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USAID Country Health Statistical Report

# Madagascar

January 2011



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# About the Report

Released January 2011

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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:

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# I. Statistical Overview

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\*see data notes

Demographic Indicators				
Indicator	Value	Data Unit	Year	Source
Total Population	21,281,844		2010	BUCEN-IDB-2010
Population Growth Rate	3	%	2010	BUCEN-IDB-2010
Percent Urban	27	%	2004	World Bank/WDI-2006
Women, 15-19	1,157,667		2010	BUCEN-IDB-2010
Women, 15-49	4,994,462		2010	BUCEN-IDB-2010
Life Expectancy at Birth	63.3		2010	BUCEN-IDB-2010
Crude Birth Rate	37.9	per 1,000	2010	BUCEN-IDB-2010
Crude Death Rate	8	per 1,000	2010	BUCEN-IDB-2010
Number of Live Births	806,369		2010	BUCEN-IDB-2010
Healthy Life Expectancy: Female	50		2002	WHO Global Health Atlas-2008
Healthy Life Expectancy: Male	47		2002	WHO Global Health Atlas-2008
Population: Percent < Age 15	43.3	%	2010	BUCEN-IDB-2010

Socioeconomic Indicators				
Indicator	Value	Data Unit	Year	Source
GNI per Capita (PPP)	880	\$	2005	World Bank/WDI-2006
Health Expenditure as Percentage of GDP	2.7	%	2003	World Bank/WDI-2006
Physicians per 1,000 People	0.14	per 1,000	2002	World Bank/WDI-2005
Adult Literacy Rate	70.7	%	2004	World Bank/WDI Database-2007
Adult Literacy Rate, Female	65 <sup>1</sup>	%	2002	World Bank/WDI-2006
Adult Literacy Rate, Male	76 <sup>2</sup>	%	2002	World Bank/WDI-2006
Gross Enrollment Ratio - Primary School	141.4	%	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)	34	%	2002	World Bank/WDI-2005
Access to an Improved Water Source (Urban)	75	%	2002	World Bank/WDI-2005
Access to Improved Sanitation Facilities (Rural)	27	%	2002	World Bank/WDI-2005
Access to Improved Sanitation Facilities (Urban)	49	%	2002	World Bank/WDI-2005
Population Living Below \$1 a Day	61	%	1990-2005	Human Development Report - 2007/2008-2008
Human Development Index	0.53		2005	Human Development Report - 2007/2008-2008
Population Below Poverty Line	50	%	2004	CIA World Factbook-2009
Real GDP (Growth) Rate	<0.01	%	2009	CIA World Factbook-2010
Income Inequality (Gini index)	47.5		2001	CIA World Factbook-2009
Unemployment Rate	Data Not Available			
Inflation Rate	8	%	2009	CIA World Factbook-2010
Airports	84		2010	CIA World Factbook-2010
Airports with paved runways	27		2010	CIA World Factbook-2010

<sup>1</sup> Based on survey data.

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

Family Planning Indicators				
Indicator	Value	Data Unit	Year	Source
Total Fertility Rate (BUCEN)	5.1		2010	BUCEN-IDB-2010
Total Fertility Rate (DHS)	5.2		2003-2004	Madagascar DHS-2003-04
Contraceptive Prevalence Rate, Modern Methods, All Women	14	%	2003-2004	Madagascar DHS-2003-04
Contraceptive Prevalence Rate, Modern Methods, Married Women	18.3	%	2003-2004	Madagascar DHS-2003-04
Median Age of Sexual Debut Among Women, Ages 25-49	17.5		2003-2004	Madagascar DHS-2003-04
Mean Ideal Family Size	4.8		2003-2004	Madagascar DHS-2003-04
Women 20-24 Who Gave Birth Before Age 20	53.8	%	2003-2004	Madagascar DHS-2003-04
Total Fertility Rate, Rural	5.2		2009	BUCEN-IDB-2010
Unmet Need for Family Planning: Rural	19.1	%	2008-2009	BUCEN-IDB-2010
Unmet Need for Family Planning: Urban	17.5	%	2008-2009	BUCEN-IDB-2010
Contraceptive Prevalence Rate, All Methods	39.9	%	2008-2009	BUCEN-IDB-2010
Equity in use of modern contraception	0.24	Ratio	2003-2004	Madagascar DHS-2003-04
Percent of need satisfied by modern methods of family planning	36	%	2003-2004	Madagascar DHS-2003-04

Maternal Health Indicators				
Indicator	Value	Data Unit	Year	Source
Maternal Mortality Ratio (WHO/Hill)	510	Per 100,000 live births	2005	WHO/Hill-2005
Maternal Mortality Ratio (DHS)	469	Per 100,000 live births	2003-2004	Madagascar DHS-2003-04
Antenatal Care (at least 1 visit)	80.6	%	2003-2004	Madagascar DHS-2003-04
Antenatal Care (2+ visits)	74.8	%	2003-2004	Madagascar DHS-2003-04
Antenatal Care (4+ visits)	39.9	%	2003-2004	Madagascar DHS-2003-04
Assisted Delivery by a Health Professional	51.3	%	2003-2004	Madagascar DHS-2003-04
Assisted Delivery by Doctor	8.5	%	2003-2004	Madagascar DHS-2003-04
Assisted Delivery by Other Health Professional	42.8	%	2003-2004	Madagascar DHS-2003-04
Anemia prevalence among women of reproductive age	46	%	2003-2004	Madagascar DHS-2003-04
Equity in skilled attendance at delivery	0.32	Ratio	2003-2004	Madagascar DHS-2003-04

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	39.3	%	2003-2004	Madagascar DHS-2003-04
ORT Use Rate (ORS, RHS, or Increased Fluids)	58.1	%	2003-2004	Madagascar DHS-2003-04
<b>Mortality Indicators</b>				
Infant Mortality Rate (BUCEN)	52.8	per 1,000 live births	2010	BUCEN-IDB-2010
Infant Mortality Rate (UNICEF)	68		2008	UNICEF-2010
Infant Mortality Rate (DHS)	58	per 1,000 live births	2003-2004	Madagascar DHS-2003-04
Infant Mortality Rate, Females (BUCEN)	47.8	per 1,000 live births	2010	BUCEN-IDB-2010
Infant Mortality Rate, Males (BUCEN)	57.7	per 1,000 live births	2010	BUCEN-IDB-2010
Under-5 Mortality Rate (BUCEN)	106.6	per 1,000 live births	2010	BUCEN-IDB-2006
Neonatal Mortality Rate	32	per 1000	2004	DHS STATcompiler as of September 2008-2008
Under-5 Mortality Rate (UNICEF)	106	per 1,000 live births	2008	UNICEF-2010
Under-5 Mortality Rate (DHS)	94	per 1,000 live births	2003-2004	Madagascar DHS-2003-04
<b>Nutrition Indicators</b>				
Exclusive Breastfeeding (under 4 mos.)	77.1	%	2003-2004	Madagascar DHS-2003-04
Exclusive Breastfeeding (under 6 mos.)	67.2	%	2003-2004	Madagascar DHS-2003-04
Stunted (height-for-age)	47.7	%	2003-2004	Madagascar DHS-2003-04
Underweight (weight-for-age)	41.9	%	2003-2004	Madagascar DHS-2003-04
Wasted (weight-for-height)	12.8	%	2003-2004	Madagascar DHS-2003-04
<b>Vaccination Coverage</b>				
DPT3 Vaccination Rate (DHS)	61.4	%	2003-2004	Madagascar DHS-2003-04
DPT3 Vaccination Rate (WHO)	89	%	2009	WHO: Global Summary-2009
Measles Vaccination Rate (DHS)	59	%	2003-2004	Madagascar DHS-2003-04
Measles Vaccination Rate (WHO)	85	%	2009	WHO: Global Summary-2009
Polio Vaccination Rate (DHS)	63.2	%	2003-2004	Madagascar DHS-2003-04
Polio Vaccination Rate (WHO)	89	%	2009	WHO: Global Summary-2009
Tetanus Toxoid Vaccination	39.7	%	2003-2004	Madagascar DHS-2003-04
Equity in DPT3 coverage (DHS)	0.43	Ratio	2003-2004	Madagascar DHS-2003-04
Improved sanitation/hygiene practices	Data Not Available			
Vitamin A supplementation coverage among children 6-59 months	76.2	%	2003-2004	Madagascar DHS-2003-04

HIV/AIDS Prevention Indicators				
Indicator	Value	Data Unit	Year	Source
HIV Prevalence proportion: Adults (15–49 years)	0.1	%	2007	UNAIDS 2008-2008
Estimated number of people living with HIV: Adults and Children	14,000		2007	UNAIDS 2008-2008
Estimated number of people living with HIV: Women (15+ years)	3,400		2007	UNAIDS 2008-2008
Estimated number of people living with HIV: Children (0–14 years)	500 <sup>1</sup>		2007	UNAIDS 2008-2008
Males Reporting Condom Use With Last Non-Regular Partner	13.1	%	2003-2004	Madagascar DHS-2003-04
Females Reporting Condom Use With Last Non-Regular Partner	4.6	%	2003-2004	Madagascar DHS-2003-04

Infectious Diseases Control Indicators				
Indicator	Value	Data Unit	Year	Source
TB Estimated Number of Cases	49,360		2007	WHO: Global Atlas-2009
TB Case Detection Rate	42	%	2007	Global Atlas-2010
TB (DOTS) Treatment Success Rate	78	%	2006	WHO: Global Atlas-2009
Malaria Cases per 100,000	11,364 <sup>2</sup>	per 100,000	2003	WHO Global Health Atlas-2008
DOTS Coverage	100	%	2007	WHO: Global Atlas-2009
HIV-Infected with Active TB	2.4	%	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	45.8	%	2008-2009	BUCEN-IDB-2010
Equity in Bednet (ITN) Ownership	Data Not Available			

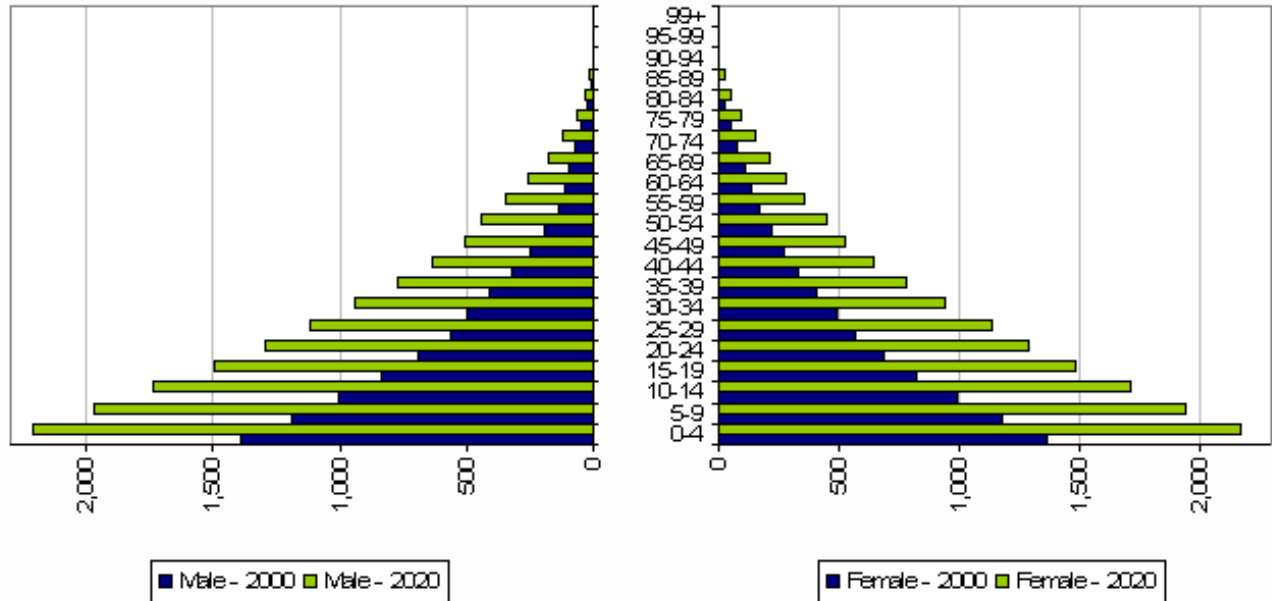
<sup>1</sup> Less than 500

<sup>2</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

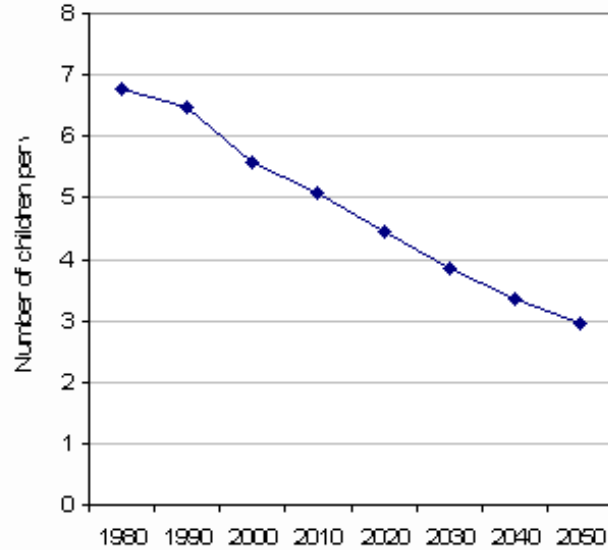
Age Group	Male - 2000	Male - 2020	Female - 2000	Female - 2020
0-4	1,388,018	2,214,890	1,366,547	2,171,556
5-9	1,187,366	1,972,241	1,181,584	1,942,287
10-14	1,002,316	1,733,270	988,889	1,711,628
15-19	834,806	1,498,008	822,674	1,483,885
20-24	690,367	1,292,537	686,288	1,289,911
25-29	566,152	1,121,677	566,407	1,134,622
30-34	499,863	938,643	494,923	945,096
35-39	406,924	772,019	404,629	778,886
40-44	324,804	631,468	331,472	642,396
45-49	246,377	510,488	270,254	522,688
50-54	192,030	439,406	218,450	447,903
55-59	140,449	343,726	165,685	355,875
60-64	113,208	257,895	134,032	278,874
65-69	97,542	177,007	111,645	210,498
70-74	71,884	117,486	80,165	148,945
75-79	45,921	66,041	48,310	90,246
80-84	21,840	34,119	23,125	49,857
85-89	6,637	14,365	7,355	22,228
90-94	1,231	3,613	1,466	6,143
95-99	125	501	166	927
99+	6	34	10	71

**TABLE 1.2: Population Estimates and Projections**

Source: BUCEN-IDB

1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
5,481,721	6,765,644	8,691,245	11,632,868	15,741,942	21,281,844	28,373,956	36,797,205	46,296,341	56,513,827

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

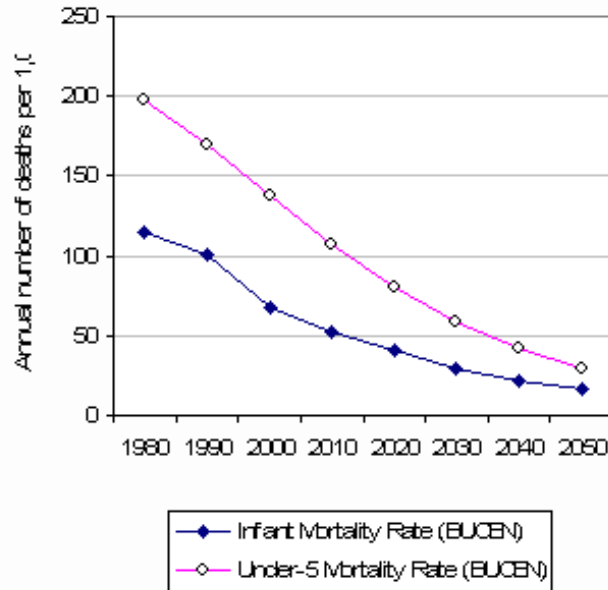


**Table 2: Estimated Total Fertility Rate per Woman**

Source: BUCEN-IDB

1980	1990	2000	2010	2020	2030	2040	2050
6.8	6.5	5.6	5.1	4.4	3.9	3.3	2.9

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

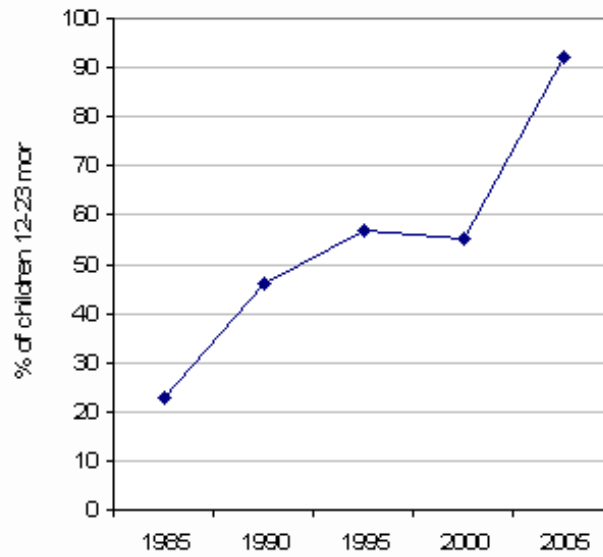


**Table 3: Infant Mortality Rates / Under-5 Mortality Rates**

Source: BUCEN-IDB 2010

Indicator	1980	1990	2000	2010	2020	2030	2040	2050
Infant Mortality Rate (BUCEN)	115.4	100.4	67.6	52.8	40.2	29.9	21.9	16.1
Under-5 Mortality Rate (BUCEN)	197.9	169.4	137.1	106.6	80.3	58.7	42.0	29.7

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



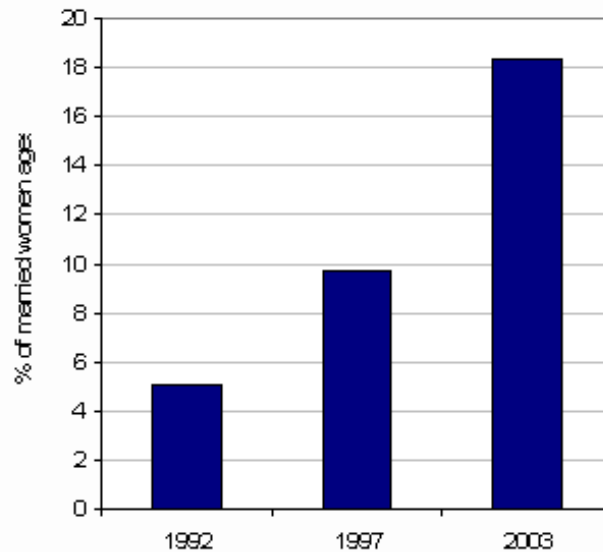
**Table 4: Vaccination Coverage (DPT3) Trends**

Source: WHO/Global Summary

WHO: Global Summary

1985	1990	1995	2000	2005
23.0	46.0	57.0	55.0	92.0

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



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

Source: Madagascar DHS

1992	1997	2003
5.1	9.7	18.3



# Data Notes

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\*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 (DHS)</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 (DHS)</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 (DHS)</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 (DHS)</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 (DHS)</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 (DHS)</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 Madagascar

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