USAID Country Health Statistical Report

Yemen

October 2003

Population, Health, Nutrition Information Project

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About the Report

Released October 2003

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 Population, Health and Nutrition Information (PHNI) 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 PHNI'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 PHNI'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

*see data notes

Demographic Indicators				
Indicator	**Value**	**Data Unit**	**Year**	**Source**
Total Population	19,349,881		2003	BUCEN-IDB-2002
Population Growth Rate	3.4	%	2003	BUCEN-IDB-2002
Percent Urban	25	%	2001	World Bank/WDI-2003
Women, 15-19	1,094,868		2003	BUCEN-IDB-2002
Women, 15-49	4,246,840		2003	BUCEN-IDB-2002
Life Expectancy at Birth	61		2003	BUCEN-IDB-2002
Crude Birth Rate	43.2	per 1,000	2003	BUCEN-IDB-2002
Crude Death Rate	9	per 1,000	2003	BUCEN-IDB-2002
Number of Live Births	836,495	000s	2003	BUCEN-IDB-2002

Socioeconomic Indicators				
Indicator	**Value**	**Data Unit**	**Year**	**Source**
GNI per Capita (PPP)	730	$	2001	World Bank/WDI-2003
Health Expenditure as Percentage of GDP	5.6	%	1997	World Bank/WDI-2002
Physicians per 1,000 People	0.2		1998	World Bank/WDI-2002
Adult Literacy Rate	47.7	%	2001	World Bank/WDI-2003
Adult Literacy Rate, Female	26.9	%	2001	World Bank/WDI-2003
Adult Literacy Rate, Male	68.5	%	2001	World Bank/WDI-2003
Gross Enrollment Rate - Primary School	68	%	1998	UNESCO-2000
Gender Parity Index - Net Enrollment Rate	0.49		1995	UNESCO-2000
Access to an Improved Water Source (Rural)	64	%	2000	World Bank/WDI-2001
Access to an Improved Water Source (Urban)	85	%	2000	World Bank/WDI-2001
Access to Improved Sanitation Facilities (Rural)	31	%	2000	World Bank/WDI-2001
Access to Improved Sanitation Facilities (Urban)	87	%	2000	World Bank/WDI-2001

Family Planning Indicators

Indicator	Value	Data Unit	Year	Source
Total Fertility Rate (BUCEN)	6.8		2003	BUCEN-IDB-2002
Total Fertility Rate (DHS)	6.5		1997	Yemen DHS-1997
Contraceptive Prevalence Rate, Modern Methods, All Women	9.3	%	1997	Yemen DHS-1997
Contraceptive Prevalence Rate, Modern Methods, Married Women	9.8	%	1997	Yemen DHS-1997
Median Age of Sexual Debut Among Women, Ages 25-49	Data Not Available			
Mean Ideal Family Size	4.5		1997	Yemen DHS-1997
Women 20-24 Who Gave Birth Before Age 20	45.1	%	1997	Yemen DHS-1997

Maternal Health Indicators

Indicator	Value	Data Unit	Year	Source
Maternal Mortality Ratio (WHO/Hill)	850	Per 100,000 live births	1995	WHO/Hill-2001
Maternal Mortality Ratio (DHS)	351	Per 100,000 live births	1997	Yemen DHS-1997
Antenatal Care (at least 1 visit)	35.3	%	1997	Yemen DHS-1997
Antenatal Care (2+ visits)	24.3	%	1997	Yemen DHS-1997
Antenatal Care (4+ visits)	11.6	%	1997	Yemen DHS-1997
Assisted Delivery by a Health Professional	21.6	%	1997	Yemen DHS-1997
Assisted Delivery by Doctor	15	%	1997	Yemen DHS-1997
Assisted Delivery by Other Health Professional	6.6	%	1997	Yemen DHS-1997

Child Survival Indicators				
Indicator	**Value**	**Data Unit**	**Year**	**Source**
Acute Respiratory Infection (ARI) and Oral Rehydration Therapy (ORT)				
ARI Treatment - Children Under 5	32.2	%	1997	Yemen DHS-1997
ORT Use Rate (ORS, RHS, or Increased Fluids)	64.6	%	1997	Yemen DHS-1997
Mortality Indicators				
Infant Mortality Rate (BUCEN)	65	per 1,000 live births	2003	BUCEN-IDB-2002
Infant Mortality Rate (DHS)	75.3	per 1,000 live births	1997	Yemen DHS-1997
Infant Mortality Rate, Females (BUCEN)	59.8	per 1,000 live births	2003	BUCEN-IDB-2002
Infant Mortality Rate, Males (BUCEN)	70	per 1,000 live births	2003	BUCEN-IDB-2002
Under-5 Mortality Rate (BUCEN)	89.6	per 1,000 live births	2003	BUCEN-IDB-2002
Under-5 Mortality Rate (UNICEF)	107	per 1,000 live births	2001	UNICEF-2003
Under-5 Mortality Rate (DHS)	104.8	per 1,000 live births	1997	Yemen DHS-1997
Nutrition Indicators				
Exclusive Breastfeeding (under 4 mos.)	23.3	%	1997	Yemen DHS-1997
Exclusive Breastfeeding (under 6 mos.)	17.8	%	1997	Yemen DHS-1997
Stunted (height-for-age)	51.7	%	1997	Yemen DHS-1997
Underweight (weight-for-age)	46.1	%	1997	Yemen DHS-1997
Wasted (weight-for-height)	12.9	%	1997	Yemen DHS-1997
Vaccination Coverage				
DPT3 Vaccination Rate (DHS)	39.8	%	1997	Yemen DHS-1997
DPT3 Vaccination Rate (WHO)	76	%	2001	WHO/Global Summary-2002
Measles Vaccination Rate (DHS)	42.8	%	1997	Yemen DHS-1997
Measles Vaccination Rate (WHO)	79	%	2001	WHO/Global Summary-2002
Polio Vaccination Rate (DHS)	45.8	%	1997	Yemen DHS-1997
Polio Vaccination Rate (WHO)	76	%	2001	WHO/Global Summary-2002
Tetanus Toxoid Vaccination	9.3	%	1997	Yemen DHS-1997

HIV/AIDS Prevention Indicators

Indicator	Value	Data Unit	Year	Source
HIV Prevalence, Adults	0.1	%	2001	UNAIDS-2002
HIV Prevalance, Females 15-24, High Estimates	Data Not Available			
HIV Prevalance, Females 15-24, Low Estimates	Data Not Available			
HIV Prevalence, Males 15-24, High Estimates	Data Not Available			
HIV Prevalence, Males 15-24, Low Estimates	Data Not Available			
Males Reporting Condom Use With Last Non-Regular Partner	Data Not Available			
Females Reporting Condom Use With Last Non-Regular Partner	Data Not Available			

Infectious Diseases Control Indicators

Indicator	Value	Data Unit	Year	Source
TB Estimated Number of Cases	19,995		2001	WHO/TB Control Report-2003
TB Case Detection Rate	55	%	2001	WHO/TB Control Report-2003
TB (DOTS) Treatment Success Rate	75	%	2000	WHO/TB Control Report-2003
Malaria	1,394,495	Reported # of cases	2000	WHO/RBM-2003

II. Trends in Health Indicators

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

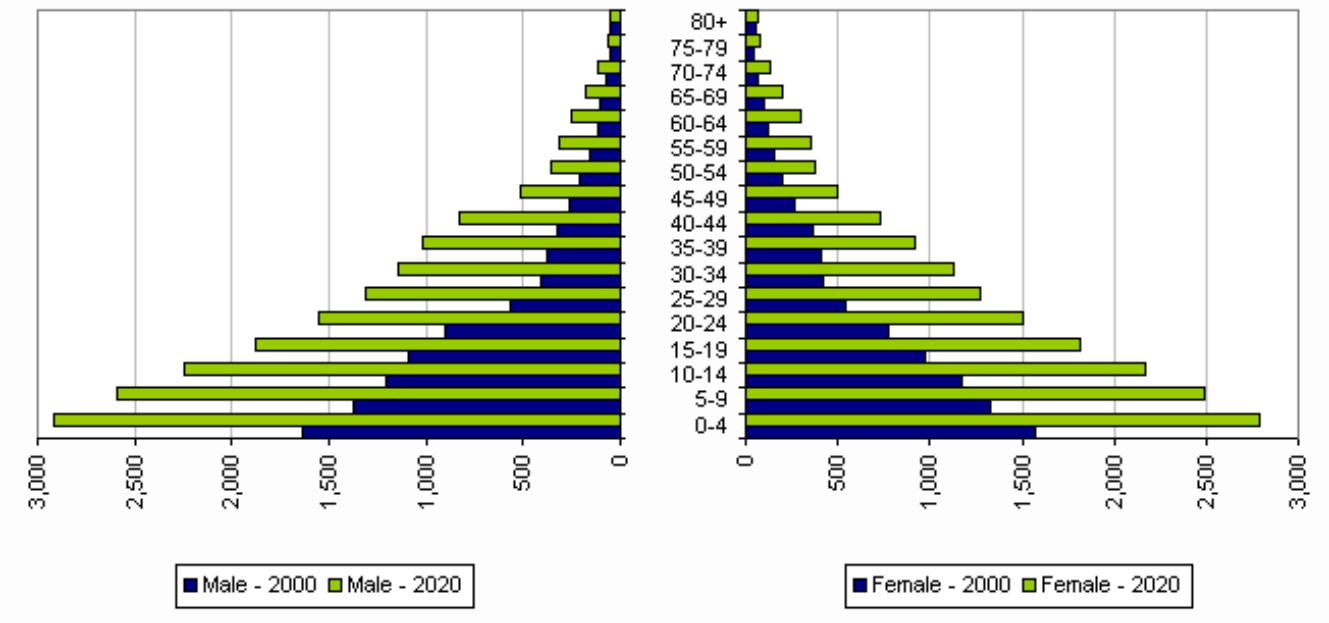

Table 1.1: Current and Projected Population by Age and Sex

Source: BUCEN-IDB

Age Group	Male - 2000	Male - 2020	Female - 2000	Female - 2020
0-4	1,636,568	2,911,593	1,576,445	2,794,471
5-9	1,372,909	2,595,367	1,323,320	2,496,231
10-14	1,211,144	2,247,191	1,177,137	2,165,663
15-19	1,094,436	1,882,726	970,311	1,819,041
20-24	899,347	1,554,947	778,110	1,509,008
25-29	568,008	1,312,194	542,357	1,278,376
30-34	405,967	1,144,828	422,302	1,127,934
35-39	379,791	1,020,906	412,952	919,942
40-44	329,419	827,422	361,107	729,026
45-49	258,956	512,319	265,045	500,298
50-54	205,292	353,765	201,265	380,462
55-59	154,743	313,920	152,884	359,382
60-64	120,180	251,507	118,141	298,200
65-69	99,909	175,120	94,695	201,010
70-74	74,596	115,182	70,118	132,538
75-79	50,709	65,063	49,162	80,248
80+	50,376	51,422	51,505	68,045

TABLE 1.2: Population Estimates and Projections

Source: BUCEN-IDB

1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
5,871,831	7,098,239	9,132,545	12,416,080	17,479,206	24,637,447	34,195,347	45,464,115	58,012,716	71,119,251

Figure 2: Estimated Total Fertility Rate per Woman

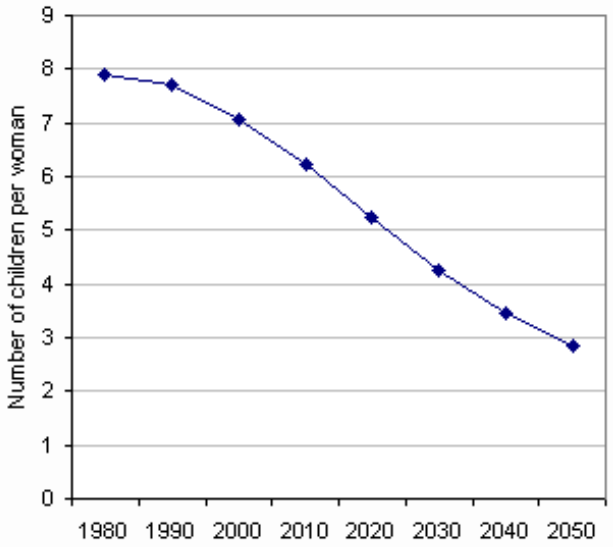

Table 2: Estimated Total Fertility Rate per Woman

Source: BUCEN-IDB

1980	1990	2000	2010	2020	2030	2040	2050
7.9	7.7	7.1	6.2	5.2	4.3	3.4	2.9

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

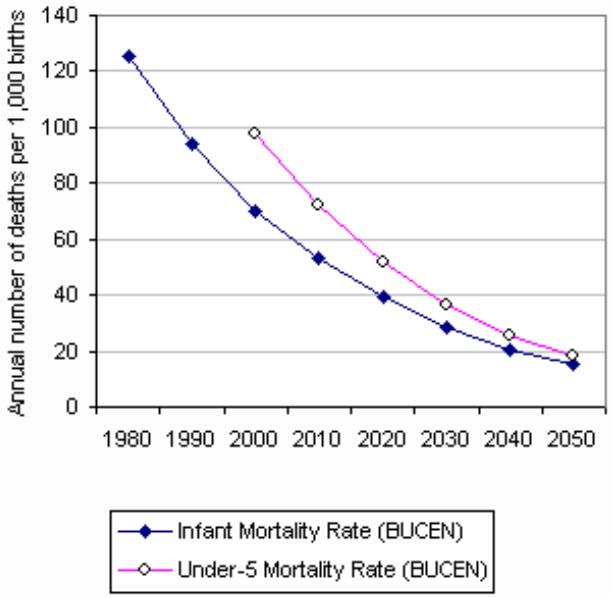

Table 3: Infant Mortality Rates / Under-5 Mortality Rates

Source: BUCEN-IDB 2002

Indicator	1980	1990	2000	2010	2020	2030	2040	2050
Infant Mortality Rate (BUCEN)	125.7	94.1	70.3	53.4	39.5	28.7	20.7	15.0
Under-5 Mortality Rate (BUCEN)			97.6	72.2	51.9	36.6	25.7	18.2

Figure 4: Vaccination Coverage (DPT3) Trends

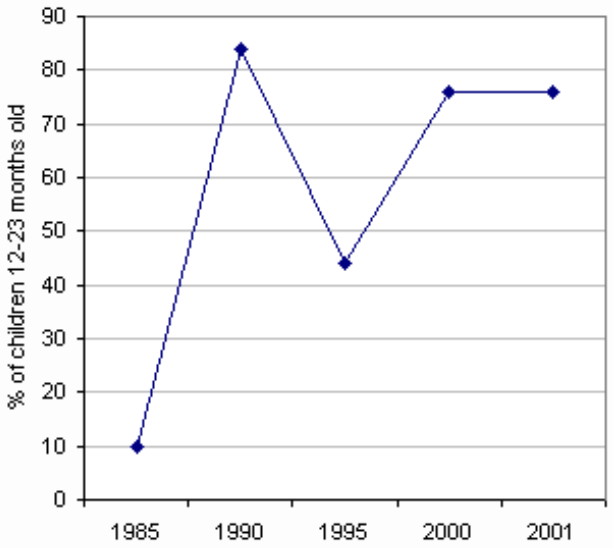

Table 4: Vaccination Coverage (DPT3) Trends

Source: WHO/Global Summary

1985	1990	1995	2000	2001
10.0	84.0	44.0	76.0	76.0

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

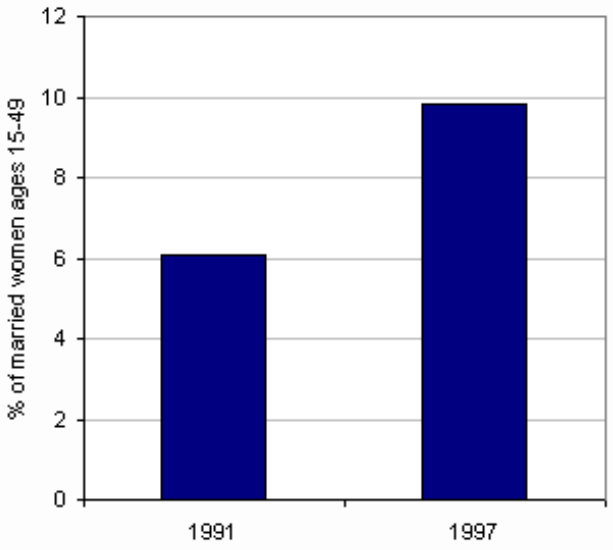

Table 5: Contraceptive Prevalence Rates, Modern Methods, Married Women

Source: Yemen DHS

1991	1997
6.1	9.8

Data Notes

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

Demographic Indicators

Total Population	The number of people in a given area (i.e., country) in a particular time period (usually a midyear estimate).
Population Growth Rate	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).
Percent Urban	The percentage of the midyear population living in areas defined as urban in each country and reported to the United Nations.
Women, 15-19	The number of women between the ages of 15-19 in the midyear population.
Women, 15-49	The number of women between the ages of 15-49 in the midyear population.
Life Expectancy at Birth	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.
Crude Birth Rate	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.
Crude Death Rate	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.
Number of Live Births	The number of live births, annually, within a country.

Socioeconomic Indicators

GNI per Capita (PPP)	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.
Health Expenditure as Percentage of GDP	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.
Physicians per 1,000 People	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).
Adult Literacy Rate	The percentage of people ages 15 and over who can, with understanding, read and write a short, simple statement about their everyday life.
Adult Literacy Rate, Female	The percentage of women ages 15 and over who can, with understanding, read and write a short, simple statement about their everyday life.
Adult Literacy Rate, Male	The percentage of men ages 15 and over who can, with understanding, read and write a short, simple statement about their everyday life.
Gross Enrollment Rate - Primary School	Total enrolment in primary level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to primary level of education in give school-year. GER can be over 100% due to the inclusion of over-aged and under-aged pupils/students because of early or late entrants, and grade repetition.
Gender Parity Index - Net Enrollment Rate	The ratio of the female-to-male net primary school enrollment rates measures progress towards gender equity in school attendance and the level of learning opportunities available for women in relation to those available to men. Calculation Method: Divide the female net primary school enrollment rate by the male net primary school enrollment rate.

Access to an Improved Water Source (Rural)	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. Reasonable access is defined as the availability of at least 20 liters a person a day from a source within one kilometer of the dwelling.
Access to an Improved Water Source (Urban)	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. Reasonable access is defined as the availability of at least 20 liters a person a day from a source within one kilometer of the dwelling.
Access to Improved Sanitation Facilities (Rural)	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.
Access to Improved Sanitation Facilities (Urban)	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.

Family Planning Indicators

Total Fertility Rate (BUCEN)	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.
Total Fertility Rate (DHS)	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.
Contraceptive Prevalence Rate, Modern Methods, All Women	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).
Contraceptive Prevalence Rate, Modern Methods, Married Women	Percent of currently married ages women 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).
Median Age of Sexual Debut Among Women, Ages 25-49	Median age of first sexual intercourse for women ages 25-49.
Mean Ideal Family Size	Mean ideal number of children for all women, according to number of living children.
Women 20-24 Who Gave Birth Before Age 20	Percentage of women ages 20-24 who have already given birth.

Maternal Health Indicators

Maternal Mortality Ratio (WHO/Hill)	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.
Maternal Mortality Ratio (DHS)	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, Noureddine 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.
Antenatal Care (at least 1 visit)	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).
Antenatal Care (2+ visits)	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).

Antenatal Care (4+ visits)	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).
Assisted Delivery by a Health Professional	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, midwives, village health workers, or any other trained health professional.
Assisted Delivery by Doctor	The percentage of live births/deliveries that occur with the assistance of a doctor during the five-year period preceding the survey.
Assisted Delivery by Other Health Professional	The percentage of live births/deliveries that occur with the assistance of a nurse, midwife, village health worker, or any other trained health professional besides a doctor during the five-year period preceding the survey.

Child Survival Indicators

ARI Treatment - Children Under 5	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, and who were treated with specific remedies.
ORT Use Rate (ORS, RHS, or Increased Fluids)	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).
Infant Mortality Rate (BUCEN)	The estimated annual number of deaths of infants under 12 months in a given year per 1,000 live births in that same year.
Infant Mortality Rate (DHS)	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).
Infant Mortality Rate, Females (BUCEN)	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.
Infant Mortality Rate, Males (BUCEN)	The estimated annual number of male infants under 12 months in a given year per 1,000 live births in that same year.
Under-5 Mortality Rate (BUCEN)	Annual number of deaths that occur in children 0-4 years old per 1,000 births.
Under-5 Mortality Rate (UNICEF)	Annual number of deaths that occur in children 0-4 years old per 1,000 births (five-year period preceding survey).
Under-5 Mortality Rate (DHS)	Annual number of deaths that occur in children 0-4 years old per 1,000 births (five-year period preceding survey).
Exclusive Breastfeeding (under 4 mos.)	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.
Exclusive Breastfeeding (under 6 mos.)	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.
Stunted (height-for-age)	Percentage of children under age five whose height-for-age is below minus-two standard deviations from the median of the reference population.
Underweight (weight-for-age)	Percentage of children under age five whose weight-for-age is below minus-two standard deviations from the median of the reference population.
Wasted (weight-for-height)	Percentage of children under age five whose weight-for-height is below minus-two standard deviations from the median of the reference population.
DPT3 Vaccination Rate (DHS)	Proportion of living children 12-23 months old who have received three complete doses of vaccines against diphtheria, pertussis, and tetanus.
DPT3 Vaccination Rate (WHO)	Proportion of living children 12-23 months old who have received three complete doses of vaccines aginst diphtheria, pertussis, and tetanus.

Measles Vaccination Rate (DHS)	Percentage of living children 12-23 months old who have received one dose of MCV (fully immunized against measles).
Measles Vaccination Rate (WHO)	Percentage of living children who have received one dose of MCV (fully immunized) against measles.
Polio Vaccination Rate (DHS)	Proportion of living children 12-23 months who have received three doses of polio vaccine.
Polio Vaccination Rate (WHO)	Percentage of children receiving three doses of polio vaccine.
Tetanus Toxoid Vaccination	Percentage of pregnant women receiving two (or more) doses of tetanus toxoid (three-year period preceding survey).

HIV/AIDS Prevention Indicators

HIV Prevalence, Adults	The estimated number of adults (ages 15-49) living with HIV/AIDS at the end of 1999 divided by the 1999 adult population (ages 15–49).
HIV Prevalance, Females 15-24, High Estimates	HIV prevalence, adolescent females 15-24 for high estimates.
HIV Prevalance, Females 15-24, Low Estimates	HIV prevalence, adolescent females 15-24 for low estimates.
HIV Prevalence, Males 15-24, High Estimates	HIV prevalence, adolescent males 15-24 for high estimates.
HIV Prevalence, Males 15-24, Low Estimates	HIV prevalence, adolescent males 15-24 for low estimates.
Males Reporting Condom Use With Last Non-Regular Partner	Among men who have had 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 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	Reported number of cases of malaria during the year for which data reported.

Statistical Sources For Yemen

BUCEN-IDB 2002	United States Census Bureau (BUCEN), International Programs Center. International Database. October 2002.
UNAIDS 2002	Report on the Global HIV/AIDS Epidemic. July 2002. The Joint United Nations Programme on HIV/AIDS, Geneva.
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Yemen DHS 1997	Central Statistical Organization and Macro International, Inc. "Yemen Demographic and Maternal and Child Health Survey, 1997." Macro Internatiol Inc., Calverton, MD 1998