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# HIV Notes from MEASURE DHS

Fall 2009

## Further Analyses Highlight Many Uses for DHS HIV Data

### Fertility preferences and the need for contraception among women living with HIV

This study, soon to be released in the journal *AIDS*, highlights the need for services that help HIV-positive women prevent unwanted pregnancies. DHS data from Zambia, Swaziland, Zimbabwe, and Lesotho confirm that women's knowledge of their own HIV status is significantly associated with their fertility desires and contraceptive use.



In all four countries, women with an HIV-positive test result in the past year are less likely than other women to want to have another child. This relationship is particularly strong in Swaziland and Zimbabwe, where HIV testing coverage is most widespread. For Zambia, Swaziland, and Zimbabwe, HIV-positive test results in the past year were also associated with an increased demand for and use of contraception. Additional

analysis in Zambia, Swaziland, and Zimbabwe suggest that recently tested HIV-positive women are more likely to be using condoms than HIV-negative women. In Zimbabwe, for example, condom use among recently tested HIV-positive women is three times higher than condom use among HIV-negative women.

These results underscore the importance of ensuring women's universal access to both HIV testing services and reproductive health and family planning services: preventing unwanted pregnancies among HIV-positive women is an essential step to reducing mother-to-child transmission of HIV.

### Concurrent sexual partnerships and HIV infection: Evidence from national population-based surveys

Knowing the prevalence of multiple and concurrent sexual partnerships is important for understanding the dynamics of HIV transmission and thus, for developing effective prevention interventions. This study uses DHS and AIS data on sexual partnerships and HIV serostatus to compare the prevalence of concurrent sexual partnerships across countries.

Results indicate that men are much more likely than women to have concurrent partners (defined here as having two or more sexual partners that overlapped in time in the year before the survey). In addition, many of the reported multiple partnerships in the 12 months before the survey interview were not concurrent ones. Finally, very few men had overlapping partners for one year or longer. In

continued on page 2

## What's Coming...

### Surveys with HIV Prevalence

- Burundi (design)
- Cameroon (fieldwork early 2010)
- Congo (final report available late 2009)
- Cote d'Ivoire 2010 (planning)
- Equatorial Guinea (planning)
- Lesotho (fieldwork winter 09–10)
- Malawi (fieldwork winter 09–10)
- Mozambique (fieldwork complete)

### Upcoming HIV SPA Surveys:

Namibia

### Conferences:

- American Public Health Association, Philadelphia, Nov. 7–11, 2009
- Population Association of America, Dallas, April 15–17, 2010

### Recent Analytical Publications:

- Spousal Communication About HIV Prevention in Kenya
- Integrating Family Planning and VCT Services in Ethiopia: Experiences of Health Care Providers
- A Closer Examination of the HIV/Fertility Linkage
- Concurrent Sexual Partnerships and HIV Infection: Evidence from National Population-Based Surveys
- The Role of Partner Reduction and Faithfulness in HIV prevention in Sub-Saharan Africa: Evidence from Cameroon, Rwanda, Uganda, and Zimbabwe

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## Further analyses, cont'd

sub-Saharan Africa, urban, more-educated, and wealthier women and men are more likely to have concurrent partnerships than their rural, less-educated, and poorer counterparts. Circumcised men are also more likely to have concurrent partners than uncircumcised men. Those who had concurrent partners are more likely to report using condoms than those who did not have concurrent partners; yet, only one-fifth of women and less than one-tenth of men with concurrent partners reported using condoms at last sex.

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Only 1 in 5 women and less than 1 in 10 of men with concurrent partners reported using condoms at last sex.

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In most countries, women and men who had concurrent sexual partners in the previous 12 months were more likely to be HIV-positive than those who had only one lifetime partner, or those who had multiple lifetime partners but no overlapping partners in the previous 12 months.

### HIV and nutrition among women in sub-Saharan Africa

HIV infection is associated with wasting and underweight, and yet many HIV-positive women in sub-Saharan Africa are overweight. This study investigates the relationship between HIV, body mass index (BMI), and anemia among women in 12 countries in sub-Saharan Africa (Burkina Faso, Cameroon, Ethiopia, Ghana, Guinea, Kenya, Lesotho, Malawi, Niger, Rwanda, Senegal, and Zimbabwe).

The study found that HIV prevalence is highest among overweight women in 5 of the 12 countries studied, while it is highest among underweight women only in Malawi. In seven countries, the percentage of HIV-negative women who are underweight is greater than the percentage of HIV-positive women who are underweight. HIV-positive status is significantly positively associated with being overweight. However, after controlling for wealth and other socio-demographic



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characteristics, the relationship reverses direction, and HIV-positive status becomes significantly positively associated with being underweight.

In every country studied, the percentage of HIV-positive women who are anemic is much larger than the percentage of HIV-negative women who are anemic. In pooled analysis, HIV-positive status is significantly negatively associated with hemoglobin concentration, and the relationship grows stronger when background characteristics and BMI are controlled for.

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HIV-positive status in women is highly associated with anemia, signalling a need for nutrition supplementation programs for those living with HIV/AIDS.

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HIV is independently associated with poorer nutritional status—particularly anemia—after controlling for household wealth and other socio-demographic characteristics of the women studied. This study, therefore, provides evidence to support increasing food security and providing nutritional supplementation to HIV-positive people. At the same time, this study shows that HIV is concentrated among overweight women in several sub-Saharan African countries, emphasizing the fact that HIV does not affect only those who “look sick” or appear malnourished.

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([www.measuredhs.com/topics/hiv](http://www.measuredhs.com/topics/hiv))

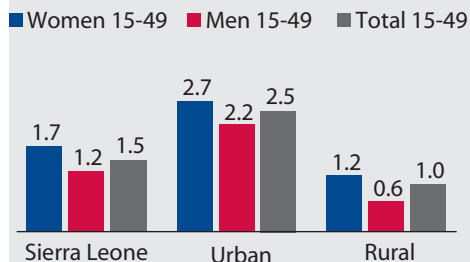
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## HIV Data from Recent DHS Surveys

### First-ever population-based HIV testing in Sierra Leone

Under 2% of adults age 15–49 in Sierra Leone are HIV-positive according to the 2008 SLDHS. Women are slightly more likely to be infected than men (1.7% versus 1.2%). Prevalence is 2.5 times higher in urban areas than in rural areas.

#### Sierra Leone: HIV Prevalence



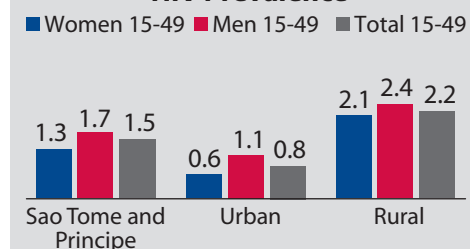
HIV-related knowledge is low in Sierra Leone. Only 43% of women know that using condoms can prevent HIV. Very few Sierra Leoneans (14% of women and 24% of men) know that HIV transmission from mother to child can be reduced by the mother taking special drugs during pregnancy.

HIV testing is quite rare in Sierra Leone. Only about 3 in 10 women and men know where to get an HIV test. Only 9% of women and 7% of men have ever been tested and received the results.

### Sao Tome HIV prevalence higher in rural than urban areas

Preliminary results of the 2008–09 Sao Tome and Principe DHS indicate that 1.3% of women age 15–49 and 1.7% of men age 15–49 are HIV-positive.

#### Sao Tome and Principe: HIV Prevalence



Contrary to the pattern seen in the rest of sub-Saharan Africa, HIV prevalence in Sao Tome is markedly higher in rural areas (2.2%) than urban areas (0.8%).

The 2008–09 DHS in Sao Tome and Principe also included testing for Hepatitis B. Lab results indicate that 6% of women age 15–49 and 10% of men 15–49 have Hepatitis B.

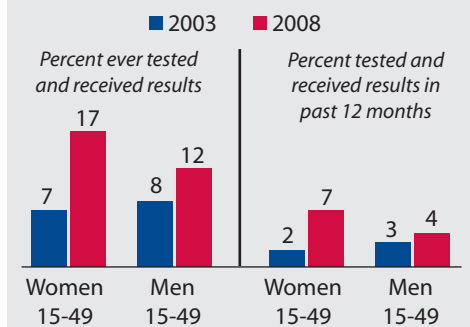
Over 4,700 women and men were tested for HIV, a response rate of 79%. The final report will be available in late spring 2010.

### HIV knowledge, coverage of HIV testing improve in Ghana

The 2008 Ghana DHS reports that HIV-related knowledge has increased significantly since 2003. Currently, almost half of women and men know that maternal-to-child transmission of HIV can be prevented by the mother taking special drugs during pregnancy. Only 16% of women and men had this knowledge five years earlier.

HIV testing has also increased in recent years. In 2003, only 7% of women and 8% of men had ever been tested for HIV and received the results. The 2008 GDHS reports that 17% of women and 12% of men had ever been tested and received the results.

#### Trends in HIV Testing in Ghana



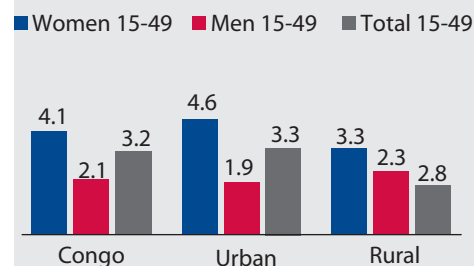
### 3% HIV-positive in Congo

The preliminary results of the 2009 AIDS Indicator Survey in Congo (Brazzaville) report that 3.2% of adults

age 15–49 are HIV-positive. Women are twice as likely to be HIV-positive as men (4% versus 2%).

Prevalence is slightly higher in urban areas than in rural areas (3.3% versus 2.8%) and ranges from 1.5% in Cuvette-Ouest Department to 4.8% in Lékoumou Department.

#### Congo: HIV Prevalence



The Congo AIS included HIV testing of over 12,000 women and men, representing a response rate of almost 98%. The AIS also includes information on HIV-related knowledge, attitudes, and behaviors. The final report is expected to be published in late spring 2010.

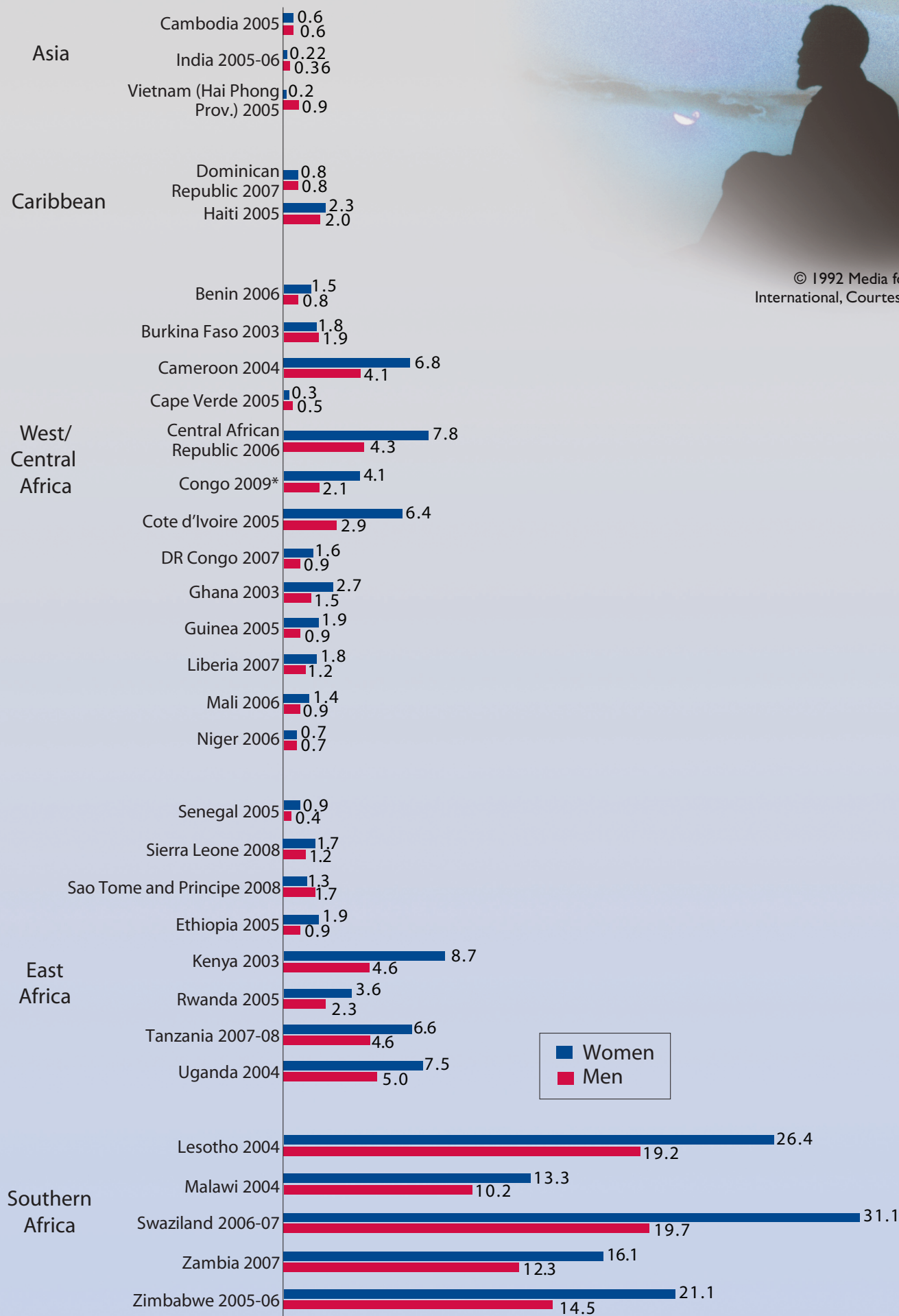
### DHS HIV Facts

- In Benin, only 7% of women and 5% of men took an HIV test and received the results of the test in the year before the survey.
- In Liberia, only 50% of women know that using a condom can reduce the risk of HIV transmission.
- Among sexually active single women and men age 15–24 in Rwanda, only 25% of women and 39% of men used a condom the last time they had sex.
- More than one-third of women in Swaziland has ever been tested for HIV and received the results.
- HIV prevalence in India is 0.28%. This translates to 1.7 million adults age 15–49 who are HIV-positive.





# HIV Prevalence by Sex: Results from the DHS



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\*preliminary data