventing sexual violence;
- 8. Promoting the use of testing and counseling services, including developing innovative strategies to encourage and increase HIV testing, such as routine testing where appropriate;
- 9. Training health care providers, teachers, and peer educators to identify, counsel, and refer young victims of rape, incest, or other sexual abuse for other health care; and
- 10. Coordinating with governments and NGOs to eliminate gender inequalities in the civil and criminal code and enforce existing sanctions against sexual abuse and sexual violence.

Priority Interventions: Prevention of HIV Infection in the Most At-Risk Populations

Following the ABC model, and recognizing that correct and consistent condom use is an essential means of reducing, but not eliminating, the risk of HIV infection for populations who engage in risky behavior, the Emergency Plan will fund those activities that target at-risk populations with specific outreach, services, comprehensive prevention messages, and condom information and provision. As defined above, these populations include sex workers and their clients, sexually active discordant couples or couples with unknown HIV status, substance abusers, mobile male populations, men who have sex with men, people living with HIV/AIDS, and those who have sex with an HIV-positive partner or one whose status is unknown.

Some of the populations most affected by HIV/AIDS are also the most difficult to reach through conventional health care programs. Sex workers and their clients, men who have sex with men, and injecting drug users have the least access to basic health care. These populations are generally at higher risk of infection and in greatest need of prevention services. The experiences of Thailand, Cambodia, the Dominican Republic, Senegal, and other countries illustrate that targeted efforts to promote correct and consistent condom use with specific high-risk groups can prevent concentrated epidemics from maturing into generalized epidemics. In generalized epidemics, such targeted approaches remain crucial but must be augmented by balanced ABC approaches that can reach broader audiences in order to provide information to those who may be having sex with a partner whose status is unknown.

First and foremost, the Emergency Plan will support approaches directed at ending risky behavior. In addition, the Emergency Plan supports effective new approaches to serve groups at high risk through a combination of the following:

- 1. Interpersonal approaches to behavior change, such as counseling, mentoring, and peer outreach;
- 2. Community and workplace interventions to eliminate or reduce risky behaviors;
- 3. Initiatives to promote the use of testing and counseling services, including developing innovative strategies to encourage and increase HIV testing, such as routine testing where appropriate;
- 4. Promoting and supporting substance abuse prevention and treatment targeting HIV-infected individuals;
- 5. Promoting a comprehensive package for sex workers and other high-risk groups, including HIV counseling and testing, STI screening and treatment, targeted condom promotion and distribution, and other risk reduction education;
- 6. Promoting correct and consistent condom use during high-risk sexual activity; and
- 7. Media interventions with specially tailored messages appropriately targeted to specific populations.

#### Conclusion

Prevention activities under the Emergency Plan will be driven by best practices, sensitivity to the dynamics of the local epidemic, and the national strategy of host governments. Therefore, the Emergency Plan will use the ABC approach for prevention of the sexual transmission of HIV. Technical assistance is available to support the implementation of ABC programs. By strengthening our prevention efforts, the Emergency Plan will support the efforts of the nations

in which we work to prevent HIV infection and preserve health and families as, together, we turn the tide against HIV/AIDS.

## **Appendix: Determining the Appropriate Mix of ABC Interventions**

To identify the most strategic prevention interventions, countries must first gain an understanding of the types and degrees of risk behavior that fuel the epidemic locally. It is recommended that countries develop their prevention strategies through a two-step situation analysis that addresses questions of "who is doing what, with whom, where, and why."

In the first step, available epidemiological data should be applied to estimate the proportion of new infections that are associated with specific behaviors such as prostitution, early onset of sexual activity among youth, transmission through sexual networks, etc. Efforts should be made to review prevalence data available through national serosurveys, antenatal clinic surveillance, and/or voluntary counseling and testing clinics, to assess different infection burdens by age and by gender. For example, high HIV prevalence among young women, and among older men, may point to transmission that is fueled by cross-generational sex. Population-level surveys featuring behavioral indicators, such as demographic health surveys and behavioral surveillance surveys should also be carefully reviewed to assess the extent to which certain types of behaviors represent important opportunities for preventing new infections. In Botswana, for example, reported levels of condom use are quite high, but so are reported numbers of concurrent sex partners, suggesting that approaches emphasizing partner reduction could have strategic benefits over those that prioritize additional condom promotion.

It is recommended that this first step produce information relevant to each of the following considerations:

- Who are the core transmitters?
- What are the specific behaviors through which HIV is transmitted?
- What are the specific behaviors that represent the most strategic targets for averting new infections?
- What are some of the specific prevention/intervention needs of women, youth, and "vulnerable" populations?
- What are some of the specific prevention/intervention needs of people living with HIV/AIDS (PLWHAs)?
- How can the "ABCs" be applied appropriately? (Note: ABC must be balanced at the
  portfolio level, i.e. all three components must be represented in the country's prevention
  strategy, but individual programs must be appropriately designed to meet the needs of the
  target audience.)
- What are the priorities for abstinence?
- Partner reduction is a critical behavioral determinant in many cases; how is it being addressed?
- In what circumstances are condoms critical?

Having identified these behavior change priorities, the second step should seek to understand more specifically who is engaging in risk-related activities, where to reach these people, and what individual and structural factors could be leveraged to promote change. Participatory and/or rapid assessment approaches, employing qualitative and/or quantitative methods, can help to characterize transmission risk among specific groups or in specific settings. In addition, one

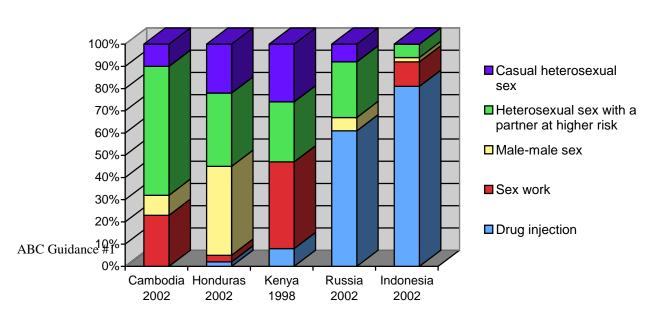
of the most important components of this step involves developing a better sense of the supporting environment for specific kinds of initiatives and prevention opportunities. Many of the interventions that are believed to have contributed to Uganda's success originated from pre-existing structures, organizations, and networks. This type of information is often collected through observation and experience, but reviewing local media and conducting strategic interviews with key local and national stakeholders from a variety of backgrounds can help to generate a good picture of the supporting environment. Some other critical questions to consider in this stage include:

- What is national political, social, and cultural leadership saying or doing (or not) about AIDS and about behavior change and prevention?
- What networks or institutions are engaged (or not) in HIV prevention? (Schools, churches, NGOs, local government units, workplaces, etc.)
- What are community leaders doing or saying (or not) about HIV prevention?
- How is information about HIV/AIDS being shared within personal networks? Are people talking about HIV/AIDS? To what extent does stigma present a barrier to effective action?
- What are the gender inequities that foster the spread of HIV?
- What are the other social inequities and local practices that foster the spread of HIV?
- How is the media treating HIV prevention and behavior change?
- What additional issues are impacting the country and its HIV epidemic (e.g. war, famine, refugees, other diseases)?
- How are local experts engaged in assessing the supporting environment, including women and PLWHA?

These diagnostic questions are all critical for empowering a grassroots/community-level response to the epidemic. U.S. missions should collaborate with local experts to foster a local perspective that is culturally appropriate and sensitive. Creating a strong community-level response will aid rapid scale-up and ensure long-term sustainability.

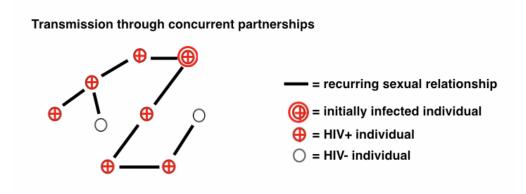
## ABC and Local Transmission Dynamics

Program planners should recognize that the relative prevention benefits associated with "A", "B" and "C" programs will vary across epidemic contexts with differing transmission dynamics. In the absence of this recognition, programmers risk responding to a "generalized" epidemic with a



"generalized" response – one that lacks strategic focus in terms of both its target audiences and its behavioral objectives. This point is illustrated in the following figure, which highlights large differences in the types of exposures that are significantly contributing to new infections in five countries. The transmission dynamics that contribute to infection across these different "exposure" types helps to highlight the strategic benefits of prioritizing different ABC objectives in different settings.

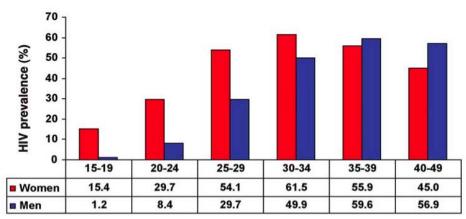
In the majority of the Emergency Plan focus countries, a large proportion of new HIV infections is attributable to heterosexual transmission fueled by casual sex and concurrent partnerships. Whether or not an HIV epidemic escalates depends on the existence of secondary networks that facilitate further HIV transmission to individuals who may not have direct contact with perceived "high-risk" partners.<sup>21</sup>



This diagram illustrates how the efficiency of HIV transmission is dramatically increased in the presence of frequent sexual contact if such contacts are "concurrent" (overlapping). Since population-level survey data from many countries indicates that regular and "low-risk" (marital or cohabitating) partnerships have low levels of condom use, the "B" or partner reduction component of the ABC approach in a "generalized" epidemic is especially important. <sup>6,16</sup>

A lesson learned from successful country programs is that the most effective prevention interventions are ones that focus on changing the specific behaviors likely to avert the largest proportion of new infections.<sup>2,19</sup> In other words, the selection of intervention activities cannot be divorced from identifying the most strategic behavior change objectives at a country level, and country programs should not simply devote funding to generic behavior change activities in categories such as school programs, community-based programs, and mass media. The figure below depicts age and gender-specific HIV prevalence in Botswana and illustrates why activities must be associated with prioritized behavioral objectives. From the figure one can conclude that programs to reduce new infections in young women should focus on promotion of abstinence among young females, on reducing cross-generational sexual relationships, and on encouraging faithfulness and correct and consistent condom use among older males.

HIV prevalence by age group among men and women aged 15-49. Tebelopele VCT Centres, 2003, Botswana\*



<sup>\*2003</sup> data through to 30th September only

For More Information

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# References:

- 1. Green E. Rethinking AIDS Prevention. Westport, Ct: Praeger, 2003.
- 2. Pisani E, Garnett GP, Grassly NC, et al. Back to basics in HIV prevention: focus on exposure. BMJ 2003;326:1384-87 (bmj.bmjjournals.com/cgi/content/full/326/7403/1384).
- 3. UNAIDS. 2004 Report of the Global AIDS Epidemic: 4<sup>th</sup> global report.
- 4. Pettifor AE, van der Straten A, Dunbar MS, Shiboski SC, Padian NS. Early age of first sex: a risk factor for HIV infection among women in Zimbabwe. AIDS 2004;18:1435–42.
- 5. Measure Evaluation. Sexual behavior, HIV and fertility trends: a comparative analysis of six countries. USAID: 2003 (www.cpc.unc.edu/measure/publications/special/abc.pdf).
- 6.Shelton J, Halperin D, Nantulya V, Potts M, Gayle H, Holmes K. Partner reduction is crucial for balanced "ABC" approach to HIV prevention. Brit Med J 2004;328:891-3 (<a href="http://bmj.bmjjournals.com/cgi/content/full/bmj;328/7444/891">http://bmj.bmjjournals.com/cgi/content/full/bmj;328/7444/891</a>).
- 7. Cohen S. Beyond slogans: lessons from Uganda's experience with ABC and HIV/AIDS. Alan Guttmacher Institutue report (<a href="www.agi-usa.org/pubs/journals/gr060501.pdf">www.agi-usa.org/pubs/journals/gr060501.pdf</a>).
- 8. Stoneburner R, Low-Beer D. Population-level HIV declines and behavioral risk avoidance in Uganda. Science 2004; 304:714-18.
- 9. Hearst N, Chen S. Condom promotion for AIDS prevention in the developing world: is it working? Stud Fam Plann 2004;35:39-47 (<a href="https://www.usp.br/nepaids/condom.pdf">www.usp.br/nepaids/condom.pdf</a>).
- 10. Weller S, Davis K. Condom effectiveness in reducing heterosexual HIV transmission. Oxford: The Cochrane Library, Issue 2, 2002 (<a href="https://www.cochrane.org/cochrane/revabstr/ab003255.htm">www.cochrane.org/cochrane/revabstr/ab003255.htm</a>).
- 11. Pinkerton SD, Abramson PR, Effectiveness of condoms in preventing HIV transmission. Social Science and Medicine 1997: 44:1303-12.

- 12. Holmes KK, Levine R, Weaver M. Effectiveness of condoms in preventing sexually transmitted infections. Bull World Health Organ. 2004 June 82(6):454-61
- 13. Kelly RJ, Gray RH, Sewankambo NK, et al. Age differences in sexual partners and risk of HIV-1 infection in rural Uganda. J Acq Immune Def Synd 2003;32:446–51.
- 14. Glynn et al. (2001). Why do young women have a much higher prevalence of HIV than young men? A study in Kisumu, Kenya and Ndola, Zambia. *AIDS*, 15(Suppl. 4):S51–60.
- 15. Luke N, Kurz K (2002). *Cross-generational and transactional sexual relations in sub-Saharan Africa*. Washington, AIDSmark. Available at www.icrw.org/docs/crossgensex\_Report\_902pdf
- 16. Wilson D. Partner reduction and the prevention of HIV/AIDS: the most effective strategies come from communities. BMJ 2004;328:848-49 (bmj.bmjjournals.com/cgi/content/full/328/7444/848).
- 17. Cates W. The "ABC to Z" approach: condoms are one element in a comprehensive approach to STI/HIV prevention. Network, Family Health Int., June 2003 (www.fhi.org/en/RH/Pubs/Network/v22\_4/nt2241.htm).
- 18. Merson M H, Dayton J M, O'Reilly K (2000). Effectiveness of HIV prevention interventions in developing countries. *AIDS*, 14 (Suppl. 2):S68–84.
- 19. Stover J, Walker N, Garnett G P et al. (2002). Can we reverse the HIV/AIDS pandemic with an expanded response. *Lancet*, 360:73–77. (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list\_uids=12114060)
- 20. Cote AM, Sobela F, Dzokoto A, et al. Transactional sex is the driving force in the dynamics of HIV in Accra, Ghana. AIDS 2004,18:917–25.
- 21. Morris M, Kretzschmar M. Concurrent partnerships and the spread of HIV. AIDS 1997;11:681-83.