



Tanzania HIV/AIDS and Malaria Indicator Survey: Preliminary Report

The preliminary results of the Tanzania HIV/AIDS and Malaria Indicator Survey 2007-8 have just been issued by the National Bureau of Statistics. In this paper we provide commentary on the new results, with a particular focus on comparison to previous estimates.

HIV Headlines

- National adult HIV prevalence has declined from 7.0% in 2003/4 to 5.7% in 2007/8
- HIV prevalence has decreased for both women and men, and across most age groups.
- The estimated number of people living with HIV in Tanzania in 2008 is approximately 1.06 million – down from 1.12 million in 2004.
- Seventeen out of twenty-one regions registered a decline in the proportion of 15-49 year-olds with HIV.
- The proportion of people tested for HIV in the previous 12 months rose from single figures in 2003/4 to nearly 20% in 2007/8
- The proportion of 15-49 year olds who reported higher-risk sex declined slightly, and those who used condoms at last high-risk sex increased marginally.
- There is no evidence that young people have delayed the age at which they first have sex.

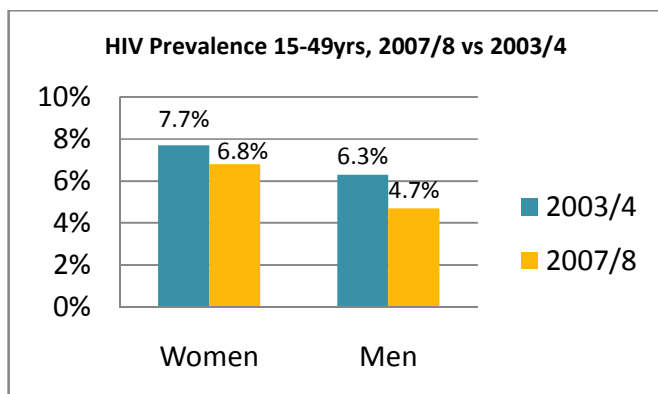
Malaria Headlines

- The survey provides the first nationally-representative figures for malaria prevalence.
- The overall prevalence of malaria in young children in Tanzania is 18 percent. The prevalence increases with age, from 9 percent among infants to over 20 percent above age 2.
- Rural children are almost three times more likely than urban children to have malaria parasites (20 percent compared with 8 percent).
- Five regions (Kagera, Lindi, Mtwara, Mwanza and Mara) and had under-five malaria prevalence of more than 30%. Eight regions had malaria prevalence rates of less than 10%.
- 8% of under-fives suffer from severe anaemia – and this figure differs little between urban and rural areas. Anaemia rates are highest among the youngest children (under 2 years of age).
- These anaemia rates are substantially lower than in 2004-5, particularly in rural areas and in under-twos.
- The proportion of children who suffered from fever in the previous 2 weeks is lower than in 2004-5 and markedly lower than in 1999.
- ITN coverage for under-fives and pregnant women has risen from around 16% in 2004/5 to 26%.
- The proportion of women who received preventive treatment for malaria (IPTp) during their last pregnancy went up from 22% to 57%.

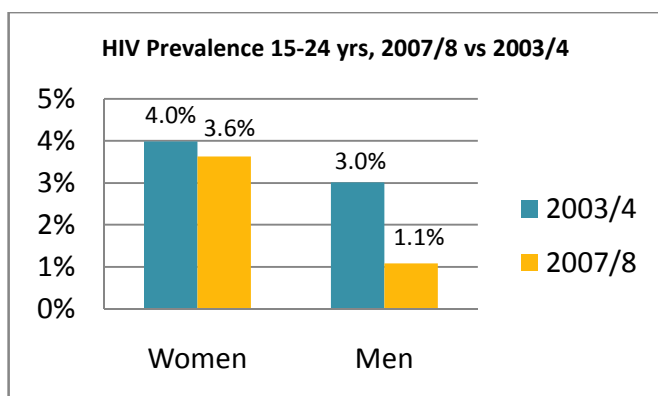
HIV Indicators

Prevalence

Adult (15-49yrs) HIV prevalence has decreased among both men and women compared to the THIS 2003/4.



A reduction in HIV prevalence is also seen in the 15-24 age group, although the decline looks steeper in males than in females.



HIV prevalence (men and women combined) has decreased in both urban and rural areas. Urban HIV prevalence has come down from 10.9% to 8.7%. Rural prevalence decreased from 5.3% to 4.7%.

We have estimated the number of people living with HIV in Tanzania in 2008 by applying the survey results (collected late 2007 to early 2008) to the age/sex population structure in 2008 according to official projections of the National Bureau of Statistics. This

implies the total number of people living with HIV on Tanzania Mainland stands at about 1.05 million, marginally lower than our 2004 estimate of 1.12 million (using the same methodology).

In 2008, women comprise over 60% of people living with HIV. Among the 15-24 year age group, this proportion rises to nearly three-quarters.

Number of people (15-49 yrs) living with HIV, 2008

Age	Men	Women	Total	Women %
15-19	15,604	28,705	44,308	65%
20-24	30,256	114,596	144,852	79%
25-29	66,482	129,087	195,568	66%
30-34	92,840	152,775	245,614	62%
35-39	114,402	109,056	223,458	49%
40-44	54,487	63,853	118,340	54%
45-49	39,494	45,225	84,720	53%
Total	413,564	643,296	1,056,860	61%
<i>Zanzibar</i>	1,424	2,145	3,569	
<i>Mainland</i>	412,140	641,151	1,053,291	

HIV-Related Attitudes and Behaviour

The preliminary survey report provides a wealth of data on knowledge, attitudes and behaviour related to HIV. With regard to **stigma**, the new survey found slightly more accepting attitudes towards people with HIV compared to 2003-4¹. The exception, however, is that fewer people felt willing to disclose the HIV positive status of a family member.

On the other hand, the proportion of people who have been **tested** has risen dramatically. The proportion who had been tested for HIV and received results within the previous 12 months rose from 5% (women) and 7% (men) to 19% (both sexes). Over a quarter of men and more than a third of women have been tested for HIV and received test results at least once.

¹ As signified by willingness to care for a family member with HIV in their own household; willingness to buy fresh vegetables from a vendor with AIDS; believing that an HIV-positive female teacher should be allowed to continue teaching.

The proportion of respondents who reported having **two or more sexual partners** within the previous 12 months was slightly (3-5 percentage points) lower in the new survey than in 2003-4. This is true for all age groups, and for urban and rural areas. The proportion reporting multiple partners remains very much higher for men (25%) than for women (3%). The biggest change has occurred among young men aged 15-19, where the proportion reporting two or more partners in the last 12 months has decreased from 30% to 14%.

Declining trends are also seen in the proportion of people reporting **“higher-risk sex”**² in the past 12 months, although the changes are very small (from 23% to 21% for women and 46% to 40% for men). Condom use at last higher-risk sex was also slightly greater than in 2003-4 (up 4-5 percentage points for both women and men). Nonetheless, condom use for last higher-risk sex was still very low: 43% for women and 53% for men.

There is no evidence of an increase of age at **first sex**. However, among never-married young people, the proportion who reported sex during the previous 12 months was marginally lower for both men and women (data not shown).

Age of sexual debut

	2003-4	2007-8
Among 15-19 year olds, % had first sex before age 15		
Women	10.1%	10.7%
Men	10.7%	10.8%
Among 20-24 year olds, % had first sex before age 18		
Women	54.1%	58.8%
Men	40.1%	41.8%

Malaria Indicators

The malaria indicators presented in the preliminary report are compared to those in the Tanzania Demographic and Health Survey of 2004-5 and the Tanzania Reproductive and Child Health Survey of 1999.

² For the purpose of the survey, this is defined as sexual intercourse with someone the respondent is neither married to, nor living with.

Malaria Prevalence

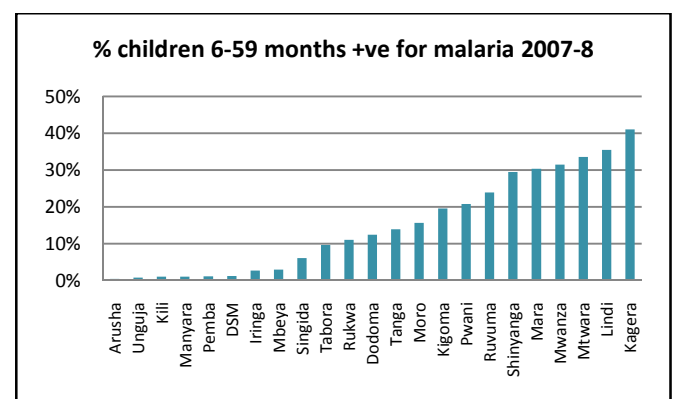
The 2007-8 survey included the first ever nationally-representative, population-based assessment of malaria prevalence in under-fives. Malaria tests were conducted for 94% of the 6,812 eligible under-fives (6-59 months), yielding a typical sample size per region of around 200.

Malaria Prevalence 6-59 months

Age Group	Malaria Positive
6-11 months	9.1%
12-23 months	14.4%
24-35 months	19.6%
36-47 months	19.5%
48-59 months	21.9%
Urban	8.1%
Rural	19.7%
All (6-59 months)	17.7%

Malaria prevalence rises quickly with age, from 9% among 6-11 month-olds to 20% in children aged 2-3 years, and 22% among 4 year-olds. No previous national data are available to compare this to.

The survey also shows huge variation between regions. In Zanzibar less than 1% of under-fives tested positive. Five other regions had malaria-positive rates of 3% or less. In the worst-affected five regions, over 30% of under-fives tested positive for malaria.



Anaemia in under-5s

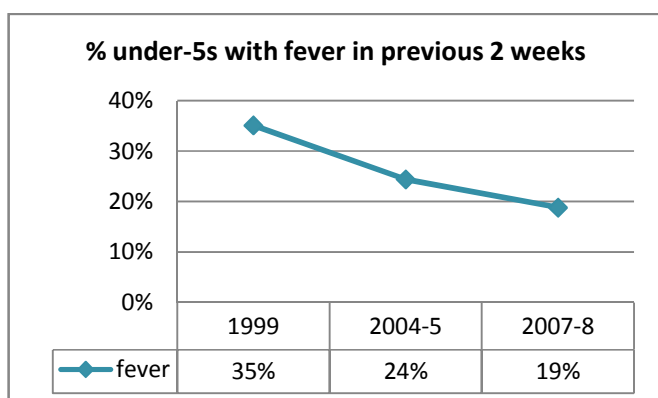
Following *Roll Back Malaria* standards, the new report uses a haemoglobin “cut-off” level of 8g/dl to define severe anaemia. We have re-tabulated the TDHS 2004-5 data using the new criterion so that a direct comparison can be made. The results show a major reduction in severe anaemia among under-fives, particularly in the youngest age groups and in rural areas.

Severe anaemia in under-fives (<8g/dl)

	2004-2005	2007-2008
6-11 months	17.4%	11.1%
12-23 months	19.1%	12.4%
24-35 months	12.1%	8.2%
36-47 months	8.9%	5.2%
48-59 months	4.7%	3.0%
Urban (6-59 months)	8.1%	8.5%
Rural (6-59 months)	13.1%	7.5%
All (6-59 months)	12.2%	7.7%

Fever incidence in under-fives

Fewer under-fives were reported to have suffered from fever in the previous two weeks, as compared to 2004-5. The decline in reported fever is even greater compared to the 1999 TRCHS survey. The levels and trends in fever are very similar for urban and rural areas.



Ownership and use of Mosquito Nets

Ownership of treated and untreated nets has increased considerably compared to 2004-5. Urban households

are nearly twice as likely as rural ones to own a net or ITN.

Net / ITN ownership by households

		2004-5	2007-8
Own at least 1 net	Urban	74%	79%
	Rural	36%	49%
	All	46%	56%
Own at least 1 ITN	Urban	47%	59%
	Rural	25%	33%
	All	23%	39%

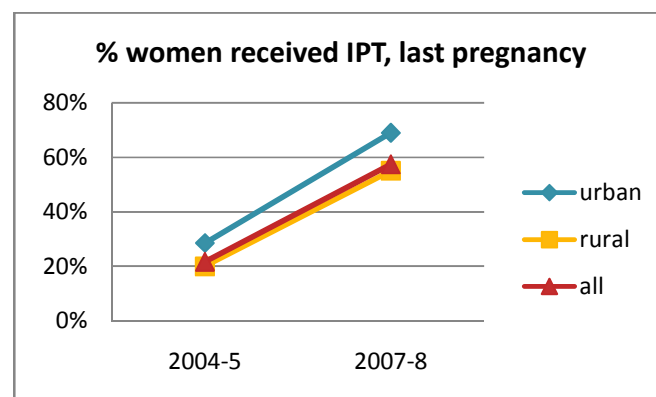
Use of ITNs for the night before the survey has improved for both the under-five age group and pregnant women, with almost identical coverage rates and trends for both. The urban-rural gap persists.

ITN use the night before the survey

		2004/5	2007/8
Under-5	Urban	40%	49%
	Rural	10%	21%
	All	16%	26%
Pregnant Women	Urban	39%	48%
	Rural	10%	21%
	All	16%	27%

Malaria prevention in pregnancy

The proportion of women who received preventive treatment for malaria in pregnancy (IPTp) has more than doubled between 2004-5 and 2007-8. This should reduce anaemia, low birth weight and pregnancy loss.



Discussion

The results described in the preliminary Tanzania HIV and Malaria Indicator Survey 2008-9 give grounds for cautious optimism.

The HIV prevalence figures may not turn out to be *statistically* different from the 2003-4 survey. However, almost all of the movement on the numbers shows improvement – consistent with the downward trends also observed in the data from ANC sentinel surveillance and blood donors. There seems also to be slight improvement in behavioural risk factors, although the magnitude of the change is as yet very small.

The malaria indicators show steep improvements in coverage of nets/ITNs, lower rates of anaemia and fewer cases of fever among under-fives. The data also illustrate the magnitude of the remaining challenge. On average, 20% of children between the age of 2 and 4 tested positive for malaria. About half of Tanzania's regions still suffer a high burden of malaria.

References

Tanzania HIV & Malaria Indicator Survey 2007-8, Preliminary Report. National Bureau of Statistics and ORC Macro. Dar es Salaam, August 2008.

Tanzania Demographic and Health Survey 2004-5. National Bureau of Statistics and ORC Macro. Dar es Salaam, December 2005.

Tanzania HIV Indicator Survey 2003-4. Tanzania Commission for AIDS, National Bureau of Statistics and ORC Macro. Dar es Salaam, March 2005

Tanzania Reproductive and Child Health Survey 1999. National Bureau of Statistics and ORC Macro. Dar es Salaam, November 2000.

Tanzania National [Population] Projections (Vol.12), National Bureau of Statistics, December 2006

This paper is the first of the “Spotlight” series. Each issue of *Spotlight* will focus in on new research and survey results, aiming to provide analysis, synthesis and interpretation for a broader audience.

The Survey results that are analysed here come from the Tanzania HIV/AIDS and Malaria Indicator Survey, Preliminary Report that was carried out by National Bureau of Statistics and ORC Macro on behalf of TACAIDS and the Ministry of Health and Social Welfare. The full final report is due for release later this year.

*Full text of the Preliminary Report can be downloaded from our web-site:
www.ihl.or.tz*

Ifakara Health Institute
Plot 463, Kiko Avenue, Mikocheni
PO Box 78373, Dar es Salaam, Tanzania
Web: www.ihl.or.tz

E-mail address: info@ihl.or.tz
Phone: +255 (0)22 2774756 Fax: +255 (0)22 2771714