

## Ethiopia Atlas of Key Demographic and Health Indicators, 2005

Macro International Inc. Calverton, Maryland, USA

September 2008









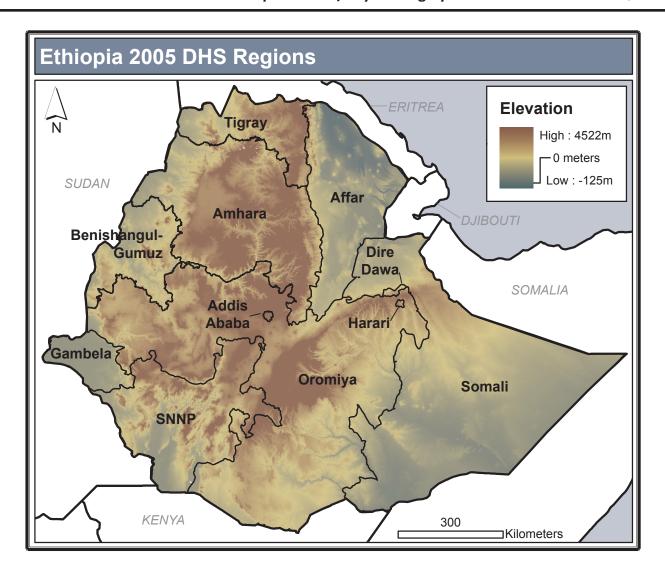
This atlas is based on data from the 2005 Ethiopia Demographic and Health Survey (EDHS) and was produced by Macro International Inc. The EDHS is part of the worldwide MEASURE DHS project, which is funded by the U.S. Agency for International Development (USAID). Additional information about the EDHS may be obtained from the Central Statistical Agency (CSA), P.O. Box 1143, Addis Ababa, Ethiopia; Telephone: (251) 111 55 30 11/111 15 78 41, Fax: (251) 111 55 03 34. E-mail: csa@ethionet.et. Additional information about the DHS project may be obtained by contacting the MEASURE DHS program, Macro International Inc., 11785 Beltsville Drive, Calverton, MD; Telephone: (301) 572-0200, Fax: (301) 572-0999, Internet: www.measuredhs.com.

## Recommended citation:

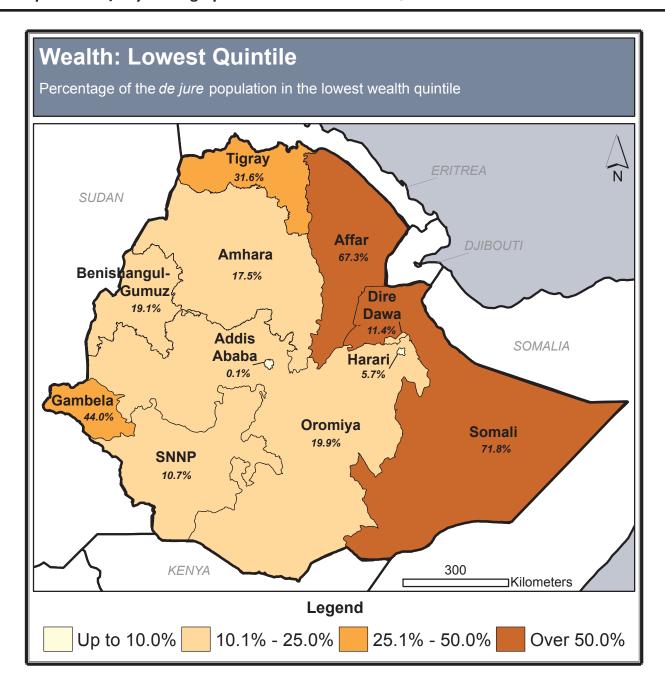
Macro International Inc. 2008. Ethiopia Atlas of Key Demographic and Health Indicators, 2005. Calverton, Maryland, USA: Macro International Inc.

## **CONTENTS**

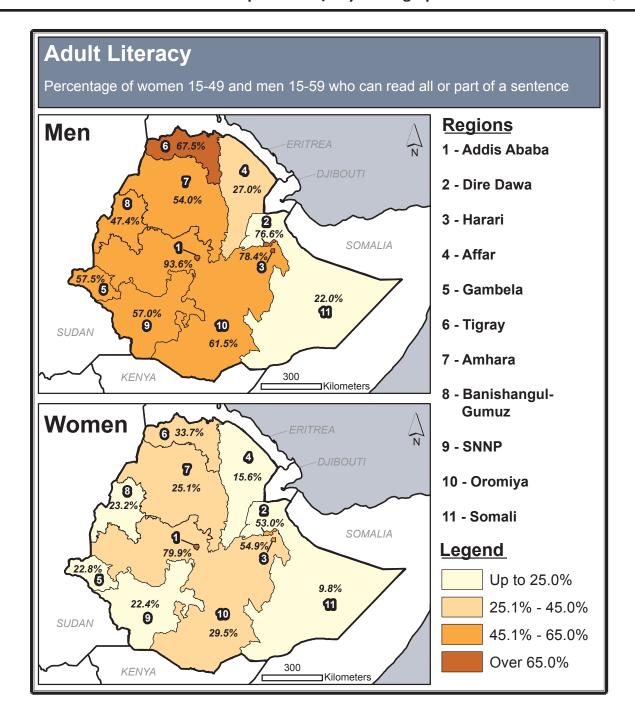
Ethiopia 2005 DHS Regions	I
Wealth: Lowest Quintile	2
Adult Literacy	3
Exposure to Media	4
Total Fertility Rate	5
Teenage Pregnancy and Motherhood	6
Contraceptive Prevalence	7
Unmet Need for Family Planning	8
Total Demand for Family Planning	9
Infant Mortality Rate	10
Under-Five Mortality Rate	11
Assistance during Delivery	12
Vaccination Coverage	13
Vitamin A Supplementation	14
Moderate or Severe Anemia in Children	15
Moderate or Severe Anemia in Women	16
Child Nutrition: Stunting	17
Women's Nutrition: Low Body Mass Index (BMI)	18
Knowledge of HIV/AIDS Prevention: Abstinence	19
Knowledge of HIV/AIDS Prevention: Be Faithful	20
Knowledge of HIV/AIDS Prevention: Condoms	21
Multiple Sex Partners: Men	22
Higher-Risk Intercourse: Men	23
Prevalence of HIV	24
Prevalence of HIV:Women	25
Prevalence of HIV: Men	26
Female Decisionmaking	27



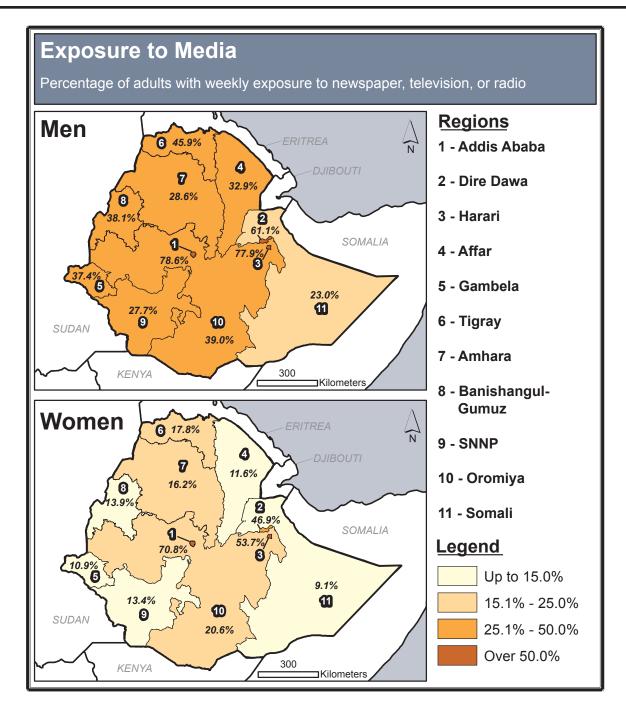
The 2005 Ethiopia DHS (EDHS) collected data from over 14,000 women and 6,000 men from every region in the country. The survey sampling method provides representative data for Ethiopia as a whole and for each of the 11 regions.



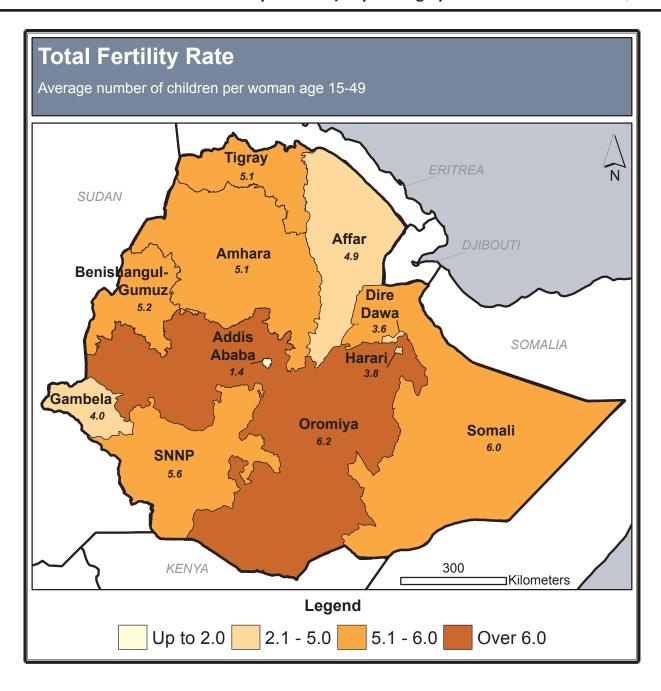
The EDHS divided the population into five wealth categories (quintiles), based on household assets such as bicycles and radios and characteristics of the household including access to water and sanitation facilities. By definition, 20 percent of the population at the national level falls into the lowest wealth quintile. Wealth is very unequally distributed in Ethiopia. Less than 10 percent of the population in Harari and Addis Ababa and less than 12 percent in Dire Dawa, the most urbanized areas in the country, are in the lowest wealth quintile. In contrast, more than half of the residents of the very rural regions of Somali and Affar are in the lowest wealth quintile. In the very populous regions of Amhara and Oromiya, between 10 and 25 percent of the households are classified among the poorest in the nation.



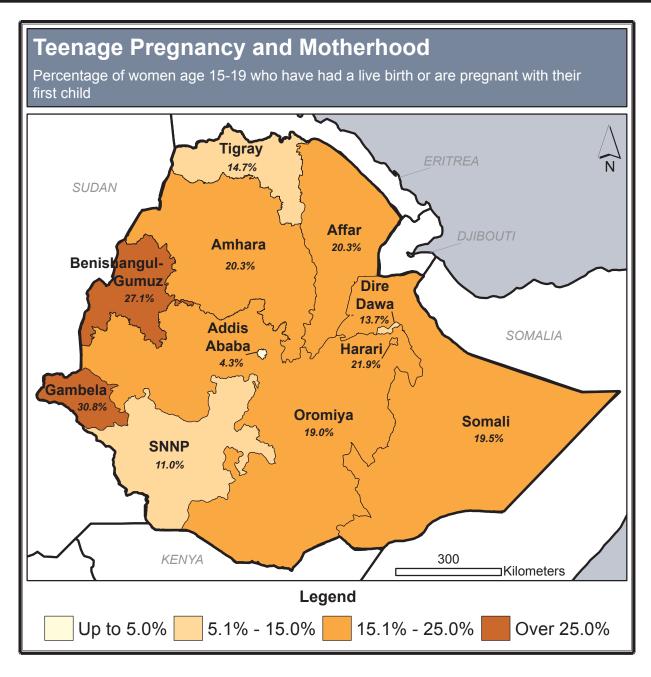
Adult literacy remains very low in Ethiopia, particularly among women. Less than one-fourth of women in Affar, Somali, Banishangul-Gumuz, Gambela, and SNNP can read. Half or more of women are literate in only three regions—Addis Ababa, Dire Dawa, and Harari. Many more Ethiopian men are literate, ranging from a low of 22 percent in Somali to over 90 percent in Addis Ababa. More than half of men can read in all but three (Somali, Affar, and Banishangul-Gumuz) of Ethiopia's 11 regions.



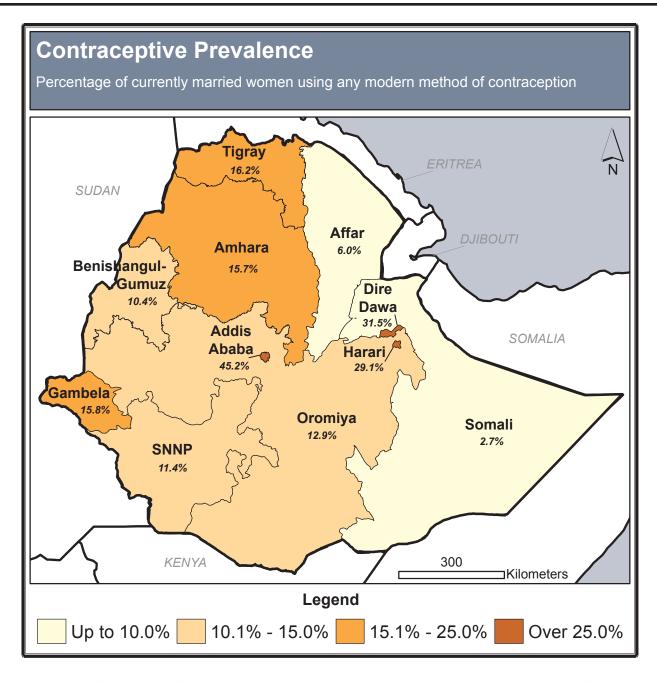
Mass media are a gateway to new ideas and a source of important health information. The DHS asked men and women if they were exposed to radio, newspapers, or television at least once a week. Nationwide, access to media is limited. As expected, urban residents have far more exposure to mass media than rural dwellers. Women, particularly in rural areas, have far less access to media than men. With the exception of the urban regions of Addis Ababa, Dire Dawa, and Harari, less than 21 percent of women are exposed to even one medium weekly. Among men, on the other hand, access to media ranges from a low of 23 percent in Somali to a high of 79 percent in Addis Ababa. Radio is the most common medium for both men and women.



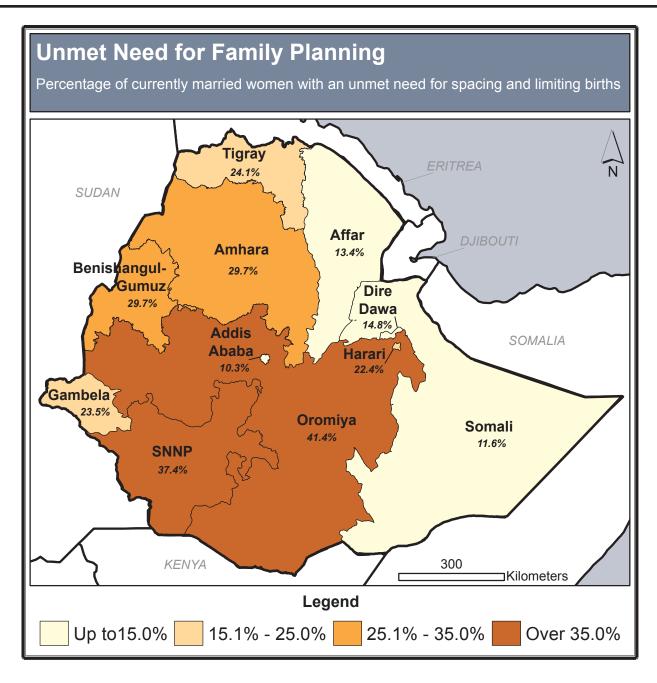
The total fertility rate represents the average number of children a women will have in her life-time. Nationwide, the total fertility rate is 5.4. There is substantial variation among regions, ranging from only 1.4 children per woman in Addis Ababa to 6 children in Somali and 6.2 children in Oromiya. Fertility is lowest in the urban areas and highest in the rural regions. Overall, the poorest and least educated women have the most children.



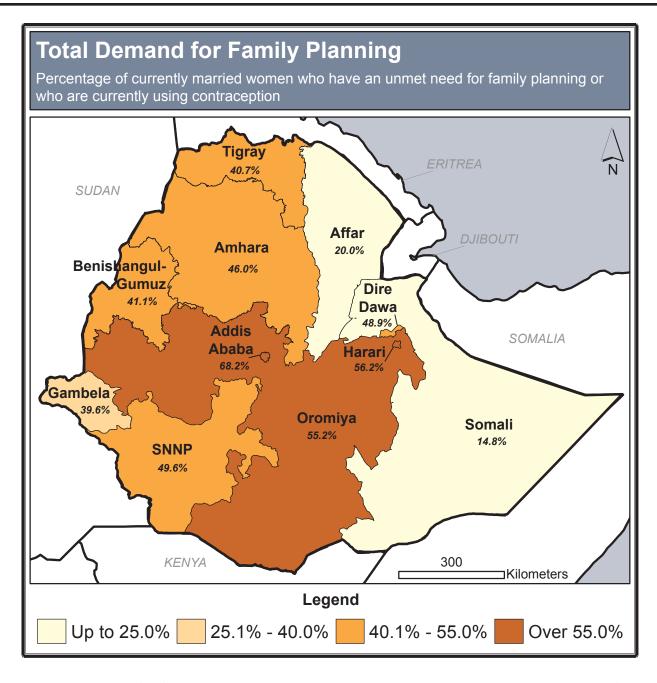
Early pregnancy carries health risks for both the mother and the child. It also limits opportunities for young women, usually ending their chances for further education and employment. Women who start giving birth in their teens are also more likely to have larger families. In Ethiopia, one in six young women age 15-19 (17 percent) is pregnant or has already given birth by age 19. Teenage pregnancy is most common in Gambela (31 percent) and Benishangul-Gumuz (27 percent) and least common in Addis Ababa (4 percent). Nationwide, early pregnancy is most common in rural areas and among the least educated and poorest women.



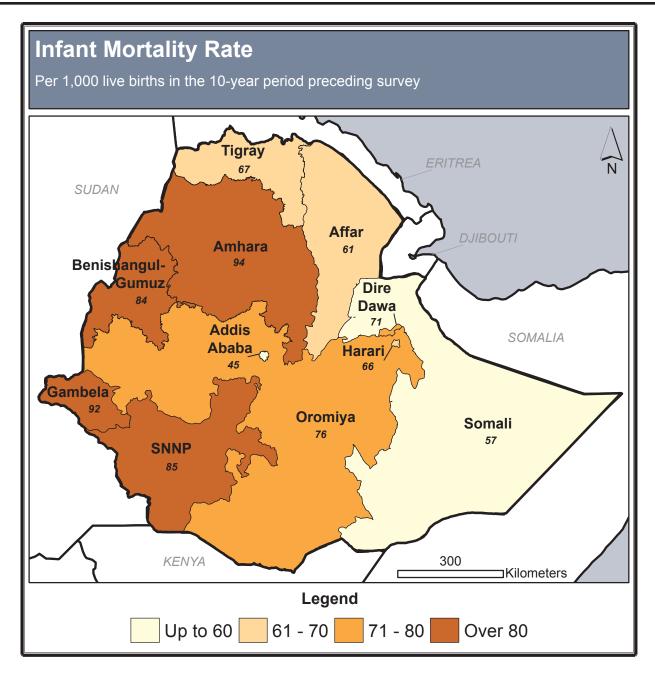
While over 85 percent of currently married women know about contraception, only 14 percent use any modern method, one of the lowest rates in Africa. Urban women are more likely to use a modern method than rural women. Just over 45 percent of women in Addis Ababa and around 30 percent of women in Dire Dawa and Harari are current users. In contrast, only 3 percent of Somali women and 6 percent of Affari women currently use a modern method. Injectables are the most widely used modern method in all regions.



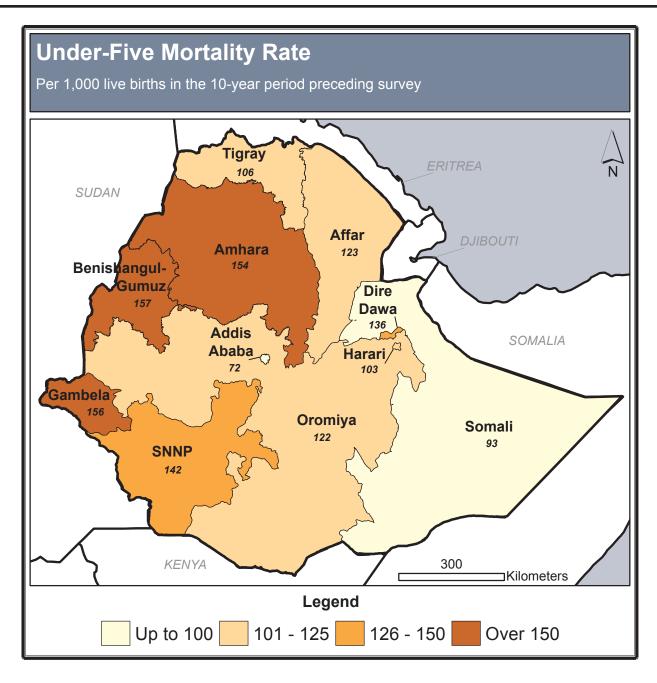
Currently married women who want to delay their next pregnancy or stop having children entirely but are not using contraception are considered to have an unmet need for family planning services. Nationwide, just over one-third of married women have an unmet need for family planning—20 percent for spacing and 14 percent for limiting pregnancy. Unmet need is highest in Oromiya at 41 percent of currently married women and lowest in Addis Ababa at only 10 percent.



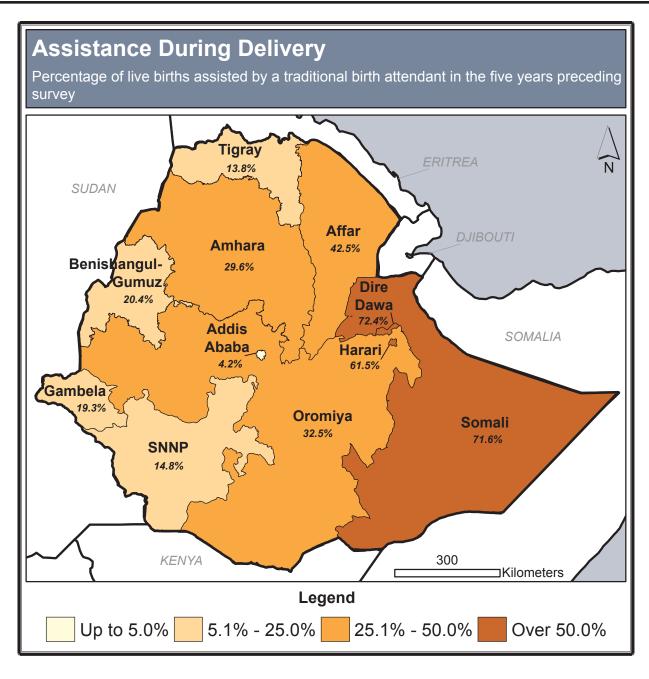
The total demand for family planning includes both married women who are currently using family planning (met need) and married women with unmet need for family planning. The measure of total demand helps planners identify service delivery needs. Total demand for family planning is quite low in Somali (15 percent) and Affar (20 percent) where most women still want large families. Elsewhere in the country, total demand ranges from 40 percent in Gambela to a high of 68 percent in Addis Ababa.



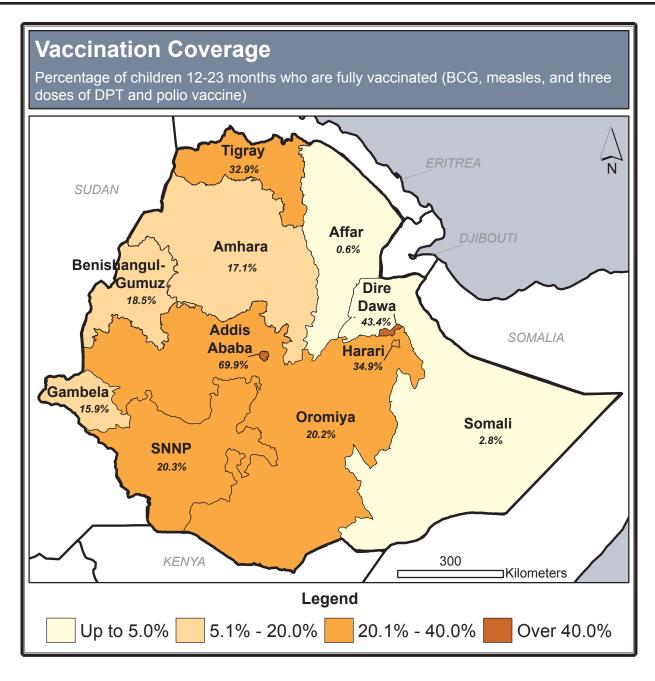
The infant mortality rate measures the risk of death in the first year after birth. Nationwide, there were 77 infant deaths per 1,000 live births in the five years before the 2005 EDHS. At least half of these deaths occurred in the infants' first month of life. Infant mortality is most common in Amhara and Gambela at 94 and 92 deaths per 1,000 live births, respectively. Infant mortality is lower in the largely rural and poor regions of Somali (57) and Affar (61) than in the urban regions of Dire Dawa and Harari; however, this data must be interpreted with caution, since numbers associated with mortality are small and subject to large sampling errors. Addis Ababa experiences the lowest rate nationwide at 45 deaths per 1,000 live births.



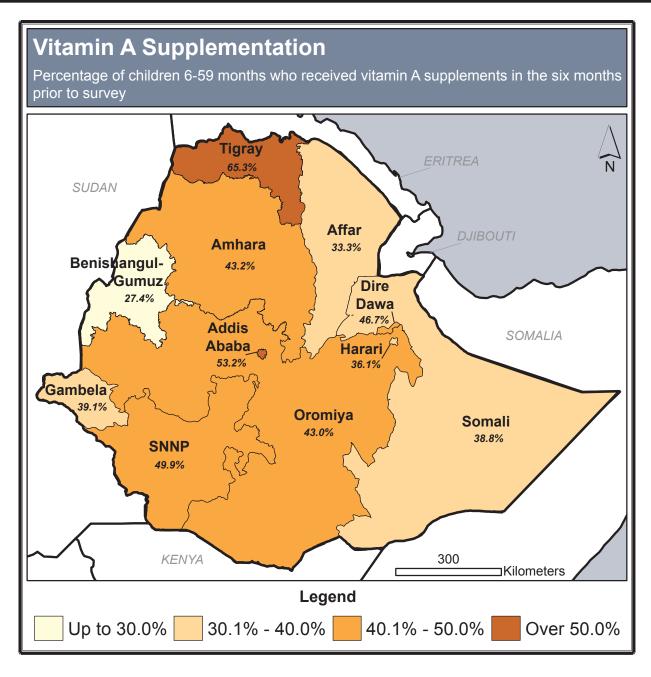
The under-five mortality rate measures the risk of death in the first five years of life. For all of Ethiopia, 123 children per 1,000 births or 12 percent die before age five. The risk of child death varies by region in roughly the same pattern as infant mortality. Amhara, Gambela, and Benishangul-Gumuz report more than 150 child deaths per 1,000 live births. Child mortality is lowest in Addis Ababa at 72 deaths per 1,000 live births.



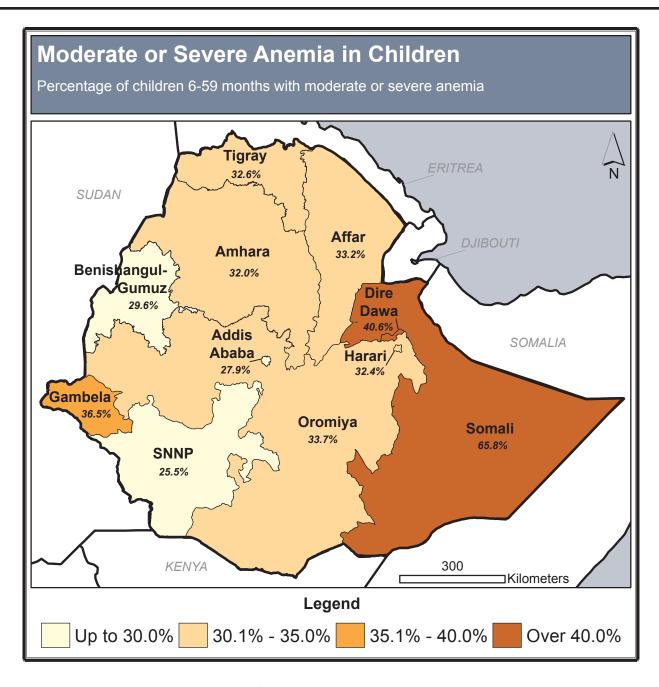
Assistance from a trained provider during childbirth reduces complications for both mother and child. In Ethiopia over 90 percent of women give birth at home, most often with help from relatives. About 28 percent of births are assisted by a traditional birth attendant. In Harari, Somali, and Dire Dawa, traditional birth attendants assist over 60 percent of births. Rates are much lower in other parts of the country, especially in Addis Ababa.



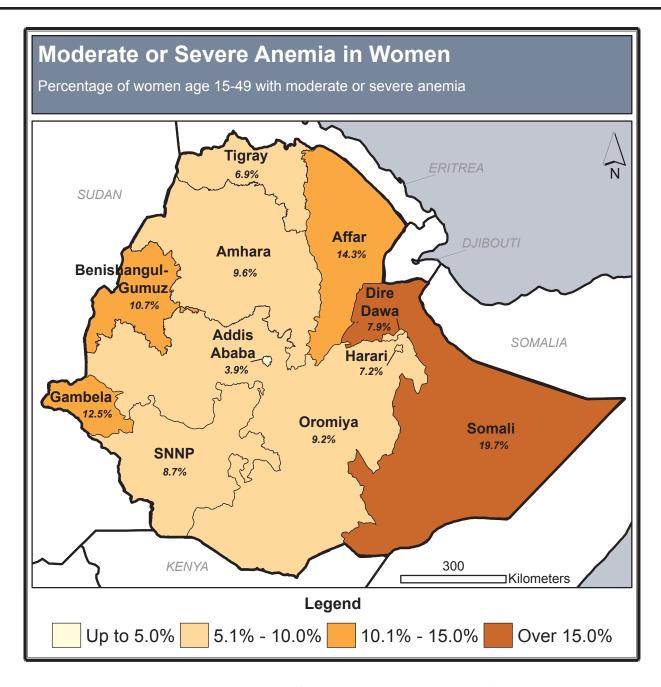
Complete immunization against common infectious diseases is vital for preventing illness and death among children. In Ethiopia, only 20 percent of children nationwide have been immunized against all six vaccine-preventable diseases—tuberculosis, diphtheria, whooping cough, tetanus, polio, and measles. There are marked regional differences in immunization. Less than 3 percent of children are fully immunized in Affar and Somali and less than 20 percent in Amhara, Benishangul-Gumuz, and Gambela. In contrast, almost 70 percent of children have received all vaccinations in Addis Ababa and 43 percent in Dire Dawa. Children in urban areas are three times as likely to be fully immunized as children living in rural areas.



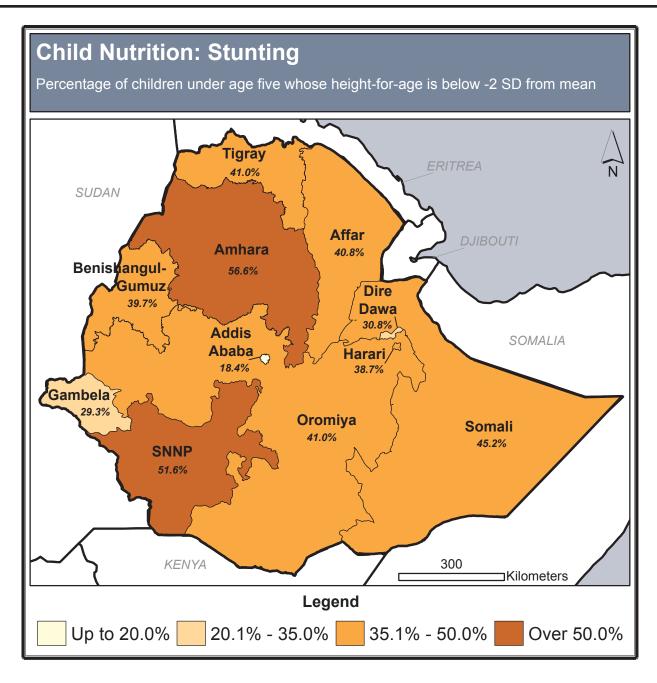
Vitamin A is an essential micronutrient for maintaining the body's immune system. Severe vitamin A deficiency can lead to eye damage and slow recovery from illnesses. Children need to eat foods rich in vitamin A and take a vitamin A supplement every six months. In Ethiopia as a whole, just over 45 percent of children age 6 months to 5 years received a supplement in the six months before the EDHS. Children living in Benishangul-Gumuz are the least likely to receive vitamin A supplements (27 percent), and children living in Tigray are most likely to receive supplements (65 percent).



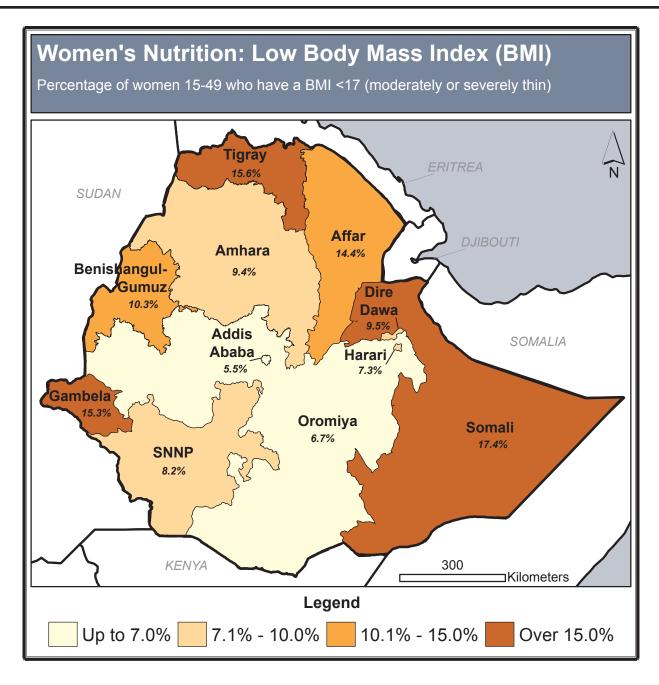
In young children anemia can cause fatigue, weakness, and delays in normal physical and mental development. Anemia usually results from a diet poor in iron and other micronutrients, malaria, intestinal worms, and sickle cell disease. Just over half (54 percent) of all children in Ethiopia have any anemia, while 32 percent have moderate or severe anemia. Two-thirds of children in Somali suffer from moderate or severe anemia, the highest rate nationwide. Moderate or severe anemia is least common among children in SNNP (26 percent) and Addis Ababa (28 percent).



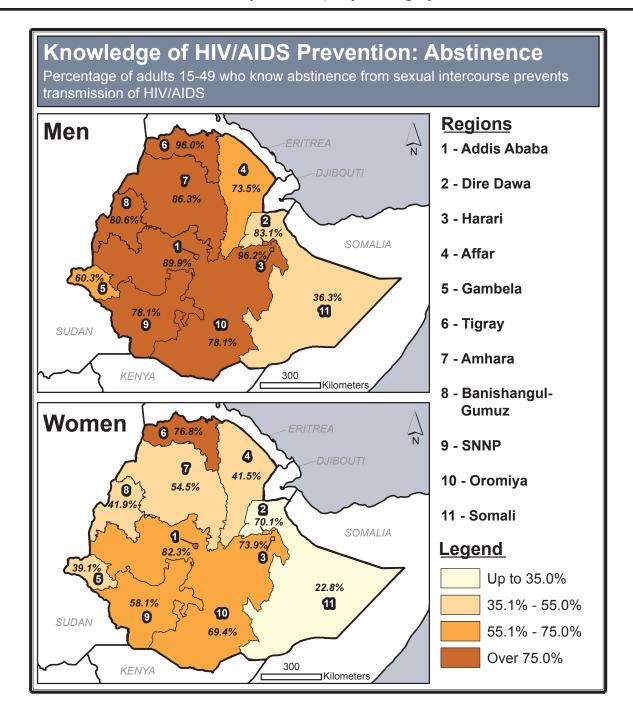
Nationwide, moderate or severe anemia affects just under 10 percent of Ethiopian women. Anemia among women is a particular concern during pregnancy since it may be an underlying cause of spontaneous abortion, premature delivery, and maternal mortality. The pattern of regional differences for anemia in women is similar to the pattern for anemia in children. One in five women in Somali has moderate or severe anemia, the highest rate nationwide. Less than 8 percent of women in Dire Dawa and Harari are affected, as are less than 4 percent in Addis Ababa.



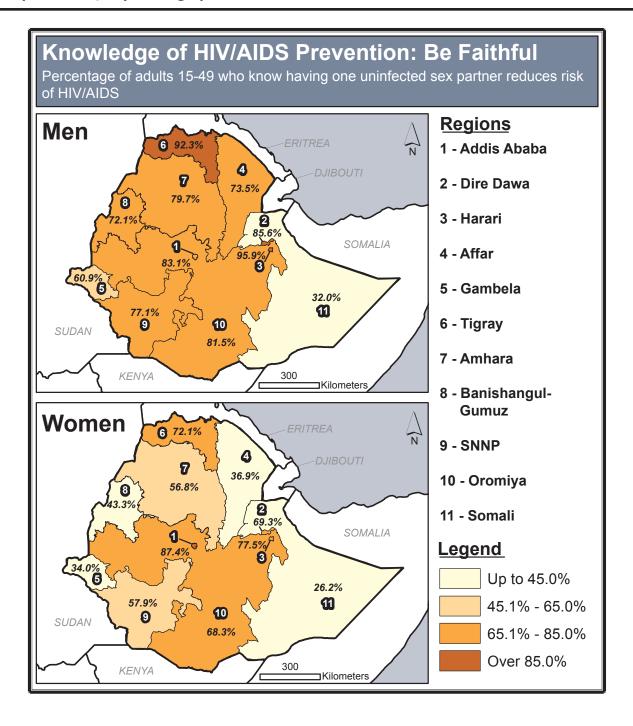
The EDHS measured height and weight for almost 5,300 children under five. Stunting, or being shorter than the age-appropriate height, is an indicator of poor nutrition. In Ethiopia stunting is very common. Nationwide, just under half (47 percent) of all children are stunted. Rural children are more likely to be stunted than urban children. Stunting is most common in SNNP (52 percent) and Amhara (57 percent) and least common in Addis Ababa (18 percent).



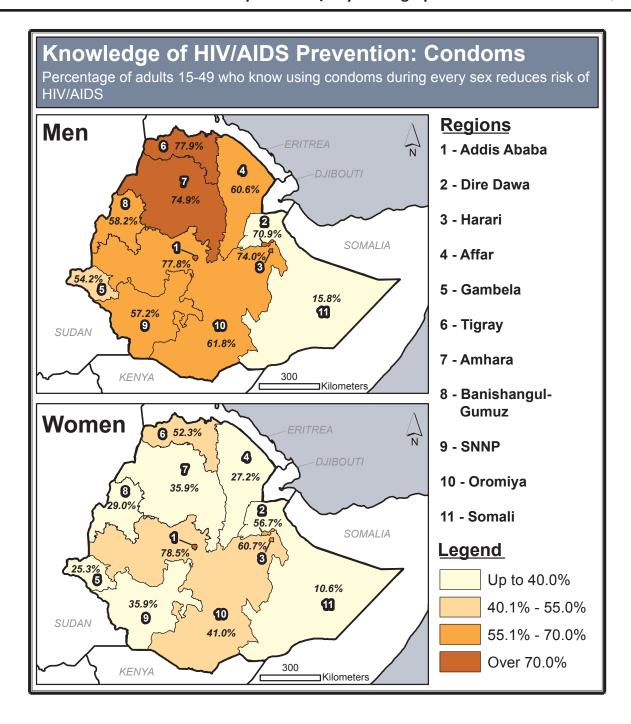
The EDHS measured women's height and weight to get an assessment of adult nutritional status known as the body weight index or BMI. A BMI measurement between 18.5 and 24.9 indicates normal weight. A BMI under 17.0 indicates moderate and severe thinness or acute undernutrition, which has grave consequences for women's health and for their current and future pregnancies. Throughout Ethiopia, about 9 percent of women have a BMI below 17. The regional differences are marked, however. Extreme thinness is most common in Somali, affecting one in six women (17 percent), Tigray (16 percent), and Gambela (15 percent) and least common among women in Addis Ababa (6 percent) and Oromiya and Harari (7 percent).



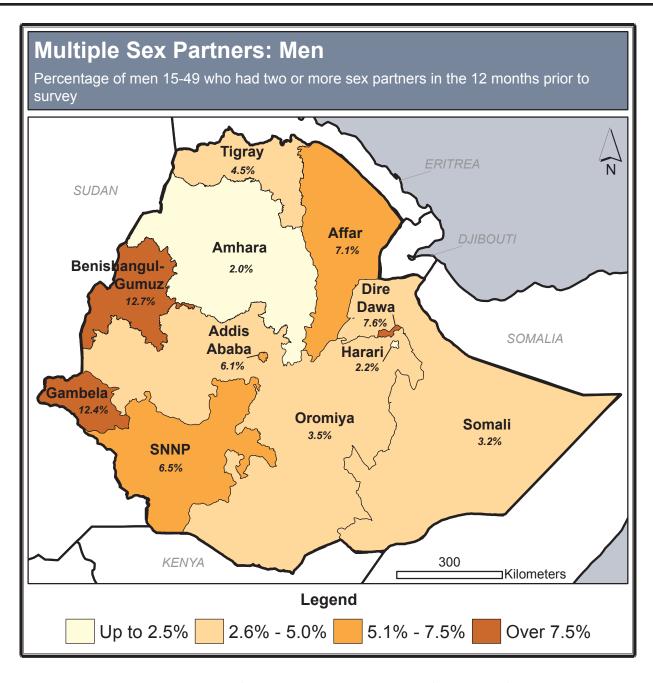
The EDHS asked all survey respondents about the three ways to prevent HIV transmission: abstinence before marriage, faithfulness to one partner, and use of condoms. Abstinence is the most widely known of the three methods, particularly among men. More than 75 percent of men in 8 of the 11 regions identified abstinence as a prevention method. Among women, knowledge is much lower; more than 75 percent of women identified abstinence in only two regions—Tigray and Addis Ababa. Knowledge levels are lowest among Somali men (36 percent) and women (23 percent).



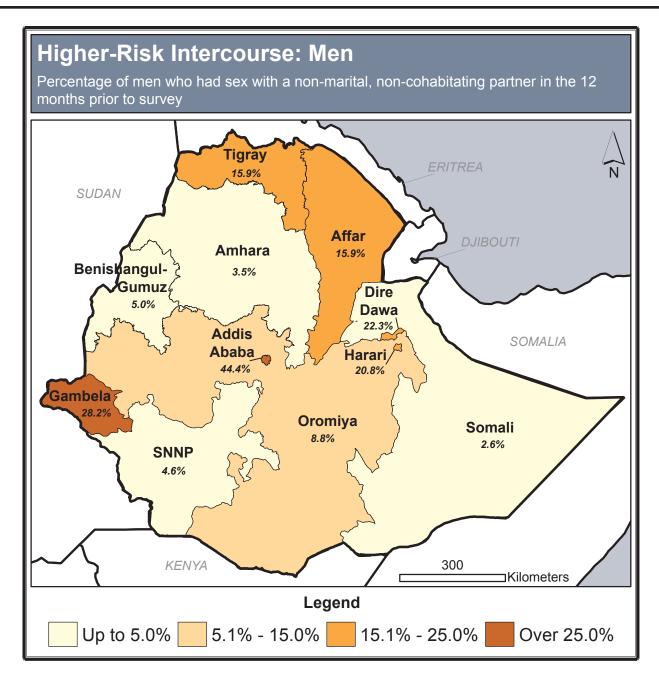
About 63 percent of women and 79 percent of men nationwide know that remaining faithful to one partner prevents HIV transmission. As with abstinence, more men know about being faithful than women. At least four in five men in Harari (96 percent), Tigray (92 percent), Dire Dawa (87 percent), Addis Ababa (83 percent) and Oromiya (82 percent), identified being faithful as a prevention method. Addis Ababa is the only region where at least four in five women know that being faithful protects against HIV infection. Men and women in Somali are much less knowledge than adults in other regions.



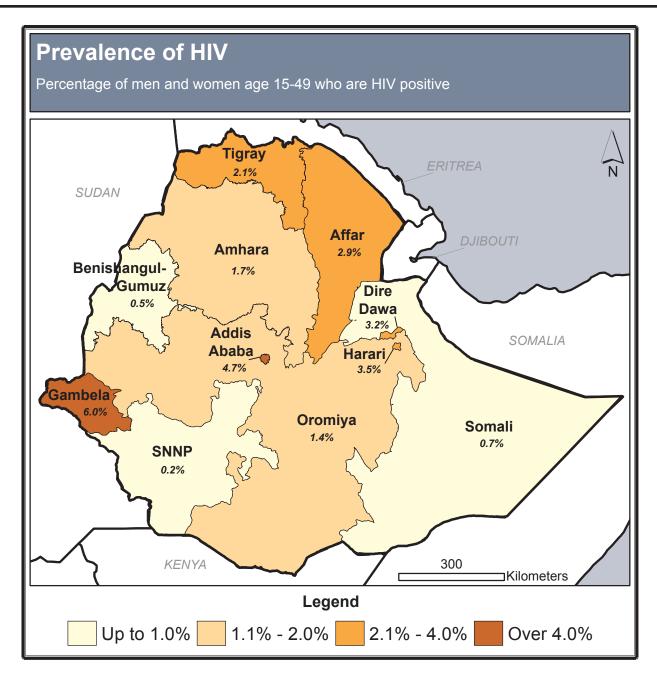
Using condoms is the least well known prevention method. Regional differences are very similar to knowledge of the other prevention methods. Men are more knowledgeable about condoms than women, and both men and women in Somali are least informed about condoms by a considerable margin.



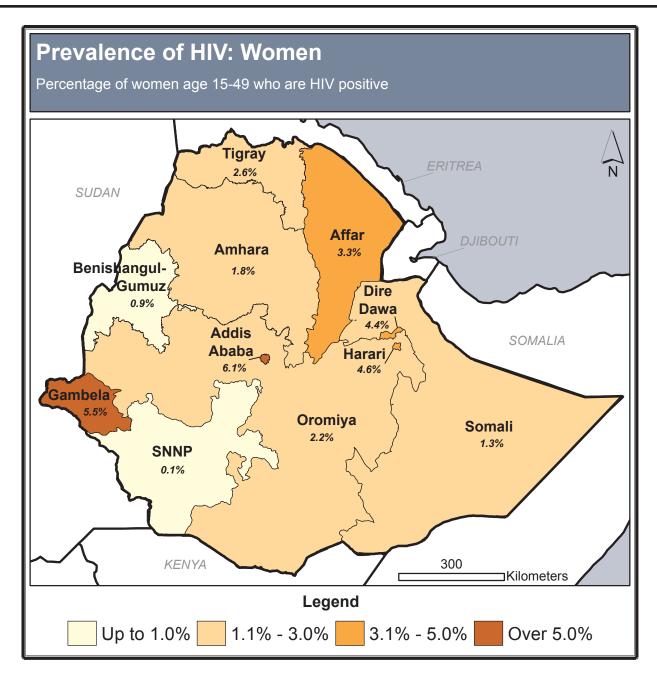
Nationwide, less than I percent of sexually active women and 4 percent of sexually active men reported having two or more partners in the I2 months before the survey. More than I0 percent of men reported having multiple partners in Benishangul-Gumuz (I3 percent) and Gambela (I2 percent). Four percent or less of men said they had had multiple partners in Amhara (2 percent), Somali (3 percent) and Oromiya (4 percent). Never married men were more likely to have multiple partners than currently married and divorced men.



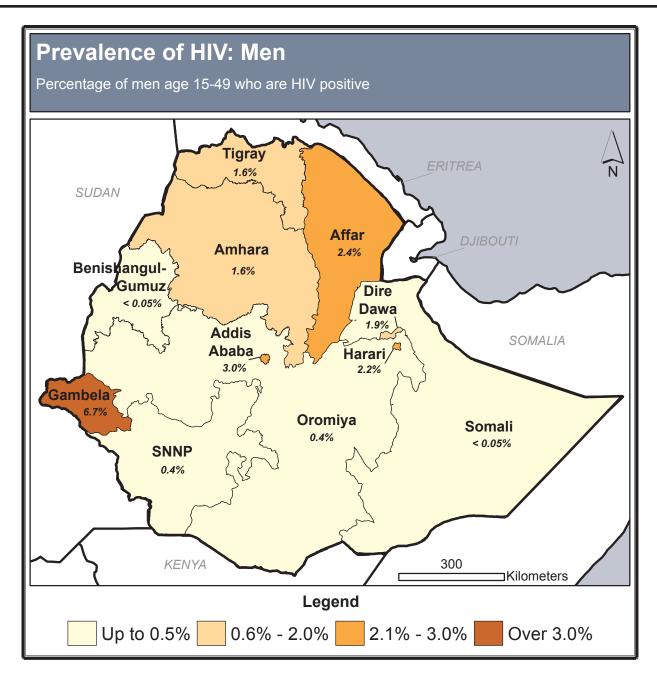
The EDHS defines higher-risk sex as sexual intercourse with someone other than a spouse or cohabiting partner. Higher-risk sex increases the chances of transmitting HIV and other sexually transmitted infections. The percentage of sexually active men reporting higher-risk sex in the 12 months before the survey varies markedly among regions. At the low end, 3 percent of men in Somali and 4 percent in Amhara reported sex with non-marital/non-cohabiting partners. At the high end, 28 percent of men in Gambela and 44 percent of men in Addis Ababa reported higher-risk sex. Between 16 and 22 percent of men in Tigray, Affar, Harari, and Dire Dawa also reported higher-risk sex.



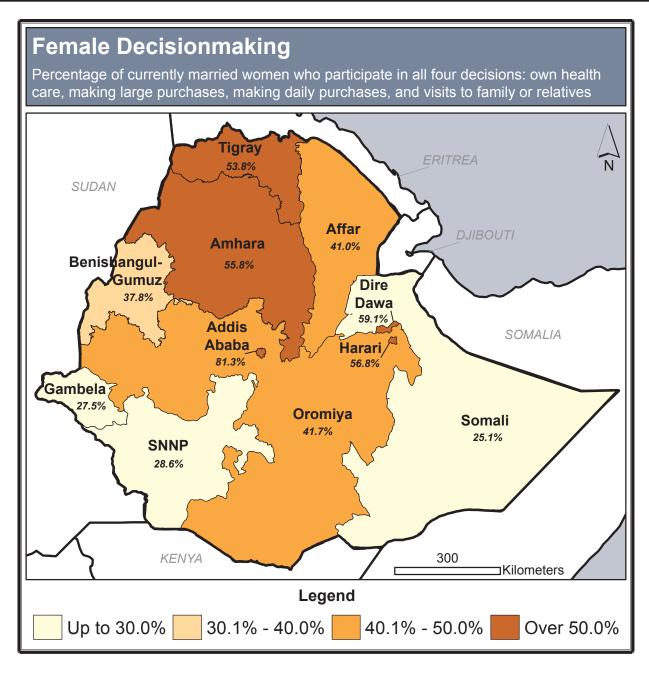
Over 5,700 women age 15-49 and just over 5,300 men age 15-49 gave informed consent to be tested for HIV during the EDHS. Based on these test results, the EDHS estimates a national HIV prevalence rate of 1.4 percent, much lower than neighboring Kenya and Uganda. The border region of Gambela has the highest rate in Ethiopia with 6 percent of men and women testing positive for HIV. HIV prevalence ranges from 3.2 to 4.7 percent in the urban regions of Addis Ababa, Harari, and Dire Dawa. Less than I percent of adults in SNNP, Somali, and Benishangul-Gumuz tested positive for HIV.



As in other African countries, HIV prevalence in Ethiopia is about twice as high among women as among men. The cumulative effect of physiological vulnerability of young women, their early age at marriage and sexual debut, the inability of many women to ask their partners to use a condom, and the high risk behavior of their male partners make women more vulnerable to infection than men. Nationwide, I.9 percent of women tested positive for HIV. Infection rates are highest in Addis Ababa (6.1 percent), Gambela (5.5 percent), Harari (4.6 percent), and Dire Dawa (4.4 percent). Consistent with other African countries, HIV is more prevalent in urban than rural areas.



Just under I percent (0.9 percent) of men in Ethiopia are infected with HIV. There are considerable regional differences, however. About one in 15 men (6.7 percent) in Gambela are HIV positive. Between 2 and 3 percent of men are infected in Addis Ababa, Affar, and Harari. In the rest of the country less than 2 percent of men tested positive for HIV. These pronounced regional differences are important indicators for targeting prevention programs.



When couples share in household and family decisions, women have more power over the circumstances in their daily lives. Decisionmaking can also affect family health, for example, if a woman needs her husband's permission to go to a health clinic or to visit friends and family for advice. The EDHS asked women if they routinely participated in four types of decisions—deciding about women's own health care, making large household purchases, making household purchases for daily needs, and visits to family or relatives. Nationwide about 4 in 10 women said that they participated in making all four types of decisions. Shared decisionmaking is most common in Addis Ababa (81 percent) and Dire Dawa (59 percent). Less than one-third of women participate in all four decisions in Somali (25 percent), Gambela (28 percent), and SNNP (29 percent).