



**USAID**  
FROM THE AMERICAN PEOPLE

USAID Country Health Statistical Report

# Nicaragua

January 2011



# Table of Contents

---

## 1. About the Report

## 2. Country Profile

### I. Statistical Overview

- *Demographic Indicators*
- *Socioeconomic Indicators*
- *Family Planning Indicators*
- *Maternal Health Indicators*
- *Child Survival Indicators*
- *HIV/AIDS Prevention Indicators*
- *Infectious Diseases Control Indicators*

### II. Trends in Health Indicators

- *Current and Projected Population by Age and Sex*  
(Figure 1 and Table 1.1)
- *Population Estimates and Projections*  
(Table 1.2)
- *Estimated Total Fertility Rate per Woman*  
(Figure 2 and Table 2)
- *Infant Mortality Rates / Under-5 Mortality Rates*  
(Figure 3 and Table 3)
- *Vaccination Coverage (DPT3) Trends*  
(Figure 4 and Table 4)
- *Contraceptive Prevalence Rates - Married Women*  
(Figure 5 and Table 5)

## 3. Data Notes

## 4. Sources

# About the Report

Released January 2011

---

This report is one of a series of Country Health Statistical Reports produced on behalf of the United States Agency for International Development (USAID) by the Analysis, Information Management and Communication Activity (AIM) Project. Each profile contains statistical data on current health conditions, population dynamics, health and family planning behavior, and health and population trends in a given developing country. Information is compiled from AIM's health statistics database, which draws data from a diverse range of sources listed at the end of this profile.

Hard copy editions of USAID's profiles are available from AIM'S publications department. Reports are available on the USAID Global Health Web site in Portable Document Format (pdf). Any feedback you have on the content or presentation of this report would be greatly appreciated. We would also appreciate receiving any more recent, more accurate, or more representative information. Contact us at the following:

**Analysis, Information Management**

**&**

**Communications Activity (AIM)**

655 15th Street, NW, Suite 450

Washington, DC 20005

Phone: 202-661-8600

Fax: 202-661-8601

E-mail: [dolphn@aimglobalhealth.org](mailto:dolphn@aimglobalhealth.org)

The Analysis, Information Management & Communications (AIM) Activity, a USAID contract managed by MasiMax Resources, Inc, with John Snow, Inc., ORC Macro, and Insight Systems Corporation prepared this document under task order number GPO-M-00-05-00043-00, with the Bureau for Global Health, USAID.

# I. Statistical Overview

---

\*see data notes

| Demographic Indicators          |           |           |      |                              |
|---------------------------------|-----------|-----------|------|------------------------------|
| Indicator                       | Value     | Data Unit | Year | Source                       |
| Total Population                | 5,995,928 |           | 2010 | BUCEN-IDB-2010               |
| Population Growth Rate          | 1.7       | %         | 2010 | BUCEN-IDB-2010               |
| Percent Urban                   | 58        | %         | 2004 | World Bank/WDI-2006          |
| Women, 15-19                    | 345,905   |           | 2010 | BUCEN-IDB-2010               |
| Women, 15-49                    | 1,662,645 |           | 2010 | BUCEN-IDB-2010               |
| Life Expectancy at Birth        | 71.8      |           | 2010 | BUCEN-IDB-2010               |
| Crude Birth Rate                | 22.8      | per 1,000 | 2010 | BUCEN-IDB-2010               |
| Crude Death Rate                | 4.3       | per 1,000 | 2010 | BUCEN-IDB-2010               |
| Number of Live Births           | 136,527   |           | 2010 | BUCEN-IDB-2010               |
| Healthy Life Expectancy: Female | 63        |           | 2002 | WHO Global Health Atlas-2008 |
| Healthy Life Expectancy: Male   | 60        |           | 2002 | WHO Global Health Atlas-2008 |
| Population: Percent < Age 15    | 33        | %         | 2010 | BUCEN-IDB-2010               |

| Socioeconomic Indicators                         |                    |           |           |   |
|--|--------------------|-----------|-----------|---|
| Indicator  | Value              | Data Unit | Year      | Source                                    |
| GNI per Capita (PPP)                             | 3,650 <sup>1</sup> | \$        | 2005      | World Bank/WDI-2006                       |
| Health Expenditure as Percentage of GDP          | 7.7                | %         | 2003      | World Bank/WDI-2006                       |
| Physicians per 1,000 People                      | 1.6                | per 1,000 | 2003      | World Bank/WDI-2005                       |
| Adult Literacy Rate                              | 76.7               | %         | 2004      | World Bank/WDI Database-2007              |
| Adult Literacy Rate, Female                      | 77 <sup>2</sup>    | %         | 2002      | World Bank/WDI-2006                       |
| Adult Literacy Rate, Male                        | 77 <sup>3</sup>    | %         | 2002      | World Bank/WDI-2006                       |
| Gross Enrollment Ratio - Primary School          | 115.8              | %         | 2007      | UNESCO Global Monitoring Report-2010      |
| Gender Parity Index - Net Enrollment Ratio       | 1.1                |           | 2007      | UNESCO Global Monitoring Report-2010      |
| Access to an Improved Water Source (Rural)       | 65                 | %         | 2002      | World Bank/WDI-2005                       |
| Access to an Improved Water Source (Urban)       | 93                 | %         | 2002      | World Bank/WDI-2005                       |
| Access to Improved Sanitation Facilities (Rural) | 51                 | %         | 2002      | World Bank/WDI-2005                       |
| Access to Improved Sanitation Facilities (Urban) | 78                 | %         | 2002      | World Bank/WDI-2005                       |
| Population Living Below \$1 a Day                | 45.1               | %         | 1990-2005 | Human Development Report - 2007/2008-2008 |
| Human Development Index                          | 0.71               |           | 2005      | Human Development Report - 2007/2008-2008 |
| Population Below Poverty Line                    | 48                 | %         | 2005      | CIA World Factbook-2009                   |
| Real GDP (Growth) Rate                           | <0.01              | %         | 2009      | CIA World Factbook-2010                   |
| Income Inequality (Gini index)                   | 43.1               |           | 2001      | CIA World Factbook-2009                   |
| Unemployment Rate                                | 8.2                | %         | 2009      | CIA World Factbook-2010                   |
| Inflation Rate                                   | 4.3                | %         | 2009      | CIA World Factbook-2010                   |
| Airports   | 143                |           | 2010      | CIA World Factbook-2010                   |
| Airports with paved runways                      | 11                 |           | 2010      | CIA World Factbook-2010                   |

<sup>1</sup> Estimate is based on regression; other PPP figures are extrapolated from the latest International Comparison Programme benchmark estimates.

<sup>2</sup> Based on survey data.

<sup>3</sup> Based on survey data

| Family Planning Indicators                                     |                    |           |           |  |
|--|--------------------|-----------|-----------|--|
| Indicator  | Value              | Data Unit | Year      | Source                                     |
| Total Fertility Rate (BUCEN)                                   | 2.5                |           | 2010      | BUCEN-IDB-2010                             |
| Total Fertility Rate (CDC)                                     | 2.7                |           | 2006-2007 | Nicaragua Preliminary DHS-2006-2007        |
| Contraceptive Prevalence Rate, Modern Methods, All Women       | 43.9               | %         | 2001      | Nicaragua DHS-2001                         |
| Contraceptive Prevalence Rate, Modern Methods, Married Women   | 69.8               | %         | 2006-2007 | Nicaragua Preliminary DHS-2006-2007        |
| Median Age of Sexual Debut Among Women, Ages 25-49             | 17.4 <sup>1</sup>  |           | 2006-2007 | Nicaragua Preliminary DHS-2006-2007        |
| Mean Ideal Family Size   | 2.9                |           | 2001      | Nicaragua DHS-2001                         |
| Women 20-24 Who Gave Birth Before Age 20                       | 47.9               | %         | 2001      | Nicaragua DHS-2001                         |
| Total Fertility Rate, Rural                                    | 3.5                |           | 2006      | DHS STATcompiler-2010                      |
| Unmet Need for Family Planning: Rural                          | 18.7               | %         | 2001      | DHS STATcompiler as of September 2008-2008 |
| Unmet Need for Family Planning: Urban                          | 11.5               | %         | 2001      | DHS STATcompiler as of September 2008-2008 |
| Contraceptive Prevalence Rate, All Methods                     | 72.4               | %         | 2006-2007 | Nicaragua Preliminary DHS-2006-2007        |
| Equity in use of modern contraception                          | 0.9                | Ratio     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007        |
| Percent of need satisfied by modern methods of family planning | Data Not Available |           |           |  |

| Maternal Health Indicators                        |                    |                         |           |                                     |
|---|--------------------|-------------------------|-----------|-------------------------------------|
| Indicator   | Value              | Data Unit               | Year      | Source                              |
| Maternal Mortality Ratio (WHO/Hill)               | 170                | Per 100,000 live births | 2005      | WHO/Hill-2005                       |
| Maternal Mortality Ratio (DHS)                    | Data Not Available |                         |           |                                     |
| Antenatal Care (at least 1 visit)                 | 91                 | %                       | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Antenatal Care (2+ visits)                        | 82.5 <sup>2</sup>  | %                       | 2001      | Nicaragua DHS-2001                  |
| Antenatal Care (4+ visits)                        | 77.8               | %                       | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Assisted Delivery by a Health Professional        | 73.7               | %                       | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Assisted Delivery by Doctor                       | 64.1               | %                       | 2001      | Nicaragua DHS-2001                  |
| Assisted Delivery by Other Health Professional    | 25.5               | %                       | 2001      | Nicaragua DHS-2001                  |
| Anemia prevalence among women of reproductive age | Data Not Available |                         |           |                                     |
| Equity in skilled attendance at delivery          | 0.4                | Ratio                   | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |

<sup>1</sup> The value for this country represents data from women 20-49 years of age.

<sup>2</sup> The value for this country represents data from the five-year period preceding the survey.

| Child Survival Indicators   |                    |                       |           |                                     |
|---|--------------------|-----------------------|-----------|-------------------------------------|
| Indicator   | Value              | Data Unit             | Year      | Source                              |
| <b>Acute Respiratory Infection (ARI) and Oral Rehydration Therapy (ORT)</b> |                    |                       |           |                                     |
| ARI Care Seeking - Children Under 5   | 83                 | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| ORT Use Rate (ORS, RHS, or Increased Fluids)                                | 58.6 <sup>1</sup>  | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| <b>Mortality Indicators</b>   |                    |                       |           |                                     |
| Infant Mortality Rate (BUCEN)   | 24.2               | per 1,000 live births | 2010      | BUCEN-IDB-2010                      |
| Infant Mortality Rate (UNICEF)  | 23                 |                       | 2008      | UNICEF-2010                         |
| Infant Mortality Rate (CDC)   | 29                 | per 1,000 live births | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Infant Mortality Rate, Females (BUCEN)                                      | 21                 | per 1,000 live births | 2010      | BUCEN-IDB-2010                      |
| Infant Mortality Rate, Males (BUCEN)  | 27.1               | per 1,000 live births | 2010      | BUCEN-IDB-2010                      |
| Under-5 Mortality Rate (BUCEN)  | 29.4               | per 1,000 live births | 2010      | BUCEN-IDB-2006                      |
| Neonatal Mortality Rate   | 16                 | per 1000              | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Under-5 Mortality Rate (UNICEF)   | 27                 | per 1,000 live births | 2008      | UNICEF-2010                         |
| Under-5 Mortality Rate (CDC)  | 35                 | per 1,000 live births | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| <b>Nutrition Indicators</b>   |                    |                       |           |                                     |
| Exclusive Breastfeeding (under 4 mos.)                                      | 37.9               | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Exclusive Breastfeeding (under 6 mos.)                                      | 30.6               | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Stunted (height-for-age)  | 16.9               | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Underweight (weight-for-age)  | 6.9                | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Wasted (weight-for-height)  | 1                  | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| <b>Vaccination Coverage</b>   |                    |                       |           |                                     |
| DPT3 Vaccination Rate (CDC)   | 95.1               | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| DPT3 Vaccination Rate (WHO)   | 98                 | %                     | 2009      | WHO: Global Summary-2009            |
| Measles Vaccination Rate (CDC)  | 87.6 <sup>2</sup>  | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Measles Vaccination Rate (WHO)  | 99                 | %                     | 2009      | WHO: Global Summary-2009            |
| Polio Vaccination Rate (CDC)  | 95.1 <sup>3</sup>  | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Polio Vaccination Rate (WHO)  | 99                 | %                     | 2009      | WHO: Global Summary-2009            |
| Tetanus Toxoid Vaccination  | 91.2 <sup>4</sup>  | %                     | 2006-2007 | Nicaragua Preliminary DHS-2006-2007 |
| Equity in DPT3 coverage (DHS)   | Data Not Available |                       |           |                                     |
| Improved sanitation/hygiene practices                                       | Data Not Available |                       |           |                                     |
| Vitamin A supplementation coverage among children 6-59 months               | Data Not Available |                       |           |                                     |

- 1 The value for this country represents only oral rehydrations solution.
- 2 The value for this country represents data from children 19-29 months of age.
- 3 The value for this country represents data from children 19-29 months of age.
- 4 The value for this country represents percentage of pregnant women receiving 1 or more doses and is from the five-year period preceding the survey.



| HIV/AIDS Prevention Indicators                                    |                    |           |      |                    |
|---|--------------------|-----------|------|--------------------|
| Indicator   | Value              | Data Unit | Year | Source             |
| HIV Prevalence proportion: Adults (15–49 years)                   | 0.2                | %         | 2007 | UNAIDS 2008-2008   |
| Estimated number of people living with HIV: Adults and Children   | 7,700              |           | 2007 | UNAIDS 2008-2008   |
| Estimated number of people living with HIV: Women (15+ years)     | 2,100              |           | 2007 | UNAIDS 2008-2008   |
| Estimated number of people living with HIV: Children (0–14 years) | Data Not Available |           |      |                    |
| Males Reporting Condom Use With Last Non-Regular Partner          | Data Not Available |           |      |                    |
| Females Reporting Condom Use With Last Non-Regular Partner        | 13.8               | %         | 2001 | Nicaragua DHS-2001 |

| Infectious Diseases Control Indicators                       |                    |             |      |                              |
|--|--------------------|-------------|------|------------------------------|
| Indicator  | Value              | Data Unit   | Year | Source                       |
| TB Estimated Number of Cases                                 | 2,731              |             | 2007 | WHO: Global Atlas-2009       |
| TB Case Detection Rate                                       | 79                 | %           | 2007 | Global Atlas-2010            |
| TB (DOTS) Treatment Success Rate                             | 89                 | %           | 2006 | WHO: Global Atlas-2009       |
| Malaria Cases per 100,000                                    | 124 <sup>1</sup>   | per 100,000 | 2003 | WHO Global Health Atlas-2008 |
| DOTS Coverage  | 100                | %           | 2007 | WHO: Global Atlas-2009       |
| HIV-Infected with Active TB                                  | 3.5                | %           | 2007 | WHO: Global Atlas-2009       |
| Avian Influenza: Cumulative Number of Confirmed Human Cases  | Data Not Available |             |      |                              |
| Avian Influenza: Cumulative Number of Confirmed Human Deaths | Data Not Available |             |      |                              |
| Child Sleeps Under Insecticide-Treated Net                   | Data Not Available |             |      |                              |
| Equity in Bednet (ITN) Ownership                             | Data Not Available |             |      |                              |

<sup>1</sup> Calculated using (100,000/WHO population)xMalaria Reported # of Cases

## II. Trends in Health Indicators

Figure 1: Current and Projected Population by Age and Sex (in thousands)

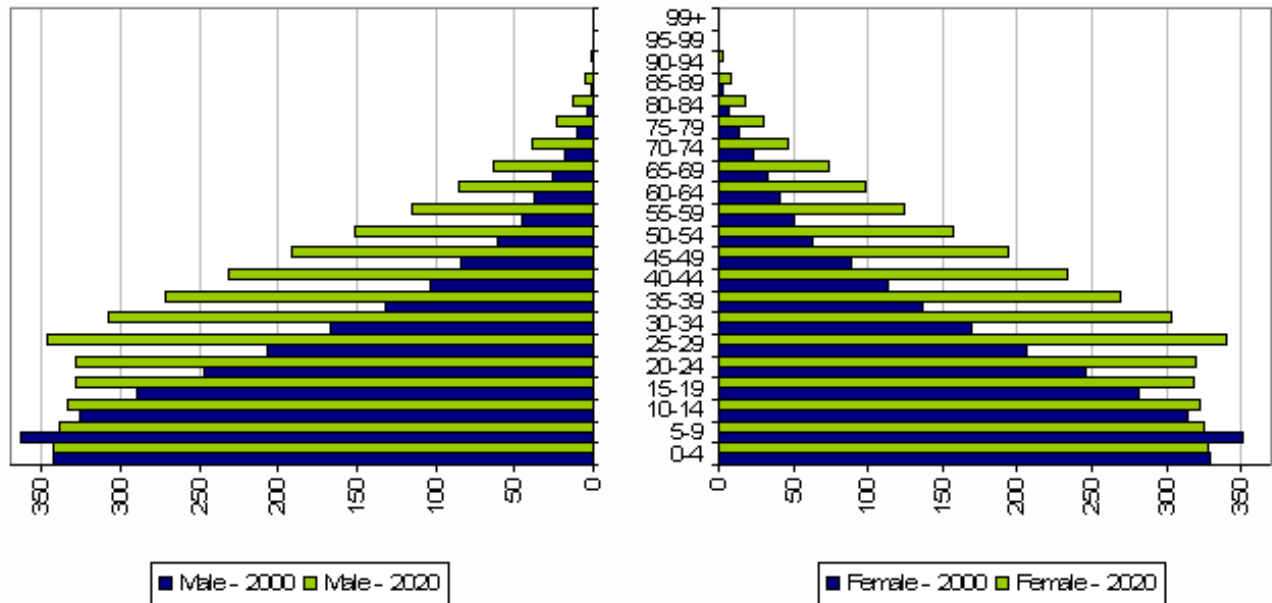


Table 1.1: Current and Projected Population by Age and Sex

Source: BUCEN-IDB

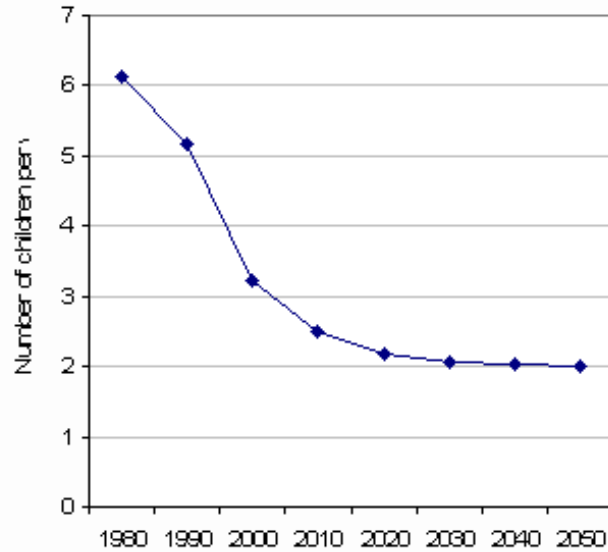
| Age Group | Male - 2000 | Male - 2020 | Female - 2000 | Female - 2020 |
|-----------|-------------|-------------|---------------|---------------|
| 0-4       | 342,805     | 342,765     | 329,657       | 328,224       |
| 5-9       | 363,062     | 339,000     | 350,370       | 325,571       |
| 10-14     | 325,662     | 333,922     | 314,679       | 321,713       |
| 15-19     | 289,172     | 329,092     | 281,326       | 318,428       |
| 20-24     | 247,710     | 328,693     | 245,349       | 320,155       |
| 25-29     | 206,730     | 346,587     | 206,298       | 339,616       |
| 30-34     | 166,904     | 307,724     | 169,341       | 302,580       |
| 35-39     | 132,363     | 271,242     | 136,626       | 268,517       |
| 40-44     | 103,567     | 231,303     | 112,729       | 232,937       |
| 45-49     | 84,444      | 191,525     | 89,326        | 194,371       |
| 50-54     | 60,785      | 151,563     | 62,957        | 157,340       |
| 55-59     | 45,846      | 115,741     | 50,157        | 124,121       |
| 60-64     | 36,902      | 85,086      | 40,684        | 98,589        |
| 65-69     | 26,256      | 63,001      | 32,305        | 73,316        |
| 70-74     | 18,141      | 38,830      | 23,406        | 46,291        |
| 75-79     | 10,333      | 22,863      | 14,055        | 30,703        |
| 80-84     | 4,341       | 12,368      | 6,458         | 18,303        |
| 85-89     | 1,307       | 4,597       | 2,276         | 8,683         |
| 90-94     | 242         | 1,189       | 498           | 2,813         |
| 95-99     | 22          | 168         | 51            | 512           |
| 99+       | 2           | 11          | 4             | 46            |

TABLE 1.2: Population Estimates and Projections

Source: BUCEN-IDB

| 1960      | 1970      | 1980      | 1990      | 2000      | 2010      | 2020      | 2030      | 2040      | 2050      |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1,492,698 | 2,052,544 | 2,805,646 | 3,685,127 | 4,935,148 | 5,995,928 | 7,030,099 | 7,985,165 | 8,805,080 | 9,478,660 |

**Figure 2: Estimated Total Fertility Rate per Woman**

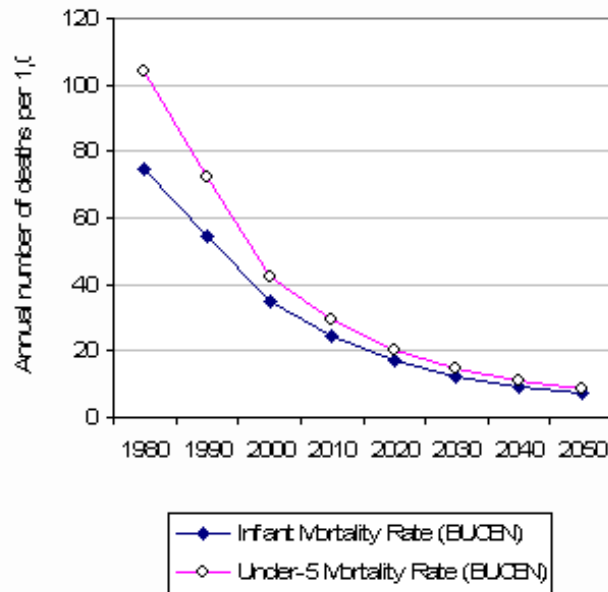


**Table 2: Estimated Total Fertility Rate per Woman**

Source: BUCEN-IDB

| 1980 | 1990 | 2000 | 2010 | 2020 | 2030 | 2040 | 2050 |
|------|------|------|------|------|------|------|------|
| 6.1  | 5.2  | 3.2  | 2.5  | 2.2  | 2.1  | 2.0  | 2.0  |

**Figure 3: Infant Mortality Rates / Under-5 Mortality Rates**

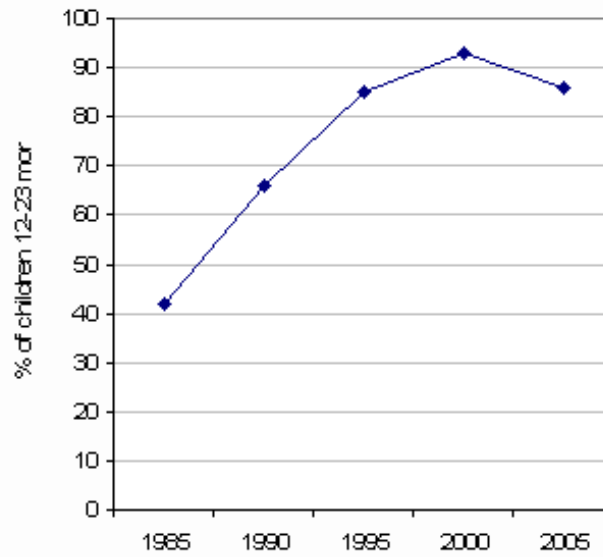


**Table 3: Infant Mortality Rates / Under-5 Mortality Rates**

Source: BUCEN-IDB 2010

| Indicator                      | 1980  | 1990 | 2000 | 2010 | 2020 | 2030 | 2040 | 2050 |
|--------------------------------|-------|------|------|------|------|------|------|------|
| Infant Mortality Rate (BUCEN)  | 74.7  | 54.4 | 34.6 | 24.2 | 17.1 | 12.4 | 9.3  | 7.2  |
| Under-5 Mortality Rate (BUCEN) | 103.8 | 72.2 | 42.4 | 29.4 | 20.5 | 14.6 | 10.8 | 8.3  |

**Figure 4: Vaccination Coverage (DPT3) Trends**



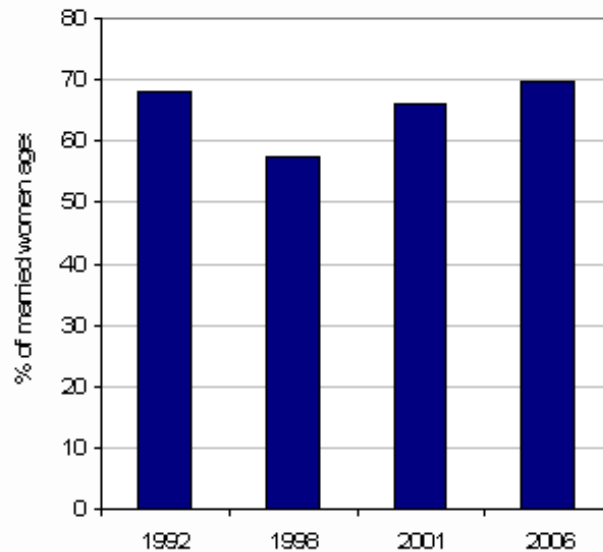
**Table 4: Vaccination Coverage (DPT3) Trends**

Source: WHO/Global Summary

WHO: Global Summary

| 1985 | 1990 | 1995 | 2000 | 2005 |
|------|------|------|------|------|
| 42.0 | 66.0 | 85.0 | 93.0 | 86.0 |

**Figure 5: Contraceptive Prevalence Rates, Modern Methods, Married Women**



**Table 5: Contraceptive Prevalence Rates, Modern Methods, Married Women**

Source: FHS/Nicaragua

Nicaragua DHS

Nicaragua Preliminary DHS

| 1992 | 1998 | 2001 | 2006 |
|------|------|------|------|
| 67.9 | 57.4 | 66.1 | 69.8 |



# Data Notes

---

\*Indicator definitions that differ from those in the data notes section are identified by footnotes accompanying the indicator tables.

## **Demographic Indicators**

|  |   |
|--|---|
| <b>Total Population</b>                | The number of people in a given area (i.e., country) in a particular time period (usually a midyear estimate).  |
| <b>Population Growth Rate</b>          | The average annual growth rate is the rate of natural increase in a population plus the net migration rate. The rate of natural increase is the difference between the birth rate and the death rate, but it is conventionally measured in percentage terms (per hundred rather than per thousand). |
| <b>Percent Urban</b>                   | The percentage of the midyear population living in areas defined as urban in each country and reported to the United Nations.   |
| <b>Women, 15-19</b>                    | The number of women between the ages of 15-19 in the midyear population.  |
| <b>Women, 15-49</b>                    | The number of women between the ages of 15-49 in the midyear population.  |
| <b>Life Expectancy at Birth</b>        | The average number of years that a person at age 0 will live if age-specific death rates remain constant. Life expectancy at birth is highly affected by rates of infant and child death.   |
| <b>Crude Birth Rate</b>                | The number of births per thousand of the population. The product of the number of live births, divided by the midpoint population, multiplied by 1,000.   |
| <b>Crude Death Rate</b>                | The number of deaths per thousand of the population. The product of the number of deaths divided by the midpoint population, multiplied by 1,000.   |
| <b>Number of Live Births</b>           | The number of live births, annually, within a country.  |
| <b>Healthy Life Expectancy: Female</b> | The number of years of in full health that a female newborn can expect to live based on current rates of ill-health and mortality. HALE is based on life expectancy at birth but includes an adjustment for time spent in poor health.  |
| <b>Healthy Life Expectancy: Male</b>   | The number of years of in full health that a male newborn can expect to live based on current rates of ill-health and mortality. HALE is based on life expectancy at birth but includes an adjustment for time spent in poor health.  |
| <b>Population: Percent &lt; Age 15</b> | Percent of population less than 15 years of age.  |

## **Socioeconomic Indicators**

|  |   |
|--|---|
| <b>GNI per Capita (PPP)</b>                    | The gross national income (GNI) converted to international dollars using purchasing power parity (PPP) rates. An international dollar has the same purchasing power over GNI as a U.S. dollar has in the United States.   |
| <b>Health Expenditure as Percentage of GDP</b> | Total health expenditures is the sum of public and private health expenditures figured as a percentage of a country's gross domestic product (GDP). It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation. |
| <b>Physicians per 1,000 People</b>             | Physicians are defined as graduates of any faculty or school of medicine who are working in the country in any medical field (practice, teaching, research).  |
| <b>Adult Literacy Rate</b>                     | The percentage of people ages 15 and over who can, with understanding, read and write a short, simple statement about their everyday life.  |
| <b>Adult Literacy Rate, Female</b>             | The percentage of women ages 15 and over who can, with understanding, read and write a short, simple statement about their everyday life.   |

|   |  |
|---|--|
| <b>Adult Literacy Rate, Male</b>                        | The percentage of men ages 15 and over who can, with understanding, read and write a short, simple statement about their everyday life.  |
| <b>Gross Enrollment Ratio - Primary School</b>          | Total enrolment in primary level of education, regardless of age, expressed as a percentage of the population in the official age group corresponding to primary level of education. The GER can exceed 100% due to late entry or/and repetition.  |
| <b>Gender Parity Index - Net Enrollment Ratio</b>       | The ratio of the female-to-male values (or male to female, in certain cases) of net primary school enrollment rates (NER). NER measures the number of pupils in the official age group for a given level of education, expressed as a percentage of the population in that age group.  |
| <b>Access to an Improved Water Source (Rural)</b>       | Access to an improved water source in rural areas. Refers to the percentage of the rural population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, or rainwater collection. Unimproved sources include vendors, tanker trucks, and unprotected wells and springs.  |
| <b>Access to an Improved Water Source (Urban)</b>       | Access to an improved water source in urban areas. Refers to the percentage of the urban population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, or rainwater collection. Unimproved sources include vendors, tanker trucks, and unprotected wells and springs.  |
| <b>Access to Improved Sanitation Facilities (Rural)</b> | Access to improved sanitation facilities in rural areas. Refers to the percentage of the rural population with access to at least adequate excreta disposal facilities (private or shared, but not public) that can effectively prevent human, animal, and insect contact with excreta.  |
| <b>Access to Improved Sanitation Facilities (Urban)</b> | Access to improved sanitation facilities in urban areas. Refers to the percentage of the urban population with access to at least adequate excreta disposal facilities (private or shared, but not public) that can effectively prevent human, animal, and insect contact with excreta.  |
| <b>Population Living Below \$1 a Day</b>                | The percentage of the population living below the specified poverty line of \$1 a day at 1985 international prices (equivalent to \$1.08 at 1993 international prices), adjusted for purchasing power parity.  |
| <b>Human Development Index</b>                          | The HDI is a composite index that measures the average achievements in a country in three basic dimensions of human development: a long and healthy life, as measured by life expectancy at birth; knowledge, as measured by the adult literacy rate and the combined gross enrollment ratio for primary, secondary, and tertiary schools; and a decent standard of living, as measured by gross domestic product (GDP) per capita in purchasing power parity (PPP) US dollars.  |
| <b>Population Below Poverty Line</b>                    | National estimates of the percentage of the population falling below the poverty line are based on surveys of sub-groups, with the results weighted by the number of people in each group. Definitions of poverty vary considerably among nations. For example, rich nations generally employ more generous standards of poverty than poor nations.  |
| <b>Real GDP (Growth) Rate</b>                           | This entry gives the gross domestic product (GDP) growth on an annual basis adjusted for inflation and expressed as a percent.   |
| <b>Income Inequality (Gini index)</b>                   | This index measures the degree of inequality in the distribution of family income in a country. It is calculated from the Lorenz curve, in which cumulative family income is plotted against the number of families arranged from the poorest to the richest. The index is the ratio of (a) the area between a country's Lorenz curve and the 45 degree helping line to (b) the entire triangular area under the 45 degree line. The more nearly equal a country's income distribution, the closer its Lorenz curve to the 45 degree line and the lower its Gini index, e.g., a Scandinavian country with an index of 25. The more unequal a country's income distribution, the higher its Gini index, e.g., a Sub-Saharan country with an index of 50. If income were distributed with perfect equality, the index would be zero; if income were distributed with perfect inequality, the index would be 100. |
| <b>Unemployment Rate</b>                                | This entry contains the percent of the labor force that is without jobs. Substantial underemployment might be noted.   |
| <b>Inflation Rate</b>                                   | This entry furnishes the annual percent change in consumer prices compared with the previous year's consumer prices.   |



|   |  |
|---|--|
| <b>Airports</b>   | This entry gives the total number of airports or airfields recognizable from the air. The runway(s) may be paved (concrete or asphalt surfaces) or unpaved (grass, earth, sand, or gravel surfaces) but may include closed or abandoned installations. Airports or airfields that are no longer recognizable (overgrown, no facilities, etc.) are not included. Note that not all airports have accommodations for refueling, maintenance, or air traffic control.   |
| <b>Airports with paved runways</b>                                  | This entry gives the total number of airports with paved runways (concrete or asphalt surfaces) by length. For airports with more than one runway, only the longest runway is included according to the following five groups - (1) over 3,047 m, (2) 2,438 to 3,047 m, (3) 1,524 to 2,437 m, (4) 914 to 1,523 m, and (5) under 914 m. Only airports with usable runways are included in this listing. Not all airports have facilities for refueling, maintenance, or air traffic control.  |
| <b>Family Planning Indicators</b>                                   |  |
| <b>Total Fertility Rate (BUCEN)</b>                                 | The number of children a woman between ages 15-49 would have during her reproductive life, if, for all of her childbearing years she were to experience the age-specific birth rates for that given year.  |
| <b>Total Fertility Rate (CDC)</b>                                   | The number of children a woman between ages 15-49 would have during her lifetime if she were to bear children at the currently observed rates.   |
| <b>Contraceptive Prevalence Rate, Modern Methods, All Women</b>     | Percentage of all women ages 15-49 currently using a modern method of contraception. Modern methods include oral contraceptives, IUDs, injectables, female and male sterilization, all emergency contraception, and barrier methods (diaphragm, foam, jelly, male and female condom).  |
| <b>Contraceptive Prevalence Rate, Modern Methods, Married Women</b> | Percent of currently married women ages 15-49 currently using a modern method of contraception. Modern methods include oral contraceptives, IUDs, injectables, female and male sterilization, all emergency contraception, and barrier methods (diaphragm, foam, jelly, male and female condom).   |
| <b>Median Age of Sexual Debut Among Women, Ages 25-49</b>           | Median age of first sexual intercourse for women ages 25-49.   |
| <b>Mean Ideal Family Size</b>                                       | Mean ideal number of children for all women, according to number of living children.   |
| <b>Women 20-24 Who Gave Birth Before Age 20</b>                     | Percentage of women ages 20-24 who have given birth before age 20.   |
| <b>Total Fertility Rate, Rural</b>                                  | In rural areas only, the number of children a woman between ages 15-49 would have during her lifetime if she were to bear children at the currently observed rates.  |
| <b>Unmet Need for Family Planning: Rural</b>                        | In rural areas, percentage of married women ages 15-49 with unmet need for family planning. Unmet need for spacing includes pregnant women whose pregnancy was mistimed, amenorrheic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait 2 or more years for their next birth. Also included are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth unless they say it would not be a problem if they discovered they were pregnant in the next few weeks. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted, and fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and want no more children. |
| <b>Unmet Need for Family Planning: Urban</b>                        | In urban areas, percentage of married women ages 15-49 with unmet need for family planning. Unmet need for spacing includes pregnant women whose pregnancy was mistimed, amenorrheic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait 2 or more years for their next birth. Also included are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth unless they say it would not be a problem if they discovered they were pregnant in the next few weeks. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted, and fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and want no more children. |

|   |   |
|---|---|
| <b>Contraceptive Prevalence Rate, All Methods</b>                     | Percentage of currently married women ages 15-49 currently using ANY method of contraception.   |
| <b>Equity in use of modern contraception</b>                          | Contraceptive prevalence rate in the lowest wealth quintile/contraceptive prevalence rate in the highest wealth quintile.   |
| <b>Percent of need satisfied by modern methods of family planning</b> | Number of women in union who are fecund and are currently using modern contraceptive methods to stop or postpone the next pregnancy/number of women in union who are fecund and who desire to either terminate childbearing or to postpone their next birth for 2 years or more.  |
| <b>Maternal Health Indicators</b>                                     |   |
| <b>Maternal Mortality Ratio (WHO/Hill)</b>                            | The estimated number of women who die as a result of pregnancy or childbirth per 100,000 live births arrived through Hill et al., adjustment procedure depending on the nature of data used. The margins of uncertainty associated with the estimated maternal mortality ratios are very large and the estimates should not be used to monitor trends in the short term (including comparisons between 1995 and 2000 estimates). In addition, cross-country comparisons should be treated with considerable circumspection because different strategies are used to derive the estimates for different countries rendering comparisons fraught with difficulty. For further information please refer to the source. |
| <b>Maternal Mortality Ratio (DHS)</b>                                 | The estimated number of women who die as a result of pregnancy or childbirth per 100,000 live births, arrived mostly through the "sisterhood method". The data are aggregated based on different time periods ranging from four to ten years preceding the survey. Thus, the data may not be suitable for trend analysis due to over-lapping year ranges of estimates. For further information on methodology please refer to: Stanton, Cynthia, Nouredine Abderrahim, and Kenneth Hill. 1997. DHS Maternal Mortality Indicators: An assessment of Data Quality and Implications for Data Use. Calverton: Macro International Inc., or individual country DHS reports.  |
| <b>Antenatal Care (at least 1 visit)</b>                              | Percentage of women of reproductive age (15-49) who receive at least one antenatal care visit during pregnancy (in the three-year period preceding the survey).   |
| <b>Antenatal Care (2+ visits)</b>                                     | Percentage of women of reproductive age (15-49) who receive at least two antenatal care visits during pregnancy (in the three-year period preceding the survey).  |
| <b>Antenatal Care (4+ visits)</b>                                     | Percentage of women of reproductive age (15-49) who receive four or more antenatal care visits during pregnancy (in the three-year period preceding the survey).  |
| <b>Assisted Delivery by a Health Professional</b>                     | The percentage of births/deliveries that occur with the assistance of any trained health professional during the five-year period preceding the survey. May include doctors, nurses, or midwives.   |
| <b>Assisted Delivery by Doctor</b>                                    | The percentage of live births/deliveries that occur with the assistance of a doctor during the five-year period preceding the survey.   |
| <b>Assisted Delivery by Other Health Professional</b>                 | The percentage of live births/deliveries that occur with the assistance of a nurse or midwife during the five-year period preceding the survey.   |
| <b>Anemia prevalence among women of reproductive age</b>              | Number of women of reproductive age (15-49 years) with anemia/number of women of reproductive age (15-49 years).  |
| <b>Equity in skilled attendance at delivery</b>                       | Percentage of births in the lowest wealth quintile attended by a doctor, nurse, or trained midwife/percentage of births in the highest wealth quintile attended by a doctor, nurse, or trained midwife.   |
| <b>Child Survival Indicators</b>                                      |   |
| <b>ARI Care Seeking - Children Under 5</b>                            | Percentage of children under five years who were ill with an acute respiratory infection (ARI), which is associated with cough, rapid breathing and a high fever, during the two weeks preceding the survey, for whom care was sought from a health facility or provider.   |
| <b>ORT Use Rate (ORS, RHS, or Increased Fluids)</b>                   | Oral Rehydration Therapy (ORT). Percentage of children under age 5 with diarrhea two weeks prior to survey who received increased fluids, oral rehydration solution (ORS) or recommended home solution (RHS).   |
| <b>Infant Mortality Rate (BUCEN)</b>                                  | The estimated annual number of deaths of infants under 12 months in a given year per 1,000 live births in that same year.   |

|   |  |
|---|--|
| <b>Infant Mortality Rate (UNICEF)</b>         | The under five mortality rate is the probability (as expressed as a rate per 1,000 live births) of a child born in a specified year dying before reaching the age of one if subject to current age-specific mortality rates. |
| <b>Infant Mortality Rate (CDC)</b>            | The estimated annual number of deaths of infants under 12 months in a given year per 1,000 live births in that same year (five-year period preceding survey).  |
| <b>Infant Mortality Rate, Females (BUCEN)</b> | The estimated annual number of deaths of female infants under 12 months in a given year per 1,000 live births in that same year.   |
| <b>Infant Mortality Rate, Males (BUCEN)</b>   | The estimated annual number of male infants under 12 months in a given year per 1,000 live births in that same year.   |
| <b>Under-5 Mortality Rate (BUCEN)</b>         | Annual number of deaths that occur in children 0-4 years old per 1,000 births.   |
| <b>Neonatal Mortality Rate</b>                | The estimated number of infant deaths in the first month of life per 1,000 live births in the five-year period preceding the survey.   |
| <b>Under-5 Mortality Rate (UNICEF)</b>        | Annual number of deaths that occur in children 0-4 years old per 1,000 births (five-year period preceding survey).   |
| <b>Under-5 Mortality Rate (CDC)</b>           | Annual number of deaths that occur in children 0-4 years old per 1,000 births (five-year period preceding survey).   |
| <b>Exclusive Breastfeeding (under 4 mos.)</b> | Percentage of children under 4 months exclusively breastfed. Exclusive breastfeeding is defined as providing no food or liquid other than breast milk to the child during the 24-hour period before the survey.              |
| <b>Exclusive Breastfeeding (under 6 mos.)</b> | Percentage of children under 6 months exclusively breastfed. Exclusive breastfeeding is defined as providing no food or liquid other than breast milk to the child during the 24-hour period before the survey.              |
| <b>Stunted (height-for-age)</b>               | Percentage of children under age five whose height-for-age is below minus-two standard deviations from the median of the reference population.   |
| <b>Underweight (weight-for-age)</b>           | Percentage of children under age five whose weight-for-age is below minus-two standard deviations from the median of the reference population.   |
| <b>Wasted (weight-for-height)</b>             | Percentage of children under age five whose weight-for-height is below minus-two standard deviations from the median of the reference population.  |
| <b>DPT3 Vaccination Rate (CDC)</b>            | Proportion of living children 12-23 months old who have received three complete doses of vaccines against diphtheria, pertussis, and tetanus.  |
| <b>DPT3 Vaccination Rate (WHO)</b>            | Proportion of living children 12-23 months old who have received three complete doses of vaccines against diphtheria, pertussis, and tetanus.  |
| <b>Measles Vaccination Rate (CDC)</b>         | Percentage of living children 12-23 months old who have received one dose of Measles Containing Vaccine.   |
| <b>Measles Vaccination Rate (WHO)</b>         | Percentage of living children 12-23 months old who have received one dose of Measles Containing Vaccine.   |
| <b>Polio Vaccination Rate (CDC)</b>           | Proportion of living children 12-23 months who have received three doses of polio vaccine.   |
| <b>Polio Vaccination Rate (WHO)</b>           | Proportion of living children 12-23 months who have received three doses of polio vaccine.   |
| <b>Tetanus Toxoid Vaccination</b>             | Percentage of pregnant women receiving two (or more) doses of tetanus toxoid (three-year period preceding survey).   |
| <b>Equity in DPT3 coverage (DHS)</b>          | DPT3 coverage in the lowest wealth quintile/DPT3 coverage in the highest wealth quintile.  |
| <b>Improved sanitation/hygiene practices</b>  | Number of households with child under 5 years of age whose youngest child's feces was safely disposed of the last time he/she passed stool/total number of households with a child under 5 years of age.                     |

**Vitamin A supplementation coverage among children 6-59 months**

Number of children aged 6-59 months who received a vitamin A supplement in the last 6 months/total number of children aged 6-59 months surveyed.

**HIV/AIDS Prevention Indicators**

**HIV Prevalence proportion: Adults (15–49 years)**

The adult HIV prevalence proportion is the estimated number of adults living with HIV divided by the adult population (aged 15–49).

**Estimated number of people living with HIV: Adults and Children**

Estimated number of adults and children living with HIV. Adults are 15 years and over. Children are defined as those aged 0–14 years.

**Estimated number of people living with HIV: Women (15+ years)**

Estimated number of women (aged 15 and over) living with HIV.

**Estimated number of people living with HIV: Children (0–14 years)**

Estimated number of children under age 15 living with HIV.

**Males Reporting Condom Use With Last Non-Regular Partner**

Among men who have had high risk sex in the last year, percentage who used condoms during their last sexual intercourse with a non-regular partner/non-cohabitating partner.

**Females Reporting Condom Use With Last Non-Regular Partner**

Among women who have had high risk sex in the last year, percentage who used condoms during their last sexual intercourse with a non-regular partner/non-cohabitating partner.

**Infectious Diseases Control Indicators**

**TB Estimated Number of Cases**

The estimated number of cases (all forms).

**TB Case Detection Rate**

TB Case Detection Rate is defined as the percentage of the annual new smear-positive notifications of the estimated annual new smear-positive incidence.

**TB (DOTS) Treatment Success Rate**

The proportion of smear-positive patients who were cured plus the proportion who completed treatment.

**Malaria Cases per 100,000**

Number of malaria cases per 100,000 of the population during the year for which data was reported.

**DOTS Coverage**

The percentage of the national population living in areas where health services have adopted DOTS. "Areas" are the lowest administrative or management units in the country (townships, districts, counties, etc). If an area is considered a DOTS area, then all cases registered and reported in that area are considered DOTS cases and the population living within the boundaries of that area counts toward national DOTS coverage. As a measure of patient access to diagnosis and treatment under DOTS, coverage is an approximation, and usually an overestimate.

**HIV-Infected with Active TB**

The TB incidence rate in HIV-infected people 15-49 divided by the incidence rate in HIV-uninfected people 15-49.

**Avian Influenza: Cumulative Number of Confirmed Human Cases**

The cumulative number of confirmed human cases of Avian Influenza A/(H5N1) reported to WHO. The total number of cases includes number of deaths. WHO reports only laboratory-confirmed cases.

**Avian Influenza: Cumulative Number of Confirmed Human Deaths**

The cumulative number of confirmed human deaths from Avian Influenza A/(H5N1) reported to WHO. WHO reports only laboratory-confirmed cases and deaths.

**Child Sleeps Under Insecticide-Treated Net**

Percentage of children under five years of age who slept under an Insecticide Treated Net (ITN) the night before the survey. An ITN is (1) a permanent net that does not require any treatment, or (2) a pretreated net obtained within the last six months, or (3) a net that has been soaked with insecticide within the past six months.

**Equity in Bednet (ITN) Ownership**

Proportion of households in the lowest income quintile with an ITN / proportion of households in the highest income quintile with an ITN.

# Statistical Sources For Nicaragua

---

|   |   |
|---|---|
| <b>BUCEN-IDB 2006</b>                             | United States Census Bureau (BUCEN), International Programs Center. International Database. August 2006.  |
| <b>BUCEN-IDB 2009</b>                             | United States Census Bureau (BUCEN), International Programs Center. International Database. November 2009.  |
| <b>BUCEN-IDB 2010</b>                             | United States Census Bureau (BUCEN), International Programs Center. International Database. April 2010.   |
| <b>CIA World Factbook 2009</b>                    | CIA World Factbook 2009 <a href="https://www.cia.gov/library/publications/the-world-factbook/index.html">https://www.cia.gov/library/publications/the-world-factbook/index.html</a>   |
| <b>CIA World Factbook 2009</b>                    | CIA World Factbook, 2008 <a href="https://www.cia.gov/library/publications/the-world-factbook/index.html">https://www.cia.gov/library/publications/the-world-factbook/index.html</a> . Last accessed April, 2009.                               |
| <b>CIA World Factbook 2010</b>                    | CIA World Factbook 2010 <a href="https://www.cia.gov/library/publications/the-world-factbook/index.html">https://www.cia.gov/library/publications/the-world-factbook/index.html</a>   |
| <b>CIA World Factbook 2010</b>                    | CIA World Factbook November 2010 <a href="https://www.cia.gov/library/publications/the-world-factbook/index.html">https://www.cia.gov/library/publications/the-world-factbook/index.html</a>  |
| <b>DHS STATcompiler 2010</b>                      | DHS STATcompiler as of April 2010   |
| <b>DHS STATcompiler as of September 2008 2008</b> | DHS STATcompiler as of September 2008 <a href="http://www.statcompiler.com">http://www.statcompiler.com</a>   |
| <b>FHS/Nicaragua 1992-93</b>                      | Asociacion Pro-Bienestar de la Familia Nicaraguense (PROFAMILIA)[Costa Rica]; Centers for Disease Control and Prevention [USA]. Encuesta sobre Salud Familiar, Nicaragua 1992-93. Centers for Disease Control and Prevention, Atlanta, Georgia. |
| <b>Global Atlas 2010</b>                          | WHO Global Health Atlas: <a href="http://apps.who.int/globalatlas/dataQuery/default.asp">http://apps.who.int/globalatlas/dataQuery/default.asp</a>  |
| <b>Human Development Report - 2007/2008 2008</b>  | Human Development Report 2007/2008. Fighting climate change: Human solidarity in a divided world. Published for the United Nations Development Programme (UNDP)   |
| <b>Nicaragua DHS 1998</b>                         | Instituto Nacional de Estadísticas y Censos, Ministerio de Salud and Macro International Inc. "Nicaragua Encuesta Nicaraguense de Demografía y Salud, 1998." Macro International, Calverton, MD; 1999   |
| <b>Nicaragua DHS 2001</b>                         | Instituto Nacional de Estadísticas y Censos, Ministerio de Salud and Macro International Inc. "Nicaragua Encuesta Nicaraguense de Demografía y Salud, 2001." Macro International, Calverton, MD; 2002   |
| <b>Nicaragua Preliminary DHS 2006-2007</b>        | REPÚBLICA DE NICARAGUA Encuesta Nicaragüense de Demografía y Salud ENDESA 2006/07 INFORME PRELIMINAR  |
| <b>UNAIDS 2008 2008</b>                           | 2008 Report on the Global AIDS Epidemic. Geneva: UNAIDS, 2008   |
| <b>UNESCO Global Monitoring Report 2010</b>       | EFA Global Monitoring Report April 2010   |
| <b>UNICEF 2010</b>                                | UNICEF Global Database/Child Mortality  |

|                                     |  |
|-------------------------------------|--|
| <b>WHO Global Health Atlas 2008</b> | Accessed March of 2008   |
| <b>WHO Global Health Atlas 2008</b> | WHO Website: <a href="http://apps.who.int/globalatlas/dataQuery/default.asp">http://apps.who.int/globalatlas/dataQuery/default.asp</a>   |
| <b>WHO/Global Summary 2002</b>      | WHO Vaccine-Preventable Diseases Monitoring System. 2002 Global Summary. World Health Organization, Geneva.  |
| <b>WHO/Global Summary 2008</b>      | Immunization surveillance, assessment and monitoring section of the WHO website: <a href="http://www.who.int/immunization_monitoring/en/globalsummary/timeseries/tscoveragedtp3.htm">http://www.who.int/immunization_monitoring/en/globalsummary/timeseries/tscoveragedtp3.htm</a> |
| <b>WHO/Hill 2005</b>                | Maternal Mortality in 2005: Estimates developed by WHO, UNICEF, UNFPA and The World Bank   |
| <b>WHO: Global Atlas 2009</b>       | WHO Global Health Atlas: <a href="http://apps.who.int/globalatlas/dataQuery/default.asp">http://apps.who.int/globalatlas/dataQuery/default.asp</a>   |
| <b>WHO: Global Summary 2009</b>     | WHO Global Summary Vaccine: <a href="http://www.who.int/immunization_monitoring/en/globalsummary/timeseries/tscoveragemcv.htm">http://www.who.int/immunization_monitoring/en/globalsummary/timeseries/tscoveragemcv.htm</a>  |
| <b>World Bank/WDI 2005</b>          | World Bank Development Indicators 2005, CD-Rom. Washington, DC: The World Bank, 2005.  |
| <b>World Bank/WDI 2006</b>          | World Bank Development Indicators 2006. Washington, DC: The World Bank, 2005. Available at: <a href="http://devdata.worldbank.org/wdi2006/contents/index2.htm">http://devdata.worldbank.org/wdi2006/contents/index2.htm</a> . Last accessed April, 2007.                           |
| <b>World Bank/WDI Database 2007</b> | World Bank Development Indicators Database 2007. Washington, DC: The World Bank, 2007. Available at: <a href="http://devdata.worldbank.org/data-query/">http://devdata.worldbank.org/data-query/</a> . Last accessed April, 2007.  |