

Tanzania

2007-08 HIV/AIDS and Malaria Indicator Survey

Key Findings



This report summarizes the findings of the 2007-08 Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS), commissioned by the Tanzanian Commission for AIDS (TACAIDS) and the Zanzibar AIDS Commission (ZAC) and implemented by the National Bureau of Statistics (NBS) in collaboration with the Office of Chief . Macro International Inc. provided technical assistance for the survey through the USAID-funded MEASURE DHS programme, which is designed to assist developing countries to collect data on fertility, family planning and maternal and child health. Technical assistance was funded by the United States Agency for International Development (USAID)/Tanzania. Other assistance was provided by the National AIDS Control Programme, the National Malaria Control Programme, the Ministry of Health and Social Welfare, the Zanzibar AIDS Control Programme, and the Muhimbili University College of Health Sciences.

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Additional information about the 2007-085 THMIS may be obtained from the Tanzania Commission for AIDS (TACAIDS), P.O. Box 76987, Dar es Salaam, Tanzania (Telephone: 255-22-212-265; Fax: 255-22-212-2427, Email: tacaids@raha.com) or the National Bureau of Statistics (NBS), P.O. Box 796, Dar es Salaam, Tanzania; (Telephone: 255-22-213-2549 or 213-2547; Fax: 255-22-213-0852; Email: dg@nbs.go.tz).

Additional information about the DHS project may be obtained from Macro International Inc., 11785 Beltsville Drive, Calverton, MD 20705, USA; (Telephone: 301-572-0200, Fax: 301-572-0999, Internet: www.measuredhs.com).

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Cover photograph: © Ayesha Mawji. Aisha Felix (pictured) is the Chairperson of the TUPENDANE Group, an organization for women living with HIV/AIDS. She is a single parent with three children. Her sign reads: "The vision of TUPENDANE is to see people living with HIV and their children living in peace and friendship."



United
Republic of
Tanzania

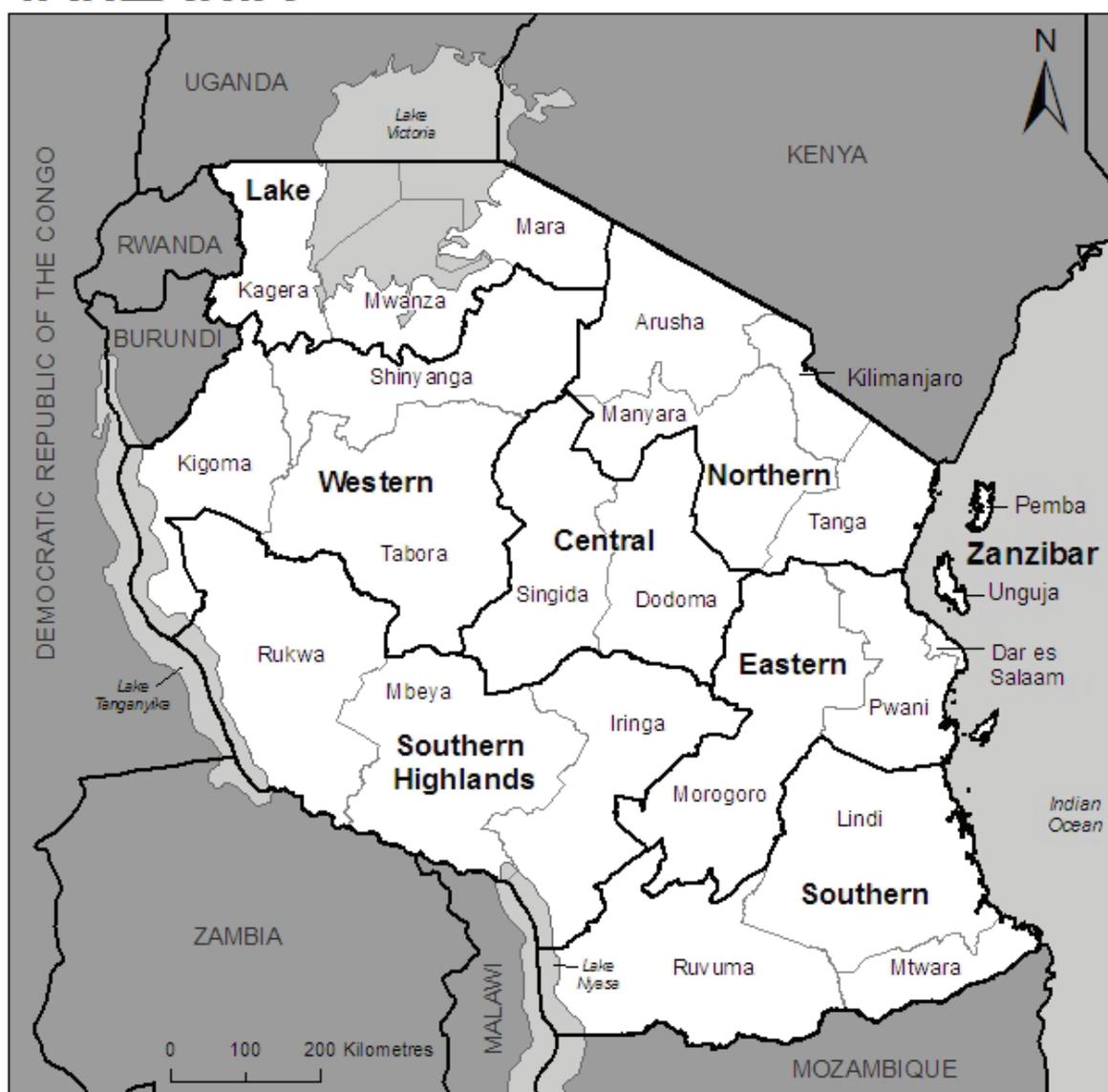
ABOUT THE 2007-08 THMIS

The 2007-08 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 2007-08 THMIS is the eighth national survey carried out as part of the Demographic and Health Surveys project in Tanzania. It is the second comprehensive survey on HIV/AIDS carried out in Tanzania.

Who participated in the survey?

A nationally representative sample of 9,343 women age 15-49 and 6,975 men age 15-49 were interviewed. This represents a response rate of 96% for women and 88% for men. This sample provides estimates for Tanzania as a whole, for urban and rural areas, for each of the seven zones, and, for most indicators, an estimate for each of the 26 regions.

TANZANIA



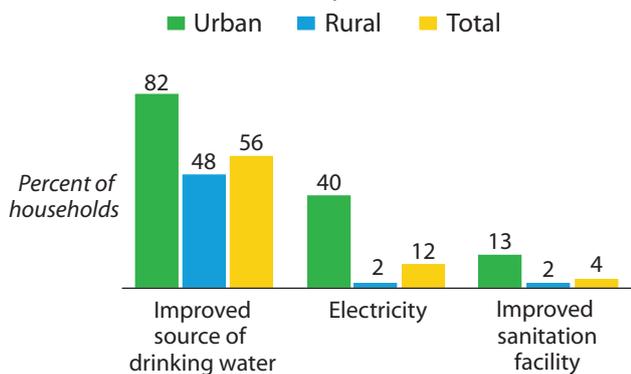
CHARACTERISTICS OF HOUSEHOLDS & RESPONDENTS

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 areas than in rural areas. More than four in five urban households have access to an improved source of drinking water, compared to only 48% of households in rural areas. Two in five urban households have electricity compared to only 2% of rural households. Sanitation facilities are limited throughout Tanzania—13% of urban households and only 2% of rural households have access to an improved sanitation facility.

Water, Electricity and Sanitation



More than half of Tanzanian households have a radio, while only 9% have a TV. More than one-quarter of households have a mobile phone. Only 10% of households have a bank account. Two in five households have a bicycle while only 1% of households has a car or truck. Households in urban areas are more likely to own all of these possessions, with the exception of the bicycle, which is more common in rural households.



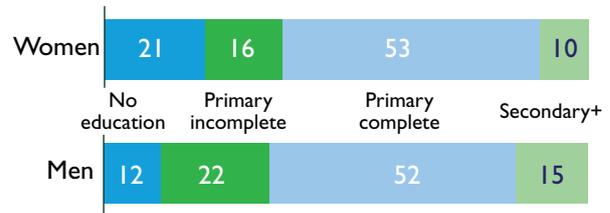
Photo by René Salgado, M.D.

Survey Respondents Age 15-49

One-fifth of women age 15-49 and over one-tenth of men age 15-49 have had no education. About half of women and men have completed primary school. Only 10% of women and 15% of men have gone to secondary school or beyond.

Education

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



Seventy-five percent of women and 80% of men were employed at the time of the survey.

Men have better access to mass media than women. Forty percent of women had no weekly access to mass media compared to only 23% of men. The radio is the most common form of media for both women and men: 56% of women and 73% of men listen to the radio weekly.

Marriage

Almost two-thirds of women age 15-49 are currently married compared to 53% of men age 15-49. Almost one-quarter of women are in a polygynous marriage.

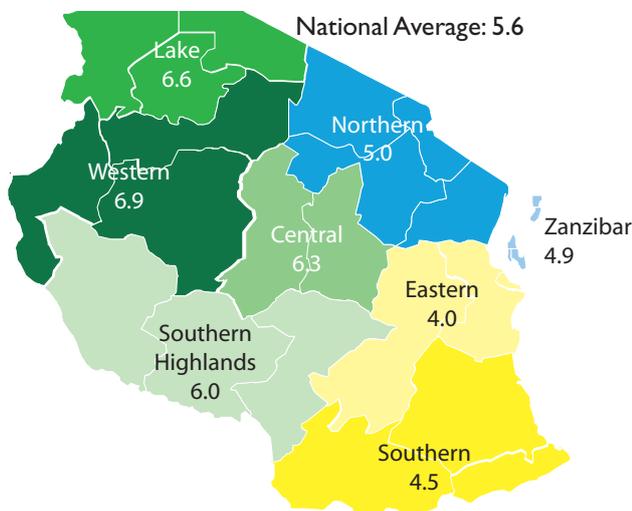
Half of women are married by age 18.8, while men get married much later, at a median age of 24.3.

FERTILITY AND REPRODUCTIVE HEALTH

Currently, Tanzanian women have an average of 5.6 children in their lifetime. This fertility rate is just slightly lower than the rate reported in the 2004-05 TDHS (5.7). Fertility is very high in rural areas, where women have an average of 6.4 children, while women in urban areas have an average of only 3.5 children.

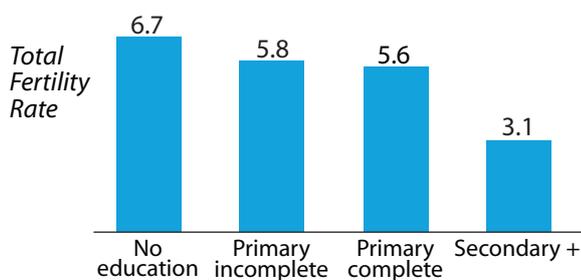
Fertility varies by zone of residence. Women living in Eastern Zone have the lowest average number of children (4.0), whereas women living in Western Zone have an average of 6.9 children.

Total Fertility Rate by Zone



Fertility decreases with education and with wealth. Women with secondary or more education have only 3.1 children on average, compared to 6.7 children among those with no education. Similarly, women from the poorest households have more than twice as many children as women from the wealthiest households.

Fertility by Education



Teenage Pregnancy

Almost one quarter (23%) of young women age 15-19 are already mothers or are pregnant with their first child. Teenage motherhood is much more common in rural than in urban areas (26% versus 16%).

Almost one in four teenagers have begun childbearing.

Antenatal Care

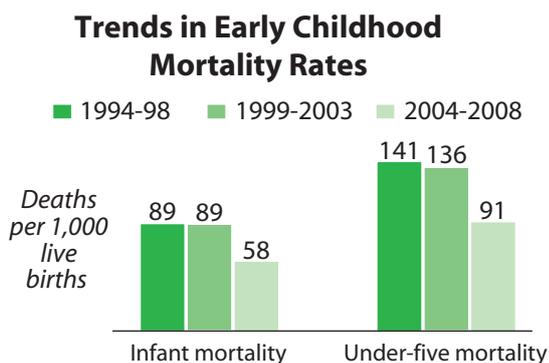
Almost all pregnant women (97%) receive antenatal care from a skilled provider. Two-thirds receive antenatal care from a nurse or midwife, while only 4% receive this care from a doctor.



Photo by René Salgado, M.D.

CHILDHOOD MORTALITY

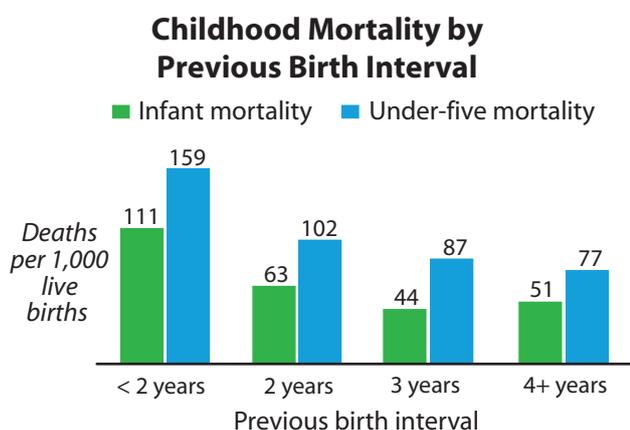
Childhood mortality rates have fallen dramatically in recent years. Infant mortality for the five years before the 2007-08 survey is 58 deaths per 1,000 live births, down almost 35% from 89 in 2004-05. Under-five mortality is 91 deaths per 1,000 live births. This means that one in eleven children dies before his or her fifth birthday.



Childhood mortality varies by region. Infant mortality, for example, is highest in Eastern Zone (103) and lowest in Zanzibar (54).

Childhood mortality decreases as mother's education increases. Under-five mortality for children whose mothers have secondary or higher education is only 78 deaths per 1,000 live births compared to 129 deaths for children whose mothers have no education. Childhood mortality also decreases with household wealth.

Previous birth interval is an important factor in childhood mortality. Children born less than two years after a sibling are more than twice as likely to die during childhood as those born four or more years after a sibling.



ORPHANS AND VULNERABLE CHILDREN

More than one in ten (11%) children under age 18 is an orphan, meaning that at least one of his or her parents is dead. Orphanhood is highest in Iringa (24%) and lowest in Lindi region and Pemba Island (6% each).

Eight percent of Tanzanian children are classified as vulnerable. Vulnerable children are those who have lived with a very sick adult for at least three months of the last year or lived in a household where at least one adult died in the past year and had been very sick for at least three months. In all, 18% of children are orphans or vulnerable children (OVC).

One in six children under age 18 is an orphan or vulnerable child (OVC).

OVC are often disadvantaged compared to their non-OVC peers. OVC are far less likely to have basic material needs (shoes, two sets of clothes, and a blanket).

Only 7% of households with OVC received any external support, such as medical, emotional, social or school-related assistance, in the year before the survey.



Photo by René Salgado, M.D.

HIV/AIDS KNOWLEDGE

Almost all Tanzanians have heard of AIDS. Knowledge of AIDS prevention, however, is less common. Only 69% of women and 76% of men know that using condoms reduces the risk of contracting HIV. More women and men (more than 80%) know that limiting sex to one uninfected partner or abstaining from sex reduces the risk of HIV transmission.

Most Tanzanians reject common myths about HIV/AIDS. More than four in five adults know that a healthy-looking person can have HIV and that HIV cannot be transmitted by supernatural means. About three-quarters know that HIV cannot be transmitted by mosquito bites.

Only 40% of women and 44% of men, however, have a comprehensive knowledge of AIDS. That is, they know that using condoms and having just one uninfected partner can reduce the chances of getting HIV, know that a healthy-looking person can have the AIDS virus, and know that the AIDS virus cannot be transmitted by mosquito bites or by supernatural means. Comprehensive knowledge is much higher in urban areas than in rural areas (53% versus 35% among women). As expected, comprehensive knowledge increases with education and wealth. For example, only 26% of men with no education have comprehensive HIV knowledge compared to 61% of men with secondary or higher education.

More than 25% of Tanzanian adults do not know that using a condom reduces the risk of getting HIV.

Comprehensive knowledge varies substantially by region, from a low of 15% among women in Rukwa to a high of 63% of women in Lindi.

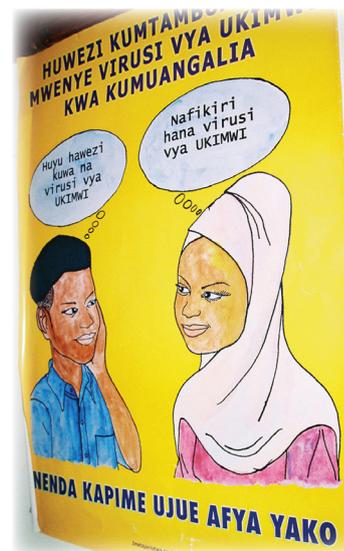
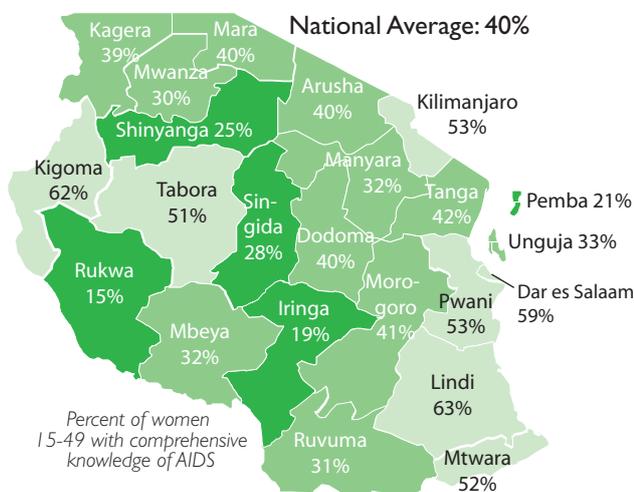
Knowledge of Prevention of Mother-to-Child Transmission of HIV (MTCT)

While about three-quarters of women and men know that HIV can be transmitted by breastfeeding, only 53% of women and 44% of men know that the risk of MTCT can be reduced by the mother taking special drugs during pregnancy.

Messages about HIV/AIDS

About half of women and two-thirds of men heard or watched an HIV education programme on TV or radio in the year before the survey. Tuzungumze Ukimwi and Femina/Fema were the most common programmes watched or heard among both women and men.

Women's Comprehensive Knowledge of AIDS



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HIV/AIDS-RELATED ATTITUDES

Attitudes towards those living with HIV/AIDS

HIV-related stigma is still present in Tanzania. While most women and men say that they would be willing to care for a family member with the AIDS virus in their home (more than 90%), only 49% of women and 59% of men would not want their family member's HIV status to be kept secret.

Among women, accepting attitudes are most common in Arusha region and Unguja Island (42% and 39% expressing accepting attitudes on all 4 indicators), while men in Dar es Salaam are most likely to express accepting attitudes on all four indicators (56%).

Negotiating Safer Sex

More than 90% of women and men agree that a woman is justified in either refusing sexual intercourse or asking to use a condom if her husband has a sexually transmitted infection.

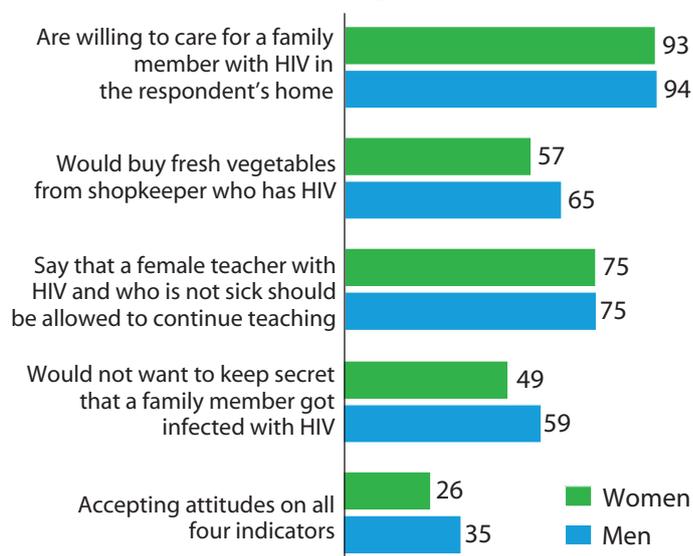
Support of Condom Education

Less than two-thirds of women and men age 18-49 agree that children age 12-14 should be taught about using a condom to avoid contracting HIV.



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Accepting Attitudes Towards Those Living with HIV/AIDS



Percent

HIV/AIDS-RELATED BEHAVIOUR

Age at First Sex

Half of Tanzanian women age 25-49 had their first sexual intercourse at a median age of 17.3. Men initiate sexual activity about a year later, at a median age of 18.5.

Multiple Sexual Partners and Condom Use

Among women and men, 3% of women and 18% of men had more than one sexual partner in the past 12 months. Among those men who had two or more sexual partners, 22% used a condom during their last sexual intercourse. Multiple sexual partners for men is most common in rural areas (19%) and in Mtwara (28%).

Tanzanian women report that they have an average of 2.4 sexual partners in their lifetime, while men report an average of 6.8 sexual partners.

Payment for Sex

Eight percent of men report that they paid for sex in the year before the survey. Sixty percent of those who paid for sex used a condom the last time they paid for sex. Payment for sex is most common among young men: 13% of 20-24 year-olds paid for sex in the year before the survey.

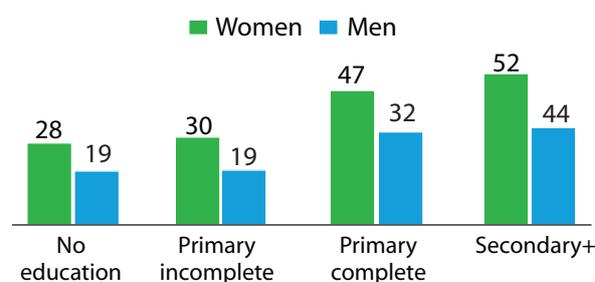
Prior HIV Testing

More than 80% of women and men know where to get an HIV test. However, only 37% of women and 27% of men have ever been tested for HIV and received the results. Prior testing is most common in urban areas (52% among women), those living in Dar es Salaam (60% of women), those with secondary or more education, and those from the wealthiest households.

Overall, the proportion of people who are tested for HIV and received results is increasing. In the 2007-08 THMIS, 19% of women and men were tested for HIV and received the results in the past 12 months, compared to only 5% of women and 7% of men in 2003-04 Tanzania HIV/AIDS Indicator Survey (THIS).

Prior HIV Testing by Education

Percent of women and men 15-49 ever tested



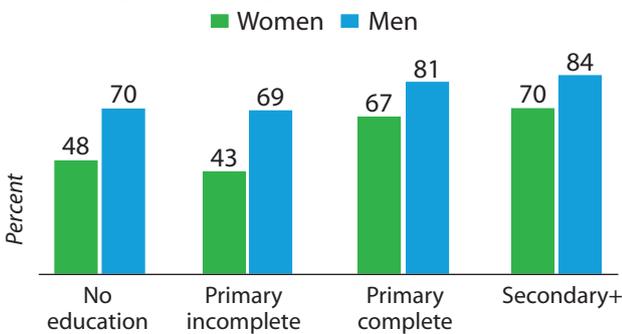
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HIV AND YOUTH

HIV Knowledge among Youth

About 60% of young women (age 15-24) and three-quarters of young men know a source for condoms. But only about 40% of young people have comprehensive knowledge of HIV/AIDS. Comprehensive knowledge is higher in urban than rural areas (52% versus 35%, among young women), and is highest among youth with secondary or more education. Knowledge of a condom source also increases with education.

Knowledge of a Source for Condoms among Youth Age 15-24 by Education



First Sexual Experience and Condom Use

Eleven percent of young women and 10% of young men had sexual intercourse before age 15. More than half of young women and 43% of young men had sexual intercourse by age 18. Among the youth who ever had sexual intercourse, only 24% of young women and 29% of young men used a condom the first time they had sex.

Premarital Sex

More than half of young unmarried women and men have never had sex (62% and 53% respectively). Among the never-married youth, 30% of young women and 33% of young men had sexual intercourse in the year before the survey. About half of the sexually active youth used a condom the last time they had sex. Condom use during premarital sex increases dramatically with education—youth with secondary or more education are twice as likely to use a condom than their peers with no education.

About half of unmarried, sexually active youth used a condom the last time they had sexual intercourse.

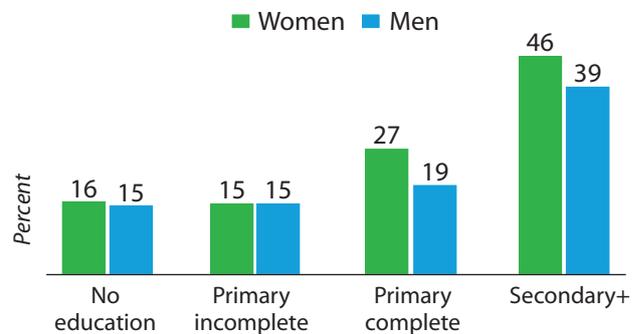
Age Differences with Sexual Partners

Eight percent of young women had sexual intercourse with a man ten or more years older. This is most common in Lake Zone and among women with no education.

Recent HIV Tests among Youth

One-quarter of young women and one-fifth of young men were tested for HIV and received the results in the year before the survey. Youth living in urban areas, especially those living in Dar es Salaam, are most likely to have been tested. Prior testing also increases with education.

Recent HIV Tests among Youth Age 15-24 by Education



HIV PREVALENCE

The 2007-08 THMIS included HIV testing of over 8,700 age 15-49 women and 6,300 men age 15-49. According to the 2007-08 THMIS, 5.7% of Tanzanians age 15-49 are HIV-positive. Women are more likely to be infected than men (6.6% versus 4.6%).

Trends

Tanzania's HIV prevalence has declined slightly in recent years, from 7.0% in 2003-04. The 2003-04 THMIS reported that 7.7% of women (6,000 tested) and 6.3% of men (4,900 tested) were HIV-positive. The 2007-08 THMIS results show a statistically significant decline in HIV prevalence among men, but not among women. The decrease in national prevalence (total of women and men) is also statistically significant.

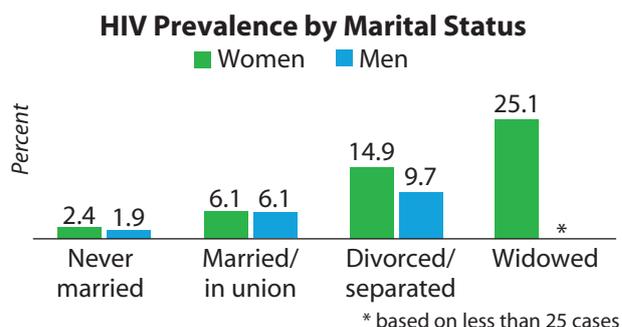
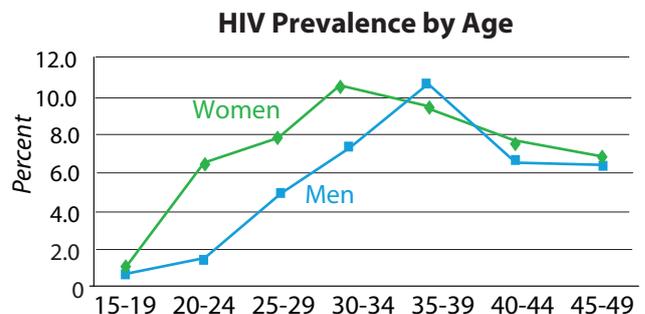
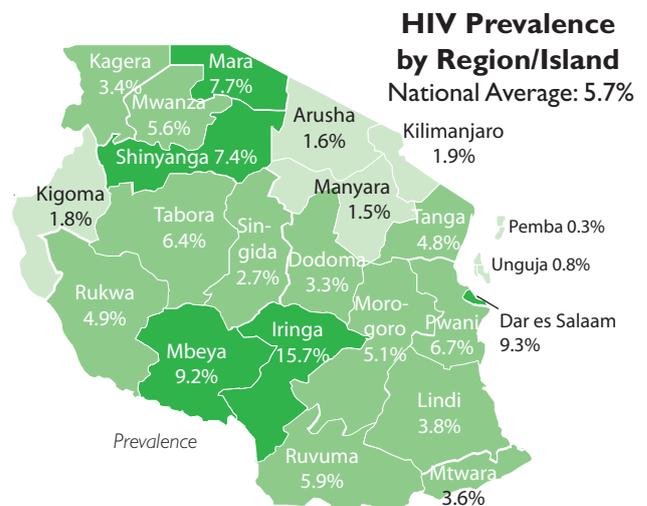
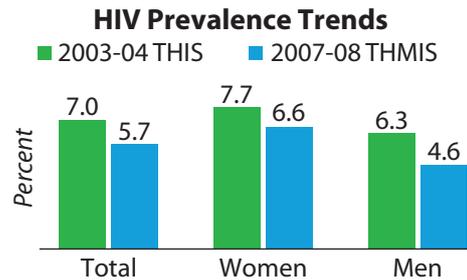
Patterns

HIV prevalence is higher in urban areas than in rural areas (8.7% versus 4.7%) and ranges from a low of 0.3% in Pemba Island to 15.7% in Iringa region.

HIV prevalence is highest among those who completed primary education (6.2%), although all educational groups are affected. In general, HIV prevalence increases with wealth, with 8.1% of women and men in the wealthiest households HIV-positive.

Among women, HIV prevalence hits its peak at age 30-34 at 10.4%, while prevalence is highest among men at age 35-39 (10.6%).

HIV prevalence is especially high among those who are divorced/separated or widowed. One in four widowed women in Tanzania is HIV-positive.



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MALARIA PREVENTION AND TREATMENT

Ownership and Use of Mosquito Nets

More than half of households (56%) own a mosquito net, and 39% of households own an insecticide-treated net (ITN). Ownership of nets is more common in urban than rural areas and is most common in Zanzibar where 72% of households own an ITN. Ownership of ITNs increases with household wealth. The wealthiest households are three times as likely as the poorest households to have an ITN.

Nationwide, 26% of children under age five slept under an ITN the night before the survey. Use of mosquito nets is highest in Dar es Salaam and Zanzibar, where more than half of children slept under an ITN the night before the survey.

Pregnant women are also especially vulnerable to malaria. More than one-third of pregnant women slept under a mosquito net, while 27% slept under an ITN the night before the survey. These are approximately the same proportions of net use found among all women.

Mosquito nets were most commonly obtained from shops (34%), health facilities (21%), or from the Hati Punguzo programme (21%).

Antimalarial Drug Use During Pregnancy

Malaria during pregnancy contributes to low birth weight, infant mortality, and other complications. At the time of the survey, it was recommended that pregnant women receive two doses of the antimalarial drug SP/Fansidar as intermittent preventive treatment (IPT). Sixty percent of pregnant woman took any antimalarial drug during their last pregnancy, and most of these took SP/Fansidar. Only 31% of pregnant women, however, took two or more doses of SP/Fansidar. Thirty percent of pregnant women took two doses, including one during an ANC visit.

Pregnant women in urban areas and those living in Dar es Salaam and Zanzibar were most likely to receive the recommended prophylactic treatment.



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Management of Malaria in Children

In the two weeks before the survey, 19% of children under age five had fever, the primary symptom of malaria. Of these children, 57% took an antimalarial drug, but only 34% took the drug the same day or day after the fever began. Just over half of children with fever (54%) sought treatment from a health facility.

At the time of the survey, ALu/Coartem was the recommended drug for treating malaria in children. One-fifth of children with a fever took ALu/Coartem, while 18% took amodiaquine and 12% took quinine.

Indoor Residual Spraying

Only 4% of households in Tanzania had been sprayed with insecticide in the year before the survey. Spraying was very common in Zanzibar, where 94% of households were sprayed. The government coordinated the majority of the spraying.

MALARIA AND ANAEMIA PREVALENCE

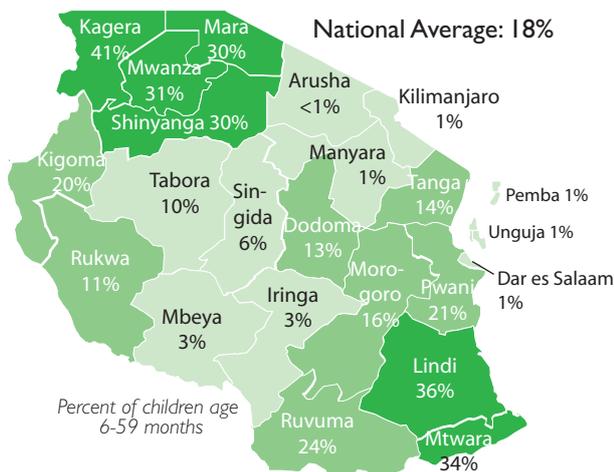
Malaria Prevalence

Malaria may be present in the blood despite the absence of symptoms. The 2007-08 THMIS tested 6,400 children age 6-59 months for malaria.

Malaria parasites were detected in 18% of children age 6-59 months. Malaria is most common among older children who are less likely to sleep under nets.

Malaria is much more common in rural areas than in urban areas (20% versus 7%), and prevalence ranges from less than 1% in Zanzibar and Arusha to 41% in Kagera. Prevalence is highest among children whose mothers have lower levels of education and among those from the poorest households.

Malaria Prevalence by Region/Island

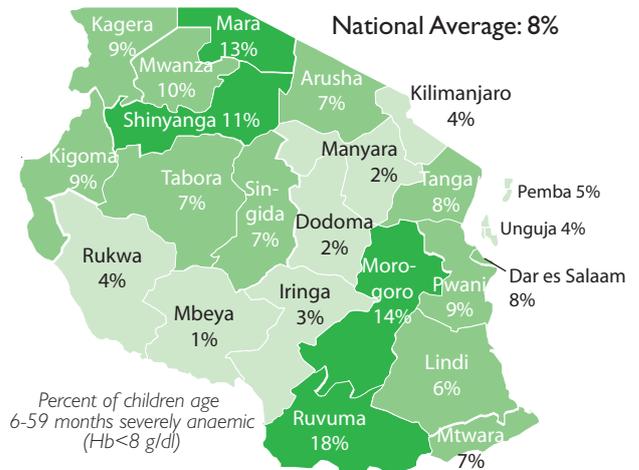


Anaemia

Anaemia is a common comorbidity of malaria. About 8% of children age 6-59 months are severely anaemic. Anaemia in Tanzania is most common among children under age two.

Anaemia prevalence is similar in urban and rural areas but varies widely by region. Eighteen percent of children in Ruvuma are anaemic compared to only 1% in Mbeya.

Anaemia Prevalence by Region/Island



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KEY INDICATORS

	Residence		
	Total	Urban	Rural
Fertility and Reproductive Health			
Total fertility rate (births per woman)	5.6	3.5	6.4
Women age 15–19 who are mothers or now pregnant (%)	23	16	26
Women giving birth in last 5 years who received antenatal care from a skilled provider (doctor, clinical officer, asst. clinical officer, nurse, midwife, or MCH aide) (%)	97	99	96
Childhood Mortality			
(Figures are for the ten-year period before the survey, except for the national rate, in italics, which represents the five-year period before the survey)			
Number of deaths per 1,000 births:			
Infant mortality (between birth and first birthday)	58	79	70
Under-five mortality (between birth and fifth birthday)	97	110	112
Orphans and Vulnerable Children			
Children under 18 years who are orphans (one or both parents dead) (%)	11	13	10
Children under 18 years who are “vulnerable” ¹ (%)	8	11	8
Orphans and/or vulnerable children (% of children under 18)	18	21	17
Malaria and Anaemia			
Households with at least one insecticide-treated net (ITN) (%)	39	59	33
Children <5 who slept under an ITN the night before the survey (%)	26	49	21
Pregnant women who slept under an ITN the night before the survey (%)	27	48	21
Pregnant women who received 2+ doses of SP/Fansidar, at least one during an ANC visit (%)	30	42	28
Children under 5 with fever who took antimalarial drugs the same day or day after fever began (%)	34	50	31
Malaria prevalence (children 6-59 months) (%)	18	7	20
Anaemia prevalence (children 6-59 months) (%)	8	8	8
HIV/AIDS-Related Knowledge, Attitudes, and Behaviour			
Has comprehensive knowledge ² of AIDS (women 15-49) (%)	40	53	35
Has comprehensive knowledge ² of AIDS (men 15-49) (%)	44	53	42
Women who know that HIV can be transmitted by breastfeeding AND that taking special drugs during pregnancy can prevent MTCT (%)	49	66	43
Women who have accepting attitudes on all 4 indicators ³ (%)	26	37	23
Men who have accepting attitudes on all 4 indicators ³ (%)	35	50	30
Women who were tested for HIV and received results in the year before the survey (%)	19	24	17
Men who were tested for HIV and received results in the year before the survey (%)	19	22	18
HIV Prevalence			
HIV prevalence among women age 15-49 (%)	6.6	10.6	5.3
HIV prevalence among men age 15-49 (%)	4.6	6.4	4.0

1-Children who have a parent or have lived in a house with an adult who was very sick for at least 3 of the past 12 months or have lived in a household where at least 1 adult died in the past year and had been very sick for at least 3 months before he/she died.

2- 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.

Region							
Western	Northern	Central	Southern Highlands	Lake	Eastern	Southern	Zanzibar
6.9	5.0	6.3	6.0	6.6	4.0	4.5	4.9
25	16	22	24	26	22	34	8
98	94	99	97	94	100	99	96
63	63	78	75	68	103	75	54
92	92	128	121	120	145	107	79
9	11	8	16	11	11	9	7
6	7	9	12	9	9	9	4
15	17	16	24	17	19	17	10
37	32	28	26	44	57	41	72
20	21	14	16	29	50	29	59
25	21	9	12	32	51	28	51
23	31	36	30	21	48	31	52
32	24	26	36	26	57	44	32
22	4	10	5	34	11	30	1
9	5	4	3	10	11	11	5
42	43	35	24	35	53	47	29
43	44	47	41	44	48	49	30
43	51	45	48	41	65	50	58
19	33	16	25	28	30	26	34
27	34	25	41	32	46	35	44
19	20	19	20	17	22	21	12
18	22	18	21	16	19	21	11
6.6	3.2	3.7	11.3	6.3	9.1	5.7	0.7
4.8	1.8	2.3	8.7	4.1	5.9	3.2	0.5

3-Are willing to care for a family member with the AIDS virus in the respondent's home, would buy fresh vegetables from a shopkeeper who has the AIDS virus, say that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching, and would not want to keep secret that a family member got infected with the AIDS virus.

