

Tanzania

2011-12 HIV/AIDS and Malaria Indicator Survey

Key Findings



This 2011-12 Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS) was implemented by the National Bureau of Statistics (NBS) in collaboration with the Office of the Chief Government Statistician (OCGS-Zanzibar) from December 16, 2011, to May 24, 2012. The Tanzania Commission for AIDS (TACAIDS) and the Zanzibar AIDS Commission (ZAC) authorised the survey. Funding for the survey was provided by the United States Agency for International Development (USAID), the Tanzania Commission for AIDS (TACAIDS), and the Ministry of Health and Social Welfare (MoHSW). ICF International supported the survey through the MEASURE DHS project, a USAID-funded programme providing support, technical assistance, and funding for population and health surveys in countries worldwide.

Additional information about the survey may be obtained from the Tanzania Commission for AIDS (TACAIDS), P.O. Box 76987, Dar es Salaam, Tanzania (Telephone: 255-22-212-2651; Fax: 255-22-212-2427; Internet: www.tacaids.go.tz) and the National Bureau of Statistics, General Office, P.O. Box 796, Dar es Salaam, Tanzania (Telephone: 255-22-212-2722/3; Fax 255-22-213-0852; Internet: www.nbs.go.tz).

Information about the DHS programme may be obtained from MEASURE DHS, ICF International, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705, USA (Telephone: 301-572-0200; Fax: 301-572-0999; E-mail: reports@measuredhs.com; Internet: <http://www.measuredhs.com>.)

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ABOUT THE 2011-12 THMIS

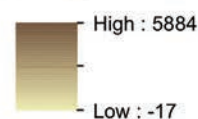
The 2011-12 Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS) was designed to provide up-to-date information on the prevalence of HIV infection among Tanzanian adults and the prevalence of malaria and anaemia among children under age five. The 2011-12 THMIS is the tenth national survey carried out as part of the Demographic and Health Surveys project in Tanzania. It is the third comprehensive survey on HIV/AIDS carried out in Tanzania.

Who participated in the survey?

A nationally representative sample of 10,967 women age 15-49 and 8,352 men age 15-49 were interviewed. This represents a response rate of 96% for women and 89% for men. This sample provides estimates for Tanzania as a whole, for urban and rural areas, for each of the nine zones, and, for most indicators, an estimate for each of the 30 regions.



Elevation in meters above sea level



CHARACTERISTICS OF HOUSEHOLDS & RESPONDENTS

Tanzanian Households

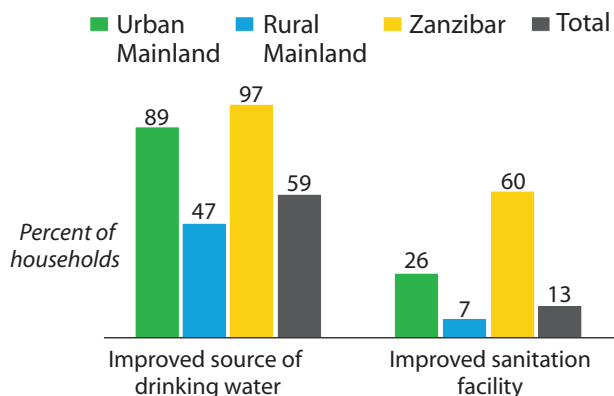
Households in Tanzania have an average of five members. About one-quarter of households are headed by women. Almost half of the population is under the age of 15.

Living conditions are markedly better in urban Mainland areas and Zanzibar than in rural Mainland areas. Nearly nine in ten urban Mainland households have access to an improved source of drinking water, compared to only 47% of rural households in Mainland areas. Access to an improved source of drinking water is almost universal in Zanzibar. Sanitation facilities are limited throughout Tanzania—26% of urban Mainland households and only 7% of rural Mainland households have access to an improved sanitation facility. Six in ten households in Zanzibar have access to an improved sanitation facility.



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Water and Sanitation



Only 15% of Tanzanian households have electricity, a slight increase from 12% in 2007-08. Within the Mainland, there is a large difference in access to electricity between urban and rural households (46% vs. 4%). In Zanzibar, 41% of households have electricity.

More than 60% of Tanzanian households have a radio, while only 15% have a TV. Sixty-one percent of households have a mobile phone. Almost one in five households have a bank account. Nearly half of households have a bicycle while only 2% of households have a car or truck.

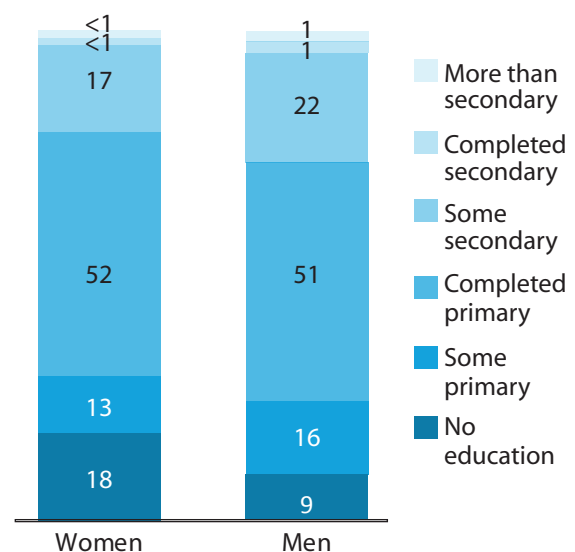
Survey Respondents Age 15-49

Eighteen percent of women age 15-49 and 9% of men age 15-49 have had no education. More than half of women and men have completed primary school. Only 1% of women and 2% of men have completed secondary school or beyond.

Men have better access to mass media than women. More than 40% of women had no weekly access to mass media compared to only 23% of men. Radio is the most common form of media: 74% of men and 49% of women listen to the radio weekly.

Education

Percent distribution of women and men age 15-49 by highest level of education completed or attended



HIV/AIDS KNOWLEDGE AND ATTITUDES

Knowledge of HIV Prevention Methods

Knowledge of HIV is universal: almost all respondents have heard of AIDS. More than 60% of women and 71% of men age 15-49 know that HIV can be prevented by using condoms and by limiting sexual intercourse to one uninfected partner. Men are slightly more likely than women to know about the different HIV prevention methods. Knowledge of HIV prevention methods is highest among women and men in urban areas and in the highest wealth quintile.

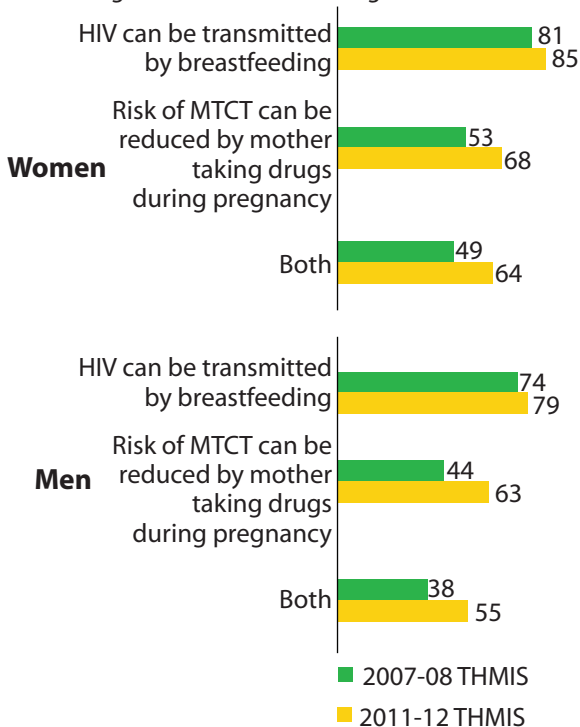
Knowledge of Prevention of Mother-to-Child Transmission of HIV (PMTCT)

While about 85% of women and 79% of men know that HIV can be transmitted by breastfeeding, only about two-thirds of women and men know that the risk of MTCT can be reduced by the mother taking special drugs during pregnancy. About two-thirds (64%) of women and more than half (55%) of men know both key messages about PMTCT of HIV.

Women's and men's knowledge that the risk of MTCT of HIV can be reduced by the mother taking drugs during pregnancy has increased since the 2007-08 THMIS.

Trends in Knowledge of Prevention of Mother-to-Child Transmission of HIV

Percentage of women and men age 15-49 who know that:



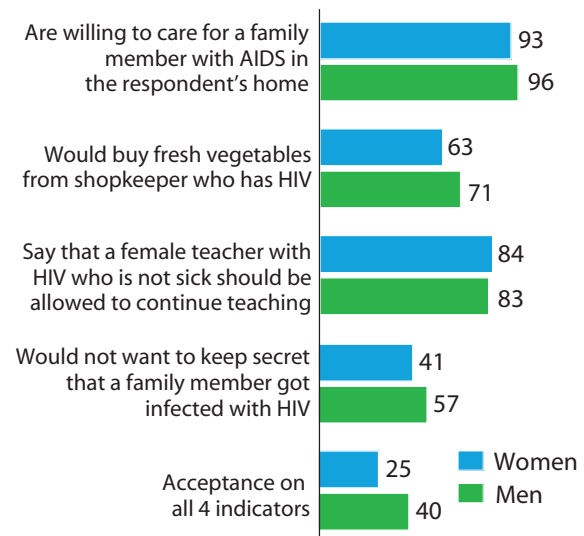
Attitudes towards those living with HIV/AIDS

Stigma and discrimination related to HIV/AIDS are still widespread among Tanzanian adults. Though the majority of women (93%) and men (96%) say they are willing to care for a family member with AIDS in their home, only 41% of women and 57% of men say that they would not want to keep secret that a family member has HIV. Furthermore, only one-quarter of women and 40% of men express accepting attitudes on all four indicators.

Women and men in Zanzibar report less HIV/AIDS-related stigma compared with those in Mainland Tanzania. Forty-three percent of women and 55% of men from Zanzibar express accepting attitudes on all four standard indicators compared with 25% of women and 40% of men in Mainland Tanzania.

Accepting Attitudes Towards Those Living with HIV/AIDS

Percent of women and men age 15-49 who:

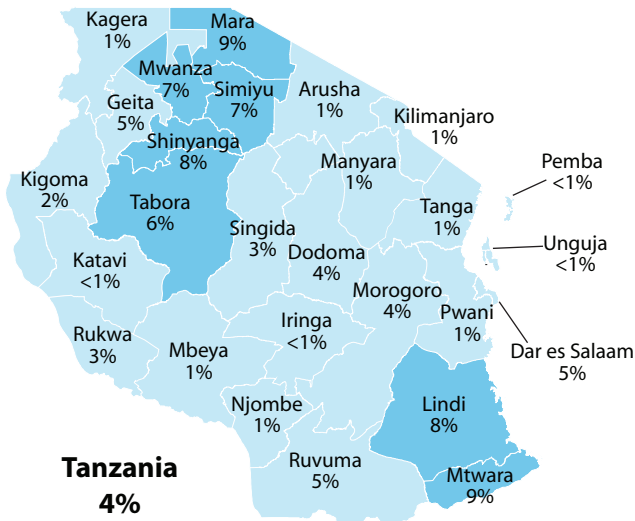


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SEXUAL ACTIVITY AND BEHAVIOUR

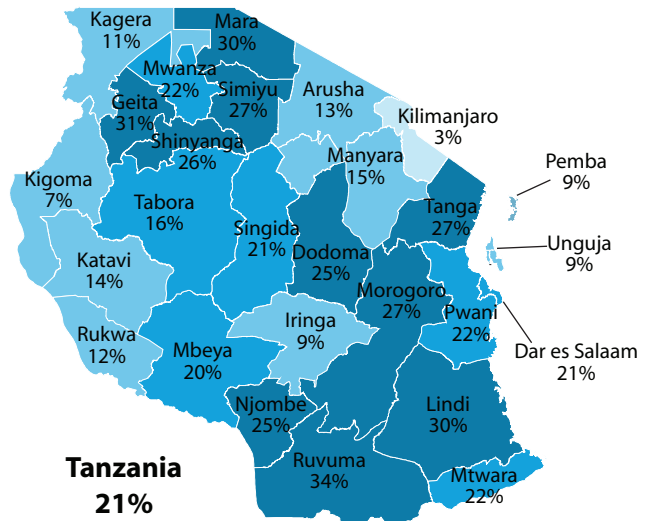
Multiple Sexual Partners by Region: Women

Percent of women age 15-49 who had 2+ sexual partners in the past 12 months



Multiple Sexual Partners by Region: Men

Percent of men age 15-49 who had 2+ sexual partners in the past 12 months



Four percent of Tanzanian women age 15-49 reported having two or more sexual partners in the past 12 months. Multiple sexual partnerships range from a low of <1% in Katavi, Iringa, Pemba and Unguja regions to a high of 9% in Mara and Mtwara regions.

The proportion of men age 15-49 who had two or more sexual partners in the past 12 months is more than five times higher than the proportion of women (21% versus 4%). Among men, multiple sexual partnerships are most common in Ruvuma (34%) and Geita (31%) regions.

Nine percent of men reported paying for sex in the past 12 months. More than half (53%) of men who engaged in paid sex in the past 12 months used a condom the last time they paid for sex.

Condom Use

Twenty-seven percent of both women and men who had more than one sexual partner in the past 12 months reported using a condom during their last sexual intercourse. Condom use among those with multiple partners generally increases with level of education.

Condom Use among Respondents Reporting Multiple Sexual Partnerships by Education Level

Among women and men age 15-49 who had 2+ sexual partners in the past 12 months, percent who reported using a condom at last sexual intercourse

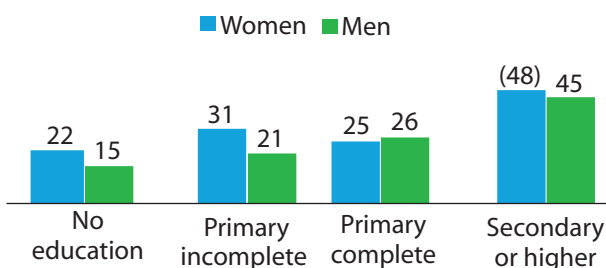


Figure in parentheses is based on 25-49 unweighted cases.



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HIV TESTING

Nine in ten women and men know where to get an HIV test. HIV testing in Tanzania has increased over time. HIV testing and receiving the results among women age 15-49 has increased from 37% in 2007-08 to 62%. Similarly, HIV testing and receiving the results among men has almost doubled from 27% in 2007-08 to 47%. However, one-third of women and half of men have never been tested for HIV.

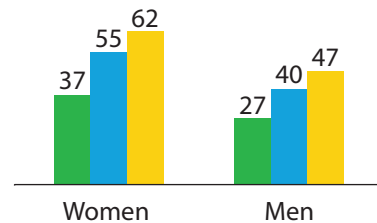
HIV testing is higher in urban areas than rural areas among both women and men. Women and men who are married or living together are more likely than those who are divorced, separated, widowed, or those who have never been married to have ever been tested for HIV and received their results. HIV testing increases with level of education for men; 54% of men with secondary or higher education have ever been tested for HIV and received the results compared with 32% of men with no education.

Three in 10 women and more than 25% of men have been tested for HIV and received the results in the past 12 months.

Trends in HIV Testing

Percentage of women and men age 15-49 who have ever been tested for HIV and received the results

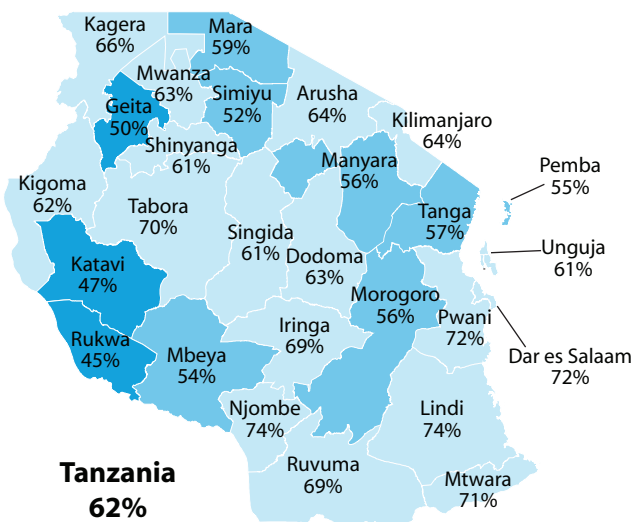
■ 2007-08 THMIS ■ 2010 TDHS ■ 2011-12 THMIS



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HIV Testing by Region: Women

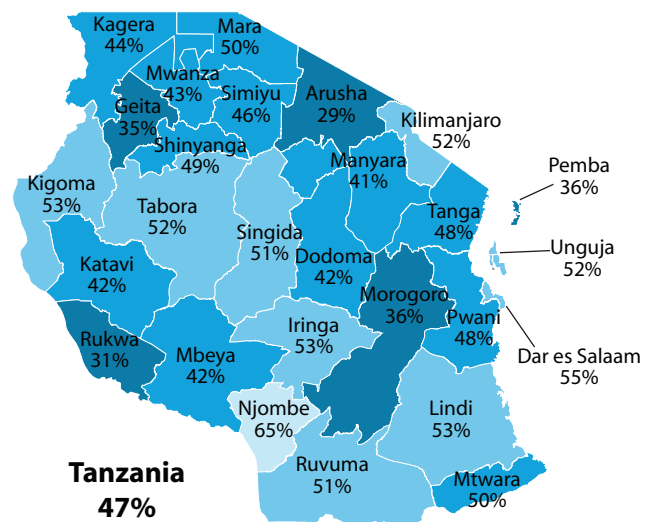
Percent of women age 15-49 who have ever been tested for HIV and received the results



Almost two-thirds of Tanzanian women age 15-49 have ever been tested and received the results. Prior HIV testing is highest in Njombe and Lindi (both 74%) regions and lowest in Katavi and Rukwa regions where less than half of women have ever been tested and received their results.

HIV Testing by Region: Men

Percent of men age 15-49 who have ever been tested for HIV and received the results

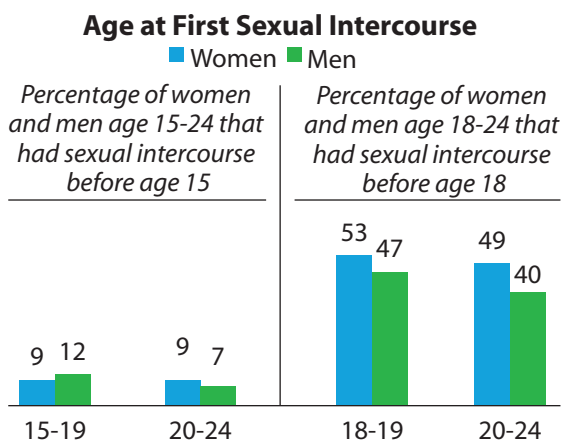


Almost half of men age 15-49 have ever been tested for HIV and received the results. Prior HIV testing ranges from a high of 65% in Njombe region to a low of 29% in Arusha region. HIV testing is more common among better educated and wealthier men.

YOUTH AND HIV

Age at First Sexual Intercourse

Nine percent of young women and 10% of young men age 15-24 report having had sexual intercourse for the first time before age 15. Among those age 18-24, 50% of young women and 43% of young men report having had sex by age 18.



Premarital Sex

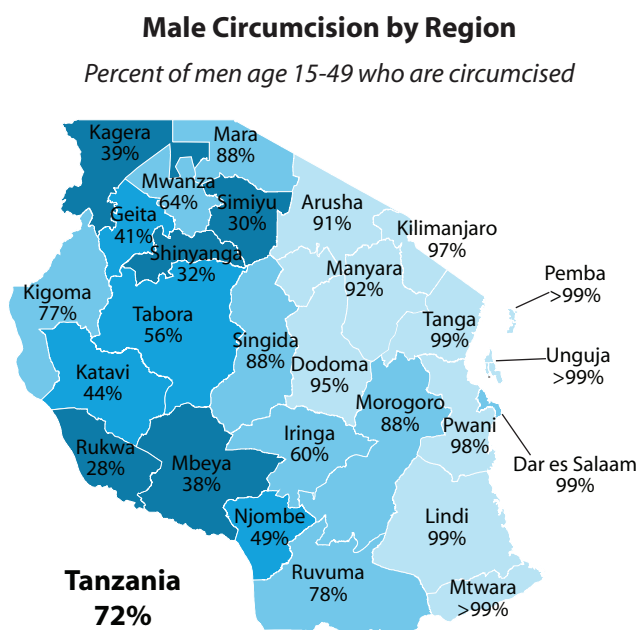
About one-third of never-married young women and 42% of never-married young men had sexual intercourse during the 12 months preceding the survey. Condom use at last sex was nearly identical for both groups (58% and 59%, respectively) and increased from 49% in 2007-08. Never married young women (59%) are more likely than never-married young men (48%) to report that they have never engaged in sexual intercourse.

HIV Counselling and Testing

Among youth age 15-24, almost half of young women and one-third of young men have ever been tested for HIV and received their results. Young women and men age 20-24 are more likely to have ever been tested for HIV and received their results than young women and men age 15-19.

MALE CIRCUMCISION

Nearly three-quarters (72%) of Tanzanian men age 15-49 report having been circumcised. Circumcision is more common in urban areas than in rural areas (94% versus 64%, respectively). More than half of the regions on Mainland Tanzania show levels of male circumcision of 50% or more. The prevalence of male circumcision is lowest in Rukwa (28%), Simiyu (30%), and Shinyanga (32%). In contrast, male circumcision in Zanzibar, Dar es Salaam, Mtwara, Tanga, Lindi, and Pwani regions is almost universal.



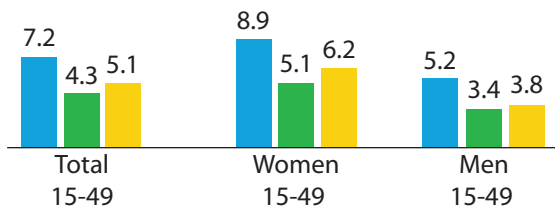
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HIV PREVALENCE

HIV prevalence data were obtained from blood samples voluntarily provided by women and men interviewed in the 2011-12 THMIS. Of the 20,811 eligible women and men age 15-49, 90% of women and 79% of men provided specimens for HIV testing.

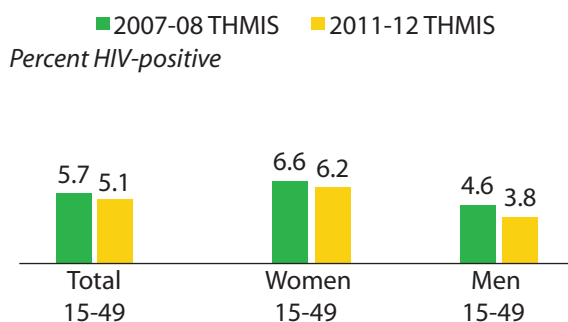
Overall, 5.1% of Tanzanians age 15-49 are HIV-positive. HIV prevalence is higher among women (6.2%) than among men (3.8%). HIV prevalence is higher in urban areas for both women and men than in rural areas.

HIV Prevalence by Residence
 ■ Urban ■ Rural ■ Tanzania total
 Percent HIV-positive, women and men age 15-49



HIV prevalence is highest among those living in the wealthiest households. Among regions, HIV prevalence ranges from a low of less than 1% in Pemba and 1.2% in Unguja to a high of 14.8% in Njombe.

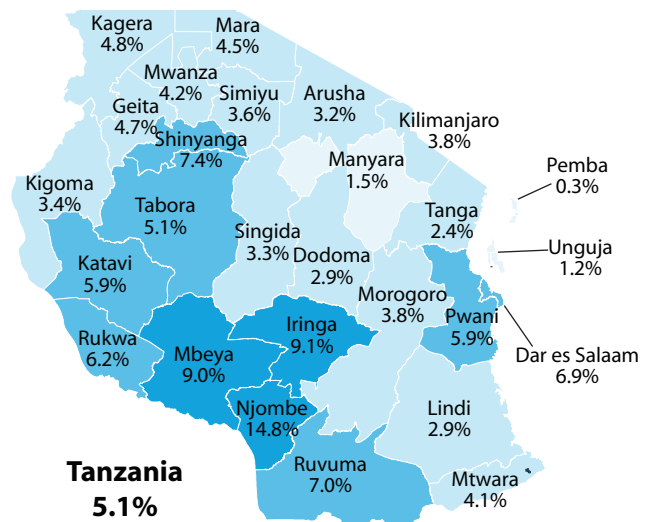
Trends in HIV Prevalence in Tanzania (Mainland and Zanzibar Included)



A comparison of the 2007-08 THMIS and 2011-12 THMIS HIV prevalence estimates indicate that HIV prevalence has declined slightly from 5.7% to 5.1% among adults age 15-49. Similarly, HIV prevalence has declined among women, from 6.6% to 6.2%, and among men, from 4.6% to 3.8%. These declines in HIV prevalence are not statistically significant.

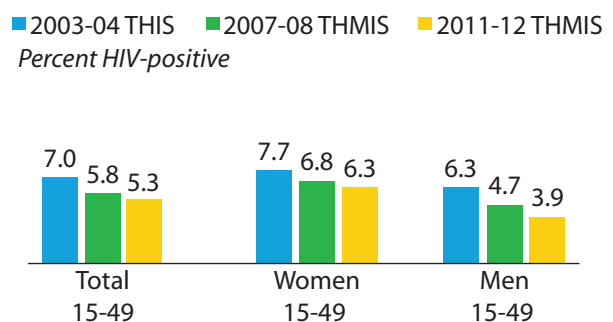
HIV Prevalence by Region

Percent of women and men age 15-49 who are HIV-positive



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Trends in HIV Prevalence in Mainland Tanzania (Zanzibar Excluded)



In Mainland Tanzania, HIV prevalence among women and men age 15-49 has decreased from 7.0% in the 2003-04 THIS to 5.3% in the 2011-12 THMIS. The decline in total HIV prevalence between 2003-04 and 2011-12 is statistically significant. Additionally, the decline is significant among men (6.3% versus 3.9%).

HIV PREVALENCE

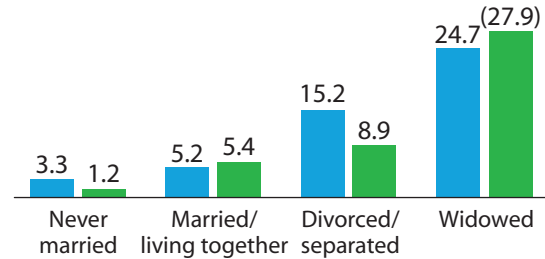
HIV Prevalence by Marital Status

HIV prevalence is highest among women and men who are widowed. HIV prevalence is also high among divorced and separated women and men. Women and men who have never been married are least likely to be HIV positive.

HIV Prevalence by Marital Status

■ Women 15-49 ■ Men 15-49

Percent HIV-positive

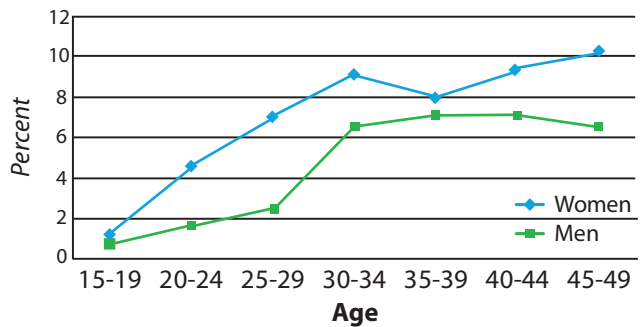


Figures in parentheses are based on 25-49 unweighted cases.

HIV Prevalence by Age

Among both women and men, HIV prevalence generally increases with age. Women have a higher HIV prevalence than men at each age group.

HIV Prevalence by Age



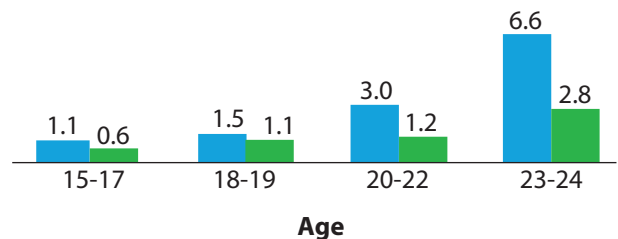
HIV Prevalence among Youth

Overall, 2.0% of young women and men age 15-24 are HIV-positive which is almost the same prevalence as measured in 2007-08. HIV prevalence among young women is higher than among young men, particularly for youth age 23-24 where women are more than twice as likely to be infected as men (6.6% versus 2.8%). Njombe region has the highest HIV prevalence among young people at 5.1%.

HIV Prevalence among Youth

■ Women ■ Men

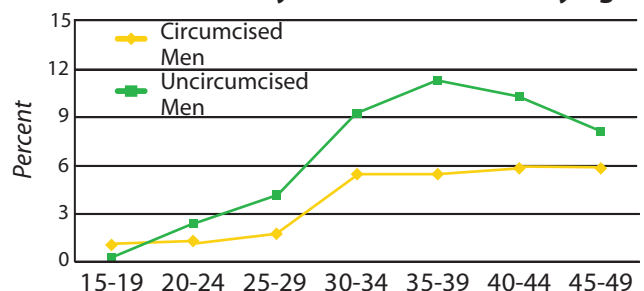
Percent of women and men age 15-24 HIV-positive



HIV Prevalence and Male Circumcision

Circumcised men are less likely to be HIV infected than uncircumcised men (3.3% versus 5.2%). Among circumcised men, HIV prevalence is highest in the Southwest Highlands Zone (7.0%) and lowest in the Southern Zone (1.4%). HIV prevalence for uncircumcised men increases with age until it peaks at age 35-39 (11.3%).

HIV Prevalence by Male Circumcision by Age

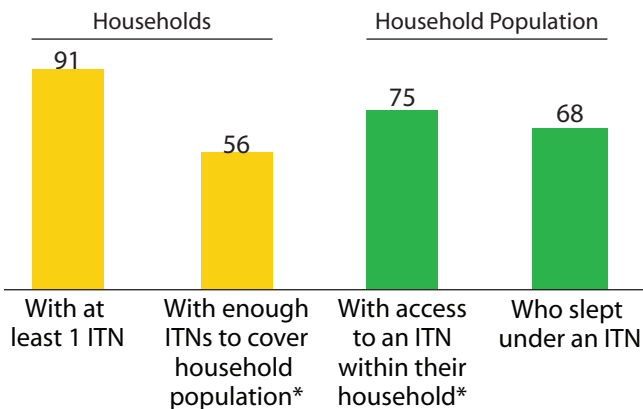


MALARIA PREVENTION AND TREATMENT

Ownership and Use of Mosquito Nets

Among all households in Tanzania, 91% own at least one insecticide-treated net (ITN), and 90% own at least one long-lasting insecticidal net (LLIN). However, only 56% of households have enough ITNs to cover each member, assuming one ITN is used by two people. Among the household population, 75% of individuals have access to an ITN, while 68% slept under an ITN the night before the survey.

Ownership of, Access to, and Use of ITNs
Percent of:



* Assuming one ITN covers 2 persons

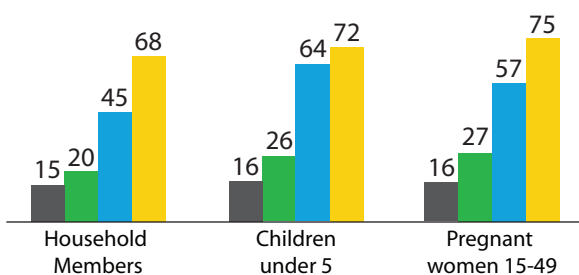
Trends in Use of ITNs

Children and pregnant women are most vulnerable to malaria. In 2011-12, 72% of children under five and 75% of pregnant women slept under an ITN the night before the survey. Use of mosquito nets by household members, children under five, and pregnant women has increased markedly since 2004-05.

Trends in Use of ITNs

Percent who slept under an ITN the night before the survey

Legend: 2004-05 TDHS (Dark Grey), 2007-08 THMIS (Green), 2010 TDHS (Blue), 2011-12 THMIS (Yellow)



Intermittent Preventive Treatment of Pregnant Women

Malaria during pregnancy contributes to low birth weight, infant mortality, and other complications. To prevent malaria, pregnant women should receive two or more doses of SP/Fansidar during an antenatal care (ANC) visit. Nearly one-third (32%) of pregnant women received this intermittent preventive treatment (IPTp) during ANC.

Management of Malaria in Children

In the two weeks before the survey, one in five children under age five had fever, the primary symptom of malaria. Just over three-quarters (77%) of children with fever sought treatment from a health facility, while 25% had blood taken from a finger or heel stick.

At the time of the survey, artemisinin combination therapy (ACT) was the recommended drug for treating malaria in children. Over half (54%) of children with fever received an antimalarial. Among these children, 61% received ACT.

Indoor Residual Spraying

Indoor residual spraying (IRS) is limited to specific regions within Tanzania. Only 14% of households in Tanzania had been sprayed with insecticide in the year before the survey. Spraying was very common in Kagera region and Zanzibar, where 92% and 87% of households were sprayed, respectively.



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ANAEMIA AND MALARIA PREVALENCE

All children age 6-59 months living in selected households were eligible for anaemia and malaria testing. Anaemia testing was carried out using the HemoCue system. Malaria testing was done through both rapid diagnostic testing (RDT) as well as blood smear microscopy. Of the 8,119 eligible children, 95% provided blood for anaemia, 94% for rapid diagnostic testing, and 92% for microscopy testing. This report presents malaria prevalence estimates based only on RDT results.

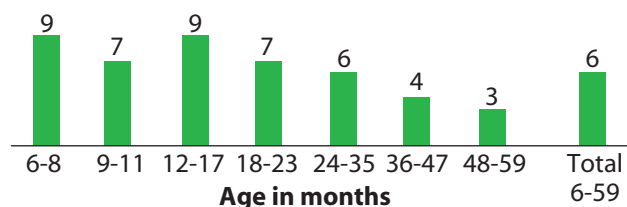
Anaemia Prevalence

Anaemia is a common symptom of malaria in children. In Tanzania, 6% of children age 6-59 months have moderate to severe anaemia. Moderate to severe anaemia generally declines with age.

Anaemia prevalence is highest in Arusha (16%) and Lindi (12%) and is lowest in Kilimanjaro where less than 1% of children age 6-59 months anaemic.

Prevalence of Moderate to Severe Anaemia in Children

Percent of children 6-59 months with moderate to severe anaemia (haemoglobin <8.0 g/dl)

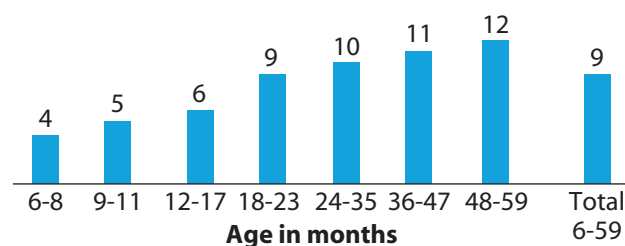


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Malaria Prevalence

In Tanzania, 9% of children age 6-59 months tested positive for malaria according to RDT. Malaria prevalence increases with age. Malaria prevalence is higher in rural areas (10%) than in urban areas (3%).

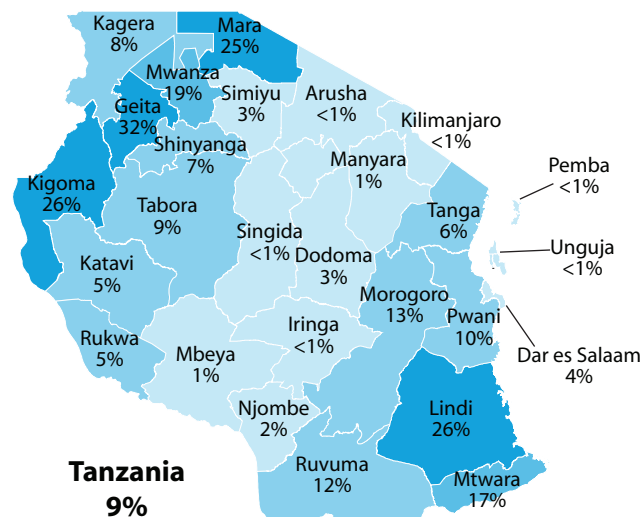
Malaria Prevalence in Children
Percent of children age 6-59 months testing positive for malaria by rapid diagnostic test (RDT)



By region, malaria prevalence varies greatly. Prevalence is highest in Geita (32%), Kigoma (26%), and Lindi (26%). Malaria is more common in Mainland Tanzania (10% prevalence) compared to Zanzibar (<1% prevalence).

Malaria Prevalence in Children by Region

Percent of children 6-59 months testing positive for malaria by rapid diagnostic test (RDT)



MALARIA KNOWLEDGE AND COMMUNICATION

Knowledge of Malaria

Seventy-eight percent of women and 70% of men reported fever as a sign or symptom of malaria in a young child.

Knowledge that malaria can be prevented is nearly universal. Among men and women who know that it can be prevented, 98% cited sleeping under a mosquito net as a way to avoid malaria. However, only 4% of women and 2% of men cited IPTp as a way to avoid malaria.

Exposure to Media Messages

Eighty-four percent of women and 93% of men have heard the messages 'Malaria Haikubaliki' or 'Maliza Malaria' in the past year. Radio is the most common channel by which the message was heard (84% of women and 91% of men).



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Hati Punguzo Programme

Among women and men in Mainland Tanzania, over 8 in 10 have heard of *Hati Punguzo*, the voucher programme for ITNs for pregnant women and infants. Most women heard of *Hati Punguzo* at a health facility (74%), followed by radio (46%). For men, the most commonly cited source was the radio (74%), followed by a health facility (48%).

Almost two-thirds of women from Mainland Tanzania who had a live birth in the past five years and who received ANC received a *Hati Punguzo* voucher. Among women who received a voucher, just over half received it at their first ANC visit.

KEY INDICATORS

HIV/AIDS-Related Knowledge	Residence		
	Total	Urban	Rural
Women age 15-49 who know that the risk of HIV transmission can be reduced by using condoms and limiting sex to one faithful, uninfected partner (%)	63	75	59
Men age 15-49 who know that the risk of HIV transmission can be reduced by using condoms and limiting sex to one faithful, uninfected partner (%)	71	74	69
Women age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother to child transmission (MTCT) of HIV can be reduced by the mother taking special drugs during pregnancy (%)	64	78	59
Men age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother to child transmission (MTCT) of HIV can be reduced by the mother taking special drugs during pregnancy (%)	55	63	52
Women age 15-49 with comprehensive knowledge of AIDS ¹ (%)	42	55	37
Men age 15-49 with comprehensive knowledge of AIDS ¹ (%)	50	58	47
Young women age 15-24 with comprehensive knowledge of AIDS ¹ (%)	40	52	36
Young men age 15-24 with comprehensive knowledge of AIDS ¹ (%)	47	56	43
HIV/AIDS-Related Behaviour			
Women age 15-49 who had 2+ sexual partners in the last 12 months (%)	4	5	4
Men age 15-49 who had 2+ sexual partners in the last 12 months (%)	21	17	22
Men age 15-49 who are circumcised (%)	72	94	64
Young women age 15-24 who had sexual intercourse before the age of 15 (%)	9	7	10
Young men age 15-24 who had sexual intercourse before the age of 15 (%)	10	7	11
Never-married young women age 15-24 who had sexual intercourse in the last 12 months (%)	32	39	29
Never-married young men age 15-24 who had sexual intercourse in the last 12 months (%)	42	42	42
HIV Testing			
Women age 15-49 who have ever been tested and received the results (%)	62	70	60
Men age 15-49 who have ever been tested and received the results (%)	47	57	44
HIV Prevalence			
Women age 15-49 who are HIV-positive (%)	6.2	8.9	5.1
Men age 15-49 who are HIV-positive (%)	3.8	5.2	3.4
Malaria Prevention and Treatment			
Households with at least one insecticide-treated net (ITN) (%)	91	87	92
Children <5 who slept under an ITN the night before the survey (%)	72	73	72
Pregnant women who slept under an ITN the night before the survey (%)	75	76	74
Pregnant women who received 2+ doses of SP/Fansidar, at least one during an ANC visit (%)	32	39	30
Anaemia and Malaria Prevalence			
Anaemia prevalence (children 6-59 months) ² (%)	6	6	5
Malaria prevalence (children 6-59 months) by RDT (%)	9	3	10

1-Knows that consistent use of condoms and having just one uninfected partner can reduce the chances of getting the AIDS virus, knows that a healthy-looking person can have the AIDS virus, and knows that AIDS cannot be transmitted by mosquito bites or by supernatural means.

2-Moderate to severe anaemia is defined as haemoglobin lower than 8.0g/dl

Zone								
Eastern	Western	Southern	Southern Highlands	Southwest Highlands	Central	Northern	Lake	Zanzibar
79	68	76	70	47	63	52	61	55
75	68	82	76	83	71	71	62	39
76	71	81	75	60	51	54	58	75
61	57	64	73	63	44	47	47	62
59	44	52	43	30	43	39	36	37
57	44	56	56	64	47	51	41	30
56	44	52	44	30	44	33	33	34
56	42	62	54	62	42	50	36	31
4	4	9	3	1	3	1	6	<1
22	12	25	27	18	21	15	24	9
96	65	>99	67	37	92	96	49	>99
6	14	19	7	7	9	8	12	2
11	10	20	5	12	7	9	11	<1
43	31	45	46	22	23	23	34	6
53	48	56	42	36	39	32	42	15
69	66	72	70	51	61	61	59	60
50	53	51	55	40	45	44	45	48
7.7	5.1	5.4	10.8	9.2	3.2	4.0	5.4	1.1
4.1	3.4	1.4	7.2	6.5	2.1	1.7	3.9	0.9
84	95	94	94	90	93	90	94	74
71	79	79	75	67	72	71	72	51
75	78	81	77	59	71	71	83	36
47	25	43	39	30	37	35	21	48
8	6	7	5	3	4	9	5	4
8	17	21	8	3	1	3	15	<1

