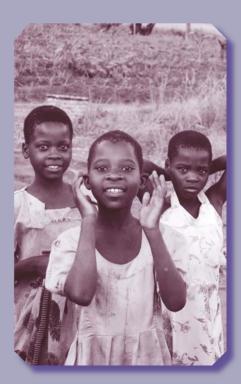




# Malawi

# 2004 Demographic and Health Survey Key Findings

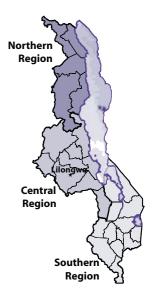


# ABOUT THE 2004 MDHS

The 2004 Malawi Demographic and Health Survey (2004 MDHS) was designed to provide data to monitor the population and health situation in Malawi as a follow-up of the 1992 and 2000 Malawi DHS surveys. In 2004, new features include data on anaemia levels of children under 5 and women age 15-49, HIV prevalence of women and men age 15-49, and domestic violence.

### Who participated in the survey?

A nationally representative sample of 11,698 women age 15–49 and 3,261 men age 15–54 were interviewed. This sample provides estimates of health and demographic indicators at the national and regional levels, for rural and urban areas, and for ten selected large districts that were over sampled. The population in Malawi has slightly more females (51 percent) than males (49 percent). Almost half (48 percent) of the population is below the age of 15 years. Only 4 percent of Malawi population is age 65 or older. This youthful age structure is typical of populations with high fertility and high mortality.



This report summarizes the findings of the 2004 Malawi Demographic and Health Survey (2004 MDHS), carried out by the National Statistical Office (NSO). The Ministry of Health, the National AIDS Commission (NAC), the National Economic Council, and the Ministry of Gender contributed to the survey by assisting in the development of the questionnaires. Most of the funds for the local costs of the survey were provided by multiple donors through NAC. Additional funding for the MDHS was received from the United States Agency for International Development (USAID), the United Kingdom's Department for International Development (DFID), the United Nations Children's Fund (UNICEF/Malawi) and United Nations Population Fund (UNFPA). ORC Macro 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. The Centers for Disease Control and Prevention provided technical assistance in HIV testing.

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Additional information about the 2004 MDHS may be obtained from the Demography and Social Statistics Division (DSS), NSO, Chimbiya Road, P.O. Box 333, Zomba, Telephone: 265-1-524-377, 265-1-524-111 (switchboard); Fax: 265-1-525-130, E-mail: demography@statistics.gov.mw; web: www.nso.malawi.net.

Additional information about the DHS program may be obtained by writing to: MEASURE DHS, ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705, USA (Telephone: 301-572-0200; Fax: 301-572-0999; E-mail: reports@macroint.com; web: www.measuredhs.com).

Recommended citation:

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# 2004 MALAWI DEMOGRAPHIC AND HEALTH SURVEY

# **KEY FINDINGS**

Household Characteristics Household composition Housing conditions Ownership of goods	
<b>Fertility and Its Determinants</b> Fertility levels and trends Fertility differentials Fertility preferences Age at first marriage Age at first sexual intercourse Unplanned fertility	
Family Planning Knowledge of family planning Current use of family planning Trends in contraceptive use Source of family planning methods	
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Maternal Health Antenatal care Delivery and postnatal care	
Malaria Mosquito nets Intermittent preventive treatment during pregnancy Management of malaria in children	
Gender Violence Prevalence Marital violence	



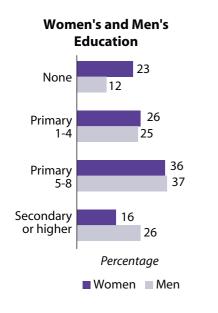


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### **Education**

Most Malawians have received some education. However, 23 percent of women age 15–49 have had no education at all, compared with 12 percent of men age 15–54. Women and men in Mangochi District have the least education, with 44 percent of women and 20 percent of men receiving no education at all.

Malawian men tend to complete higher levels of education than women; 26 percent of men 15-54 have at least some secondary education compared with 16 percent of women 15-49.



# HOUSEHOLD CHARACTERISTICS

Housing conditions and ownership of durable goods have implications for health; they also reflect the socioeconomic level of the household.

### **Household Composition**

Malawian households consist of an average of 4.4 persons. Households in urban areas are slightly smaller than those in rural areas (4.2 compared with 4.4 persons). One in four households in Malawi is headed by a woman. Female-headed households are more common in rural areas (26 percent) than in urban areas (17 percent).

### **Housing Conditions**

Housing conditions vary greatly by urban-rural residence. Overall, 7 percent of households in Malawi have electricity. Electricity is much more common in urban areas (30 percent) than in rural areas (2 percent). Forty-two percent of households in Malawi are within 15 minutes of their drinking water supply. Many urban households have water piped into their compound or dwelling (29 percent) or get water from public taps (45 percent). Rural households rely primarily on open public wells (26 percent) or protected public wells (43 percent).

The use of traditional pit latrines is still common in both urban and rural areas, accounting for 79 percent of all households. Overall, 16 percent of the households in Malawi have no toilet facilities. This problem is more common in rural areas.

Overall, four households in five live in residences with floors made of earth, sand, or dung, while the rest live in houses with finished floors like those made of cement or wooden panels. Most households (89 percent) use firewood or straw for cooking.

### **Ownership of Goods**

Nationally, 62 percent of households in Malawi own a radio and only 5 percent a television. Four in ten households own a paraffin lamp, five percent own a cell phone, and only 2 percent own a landline telephone.



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# FERTILITY AND ITS DETERMINANTS

The 2004 MDHS examines several aspects of fertility. This information can help monitor the effectiveness of public health and family planning programs. The fertility indicators presented in the 2004 MDHS are based on reports provided by women age 15-49 regarding their reproductive histories. Each woman was asked to report on all live births, on children still living at home, those living elsewhere, and those who had died.

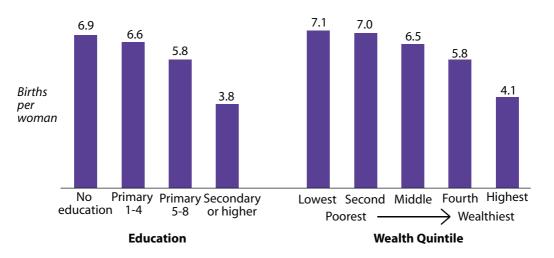
### Fertility levels and trends

Currently, women in Malawi have an average of 6.0 children. The TFR measured from the 2004 MDHS is slightly lower than the TFR measured in the 2000 MDHS (6.3 children per woman). Fertility in Malawi is still ranked as one of the highest among the Eastern and Southern African countries, lower only than Uganda (6.9 children per woman).

### **Fertility differentials**

Fertility differentials by background characteristics are marked. Urban women have fewer children (4.2 children per woman) than their rural counterparts (6.4 children per woman). There are substantial regional variations in fertility across the three regions: the TFR in the Central Region is 6.4 births per woman, compared with 5.8 births per woman in the Southern Region and 5.6 births per woman in the Northern Region. Across districts, the TFR ranges from 4.8 births in Blantyre to 7.2 births per woman in Mangochi.

Fertility also varies with the woman's education and economic status. Fertility decreases as educational level increases. Women who have at least some secondary education have an average of 3.8 children, compared with 6.9 children for women with no education. Fertility also decreases as the wealth status of the respondent\* increases. On average, women in the highest wealth quintile have 3 children less than those in the lowest wealth quintile (4.1 compared with 7.1).



### Fertility by Education and Wealth Quintile

\* Household assets collected from DHS surveys—i.e., type of flooring; source of water; availability of electricity; possession of durable consumer goods—are combined into a single wealth index. Each household is assigned a score for each asset, and the scores were summed for each household. Individuals were ranked according to the total score of the household in which they reside. The sample was then divided into five groups of equal size, or quintiles, from lowest to highest.

### **Fertility Preferences**

The 2004 MDHS findings indicate that 35 percent of currently married women in Malawi want no more children and therefore want to limit the family size at its current level, and 6 percent had already been sterilised. Thirty-eight percent of women would like to wait for two or more years for the next birth, while 14 percent would like to have a child soon (within two years). Thirty-eight percent of currently married men also report wanting no more children.

Malawian women have an ideal family size of 4.1 children. Currently married women and men want on average 4.3 children. The average ideal family size has steadily declined over the years. For women it decreased from 5.1 children in 1992 to 4.1 children in 2004, while for men it decreased more sharply from 5.2 children in 1992 to 4.0 children in 2004. Ideal family size is higher among women in rural areas than in urban areas (4.2 compared with 3.4 children) but is relatively similar across regions. Across districts, the average ideal number of children for women ranges from 3.5 children in Blantyre to 4.5 children in Mangochi. Ideal family size is substantially smaller among women with at least some secondary education (3.1 children), compared with those with no education (4.8 children). Ideal family size also decreases with increasing wealth. These patterns also hold true for men.

#### Wanted fertility Actual fertility 4.0 Mulanje 5.6 3.6 Lilongwe 5.7 3.9 Zomba 5.3 4.1 Thyolo 5.7 4.3 Salima 6.8 4.1 Mzimba 5.5 4.5 Mangochi 7.2 4.4 Machinga 7.0 4.2 Kasungu 70 3.5 Blantyre 4.8

Number of children per woman

### **Age at First Marriage**

Women who marry early often give birth to more children. The median age at first marriage for women age 20-49 in Malawi has remained constant at 18.0 years since 2000. Overall, 51 percent of women age 20-49 are married by age 18 and 73 percent are married by age 20. Urban women marry one year later than their rural counterparts (18.9 years compared with 17.8 years). Age at first marriage increases somewhat with education; for example, women age 25 to 29 women with at least some secondary education get married more than 4 years later than those with no education (21.6 years compared with 17.2 years). Men marry about 5 years later than women; the median age at first marriage for men is 22.9 years compared with 18.0 years for women.

### Wanted and Actual Fertility, by District

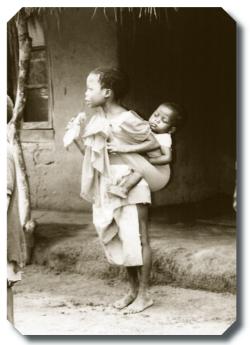
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### Age at First Sexual Intercourse

Comparison of data from the 2004 MDHS with data from the 2000 MDHS indicates that there has been a slight increase in the age at first sexual experience. The median age at first sexual intercourse for women increased from 16.9 years in 2000 to 17.3 years in 2004. While there are small urban-rural differences, women in the Southern Region started having sex at an earlier age (16.7 years) than women in the Northern and Central Regions (17.7 and 18.0 years, respectively). The median age at first sexual intercourse varies by district, ranging from 15.6 years in Thyolo to 18.2 years in Lilongwe. There is a strong inverse relationship between a woman's education and her initiation to sexual activity; women with secondary or higher education have their first sexual intercourse more than two years later than women with no education (19.2 years compared with 16.5 years). Wealth status is also associated with the age at first sexual intercourse; women in the highest wealth quintile had sex for the first time more than one year later than women in the lowest wealth quintile (18.2 compared with 16.9 years).

### **Unplanned Fertility**

Despite increasing use of contraception, the 2004 MDHS data indicate that unplanned pregnancies are common in Malawi. Overall, 20 percent of births in the five years preceding the survey are not wanted and 21 percent are mistimed (wanted later). The percentage of recent births that are not wanted increased from 14 percent in 1992 to 20 percent in 2004.



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# FAMILY PLANNING

Information on contraceptive use is of considerable importance to family planning programme planners since it allows an assessment of the need for contraception, for both birth spacing and limiting. Data on fertility regulation are also useful as an indicator of the future trend in fertility

### **Knowledge of Family Planning**

Knowledge of family planning in Malawi is nearly universal. Ninety-seven percent of both women and men know at least one modern method of family planning. Among women 15-49, the most widely known modern methods of contraception are injectables (93 percent), the pill and male condom (90 percent each), and female sterilisation (83 percent). Among women with no sexual experience, the most widely known contraceptive method is the male condom (72 percent).

### **Current Use of Family Planning**

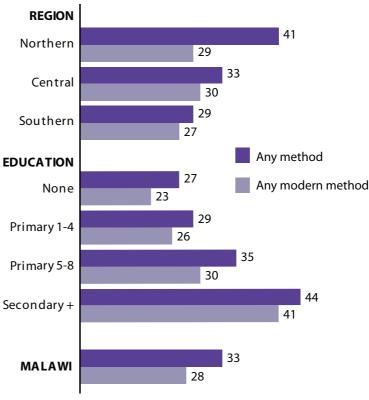
One in three currently married women in Malawi is using a method of family planning. The majority of these women (28 percent) are using a modern method, and only 4 percent are using a traditional method. Injectables (18 percent) and female sterilisation (6 percent) are the most commonly used methods among currently married women, while injectables (11 percent) and male condoms (10 percent) are the most commonly used methods among sexually active unmarried women.

Use of a modern family planning method varies by residence. Modern methods are used by 35 percent of married women in urban areas, compared with 27 percent of women in rural areas. Modern contraceptive use ranges from 17 percent in Mangochi to 34 percent in Lilongwe and Blantyre. Use of modern family planning methods varies only slightly by region. However, use of traditional methods is significantly higher

in the Northern Region (13 percent) than in the Central and Southern Regions (3 percent each). The most popular traditional method in the Northern Region is withdrawal (10 percent).

Modern contraceptive use increases significantly with the woman's education and wealth status. Only 23 percent of uneducated married women use a modern method compared with 41 percent of women with at least some secondary education. Similarly, the proportion of married women using a modern family planning method varies from 22 percent of women in the lowest wealth quintile to 38 percent of those in the highest.

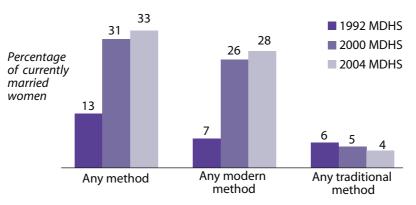
How does contraceptive use vary by region and education?



Percentage of currently married women

### **Trends in Contraceptive Use**

Use of any contraceptive method among married women has increased only slightly from 31 percent in 2000 to 33 percent in 2004. This is a much slower increase than that between 1992 (13 percent) and 2000 (31 percent). Since 1992, there has been a sharp increase in the use of modern methods from 7 percent to the current level of 28 percent. This is mostly due to the significant rise in the use of injectables and female sterilisation. The use of male condoms remained unchanged at 2 percent.



### **Trends in Use of Contraceptive Methods**

### **Source of Family Planning Methods**

Two in three users of modern methods obtain their methods from a public facility, which is similar to that recorded in the 2000 MDHS (68 percent). Thirteen percent of current users get their methods from mission facilities, 4 percent from a private medical facility, and 17 percent from other sources including NGOs, where Banja La Mtsogolo (BLM) is the most commonly used source (13 percent).



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# **NEED FOR FAMILY PLANNING**

### **Intention to Use Family Planning**

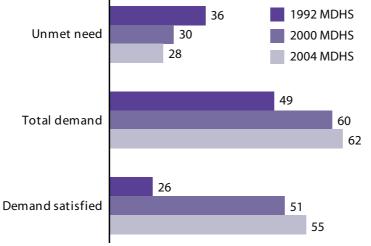
The majority (74 percent) of currently married non-users intend to use family planning in the future. The most common preferred method for future use among non-users is injectables (59 percent). Fourteen percent of women intend to use female sterilisation in the future, while 11 percent intend to use the pill.

### **Unmet Need for Family Planning**

Unmet need for family planning services is defined as the percentage of currently married women who either want to space their next birth or stop childbearing entirely but are not using contraception. The 2004 MDHS data show that 28 percent of married women have an unmet need for family planning, 17 percent for spacing and 10 percent for limiting. The total demand for family planning among married women has increased slightly since 2000 MDHS (60 percent in 2000 versus 62 percent in 2004).

### **Discontinuation of Contraceptive Use**

Overall, 36 percent of contraceptive users discontinue use within 12 months of adopting a method. The 12-month discontinuation rate for modern methods is highest for male condoms (62 percent), followed by the pill (52 percent) and injectables (33 percent). Eight percent of the users stopped using a method because they wanted to get pregnant. One in five users gave other various reasons for discontinuing.



### Trends in Unmet Need for Family Planning, Total Demand, and Percentage of Demand Satisfied

Percent distribution of currently married women

# INFANT AND CHILD MORTALITY

Infant and child mortality rates are basic indicators of a country's socioeconomic situation and quality of life. Identifying children most at risk of dying allows policymakers and program planners to direct resources to improve health outcomes.

### **Levels and Trends**

For the most recent five-year period, the infant mortality rate is 76 per 1,000 live births and the underfive mortality rate is 133 per 1,000 live births. This means that about one in every eight children born in Malawi dies before reaching their fifth birthday.

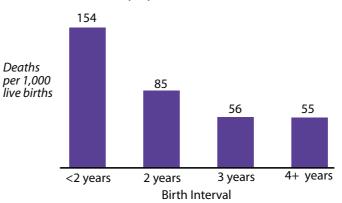
Childhood mortality rates have decreased since 1992. For example, the under-five mortality rate declined steadily from 234 in the 1992 MDHS, to 189 in the 2000 MDHS, to the current level of 133 per 1,000 live births. During the 15-year period preceding the survey, the estimates of neonatal mortality show a decline of 36 percent (from 42 to 27 per 1,000 live births).

Mortality rates differ significantly by socioeconomic characteristics. Both infant and under-five mortality levels are higher in rural areas than in urban areas. The Northern Region has the lowest under-five mortality (120 deaths per 1,000 live births), compared with the Central (162 per 1,000) or the Southern Region (164 per 1,000). The same pattern is observed for infant mortality. The rate in the Northern Region (82 deaths per 1,000) is lower than in the Central (90 per 1,000) or the Southern Region (98 per 1,000). Across districts, under-five mortality rates range from 112 deaths per 1,000 live births in Mzimba to 221 deaths per 1,000 live births in Mulanje. For infant mortality, the lowest rate is found in Lilongwe (73 deaths per 1,000 live births) and the highest is in Mulanje (145 deaths per 1,000 live births).

Mothers' level of education is strongly associated with infant mortality. Children born to women with some secondary education have an infant mortality rate of 63 deaths per 1,000 live births, compared with 101 deaths per 1,000 live births for those whose mothers are not educated. Furthermore, children born to women in the lowest wealth index quintile have higher childhood mortality rates than other children.

### **Birth Intervals**

Spacing children at least 36 months apart is safest and healthiest for the mother and the child. Infants born less than 2 years after a previous birth have particularly high infant mortality rates.



### Infant Mortality by Previous Birth Interval

### CHILD HEALTH

A large proportion of childhood deaths can be prevented by vaccination against six serious diseases and early diagnosis and treatment of common childhood illnesses.

### **Vaccination Coverage**

In 2004, 64 percent of Malawian children 12-23 months were fully vaccinated against the six major childhood illnesses (tuberculosis, diphtheria, pertussis, tetanus, polio, and measles). More than nine in ten of these children had received the BCG vaccine, and the first dose of polio and DPT vaccines, while about eight in ten had been vaccinated against measles. Vaccination coverage with all recommended vaccines has declined steadily from 82 percent in 1992, to 70 percent in 2000, to 64 percent in 2004.

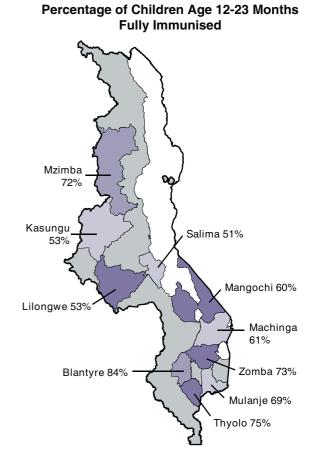
As expected, vaccination coverage increases with mother's education and wealth. For example, 55 percent of children born to mothers with no education have received all of the recommended vaccines compared with 84 percent for children whose mothers have at least some secondary education. First-born children, children in urban areas and in the Northern Region are more likely than other children to be fully vaccinated. There are also large variations by district; the vaccination coverage ranges from 51 percent in Salima to 84 percent in Blantyre.

### **Childhood Illnesses**

Acute respiratory infections (ARI), diarrhoea, and malaria are common causes of child death. In the

two weeks before the survey, 19 percent of children under age 5 were ill with a cough and short, rapid breathing and only one in five of these children were taken to a health facility for advise or treatment. The highest prevalence of symptoms of ARI occurs at children age 6-11 months. Children residing in rural areas are more likely to have symptoms of ARI than their urban counterparts. District prevalence of ARI symptoms is as low as 14 percent in Blantyre and as high as 25 percent in Kasungu and Zomba.

Twenty-two percent of children under 5 had diarrhoea in the two weeks preceding the survey and 36 percent of children with diarrhoea were taken to a health facility. As with ARI, prevalence of diarrhoea is highest among children age 6-11 months. Children in urban areas experience a lower rate of diarrhoea than rural children. Furthermore, children in the Central Region are more likely to have diarrhoea (27 percent) than children in the Southern and Northern Regions (21 percent and 12 percent, respectively). Diarrhoea is most prevalent in Salima (29 percent) and least prevalent in Mzimba (16 percent). Sixty-one percent of children with diarrhoea were given Oral Rehydration Salt (ORS), seven in ten were given either ORS or increased fluids of some kind, and 18 percent were not treated at all.





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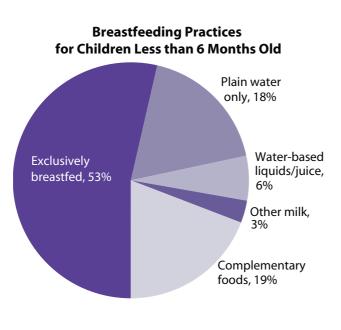
### FEEDING PRACTICES AND THE NUTRITIONAL STATUS OF WOMEN AND CHILDREN

Nutritional deficiencies contribute to high rates of disability, illness and death in Malawi, especially among women and young children. The 2004 MDHS collected height and weight measurements of women and young children to assess overall nutritional status.

### **Breastfeeding and Introduction of Other Foods**

Breastfeeding is nearly universal in Malawi, with 98 percent of children breastfed. WHO recommends that children receive nothing but breast milk (exclusive breastfeeding) for the first six months of life. In Malawi, more than half (53 percent) of children under six months are exclusively breastfed, an increase from 45 percent reported in the 2000 MDHS. The median duration of breastfeeding in Malawi in 2004 is 23.2 months, one month shorter than in 2000. The median duration of exclusive breastfeeding is 2.5 months, whereas the median for predominant breastfeeding is 4.8 months.

Bottle-feeding is uncommon in Malawi; use of feeding bottles in children under age 6 months has remained at the same level as in the 2000 MDHS (3 percent). Water, juices and other milks are given too early, as 27 percent of children under 6 months receive these. Complementary or solid foods are also given to one in five children in this age group. Complementary foods should be introduced when a child is six months old to reduce the risk of malnutrition. In Malawi, 78 percent of children ages 6–9 months are eating complementary foods.



### Vitamin A and Iron Supplementation

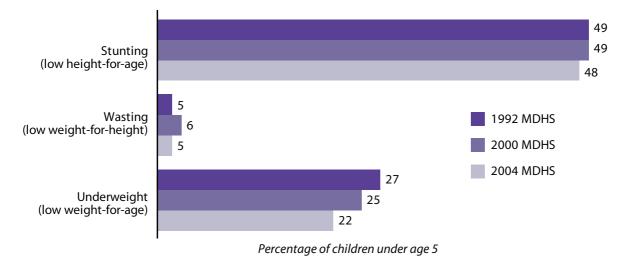
### Micronutrients are essential vitamins and minerals required for good health.

Vitamin A prevents blindness and infection and is particularly important for children and new mothers. In Malawi, the policy of the Ministry of Health is to supplement children age 6-59 months with a dose of vitamin A capsules once every six months. The 2004 MDHS results show that 65 percent of children under age three had consumed foods rich in vitamin A in the seven days preceding the survey and 65 percent received a vitamin A capsule in the last six months before the survey.

Provision of vitamin A supplements to women after delivery of a child is intended to ensure sufficient body storage and adequate delivery of this essential micronutrient to the child through breast milk. In the 2004 MDHS, women who had a live birth in the five years before the survey were asked whether they had received a vitamin A supplement in the two-month period after delivery of their last born child.Forty-one percent of women received a vitamin A supplement during the postnatal period, representing the same level as that recorded in the 2000 MDHS.

### **Children's Nutritional Status**

Inadequate nutrition affects the physical growth and development of children. A child's nutritional status is assessed by comparing height and weight measurements against an international reference standard. At the national level, 48 percent of children under five in Malawi are stunted, or too short for their age. Stunting indicates chronic malnutrition. Five percent of children are wasted or too thin for their height. Wasting is a sign of severe malnutrition. Overall, about one in five children (22 percent) are underweight. Stunting, wasting, and underweight are most common in rural areas, among children of mothers with no or little education, and among families of lower socioeconomic status. Children's nutritional status in 2004 is similar to the status in 1992 and 2000, indicating that there has been no improvement in the nutritional status of children age under 5 since 1992.



### Children's Nutritional Status Has Not Changed Since 1992

For the first time in Malawi, the DHS collected blood samples to

be tested for haemoglobin level, a measurement of anaemia. The survey found 73 percent of children age 6-59 months to be anaemic, 26 percent have mild anaemia, 42 percent have moderate anaemia, while 5 percent showed severe anaemia.

### **Women's Nutritional Status**

To assess thinness and obesity, the MDHS uses the body mass index (BMI), defined as the weight in kilograms divided by the squared height in metres. A lower cut-off point of 18.5 is used to define chronic energy deficiency. The average BMI of Malawians is 22. About one in eight women (77 percent) are classified as normal, while 9 percent have a BMI below 18.5 and are considered thin. The mean height of women is 156 centimetres and 3 percent of women are less than 145 centimetres in height. The nutritional status of women in Malawi has remained constant since 2000. The survey also found that 44 percent of women are anaemic; 32 percent have mild anaemia, 11 percent have moderate anaemia, and 2 percent have severe anaemia.



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# MATERNAL HEALTH

Maternal and child health reflects both a society's level of development as well as the performance of the health care delivery system.

### **Antenatal Care**

Overall, 93 percent of Malawian women receive antenatal care from a medical professional (82 percent from a nurse or a midwife, 10 percent from a doctor or a clinical officer). A small proportion (2 percent) receives antenatal care from traditional birth attendants, and 5 percent do not receive any antenatal care. There has been little change in the coverage of antenatal care from a medical professional since 2000 (93 percent in 2004 compared with 91 percent in 2000). Urban women are more likely to receive antenatal care than rural women. The use of antenatal services is strongly associated with level of education and wealth status. While 8 percent of women with no education received no antenatal care, the proportion among women with some secondary education is only 2 percent. ANC by health care providers is most common in Mzimba, Blantyre, Salima, and Zomba (96-98 percent); on the other hand, lack of any antenatal care is as high as 6-7 percent in Lilongwe and Mangochi.

Proper antenatal care can reduce the level of neonatal mortality. It is recommended that mothers receive antenatal care within the first three months of their pregnancy. Only 8 percent of women initiated ANC before the fourth month of pregnancy, a marginal increase from 7 percent in the 2000 MDHS. Overall, 85 percent of women received at least one tetanus toxoid injection during pregnancy for their most recent birth in the five years preceding the survey. The coverage of tetanus toxoid injection has not changed since the 1992 MDHS. Two in three women received the recommended 2 or more doses of tetanus toxoid injection, a decrease from the proportion reported in 1992 (73 percent). With regard to malaria prevention during pregnancy, the 2004 MDHS data show that 81 percent of pregnant women took an anti-malarial drug and 43 percent of women received two or more doses of IPT, at least once during an ANC visit.

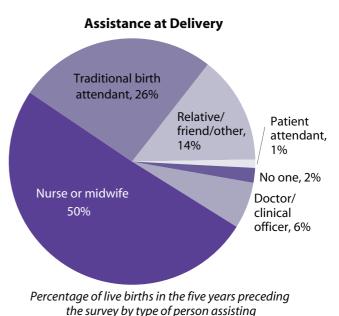
### **Delivery and Postnatal Care**

A large proportion of births in Malawi are attended by a health professional; 50 percent by a nurse or midwife, 6 percent by a doctor or clinical officer, and one percent by a patient attendant. A considerable proportion of births (29 percent) take place at home. Since 2000, there has been a slight increase in the proportion of births attended by a doctor or clinical officer (from 5 to 6 percent) or from a traditional birth attendant (from 23 to 26 percent).

Postnatal care is an important precaution against post-delivery complications. Postnatal care is recommended to start immediately after the birth of the baby and placenta to 42 days after delivery. Seven in ten women did not receive postnatal care. About two in ten women who received postnatal care did so within two days of delivery, as recommended.



Cover photo: © 2005 Karen Z. Waltensperger, Courtesy of Photoshare



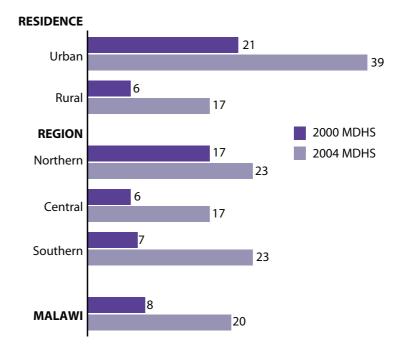
### Malaria

Malaria is a major public health problem in Malawi. It is the leading cause of morbidity and mortality, especially among children under the age of five years and pregnant women. The Ministry of Health estimates that over the past five years there have been over 8 million episodes of malaria per year throughout the country. The country's national strategy outlines specific interventions use of insecticide-treated mosquito nets, prompt and effective treatment of malaria illness, and control of malaria during pregnancy.

### **Mosquito Nets**

Overall, 42 percent of households in Malawi own at least one mosquito net, but only 27 percent of households own an insecticide-treated (ITN). Urban households are somewhat more likely to own ever-treated nets (48 percent) than rural households (32 percent). Households in the Northern Region are more likely to have an ITN (31) percent), while the Central Region has the lowest (24 percent). Among districts, the proportion of households with at least one ever-treated net ranges from 25 percent in Mulanje to 55 percent in Salima. The data also show that ownership of mosquito nets increases with the wealth of the household.





### It is especially important for

children under age of 5 years and pregnant women to be protected from malaria. In Malawi, one in five children under age five slept under a mosquito net the night before the survey. Most of these children (18 percent) slept under an ever-treated net and 15 percent slept under an ITN. Use of mosquito nets by pregnant women (19 percent) is only slightly lower than all women (21 percent).

### **Intermittent Preventive Treatment During Pregnancy**

Intermittent Preventive Treatment (IPT) in pregnancy prevents development of malaria and eliminates malaria parasite from the placenta. As a protective measure against various adverse outcomes of pregnancy, the National Malaria Policy Government recommends that pregnant women receive at least two doses of sulfadoxine-pyrimethamine (SP), one in the second trimester and one in the third trimester. Overall, eight in ten pregnant women take an anti-malarial drug during pregnancy; the majority of these women take SP/Fansidar.

### **Management of Malaria in Children**

In the two weeks preceding the survey, 37 percent of children under age 5 had fever and/or convulsions in the two weeks preceding the survey. Among children with fever and/or convulsions, 57 percent were given an anti-malarial drug and 46 percent were given the medication on the same day or next day.

# **GENDER VIOLENCE**

Domestic violence has been acknowledged as a violation of basic human rights of women, and research shows the health burdens and demographic consequences of such violence.

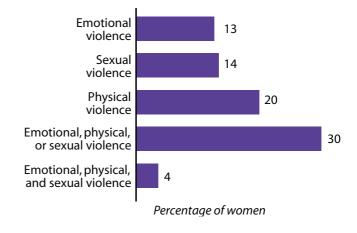
### Prevalence

Gender-based violence is defined as any act of violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women. In the 2004 MDHS, questions on domestic violence are asked to one randomly selected woman in each household among those eligible for individual interview. These women were asked if they had experienced any physical violence since age 15. The data show that 28 percent of women experienced physical violence since age 15 and 15 percent experienced it in the 12 months preceding the survey. Woman's marital status is associated with her experience of domestic violence; 42 percent of divorced or separated women report having experienced physical violence since the age of 15, compared with 28 percent of currently married women, 23 percent of never-married women, and 15 percent of widows. Experiences of violence do not vary significantly by urban-rural residence, education, or wealth status.

### **Marital Violence**

Marital violence refers to violence by partners within a marital union. The 2004 MDHS data show that 13 percent of ever-married women report to having experienced emotional violence, 20 percent experienced physical violence, and 13 percent experienced sexual violence. Thirty percent of women experienced at least one of the three forms of violence, while 4 percent experienced all three. Women age 30-39, those who are previously married, women with 5 or more living children, those with incomplete primary education, and who are employed for cash are more likely than other women to report emotional, physical, or sexual violence by their husbands. The most common form of spousal violence is slapping and arm twisting (16 percent) and forced intercourse or marital rape (13 percent).

**Experience of Marital Violence** 



### Help-Seeking Behaviour for Women who Experienced Violence

Only about four in ten (42 percent) of women who ever experienced physical or sexual violence actually sought help. Of these women, about four in ten sought help from relatives or friends, one in three sought help from their own family, and about one in ten went for help from their in-laws.

# **HIV/AIDS Awareness and Behaviour**

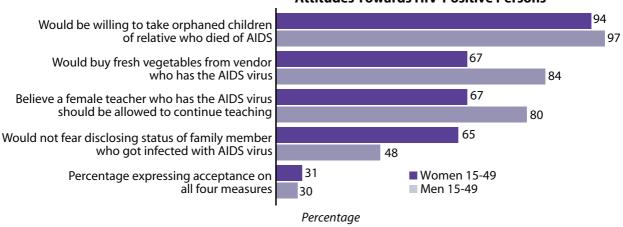
The 2004 MDHS allows the anonymous linking of HIV results with key behavioural, social and demographic factors. The HIV prevalence data provide important information to plan the national response to the HIV/AIDS epidemic and to evaluate program impact. The understanding of the prevalence of HIV within the population and the analysis of social, biological and behavioural factors associated with HIV infection provide new insights into the HIV epidemic in Malawi.

### **Awareness of AIDS**

Almost all Malawian adults have heard of AIDS. This is true across age group, urban-rural residence, marital status, wealth index, and education. Overall, about half of women and six in ten men reject the two most common misconceptions (HIV can be transmitted by mosquito bites and supernatural means) and know that a healthy-looking person can have the AIDS virus. Most women in Malawi know that HIV can be transmitted by breastfeeding (75 percent), but only 39 percent know that the risk of mother-to-child transmission can be reduced by taking drugs during pregnency.

### **Attitudes Towards HIV-Infected People**

The 2004 MDHS respondents were asked questions to gauge stigma related to AIDS. Almost all women and men say that they are willing to care for an orphaned child of a family member who died of AIDS. About two in three women and eight in ten men say they would buy fresh vegetables from a shopkeeper infected with HIV or that a female teacher should be allowed to keep teaching. Sixty-five percent of women and 48 percent of men say that they would not necessarily fear disclosure of a family member's HIV-positive status. About one in three women and men express acceptance on all four above measures.



### **Attitudes Towards HIV-Positive Persons**

### **HIV-Related Behavioural Indicators**

Delaying the age at which young persons become sexually active is an important strategy for reducing the risk of contracting a sexually transmitted infection (STI). In Malawi, 15 percent of women and 14 percent of men age 15-24 had sex by age 15.

Sexual intercourse with a non-marital or non-cohabiting partner is associated with an increase in the risk of contracting an STI. Eight percent of women and 27 percent of men engaged in higher-risk sexual behaviour in the last 12 months. Condom use during last episode of sex in higher-risk sex was reported by 30 percent of women and 47 percent of men. Higher-risk sexual behaviour is more common among youth age 15-24; 14 percent of young women and 62 percent of young men age 15-24 engaged in higher-risk sexual activity in the 12 months preceding the survey. Only 35 percent of young women and 47 percent of young men reported using a condom during the last higher-risk sexual encounter.

# **HIV/AIDS Prevalence**

### **Response Rates for HIV Testing**

One in three households selected for the 2004 MDHS survey was selected for male interviews. All men age 15-54 and all women age 15-49 in these households were asked to voluntarily provide some drops of blood for HIV testing in the laboratory. Overall, 4,071 women age 15-49 and 3,797 men 15-54 were identified as eligible for testing. Of these, testing was successfully conducted on 2,686 women and 2,581 men, resulting in a response rate of 67 percent (70 percent for women and 63 percent for men). Response rates were considerably higher in rural than urban areas (68 percent and 60 percent, respectively). The main reasons for non-response were refusal and absence. On the whole, adjusting the observed prevalence rates by accounting for the predicted rates among non-tested women and men makes little difference to the observed rates<sup>1</sup>. The adjusted HIV prevalence rates for all eligible women and men are well within the error margins of the observed prevalence rates based on tested respondents. This report presents the observed prevalence rates.

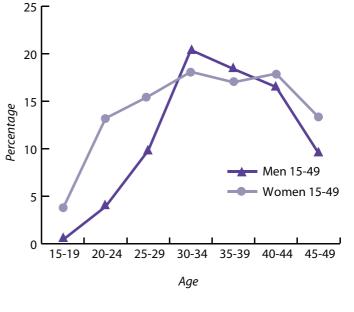
#### **HIV Prevalence**

The 2004 MDHS indicates that 12 percent of women and men age 15-49 in Malawi are infected with HIV. HIV prevalence among women is higher (13 percent) than for men (10 percent). Overall, HIV prevalence

peaks at 19 percent for respondents age 30-34 (18 percent for women and 20 percent for men in that age group). HIV prevalence is higher among urban residents when compared with their rural counterparts. Eighteen percent of urban women are HIVpositive compared with 13 percent of rural women. The urban-rural difference in HIV prevalence is more pronounced among men; urban men are almost twice as likely to be HIV-positive as rural men (16 percent and 9 percent, respectively). HIV prevalence among women and men is significantly higher in the Southern Region (20 percent and 15 percent, respectively) compared with the Northern (10 percent and 5 percent) or Central (7 percent and 6 percent) Regions.

Data show that for 83 percent of couples, both partners are HIV-negative, and for 7 percent of couples both partners are HIVpositive. Ten percent of the couples are discordant, that is, one partner is infected and the other not.

HIV Prevalence by Age





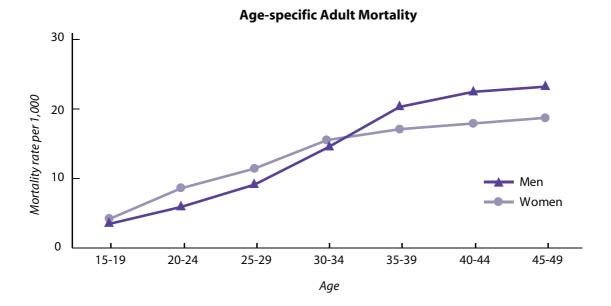
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<sup>1.</sup> Adjusting for the low response rate for HIV testing and the implausibly low rates of infection in Lilongwe District, the overall infection rate for Malawi increased from 12 percent to 13 percent.

### **Adult and Maternal Mortality**

Two aspects of adult mortality dynamics deserve close attention. First, given sharp rises in the prevalence of HIV infection and AIDS over the last 20 years, Malawi is expected to suffer increases in both female and male adult mortality in the near term. Second, mortality related to pregnancy and childbearing (maternal mortality) serves as an important indicator to monitor women's and reproductive health programmes in the country. The basis for the calculation of the mortality rates is the survivorship of all live births to the respondent's natural mother (i.e., the respondent's brothers and sisters). The direct approach to estimating adult and maternal mortality maximises use of the available data, including information on the age of surviving siblings, the age at death of siblings who died, and the number of years ago the sibling died.

Comparison of data from the 2000 and 2004 MDHS surveys indicates that adult mortality for both women and men has remained at the same levels since 1997, which is the centre of the reference period for the 2000 MDHS estimate of adult mortality.



Data on the survival of respondents' sisters were used to calculate a maternal mortality ratio (MMR) for the 7-year period before the survey. Using direct estimation procedures, MMR in Malawi is estimated to be 984 maternal deaths per 100,000 live births. The MMR based on the 2000 MDHS is significantly higher than that calculated from the 1992 MDHS (620 deaths per 100,000 live births) but lower than the rate from the 2000 MDHS survey (1,120 maternal deaths per 100,000 live births). It is unlikely that maternal mortality has changed so dramatically up and then down again, especially since the reference periods for the estimates overlap each other. Maternal mortality ratios measured in this way are subject to very high sampling errors and cannot adequately indicate short term trends.

# Men's Participation in Health Care

The 2004 MDHS collected information on men's participation in their wives and children's health care. This information helps family planning and health programme managers in investigating men's role in taking care of the health of their family.

### **Reproductive Health Care**

Ninety-six percent of fathers reported that the mother of their last born in the preceding five years received antenatal care from a health professional. When asked the same question, women reported 93 percent. For delivery assistance by a health care provider, men reported 74 percent of the deliveries while women reported 57 percent. Differences in question wording could account for some of the differences in report-ing between men and women. Another factor to account for the differences could be that parents may not necessarily report on the same birth.

The majority of men with a child born in the last five years reported that for 76 percent of pregnancies the antenatal services were free, for 66 percent of births delivery care was free, and for 86 percent of births postnatal care was free. Fathers reported providing payment for antenatal care for 19 percent of pregnancies, for delivery care for 27 percent of births, and for postnatal care for 12 percent of births.

### **Decisionmaking on Child's Health Care**

The 2004 MDHS also collected information from fathers on who usually decides about their children's health care. Questions were specifically asked about the health care for their youngest child under age five. Fathers reported that they themselves decide about the health care for their children in 87 percent of the cases, while mothers do so in 64 percent of the cases.

### **Knowledge of Signs of Danger in Pregnancy**

The results from the 2004 MDHS show that men's knowledge of danger signs in pregnancy is limited. Two in three men have no knowledge of any danger signs or symptoms that indicate that a pregnancy may be

at an elevated risk. The most often cited sign of pregnancy complication is vaginal bleeding with 11 percent of men reporting knowledge of this complication.



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# MILLENNIUM DEVELOPMENT GOAL INDICATORS MALAWI, 2004

		Value		
Goal	Indicator	Male	Female	Total
Eradicate extreme poverty and hunger	Prevalence of underweight children under five years of age (%)	21.8	22.4	22.0
Achieve universal primary education	Net enrolment ratio in primary education (%) <sup>1</sup>	80.1	83.9	82.0
	Percent of pupils starting grade 1 who reach grade 5 <sup>1</sup>	85.2	86.5	85.9
	Literacy rate of 15-24-year olds (%) <sup>2</sup>	75.7	65.4	67.3
Promote gender equality and empower women	Ratio of girls to boys in primary education			0.95
	Ratio of girls to boys in secondary education			0.75
	Ratio of girls to boys in tertiary education			0.88
	Ratio of literate women to men, 15-24 years old			0.86
	Share of women in wage employment in the non-agricultural sector $(\%)^3$			15.4
Reduce child mortality	Under-five mortality rate (deaths per 1,000 live births)			133
	Infant mortality rate (deaths per 1,000 live births)			76
	Percent of 1 year-old children immunised against measles	78.8	78.6	78.7
Improve maternal health	Maternal Mortality Ratio (deaths per 100,000 live births)			984
	Percent of births attended by skilled health personnel			57.0
Combat HIV/AIDS, ma- laria, and other diseases	Percentage of current users of contraception who are using condoms (currently married women 15-49)			3.2
	Condom use at last high-risk sex (population age 15-49)(%) <sup>4</sup>	41.6	32.6	49.9
	Percentage of population age 15-24 years with comprehensive correct knowledge of HIV/AIDS <sup>5</sup>	33.2	24.8	28.3
	Contraceptive prevalence rate (any modern method, currently married women 15-49)(%)			28.1
	Ratio of school attendance of orphans to school attendance of non-or- phans age 10-14 years			1.0
		Urban	Rural	Total
Ensure environmental sustainability	Percentage of population using solid fuels <sup>6</sup>	88.7	99.7	97.9
	Percentage of population with sustainable access to an improved water source <sup>7</sup>	91.4	56.9	62.4
	Percentage of population with access to improved sanitation <sup>8</sup>	94.8	83.7	85.4

<sup>1</sup> Excludes children with parental status missing.

<sup>2</sup> Refers to respondents who attended secondary school or higher and women who can read a whole sentence.

<sup>3</sup> Wage employment includes respondents who receive wages in cash or in cash and kind.

<sup>4</sup> Higher-risk sex refers to sexual intercourse with a partner who neither was a spouse nor who lived with the respondent; time frame is 12 months preceding the survey.

<sup>5</sup> A person is considered to have a comprehensive knowledge about AIDS when they say that use of condoms for every sexual intercourse and having just one uninfected and faithful partner can reduce the chance of getting the AIDS virus, that a healthy-looking person can have the AIDS virus, and when they reject the two most common local misconceptions. The most common misconceptions in Malawi are that AIDS can be transmitted through mosquito bites and that a person can become infected with the AIDS virus by supernatural means.

<sup>6</sup> Charcoal, firewood, straw, dung, or crop waste.

<sup>7</sup> Improved water sources are: household connection (piped), public standpipe, borehole, protected dug well, protected spring, or rainwater collection.

<sup>8</sup> Improved sanitation technologies are: connection to a public sewer, connection to septic system, pour-flush latrine, simple pit latrine, or ventilated improved pit latrine.



